

VICTORIAN YEAR BOOK 1971

Number 85

21

This page was added on 11 January 2013 to include the Disclaimer below.
No other amendments were made to this Product

DISCLAIMER

Users are warned that this historic issue of this publication series may contain language or views which, reflecting the authors' attitudes or that of the period in which the item was written, may be considered to be inappropriate or offensive today.

Melbourne Airport at Tullamarine, opened
on 1 July 1970 by the Prime Minister,
the Rt Hon. J. G. Gorton, M.P.

Department of Civil Aviation



VICTORIAN YEAR BOOK

1971

V. H. ARNOLD, F.I.A.

*Deputy Commonwealth Statistician
and Victorian Government Statist*

Number 85

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
VICTORIAN OFFICE

First published 1971 by the Victorian Office of the
Commonwealth Bureau of Census and Statistics,
Commonwealth Banks Building,
Cnr Elizabeth and Flinders Streets, Melbourne.
Registered at the General Post Office, Melbourne,
for transmission through the post as a book.

This book is in International B5 format,
the text is set in 10 on 11 point Times New Roman and
printed on Wiggins Teape brochure opaque printing paper,
the photographs are printed on Warren's cameo brilliant
dull matt paper, and the book is bound in
Nylex PVC coated book cloth G quality.

Wholly set up, printed, and bound in Australia by
C. H. RIXON, Government Printer, Melbourne.

CONTENTS

Preface
Acknowledgments

1 PHYSICAL ENVIRONMENT

Amphibians and reptiles	1
Geographical features	36
Climate	52

2 GOVERNMENT AND ADMINISTRATION

Constitution	71
Government	74
Judiciary	75
State Parliament	76
State electoral system	91
Commonwealth Parliament	97
Government administration	98

3 DEMOGRAPHY

Population	109
Vital statistics	140

4 INDUSTRIAL CONDITIONS, EMPLOYMENT, AND PRICES

Industrial conditions	166
Employment and unemployment	200
Prices	207

5 LOCAL GOVERNMENT

Administration	213
Statistics of local government	232
Semi-governmental authorities	243

6	PRIMARY PRODUCTION	
	Land settlement and irrigation	269
	Agricultural education, research, and extension services	291
	Farming	297
	Primary industries other than farming	346
	Value of production	363
7	MANUFACTURING INDUSTRY	
	Natural resources and location	366
	Australian Integrated Economic Censuses	368
	Manufacturing activity	389
	Individual industries	419
8	SOCIAL CONDITIONS	
	Cultural and recreational	432
	Education	451
	Health and medical research	497
	Social welfare	522
	Justice and the administration of law	564
	Housing and building	591
9	FINANCE	
	Public finance	614
	Private finance	649
10	TRADE, TRANSPORT, AND COMMUNICATIONS	
	Retail trade	697
	Overseas and interstate trade	698
	Transport	709
	Communications	751
	APPENDICES	
	A Hamilton	761
	B Australian National Accounts	778
	C National Health Benefits	785
	D Principal events from 1 July 1969 to 30 June 1970	787
	E Index of special articles in editions of the <i>Victorian Year Book</i>	789
	F Index of maps in editions of the <i>Victorian Year Book</i>	794
	G Select bibliography of books about Victoria	796
	H Select bibliography of books published in Victoria, 1969-70	799
	I List of Victorian statistical publications	804
	INDEX	805
	SUPPLEMENT	

FIGURES

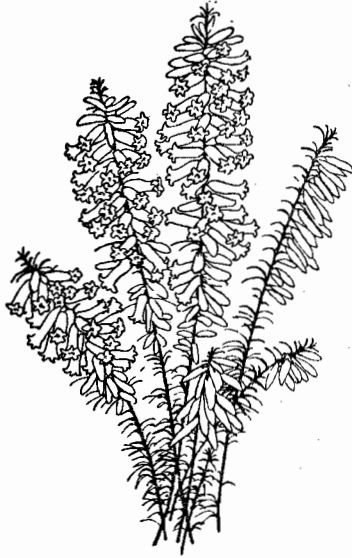
1	Physiographic divisions of Victoria	37
2	Victoria's water resources and river basins	48
3	Average annual rainfall map of Victoria	56
4	District monthly rainfall in Victoria : average and 1969	57
5	Relative rainfall variability by districts	58
6	Western Port water supply	290
7	Counties and Statistical Districts of Victoria	301
8	Brown coal in Victoria	361
9	Graph showing value of factory output	403
10	Graph showing number of factories and value of production classified according to number of persons employed	403
11	Victoria's main power transmission system	425
12	Wilson's Promontory National Park	450
13	Courses and careers in engineering	463
14	Graph showing number of new houses classified according to ownership	602
15	Graph showing percentage number of new houses commenced classified according to materials of outer walls	603
16	Melbourne share price index	689
17	Port of Melbourne	717

FOLDING MAPS

Amphibians and reptiles : environmental factors and zoogeographic patterns	facing 14
State Electoral Districts for Legislative Assembly	facing 94
State Electoral Provinces for Legislative Council	facing 96
Gippsland natural gas and crude oil fields: development and distribution, 1966-1970	facing 354
Statistical Divisions of Victoria	inside back cover
Melbourne Statistical Division	inside back cover
Population density of Victoria	inside back cover

PHOTOGRAPHS

Melbourne Airport	frontispiece
Amphibians and reptiles	facing 32
Royal visit, April 1970	facing 192
Victoria today	facing 384
Bridges of Victoria	facing 608



The form of the Pink Heath, *Epacris impressa* Labill, was proclaimed on 11 November 1958 by the then Governor of Victoria, General Sir Dallas Brooks, to be the Floral Emblem for the State of Victoria. This plant was chosen as the result of a number of surveys made throughout Victoria by the Field Naturalists' Club of Victoria, the Tree Planters Association of Victoria, and the metropolitan press, over a period of some twenty years.

PREFACE

This eighty-fifth edition of the *Victorian Year Book* again aims to present a comprehensive and faithful account of life in Victoria today. In attempting to achieve this objective, the *Year Book* reports upon important State activities and in particular upon the major social, political, and economic developments and trends of the State. In view of the importance of the Integrated Economic Censuses conducted by the Bureau, an account of this project is given in Part 7 and should help readers understand its background and its effects on the new presentation of the Bureau's economic statistics. Appendix C gives an outline of the new Commonwealth Health Benefits which became operative during 1970.

As far as possible continuity, especially of statistical information, is preserved so that the *Year Book's* function as a tool of reference can be maintained unimpaired. Consistent with its basic purpose, the coverage of the book is wide and hence, of necessity, its treatment is broad. Therefore, the statistical tabulations, which are supplemented by descriptive text, graphs, maps, and photographs, are comprehensive rather than detailed. The specialist reader will, however, frequently wish to pursue a subject further and hence to refer to other publications issued by this Office. These are listed in Appendix I and, as opportunity presents itself, are expanded to incorporate a steadily increasing amount of statistical information. They may be obtained from the Victorian Office of the Bureau which also provides library facilities where the public may consult a wide range of statistical references.

The statistical tables in the *Year Book* give the latest facts available at the time the book goes to press. However, because of the time required for various phases of editing and printing, later information on a particular topic is often available in mimeographed publications. Readers should be aware that rounded figures sometimes cause small discrepancies between totals and the sums of components. Yearly periods shown as, e.g., "1969", refer to the year ended 31 December 1969; those shown as, e.g., "1968-69", refer to the year ended 30 June 1969. Other yearly periods are specifically indicated.

This edition again contains a number of new articles and hence some of the material published previously has been omitted. To help in tracing such omissions, references retrospective to 1961 are given both in the places where the articles last appeared and, in the case of major articles, in Appendix E. These references show the year of publication and the page number.

The material in the *Year Book* has been carefully checked throughout, but I shall be grateful to those who will be kind enough to point out defects or make suggestions.

Readers requiring the main statistical information of the *Year Book* in a concise form are referred to the *Victorian Pocket Year Book* which is usually published in July of each year. Copies can be obtained from the Victorian Office of the Bureau.

A number of persons and institutions have again helped the preparation of the *Victorian Year Book* ; I express my thanks to them in detail in the following pages.

V. H. ARNOLD

*Deputy Commonwealth Statistician
and Victorian Government Statist*

April 1971

ACKNOWLEDGMENTS

The preparation of this *Victorian Year Book* has been a complex undertaking which would not have been possible without the willing co-operation of many persons and institutions in the community.

First, I wish to thank members of my own staff who have pursued their task with great enthusiasm and have again endeavoured to make the *Year Book* a true reflection of Victoria's activities today. It has been edited by the Editor of Publications, Mr H. L. Speagle, M.A., B.Ed. The revision, compilation, and tabulation of statistics have been the responsibility of the two Assistant Deputy Commonwealth Statisticians, Mr N. Bowden, B.Ec., and Mr R. O. Spencer, and the supervisors working under them : Mr J. F. Clark, B. Com., Secondary Industries and Distribution, Mr J. Curtain, B. Com., Population and Employment, Mr N. L. Dunstan, Primary Industries and Construction, Mr R. A. Hamilton, B.Com., Finance, Mr D. J. Hourigan, B. Com., A.A.S.A., Automatic Data Processing, and Mr W. N. B. Pratt, B. Com., Dip. Pub. Adm., A.A.S.A., *p.s.a.*, Publications and Research.

Second, my thanks are due to the many persons and institutions listed below who either supplied basic information for the various articles or advised on their preparation. Their suggestions in many cases made possible a continual revision of the scope as well as the contents of various articles.

Third, I must thank Mr Norman Quaintance who redesigned the book in its new format and the Government Printer and his staff for their interest, skill, and resourcefulness in resetting and printing it.

The following persons and institutions assisted in the preparation of the articles :

PART 1 PHYSICAL ENVIRONMENT

Commonwealth Bureau of Meteorology
Department of Crown Lands and Survey
La Trobe University—Zoology Department (Mr P. A. Rawlinson)
Mines Department
Public Works Department—Ports and Harbors Division
State Rivers and Water Supply Commission
University of Melbourne—Department of Geology
Department of Zoology (Dr. M. J. Littlejohn)

PART 2 GOVERNMENT AND ADMINISTRATION

Department of Agriculture
Chief Electoral Officer
Clerk of Parliaments
Commonwealth Electoral Officer for Victoria
Crown Law Department
Official Secretary to His Excellency the Governor of Victoria
Premier's Department
Public Service Board of Victoria
State Library of Victoria—Archives Division

PART 3 DEMOGRAPHY

Ministry of Aboriginal Affairs
Department of Immigration
Immigration Department (State)

PART 4 INDUSTRIAL CONDITIONS, EMPLOYMENT, AND PRICES

Department of Labour and Industry
Department of Labour and National Service

PART 5 LOCAL GOVERNMENT

Ballarat Water Commissioners and Sewerage Authority
Country Fire Authority
Country Roads Board
Geelong Waterworks and Sewerage Trust
Latrobe Valley Water and Sewerage Board
Local Government Department
Melbourne City Council
Melbourne and Metropolitan Board of Works
Port Phillip Authority
State Rivers and Water Supply Commission
Town and Country Planning Board
Western Port Regional Planning Authority

PART 6 PRIMARY PRODUCTION

Department of Agriculture
Australian Meat Board
Australian Wheat Board
Department of Crown Lands and Survey
Fisheries and Wildlife Department
Forests Commission of Victoria
Ministry of Fuel and Power
Grain Elevators Board
Milk Board
Mines Department
Rural Finance and Settlement Commission

Soil Conservation Authority
State Rivers and Water Supply Commission
University of Melbourne—School of Agriculture

PART 7 MANUFACTURING INDUSTRY

Ministry of Fuel and Power
Gas and Fuel Corporation
Metal Industries Association of Victoria
Premier's Department
State Electricity Commission
Department of Trade and Industry
Victorian Pipelines Commission

PART 8 SOCIAL CONDITIONS

The Age

Anti-Cancer Council
Australian Broadcasting Commission
Australian Broadcasting Control Board
The Australian Financial Review
Australian Red Cross Society (Victoria)
Cancer Institute
Catholic Education Office
Children's Court
Commonwealth Serum Laboratories
Registrar, Co-operative Housing Societies
Council of Adult Education
Council of Public Education
Education Department
Fisheries and Wildlife Department
Registrar of Friendly Societies
Department of Health
Health Benefits Council of Victoria

The Herald

High Court of Australia
Hospitals and Charities Commission
Department of Housing
Housing Commission of Victoria
Institute of Applied Science of Victoria
La Trobe University
Library Council of Victoria
Liquor Control Commission
Lord Mayor's Fund
Melbourne City Council
Melbourne Kindergarten Teachers' College
Mental Health Authority
Monash University
Monash University—Faculty of Law
National Gallery of Victoria

National Parks Authority
National Trust of Australia (Victoria)
Prothonotary of the Supreme Court
Public Solicitor
Repatriation Department
Royal District Nursing Service
Department of Social Services
Social Welfare Department
Mr P. S. Staughton
Swan Hill Folk Museum
Town and Country Planning Board
Mr P. C. Trumble
University of Melbourne
Victoria Institute of Colleges
Victoria Police
Victorian Bush Nursing Association
Victorian Headmasters' Conference
Victorian School for Deaf Children
Victorian Universities and Schools Examinations Board

PART 9 FINANCE

Australia and New Zealand Banking Group Ltd
Commonwealth Banking Corporation
Council of Fire and Accident Underwriters
Export Payments Insurance Corporation
Public Trustee
Registrar of Probates
Registrar of Titles
Reserve Bank of Australia
State Savings Bank of Victoria
Stock Exchange of Melbourne

PART 10 TRADE, TRANSPORT, AND COMMUNICATIONS

Department of Civil Aviation (Victoria-Tasmania Region)
Geelong Harbor Trust Commission
Lower Yarra Crossing Authority
Melbourne Harbor Trust Commissioners
Melbourne and Metropolitan Tramways Board
Overseas Telecommunications Commission
Port Phillip Sea Pilots Service
Portland Harbor Trust Commissioners
Postmaster-General's Department (Victoria)
Public Works Department—Ports and Harbors Division
Department of Trade and Industry
Traffic Commission
Transport Regulation Board
Victorian Railways Commissioners
Western Port Regional Planning Authority

APPENDIX A

Department of Agriculture—Pastoral Research Station, Hamilton
Commonwealth Bureau of Meteorology
Shire of Dundas
Education Department
Glenelg Base Hospital
Glenelg Regional Library
City of Hamilton
Hamilton Art Gallery
Mr L. E. Huf
National Museum of Victoria
State Rivers and Water Supply Commission of Victoria

APPENDIX G

La Trobe Library

V.H.A.

Ranidae (one species). There are no consistent differences which will allow accurate use of the terms "frog" and "toad" for Australian amphibians. However, they are sometimes used to provide variety in common names, with "toad" being applied to the more globose, short-limbed, burrowing species, and "tree frog" to the more slender, long-limbed climbing species. Otherwise it is preferable to use the accepted general inclusive terms "frog" or "anuran". Twenty-nine described species are known to occur in Victoria (Hylidae—nine species, Leptodactylidae—twenty species). Four additional subspecies are currently recognised and four forms of uncertain status are presently under investigation. The anuran fauna of Victoria is listed in the table on page 3.

Anurans have several general characteristics which make them suitable for experimental studies: convenient size, ready availability, ease of maintenance, external fertilisation and development, and relatively uncomplicated stereotyped behaviour patterns. These features, together with low dispersal ability and dependence on the availability of water, have resulted in anurans being extensively studied in the areas of zoogeography and evolutionary biology, especially for understanding the species concept in higher animals. Consequently, much more is presently known about species delimitation (taxonomy) and associated problems in anuran amphibians than in the other vertebrate groups. The Anura of southern Australia, particularly of southwestern Western Australia and of Victoria, have been intensively investigated in this regard, and the results have contributed to a better understanding of the basic problems of species formation (speciation) and co-existence.

Taxonomic criteria

A fundamental biological problem is the understanding and delimiting of the diversity of living forms, with the species occupying the primary position. While there are difficulties in applying a species concept to asexual systems, some progress has been made with biparental, sexually reproducing forms. In these cases, species can be broadly defined as groups of individuals which share, or have the potential to share, a common heredity (genetic pool) through interbreeding. They are separated from other spatially co-existent (i.e., sympatric) interbreeding groups by a genetic gap imposed by the operation of factors which prevent effective genetic interchange—reproductive isolating mechanisms. Thus each biparental species is a closed genetic system maintaining its uniqueness and evolving along its own adaptive path.

Isolating mechanisms are the most important features of biparental species and operate at two levels: before or after mating. In the former category (pre-mating) are differences in time and site of breeding, size, and courtship behaviour; in the latter category (post-mating) are infertility, hybrid inviability, and hybrid sterility. The expenditure of reproductive effort on the production of less-fit hybrids is very inefficient for co-existent species so that pre-mating isolating mechanisms which prevent such wastage should be favoured by natural selection. In species of frogs the most important pre-mating isolating mechanism is the distinctive male mating call and associated specific female response only to the call of a male of the same species. Thus the mating call will also be an ideal indicator of the presence of each sympatric species of frog.

VICTORIA—TAXONOMIC COMPOSITION AND ZOOGEOGRAPHIC DISTRIBUTION OF AMPHIBIANS

Taxon	Zoogeographic subregions			
	Bassian		Eyrean	Wide-ranging
	Southern	Eastern		
Hylidae				
<i>Hyla aurea aurea</i>	—	+	—	—
<i>H. aurea raniformis</i>	—	—	—	+
<i>H. citropa</i>	—	+	—	—
<i>H. ewingi</i>	+	—	—	—
<i>H. ewingi</i> complex (sp. nov.)	—	—	+	—
<i>H. jervisiensis</i>	—	+	—	—
<i>H. lesueuri</i>	—	—	—	+
<i>H. maculata</i>	+	—	—	—
<i>H. peroni</i>	—	—	—	+
<i>H. phyllochroa</i>	—	+	—	—
<i>H. verreauxi verreauxi</i>	—	+	—	—
<i>H. verreauxi alpina</i>	+	—	—	—
Leptodactylidae				
<i>Crinia haswelli</i>	—	+	—	—
<i>C. laevis</i>	+	—	—	—
<i>C. parinsignifera</i>	—	—	+	—
<i>C. signifera</i>	—	—	—	+
<i>C. sloanei</i>	—	—	+	—
<i>C. victoriana</i>	+	—	—	—
<i>Heleioporus australiacus</i>	—	+	—	—
<i>Limnodynastes dorsalis dumerili</i>	—	—	+	—
<i>L. dorsalis insularis</i>	+	—	—	—
<i>L. dorsalis interioris</i>	—	—	+	—
<i>L. dorsalis</i> (subsp. nov.)	+	—	—	—
<i>L. fletcheri</i>	—	—	+	—
<i>L. peroni</i>	—	—	—	+
<i>L. tasmaniensis</i> (Southern Call Race)	+	—	—	—
<i>L. tasmaniensis</i> (Northern Call Race)	—	—	+	—
<i>Mixophyes balbus</i>	—	+	—	—
<i>Neobatrachus centralis</i>	—	—	+	—
<i>N. pictus</i>	—	—	+	—
<i>N.</i> (sp. nov.)	+	—	—	—
<i>Philoria frosti</i>	+	—	—	—
<i>Pseudophryne bibroni</i>	—	—	+	—
<i>P. dendyi</i>	—	+	—	—
<i>P. semimarmorata</i>	+	—	—	—
<i>Uperoleia marmorata</i>	—	+	—	—
<i>U. rugosa</i>	—	—	+	—
Total	11	10	11	5

Unequivocal species of frogs are those which can co-exist with other closely related forms (i.e., are sympatric), and still maintain their distinctness. Such undisputed species are generally recognised by distinctive adult external morphology and unique male mating call. But morphological distinctness is not an essential requisite and many anuran species are so similar in appearance that initial recognition was based solely on the mating call (e.g., *Crinia parinsignifera*, *C. signifera*, and *C. sloanei*). Subsequent detailed investiga-

tions have usually led to the finding of slight but consistent morphological differences, and together with other information about various aspects of their biology, have confirmed the status of these concealed (cryptic) species. Other cryptic species which do not co-exist spatially (i.e., are allopatric) have been detected through artificial crossing experiments which have indicated their inability to hybridise successfully with their genetically closest, but geographically separated, relative.

Those populations which occupy geographically exclusive but contiguous ranges and form narrow hybrid zones are generally considered as separate species if the parental types are also present in the hybrid zone. Broader zones of intergradation are characteristic of subspecies, this latter term also being applied to slightly differentiated but completely geographically separated forms. Six cases of narrow hybrid zones and three of broader intergradation occur in Victoria and are currently under investigation. In cases such as these taxonomic decisions are difficult, and currently must be subjectively based. But these cases reflect the dynamic nature of divergent evolution and therefore attract the interest of biologists concerned with the processes of species formation. Sometimes the investigator does not consider the forms to have diverged enough even to be recognised as subspecies and he may refer to them informally as races. This term may also be used for well-differentiated populations still under investigation and awaiting formal description and naming. Species, subspecies, and races are collectively referred to as taxa (singular : taxon). Closely related groups of taxa representing cryptic species or transitional stages in the process of species formation are generally referred to as species complexes (e.g., the *Hyla ewingi* complex which includes : *H. ewingi*, a similar but presently undescribed species, *H. verreauxi verreauxi*, and *H. verreauxi alpina* in Victoria ; or the four subspecies of the *Limnodynastes dorsalis* complex). If no subspecies are recognised, then the species is said to be monotypic and a two part latinised name (binomial) is applied (e.g., *Hyla lesueuri*). If subspecies are recognised, the species is said to be polytypic and the various taxa are each given a three part latinised name or trinomial (e.g., *Hyla aurea aurea* and *H. aurea raniformis*), the first described being termed the nominate subspecies.

Environment, climate, and distribution

Because of their limited ability to control water loss through the skin, and the requirement of fresh water or sustained high humidity for embryonic and larval development, anurans are strongly influenced by the amount, effectiveness, reliability, and seasonal distribution of precipitation. They are also intolerant of salt water. Solar radiation is important, perhaps to a lesser extent, in affecting rates of evaporation, availability and duration of free water, temperature extremes in shallow ponds, and larval development rates. These factors combine to determine the general distribution of anurans, but particular species' distributions will also be controlled by their special physiological adaptations, dispersal powers, and historical opportunities (e.g., availability of suitable migratory paths).

Within Victoria, the area of greatest abundance of anurans is warm, moist east Gippsland with more than seventeen taxa ; while the hot, dry Mallee represents the other extreme with one or two taxa. The Murray

River Valley provides a moist corridor through the Mallee allowing five taxa to penetrate an otherwise unsuitable area. Four taxa occur in the sub-alpine areas of Victoria (i.e., above 4,000 ft). Twelve to fourteen taxa occur in south-central Victoria, and at least nine in south-western Victoria.

Zoogeography

Of the several suggested schemes to subdivide the Australian Zoogeographic Region, a modified version of that advanced by Baldwin Spencer appears the most satisfactory at present. This proposal divides Australia into four subregions, which have distinctive faunas and which also fit the broad climatic areas of Australia, namely temperate, tropical, and arid. The subregions are:

1. *Bassian*. Temperate eastern and south-eastern Australia south of 30° S. latitude, including the highlands, Tasmania, and the Bass Strait islands. This subregion may be further subdivided on the basis of climate into (a) the warm eastern area characterised by rain at all seasons and either a uniform distribution or a slight summer maximum; and (b) the cool southern area characterised by rain at all seasons but with a winter maximum.
2. *Eyrean*. Arid and semi-arid central Australia, generally with an annual rainfall of less than 20 inches.
3. *South-western*. Temperate south-western Western Australia with a mediterranean climate.
4. *Torresian*. Northern and north-eastern tropical and sub-tropical areas with a high annual rainfall but a dry winter.

In this scheme approximately two thirds of Victoria is included within the Bassian Subregion and the balance within the Eyrean Subregion (see section on Reptiles for details, including life forms of vegetation). Hence four components within the Victorian anuran fauna may be recognised:

1. *Southern Bassian*. Eleven taxa are mostly restricted to the Dividing Range or southern coastal areas of Victoria (see table on page 3). There is a progressive reduction of this component eastward into south-eastern New South Wales and westward into south-eastern South Australia. The most widely distributed taxon is *Hyla ewingi* which extends to Moss Vale, New South Wales, in the north, and to the Mount Lofty Range and Kangaroo Island, South Australia, in the west. The most restricted is *Phyllorhina frosti* which is known only from the Mount Baw Baw Plateau. Five of these taxa (*Crinia laevis*, *Hyla ewingi*, *Limnodynastes dorsalis insularis*, *Limnodynastes tasmaniensis* (Southern Call Race), and *Pseudophryne semimarmorata*) also occur in Tasmania.
2. *Eastern Bassian*. Ten taxa, whose northern limits are within or just beyond the northern boundary of the Bassian Subregion in New South Wales, also occur in southern Victoria with progressive recession westward through Gippsland to Port Phillip Bay (see table on page 3).
3. *Eyrean*. Eleven taxa have distributions mainly to the north of the Dividing Range and represent the Eyrean component of the fauna (see table on page 3). Three taxa (*Limnodynastes dorsalis dumerili*, *Neobatrachus pictus*, and *Pseudophryne biboni*) have been able to penetrate the Dividing Range through the Kilmore gap and reach south to the outskirts of Melbourne. *Limnodynastes fletcheri* is restricted to the valleys of the larger rivers

(Goulburn and Murray Rivers) ; the others are more generally distributed throughout the area with progressive recession to the west and north-west into the Mallee where, except along the moist Murray River valley which allows *Limnodynastes dorsalis dumerili*, *L. tasmaniensis* (Northern Call Race), and *Crinia parinsignifera* to persist. *Neobatrachus centralis* may be the only extreme arid-adapted species.

4. *Wide-ranging.* Five taxa range widely throughout south-eastern Australia and cannot easily be included in any of the other components. *Crinia signifera* is found through all Victoria except the Mallee; *Hyla aurea raniformis* is distributed through the northern plains and rivers, and southern Victoria, excluding the montane regions and East Gippsland; *Limnodynastes peroni* occurs through coastal eastern and south-eastern Australia and north-western Tasmania. *Hyla lesueuri* occurs in northern and eastern Australia and westward through southern Victoria to near Ararat, while *H. peroni* has an extensive eastern Australian distribution ranging into Victoria along the larger inland rivers and also along the east coast through Gippsland to near Rosedale. These latter two species may represent an intrusive Torresian element. (See table on page 3.)

General ecology

With a complex life cycle typically involving an aquatic larva and a terrestrial adult, anuran amphibians are able to exploit two major ecological adaptive zones. At present little is known about the ecology of Victorian anurans, but some generalisations can be made.

Larvae (tadpoles) of most species are herbivores feeding on phytoplankton and encrusting algae, scavengers utilising fungal hyphae and animal remains, or a combination of these. Populations of tadpoles can reach very high densities in temporary ponds and shallow streams and represent a major component in the energy transfer pathways of such ecosystems.

All adult frogs are carnivores and are generally opportunistic rather than specialised feeders, taking virtually any small moving prey. Crawling and low-flying insects, spiders and mites constitute common elements of diet, with isopods, earthworms and snails being occasionally represented. Some of the larger species of frogs also prey on smaller species of frogs (e.g., *Hyla aurea*, *Limnodynastes dorsalis interioris*).

Frog eggs apparently are not commonly used as food by predators. However, larval stages are subject to heavy predation, particularly by carnivorous aquatic insects (water beetle adults and larvae, water scorpions, damselfly larvae and dragon-fly larvae). Fish and turtles are probably important predators in larger, more permanent bodies of water such as lakes and river lagoons. Snakes and predatory water birds (e.g., white-faced heron, egret) also eat frogs. Leeches and mosquitoes attack adult frogs as external parasites, while the dipteran (fly) larva *Batrachomyia* lives under the skin of several species, particularly *Pseudophryne*. Both adult and larval stages can be infected with a wide variety of protozoan (e.g., species of *Protoopalina*) and platyhelminth (flukes and tapeworms) parasites.

Adaptations to extreme environments

Adaptations to drier environments include avoiding desiccation by burrowing deeply, often assisted by the possession of horny or fleshy tuber-

cles ("spades") on the feet (*Limnodynastes dorsalis* and *Neobatrachus spp.*); long adult life in order to live through extended droughts; opportunistic breeding associated with the unreliable but heavy falls of rain which occur in the desert during the warmer seasons; and a short aquatic larval life to allow metamorphosis to be reached before the ponds dry out. No species of anuran occurring in arid areas has terrestrial oviposition and development, presumably because of the inability to control water loss through the egg capsule.

High altitude conditions also present problems for amphibians. Exposed shallow pools can experience high daytime temperatures during summer (e.g., 90·7°F. at 4,500 ft on Lake Mountain) and drop to near freezing point at night, thus requiring a wide temperature tolerance by tadpoles. Modified breeding seasons and extended larval life may also occur because of the short growing season. At low altitudes (c. 1,000 ft) *Crinia victoriana* breeds during the period April–May; the larvae reach a maximum size of 28 mm and metamorphose in October and November. At 4,500 ft on Lake Mountain, however, breeding begins in January and is almost completed by mid-March; the larvae grow more slowly and reach body lengths up to 45 mm, suggesting that metamorphosis is delayed until the following season after the snow has melted.

Life histories

Breeding seasons

Three types of breeding season may be recognised:

1. *Short regular.* Breeding occurs at the same time each year and is confined to a 4-6 week period, the season presumably being triggered off by the annual temperature regime. *Crinia laevis*, *C. victoriana*, and the three species of *Pseudophryne* breed during a short period in autumn, while the montane species, *Philoria frosti*, has a short breeding season in late spring.
2. *Short irregular.* Populations occupying areas of low and unreliable rainfall are characterised by very short (2-3 days) breeding seasons following heavy precipitation. Populations of *Neobatrachus centralis* and *N. pictus* in the Mallee area may breed in this way.
3. *Extended.* (a) Several species begin breeding with the first heavy rains of autumn and continue intermittently throughout the winter into the early summer with a number of bursts of breeding. Breeding activity appears to follow the rainfall associated with the regular progression of cold fronts characteristic of southern Victoria. *Crinia signifera* and *Hyla ewingi* have breeding patterns of this type. (b) A large group of species begins breeding in late winter-early spring and continues through into summer, sometimes with a second peak in autumn.

Breeding behaviour

Most breeding activity occurs at night, although during the height of the season it may be continuous. The following is a general account of the breeding process.

Males arrive at the breeding site and establish calling stations or "territories". The mating call indicates to other males that a particular area is occupied and a special "territorial call" may be used to discourage intruders; sometimes physical contact may occur with associated aggressive

behaviour. After a period of spatial adjustment, the males settle down to producing the distinctive mating call which is highly characteristic and serves to attract a breeding female of the same species. When the eggs are mature and ovulation has commenced, or can be initiated by the mating process, a female moves into the breeding area and is attracted to the male mating call. Close visual or physical contact results in the male clasping the female (amplexus). The pair then moves to the oviposition site where egg-laying and external fertilisation occur. Except, possibly, for species of *Pseudophryne*, where the pair or the male remains in the nest with the eggs, there is no parental care of the developing embryos.

Since it is usual for several species to breed in the same area at the same time, there can be serious problems associated with interbreeding, space sharing, and acoustic interference resulting from the simultaneous production of different mating calls. Each sympatric species has a distinctive mating call to which only a female of the same species responds, thus greatly reducing the possibility of attempts at cross-mating. Males seem to be indiscriminate and will attempt to clasp any moving object of the appropriate size, so that effective discrimination by the female is essential for reproductive efficiency. The selection of species-specific calling positions, or of single species aggregations into choruses in different parts of the breeding habitat, can minimise the spatial problem; even so, males of different species may call in close proximity, suggesting that space may not always be a limiting factor. Acoustic interference may be reduced in three ways: spatial separation so that the intensities of calls of other individuals are below the threshold of hearing; time sharing where one individual alternates his calls with those of another close individual of the same or a different species; and frequency separation where the calls of different species are transmitted on different frequency bands with the ears acting as filters.

The following examples, taken from Yan Yean, twenty miles north of Melbourne, illustrate how some of these mechanisms operate. In the autumn males of *Crinia victoriana* and *Pseudophryne semimarmorata* use the same

VICTORIA—AMPHIBIANS: A SPRING CHORUS AT YAN YEAN

Species	Approximate dominant frequency of mating call (Hertz)	Usual calling site
<i>Limnodynastes dorsalis</i>	700	Floating, supported by emergent vegetation
<i>Limnodynastes peroni</i>	1,000	In water, concealed at bases of flooded tussocks
<i>Hyla aurea</i>	1,250	Floating in open water
<i>Limnodynastes tasmaniensis</i>	2,000	Floating in open situations, supported by emergent grass stems
<i>Hyla verreauxi</i>	2,050	On banks, sometimes more than 30 ft from the water
<i>Hyla ewingi</i>	2,600	At water's edge, above surface in emergent or marginal vegetation, or floating supported by vegetation
<i>Crinia signifera</i>	2,900	On banks at water's edge

breeding sites (locations of summer-dry ponds) and may call in close proximity, with the sound energy in the mating calls of each species being concentrated around 2,500 Hertz (the dominant, carrier, or transmission frequency). Electrophysiological studies have shown that the ears of both species are maximally sensitive at this frequency. Field play-back experiments have shown that acoustic interference is minimised by a *P. semimarmorata* male alternating or placing its much shorter calls in the intervals between the longer, more complex calls of nearby *C. victoriana* males (i.e., time sharing). In the early spring, seven other species call and breed at the same site (now flooded and an extensive swamp). In this case, there is strong evidence for the operation of both spatial separation and transmission frequency differentiation as shown in the table on page 8.

Eggs and oviposition

No field information is presently available on the eggs and oviposition sites of the following species: *Crinia haswelli*, *Hyla citropa*, *H. lesueuri*, *H. maculata*, *H. phyllochroa*, *Neobatrachus* sp. nov., *Uperoleia marmorata*, and *U. rugosa*.

Form of egg mass and method of oviposition show little variability within those species of the Family Hylidae for which data are available, closely following the "typical" pattern. Numerous small pigmented eggs are laid in water; there is a short embryonic development and the larva hatches at a relatively immature stage, remaining quiescent and attached to the egg capsules or aquatic vegetation for some time before actively swimming and feeding. Even so, two types of egg mass may be recognised: Type 1. Submerged bunches of eggs enclosed in a clear jelly and attached to grass stems, reeds, and other objects (most species of *Hyla*); and Type 2. Floating mats of eggs which later sink to the bottom (*Hyla aurea*).

In contrast to the relatively uniform hylid pattern, the species of the Family Leptodactylidae, for which information is available, show considerable variation in type of egg mass and site of oviposition. Five additional categories may be recognised:

Type 3. Foamy egg masses floating in open water or concealed by emergent vegetation (all species of *Limnodynastes*);

Type 4. Foamy egg masses concealed in a flooded burrow or nest (*Heleioporus australiacus*, *Phyloria frosti*);

Type 5. Strings of eggs with clear jellies attached to submerged vegetation (*Neobatrachus pictus*);

Type 6. Submerged clumps of eggs or individual eggs resting on, or attached to, the substratum (*Crinia parinsignifera*, *C. sloanei*, *C. signifera*, *Mixophyes balbus*, *Neobatrachus centralis*); and

Type 7. Clumps of eggs laid on land, either under vegetation (*Crinia laevis*, *C. victoriana*) or in shallow burrows (all species of *Pseudophryne*).

Larval stages

No information is available on the tadpoles of *Hyla citropa*, *H. maculata*, and *H. phyllochroa*. For the remainder, four main adaptive types may be recognised:

1. *Generalised*. This is the form of the typical and familiar tadpole, and most Victorian species are of this type, occupying still-water habitats and

feeding on detritus and encrusting algal films ;

2. *Nektonic*. Deep-bodied, high-finned actively swimming tadpoles are also found in some still-water habitats and may use suspended microscopic algae (phytoplankton) as their principal food source (*Crinia haswelli*, *Hyla ewingi complex*) ;

3. *Mountain stream*. These are the very strongly swimming tadpoles of fast-flowing aquatic habitats ; they are characterised by flattened bodies, well-developed tail musculature, narrow fins and large suction mouths allowing attachment to the rocky substratum and maintenance of position in a current (*Hyla lesueuri*, *Mixophyes balbus*) ; and

4. *Direct development*. Larvae adapted for intra-capsular development are characterised by vestigial mouth parts, reduced musculature, no pigmentation, and an adequate supply of yolk to carry the embryo through to metamorphosis (*Philoria frosti*).

Modification of life history

Not all species show the typical anuran life cycle with aquatic oviposition and a free-living active larval stage. Trends towards terrestrial development within the egg capsules, or direct development through suppression of the larval stage, have occurred many times within the Anura. Presumably there are advantages in reducing predation pressure (avoidance of specialised aquatic predators), interspecific competition (tadpoles of several species may hatch at the same time and thus compete for limited food resources), and in obviating the need for free water breeding sites. But such modifications can only occur in areas of sustained high humidities since amphibians have not been able to evolve shelled eggs and the associated water impermeability characteristic of the reptiles and birds.

The fullest expression of this trend is reached when the eggs are placed in specialised pouches in the body of one of the parents and transported about under favourable microclimatic conditions until development is completed and small frogs hatch out. No Victorian species exhibits this type of life cycle but in *Crinia darlingtoni*, a rain forest species of the McPherson Range area on the Queensland-New South Wales border, the fertilised eggs are placed in lateral pouches in the male, where the larvae develop and metamorphose into small frogs.

An alternate modification is seen in the terrestrial oviposition of large, yolky eggs in nests which can be maintained at high humidities for long periods. In such cases the tadpole stage is retained within the egg mass while it develops and eventually metamorphoses. Only one Victorian species, *Philoria frosti*, has this type of life history. Large, yolky, unpigmented eggs are laid in small nests in saturated sphagnum moss ; an unpigmented tadpole with rudimentary mouth parts is formed, but it does not feed and subsists on its generous supply of yolk. The tadpole is capable of swimming, but is normally retained within the egg mass until it metamorphoses. The terrestrial oviposition and advanced stage of larval development at hatching seen in *Crinia laevis*, *C. victoriana*, and the three species of *Pseudophryne* may represent earlier stages in this trend.

Further references

- LITTLEJOHN, M. J. "Patterns of zoogeography and speciation in south-eastern Australian Amphibia", pp. 150-174, in *Australian inland waters and their fauna*, ed. A. H. Weatherley. Canberra, Australian National University Press, 1967.
- "Frog calls and the species problem", pp. 259-264, in *Australian zoologist*, vol. 14, 1968.
- "Amphibia of east Gippsland", pp. 105-112, in Royal Society of Victoria, *Proceedings*, vol. 82, pt 1, 1969.
- LITTLEJOHN, M. J. and MARTIN, A. A. "Mating call as an aid to the identification of the frogs of the Melbourne area", pp. 126-127, in *Victorian naturalist*, vol. 86, 1969.
- MAIN, A. R. "Ecology, systematics and evolution of Australian frogs", pp. 37-86, in *Advances in ecological research*, vol. 5, 1968.
- MARTIN, A. A. "Australian anuran life histories: some evolutionary and ecological aspects", pp. 175-191, in *Australian inland waters and their fauna*, ed. A. H. Weatherley. Canberra, Australian National University Press, 1967.
- "The biology of tadpoles", pp. 326-330, in *Australian natural history*, vol. 15, 1967.
- MARTIN, A. A. and LITTLEJOHN, M. J. "The amphibian fauna of Victoria: two new records and a checklist", pp. 170-172, in *Victorian naturalist*, vol. 86, 1969.
- MOORE, J. A. "The frogs of eastern New South Wales", pp. 149-386, in American Museum of Natural History, *Bulletin*, vol. 121, 1961.

Reptiles

Introduction

Among the vertebrates (Sub-phylum Vertebrata), amphibians (Class AMPHIBIA) were the first to invade the land surfaces. The reptiles (Class REPTILIA) evolved from amphibian ancestors during the Carboniferous Period over 300 million years ago. Altogether sixteen Orders of reptiles are known to have existed, only four of which survive to the present day. From two of the extinct Orders evolved the so called higher vertebrates, birds (Class AVES) from the ancestors of the Order THECODONTIA, and mammals (Class MAMMALIA) from members of the Order THERAPSIDA.

Reptiles were the first completely terrestrial vertebrates and they evolved a number of adaptations to terrestrial life not found in amphibians. Most important of these was the *cleidoic egg* which is enclosed in a protective shell that prevents the free exchange of any materials other than respiratory gases; thus the egg is resistant to desiccation making it suitable for laying on land. The egg also has an abundant yolk supply so that the embryo can develop to a large size and hatch at an advanced state, eliminating the need for a larval stage. A typical vertebrate cleidoic egg soon after fertilisation consists of an embryo and a large yolk sac surrounded by an egg shell. As development proceeds three membranes form; the *chorion* which sheathes the embryo and yolk inside the egg shell; the *allantois* which is sac like, stores waste products as uric acid, and its vascular outer layer contacts the chorion and acts as a respiratory organ; and the *amnion* which encloses the developing embryo in a fluid filled space. The egg is laid in a terrestrial nest and after a period of incubation the hatchling emerges as a small version of the adult.

Reptiles, birds, and mammals all basically reproduce by cleidoic eggs although in Eutherian (placental) mammals the fertilised egg is retained in the uterus, no egg shell is laid down, and the chorion and allantois become firmly attached to the wall of the uterus, allowing exchange of materials directly from the maternal to the embryonic blood stream. This structure is

the placenta, and its evolution has allowed a great reduction in the yolk content of the egg as the embryo can be nourished continuously until it is born alive and fully developed. The mode of reproduction varies in reptiles: in some species an egg shell is deposited after fertilisation and the egg is laid almost immediately; these species are said to be "oviparous". In others, an egg shell is deposited after fertilisation, but the egg is retained in the oviduct until the embryo has reached an advanced stage and the egg hatches soon after it is laid; these species are said to be "ovoviviparous". In the reproductively most advanced reptiles, no shell is deposited after fertilisation; the egg is retained in the uterus and the chorion and allantois become attached to the uterine wall allowing exchange of materials directly from the maternal to the embryonic blood stream. This structure is analogous to the mammalian placenta; the young are born alive and fully developed; and these species are said to be "viviparous". Thus some reptiles and mammals do not have a typical cleidoic egg, but in all cases the amnion survives in its original form, and the reptiles, birds, and mammals are grouped as "amniotes" to indicate their affinities.

Excretion of nitrogenous waste in fish and amphibians is through ammonia (ammonotely) or urea (ureotely); however, both ammonia and urea are soluble in water and require a continual flow of water through the animal to maintain their concentrations below toxic levels. Thus an essential physiological adaption in the cleidoic egg was some form of insoluble, non-toxic, excretory end product. For this reason, uric acid excretion (uricotely) evolved with the cleidoic egg. Uricotely was also retained in the adult as water is not needed in the excretion of waste, and this made reptiles independent of permanent water.

The evolution of the cleidoic egg also brought the need for internal fertilisation in reptiles and associated with this was the development of a male intromittant organ, the penis, for inseminating the female. Thus reptiles did not need to return to the water for fertilisation to occur. Another reproductive advance first seen in reptiles is the evolution of the metanephric kidney in which the genital ducts are separate from the urinary ducts (ureters).

Freedom from water for reproduction and excretion gave reptiles the potential to exist away from permanent water and they evolved a heavily keratinised dry scaly skin which prevented water loss from the body. The impervious skin prevented cutaneous (skin) respiration, so that reptiles came to rely exclusively on pulmonary (lung) respiration. The need for a regular supply of air to the lungs caused the development of a true sternum from the ribs which allowed rhythmic breathing. However, the efficiency of the respiratory system in reptiles is restricted, as the pulmonary (lung) and systemic (body and visceral) blood circulations are not completely separated and mixing of oxygenated and de-oxygenated blood occurs in the partially divided ventricle of the heart which is common to both circulations. Mixing is increased by the retention of two aortic arches from the ventricle to supply the body. In mammals and birds the ventricle is completely divided and there is only a single aortic arch, thereby creating two separate circulations and preventing the mixing of oxygenated and de-oxygenated blood.

Reptiles are restricted in terrestrial environments mainly by temperature. This results from the fact that they have no true physiological control of body temperature and they must rely on environmental (external) factors for the maintenance of body temperature. For this reason reptiles are said to be ectothermic. Only birds and mammals have true physiological (internal) control of body temperature and they are said to be endothermic.

Reptiles thus show advances over amphibians in that they can reproduce on land, and they have good physiological control of osmoregulation, evaporative and excretory water loss, and ionic balance ; however, they are not as advanced as birds and mammals as they have no true physiological control of body temperature.

Ecological requirements of reptiles

Body temperature regulation is the only function for which reptiles lack internal controls. However, all species have innate (inherited) behaviour patterns which cause them to select the most favourable environmental conditions. During activity, reptiles select conditions which enable them to maintain relatively constant body temperatures. Reptiles can be divided into two groups depending on the method they use for maintaining body temperature during activity:

1. Heliotherms (basking reptiles) use the energy in solar radiation to elevate body temperature ; thus, they can remain active in low environmental temperatures if they have access to sunshine.
2. Thigmotherms (non-basking reptiles) simply select suitable temperatures in shaded situations ; thus, they are limited directly by environmental temperatures.

When environmental conditions become unfavourable (either too hot or too cold) reptiles seek out a suitable microenvironment, such as under a rock or log, and remain inactive until conditions become favourable once more. Oviparous species also need a warm, dry site for laying eggs.

Thus the major ecological requirements for reptiles are first, a suitable thermal area for activity, which must include a basking site for a heliotherm ; second, a suitable microenvironment where the reptile can remain inactive and sheltered during unfavourable conditions ; and third, a warm, dry egg nest site for oviparous species.

Zoogeographic regions in Victoria

On the basis of animal distribution patterns, it is possible to divide the Australian continent into four zoogeographic subregions, the tropical Torresian, arid Eyrean, and temperate Bassian and South-western (see page 5 for a fuller discussion). Each of these subregions has a characteristic fauna. Two of these subregions, the Eyrean and Bassian, are represented in Victoria, and the boundary between them (see map opposite page 14) falls at about the 20 inch rainfall isohyet.

Eyrean subregion

Approximately one third of the State in the north and north-west is included in this region. It is a relatively flat and arid area with poor surface drainage, especially in the sandy north-west. The vegetation varies from woodlands, tree savannah, and grasslands in the north to heath, semi-arid mallee scrub, and arid scrub in the north-west. Thus the vegetation is very

open, and solar radiation penetrates to ground level easily. As daily air temperatures usually exceed 85° to 90°F. in summer, the penetration of intense solar radiation to the ground causes extremely high air to ground interface temperatures, measurements in excess of 160°F. being common. The Murray River, with its associated swamps, lagoons, and red gum woodlands, provides a more temperate corridor through this hot arid area.

Thus the major ecological requirement for an Eyrean reptile species is a microenvironment to shelter from the high surface temperatures in summer.

Bassian subregion

The remaining two thirds of the State in the east, south, and south-west are included in the Bassian subregion (see map). The Bassian area of Victoria includes the Eastern Highlands, South Gippsland Highlands, and Otway Ranges, as well as the western coastal and volcanic plains and the East and West Gippsland coastal plains. Thus topography varies greatly in the Bassian. The vegetation also varies greatly—from open coastal grasslands to dense forests, and on to alpine herbfields, swamps and grasslands. By comparison with the Eyrean, the Bassian has a cooler climate—daily summer temperatures do not usually exceed 80°F. The Bassian also has a much higher and less variable rainfall, which is distributed more or less evenly throughout the year. As a result of the higher rainfall and more varied topography, drainage patterns are well developed.

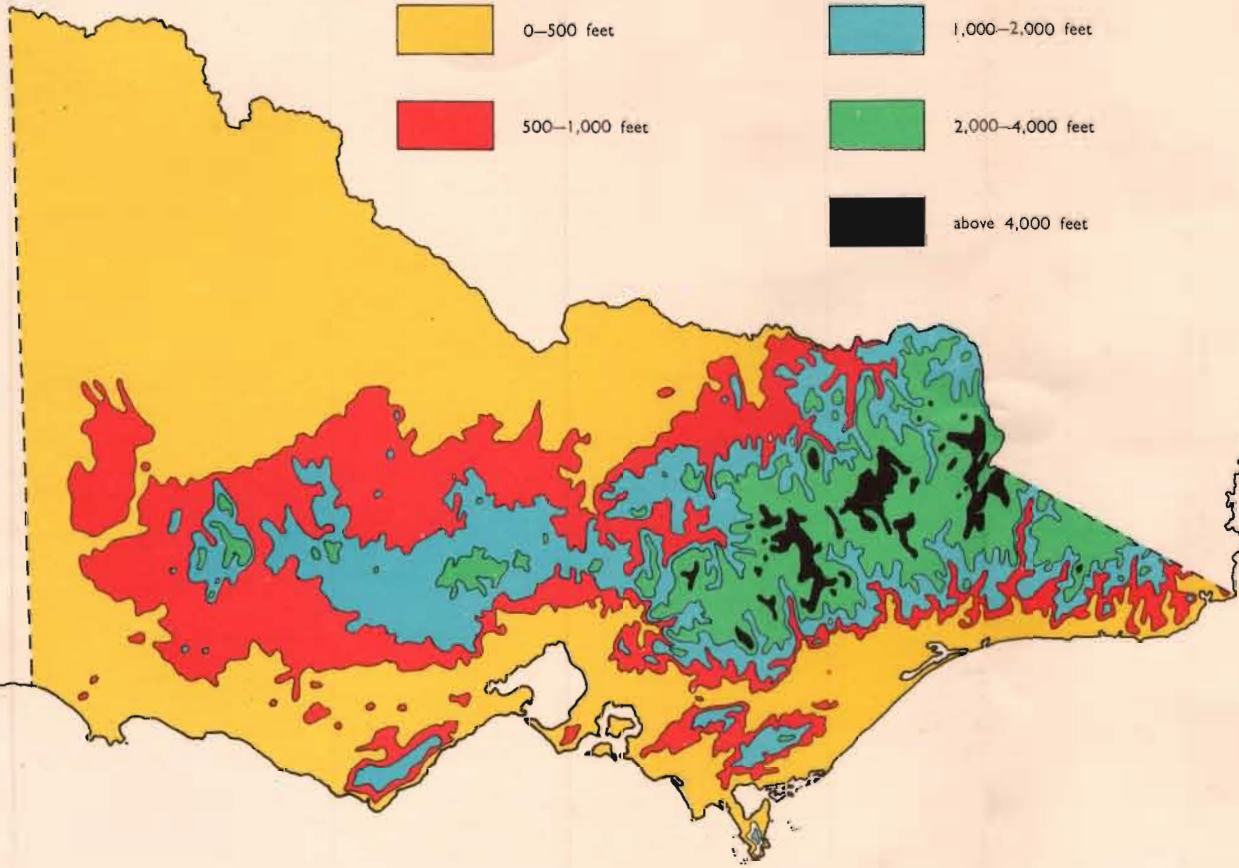
The Bassian subregion is the coldest of the four Australian zoogeographic subregions as it includes the highest latitudes and altitudes. Thus reptiles in the area are generally faced with low environmental temperatures. During activity, heliotherms can overcome this problem if they have access to sunlit areas, but thigmotherms must lower their thermal preferences. When inactive, both heliotherms and thigmotherms require a microenvironment to shelter from the low surface temperatures in winter. The three important ecological requirements for Bassian reptile species are first, prevailing environmental temperatures, second, availability of sunshine, and third, a suitable microenvironment to shelter from the low surface temperatures in winter.

Variation of these three factors within the Bassian makes it possible to recognise three distinct thermal zones (see map) each of which has a characteristic reptile fauna. These regions are :

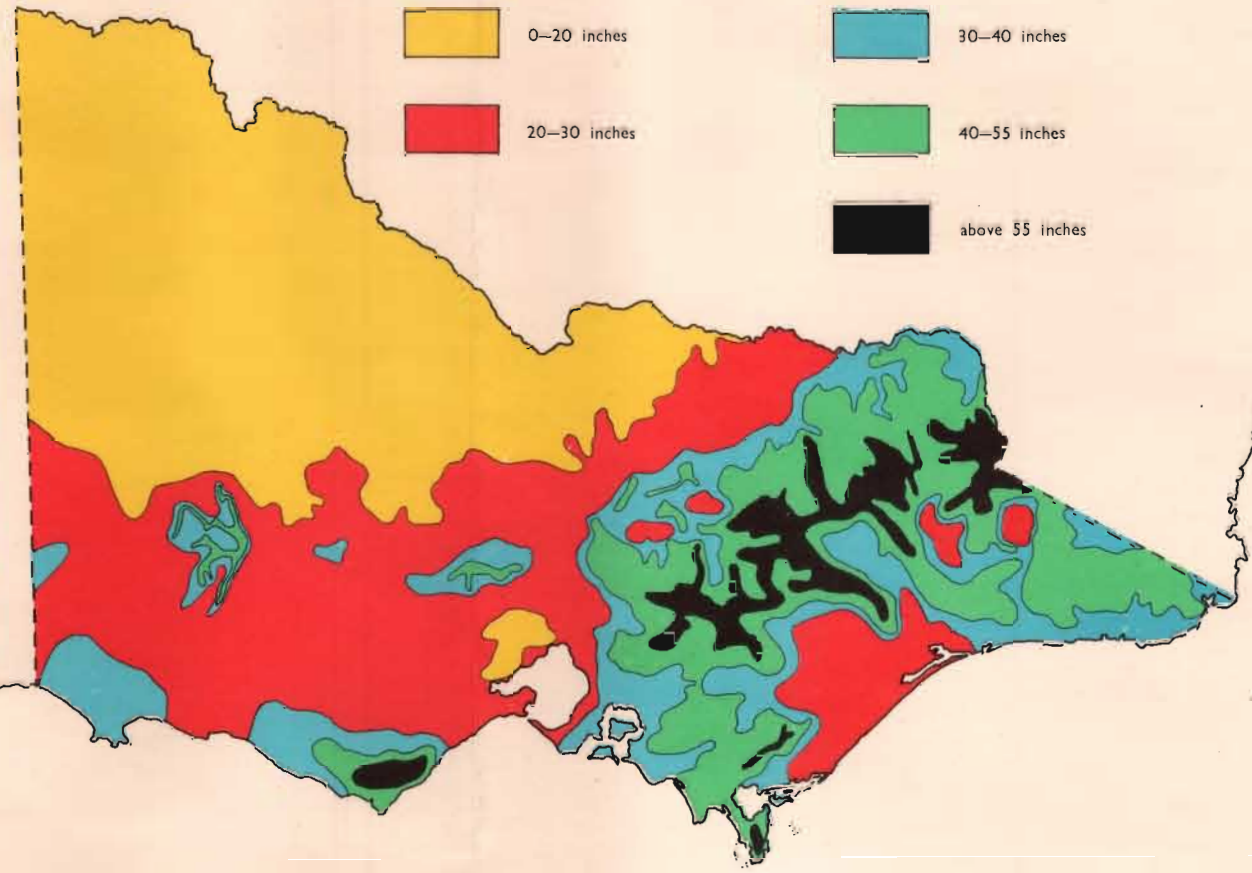
1. *Warm temperate zone.* The coastal plains of south-eastern Victoria, the volcanic and coastal plains of south-western Victoria, the inland margins of the Eastern Highlands and the Kilmore gap. The low elevations of these areas (less than 1,000 ft), low average annual rainfalls (less than 30 inches), and the open nature of the climax vegetation (woodlands, tree savannah, and tussock grasslands) result in high summer surface temperatures and intense solar radiation penetrates to the ground.
2. *Cool temperate zone.* The Eastern Highlands below 4,000 ft including the Otway Ranges and South Gippsland Highlands. In this zone the higher elevations result in lower surface temperatures and higher average annual rainfalls (more than 30 inches) than are found in the warm temperate zone. Climax vegetation varies from dry and wet sclerophyll forest to temperate rainforest, but the vegetation is always dense and prevents much of the available sunshine from penetrating to the ground. The

VICTORIA—AMPHIBIANS AND REPTILES: ENVIRONMENTAL FACTORS AND ZOOGEOGRAPHIC PATTERNS

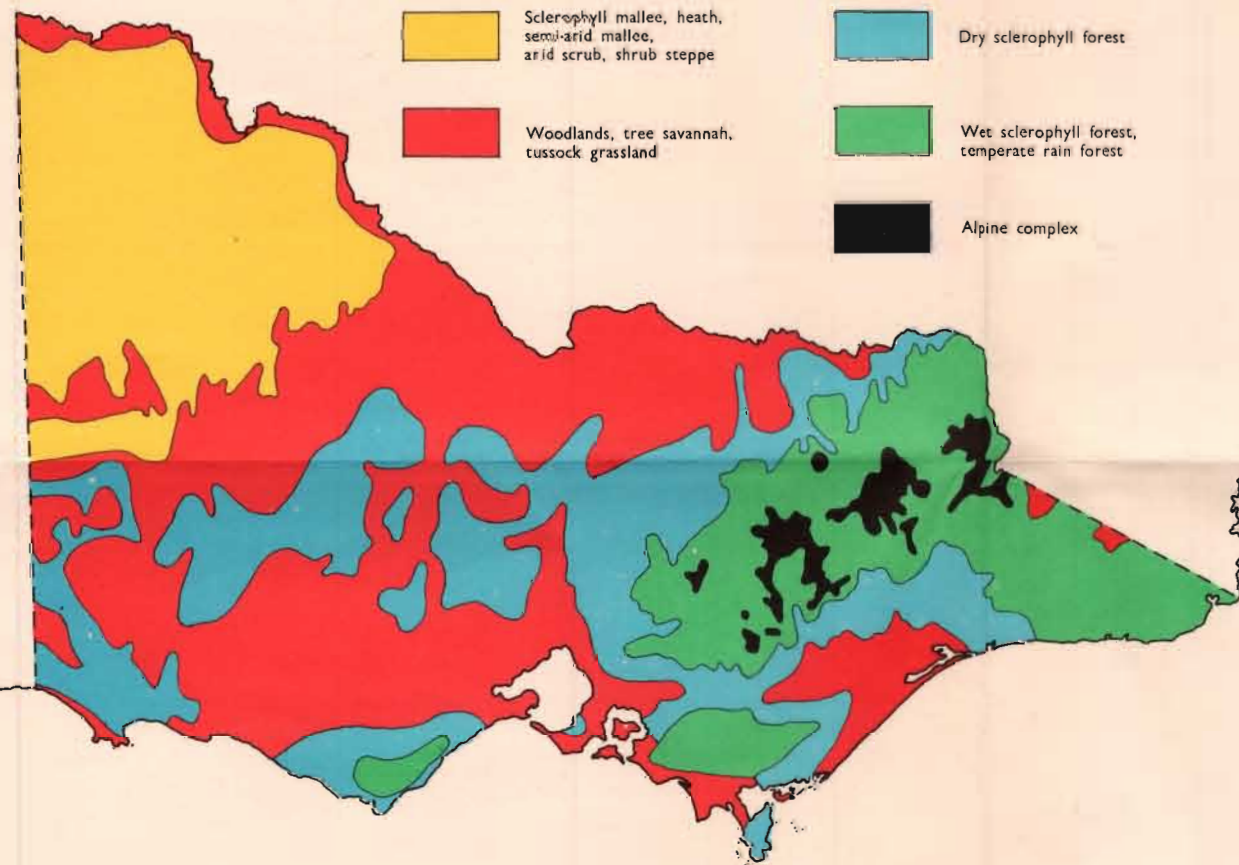
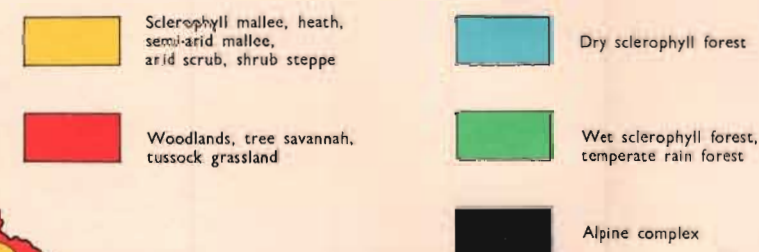
OROGRAPHIC MAP OF VICTORIA



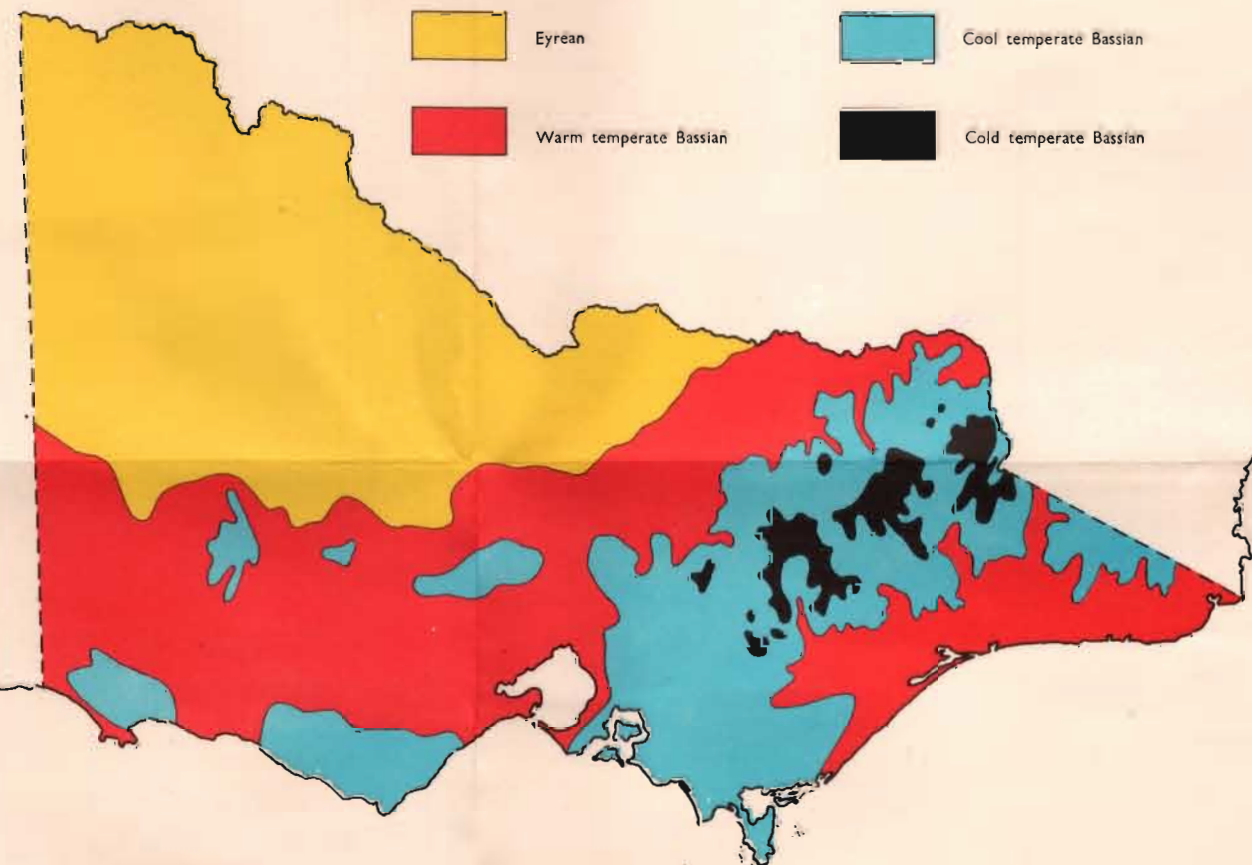
AVERAGE ANNUAL RAINFALL OF VICTORIA



MAIN VEGETATION FORMS OF VICTORIA



MAIN ZOOGEOGRAPHIC REGIONS OF VICTORIA



density of the vegetation and higher altitudes result in low prevailing surface temperatures even during summer.

3. *Cold temperate zone.* The alpine and sub-alpine areas above 4,000 ft in the Eastern Highlands. The high elevations result in very low environmental temperatures in summer and winter, and also produce high average annual rainfalls (more than 55 inches). Although the rainfall is suitable for the development of wet sclerophyll forests and temperate rainforest, the increasing severity of cold with increasing altitude prevents these vegetation forms from extending much above 4,500 ft. Climax vegetation varies from dense temperate rainforest and montane wet sclerophyll forest at the lower altitudes to open sub-alpine woodlands to alpine herbfields, swamps, and grasslands. Thus the high altitudes cause very low environmental temperatures, but the open nature of alpine vegetation allows intense solar radiation to reach the ground in summer, making it possible for heliotherms to be active. In winter, snow covers the ground for up to 5 months making reptile activity impossible.

Thus the major ecological requirements for Bassian reptile species are a habitat warm enough for activity which must include a basking site for a heliotherm and also a microenvironment for shelter from low winter temperatures.

Reptilian fauna

Included in the four living Orders of reptiles are more than 6,000 described species: 335 species in the Order CHELONIA (turtles and tortoises); twenty-three species in the Order CROCODYLIA (crocodiles, alligators, and gavials); the Order SQUAMATA is divided into two Sub-Orders, with about 3,000 species in the Lacertilia (lizards) and about 2,700 species in the Ophidia (snakes); the fourth living Order, RHYNCEPHALIA, has only one species, the Tuatara, which is found in New Zealand.

More than 400 of the known living species of reptiles, representing fourteen families and three Orders, occur in Australia. The order CROCODYLIA has one family; the Order CHELONIA has three families; and in the Order SQUAMATA the Lacertilia and the Ophidia have five families each.

Nine of the fourteen Australian reptile families occur in Victoria. The three marine families Cheloniidae (marine turtles), Dermochelyidae (leatherback turtles), and Hydrophiidae (sea snakes) do not normally occur, although single specimens are occasionally carried into Victorian waters where they cannot survive for long. Victoria also lacks representatives of the aquatic family Crocodylidae (crocodiles) which are found in the estuarine and fresh waters of northern Australia. The only terrestrial Australian reptile family missing from Victoria is the Colubridae (harmless and rear-fanged snakes).

Until the present time 102 taxa of reptiles (ninety-nine described species, two undescribed species, and one sub-species) representing forty-one genera and nine families have been recorded from within the borders of Victoria. All the species, genera, sub-families, and families known to occur in Victoria are listed in the table on pages 16 to 19. This table shows how the taxa are distributed in each of the main zoogeographic areas discussed above and shown on the map.

VICTORIA—DISTRIBUTION, THERMOREGULATION, AND REPRODUCTION OF REPTILE SPECIES

Species	Distribution of species					Thermoregulation and reproduction of species			
	Eyrean		Bassian			Method of thermoregulation		Mode of reproduction (a)	
	True Eyrean	Murray River corridor only	Warm temperate zone	Cool temperate zone	Cold temperate zone	Thigmothem	Heliothem	Oviparous	Viviparous
CHELONIA									
Chelyidae									
<i>Chelodina expansa</i>	—	+	—	—	—	+	—	+	—
<i>C. longicollis</i>	—	+	+	—	—	+	—	+	—
<i>Emydura macquarrii</i>	—	+	—	—	—	+	—	+	—
SQUAMATA									
LACERTILIA									
Agamidae									
<i>Amphibolurus adelaidensis</i>	+	—	—	—	—	—	+	+	—
<i>A. barbatus</i>	+	—	+	—	—	—	+	+	—
<i>A. diemensis</i>	—	—	—	+	+	—	+	+	—
<i>A. fordi</i>	+	—	—	—	—	—	+	+	—
<i>A. muricatus</i>	+	—	+	—	—	—	+	+	—
<i>A. pictus</i>	+	—	—	—	—	—	+	+	—
<i>Physignathus gilberti</i>	+	—	—	—	—	—	+	+	—
<i>P. lesueuri</i>	—	—	+	—	—	—	+	+	—
<i>Tympanocryptis lineata</i>	+	—	+	—	—	—	+	+	—
Gekkonidae									
Diplodactylinae									
<i>Diplodactylus ciliaris</i>	+	—	—	—	—	+	—	+	—
<i>D. damaeus</i>	+	—	—	—	—	+	—	+	—
<i>D. tessellatus</i>	+	—	—	—	—	+	—	+	—
<i>D. vittatus</i>	+	—	—	—	—	+	—	+	—
<i>Phyllurus milii</i>	+	—	—	—	—	+	—	+	—
<i>Rhynchoedura ornata</i>	+	—	—	—	—	+	—	+	—
Gekkoninae									
<i>Gehyra variegata</i>	+	—	—	—	—	+	—	+	—
<i>Heteronotia binoei</i>	+	—	—	—	—	+	—	+	—
<i>Phyllodactylus marmoratus</i>	+	—	+	—	—	+	—	+	—

Pygopodidae									
<i>Aprasia striolata</i>	+	—	+	—	—	+	—	+	—
<i>Delma fraseri</i>	+	—	—	—	—	—	—	—	—
<i>D. impar</i>	+	—	+	—	—	+	—	+	—
<i>Lialis burtonis</i>	+	—	—	—	—	+	—	+	—
<i>Pygopus lepidopodus</i>	+	—	—	—	—	+	—	+	—
Scincidae									
Lygosominae									
<i>Anotis maccoyi</i>	—	—	—	+	—	—	+	—	—
<i>Carlia maccooeyi</i>	—	—	—	+	—	—	—	—	—
<i>Cryptolepharus boutoni</i>	+	—	—	—	—	—	—	—	—
<i>Ctenotus brachyonyx</i>	+	—	—	—	—	—	—	—	—
<i>C. regius</i>	+	—	—	—	—	—	—	—	—
<i>C. robustus</i>	+	—	—	+	—	—	—	—	—
<i>C. schomburgkii</i>	+	—	—	—	—	—	—	—	—
<i>C. taeniolatum</i>	—	—	—	+	—	—	—	—	—
<i>C. uber</i>	+	—	—	—	—	—	—	—	—
<i>Hemiergus decresiensis</i>	—	—	—	+	—	—	—	—	—
<i>H. peronii</i>	—	—	—	+	—	—	—	—	—
<i>Leiolopisma delicata</i>	—	—	—	+	—	—	—	—	—
<i>L. entrecasteauxi</i>	—	—	—	+	—	—	—	—	—
<i>L. guichenoti</i>	—	—	—	+	—	—	—	—	—
<i>L. metallicum</i>	—	—	—	+	—	—	—	—	—
<i>L. mustelinum</i>	—	—	—	+	—	—	—	—	—
<i>L. trilineatum</i>	—	—	—	+	—	—	—	—	—
<i>L. weekesae?</i>	—	—	—	+	—	—	—	—	—
<i>Lerista bipes</i>	+	—	—	—	—	—	—	—	—
<i>L. bougainvilli</i>	+	—	—	+	—	—	—	—	—
<i>L. lineata</i>	+	—	—	—	—	—	—	—	—
<i>L. punctovittata</i>	+	—	—	—	—	—	—	—	—
<i>L. timidus</i>	+	—	—	—	—	—	—	—	—
<i>Menetia greyi</i>	+	—	—	—	—	—	—	—	—
<i>Morethia lineocellatus</i>	+	—	—	—	—	—	—	—	—
<i>Pseudemoia spenceri</i>	—	—	—	—	—	—	—	—	—
<i>Sphenomorphus fasciolatus</i>	+	—	—	—	—	—	—	—	—
<i>S. quoyi</i>	—	+	—	—	—	—	—	—	—
<i>S. tympanum</i> (cool temperate form)	—	—	—	—	—	—	—	—	+
<i>S. tympanum</i> (warm temperate form)	—	—	—	+	—	—	—	—	+

(a)

VICTORIA—DISTRIBUTION, THERMOREGULATION, AND REPRODUCTION OF REPTILE SPECIES—*continued*

Species	Distribution of species					Thermoregulation and reproduction of species			
	Eyrean		Bassian			Method of thermoregulation		Mode of reproduction (a)	
	True Eyrean	Murray River corridor only	Warm temperate zone	Cool temperate zone	Cold temperate zone	Thigmotherm	Heliotherm	Oviparous	Viviparous
Scincinae									
<i>Egernia cunninghami</i>	+	—	+	—	—	—	+	—	+
<i>E. inornata</i>	+	—	—	—	—	—	+	—	+
<i>E. luctuosa</i>	—	—	+	—	—	—	+	—	+
<i>E. saxatilis</i>	—	—	+	+	—	—	+	—	+
<i>E. striolata</i>	+	—	—	—	—	—	+	—	+
<i>E. whitei</i>	—	—	+	+	+	—	+	—	+
<i>Tiliqua casuarinae</i>	—	—	+	+	+	—	+	—	+
<i>T. nigrolutea</i>	—	—	—	+	—	—	+	—	+
<i>T. occipitalis</i>	+	—	—	—	—	—	+	—	+
<i>T. rugosa</i>	+	—	+	—	—	—	+	—	+
<i>T. scincoides</i>	+	—	+	—	—	—	+	—	+
Varanidae									
Varaninae									
<i>Varanus gouldii</i>	+	—	—	—	—	—	+	+	—
<i>V. varius</i>	+	—	+	—	—	—	+	+	—
OPHIDIA									
Boidae									
Pythoninae									
<i>Morelia argus argus</i>	—	—	+	—	—	+	—	+	—
<i>M. argus variegata</i>	—	+	—	—	—	+	—	+	—
Elapidae									
Elapinae									
<i>Acanthophis antarcticus</i>	+	—	—	—	—	+	—	—	+
<i>Aspidomorphus diadema</i>	+	—	—	—	—	+	—	+	—
<i>Brachyaspis curta</i>	+	—	—	—	—	+	—	+	—
<i>Demansia nuchalis</i>	+	—	—	—	—	—	+	+	—
<i>D. psammophis</i>	+	—	—	—	—	—	+	+	—
<i>D. textilis</i>	+	—	+	—	—	—	+	+	—

<i>Denisonia brevicauda</i>	+	-	-	-	-	+	-	-	+
<i>D. coronoides</i>	-	-	-	+	+	-	-	-	+
<i>D. devisi</i>	+	-	-	-	-	+	-	-	+
<i>D. flagellum</i>	-	-	+	-	-	+	-	-	+
<i>D. gouldii</i>	+	-	-	-	-	+	-	-	+
<i>D. mastersi</i>	+	-	-	-	-	+	+	-	+
<i>D. nigrescens</i>	-	-	+	-	-	+	-	-	+
<i>D. nigrostriata</i>	+	-	-	-	-	+	-	-	+
<i>D. superba</i> (highlands form)	-	-	-	+	+	-	+	-	+
<i>D. superba</i> (lowlands form)	-	-	-	+	+	-	+	-	+
<i>D. suta</i>	+	-	-	-	-	+	+	-	+
<i>Notechis scutatus</i>	-	+	+	+	-	-	+	-	+
<i>Oxyuranus scutellatus</i>	+	-	-	-	-	-	+	-	+
<i>Pseudechis australis</i>	+	-	-	-	-	-	+	-	+
<i>P. porphyriacus</i>	-	+	+	-	-	+	+	-	+
<i>Rhynchoelaps australis</i>	+	-	-	-	-	+	-	+	+
<i>Vermicella annulata</i>	+	-	-	-	-	+	-	+	+
Typhlopidae									
Typhlopinae									
<i>Typhlops australis</i>	+	-	-	-	-	+	-	+	-
<i>T. bituberculatus</i>	+	-	-	-	-	+	-	+	-
<i>T. broomi</i>	+	-	-	-	-	+	-	+	-
<i>T. ligatus</i>	+	-	-	-	-	+	-	+	-
<i>T. nigrescens</i>	+	-	-	-	-	+	-	+	-
<i>T. pinguis</i>	+	-	-	-	-	+	-	+	-
<i>T. proximus</i>	+	-	-	-	-	+	-	+	-
<i>T. unguirostris</i>	+	-	-	-	-	+	-	+	-
Totals	67	7	33	19	10	51	51	(a) 62	40
	74		44			102		102	

(a) The only known ovoviviparous species, *Anotis maccayi*, is listed with the oviparous species.

The most striking feature of Victorian reptile distribution is the rapid decrease in the numbers of families, genera, and species in a sequence from the Eyrean to the warm, cool, and cold temperate zones of the Bassian. Seventy-four species occur in the Eyrean and all nine Victorian families are represented, although one family (Boidae) has only a single species. Thirty-three species occur in the warm temperate Bassian. These represent eight of the nine Victorian families (the Typhlopidae are absent), although four of the families (Chelyidae, Gekkonidae, Varanidae, and Boidae) are represented by only a single species and another family (Pygopodidae) is represented by only two species. Nineteen species occur in the cool temperate Bassian, and these belong to only three families (Agamidae, Scincidae, and Elapidae). The five families represented by only one or two species in the warm temperate Bassian are absent from the cool temperate. Only ten species occur in the cold temperate Bassian, all being shared with the cool temperate, and the same three families (Agamidae, Scincidae, and Elapidae) are represented.

The Victorian reptile fauna is discussed below. For the sake of brevity, the major features of the anatomy, biology, and distribution of Victorian reptiles are dealt with under the major taxonomic groupings. All taxa (orders, families, genera, species, etc.) known to occur in Victoria are listed in the table on pages 16 to 19 which shows detailed information on the major points of the discussion. It should be noted that in the section on distribution occurrence of a species in a zoogeographic area (e.g., Bassian or Eyrean) does not necessarily imply the species is characteristic of that area (i.e., a Bassian or Eyrean species).

Order CHELONIA (tortoises and turtles)

The stem reptiles (Order COTYLOSAURIA) inherited from their amphibian ancestors a skull with a complete covering of dermal bone perforated only by the nostrils (external nares) and eye sockets (orbits). Chelonians are the only living reptiles which have retained this type of skull, known as the *anapsid* skull. In some groups of chelonians the dermal bone has been reduced especially in the temporal region to allow more freedom for the jaw muscles; however, the quadrate bone which articulates with the lower jaw bones (mandibles) is rigidly sutured to the other bones of the skull.

Chelonians are also unique among the living reptiles for a number of other features: the body is enclosed in a shell comprising a dorsal carapace and a ventral plastron formed by the fusion of dermal and skeletal bones and overlain by large keratinised epidermal scales; the pectoral and pelvic girdles lie inside the rib cage; teeth are lacking, beak like horny plates serving in their place; the cloacal vent is a horizontal slit; and the male possesses only a single copulatory organ (penis).

Chelonians have probably descended from aquatic or semi-aquatic ancestors and most living forms have retained this habit, although some have returned to a completely terrestrial existence. All chelonians, however, are oviparous (egg laying) and require a warm, well drained terrestrial site such as a sand bank to lay their eggs in.

Sub-Order PLEURODIRA (side-necked tortoises)

This group is distinguished from other chelonian groups in that its

members retract their heads by bending the neck vertebrae laterally rather than vertically.

Family Chelyidae (freshwater tortoises). All Victorian chelonians belong to this family which is characterised by the possession of nasal bones in the skull, lack of two bony plates (the masoplastra) in the plastron, and the inability to shield the neck when the head and neck are retracted under the margin of the carapace. These tortoises inhabit freshwater rivers, swamps and lagoons, and are basically aquatic thigmotherms but they may emerge from the water to bask for limited periods. The limbs are well developed and provided with webbed feet for swimming and clawed toes to assist in tearing food apart, digging egg-nests and hibernation sites, and also for the occasional terrestrial journey. Tortoises are usually easy to sex as the male has a longer tail.

Three species representing two genera occur in Victoria. The largest species, the broad-shelled tortoise *Chelodina expansa*, may have a carapace exceeding 2 ft in length. This species is restricted to the Murray River corridor in the Eyrean, while its smaller relative, the long-necked tortoise *Chelodina longicollis*, occurs extensively throughout the Murray River basin and in the warm temperate Bassian in south-east and south-west Victoria, including the Grampians. *Emydura macquarrii*, the short-necked tortoise, is restricted to the warmer reaches of the Murray River and its tributaries, but ranges more widely than *C. expansa*. Tortoises are probably limited in the Bassian by low water temperatures and the lack of suitable egg-laying sites.

Order SQUAMATA (lizards and snakes)

This order contains 95 per cent of the described species of living reptiles. Their ancestors (Order EOSUCHIA) advanced from the stem of reptiles (Order COTYLOSAURIA) by evolving a skull in which the solid dome of dermal bone was penetrated by two temporal openings, allowing great freedom of movement for the jaw muscles. The temporal openings resulted in two arches of dermal bone and hence this kind of skull is known as the *diapsid* skull (derived from the Greek root "apse" which means arch).

In the living members of the SQUAMATA (lizards and snakes) the original diapsid condition has been modified by the loss of the lower temporal arch, and the quadrate bones of the skull which articulate with the lower jaw bones (mandibles) have become movable. These features enable even more freedom of jaw movement. All members of the SQUAMATA have teeth which may be attached to the upper margin of the jaw (*acrodont*) or the inner side of the jaw (*pleurodont*). They are also characterised by a number of other features: all have epidermal scales; the cloacal vent is a transverse slit; and in the male the copulatory organs are paired (hemipenes).

An important feature of members of the SQUAMATA is the development of Jacobson's organ. This vomeronasal organ first appears in amphibians and is apparently associated with the senses of "taste" and "smell" as it connects with the nasal passages and is innervated by the olfactory nerve. In most reptiles the organ is vestigial, but in the SQUAMATA it is highly developed and no longer connects with the nasal passages; instead

it opens directly into the mouth (buccal) cavity. The tongue is protruded to sample the air and substrate by direct contact, and is then applied to the lobes of Jacobson's organ in the roof of the mouth. These analyse the "tastes" and "smells" and relay the information to the brain.

Sub-Order LACERTILIA (lizards)

In lizards the two halves of the lower jaw (mandibles) are firmly united at the front, a feature which limits the size of the mouth opening. Most lizards possess two pairs of pentadactyl limbs; however, the limbs may be reduced or absent in some groups, but all at least show traces of both the pectoral and pelvic limb girdles. External ear openings and movable eyelids with nictating membranes are other lizard features which may be subject to reduction or modification in more specialised groups. Further features which help to distinguish members of the Sub-Order LACERTILIA from members of the Sub-Order OPHIDIA include a skull in which the brain cavity is not enclosed anteriorly by bone; possession of a middle ear, a sternum, and a urinary bladder; and the absence of an undivided row of enlarged ventral scales connected directly to the ribs. In addition, many groups of lizards practise caudal autotomy—the tail can be shed during moments of stress and a new tail regenerated afterwards.

Family Agamidae (dragon lizards). In dragon lizards, the skull is high and laterally compressed, the upper temporal arch is present, but the postfrontal and lacrimal bones are absent. The skull has a well developed parietal foramen (third eye aperture) and the teeth have an acrodont attachment to the jaw bones. The teeth of dragon lizards are remarkable as they show some differentiation; the anterior teeth have become enlarged and resemble the incisor and canine teeth of mammals.

The body of dragon lizards is usually rather short and stout and it may be laterally compressed with a spinal ridge. The limbs are always well developed and most species are capable of running at high speed. All species of dragon lizards have pentadactyl limbs (i.e., bear five digits on each limb) and the digits are cylindrical and equipped with claws. Dragons are typically covered with small, pointed, rearwards directed, non-overlapping (juxtaposed) scales. In most species some of the scales are enlarged to form spines and tubercles. The tail is usually much longer than the combined length of the head and body, and tapers uniformly from its base to a fine point. In some species the tail is laterally compressed. Dragons do not practise caudal autotomy and if the tail should be broken it cannot be regenerated. The tongue of dragons is large and flat and may be brightly pigmented in some species. Hearing is well developed and the tympanum is visible in most species, although in some it is hidden below a layer of skin. The eye has not been modified or specialised; eyelids are present; and the pupil is round. Dragons cannot vocalise, but most species have elaborate threat displays. When challenged, they inflate the body, adopt various postures, and open the mouth widely. Femoral and preanal pores occur in many species, although these may be restricted to the male. The sexes are easy to differentiate in many species during the mating season as the males and females are differently coloured.

All dragon lizards are oviparous, the size of the clutch depending mainly on the size of the lizard. Small species may lay only three eggs while large species may lay up to sixteen eggs. Dragon lizards tolerate high body temperatures and all species are true heliotherms. During activity these lizards maintain body temperatures around 95°F. by basking in the sun.

Nine species representing three genera are found in Victoria. Seven of the species are found in the Eyrean, the commonest of which is the bearded dragon *Amphibolurus barbatus* that may exceed 20 inches in length. All of the species found in the Eyrean build subterranean tunnels for sheltering from the hot surface layer in summer. Four species occur in the warm temperate Bassian, only one of which (the tree dragon *Amphibolurus muricatus*) has its centre of distribution in this zone, another two (*A. barbatus* and the earless dragon *Tympanocryptis lineata*) intrude in from the Eyrean, while the fourth, the water dragon *Physignathus lesueuri*, is found only in the rivers and streams of the south-east. The latter species is semi-aquatic and grows to 3 ft in length, making it Victoria's largest dragon lizard. Only one species, the mountain dragon *Amphibolurus diemensis*, occurs in the cool and cold temperate zones; it burrows under logs or rocks to shelter from the winter cold.

Family Gekkonidae (gekkos). In gekkos the skull is short and flat; the upper temporal bone arch is missing; the post-orbital and lacrimal bones are absent; and the jugal bone is very reduced. The skull also lacks a parietal foramen (third eye aperture) and the teeth have a pleurodont attachment to the jaw bone.

Gekkos usually have a stout rather flat body and the limbs are always relatively well developed. The digits (fingers and toes) vary greatly from species to species; they may be long, slender and clawed, or expanded with adhesive pads, and are often used as an aid in identification. The only limb degeneration known is that some species lack the fifth digits and others lack claws. Gekkos do not have the typical scaly reptilian look as the skin is thin and loose, and the scales are very small and granular and do not overlap. In many species some of the scales are enlarged and modified to form spines and tubercles. Like their digits, gekko tails vary greatly from species to species: they may be long and tapered, flattened and leaf-like, or short and stubby. All species practise caudal autotomy and the regenerated tail always differs in appearance from the original. Gekkos resemble most other lizards in possessing a large flat tongue. The eyes are large and bulbous, and equipped with a pupil that can fill the whole eye in the dark or contract to a narrow vertical slit in the light. Some primitive gekkos (not represented in Australia) have eyelids, but in all others the eyelids have evolved to form a clear spectacle that covers, and is fused to, the surface of the eye. In the absence of eyelids gekkos use their tongues to lick the eye surface clean. In gekkos the ear is well developed and the tympanum is obvious; this feature is apparently associated with the fact that gekkos can vocalise—they make sounds such as clicks, hisses, barks, and chirps which may be specific to the species and are probably territorial in nature.

Gekkos are remarkably uniform in their mode of reproduction. Primitively they are oviparous and lay two eggs, and the only exceptions are the New Zealand gekkos which are viviparous, and some Central and South American species which lay only one egg. Gekkos do not tolerate high temperatures and all except the New Zealand species are true thigmotherms. Their thigmothermic habits restrict surface movements to the night and gekkos are commonly stated to be nocturnal, but they may be very active during the day under shelter.

Four sub-families of gekkos are currently recognised on the basis of a combination of features. Only two of these sub-families occur in Victoria and these are listed below with the main characteristics that separate them from each other.

Sub-family Diplodactylinae. In the skull, the premaxilla forms from two centres of ossification and may be paired in the adult, and the frontal bone is always single. There are always more than twenty-one scleral ossicles around the eye, and post-cranial calcified endolymphatic sacs are absent.

Six species representing three genera are found in Victoria, all of which are restricted to the Eyrean. The genus *Diplodactylus*, with four species, has been the most successful. They are ground-dwelling forms and lack large adhesive pads on the digits; during the day they exploit a variety of microenvironments such as in porcupine grass, in spider burrows or under rocks.

Sub-family Gekkoninae. The premaxilla forms from one centre of ossification and is never paired in the adult; and the frontal bone is sometimes divided. There are always less than seventeen scleral ossicles around the eye, and post-cranial calcified endolymphatic sacs are always present.

Three species representing three genera are found in Victoria, two of which are restricted to the Eyrean but the third, the marbled gekko, *Phyllodactylus marmoratus*, extends from the Eyrean into the warm temperate Bassian, through the Kilmore gap. Two of the species, the tree dtella *Gehyra variegata* and marbled gekko *P. marmoratus*, have large adhesive toe pads and can exploit vertical microenvironments such as under the bark on trees and in rock crevices, but the third species, the prickly gekko *Heteronotia binoei*, is a ground dwelling species and exploits microenvironments similar to those described above for the sub-family Diplodactylinae. Gekkos are probably restricted in the Bassian by their thigmothermic habits and oviparous mode of reproduction.

Family Pygopodidae (legless lizards). These lizards are closely allied to the gekkos and the skull is similar in that the upper temporal bone arch is missing; the post-orbital and lacrimal bones are absent; and the jugal bone is very reduced. The skull lacks a parietal foramen (third eye aperture) and the teeth have a pleurodont attachment to the jaw bone.

Legless lizards have a very elongate snake-like body with no external trace of the forelimbs and only a small pair of scaly flaps in front of the cloaca remain as external evidence of the hind limbs. Thus in body form legless lizards do not resemble their gekkonid relatives and the external dissimilarity is heightened by the fact that legless lizards are covered by a

thick skin which is folded into overlapping (imbricate) scales. All legless lizards have very elongate tapering tails which, if unbroken are longer than the combined length of the head and body. All species practise caudal autotomy. The tongue is large and flat as in most other lizards. The eyes resemble those of gekkos closely in that they are equipped with a pupil that fills the whole eye in the dark and contracts to a narrow vertical slit in the light; they lack eyelids, the eye being covered with a clear spectacle; and the tongue is used to lick the eye surface clean. In all legless lizards except the burrowing forms, the ear is well developed and the external ear opening obvious. Like the gekkos, these lizards can vocalise, they make similar sounds to gekkos and the function of the calls is probably identical.

All legless lizards are oviparous, but there is not sufficient knowledge at the present time to generalise about clutch size. Legless lizards also resemble gekkos in their habits as all species are true thigmotherms. Although they are commonly stated to be nocturnal, many species are very active in shaded areas during the day and the earlier generalisation should be discarded.

Five species representing four genera are found in Victoria. All occur in the Eyrean, but only two, the worm lizard *Aprasia striolata* and spinifex lizard *Delma impar*, occur in the Bassian where they are restricted to the warm temperate. One of the species, the worm lizard *A. striolata*, is a true burrowing form and leads a subterranean existence. The other four species utilise subterranean microenvironments for shelter, but feed above the soil surface. Like the gekkos, legless lizards are probably restricted in the Bassian by their thigmothermic habits and oviparous mode of reproduction.

Family Scincidae (skinks). The skinks are the most successful group of reptiles in Victoria, especially in the Bassian. The skull is generally high, long and slender; the upper temporal arch is present; but the temporal opening is reduced to a slit by backward expansion of the post-frontal. The skull has a well developed parietal foramen (third eye aperture); it lacks the lacrimal bone; and some of the other skull bones, such as the supratemporals and postorbitals, may be very reduced or absent. The teeth have a pleurodont attachment to the skull. Typically, skinks are covered with polished overlapping (imbricate) scales which form large symmetrical shields on the head. Skinks practise caudal autotomy, and the regenerated tail usually differs in appearance from the original. The tongue of skinks is large and flat.

Four sub-families of skinks are currently recognised on the basis of the structure of the bony palate and the penetration of the nostril. Two of these sub-families occur in Australia and Victoria, and these are listed below with the main characteristics that separate them from each other.

Sub-family Lygosominae (skinks). The palatine bones contact on the median line of the palate; the pterygoid bones contact anteriorly; and the palatal notch does not extend anteriorly to the level of the centres of the eyes.

Lygosomid skinks have elongate streamline bodies and long tails which taper uniformly to a fine point. Limb structure is extremely variable; surface dwelling forms have well developed pentadactyl limbs; while in the burrowing groups there is a complete range of forms from the pentadactyl to species lacking limbs entirely. In all cases, however, there are at least remnants of the pectoral and pelvic girdles. Typically the digits of skinks are cylindrical and equipped with claws. Lygosomid skinks practise caudal autotomy; in fact some species seem very ready to shed their tails, and it is difficult to find an adult with a complete, unregenerated tail. In surface dwelling forms the external ear opening is obvious and hearing is probably a well developed sense; however, in the burrowing forms, the ear opening is covered with skin and hearing is presumably not as important. The eye is another organ that is extremely variable in lygosomid skinks. Primitively, the eye is provided with scaly eyelids and this structure is still seen in many species, e.g., *Ctenotus* and *Sphenomorphus* species. Some specialised species, e.g., *Leiopisma* species, evolved a small transparent "window" in the lower eyelid which enabled them to see with the eyelids shut. This feature evolved further in some groups until the transparent "window" filled the lower eyelid, thus providing a complete spectacle for the eye, e.g., *Pseudemoia spenceri*. The final stage in the evolutionary sequence has been for the lower lid to become immovable and fused to the surface of the eye, and the upper lid has been completely lost, e.g., in the *Cryptoblepharus*, *Menetia*, and *Morethia* species. Lygosomid skinks completely lack the ability to vocalise. Threat displays are simple and usually only involve a lateral lashing of the tail which may be followed by a forward lunge with the mouth open. The sexes are usually hard to distinguish as males and females are similar in appearance.

The mode of reproduction is another feature of lygosomid skinks which is highly variable. Some species are oviparous, others are ovoviviparous, and many are truly viviparous; in fact the most advanced reptilian placentae known occur in species belonging to this sub-family (*Leiopisma entrecasteauxi* and *Pseudemoia spenceri*). It is even impossible to generalise about the mode of reproduction at the generic level as one genus, *Leiopisma*, exhibits several stages; *L. delicata* is oviparous, and *L. entrecasteauxi* is viviparous and has the most advanced type of reptilian placenta. The number of young produced varies from one to ten.

Most lygosomid skinks will not tolerate high body temperatures, and the sub-family probably descended from a thigmothermic group as all members voluntarily allow wide variations in body temperature. Many of the present day species are thigmotherms, although there are heliothermic species in many genera. During activity the thigmothermic species maintain mean body temperatures from 70° to 85°F., while the heliothermic species maintain mean body temperatures from 85° to 90°F. by basking in the sun.

Thirty species of lygosomid skinks representing eleven genera are known to occur in Victoria. Fourteen species from six of these genera are found in the true Eyrean. The least heat tolerant forms are burrowing thigmotherms and this group includes the five *Lerista* species, *Menetia greyi*, and the nocturnal skink, *Sphenomorphus fasciolatus*. Thus the genus *Lerista* is well represented, and its species are a variable group. All have

very elongate bodies, but they differ in limb and eye structure; *L. bougainvilli* has short pentadactyl limbs; *L. punctovittata* has only rudimentary limbs with one finger and two toes; and *L. bipes* has only rudimentary hindlimbs with two toes. The above three species possess eyelids, but the remaining two species, the two fingered, three toed *L. lineata*, and three fingered, three toed *L. timidus*, both lack eyelids completely. The more heat tolerant forms in the Eyrean are heliotherms and they exploit a variety of microenvironments to avoid the summer surface heat. *Cryptoblepharus boutoni*, a small, flat, strong limbed species lives on trees and rocky outcrops, utilising the natural cracks and crevices in the vertical surfaces for shelter. The elongate strong limbed, pentadactyl, striped skinks belonging to the genus *Ctenotus* and the snake eyed skink *Morethia lineocellatus* all burrow in loose sandy soil to escape the heat. One heliothermic species, the semi-aquatic northern water skink *Sphenomorphus quoyi* will not tolerate high body temperatures and is restricted to the Murray River corridor.

Seventeen species representing eight genera are found in the Bassian. Two of these species, the burrowing thigmotherm *Lerista bougainvilli* and heliotherm *Ctenotus robustus*, also occur in the Eyrean and are restricted to the warm temperate zone. Another five species, including the two elongate weak limbed *Hemiergis* species, and the heliothermic four fingered skink *Carlia maccoeyi*, eastern water skink *Sphenomorphus tympanum* (warm temperate form) and coppertail skink *Ctenotus taeniolatum*, are found only in the warm temperate zone.

The remaining four species found in the warm temperate are shared with the cool temperate; these are all *Leiopisma* species, of which two, *L. delicata* and *L. mustelinum*, are thigmotherms and two, *L. guichenoti* and *L. trilineatum*, are heliotherms. These four species reproduce by oviparous means and all are restricted to open habitats where there is an abundance of ground cover, such as in heathlands, woodlands, or forest clearings. *Anotis maccoyi*, a small, elongate lizard with reduced pentadactyl limbs, is the only species restricted to the cool temperate zone. It is an ovoviviparous thigmotherm which lives in the litter layer of wet sclerophyll forests, and it maintains a low mean body temperature of about 70°F. during activity. Only five species occur in the cold temperate zone and all are shared with the cool temperate. All these species are viviparous heliotherms and they maintain mean body temperatures of 85° to 90°F. during activity by basking. Thus they are restricted to open habitats such as in forest clearings, along watercourses, in rocky or burnt areas, or in alpine woodlands and grasslands. Four of the species are ground dwelling forms, one of which (the southern water skink *Sphenomorphus tympanum*, cool temperate form) is largely restricted to watercourses. The fifth species, *Pseudemoia spenceri*, a small, flat, strong limbed skink, is a tree and rock dwelling form, and exploits the natural cracks and crevices in the vertical surfaces for basking sites and shelter. In appearance and habits *P. spenceri* strongly resembles the Eyrean skink *Cryptoblepharus boutoni*, and is often abundant on large dead eucalypt trees, especially in regenerating burnt forests.

Sub-family Scincinae (rock skinks and bluetongue lizards). The palatine bones are separated on the median line of the palate ; the pterygoid bones are widely separated ; and the nostril pierces the nasal or two adjacent plates, but never touches the rostral.

In Australia this sub-family is represented by two genera, *Egernia* and *Tiliqua*, which include the largest species of skinks. Scincinid lizards belonging to the genus *Egernia* (rock skinks) have a uniform row of fine cylindrical recurved teeth. Their bodies are stout with well developed pentadactyl limbs and relatively short tails (never much longer than the head and body combined) that are broad and flat at the base and taper to a point. The scales are keeled, but in some species (e.g., *E. whitei*) the keels are not obvious, while in others (e.g., *E. cunninghami*) they form well developed spines. The bluetongue lizards belonging to the genus *Tiliqua* have conical teeth which are enlarged in the centre of the jaw. They have elongate thickset bodies with poorly developed pentadactyl limbs. The tails are short (never as long as the combined length of the head and body), flattened at the base, and usually taper to a point, but in one species, the shingleback or stumpy tail lizard *T. rugosa* the tail has been reduced to a rounded stump. The scales are smooth in all species except *T. rugosa* where they are enlarged and rough, so the skin has the texture of a pine cone.

All species of scincinid lizards are pentadactyl and the digits are cylindrical and equipped with claws. Scincinid lizards are capable of caudal autotomy, but most species, especially those with short tails, seem loath to carry out this practice. The ear opening is always obvious in scincinid lizards, and the eyes are always provided with eyelids. Threat displays in *Egernia* species may only involve a lateral lashing of the tail followed by an attempt to bite. In *Tiliqua* species, however, threats usually involve inflating the body cavity with air, side-on posturing with the mouth held wide open exposing the blue pigmented tongue, and violent hissing.

Unlike the lygosomid skinks, scincinids have a uniform mode of reproduction : they are all viviparous. The number of young produced ranges from one to sixteen, but is usually about five.

The scincinid lizards tolerate high body temperatures ; all species are heliothermic ; and they have apparently descended from a heliothermic group as they will not voluntarily allow wide variations in body temperature. During activity the species maintain mean body temperatures from 91° to 95°F. by basking in the sun.

Seven species of skinks belonging to the genus *Egernia* are known to occur in Victoria. Three species are found in the Eyrean. To avoid the surface heat, one species, *E. inornata*, constructs a burrow ; the second species, *E. striolata*, is a tree and rock dwelling form ; while the third species, *E. cunninghami*, which intrudes from the Bassian, is found only on the larger rocky outcrops and these latter two species use the natural cracks and crevices in their respective habitats for shelter. Four species are found in the warm temperate Bassian. One, the rock dwelling *E. cunninghami*, which also occurs in the Eyrean, is restricted to the warm temperate in the Bassian. A second species, *E. luctuosa*, is known only from five swampy localities in the warm temperate, where it constructs

burrows. The two remaining warm temperate species, the black rock skink *E. saxatilis* and White's skink *E. whitei*, also occur in the cool temperate and both utilise rocky outcrops and fallen logs for basking sites, and in this way manage to penetrate the forests. *E. whitei* also occurs in the cold temperate zone where it is limited to the open habitats in the lower woodlands.

Five species of skinks belonging to the genus *Tiliqua* occur in Victoria, and all are ground dwelling forms. Three species occur in the Eyrean and one, the western bluetongue *T. occipitalis*, is restricted to this zone, but the other two species, the shingleback lizard *T. rugosa* and common bluetongue *T. scincoides*, also occur in the Bassian where they are restricted to the warm temperate zone. The latter species (*T. scincoides*) may reach 2 ft in length and is Victoria's largest skink. The three species of *Tiliqua* mentioned so far occupy relatively superficial microenvironments under the surface litter or rocks during their winter hibernation. The two remaining Victorian species occupy open habitats, but utilise deep micro-environments and this could help explain their success in the cool and cold temperate zones. The oak skink *T. casuarinae* is found in the warm, cool and cold temperate zones of eastern Victoria and is rather rare. The southern bluetongue *T. nigrolutea* is restricted to the cool temperate zone where it is common.

Family Varanidae (goannas or monitor lizards). The skull is slender with a very long snout; the upper temporal arch is present; the posterior region of the external nares (nostrils) are broadly open and contact the frontals; the nasal bones are fused and very elongate, forming part of the internarial bar; the parietal foramen is present; and the orbit (eye socket) is open as the jugal does not contact the postorbital bone. The teeth have a pleurodont attachment to the jaw and they are long and curved, with the sharp points directed to the rear.

In goannas, the slender head attaches to an elongate neck that is covered by loose, folded skin. In the throat (gular) region this loose skin can be inflated with air. The body is slender and rather flattened, and the limbs are always well developed, most species being capable of running and climbing at high speeds. All goannas have pentadactyl limbs; the digits are cylindrical and equipped with long claws. Goannas have a tough, leathery, loosely folded skin which is typically covered by small non-overlapping (juxtaposed) scales. The whip-like tail is longer than the combined length of the head and body, and it tapers uniformly from a thick muscular base to a point. In many species the tail is laterally compressed. Goannas do not practise caudal autotomy, and if the tail should be broken, it cannot be regenerated. The tongue of a goanna, like that of a snake, is long and thin with a deep anterior split that makes it bifurcate (forked). When not in use the tongue retracts into a basal sheath. Hearing is well developed, and the tympanum is visible externally. The eye has not been modified or specialised; eyelids are present; and the pupil is round. Threat displays involve inflating the body with air, especially in the throat (gular) region, posturing, violent tail lashing, and hissing. Where the threat fails goannas will resort to savage clawing and biting. The sexes are not easy to differentiate.

Goannas are uniform in their mode of reproduction ; all are oviparous ; and they lay up to thirty elongate soft shelled eggs, although the exact number varies with the size of the individual and the species. Goannas tolerate very high body temperatures, and all are heliothermic. During activity they maintain mean body temperatures of about 100°F.

Only two species of goannas occur in Victoria, and both belong to the genus *Varanus*. The sand goanna *V. gouldii* is restricted to the Eyrean, where it constructs a tunnel in sandy soil to escape the summer heat. The second species, the lace lizard *V. varius*, uses hollows in standing and fallen trees for shelter, and it occurs in both the Eyrean and warm temperate Bassian. This latter species is Victoria's largest lizard ; specimens measuring more than 7 ft 6 inches still occur in remote areas of east Gippsland.

Sub-Order OPHIDIA (snakes)

The two halves of the lower jaw (mandibles) are loosely united in front by a ligament, and the bones of the upper and lower jaws are not solidly fused. In the skull, the upper temporal arch is missing, leaving the quadrate bone (which articulates to the lower jaw) loosely connected to the braincase ; anteriorly the brain cavity is enclosed by the frontal and parietal bones ; the maxillary and palatal bones (palatines, ectopterygoids, and pterygoids) are only loosely attached to the skull proper ; the bones of the nasal region have some freedom from the posterior part of the skull ; the lacrimal, postfrontal, squamosal, jugal, and quadrato-jugal bones are absent ; and the rod-like stapes terminates at the quadrate bone. Thus the skull has been reduced and is highly flexible ; all of the above modifications help the snake to greatly distend its mouth and swallow its prey whole. In the skull the parietal foramen (third eye aperture) is always absent. The teeth have an acrodont attachment to the jaw, and they are long and recurved, terminating in a sharp rearwards directed point. Teeth are present primitively on the pre-maxillary, maxillary, dentary, palatine, and pterygoid bones.

Snakes have very elongate bodies, a consequence of extension of the vertebral column by an increase in the number of vertebrae, which range from 140 to 435. Limbs and pectoral girdles are absent from all species and remnants of the pelvic girdle are found in only two families, the Typhlopidae and Boidae. External ear openings and the middle ear are other structures missing in all snakes, and as a consequence snakes are probably only able to pick up vibrations transmitted through the ground. Eyelids are also missing in all species of snakes. Further features which help to distinguish members of the sub-order OPHIDIA from the sub-order LACERTILIA include the lack of a eustachian tube, a sternum, and a urinary bladder. In all snakes, except members of the Typhlopidae, there is an undivided row of enlarged ventral scales used for locomotion, each scale being connected directly to a pair of ribs by ligaments and to the backbone by skeletal muscle. Elongation of the body has caused a change in the shape and symmetry of the internal organs (viscera), they have elongated and come to lie in a longitudinal series rather than next to one another. In the case of the paired organs (lungs, kidneys, gonads, etc.), the right organ lies anterior to the left partner and sometimes the function of the

left organ is reduced ; for example, in primitive snakes the left lung is small, but in advanced groups it is absent altogether. In snakes the tail is relatively short, always less than half the combined length of the head and body. Snakes do not practise caudal autotomy, and the tail cannot be regenerated if it is broken. The tongue (like that of goannas) is long, thin and bifurcate (forked). While the snake is active, the tongue is constantly projected through a small notch in the front of the upper lip. It flickers over the substrate and through the air, then is retracted into the mouth where the ends are inserted into the two lobes of Jacobson's organ. In this way information about the "tastes" and "smells" of the environment are conveyed to the brain, and these combined senses are well developed in snakes. Snakes are always covered by a thick skin with shiny, overlapping (imbricate) scales.

Family Boidae (boa constrictors, pythons, and anacondas). In boids the skull is not highly modified ; the pterygoid extends to the quadrate bone ; the prefrontals are sutured to the nasals ; the nasals and related elements (premaxillae, septo-maxillae, and vomers) are flexibly movable on the braincase ; large supratemporals are present ; the quadrate bone is not inclined backward or enlarged dorsally ; the stapes are long and contact the quadrates ; the elongate maxilla contacts the premaxilla and also broadly contacts the palatine and ectopterygoid bones ; and the teeth are long, strongly recurved, and solid.

Sub-family Pythoninae (pythons). This sub-family is recognised mainly on skull characters ; a supraorbital is present ; the internal process of the palatine is long ; the prefrontals are not in contact ; and there are teeth on the premaxillary, maxillary, palatine, pterygoid, and dentary bones.

Pythons feed on large active vertebrates (mainly birds and mammals) but have no venom with which to subdue and kill their prey. For this reason they constrict their prey after capture by throwing several tight body coils around the victim and holding it this way until it suffocates and can be swallowed. In pythons the posterior margin of the head is flattened causing it to stand out from the neck. The body is thickset, very muscular, and rounded in outline. There are vestiges of the pelvic girdle and hind limbs, the latter being visible externally as small claw-like spurs on either side of the cloacal vent. The spurs are longer in the males, and they are used in courtship. During courtship the male vibrates his spurs on the female's body, this apparently stimulates her and helps her to locate the cloacal region of the male so copulation can occur. Pythons have very short, muscular, and prehensile tails. The head shields are small and often asymmetrical ; there are many scales round mid-body (these range from 35 to 65) ; and the ventral body scales are narrow, never more than half the body width. Pythons are rarely active in sunshine and the eye is adapted to shaded habitats ; the pupil fills the eye in the dark, but narrows to a vertical slit in the light. Many species of pythons (e.g., *Morelia argus argus* and *M. argus variegata*) have heat (infra-red) sensitive pits on the lips which help them detect "warm blooded" prey (i.e., endothermic mammals and birds) in the dark. The left lung is well developed, though smaller than the right lung. Apart from biting, pythons lack threat displays.

All the Australian pythons are oviparous ; they lay from 15 to 100 large, elongate, soft shelled eggs ; and in several species the female is known to actively assist the incubation of the eggs. Some overseas species are ovoviviparous. Pythons are thigmotherms and most appear to be nocturnal in their habits. After feeding, many species have limited periods of basking in the early morning and late afternoon, apparently to facilitate rapid digestion.

Only two pythons occur in Victoria ; both belong to the same genus and species, but they are subspecifically distinct. The carpet python, *Morelia argus variegata*, is found mainly in the red gum woodlands and rocky cliffs of the Eyrean Murray River corridor. The diamond python, *M. argus argus*, is a coastal species, and is known only from the warm temperate Bassian coastal woodlands in the extreme east of Victoria. Pythons are probably limited in the Bassian by their thigmothermic habits and oviparous mode of reproduction.

Family Elapidae (front-fanged venomous snakes). In the absence of the world's other major terrestrial family of venomous front-fanged snakes (the family Viperidae, represented in other continents by the vipers, pit vipers, and rattlesnakes), the elapid snakes have radiated into almost every habitat in Australia. The Elapidae are also represented in other continents by such forms as the cobras, coral snakes, mambas and kraits, but they are most numerous in Australia where there are over sixty species including all the dangerous terrestrial snakes.

The skull has been reduced and highly modified to make it more flexible, increase the jaw gape and provide a biting apparatus. In the skull, the pterygoid reaches the quadrate ; the prefrontals and nasals are widely separated ; elements of the nasal region articulate freely with the anterior end of the braincase ; supratemporals are present and moveable ; the quadrate is elongate, enlarged dorsally, and slants strongly backwards, increasing the jaw gape ; the stapes are long and reach the quadrates ; the parietal and frontal do not meet below the orbit ; the maxilla articulates movably with the prefrontal ; the pterygo-palatine bar is free of the braincase ; and the maxilla is flexibly connected to it via the ectopterygoid which extends posteriorly to the pterygoid.

The elapid snakes have a characteristic dentition and arrangement of the maxillary and palatal bones. The premaxilla is small and toothless, but teeth are well developed on the maxilla, palatine, pterygoid, and dentary. The maxilla is flat, short and wide, and deeply eroded on the inner margin. Each maxilla bears one or two large, permanently erect, poison fangs with a deeply grooved or enclosed poison channel opening just behind the tip of the fang. Behind each fang lie several developing replacement fangs, and there is a short row of small solid teeth on the posterior end of the maxilla.

Sub-family Elapinae (front-fanged venomous snakes). The members of this sub-family are characterised by a short maxillary bone and a uniform row of teeth on the dentary bone in the lower jaw (mandible). Elapid snakes feed mainly on vertebrates (frogs, lizards, birds, and small mammals) and they have evolved a potent venom to subdue and kill their prey. An injecting apparatus has evolved in association with the venom.



Limnodynastes dorsalis (Leptodactylidae)
J. A. Owen

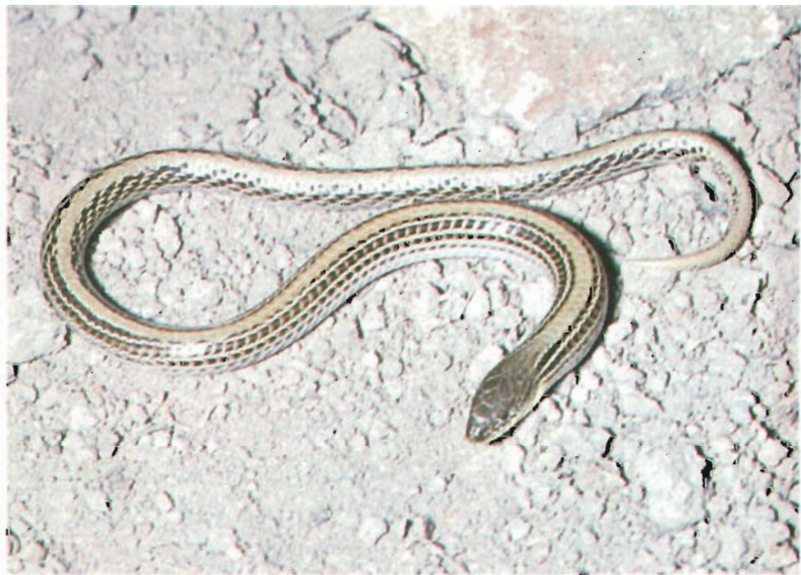
Amphibians and Reptiles

Tiliqua rugosa (Scincidae : Scincinae)
E. R. Rotherham





Typhlops australis (Typhlopidae)
E. R. Rotherham



Delma impar (Pygopodidae)
J. A. Owen



Morelia argus variegata
(Boidae : Pythoninae)
E. R. Rotherham

Hyla phyllochroa (Hylidae)
G. C. Adams



Hyla ewingi (Hylidae)
J. A. Owen

Philoria frosti (Leptodactylidae)
M. J. Littlejohn





Physignathus lesueuri (Agamidae)
J. A. Owen



Leiopisma mustelinum
(Scincidae : Lygosominae)
E. R. Rotherham



Sphenomorphus tympanum
(Scincidae : Lygosominae)
J. A. Owen



Varanus gouldii (Varanidae)
P. A. Rawlinson

Uperoleia marmorata (Leptodactylidae)
M. J. Littlejohn



Heleioporus australiacus (Leptodactylidae)
A. A. Martin

Neobatrachus centralis (Leptodactylidae)
M. J. Littlejohn





Phyllodactylus marmoratus (Gekkonidae)
E. R. Rotherham



Vermicella annulata (Elapidae)
E. R. Rotherham



Chelodina longicollis (Chelyidae)
J. A. Owen



Denisonia superba (Elapidae)
E. R. Rotherham

Mixophyes balbus (Leptodactylidae)
M. J. Littlejohn



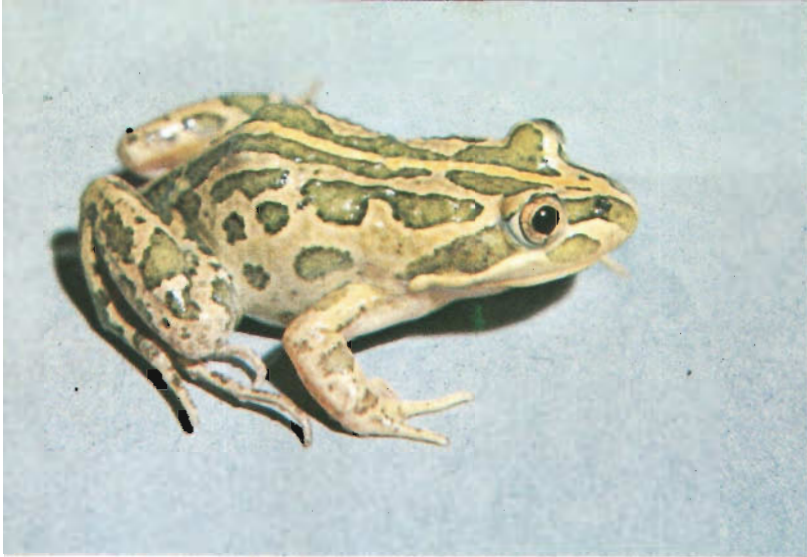
Egernia saxatilis
(Scincidae : Scincinae)
E. R. Rotherham



Crinia victoriana (Leptodactylidae)
J. A. Owen

Pseudophryne dendyi (Leptodactylidae)
M. J. Littlejohn





Limnodynastes tasmaniensis
(Leptodactylidae)

M. J. Littlejohn



Crinia signifera (Leptodactylidae)
M. J. Littlejohn



Hyla aurea aurea (Hylidae)
M. J. Littlejohn

A pair of modified salivary glands in the cheeks manufacture and store the venom. Voluntary muscles are attached to the glands and when they contract, venom is forced into the venom ducts that run inside the upper lip to the maxillary bones. Here the ducts open into cavities above the fangs, and the venom passes into the venom channels of the fangs. Thus when the snake bites its prey, and the fangs are embedded, venom is injected directly into the body tissue of the victim. After envenomation is accomplished, the elapid snake does not release its grip, but hangs on until the prey is dead and can be swallowed.

Elapid snake venoms are rich in neurotoxins that destroy the function of the nerve endings. Death usually results from suffocation following rapid failure of the nervous system. Thus the venom is highly potent, and the elapid snakes include in their ranks the world's most deadly species. The venom of the Australian tiger snake, *Notechis scutatus*, is one of the most lethal animal toxins known, and is certainly the most powerful found in any terrestrial vertebrate. Fortunately the volume of venom injected is often small, and the injecting apparatus is not as efficient as that in viperid snakes which have long folding fangs.

The head in elapid snakes is usually flattened, but it does not stand out distinctly from the neck. Most species are capable of moving at high speeds and their bodies are slender, and flattened ventrally to provide as much traction as possible. The short, fat death adder, *Acanthophis antarcticus*, is the most notable exception to this rule; as a consequence of its build it is only capable of slow movements on the surface. In elapids there is no internal or external evidence of the pelvic girdle or hind limbs, and the tail is short and cylindrical, tapering more or less uniformly to a point. The head shields are large and symmetrical; there are few scales round mid-body (these range from 15 to 23); and the ventral body scales are wide (always more than the full body width). In most elapids the eye is unmodified with a round pupil, but in some nocturnal forms it may be oval shaped. The left lung is absent in elapid snakes. Threat displays are well developed in most species and usually involve inflating the body with air, violent hissing, posturing, and flattening or compressing parts of the body. If the threat fails, the snake may bite and inject venom, but defence is a function of the venom apparatus which is only secondary to that of killing their prey.

Elapid snakes do not have a uniform mode of reproduction; there are oviparous, ovoviviparous, and viviparous (placental) forms. However, in Australia most species are viviparous and the only well represented group where all species are oviparous is the genus *Demansia*. The number of young produced varies greatly with litters ranging from four to 120.

It is also impossible to generalise about the habits of members of this family. There are many thigmothermic forms, and the heliotherms are poor at temperature regulation as their elongate bodies make it difficult to expose all sections uniformly to sunshine. Also, all the body contacts the substrate, so conductive heat transfers are rapid. Thus heliothermy is probably not as advantageous to snakes as it is to lizards.

Twenty-three species of elapid snakes representing ten genera are known to occur in Victoria. Sixteen species are found in the Eyrean.

The species belonging to the genera *Acanthophis*, *Aspidomorphus*, *Brachyaspis*, *Denisonia*, *Rhynchoelaps*, and *Vermicella* are small thigmothermic snakes that burrow into loose soil or under litter for shelter from the surface heat. The remaining species found in the Eyrean are large heliothermic snakes and they utilise a variety of shelters such as under logs and rocks or in burrows dug by other animals. These latter species include the thin whip snake, *Demansia psammophis*, which may reach 4 ft 6 inches in length; the hooded brown snake, *Demansia nuchalis*, which reaches 6 ft in length; and the brown snake, *Demansia textilis*, taipan, *Oxyuranus scutellatus*, and mulga snake, *Pseudechis australis*, all of which have been known to exceed 7 ft 6 inches in length. The record of the taipan, *O. scutellatus*, from Victoria is based on two specimens in the National Museum of Victoria said to have been collected at the junction of the Murray and Darling Rivers. This locality is doubtful, and the specimens could have come from an area to the north as taipans have recently been recorded from the Coopers Creek area in South Australia. Two heliothermic species, the tiger snake *Notechis scutatus* and black snake *Pseudechis porphyriacus*, that are well represented in the warm temperate Bassian, are found in the Eyrean where they are restricted to the Murray River corridor. Five species are found in the warm temperate Bassian and two of these, the little whip snake *Denisonia flagellum* and the small eyed snake *Denisonia nigrescens*, are thigmotherms and both are restricted to the warm temperate. The three heliotherms, the brown snake *Demansia textilis*, tiger snake *Notechis scutatus*, and black snake *Pseudechis porphyriacus*, are also found in the Eyrean or the Murray River corridor. Only four species are found in the cool temperate Bassian, and all are heliotherms and viviparous: one species, the tiger snake *Notechis scutatus*, is shared with the warm temperate; one species, the lowlands copperhead *Denisonia superba* (lowlands form) is restricted to the cool temperate; and the remaining two species, the white lipped snake *Denisonia coronoides*, and highlands copperhead *Denisonia superba* (highlands form), are shared with the cold temperate where they are restricted to the lower woodlands.

Family Typhlopidae (blind snakes or worm snakes). This group of small burrowing snakes is unique in that the cranial bones are solidly united and the jaws are not adapted to give a wide gape. In the skull the pterygoids fail to reach the quadrate; the ectopterygoids are reduced or absent; the prefrontals and nasals contact and are solidly united; elements of the rostral (snout) region are fused and form a burrowing organ that is solidly attached to the braincase; supratemporals are absent; the quadrate is short and flat with a dorsal process, and slants forward ventrally; the stapes are absent; the supraorbital and postorbital bones are absent, so the orbit is open. In the upper jaw, the premaxilla is widely separated from the maxilla, and the maxilla is shortened and movably attached to the skull. In the lower jaw, the dentary is greatly reduced and a coronoid is present. The dentition is very reduced, and the premaxilla, palatine and pterygoid bones are toothless. The maxilla bears a few solid teeth in a transverse row, and the dentary may bear one tooth or be toothless.

Sub-family Typhlopinae (blind snakes or worm snakes). In the lower jaw, the dentary is strongly reduced and toothless, and the splenial is present and reaches the anterior end of the jaw. The hyoid apparatus is Y-shaped and a reduced pelvic girdle (consisting of a single bone) is present.

Blind snakes feed on small, soft bodied invertebrates such as termites. Thus they have no need to subdue their prey before swallowing, and they are neither venomous nor have any special abilities (such as constricting) for incapacitating other animals. As the name "worm snakes" infers, these reptiles bear a superficial resemblance to earthworms. The head is short and blunt, with a shovel shaped snout adapted for digging. Below the rim of the snout lies the small mouth. The head passes imperceptibly into the neck which is indistinguishable from the body and tail as all are round in section and of the same diameter. The tail is extremely short and blunt, and terminates in a small downward directed spine that is used to anchor the snake when it is pushing through loose soil. The head shields are large, highly polished, and symmetrical; while the neck, body, and tail are covered by flat highly polished scales which are in 16 to 24 rows at mid-body. Blind snakes lack the enlarged undivided ventral scales that are characteristic of other snakes. The eyes are very reduced and only visible externally as small black spots under the translucent head shields, this feature giving rise to the name "blind snakes". The left lung is absent. Probably because of their cryptic habits, blind snakes have no threat displays and will not bite.

Blind snakes have been poorly studied in the past, and the mode of reproduction is known for only a few species; however, it is possible to state that they are basically oviparous and recorded litter sizes range from two to fifteen. Dissection of a female belonging to an overseas species revealed fourteen fully developed embryos, so there may be ovoviviparous and even viviparous species.

All blind snakes are burrowing thigmotherms and their extreme adaptations would probably prevent any other mode of existence. They only move about on the surface at night or when heavy rains flush them from the soil.

Eight species representing one genus, *Typhlops*, are known to occur in Victoria, and all are restricted to the Eyrean. They avoid the surface heat by burrowing in loose soil. It is probable that they actively thermoregulate during the day by moving up and down in the soil layers, following the optimal temperature. Blind snakes are probably excluded from the Bassian by their thigmothermic habits and their oviparous mode of reproduction.

Further references

- COGGER, H. G. *Australian reptiles in colour*. Sydney, A. H. & A. W. Reed, 1967.
- KINGHORN, J. R. *The snakes of Australia*. 2nd ed., Sydney, Angus and Robertson, 1956.
- RAWLINSON, P. A. "Reptiles of the Victorian Mallee", pp. 605-619, in Royal Society of Victoria, *Proceedings*, vol. 79, pt 2, 1966.
- "The vertebrate fauna of the Bass Strait Islands: 2. The reptilia of Flinders and King Islands", pp. 211-224, in Royal Society of Victoria, *Proceedings*, vol. 80, pt 2, 1967.
- "The reptiles of east Gippsland", pp. 113-128, in Royal Society of Victoria, *Proceedings*, vol. 82, pt 1, 1969.

RAWLINSON, P. A. "The reptiles of west Gippsland", in Royal Society of Victoria, *Proceedings*, in press.

WORRELL, E. R. *Dangerous snakes of Australia and New Guinea*. Sydney, Angus and Robertson, 1963.

—*Reptiles of Australia*. Sydney, Angus and Robertson, 1963.

GEOGRAPHICAL FEATURES

Area and boundaries

Victoria is situated at the south-eastern extremity of the Australian continent, of which it occupies about a thirty-fourth part and covers about 87,884 square miles or 56,245,760 acres.

The following table shows the area of Victoria in relation to that of Australia :

AREA OF AUSTRALIAN STATES

State or Territory	Area	Percentage of total area
	sq miles	
Western Australia	975,920	32·88
Queensland	667,000	22·47
Northern Territory	520,280	17·53
South Australia	380,070	12·81
New South Wales	309,433	10·43
Victoria	87,884	2·96
Tasmania	26,383	0·89
Australian Capital Territory	939	0·03
Total Australia	2,967,909	100·00

Victoria is bounded on the north and north-east by New South Wales, from which it is separated by the Murray River and a boundary about 110 miles long running north-westerly from Cape Howe to the nearest source of the Murray River, being a point known as The Springs, on Forest Hill. All the waters of the Murray River are in New South Wales, the State boundary being the left bank of the stream. The total length of the New South Wales boundary is about 1,175 miles.

On the west the State is bounded by South Australia and on the south by the Indian Ocean and Bass Strait. Its greatest length from east to west is about 493 miles, its greatest breadth about 290 miles, and its extent of coastline 980 miles, including the length around Port Phillip Bay 164 miles, Western Port 90 miles, and Corner Inlet 50 miles. Great Britain, inclusive of the Isle of Man and the Channel Islands, contains 88,119 square miles, and is therefore slightly larger than Victoria.

The most southerly point of Wilsons Promontory, in latitude 39 deg 8 min S., longitude 146 deg 22½ min E., is the southernmost point of Victoria and likewise of the Australian continent ; the northernmost point is where the western boundary of the State meets the Murray, latitude 34 deg 2 min

S., longitude 140 deg 58 min E.; the point furthest east is Cape Howe, situated in latitude 37 deg 31 min S., longitude 149 deg 59 min E. The westerly boundary lies upon the meridian 140 deg 58 min E., and extends from latitude 34 deg 2 min S. to latitude 38 deg 4 min S.—a distance of 280 miles.

Physical divisions

This article should be read in conjunction with the articles on geographical features, area, and climate.

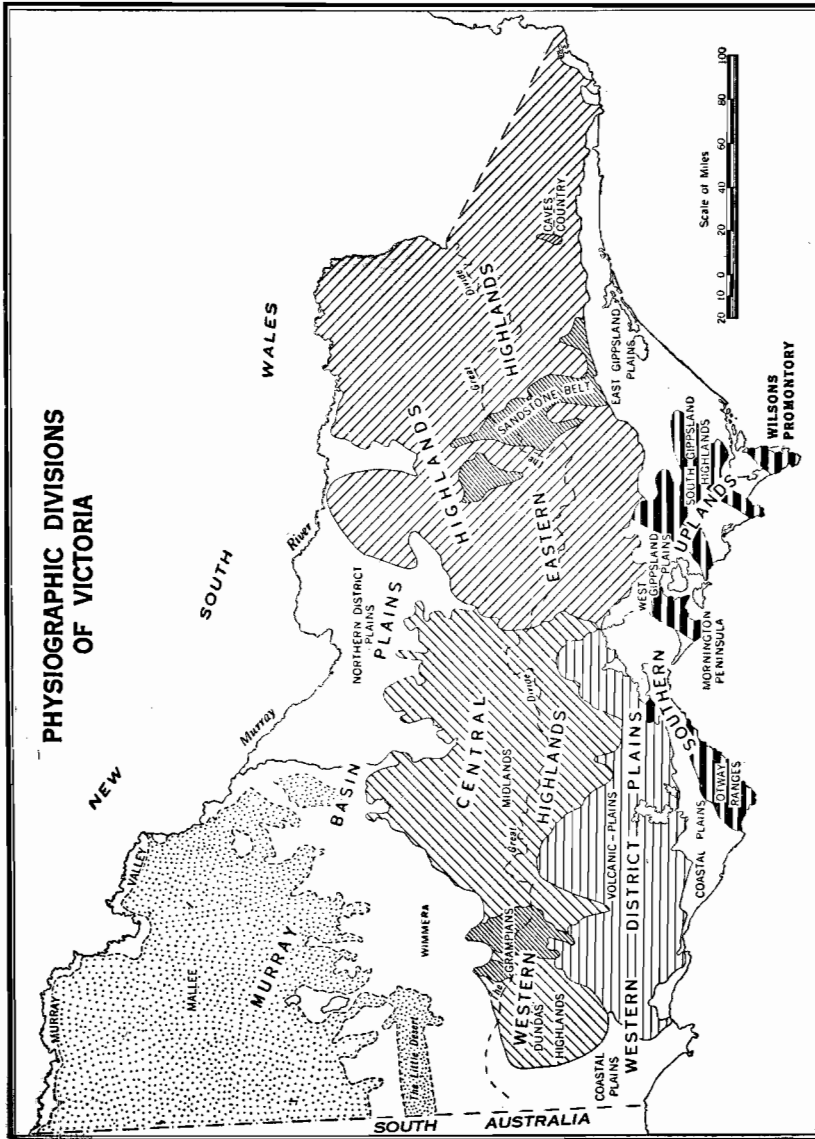


FIGURE 1.

The chief physical divisions of Victoria are shown on the map (Figure 1). Each of these divisions has certain physical features which distinguish it from the others as a result of the influence of elevation, geological structure, climate, and soils. The following divisions are recognised :

1. *Murray Basin Plains* :

- (a) The Mallee
- (b) The Murray Valley
- (c) The Wimmera
- (d) The Northern District Plains

2. *Central Highlands* :

A. The Eastern Highlands, within which

- (a) the Sandstone Belt and
- (b) the Caves Country may be distinguished from the remainder

B. The Western Highlands :

- (a) The Midlands
- (b) The Grampians
- (c) The Dundas Highlands

3. *Western District Plains* :

- (a) The Volcanic Plains
- (b) The Coastal Plains

4. *Gippsland Plains* :

- (a) The East Gippsland Plains
- (b) The West Gippsland Plains

5. *Southern Uplands* :

- (a) The Otway Ranges
- (b) The Barabool Hills
- (c) The Mornington Peninsula
- (d) The South Gippsland Highlands
- (e) Wilsons Promontory

Murray Basin Plains

These plains include the Mallee, the Wimmera, the Northern District Plains, and the Murray Valley itself. The most noticeable distinguishing features of the Mallee are the soils, vegetation, and topography. It is not a perfect plain, but exhibits broad low ridges and depressions which appear to be due to folding and faulting of the rocks. Sand ridges trending due east and west are an indication of a former more arid climate, but they are now fixed by vegetation. When cleared, the sand distributes itself irregularly without forming new ridges. There is evidence of a succession of former wet and dry periods in the Mallee, but at the present time all the streams that enter it lose so much water by evaporation and percolation that they fail to reach the Murray and terminate in shallow lakes, many of which are salt. The Murray Valley itself is cut into the higher Mallee land and is subject to periodic flooding by the river.

The Northern District Plains are formed from the combined flood plains of rivers flowing to the Murray, with an average gradient of between 3 and 5 ft to the mile, the surface being almost perfectly flat except where small residual hills of granite rise above the alluvium as at Pyramid Hill.

The Wimmera lies between the Western Highlands and the Mallee and is also composed mainly of river plains, except to the north of the Glenelg where old abandoned river channels contain a succession of small lakes. Most of the lakes of the Murray Basin Plains have crescentic loam ridges (lunettes) on their eastern shores.

Central Highlands

The Central Highlands form the backbone of Victoria, tapering from a broad and high mountainous belt in the east until they disappear beyond the Dundas Highlands near the South Australian border. They were formed by up-warping and faulting. The Eastern Highlands differ from the Western in their greater average elevation, with peaks such as Bogong, Feathertop, and Hotham rising above 6,000 ft, while the Western Highlands are generally lower, the peaks reaching above 3,000 ft, and the valleys being broader. Also, in the Eastern Highlands patches of Older Volcanic rocks occur, whereas in the Western the volcanic rocks belong mainly to the Newer Volcanic Series. Several well known volcanic mountains are still preserved; Mounts Buninyong and Warrenheip near Ballarat being examples.

Because of the great variety of geological formations in the Central Highlands and the effects of elevation and deep dissection by streams, the features of the country are very varied and there are many striking mountains and gorges. The severe winter climate, with heavy snow on the higher land, is also a special feature of the Eastern Highlands. Included in the area are several high plains such as those near Bogong and the Snowy Plains. Caves are well known in the limestone around Buchan.

In the Western Highlands the Grampians, with their striking serrate ridges of sandstone, may be compared with the belt of sandstones stretching from Mansfield to Briagolong in the east.

The Dundas Highlands are a dome which has been dissected by the Glenelg and its tributaries, the rocks being capped by ancient laterite soils which form tablelands with scarps at their edges.

Western District Plains

Many of the surface features of the Western District Plains are a result of volcanic activity, very large areas being covered with basalt flows of the Newer Volcanic Series above which prominent mountains rise, many of them with a central crater lake. Some of the youngest flows preserve original surface irregularities practically unmodified by erosion, thus forming the regions known as "Stony Rises".

The coastal plains of the Western District are for the most part sandy, the soils being derived from Tertiary and Pleistocene sedimentary deposits, which in places attain a thickness of some 5,000 ft, and yield considerable quantities of artesian water.

Gippsland Plains

Continuing the east-west belt of plains on the eastern side of the drowned area represented by Port Phillip Bay and Western Port are the Gippsland Plains. These are underlain by marine and non-marine Tertiary and Pleistocene sedimentary deposits, including the thick seams of brown coal of the Latrobe Valley. A notable feature is the Ninety Mile Beach and the lakes and swamps that lie on its landward side. This beach is an offshore bar on which aeolian sand ridges have accumulated.

Southern Uplands

Lying to the south of the plains above mentioned is a group of uplifted blocks for which faulting is mainly responsible, these constituting the Southern Uplands. The Otway Ranges and the South Gippsland Highlands are composed of fresh water Mesozoic and Tertiary sediments with Older Volcanic basalts in South Gippsland, and the Mornington Peninsula is an upraised fault block of complex geology, including granites. The Sorrento Peninsula is entirely composed of Pleistocene calcareous dune ridges which have been responsible for practically blocking the entrance to Port Phillip Bay.

Physical environment and land use

The Central Highland Zone (see Figure 1) is the dominant physiographic region of Victoria. The greatest importance of these Highlands is their influence on the drainage pattern of the State. They act as a drainage division and catchment areas between the long north and north-west flowing rivers which are part of the Murray System and the shorter south flowing rivers.

The Highlands are divided into two parts by the 1,200 ft Kilmore Gap, a natural gateway for transport routes leading north from Melbourne.

Eastern Highlands

To the east, the Eastern Highlands form a broad, rugged region of deeply dissected high plateaux with elevations of up to 6,000 ft. They form a barrier to east-moving air masses, giving rise to heavy orographic rainfall of over 50 inches a year in the higher parts. This is the wettest part of the State, and is the coldest region in winter with substantial snowfalls at higher elevations, a factor enabling the development of skiing resorts at locations such as Mt Buffalo, Mt Buller, Mt Hotham, and Falls Creek. Because of the elevation, this is also the coolest part of the State in summer. The rugged topography and dense forest cover of the Eastern Highlands makes them rather inaccessible and of little agricultural potential, so that they are the only large area of Victoria that is very sparsely settled and almost devoid of transport routes. However, the foothill zone adjoining the East Gippsland Plains is an important forestry area, while the lower slopes and valleys are used for grazing, particularly of cattle. High alpine grassland areas in the north-east, such as the Bogong High Plains, are used for summer grazing, this area being one of the rare cases of a transhumance farming economy in Australia. The high run-off and steep stream gradients have made the Eastern Highlands important for water storage and hydro-electricity generation at Kiewa, Eildon, and Rubicon.

Western Highlands

West of the Kilmore gap, the Western Highlands are much lower than those to the east. These Highlands culminate in the west in a series of block mountains, of which the Grampians and the Dundas Highlands form the final western outlines of the Highland Zone. Stream gradients are more gentle than in the Eastern Highlands, so that hydro-electricity potential is low. However, the Rocklands Dam and the Eppalock and Cairn Curran Reservoirs are important storages for water supply to farms of the northern plains of Victoria.

The Western Highlands, because of their lower elevation, have a lower rainfall than the Eastern Highlands, and they do not act as a barrier to settlement and transport. The reasonably reliable rainfall of 20 inches to 30 inches a year, cool winters, warm summers, rolling topography, open dry sclerophyll forest and grasslands, and moderately fertile, although thin, volcanic soils offer an environment suitable for sheep grazing for wool and fat lambs, fodder cropping, dairying, and potato growing. Early settlement of the area was stimulated by the gold discoveries of the 1850s and 1860s in the Ballarat and Bendigo districts, and these two cities have developed as important regional centres. Castlemaine, Maryborough, and Clunes are additional service centres.

Murray Basin Plains

North of the Central Highland Zone are the flat Murray Basin Plains (see Figure 1). The western section is comprised of the Mallee-Wimmera Plain, characterised by areas of east-west running sand ridges, grey-brown and solonised Mallee soils, and some areas of sandy wastelands. Rainfall is around 20 inches a year in the southern Wimmera, but it decreases to under 10 inches a year in the north-western Mallee, which is the driest area of the State. As well as being low, rainfall is erratic and unreliable in the Mallee-Wimmera, but the warm winters and hot summers ensure a year round growing season where water is available. Early farms were too small, and over-cropping led to widespread crop failures and soil erosion. Since the 1930s farming here has become more stable as a result of the provision of adequate and assured water supplies from the Mallee-Wimmera Stock and Domestic Water Supply System, larger farms of over 1,000 acres, crop rotations, the development of a crop-livestock farming pattern, the use of superphosphate and growing of legumes to maintain soil fertility, and soil conservation practices. The winter rainfall maximum and dry summer harvesting period, the good rail and road network and bulk handling facilities, and scientific farming techniques have enabled the Wimmera to become a region of high-yielding wheat and mixed farms. The drier areas of the Mallee are characterised more by larger sheep properties.

Of great significance in the Mallee are the irrigation areas of the Mildura-Merbein-Red Cliffs and Swan Hill districts, with close settlement farming growing vines and fruits. Mildura, Ouyen, Swan Hill, Horsham, Warracknabeal, and St Arnaud are the main regional centres of the Mallee-Wimmera Plains.

The Northern District Plains form the narrower eastern section of the Murray Basin Plains. Here rainfall increases from 15 inches a year in the western part to over 30 inches a year in the eastern part of the plain adjoining the Eastern Highlands. Rainfall is more reliable than in the Mallee-Wimmera District. However, there is generally a summer water deficiency which restricts pasture growth, so that the Northern District Plains are characterised by extensive grazing and mixed wheat-sheep farms. Recently there has been increasing emphasis on "ley" farming (i.e., rotation of crops and pastures) in order to increase carrying capacities and productivity. The higher, eastern section of the Northern District Plains with more reliable rainfall is one of the best sheep and cattle grazing areas in the State.

There is a marked contrast in the Northern District Plains between the "dry" farming areas and those closely settled irrigation areas of the Murray and its tributaries, especially in the Kerang, Echuca-Rochester, Kyabram-Shepparton, and Cobram-Yarrawonga areas using water from the Loddon, Campaspe, Goulburn, and Murray Rivers, respectively. Fruits, vegetables, hops, and tobacco growing with local specialisations, and dairying based on improved pastures are the main activities in the irrigated districts. Shepparton has become an important centre for canned and frozen fruits and vegetables. These areas are also important as suppliers for the metropolitan fresh fruit and vegetable market.

In the Northern District Plains Shepparton, Wangaratta, and Benalla are large and expanding regional centres with manufacturing industries, while Echuca, Rochester, Kyabram, and Wodonga are smaller service centres with a small range of urban functions.

Coastal Region

South of the Central Highland Zone, coastal Victoria is readily divided into three regions.

The first of these is Port Phillip Bay and environs, bounded by the You Yang Range and Keilor Plain in the west, the Central Highlands in the north, the Dandenong Range and West Gippsland Plain in the east, and the Mornington Peninsula in the south-east. Melbourne, Geelong, and the developing Western Port provide port facilities in this region. This region is dominated by the urban areas of Melbourne, which is the hub of the State's transport system, and Geelong. The urban areas are surrounded by intensively farmed rural landscapes in which market gardening is important in addition to cattle and sheep fattening, dairying, and fodder cropping. The bayside beach resorts and the seaside resorts of the Mornington Peninsula are the centre of an important tourist industry.

The second region of coastal Victoria is the extensive volcanic plain stretching westwards from the Port Phillip region. This is possibly the best agricultural region in Victoria. The rolling surface is characterised by volcanic plains and cones, lakes, and stony rises, with rich but shallow volcanic soils. Rainfall is above 20 inches a year in all areas, with a slight winter-spring maximum, and temperatures are warm in summer and mild in winter so that year round pasture growth and cropping are possible. Western District farms produce cattle, sheep for wool and fat lambs, fodder crops, and potatoes. This is also an important dairying district. Rural population densities, along with those of the West Gippsland dairying country, are second highest in the State after the northern irrigation districts. Colac, Warrnambool, Portland, Hamilton, and Camperdown are the main regional centres. Portland has recently developed modern port facilities.

South of the Western District Plains lie the Otway Ranges, a sparsely populated region of rugged scenery and very high rainfall. The coastline between Anglesea and Apollo Bay has a number of popular tourist resorts.

The third region of coastal Victoria is Gippsland. Immediately east of the Bay are the West Gippsland Plains, which are sandy in their western section where large areas of swamp have been drained for market gardening. The South Gippsland Highlands, a sparsely populated area of little agri-

cultural potential, is bounded by the West Gippsland Plain and to the east by a fault trough stretching from Warragul to the Latrobe Valley (included in East Gippsland Plains in Figure 1). The fault trough with its rolling hills, 30 inch rainfall, and year round pasture, is among the best dairying country on the Australian mainland, supplying the metropolitan wholemilk market. The Latrobe Valley towns have experienced rapid post-war development as a result of the brown coal mining operations in the Yallourn-Morwell area.

East of the Latrobe Valley, rainfall decreases to below 30 inches a year between Traralgon and the Gippsland Lakes. Here the coastline is characterised by sand dunes and lagoons, backed by the riverine plains of the Latrobe, Macalister, Avon, and Mitchell Rivers. The relatively low rainfall necessitates irrigation for cropping. Irrigated farming in the Sale-Maffra, Bairnsdale, and (further east) Orbost districts is based on maize, bean, potato, and fodder growing. Elsewhere the main land use is cattle and sheep grazing.

The plains narrow east of Lakes Entrance when the coastline becomes one of alternating river valleys and hilly headlands where the Eastern Highlands protrude south to the sea. Forestry is the main activity here, with some grazing and fodder cropping in the valleys and foothills. Tourism is important in the area around Lakes Entrance, which is also a fishing port. Gippsland is linked with Melbourne by the Princes Highway and by rail as far east as Orbost.

Mountain regions

The mountainous regions of Victoria comprise the Central Highlands and a belt known as the Southern Uplands lying to the south and separated from the Central Highlands by plains.

The Central Highlands form the backbone of Victoria, tapering from a broad and high mountainous belt in the east until they disappear near the South Australian border. In the eastern sector patches of Older Volcanic rocks occur and peaks rise more than 6,000 ft, while in the western sector the volcanic rocks belong mainly to the Newer Volcanic Series and the peaks reach 3,000 ft.

The Highlands descend to plains on their southern and northern flanks. On the south are the Western District Plains and the Gippsland Plains, and beyond these again rises a group of uplifted blocks constituting the Southern Uplands. The Otway Ranges and the hills of South Gippsland are composed of fresh water Mesozoic sediments and Tertiary sands and clays with Older Volcanic rocks in South Gippsland, and the Mornington Peninsula is an upraised fault block of complex geology, including granites.

By 1875 the mountainous areas of the State were embraced by a geodetic survey which had been started in 1856. This was the first major survey, although isolated surveys had been carried out as early as 1844. Further surveys were carried out by the Australian Survey Corps during the Second World War, and by the Department of Lands and Survey in the post-war years. Most recent values for some of the highest mountains in Victoria are Mt Bogong, 6,516 ft; Mt Feathertop, 6,307 ft; Mt Nelse, 6,181 ft; Mt Fainter, 6,157 ft; Mt Loch, 6,152 ft; Mt Hotham, 6,108 ft; Mt Niggerhead, 6,048 ft; Mt McKay, 6,045 ft; Mt Cobberas, 6,030

ft ; Mt Cope, 6,026 ft ; Mt Spion Kopje, 6,025 ft ; and Mt Buller, 5,919 ft.

Further reference, 1962

Erosion and sedimentation on the coastline

Over an appreciable period of time all coastlines change. Earth movements, world-wide rises and falls of sea level, and volcanic eruptions cause traumatic alterations to shorelines ; but the constant erosion and sedimentation which can be observed along any stretch of coast is the continuing process of change. Marine erosion is caused almost entirely by breaking waves, while lesser contributors to the process are the activities of wind on its own, rivers, and man.

Wave action

Winds passing over the surface of the ocean generate waves which travel to generally distant shores. Although the wave form moves, only in the shallows is there a forward movement of the water particles, and here the wave picks up sand, pebbles and other detritus, with which it batters cliffs or the shallow seabed.

Waves tend to swing so that the crest is parallel to the shore, but under strong cross winds will strike the shore obliquely. Eroded material is carried out to sea by the backwash, and where the wave action is oblique the effect of each wave is to move the material a short distance laterally. The combined result of many waves is to produce a movement along the shore in the direction of the prevailing moderate to strong winds. This is known as long shore drift. On the other hand, storm waves will carry the material into deeper water, where the drift affects them less.

Both actions can be seasonal, storm waves being often more common in winter, and the prevailing winds having different directions in winter and summer. In Port Phillip Bay long shore drift is from south to north in summer, and reverses in winter. For most of the Victorian coast drift is predominantly from west to east. Waves thus both erode and move material until it is deposited in sheltered bays or formed into ridges offshore.

Eroding coastlines

The rate of erosion will depend largely on the force of the waves and the hardness of the shoreline being attacked. Where the coastline material is sand dune, soft sandstone, or clays, erosion occurs fairly uniformly through the battering action of detritus-armed storm waves and the scouring action of water alone. This is seen at Anglesea, at Peterborough, between Barwon Heads and Lonsdale Bight, between Dromana and Sorrento, near Kilcunda, along the Ninety Mile Beach, and east of Marlo.

In harder rocks, the erosion is governed largely by joint planes and faults. As well as the abrasive action in the wave zone, waves can compress water and air in the joint crevices, the resulting high pressures splitting off great blocks. This type of erosion is found in the jointed granite at Cape Woolamai and Wilsons Promontory ; in the layered basalt at Flinders and Cape Schanck ; and in the layered mudstones and sandstones along the Otway Peninsula, near San Remo, and south-east from Warrnambool.

Differing resistance to erosion produces irregularities. Where horizontal soft and hard bands alternate the soft layers are eroded, leaving the hard strata as ledges. Typical examples are at Broken Head near Port Campbell, at Barwon Head, and at Kilcunda. Weaknesses along the strata may cause erosion behind the headland, resulting in rock stacks and natural arches; the area east of Port Campbell provides a spectacular example. The effect of variation along the line of the coast is to leave the harder areas as promontories—numerous examples of which are found between Frankston and Dromana.

In the erosion of a partially submerged slope, undercutting in the wave zone and the subsequent disintegration of overlying strata by storm waves and weathering results in a wave cut platform at the foot of the cliff. This has occurred at Apollo Bay, along the Otway coastline, between Portsea and Cape Schanck, at Mount Martha and Mornington, at Olivers Hill, and at Kilcunda. In most cases the eroded materials are deposited on the seaward side of the slope, thus widening the platform.

The appearance of the eroding coastline depends on the relative speeds of wave erosion and atmospheric weathering. Where the materials are soft, weathering is rapid, and the natural angle of repose is reached quickly, giving a line of smoothly curving cliffs, marked by landslips. Where wave attack is the more rapid, and the material is soft, the cliff becomes almost vertical—as at Port Campbell, Anglesea, and Mentone; but where the rock is hard with vertical joints, the vertical cliffs are irregular as in the granite cliffs at Cape Woolamai. Where the strata slope towards the sea, the cliff face may coincide with the bedding planes, and where the slope is towards the land, a stepped appearance results.

Advancing coastlines

The detritus from marine erosion and material discharged into the sea by rivers and streams is moved by wave action and is deposited ultimately in sheltered locations.

Where the coast slopes gently, the deposition of material beyond the breaking zone of the waves forms an offshore bar. Continuing addition to this constructs an offshore ridge, with a lagoon left between the ridge and the original coastline. The Ninety Mile Beach is a prominent example, and here the typical shallowing of the lagoon is being carried out by erosion products of the streams discharging into it.

The process of long shore drift can be interrupted by a protruberance from the general line of the coast, with a build up on the "upstream" side, and depending on the resistance to the movement, advance of the coastline may follow. Where the direction of longshore drift is not constant, a bar may form on both sides of the obstruction. This has happened at Wilsons Promontory, where the main granitic mass is connected to the mainland by an extensive sand tongue, and at Cape Woolamai, where the same action has connected the Cape to Phillip Island. In each case an underwater ridge provided the initial obstruction. The same tendency is obvious opposite Gabo Island, where bars from the west and east have formed a cusped foreland extending towards the island.

In sheltered areas which are not subject to high energy wave force, there is deposition of sediments from wave, tidal, and stream action. With

the growth of plants which are capable of existing in brackish water, the scouring action of long shore drift and tides is impeded, and the process of siltation accelerates. Parts of Port Phillip Bay, the northern end of Western Port, and Corner Inlet provide good examples of this type of advancing coast.

Where rivers discharge into the sea, the action of waves is to form a bar across the mouth. This impedes the discharge of the detritus carried by the river, and a build-up occurs. If there is a strong continuous stream flow a delta will result. No Victorian river is in this category, so bars which are more or less continuous have formed across the mouths of most streams, including the Snowy River at Marlo, the composite river system at Lakes Entrance, the Hopkins River at Warrnambool, and the Glenelg River at Nelson. In times of high flow the stream breaches the bar, the position of the breach being determined by the direction of the long shore drift. The majority of Victorian streams which discharge into open sea have their mouths deflected eastward, and those in Port Phillip Bay generally northward, as can be seen at Balcombe Creek at Mount Martha.

Human agency

The natural processes of erosion and siltation are, overall, almost balancing; but in any particular area the effect of either may be to "interfere" with man's use of that area. The erosion of either private land or popularly used Crown land leads to a demand for its protection, and where retaining walls are constructed for this purpose the material for natural accretion at some point is cut off and erosion will commence at some other point. Numerous examples of this are found around Port Phillip Bay.

The need for ports and small boat harbours, and for adequate channels leading into them, causes the construction of breakwaters and training walls which interfere with the natural action of waves, causing siltation in the shadow of breakwaters, and denudation of beaches adjacent to them. At Apollo Bay, Queenscliff, Port Fairy, Lakes Entrance, and the channels leading to Melbourne and Geelong, dredging is needed to maintain access; and siltation is evident at St Kilda, Brighton, Sandringham, and Port Welshpool.

Construction of dams for water supply, or the diversion of streams for flood control eliminates or reduces the flushing action of streams in flood, with consequent loss of channels at the mouth, and possibly increased siltation. The Werribee, Barwon, and Yarra Rivers are examples of the former; Mordialloc Creek, Patterson River, and Kananook Creek of the latter.

Conclusion

The joint processes of erosion and sedimentation are primarily the result of wave action. The profile of the resulting coastline will depend on the nature of the rocks which form the coast, the slope of the bed, and the intensity of the wave forces. To this, rivers and man contribute to a lesser extent, and a thorough understanding of the processes is needed before an area is developed for any particular use.

Hydrography of Coast, 1966; Coastal Physiography, 1967; Plant Ecology of Coast, 1968; Marine Animal Ecology, 1969; Marine Algae of the Victorian Coast, 1970

Rivers

Stream flows

Water is a limited resource and a major factor in the development of the State. Hence a knowledge of its water resources is essential to their optimum use. Tabular data giving the mean, maximum, and minimum flows at selected gauging stations are published periodically by the State Rivers and Water Supply Commission in their *River Gaugings*. The data in the table below have been extracted from the latest published volume containing records of 175 gauging stations to 1965.

An average value such as the mean annual flow is a useful relative single measure of magnitude, but variability is equally important. Another crude measure of such variability is given by the tabulated values of the maximum and minimum annual flows; however, the difference between these extremes, termed the "range", will increase with increasing length of record.

The following table shows the main river basins of Victoria and flows of the main streams :

VICTORIA—SCHEDULE OF MAIN STREAM FLOWS

Div.	Basin	Stream	Site of gauging station	Catchment area (square miles)	Year gauged from	Annual flows in '000 acre ft				
						Mean	No. of years	Max.	Min.	
IV. Murray-Darling Division	1	Murray	Jingellic	2,520	1890	1,933	76	4,978	549	
		Mitta	Tallandoon	1,840	1935	1,063	30	2,613	316	
		Mitta	Tallangatta	2,000	1886	1,147	49	3,460	203	
	2	Kiewa	Kiewa	450	1886	518	80	1,684	144	
	3	Ovens	Wangaratta	2,250	1941	1,308	25	3,367	271	
	4	Broken	Goorambat	740	1887	205	79	887	15.5	
	5	Goulburn	Murchison	4,140	1882	1,795	84	6,139	516	
	6	Campaspe	Elmore	1,240	1886	192	78	667	0.6	
	7	Loddon	Laanecoorie	1,610	1891	205	75	660	8.9	
	8	Avoca	Coonooer	1,000	1890	63	76	321	3.8	
	15	Wimmera	Horsham	1,570	1889	104	77	479	0	
	II. South East Coast Division	22	Snowy	Jarrahrmond	5,000	1907	1,682	42	3,254	766
		23	Tambo	Bruthen	1,030	(a) 1906	179	29	575	50
		24	Mitchell	Glenaladale	1,530	1938	764	28	1,779	325
		25	Thomson	Cowwarr	420	1901	325	50	553	142
25		Macalister	Glenmaggie	730	1919	477	47	1,277	181	
26		Latrobe	Rosedale	1,600	(b) 1901	777	51	2,634	362	
28		Bunyip	Bunyip	268	(c) 1908	124	47	246	56	
29		Yarra	Warrandyte	899	1892	685	48	1,215	265	
30		Maribyrnong	Keilor	500	(d) 1908	91	35	266	3	
31		Werribee	Melton	446	(e) 1917	68	49	259	5.3	
32		Moorabool	Batesford	430	(f) 1908	58	16	149	2.5	
33		Barwon	Winchelsea	370	(g) 1922	115	33	412	25	
35		Carlisle	Wickliffe	30	(h) 1930	32	31	71	14.5	
36		Hopkins	Wickliffe	540	(i) 1921	28	34	103	1.4	
38	Glenelg	Balmoral	606	(j) 1889	117	60	439	2.5		

Source : *River Gaugings to 1965*, State Rivers and Water Supply Commission.

Note	Years excluded in estimating mean
(g)	1924-25 to 1937-38
(b)	1919-20 to 1936-37
(c)	1951-52
(d)	1933-34 to 1955-56
(e)	1952-53

Note	Years excluded in estimating mean
(f)	1921-22 to 1945-46
(g)	1933-34 to 1943-44
(h)	1943-44 to 1946-47
(i)	1933-34 to 1943-44
(j)	1933-34 to 1938-39

Catchment and lengths

Other characteristics relating to streams are the size of the catchment and the lengths of the rivers. Areas of gauged catchments are given in *River Gaugings*, and the lengths of 230 rivers are tabulated on pages 31 to 35 of the *Victorian Year Book 1963*.

Catchments may be regarded as the hydrologically effective part of a "basin", or the area from which there is "run-off" to the stream. Thus, the whole of any area may be subdivided into basins, but parts of some basins may be regarded as non-effective, being either too flat or the rainfall too small to contribute to normal stream flows. There is little or no contribution in the north-west of the State where the annual rainfall is less than 18 inches to 20 inches. Above this amount, roughly half the rainfall appears as stream flow.

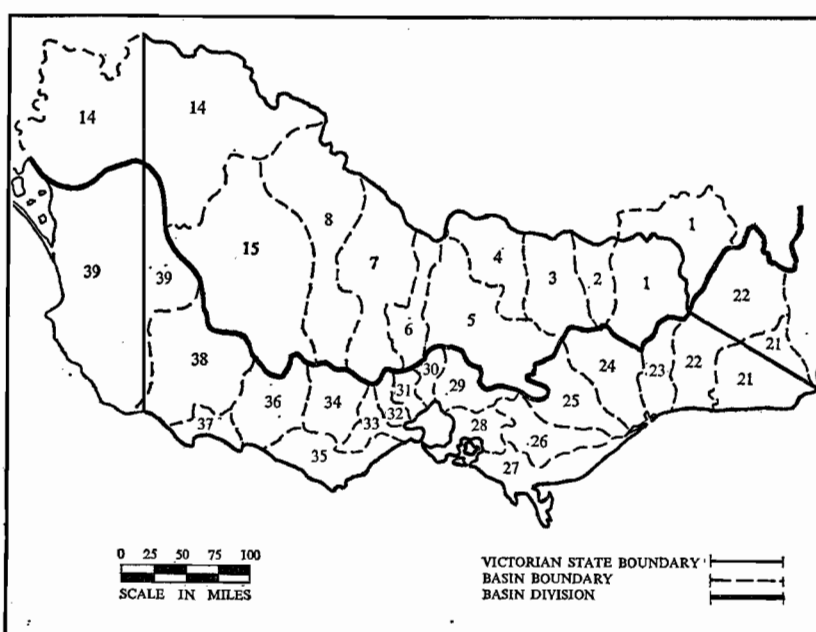


FIGURE 2. Relevant Basins of the two Divisions (South East Coast Division and Murray-Darling Division) which include Victoria and some adjacent areas. The Basins are numbered as shown on Map 3 (Sheet 2) in *Review of Australia's Water Resources*, published by Department of National Development, 1965.

SOUTH EAST COAST DIVISION

21. East Gippsland
22. Snowy River
23. Tambo River
24. Mitchell River
25. Thomson River
26. Latrobe River
27. South Gippsland
28. Bunyip River
29. Yarra River

30. Maribyrnong River
31. Werribee River
32. Moorabool River
33. Barwon River
34. Lake Corangamite
35. Otway
36. Hopkins River
37. Portland
38. Glenelg River
39. Millicent Coast

MURRAY-DARLING DIVISION

1. Upper Murray River
2. Kiewa River
3. Ovens River
4. Broken River
5. Goulburn River
6. Campaspe River
7. Loddon River
8. Avoca River
14. Mallee
15. Wimmera-Avon River

Total flow

The current estimate of mean annual flow is 17 mill. acre ft each year, about half of which flows into the Murray; the other half flowing southward to the Victorian coast. The geographic distribution of flow is heavily weighted towards the eastern half where the total flow is about 14 mill. acre ft (with about 8 mill. acre ft in the north-east and 6 mill. acre ft in the south-east) and hence leaving 3 mill. acre ft in the western half.

Location of streams

The location of about 2,500 streams in Victoria may be obtained by referring to the *Alphabetical Index of Victorian Streams* compiled by the State Rivers and Water Supply Commission in 1960. Owing to the replication of names for some streams, there are over 2,900 names; these have been obtained by examining Department of Crown Lands and Survey and Commonwealth Military Forces maps, so as to include names which have appeared on them. There are, in addition, many unnamed streams, those with locally known names, and those named on other maps or plans. No attempt was made in the Index to suggest a preferred name; this is a function of the committee appointed under the *Survey Co-ordination Place Names Act 1965*.

Stream reserves

In 1881, under the then current Land Act, an Order in Council created permanent reserves along the banks of streams where they passed through Crown land. These are scheduled in the *Township and Parish Guide* reprinted by the Lands Department in 1955. This schedule indicates the location and width of reservations for 280 streams which (except for the Murray) are 1, 1½, or 2 chains wide on *each* bank of the stream. The areas thus reserved were not fully delineated until subsequently surveyed prior to alienation.

Further reference, 1963; Droughts, 1964

Floods

General

The natural history of unregulated rivers is largely the history of their floods and droughts. Rainfall intensity increases with decrease in latitude and consequently Victoria is less subject to floods than the northern States. The practical importance of floods is, however, largely related to the damage they do in occupied areas.

Flood damage usually occurs because of the occupation of flood plains, and once occupied there is a demand for protection which is commonly provided by levees. Such levees have been constructed along the major streams including the Murray, Snowy, and Goulburn, and also in urban areas occupying the flood plain of the Dandenong Creek. The objection to levees is that by restricting the flood plain, the flood level for a given discharge is increased, and if overtopping does occur, damage is more serious. Other flood mitigation measures used in Victoria, such as straightening the stream to increase the gradient and flow rate, have also been used on such streams as the Bunyip and the Yarra. Provision to prevent excessive scour may be necessary in some cases.

Lake level changes

Another form of flood damage that has occurred in the Western District is due to the increase in level of closed lakes flooding marginal land. This has been caused by a series of wet years since 1950 upsetting the normal balance between evaporation and inflow. In the decade since 1950 the winter rainfalls in the region of Lake Corangamite were 15 per cent above average, and the lake level rose 11 ft above its normal level of 380 ft to 391 ft to inundate about 20 square miles of adjacent land.

To reduce the inflow to this lake and hence the area flooded, a 28 mile channel, completed in 1959, diverts water to the Barwon River from the Cundare Pool. This pool, which was formed by building a low barrage across a shallow area at the head of the lake, acts as a temporary storage for the relatively fresh waters of the Woody Yaloak River which normally enter the lake.

The rate of diversion is governed by the level of the Cundare Pool and by the relative salinities of water in the pool and in the Barwon River. If the 60,000 acre ft diverted in 1960 had entered Lake Corangamite, the lake level would have been 9 inches above the maximum observed level. The level would have been almost as high again in late 1964—another very wet year—but for the diversion in the preceding five years of about 180,000 acre ft. These wet years have maintained the relatively high lake level.

Legislation has been passed to permit the Government to pay compensation on a special scale to landowners who may elect to surrender land up to 388 feet above sea level around Lake Corangamite, plus any higher land rendered inaccessible to the landowner by the initial surrender. The legislation also makes similar provision for the neighbouring Lakes Gnarpurt and Murdeduke.

Other floods

Owing to the tendency for major floods to overflow the banks and, in flat country, to pass down other channels which may not rejoin the main stream, it is often difficult to determine even the relative magnitude of major floods. The difficulty is magnified by the necessity for maintaining records of the level of the gauge in relation to a permanent datum, if a true comparison is to be made.

The year 1870 is regarded as the wettest that Victoria has experienced for over a century. As there were only thirteen rainfall stations whose records are available, the estimated average of 38 inches over the State is crude, but is 3 inches more than the next highest figure of 35 inches for 1956. River gauges in 1870 were practically restricted to the Murray, and consequently flood estimates on other streams are crude and can only be inferred from dubious evidence. Furthermore, subsequent to the 1870 floods, levees were constructed along the Goulburn and other streams and consequently heights of subsequent floods were augmented by the restrictions imposed.

In the north-east, floods occurred in the years 1906, 1916, 1917, and 1956. Although records of flood flows at gauging stations on the main streams have been published, such estimates are open to correction in the light of more recent evidence. Owing in part to under-estimation of earlier floods, the protection at the S.E.C. works at Yallourn was inadequate and

the 1934 flood overflowed the banks of the Latrobe into the open cut at Yallourn. This flood was caused by a storm which is, on the basis of rainfall over large areas, the most severe that has been recorded within Victoria. An earlier storm of December 1893 which occurred over East Gippsland was heavier, but this also covered part of New South Wales.

Lakes

Lakes may be classified into two major groups : those without natural outlets which are called "closed" lakes and those with a natural overflow-channel which may be termed "open" lakes. For closed lakes to form, annual evaporation must exceed the rainfall : this is the case over most of Victoria.

Closed lakes occur mainly in the flat western part of the State. They fluctuate in capacity much more than open lakes and frequently become dry if the aridity is too high. Lake Tyrrell in the north-west is usually dry throughout the summer and can consequently be used for salt harvesting.

The level of water in an open lake is more stable because as the lake rises the outflow increases, thus "governing" the upper lake level and thus partially regulating streams emanating from it. This regulation enhances the economic value of the water resources of open lakes but Victoria does not possess any such large lake-regulated streams. However, there are small streams of this type in the Western District, such as Darlots Creek partly regulated by Lake Condah and Fiery Creek by Lake Bolac.

Salinity is often a factor which limits the use of lake water ; even the use of freshwater lakes is not extensive in Victoria due to the cost of pumping. The average salinity of closed lakes covers a wide range depending upon the geological conditions of the catchments and the water level.

Lake Corangamite is Victoria's largest lake. It can be regarded as a closed lake although during the wet period in the late 1950s it rose to within 4 ft of overflowing. The total salt content is about 16 mill. tons, giving the lake a salinity somewhat higher than seawater under average water level conditions.

The Gippsland Lakes are a group of shallow coastal lagoons in eastern Victoria, separated from the sea by broad sandy barriers bearing dune topography, and bordered on the ocean shore by the Ninety Mile Beach. A gap through the coastal dune barrier near Red Bluff, which was opened in 1899, provides an artificial entrance to the lakes from the sea. However, sea water entering this gap has increased the salinity of some lakes, which in turn has killed some of the bordering reed swamp and led to erosion. The Gippsland Lakes have been of value for commercial fishing and private angling and also attract many tourists. Coastal lagoons of this type rarely persist for more than a few thousand years and as deposition of sediment proceeds and bordering swamps encroach, the Lakes will gradually be transformed into a coastal plain.

A number of Victorian lakes and swamps have been converted to reservoirs. Waranga Reservoir is an example of this, as are Fyans Lake, Batyo Catyo, and Lake Whitton in the Wimmera. A good example of lake utilisation is the Torrumbarry irrigation system on the riverine Murray Plains near Kerang in north-west Victoria.

Further reference, 1965 ; Natural Resources Conservation League, 1965 ; Survey and Mapping, 1969

CLIMATE

Climate of Victoria

Victoria experiences a wide range of climatic conditions ranging from the hot summer of the Mallee to the winter blizzards of the snow covered Alps, and from the relatively dry wheat belt to the wet eastern elevated areas where many of Victoria's permanent streams spring.

Circulation patterns affecting Victoria

The predominating pattern which affects Victoria is an irregular succession of depressions and anticyclones. Although these systems generally move from west to east, this is not always the case. Systems can develop or degenerate *in situ*. Their speed of movement can vary considerably. They can remain quasi-stationary for even a week or more at a time.

The mean tracks of the depressions and anticyclones show a marked annual variation across the Australian region. In winter, due to the cold continent, anticyclones are centred over inland Australia, and a series of depressions over southern waters provide a persistent zonal flow across southern parts of the continent. However, on occasions when an anticyclone develops a ridge to southern waters and a depression intensifies east of Tasmania, a "cold outbreak" occurs. This brings cold and relatively dry air from southern waters rapidly across Victoria, giving windy, showery weather with some hail and snow. On other occasions, when an anticyclone moves slowly over Victoria, a prolonged spell of fine weather with frost and fog results.

During the spring, the average track of depressions and anticyclones shifts further south until in summer the average position for anticyclones is south of the continent. At this time of the year the troposphere is warmer, and therefore can hold more moisture. For this reason, rainfall during the summer months tends to be heavier. However, lifting agents in the form of cold fronts are weaker and are not as frequent as the succession of fronts that pass in winter and spring, and so rain days are less frequent in summer.

Heat wave conditions, which usually last between two and three days, and occasionally longer, are not infrequent in summer when a large anticyclone remains quasi-stationary over the Tasman Sea. Dry air from the hot interior of the continent is brought over south-eastern Australia, and hot gusty northerly winds strengthen with the approach of a southerly change. These changes vary in intensity and while some are dry, others may produce rain and thunderstorms.

During the autumn, the mean track of the anticyclones moves northwards and extremes of temperature become less frequent as the season progresses.

One of the greatest State-wide rain producing systems is a weak surface depression whose centre moves inland across the State and which extends upwards in the atmosphere to 20,000 ft and more. When warm moist air from the Indian Ocean has been advected across the continent in the higher levels of the atmosphere the presence of such a system can give very heavy rainfall. Not infrequently the "upper low" may be present without any indication at the surface. On occasions, these inland depres-

sions are not closed systems, but are "troughs in the easterlies", and when moisture is present these can also produce general rain. These are more common in the summer months, when moist, humid air from the Tasman Sea is brought over southern Victoria.

The heaviest rainfall in East Gippsland is produced by intense depressions to the east of Bass Strait. These may have come from the west and intensified in this area, or alternatively may have developed to the east of New South Wales or further north, and moved southwards along the coast.

The distribution of the average annual rainfall in Victoria is shown in the map on page 56.

Rainfall

Rainfall exhibits a wide variation across the State and although not markedly seasonal, most parts receive a slight maximum in the winter or spring months. The relatively dry summer season is a period of evaporation, which greatly reduces the effectiveness of the rainfall. Average annual totals range between 10 inches for the driest parts of the Mallee to over 60 inches for parts of the North-Eastern Highlands. An annual total exceeding 140 inches has been reported from Falls Creek in the north-east; however, with the sparse population and inaccessibility of the highland localities, it is not practicable to obtain a representative set of observations from this area. Most areas south of the Divide receive an annual rainfall above 25 inches, with over 40 inches on the Central Highlands, Otway Ranges, and southern Gippsland. The wheat belt receives chiefly between 12 and 20 inches. With the exception of Gippsland, 60 to 65 per cent of the rain falls during the period May to October. This proportion decreases towards the east, until over Gippsland the distribution is fairly uniform with a warm season maximum in the far east. All parts of the State have on rare occasions been subjected to intense falls, and monthly totals exceeding three times the average have been recorded. Monthly totals exceeding 10 inches have been recorded rarely at most places on and south of the Divide, the chief exception being over the lowlands extending from Melbourne to the Central Western District. Occurrences are more frequent, but still unusual, over the north-east and East Gippsland and isolated parts such as the Otways. This event has rarely been recorded over the north-west of the State. The highest monthly total ever recorded in the State was a fall of 35.09 inches at Tanybryn in the Otway district in June 1962.

An estimate of the area distribution of average annual rainfall, and the actual distribution of rainfall in Victoria as shown by area for 1968 and 1969 are shown in the following table :

VICTORIA—DISTRIBUTION OF AVERAGE AND
ANNUAL RAINFALL

Rainfall (inches)	Area ('000 square miles)		
	Average	1968	1969
Under 10	..	1.5	..
10-15	19.7	8.8	2.9
15-20	13.4	16.6	26.1
20-25	15.7	17.1	13.4
25-30	15.8	15.9	10.0
30-40	14.2	14.8	17.7
Over 40	9.1	13.2	11.8

The average annual number of wet days (0.01 inches or more in 24 hours) is over 150 on the west coast and West Gippsland, and exceeds 200 over the Otway Ranges. The average number of wet days a year is reduced to 100 at a distance of approximately one hundred miles inland from the coast.

District rainfall

Mallee and Northern Country

These districts receive very little rain from western cold fronts, and rain is usually brought by depressions moving inland, "upper lows", and thunderstorms. The amount received is highly variable from year to year. The average rainfall is fairly even through the year, except near the northern edge of the ranges where more rain falls in winter than in summer.

Wimmera

Rainfall in this district is more reliable than further to the north, as cold fronts bring showers, particularly in winter. The average rainfall shows a slight maximum in the winter months. This district includes part of the Grampians, which receive much higher rainfall than the plains.

Western and Central Districts

Rain may fall in these districts in a variety of situations and they have the most reliable rainfall in the State. Most rain comes with the westerly winds and cold fronts which predominate in winter and the average rainfall shows a winter maximum which is most marked along the west coast. The heaviest rain falls on the Otways, the Dandenongs, and the Upper Yarra Valley, while the plain to the west and south-west of Melbourne has relatively low rainfall due to the "rain shadow" of the Otway Ranges.

North Central

Most of this district consists of elevated country surrounding the Dividing Range and rainfall is heaviest on the higher parts, particularly towards the east. There is a well marked winter maximum in the yearly rainfall distribution.

North-eastern

The greater part of this district consists of ranges, some mountains being 6,000 ft in elevation, and rainfall on this higher country is generally heavy. The higher peaks lie under snow cover for most of the winter. A marked rain shadow area is evident near Omeo, which receives only half as much rain as the highlands to the north-west or north-east.

West Gippsland

The western part of this district has a very similar rainfall régime to the Western and Central Districts. The heaviest rain falls on the ranges of the Divide and the south Gippsland hills. Towards the east, however, a "rain shadow" is evident in the Sale-Maffra area. This eastern section receives some of its rain from east coast depressions.

East Gippsland

Depressions off the east coast bring most rain to this district, and such rainfall can be very heavy. The average rainfall shows a summer maximum. Fronts moving in a westerly stream bring very little rain, and with north-westerly winds in winter, the coastal section has the

mildest weather in the State. Rain shadows are evident along the valleys of the Mitchell, Tambo, and Snowy Rivers while the heaviest rain falls on the surrounding highlands.

A description of the State's agricultural districts will be found on pages 270 to 274.

VICTORIA—RAINFALL IN DISTRICTS

(Inches)

Year	Districts							
	Mallee	Wimmera	Northern	North Central	North-eastern	Western	Central	Gippsland
1959	9.97	15.16	16.56	26.09	27.69	24.46	26.53	33.63
1960	18.08	24.75	22.70	38.45	40.16	36.01	34.98	37.26
1961	13.44	15.07	14.90	25.27	27.60	24.03	22.90	33.04
1962	11.29	17.69	18.85	27.77	33.78	25.99	26.07	31.41
1963	16.15	18.55	20.66	30.46	35.49	25.87	28.36	35.61
1964	16.14	25.02	20.93	34.40	40.27	38.69	35.40	37.99
1965	11.76	15.25	15.36	25.83	25.80	24.67	25.09	26.28
1966	12.48	16.47	20.28	31.97	41.26	29.35	32.08	38.97
1967	5.10	8.71	9.46	16.06	17.62	16.43	17.09	23.33
1968	13.68	19.68	20.93	34.66	39.51	33.54	28.84	34.04
1969	16.05	17.45	18.94	27.17	34.56	26.72	26.13	36.01
Average (a)	12.93	18.09	18.50	27.83	34.57	28.48	29.33	33.70

(a) Average for 53 years 1913 to 1965.

Rainfall reliability

It is not possible to give a complete description of rainfall at a place or in a district by using a single measurement. The common practice of quoting the annual average rainfall alone is quite inadequate in that it does not convey any idea of the extent of the variability likely to be encountered. Examination of rainfall figures over a period of years for any particular place indicates a wide variation from the average; in fact, it is rare for any station to record the average rainfall in any particular year. Thus for a more complete picture of annual rainfall the variability or deviation from the average should be considered in conjunction with the average.

Rainfall variability assumes major importance in some agricultural areas. Even though the average rainfall may suggest a reasonable margin of safety for the growing of certain crops, this figure may be based on a few years of heavy rainfall combined with a larger number of years having rainfall below minimum requirements. Variability of rainfall is also important for water storage design, as a large number of relatively dry years would not be completely compensated by a few exceptionally wet years when surplus water could not be stored.

Although variability would give some indication of expected departures from normal over a number of years, variability cannot be presented as simply as average rainfall.

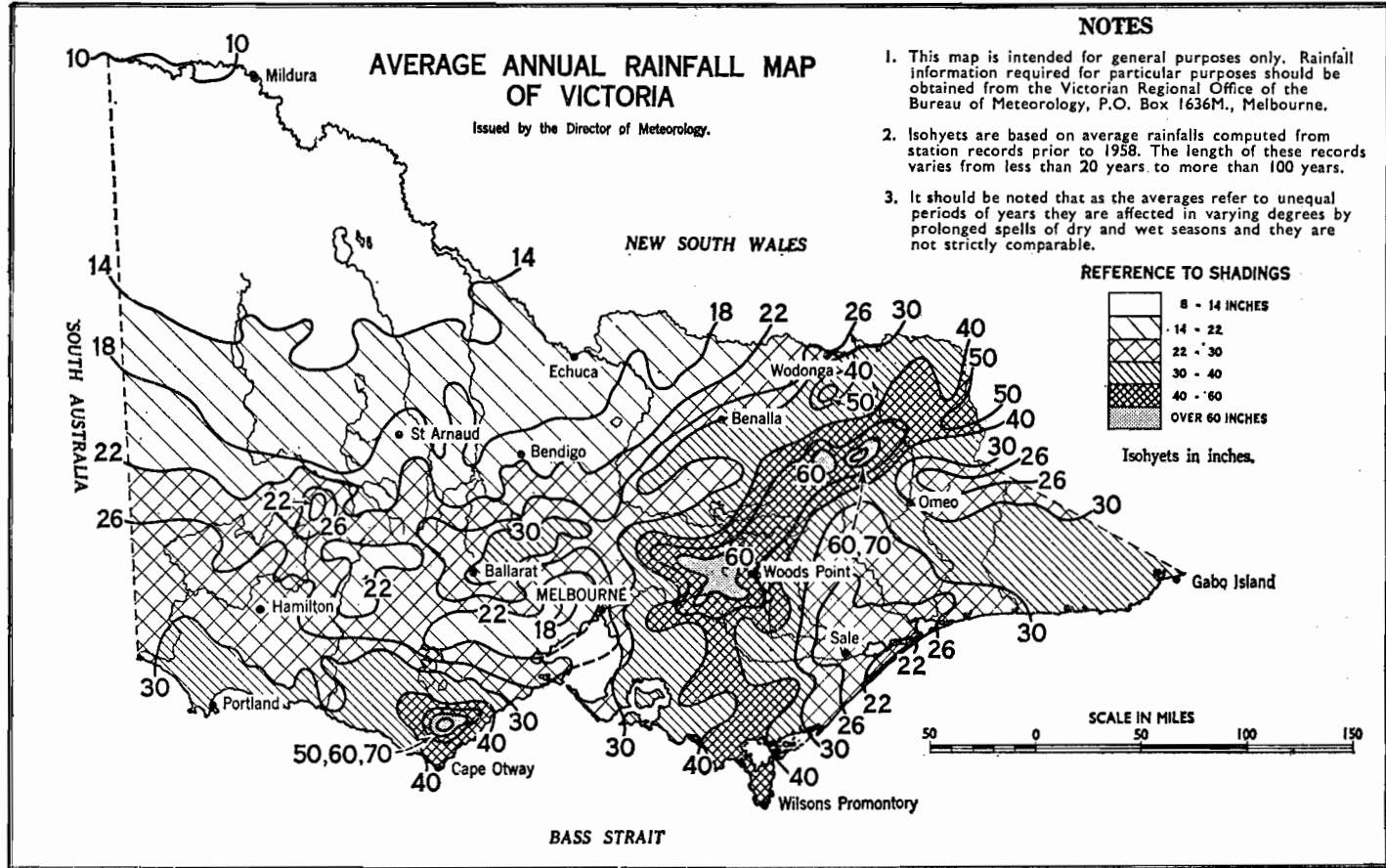


FIGURE 3.

VICTORIA—DISTRICT MONTHLY RAINFALL : AVERAGE AND 1969

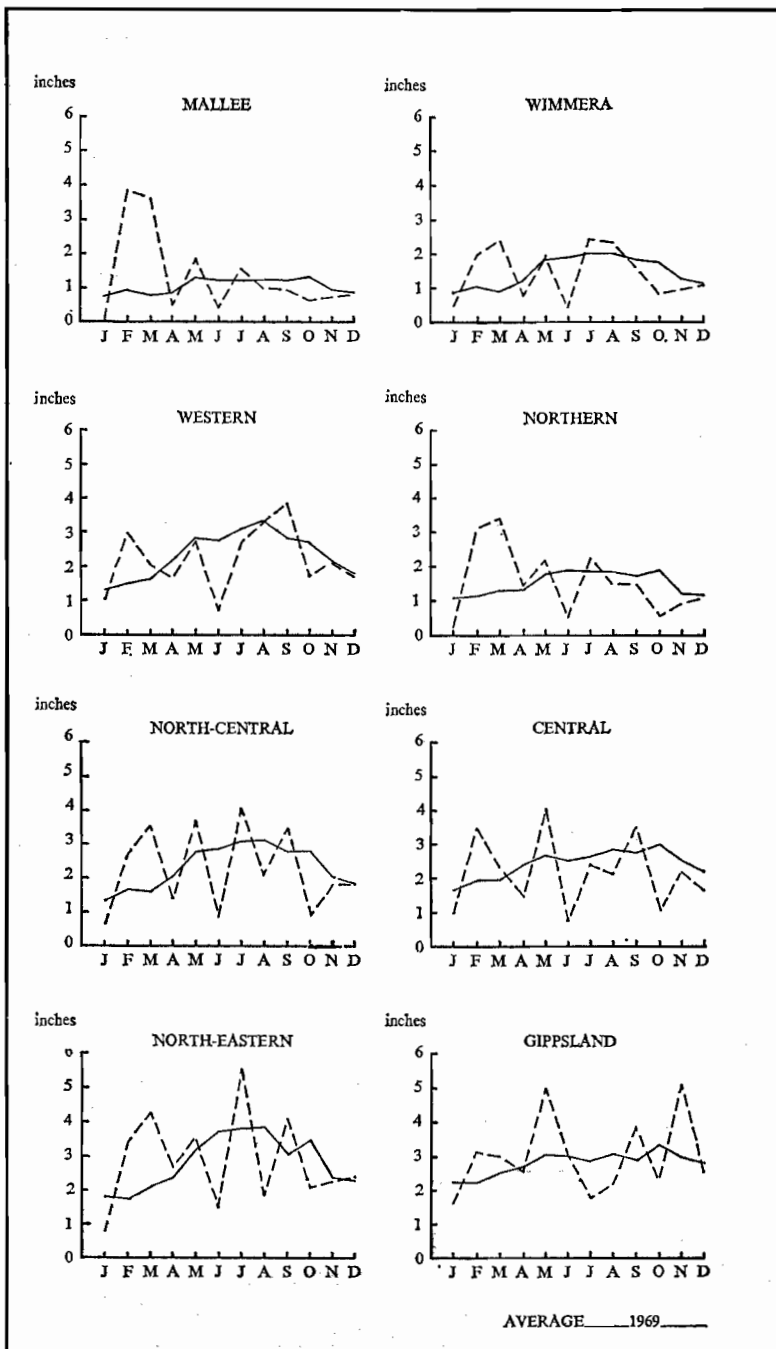


FIGURE 4.

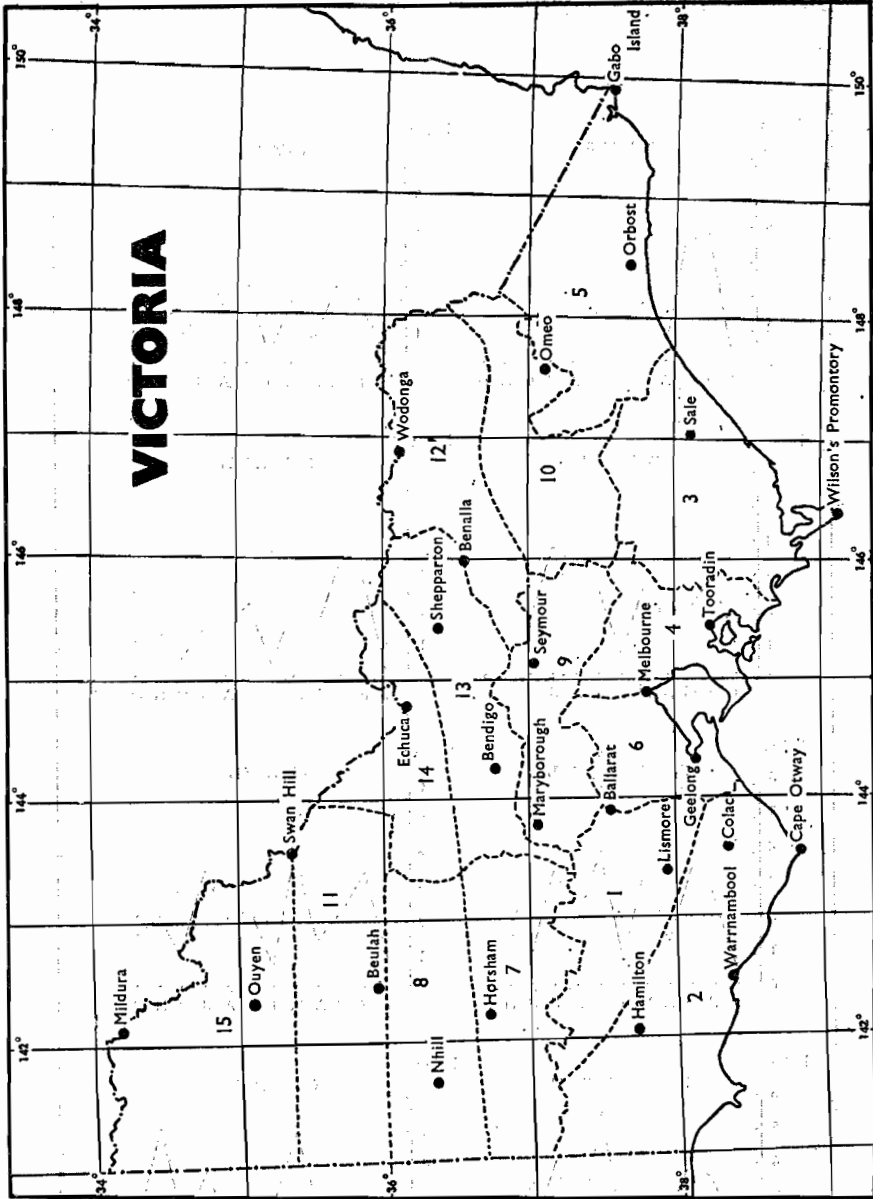


FIGURE 5. Relative rainfall variability based on district annual rainfall.
Names of districts are shown in the table on page 59.

Several expressions may be used to measure variability, each of which may have a different magnitude. The simplest measure of variability is the range, i.e., the difference between the highest and lowest annual amounts recorded in a series of years. Annual rainfall in Victoria is assumed to have a "normal" statistical distribution. These distributions can be described

fully by the average and the standard deviation. To compare one distribution with the other, the coefficient of variation

$\left(\frac{\text{standard deviation}}{\text{the average}} \times 100 \right)$ has been used. The coefficient of variation has been calculated for the fifteen climatic regions of Victoria (see Figure 5) for the 53 years 1913 to 1965 and the results are tabulated below in order of rainfall reliability :

VICTORIA—ANNUAL RAINFALL VARIATION

District	Average annual rainfall (a)	Standard deviation	Coefficient of variation
	inches	inches	per cent
1. Western Plains	24.90	3.34	13.4
2. West Coast	30.34	4.64	15.3
3. West Gippsland	36.06	5.67	15.7
4. East Central	35.27	5.74	16.3
5. East Gippsland	30.20	5.25	17.4
6. West Central	23.89	4.41	18.5
7. Wimmera South	19.53	3.78	19.4
8. Wimmera North	16.30	3.37	20.7
9. North Central	27.83	6.07	21.8
10. Upper North-east	43.77	10.05	23.0
11. Mallee South	13.66	3.44	25.2
12. Lower North-east	30.27	7.68	25.4
13. Upper North	20.01	5.19	25.9
14. Lower North	16.86	4.65	27.6
15. Mallee North	11.86	3.36	28.3

(a) Average for 53 years 1913 to 1965.

The higher the value of the coefficient of variation of the rainfall of a district, the greater the departure from the average and hence the more unreliable the rainfall.

Droughts

The variability of annual rainfall is closely associated with the incidence of drought. Droughts are rare over areas of low rainfall variability and more common in areas where this index is high.

Since records have been taken, there have been numerous dry spells in various parts of Victoria, most of them of little consequence but many widespread and long enough to be classified as droughts. The severity of major droughts or dry spells is much lower in Gippsland and the Western District than in northern Victoria.

The earliest references to drought in Victoria appear to date from 1865 when a major drought occurred in Northern Victoria, and predominantly dry conditions prevailed in the Central District. Another dry spell of lesser intensity occurred in 1868.

The most severe and widespread drought recorded since white settlement in Australia occurred in the period 1897 to 1902. Victoria was most affected in the south in 1897-98 and particularly in the north in 1902.

The next major drought commenced about June 1913 and continued until April 1915 in the north and west and August 1916 in Gippsland. The worst period was from May to October 1914.

The period from 1937 to 1945 was marked by three major droughts. The first commenced in February 1937 and continued with a break in the succeeding spring and summer until January 1939, the effects being felt much more severely in northern districts than elsewhere. Good rains in 1939 were followed by another dry period from December 1939 to December 1940. The third drought of the period extended from 1943 to 1945 in which the worst period was from June to October 1944. The drought from 1967 to 1968 is described on pages 53 and 67 of the *Victorian Year Book* 1969 and other effects noted on pages 309 to 312 of the *Victorian Year Book* 1970.

Droughts of shorter duration and lower intensity occurred in 1888, in 1907-08 in Gippsland, and in the 1920s, particularly 1925, 1927, and 1929.

Readers are referred to the publication *Droughts in Australia*, Bulletin No. 43 of the Commonwealth Bureau of Meteorology, published in 1957, for a definitive treatment of the subject of droughts in Victoria.

1967-68 Drought, 1969

Floods

Floods have occurred in all districts, but they are more frequent in the wetter parts of the State such as the north-east and Gippsland. However, although a rarer event over the North-West Lowlands, they may result from less intense rainfall and continue longer because of the poor drainage in this section of the State. In many instances the frequency of flooding is increased by valley contours and damage is often greater because of the higher density of adjacent property and crops. (See also pages 49 to 51.)

Snow

Snow in Victoria is confined usually to the Great Dividing Range and the alpine massif, which at intervals during the winter and early spring months may be covered to a considerable extent, especially over the more elevated eastern section. Falls elsewhere are usually light and infrequent. Snow has been recorded in all districts except the Mallee, Wimmera, and Northern Country. The heaviest falls in Victoria are confined to sparsely populated areas and hence general community disorganisation is kept to a minimum. Snow has been recorded in all months on the higher Alps, but the main falls occur during the winter. The average duration of the snow season in the alpine area is from three to five months.

Temperatures

February is the hottest month of the year while January is only slightly cooler. Average maximum temperatures are under 75° F. along the coast and over elevated areas forming the Central Divide and North-Eastern Highlands. Apart from these latter areas, there is a steady increase towards the north, until, in the extreme north, an average of 90° F. is reached. Values decrease steadily with height, being under 70° F. in alpine areas above 3,000 ft and as low as 60° F. in the very highest localities.

Temperatures fall rapidly during the autumn months and then more slowly with the onset of winter. Average maximum temperatures are

lowest in July; the distribution during this month again shows lowest values over elevated areas, but a significant feature is that apart from this orographically induced area, there is practically no variation across the State. Day temperatures along the coast average about 55° F. in July; much the same value is recorded over the wheat belt, and only a few degrees higher in the far north-west under conditions of few clouds and relatively high winter sunshine. The Alps experience blizzard conditions every year with minimum temperatures 10° F. to 20° F. less than at lowland stations.

Conditions of extreme summer heat may be experienced throughout the State except over the alpine area. Most inland places have recorded maxima over 110° F. with an all time extreme for the State of 123.5° F. at Mildura on 6 January 1906. Usually such days are the culmination of a period during which temperatures gradually rise, and relief comes sharply in the form of a cool change with rapid temperature drops of 30° F. at times. However, such relief does not always arrive so soon and periods of two or three days or even longer have been experienced when the maximum temperature exceeds 100° F. On rare occasions extreme heat may continue for as long as a week with little relief.

Night temperatures, as gauged by the average minimum temperature, are, like the maximum, highest in February. Values are below 50° F. over the elevated areas, but otherwise the range is chiefly 55° F. to 60° F. The highest night temperatures are recorded in the far north and along the coast. In mid-winter average July minima exceed 40° F. along the coast and at two or three places in the far north. The coldest point of the State is the north-east alpine section, where temperatures frequently fall below freezing point. Although three or four stations have been set up at different times in this area, none has a very long or satisfactory record. The lowest temperature on record so far is 9° F. at Hotham Heights (station height 5,776 ft) at an exposed location near a mountain. However, a minimum of minus 8° F. has been recorded at Charlotte Pass (station height 6,035 ft)—a high valley near Mt Kosciusko in New South Wales—and it is reasonable to expect that similar locations in Victoria would experience sub-zero temperatures (i.e., below 0° F.), although none has been recorded due to lack of observing stations.

Frosts

With the exception of the exposed coast, all parts of Victoria may experience frost, but frequencies are highest and occurrences usually more severe in elevated areas and valleys conducive to the pooling of cold air. All inland stations have recorded extreme screen temperatures less than 30° F., while at a large number of stations extremes stand at 25° F. or less. Thus frost may be expected each year over practically the whole of the State, but most of the occurrence is restricted to the winter season. Spring frosts may constitute a serious hazard to agriculture, and in some years a late frost may result in serious crop damage. Periods of frost lasting for more than three or four consecutive days are unusual.

Humidity

Generally, humidity in the lower atmosphere is much less over Victoria than in other eastern States. This is because the extreme south-east

VICTORIA—MEANS OF CLIMATIC ELEMENTS: SELECTED VICTORIAN TOWNS

Locality		Legend No. (a)	January	February	March	April	May	June	July	August	Sep.	October	Nov.	Dec.	Annual
MALLEE	Mildura	{ 1	69	87	80	57	123	96	105	109	103	124	98	84	1,135
		{ 2	89·6	88·0	83·4	73·9	65·7	61·9	59·0	62·6	68·2	74·9	81·4	85·3	74·5
		{ 3	61·7	60·9	56·9	49·9	45·2	41·4	39·9	41·8	45·0	49·9	54·0	58·3	50·4
	Ouyen	{ 1	75	90	77	81	126	123	120	129	128	143	99	98	1,289
		{ 2	90·1	87·2	83·1	73·1	65·2	60·1	58·6	62·1	68·4	74·1	80·4	86·1	74·0
		{ 3	58·8	58·3	54·4	48·1	44·5	41·1	39·7	41·1	43·7	47·8	52·1	55·8	48·8
WIMMERA	Horsham	{ 1	83	103	97	129	184	203	179	188	178	170	130	114	1,758
		{ 2	85·5	85·6	79·8	70·4	62·7	56·9	55·8	58·9	64·1	69·7	77·0	82·2	70·7
		{ 3	55·9	56·1	52·4	47·2	43·3	40·3	38·9	40·3	42·3	45·4	49·8	53·5	47·1
	Nhill	{ 1	79	91	86	117	162	192	178	184	171	159	116	111	1,646
		{ 2	85·2	84·5	79·5	70·4	63·0	57·5	56·5	59·2	64·3	70·0	76·9	82·3	70·8
		{ 3	55·0	55·3	51·6	46·7	43·0	39·9	38·1	39·4	41·7	44·9	48·8	53·0	46·5
WESTERN	Ballarat	{ 1	137	188	182	220	265	253	278	300	289	270	220	210	2,812
		{ 2	76·8	76·4	71·4	63·0	56·0	51·0	49·8	52·4	57·2	61·9	67·2	72·6	63·0
		{ 3	51·0	52·4	49·8	45·5	42·5	39·6	38·2	39·1	41·0	43·5	45·8	49·0	44·8
	Hamilton	{ 1	128	125	165	215	268	293	290	300	285	258	197	180	2,704
		{ 2	78·0	77·8	73·2	65·5	59·2	54·7	53·4	55·6	59·6	63·6	69·0	73·9	65·3
		{ 3	52·3	53·3	50·8	47·2	44·3	41·4	40·0	41·0	42·8	44·8	47·1	50·0	46·3
Warrnambool	{ 1	124	137	183	226	299	294	329	315	272	245	204	173	2,801	
	{ 2	71·3	71·4	69·5	65·0	60·5	56·7	55·6	57·0	59·8	62·8	65·8	68·8	63·7	
	{ 3	54·8	55·5	53·7	50·5	47·4	44·4	43·1	44·0	45·8	47·9	50·0	52·7	49·2	
NORTHERN	Bendigo	{ 1	125	128	141	155	211	243	219	219	208	203	146	129	2,127
		{ 2	85·1	84·4	78·8	69·7	61·1	55·2	53·8	56·9	62·2	68·6	75·6	81·3	69·4
		{ 3	57·2	57·7	54·1	48·4	43·6	40·7	38·7	39·9	42·8	46·5	50·6	54·4	47·9
	Echuca	{ 1	98	105	127	130	164	180	159	165	153	170	119	112	1,682
		{ 2	87·5	86·8	81·0	71·6	63·3	57·4	55·9	59·2	64·9	71·7	78·9	84·4	71·9
		{ 3	59·5	59·4	55·5	49·1	44·1	41·0	39·4	41·0	43·8	48·1	52·5	56·8	49·2

NORTH CENTRAL	Alexandra	1	159	143	197	204	251	289	283	294	260	279	222	192	2,773
		2	84.7	84.6	78.7	68.7	60.7	53.7	53.1	56.9	62.8	68.5	74.8	81.3	69.0
		3	52.1	53.0	48.8	43.3	39.6	37.2	36.5	37.3	40.0	42.9	46.5	50.0	43.9
NORTH CENTRAL	Kyneton	1	148	155	182	215	294	355	324	328	290	273	204	197	2,965
		2	81.1	80.3	74.6	65.0	57.1	51.2	49.9	52.9	58.9	64.6	71.4	77.0	65.3
		3	49.6	50.3	47.2	42.1	38.4	36.1	34.8	35.5	37.9	40.6	44.0	47.5	42.0
CENTRAL	Geelong	1	118	146	160	178	195	194	179	187	202	204	187	157	2,107
		2	77.0	76.7	73.8	67.5	61.8	57.3	56.4	58.7	62.5	66.7	70.5	73.9	66.9
		3	55.6	56.6	54.4	50.4	46.5	43.3	41.6	42.5	44.6	47.2	50.2	53.4	48.9
CENTRAL	Mornington	1	169	157	190	245	273	282	279	276	280	277	232	204	2,864
		2	76.6	76.4	73.5	66.3	60.8	56.0	54.6	56.5	60.6	64.3	68.4	73.2	65.6
		3	55.6	56.3	54.8	51.0	48.2	44.9	43.2	44.1	46.3	49.0	51.2	53.7	49.9
NORTH-EASTERN	Omeo	1	198	208	212	181	205	225	209	213	243	283	235	246	2,658
		2	79.3	78.5	73.6	65.6	57.5	51.3	50.2	53.9	59.6	65.3	71.4	76.3	65.2
		3	48.8	49.1	46.1	40.7	35.9	33.8	31.9	33.2	36.9	40.2	43.7	47.0	40.6
WEST GIPPSLAND	Wangaratta	1	139	147	183	185	223	291	252	251	231	248	181	168	2,499
		2	87.7	87.0	81.0	71.6	63.3	56.5	54.8	58.1	63.8	69.9	77.8	84.0	71.3
		3	58.9	58.6	53.8	46.9	41.8	39.1	38.0	39.4	42.6	46.7	51.5	56.1	47.8
WEST GIPPSLAND	Wilson's Promontory	1	195	187	277	342	431	480	446	452	379	372	287	249	4,097
		2	68.2	68.7	66.8	63.0	58.7	55.3	53.9	55.0	57.5	60.3	62.9	65.9	61.4
		3	56.6	58.1	56.9	54.4	51.3	48.3	46.6	46.7	47.7	49.4	51.7	54.4	51.8
WEST GIPPSLAND	Yallourn	1	178	232	197	253	392	335	331	401	339	345	333	277	3,613
		2	76.9	74.6	72.3	65.2	58.0	54.6	52.9	55.2	59.8	63.5	67.3	71.8	64.3
		3	54.5	55.3	53.7	49.0	45.6	43.0	40.6	41.6	44.1	47.0	49.0	52.2	48.0
EAST GIPPSLAND	Bairnsdale	1	240	198	252	201	205	219	199	188	223	273	248	265	2,711
		2	76.3	76.2	73.4	68.4	62.6	57.8	56.9	59.4	63.4	67.2	70.8	74.2	67.2
		3	53.9	54.6	52.1	47.2	42.7	39.6	38.3	39.6	42.7	46.0	49.1	52.2	46.5
EAST GIPPSLAND	Orbost	1	269	236	265	282	276	327	267	233	270	312	260	300	3,297
		2	77.1	76.5	74.4	68.7	63.3	58.9	57.9	59.9	63.8	64.6	70.1	74.4	67.5
		3	54.6	55.3	52.9	48.3	43.9	41.0	39.1	40.0	42.5	46.4	49.6	52.6	47.2

- (a) Legend : 1. Average monthly rainfall in points : 100 points = 1 inch. (For all years of record to 1968.)
 2. Average daily maximum temperature (°F.) (For all years of record to 1966.)
 3. Average daily minimum temperature (°F.) (For all years of record to 1966.)

of the continent is mostly beyond the reach of tropical and sub-tropical air masses. For several periods in the summer, however, air from the Tasman Sea has a trajectory over Bass Strait and other parts of the State, and it is then that the moisture content rises to show wet bulb temperatures above 65° F. The incidence of high humidity is important to the vine and fruit industry, tobacco growers, and wheat farmers.

Evaporation

Since 1967 the Class A Pan has been the standard evaporimeter used by the Bureau of Meteorology. This type is being progressively installed at evaporation recording stations in Victoria; there were thirty at the end of 1969.

Measurements of evaporation have been made with the Australian tank at about thirty stations, about half of which are owned by the Bureau of Meteorology. Results from these stations show that evaporation exceeds the average annual rainfall in inland areas, especially in the north and north-west, by about 40 inches. In all the highland areas and the Western District the discrepancy is much less marked, and in the Central District and the lowlands of East Gippsland annual evaporation exceeds annual rainfall by 8 to 15 inches. Evaporation is greatest in the summer months in all districts. In the three winter months, rainfall exceeds evaporation in many parts of Victoria, but not in the north and north-west.

Winds

The predominant wind stream over Victoria is of a general westerly origin, although it may arrive over the State from the north-west or south-west. There are wide variations from this general description, however, and many northerlies and southerlies occur. The latter is the prevailing direction from November to February with a moderate percentage of northerlies often associated with high temperatures. Easterly winds are least frequent over Victoria, but under special conditions can be associated with some of the worst weather experienced over the State. Wind varies from day to night, from season to season, and from place to place. Examples of the diurnal variation are the sea breeze, which brings relief on many hot days along the coastline, and the valley or katabatic breeze, which brings cold air down valleys during the night. The latter is well developed in many hilly areas of Victoria, being the result of differential cooling after sunset. It springs up during the night, often suddenly, and continues after sunrise until the land surfaces are sufficiently heated again. The sensitive equipment required to measure extreme wind gusts has been installed at only about five or six places in the State and to date the highest value recorded is just slightly over 102 mph at Point Henry near Geelong in 1962. There is no doubt, however, that similar gusts have been experienced in other parts of the State, although not in the vicinity of a recording anemometer. It is considered that any place in Victoria could feasibly experience at some time a local gust of 100 mph or more.

Thunderstorms

Thunderstorms occur far less frequently in Victoria and Tasmania than in the other two eastern States. They occur mainly in the summer months when there is adequate surface heating to provide energy for convection. On an average, more than twenty per year occur on the North-Eastern

Highlands and in parts of the Northern Country, but particularly in the north-east. Melbourne has an average of less than three per month from November to February. Isolated severe wind squalls and tornadoes sometimes occur in conjunction with thunderstorm conditions, but these destructive phenomena are comparatively rare. Hailstorms affect small areas in the summer months ; and showers of small hail are not uncommon during cold outbreaks in the winter and spring.

Computers in meteorology

Although both the solar system and the atmosphere behave in an ordered fashion, prediction of meteorological events is made very difficult by the sheer complexity of motion in the atmosphere. The meteorologist is concerned with the behaviour of a shallow layer of an uneven mixture of gases, held by gravity to a rotating sphere of irregular surface, heated by the sun and disturbed by the frequent change of phase of its water content. The equations describing the motions of the atmosphere are known, but two problems have to be overcome in their solution. One is to know the exact state of the atmosphere over the globe at the starting point. The other is to solve the complicated equations quickly enough to provide a useful prognostic pattern. This second problem is only just beginning to be overcome with the advent of the electronic computer.

The Commonwealth Bureau of Meteorology acquired its first computer in June 1968 and a second was installed in 1969. Coded versions of weather observations from hundreds of observing stations are fed directly into the computer. After checking for consistency these messages form the basis for portraying the current state of the atmosphere, i.e., the analysis charts. Further checks are applied by comparing observations from adjacent stations and also comparing observations taken at 3 hourly intervals from the one station. The analysed charts are drawn directly under computer control, each chart being drawn in 2.5 minutes.

At the same time the computer prepares prognostic charts, i.e., charts depicting the future state of the atmosphere. The prognostic charts are built up from a large number of evenly spaced grid points, and the relevant equations must be solved for each grid point separately, and for each of several levels in the atmosphere.

The operation of a World Meteorological Centre in Melbourne calls for the handling of weather information from other national centres and the exchange of this information between the three world centres in Washington, Moscow, and Melbourne. The computer is thus used to process weather information from the whole of the Southern Hemisphere.

In addition to keeping up with the current weather, the computer carries out tasks involving past weather data, and the preparation of routine climatological bulletins and summaries. Much of its time is taken up with tasks for research projects.

As further technological advances are made in the capacity and speed of computers and in data gathering techniques more sophisticated equations will be used for predicting the future state of the atmosphere.

One other complicating factor is that the equations are non-linear and have to be simulated on the computer. The success of this depends on the mathematical methods used in solving the equations.

The step from the prognostic charts to the actual forecast in terms of weather is the final difficult step. It will be some time before all the processes required here can be written in terms of mathematics. This is because the purely scientific problems associated with the small scale disturbances, such as turbulence, have not yet been solved.

Agricultural Meteorology, 1964; Maritime Meteorology, 1966; Aeronautical Meteorology, 1967; Meteorology in Fire Prevention, 1968; Meteorological Services for Commerce and Industry, 1969; Meteorological Observations, 1970

Climate of Melbourne

Temperature

The proximity of Port Phillip Bay bears a direct influence on the local climate of the metropolis. The hottest months in Melbourne are normally January and February when the average is just over 78°F. Inland, Watsonia has an average of 81°F., while along the Bay, Aspendale and Black Rock, subject to any sea breeze, have an average of 77°F. This difference does not persist throughout the year, however, and in July average maxima at most stations are within 1°F. of one another at approximately 55°F. The hottest day on record in Melbourne was 13 January 1939, when the temperature reached 114.1°F. which is the second highest temperature ever recorded in an Australian capital city. In Melbourne, the average number of days per year with maxima over 100°F. is about four, but there have been years with up to twelve and also a few years with no occurrences. The average annual number of days over 90°F. is approximately nineteen.

Nights are coldest at places a considerable distance from the sea, and away from the city where buildings may maintain the air at a slightly higher temperature. The lowest temperature ever recorded in the city was 27°F. on 21 July 1869, and likewise, the highest minimum ever recorded was 87°F. on 1 February 1902.

In Melbourne, the overnight temperature remains above 70°F. on only about two nights a year and this frequency is the same for nights on which the air temperature falls below 32°F. Minima below 30°F. have been experienced during the months of May to August, while even as late as October extremes have been down to 32°F. During the summer minima have never been below 40°F.

Wide variations in the frequencies of occurrences of low air temperatures are noted across the metropolitan area. For example, there are approximately ten annual occurrences of 36°F. or under around the bayside, but frequencies increase to over twenty in the outer suburbs and probably to over thirty a year in the more frost susceptible areas. The average frost free period is about 200 days in the outer northern and eastern suburbs, gradually increasing to over 250 days towards the city, and approaches 300 days along parts of the bayside.

Rainfall

The range of rainfall from month to month in the city is quite small, the annual average being 25.82 inches over 143 days. From January to August, monthly averages are within a few points of 2 inches; then a rise occurs to a maximum of 2.66 inches in October. Rainfall is relatively steady

during the winter months when the extreme range is from half an inch to 7 inches, but variability increases towards the warmer months. In the latter period totals range between practically zero and over 8 inches. The number of wet days, defined as days on which a point or more of rain falls, exhibits marked seasonal variation ranging between a minimum of eight in January and a maximum of fifteen each in July and August. This is in spite of approximately the same total rainfall during each month and indicates the higher intensity of the summer rains. The relatively high number of wet days in winter gives a superficial impression of a wet winter in Melbourne which is not borne out by an examination of total rainfall.

The average rainfall varies considerably over the Melbourne metropolitan area. The western suburbs are relatively dry and Deer Park has an average annual rainfall of 19·10 inches. Rainfall increases towards the east, and at Mitcham averages 35·48 inches a year. The rainfall is greater still on the Dandenong Ranges and at Sassafras the annual average is 53·93 inches.

The highest number of wet days ever recorded in any one month in the city is twenty-seven in August 1939. On the other hand, there has been only one rainless month in the history of the Melbourne records—April 1923. On occasions, each month from January to May has recorded three wet days or less. The longest wet spell ever recorded was eighteen days and the longest dry spell forty days. Over 3 inches of rain have been recorded in 24 hours on several occasions, but these have been restricted to the warmer months, September to April. Only twice has a fall above 2 inches during 24 hours been recorded in the cooler months.

Fogs

Fogs occur on an average of four or five mornings each month in May, June, and July, and average twenty days for the year. The highest number ever recorded in a month was twenty in June 1937.

Cloud and sunshine

Cloudiness varies between a minimum in the summer months and a maximum in the winter, but the range like the rainfall is not great compared with many other parts of Australia. The number of clear days or nearly clear days averages two to three each month from May to August, but increases to a maximum of six to seven in January and February. The total number for the year averages forty-seven. The high winter cloudiness and shorter days have a depressing effect on sunshine in winter and average daily totals of three to four hours during this period are the lowest of all capital cities. There is a steady rise towards the warmer months as the days become longer and cloudiness decreases. An average of over eight hours a day is received in January; however, the decreasing length of the day is again apparent in February, since the sunshine is then less in spite of a fractional decrease in cloudiness. The total possible monthly sunshine hours at Melbourne range between 465 hours in December and 289 in June under cloudless conditions. The average monthly hours, expressed as a percentage of the possible, range between 55 per cent for January and February to 34 per cent in June.

Wind

Wind exhibits a wide degree of variation, both diurnally, such as results from a sea breeze, etc., and as a result of the incidence of storms. The

speed is usually lowest during the night and early hours of the morning just prior to sunrise, but increases during the day especially when strong surface heating induces turbulence into the wind streams, and usually reaches a maximum during the afternoon. The greatest mean wind speed at Melbourne for a 24 hour period was 22.8 mph, while means exceeding 20 mph are on record for each winter month. These are mean values; the wind is never steady. Continual oscillations take place ranging from lulls, during which the speed may drop to or near zero, to strong surges which may contain an extreme gust, lasting for a period of a few seconds only, up to or even over 60 mph. At Melbourne, gusts exceeding 60 mph have been registered during every month with a few near or over 70 mph, and an extreme of 74 mph on 18 February 1951. At Essendon a wind gust over 90 mph has been measured.

There have been occurrences of thunderstorms in all months; the frequency is greatest during November to February. The greatest number of thunderstorms occurring in a year was twenty-five. This figure was recorded for both 1928 and 1932.

Hail and snow

Hailstorms have occurred in every month of the year; the most probable time of occurrence is from August to November. The highest number of hailstorms in a year was seventeen in 1923, and the greatest number in a month occurred in November of that year when seven hailstorms were reported. Snow has occasionally fallen in the city and suburbs; the heaviest snow storm on record occurred on 31 August 1849. Streets and housetops were covered with several inches of snow, reported to be 1 ft deep at places. When thawing set in, floods in Elizabeth and Swanston Streets stopped traffic, causing accidents, some of which were fatal. One report of the event indicates that the terrified state of the Aborigines suggested they had never seen snow before.

The means of the climatic elements for the seasons in Melbourne computed from all available official records are given in the following table:

MELBOURNE—MEANS OF CLIMATIC ELEMENTS

Meteorological elements	Spring	Summer	Autumn	Winter
Mean atmospheric pressure (millibar)	1015.1	1013.1	1018.3	1018.3
Mean temperature of air in shade (° F.)	57.8	66.7	59.5	50.1
Mean daily range of temperature of air in shade (° F.)	18.7	21.1	17.4	14.0
Mean relative humidity at 9 a.m. (saturation=100)	63	60	72	80
Mean rainfall (inches)	7.30	6.00	6.65	5.87
Mean number of days of rain	40	25	34	44
Mean amount of evaporation (inches)	10.28	17.34	8.13	3.79
Mean daily amount of cloudiness (Scale 0 to 8) (a)	4.9	4.2	4.8	5.2
Mean daily hours of sunshine	5.9	7.7	5.2	3.9
Mean number of days of fog	1.5	0.6	6.5	11.7

(a) Scale 0 = clear, 8 = overcast.

In the following table are shown the yearly means of the climatic elements in Melbourne for each year 1965 to 1969. The extreme values of temperature in each year are also included.

MELBOURNE—YEARLY MEANS AND EXTREMES OF CLIMATIC ELEMENTS

Meteorological elements	1965	1966	1967	1968	1969
Mean atmospheric pressure (millibars)	1017·3	1017·2	1018·1	1014·5	1017·5
Temperature of air in shade (° F.)—					
Mean	59·3	59·3	59·5	60·2	59·5
Mean daily maximum	67·8	67·5	68·1	68·2	67·4
Mean daily minimum	50·9	51·1	50·9	52·1	51·5
Absolute maximum	106·9	102·8	105·2	110·6	101·6
Absolute minimum	32·4	32·9	34·2	35·2	30·5
Mean terrestrial minimum temperature (° F.)	47·9	48·4	48·6	49·6	49·6
Number of days maximum 100° F. and over	7	5	5	8	3
Number of days minimum 36° F. and under	10	7	4	3	3
Rainfall (inches)	23·24	26·81	13·06	20·96	24·60
Number of wet days	122	157	106	141	137
Total amount of evaporation (inches) (a)	44·87	47·08	55·15	59·56	56·60
Mean relative humidity (saturation = 100)	62	63	63	58	65
Mean daily amount of cloudiness (Scale 0 to 8) (b)	4·4	4·8	4·4	4·8	4·7
Mean daily hours of sunshine (c)	6·2	6·0	6·5	6·4	5·8
Mean daily wind speed (mph)	7·2	6·9	5·9	6·2	7·2
Number of days of wind gusts 39 mph and over	62	47	46	79	41
Number of days of fog	21	6	24	3	7
Number of days of thunder	9	6	3	12	8

(a) Since 1967 evaporation has been measured by Class A Pan.

(b) Scale 0 = clear, 8 = overcast.

(c) For 1968 and 1969 sunshine has been measured at Laverton.

Victorian weather summary 1969

January rainfall was below average throughout the State and combined with above average temperatures the conditions were favourable for bushfires. Numerous outbreaks did occur, but most were on a small scale—one notable exception was on 8 January when high temperatures and very strong winds caused eighty major fires which resulted in extensive property damage and loss of life.

The weather during February and March was mild but wet. In the Mallee and northern country February was the wettest on record and the two month totals in this area were the highest on record for any time of the year. Melbourne had its wettest February for 18 years and on 3 February a severe thunderstorm caused flash flooding of suburban drains. Fogs and frosts were prevalent in coastal and mountain regions in March.

April was cool and dry in most of the State although high rainfall in East Gippsland gave rise to floods on the Thomson River on 17 April—the first flood for the season. During May the weather continued cool although rainfall was above normal except in the north-east ranges and along the western border. Melbourne experienced its wettest May for 27 years and the second wettest on record. Minor flooding occurred in the last two weeks in East Gippsland and the first snow fell on 21 May. Fogs and frost were again quite widespread and Essendon Airport was closed for nearly 2 hours on 13 May because of thick fog.

In contrast to May, June was mild and dry except in the far east where moderate flooding occurred during the first week. Melbourne had its driest June for 111 years and this was the second driest on record. July and August continued mild and dry. The mean maximum temperature for July in Melbourne was the highest on record and the rainfall total for August was the lowest for 19 years. The August mean minimum temperature for Melbourne was the highest since 1911. Fogs and frosts were prevalent during the winter months.

The spring months were cool. In September Melbourne's mean temperature was the lowest since 1905. Rainfall in this month was only slightly above normal. October and November were mostly dry, although thunderstorms occurred on several occasions in October with frontal passages. Heavy rainfall in the last week of November brought totals close to normal ; flooding occurred in Gippsland on 8, 16, and 29 November, and on 28 November further snow fell on the highlands.

December continued cool with almost average rainfall. On 11 December severe thunderstorms were reported from all parts of the State and in Melbourne severe damage in the suburbs resulted from local wind squalls in excess of 80 knots and hailstones up to 1 inch in diameter. Minor flooding occurred in the beginning of the month in Gippsland.

2

GOVERNMENT AND ADMINISTRATION

CONSTITUTION

Introduction

The present Constitution of Victoria derives from an Act passed by the Parliament at Westminster in 1855 and known in Victoria as The Constitution Act. That Act, together with *The Constitution Act Amendment Act 1958* (which consolidates the many constitutional provisions passed by the Victorian Parliament itself since 1855), provides the legal and constitutional background to a system of responsible Cabinet government based on a legislature of two Houses, both elected upon adult suffrage. The Victorian Constitution has also been affected by the establishment of the Commonwealth Constitution by the *Commonwealth of Australia Constitution Act 1900*, by which legislative and executive powers upon certain specified matters were granted to the Commonwealth Parliament and Government, some of them exclusively, and provision was made that, in the case of inconsistency of valid laws, the Commonwealth law should prevail. In the result, the Parliament of Victoria may now make laws in and for Victoria upon all matters not exclusively granted to the Commonwealth by the Commonwealth Constitution, but upon some of these matters the Victorian law may be superseded by the passing of a Commonwealth Act. Local government, that is, the control exercised by municipal councils within their respective districts, is a matter of State law and wholly within the legislative control of the Victorian Parliament.

Governor

Under the Victorian Constitution, the ultimate Executive power is vested in the Crown and is exercised by the Governor as the Queen's representative.

The Governor's authority is derived from Letters Patent (issued in 1900 and amended in 1913) under the Great Seal of the United Kingdom, from the Commissions of Appointment, and from the Governor's Instructions issued under the Royal Sign Manual and Signet.

As the Queen's representative, the Governor summons and prorogues Parliament and at the beginning of each session outlines the Government's legislative programme in his opening speech. In the name of the Queen he gives assent to Bills which have passed all stages in Parliament, with the exception of those especially reserved for the Royal Assent. These include Bills dealing with special subjects such as divorce, or the granting of land and money to himself. His functions in relation to the Legislature are contained in The Constitution Act and The Constitution Act Amendment Act.

As head of the Executive, his functions are based on the Letters Patent, his Commission, and the Royal Instructions. These empower him to make all appointments to important State offices other than those under the Public Service Act, to make official proclamations, and to exercise the prerogative of mercy by reprieving or pardoning criminal offenders within his jurisdiction. These functions are carried out on the advice of his Ministers.

There are some matters, however, which require the special exercise of the Governor's discretion. Thus he alone must finally decide after taking advice of his Premier, whether to grant a dissolution of Parliament, and whether to call upon a member of Parliament to form a new Ministry. The Governor's powers in respect of the commissioning of a member of Parliament as Premier to form a new Ministry are set out more fully below under the section describing the Cabinet.

The Governor also has power to appoint a Deputy to exercise his functions as the Queen's representative during his temporary absence from the seat of Government whether within or outside Victoria.

In the execution of the powers and authorities vested in him, the Governor shall be guided by the advice of the Executive Council, which is a body created under the Governor's Instructions and which in practice gives effect to Cabinet and ministerial decisions. If in any case he shall see sufficient cause to dissent from the opinion of the Council, he may act in the exercise of his powers and authorities in opposition to the opinion of the Council, reporting the matter to the Queen without delay, with the reasons for his so acting.

This exercise of discretionary powers emphasises the Governor's position as one above and beyond party politics and in extreme cases provides a safeguard of the Constitution. The general nature of his position is such that he is the guardian of the Constitution and bound to see that the great powers with which he is entrusted are not used otherwise than in the public interest.

On all official State occasions he performs the ceremonial functions as the representative of the Crown, and so becomes the focal point and the unifying symbol of the community.

The present Governor is Major-General Sir Rohan Delacombe, K.C.M.G., K.C.V.O., K.B.E., C.B., D.S.O., K.StJ., who assumed office on 8 May 1963.

A list of representatives of the Sovereign since the establishment of the Port Phillip District in 1839 is set out on pages 68 to 70 of the *Victorian Year Book* 1961.

Lieutenant-Governor

The Lieutenant-Governor is appointed to this office by a Commission from the Sovereign under the Sign Manual and Signet. In the Commission reference is made to the Letters Patent constituting the office of Governor, and the Lieutenant-Governor is expressly authorised and required by his Commission to administer the Government of the State of Victoria in the events dealt with in such Letters Patent, namely, the death, incapacity, or removal of the Governor, or his departure from the State, or his assuming the administration of the Government of the Commonwealth of Australia.

The Lieutenant-Governor assumes control in any of these events by issuing a proclamation. He then becomes His Excellency the Lieutenant-Governor of Victoria.

However, should the Governor be only temporarily absent for a short period from the seat of Government or from the State (except when he administers the Government of the Commonwealth of Australia) he may, by an Instrument under the Public Seal of the State, appoint the Lieutenant-Governor as his Deputy.

The present Lieutenant-Governor is Lieutenant-General the Hon. Sir Edmund Francis Herring, K.C.M.G., K.B.E., D.S.O., M.C., E.D.

Executive Council

Section 15 of *The Constitution Act Amendment Act 1958* provides that officers appointed as responsible Ministers of the Crown shall also be members of the Executive Council, and provision for their appointment appears in the Letters Patent constituting the office of Governor.

The Executive Council, consisting of Executive Councillors under summons, namely, members of the current Ministry, usually meets weekly or as required. The quorum of three comprises the Governor and at least two Ministers. These meetings are of a formal nature and are presided over by the Governor or in his absence by his Deputy.

Where it is provided in the statutes that the Governor in Council may make proclamations, orders, regulations, appointments to public offices, etc., the Governor acts formally with the advice of the Executive Council, but actually in accordance with Cabinet or ministerial decisions.

Cabinet

Formation and composition of Cabinet

Victoria has followed the system of Cabinet government evolved in Britain. The Queen's representative in Victoria, the Governor, acts by convention upon the advice of a Cabinet of Ministers, the leader of whom is called the Premier, although there is no mention of Cabinet as such in the Victorian Constitution.

The authority under which Victorian Ministers are appointed is contained in section 15 of *The Constitution Act Amendment Act 1958*, which provides that the Governor may, from time to time, appoint up to fifteen officers who are either members or capable of being elected members of either House of Parliament. No Minister shall hold office for a longer period than three months unless he is or becomes a member of the Legislative Council or the Legislative Assembly. This section further provides that not more than five of such officers shall at any one time be members of the Legislative Council and not more than eleven members of the Legislative Assembly.

In practice, a Ministry remains in office only while it has the support of a majority in the Legislative Assembly, and when a change of Government occurs and a new Ministry is to be appointed the Governor "sends for" that member of the Legislative Assembly who he thinks would be supported by a majority in that House and asks him whether he is able and willing to form a new Government with himself as leader. If that member can

assure the Governor accordingly, he may then be commissioned by the Governor to form a Ministry.

The names of those persons who are chosen to serve in his Ministry are then submitted by the Premier-elect to the Governor for appointment by him as responsible Ministers of the Crown.

Powers of Cabinet

The Cabinet is responsible politically for the administrative acts of the Government, but the constitutional powers as set out in The Constitution Act and other Acts are vested in the individual Ministers and the Governor in Council, namely, the Governor with the advice of the Executive Council. Cabinet as such has no legal powers.

Government administration includes departments under direct ministerial control as well as certain public statutory corporations which are subject to varying degrees of ministerial direction. Ministers are sworn in with appropriate portfolios which indicate their particular responsibilities.

Functions and methods of procedure

Cabinet normally meets weekly or as occasion requires, in secret and apart from the Governor, to consider an agenda made up of matters submitted by the Premier and other Ministers. The Premier's Department prepares a draft agenda for each meeting; but the Premier himself is responsible for the final agenda and the order of items on the agenda.

There is in practice no Cabinet secretariat; but *The Constitution Act Amendment Act 1958* provides for the payment of a salary to any member of the Council or of the Assembly who is recognised as the Parliamentary Secretary of the Cabinet.

The recording of decisions is primarily the responsibility of the Parliamentary Secretary of the Cabinet. There is no special machinery for circulating Cabinet minutes. Where necessary, the Secretary to the Premier's Department issues the instructions; but, where a particular Minister is concerned, the Minister is normally responsible for the execution of Cabinet decisions.

In general, Cabinet decisions are given legal effect either by the appropriate Minister or by the Governor in Council.

GOVERNMENT

Ministries

A list of Government officers administering Victoria from 1851 to 1855 and of Premiers of the Governments from 1855 to 1955 is set out on pages 72 to 74 of the *Victorian Year Book 1961*.

Ministries, 1943 to 1970

The following is a list of the Premiers of the Governments from 1943 to 1970 :

Ministry and name of Premier	Date of assumption of office	Date of retirement from office	Duration of office (days)
Albert Arthur Dunstan	18 September 1943	2 October 1945	746
Ian Macfarlan	2 October 1945	21 November 1945	51
John Cain	21 November 1945	20 November 1947	730
Thomas Tuke Hollway	20 November 1947	3 December 1948	380
Thomas Tuke Hollway	3 December 1948	27 June 1950	572
John Gladstone Black McDonald	27 June 1950	28 October 1952	855
Thomas Tuke Hollway	28 October 1952	31 October 1952	4
John Gladstone Black McDonald	31 October 1952	17 December 1952	48
John Cain	17 December 1952	31 March 1955	835
John Cain	31 March 1955	7 June 1955	69
Henry Edward Bolte	7 June 1955	Still in office	

Present Ministry

The last triennial elections for the Legislative Council and the last general election for the Legislative Assembly were held conjointly on 30 May 1970.

At 31 July 1970 the 62nd Ministry, led by the Hon. Sir Henry E. Bolte, K.C.M.G., consisted of the following members :

From the Legislative Assembly :

The Hon. Sir Henry Bolte, K.C.M.G.	Premier and Treasurer
The Hon. Sir Arthur Rylah, K.B.E., C.M.G., E.D.	Chief Secretary
The Hon. G. O. Reid	Attorney-General and Minister of Immigration
The Hon. L. H. S. Thompson	Minister of Education
The Hon. E. R. Meagher, M.B.E., E.D.	Minister of Housing, Minister of Forests, and Minister for Aboriginal Affairs
The Hon. J. C. M. Balfour	Minister for Fuel and Power and Minister of Mines
The Hon. J. F. Rossiter	Minister of Health
The Hon. V. F. Wilcox	Minister of Transport
The Hon. W. A. Borthwick	Minister of Lands, Minister of Soldier Settlement, and Minister for Conservation
The Hon. J. A. Rafferty	Minister of Labour and Industry and Assistant Minister of Education
The Hon. I. W. Smith	Minister of Water Supply

From the Legislative Council :

The Hon. G. L. Chandler, C.M.G.	Minister of Agriculture
The Hon. R. J. Hamer, E.D.	Minister for Local Government
The Hon. V. O. Dickie	Minister of State Development and Minister for Tourism
The Hon. Murray Byrne	Minister of Public Works

For later changes in the Ministry, see Supplement at end of this *Year Book*.

JUDICIARY

The following list shows members of the Victorian Judiciary as at August 1970 :

Supreme Court of Victoria*Chief Justice*

The Honourable Sir Henry Arthur Winneke, K.C.M.G., O.B.E.

Puisne Judges

The Hon. Thomas Weetman Smith	The Hon. Murray Vincent McInerney
The Hon. Sir George Augustus Pape	The Hon. George Hermann Lush
The Hon. Sir Alexander Duncan Grant Adam	The Hon. Clifford Inch Menhennitt
The Hon. Douglas Macfarlan Little	The Hon. Hibbert Richard Newton
The Hon. Urban Gregory Gowans	The Hon. Francis Robert Nelson
The Hon. Oliver James Gillard	The Hon. Kevin Victor Anderson
The Hon. John Erskine Starke	The Hon. William Charles Crockett
The Hon. Edward Hamilton Esler Barber	The Hon. Ninian Martin Stephen

Judges of the County Court

George Leo Dethridge (<i>Chairman</i>)	Eric Edgar Hewitt
John Gerald Norris	Gordon Just
Benjamin James Dunn	Roland John Leckie
Trevor George Rapke	Ivan Frederick Charles Franich
Hubert Theodore Frederico	Thomas Bernard Shillito
Norman Alfred Vickery	John Philip Somerville
Arthur Charles Adams	William Joseph Martin
Dermot William Corson	Ian Gray
John Xavier O'Driscoll	Alec James Southwell
James Herbert Forrest	Joseph Raymond O'Shea
Clive William Harris	

All information about the jurisdictions, powers, functions, etc., of the Courts is set out in the section on justice and the administration of the law in Part 8 of this *Year Book*.

STATE PARLIAMENT

The Constitution Act, creating a Legislative Council and a Legislative Assembly, was assented to by Her Majesty in Council on 21 July 1855, and came into operation in Victoria on 23 November 1855. Under this Act, Her Majesty was given power "by and with the advice and consent of the said Council and Assembly to make laws in and for Victoria in all cases whatsoever". Certain of these unlimited powers, however, are now exercised by the Legislature of the Commonwealth of Australia.

By virtue of the provisions of Act No. 7270 of 1965, membership of the Assembly was increased from sixty-six to seventy-three after the election of April 1967, while membership of the Council was increased from thirty-four to thirty-six by the addition of one member in July 1967, and a further one in June 1970. Council members are elected from two-member provinces for six year terms and Assembly members from single-member electorates for three year terms. Both Houses are elected on adult suffrage, and their powers are normally co-ordinate, although Money Bills must originate in the Legislative Assembly.

The provisions of the Constitution dealing with the Parliament have been frequently amended, as The Constitution Act gives the Victorian Parliament power to "repeal alter or vary" the Act itself, provided that the second and third readings of certain amending Bills are passed by an absolute majority of the members of each House. The most frequently amended sections of the Constitution dealing with the Parliament have been those setting out the relations between the Council and the Assembly, and

the qualifications of candidates and voters. The right, extended in the original Constitution Act, to assume the privileges, immunities, and powers of the House of Commons (as they stood at that time) was taken up in 1857 by the first Act passed by the Victorian Parliament. These include very wide powers to punish contempt. The publication of parliamentary reports and proceedings was made absolutely privileged in 1890.

The landmarks of Assembly suffrage were : 1857, manhood suffrage ; 1899, plural voting abolished ; and 1908, women's franchise. Adult suffrage for the Council was introduced in 1950. Payment of members has also been frequently adjusted. The present complex scale makes extra payments to the Leader of the third party as well as to the Leader of the Opposition ; Government, Opposition, and third party Whips and the Deputy Leader of the Opposition are also specially rewarded. Electorates are graded as "metropolitan", "urban", "inner country", and "outer country", and carry different allowances.

Parliament is summoned, prorogued, or dissolved by proclamation issued by the Governor. The duration of a Parliament depends upon the life of the Assembly (limited to three years), but may be ended by the Governor dissolving the Assembly before the expiration of that period. The Legislative Council cannot be dissolved except in special circumstances arising from disagreements between the two Houses. Its members are elected for six years, half of them retiring every three years. Members are capable of re-election. A Session is that period between the summoning of Parliament and prorogation. When Parliament is prorogued all business on hand lapses and, if it is to be continued in the next session, it must be reintroduced.

There are three political parties at present (July 1970) represented in the Parliament of Victoria : the Liberal Party, the Australian Labor Party, and the Country Party. (See pages 81 to 83 for lists of members.) Of the thirty-six members of the Legislative Council, nineteen belong to the Liberal Party, nine to the Australian Labor Party, and eight to the Country Party. Of the seventy-three members of the Legislative Assembly, forty-two belong to the Liberal Party, twenty-two to the Australian Labor Party and eight to the Country Party, and there is one Independent Labor member. The Liberal Party, having won the majority of seats at the general election of the Assembly in 1955, formed a Government which was returned to office at the general elections in 1958, 1961, 1964, 1967, and 1970. The Leader of that Party holds the office of Premier. The Australian Labor Party forms the official Opposition Party, while the Country Party sits on the corner benches on the Government side of the Assembly Chamber.

Functions of Parliament

The functions of Parliament consist of passing legislation and taking action to make available finances or funds as required for State expenditure. Legislation can be initiated by any member of Parliament in either House with the exception that all Money Bills, such as Bills for imposing a duty, rate, tax, or impost, or Bills for appropriating any part of the revenue of the State, must originate in the Assembly on the motion of a Minister. They may be rejected, but not altered, by the Council. The Council, however, may suggest amendments in such Bills, provided these

amendments will not have the effect of increasing any proposed charge or burden on the people and the Assembly may accept the suggested amendments if it so desires. In practice, almost all Bills are introduced by the Government in office as a result of policy decisions taken in Cabinet.

Parliamentary procedure

Parliament controls the Government in office by the Assembly's power, in the last resort, to pass a resolution of no-confidence in the Government or to reject a proposal which the Government considers so vital that it is made a matter of confidence. This would force the Government to resign. Procedure of each House is governed by Standing Orders, Rules, and practice, based mainly on the procedure of the House of Commons, and administered by the respective presiding officers: the President of the Legislative Council, the Speaker of the Legislative Assembly, and the respective Chairmen of Committees. The principal innovations in Assembly procedure are time limit of speeches and the elaborate ballot procedure at the opening of a new Parliament for the election of the Speaker.

The President of the Council holds office for the balance of the period for which he is elected as a member and may again be appointed if he retains his seat in the House. The election of a Speaker is the first business of a new Assembly after the members have taken the oath of allegiance. After this the Chairman of Committees is elected. The same order in debate is observed in Committee as in the House itself, the Chairman having final authority over all points of order arising when he is in the Chair.

The sittings of each House commence with the reading of the Lord's Prayer by the presiding officer. Before the business of the day, as set down on the Notice Paper, is called on, Ministers may be questioned on matters under their administrative control; notices of motion, such as motions for the introduction of Bills, or motions of a substantive or abstract nature, are given; petitions are presented; papers are laid on the Table; and messages from the Governor and from the other House are read. At this stage, members have the opportunity of moving a motion "that the House do now adjourn" which under the Standing Orders enables discussion on matters of urgent public importance.

Under "Orders of the Day" which now follows, Bills are dealt with in their various stages. All Bills, with the exception of the annual Appropriation Bill, when passed by both Houses are presented by the Clerk of the Parliaments to the Governor, who, acting on the advice of his "Council of Legislation", gives the Royal Assent. This advice is set out at the commencement of each Bill and is as follows: "Be it enacted by the Queen's Most Excellent Majesty by and with the advice and consent of the Legislative Council and the Legislative Assembly of Victoria. . . ." The Appropriation Bill is presented by the Speaker to the Governor for assent. Unless otherwise provided, all Acts come into force on the day of assent.

Private Legislation, 1962; Money Bills, 1963; Parliamentary Committees, 1964; Resolving Deadlocks between the Two Houses, 1965; Parliamentary Privilege, 1966; Presiding Officers of Parliament, 1967; Administrative Machinery of Parliament, 1968; Hansard, 1969; Houses of Parliament, 1970

Parliamentary Papers

A House of Parliament can be compared with a board of directors of a large company having a variety of interests. Just as it is necessary for the board of directors of such a company to be fully informed of the operations of the various branches of its interests, so is it necessary for the Parliament to have similar information to guide it in its deliberations in issuing directives and assessing the success or otherwise of the directives so issued. To achieve this end, the Parliament has ordered documents of various types to be presented to it, covering the reports of operations of government departments, statements of financial positions of various bodies, and statutory instruments spelling out in detail the policies broadly laid down in enabling Acts of Parliament.

When the Presiding Officer, shortly after the commencement of a day's sitting, asks "Are there any Papers?", a Chairman of a Select Committee may step forward and announce that he has a report to present. On being instructed by the Presiding Officer to "Bring it up", he will come forward from the Bar of the House and deposit the report with the Clerk. In all probability he will then move for the report to be printed.

The Presiding Officer will then ask "Are there any further papers?" and the Clerk will rise and read the list of papers which he had laid upon the Table pursuant to various statutory requirements. This list could include annual departmental reports, statutory instruments, notices of intention to resume land, and a variety of other matters.

The tabling of these papers is recorded in the Minutes of the Proceedings of the Legislative Council and the Votes and Proceedings of the Legislative Assembly (as the case may be). After certification as to the date of tabling by the Clerk of the House, they are filed as original papers and retained in the custody of the Clerk.

The term "Parliamentary Paper" does not cover such things as the daily Notice Paper, the Votes or the Minutes, "Hansard", or the Bills which are dealt with by the House; it covers only those papers which are presented to Parliament to give information.

Financial statements of harbour trusts, reports of some boards, and all statutory instruments are tabled in accordance with requirements of various statutes, but these are seldom required by the Parliament to be printed; in which case, they are preserved in their original form only. Various other papers laid upon the Tables of the Houses are required by one or other of the Houses to be printed, and these are classified according to their nature and given alphabetical or numerical identification.

The first group of the printed papers is classified A, and these are printed by order of the Legislative Assembly, the only House of Parliament to which they are presented. The documents so classified are the Treasurer's Annual Statement of Receipts and Expenditure of the Consolidated Revenue, together with the Auditor-General's Report upon the accounts of those instrumentalities which he is required to examine (there is sometimes a later separate supplement to the Auditor-General's Report). This paper is presented to the Assembly by the Speaker of the House, before he calls for the presentation of papers; a practice indicative of the financial supremacy of the lower House of Parliament and further exemplified by the fact that almost all B papers are presented only to the Legislative Assembly.

B papers comprise the annual Estimates of Revenue and Expenditure (together with later supplements) and are transmitted for the consideration of the lower House of Parliament by Message of His Excellency the Governor. These papers, like the A papers above, are ordered by the Assembly to be printed. The B paper classification is applied to Messages of His Excellency the Governor which have been ordered to be printed. None of the foregoing financial papers are presented to the Legislative Council. There have been several papers classified under this heading which were Messages from the Governor but not related to matters of finance. They mainly comprise the instructions given to His Excellency the Governor by the Sovereign and, in a later instance, reasons why His Excellency had seen fit to grant a dissolution of the Twenty-first Parliament. Messages of this type are extremely rare and, when received, are presented to both Houses and ordered to be printed.

It is not uncommon for a Minister, or even more frequently the Governor in Council, to appoint a Board of Inquiry to examine a specific matter which is causing concern and upon which the need is seen for further information. Such a report, when available, is provided to the person or body which has appointed the Board of Inquiry. As the contents could frequently be of vital interest to the Parliament and the people of the State, the responsible Minister will usually move in the House of Parliament of which he is member for the report to be made the subject of an order of the House and, the House having agreed, the report is then laid on the Table pursuant to that order. Such reports, as well as returns made to orders for information requested by private members are, when the reply is of sufficient interest, ordered to be printed by the House and are listed as C papers.

There are a number of Standing and Select Committees appointed sessionally by the Parliament and these Committees periodically make reports to the two Houses (with the exception of the Public Accounts Committee, the reports of which, being related to financial matters, are presented to the lower House only). Most of the Parliamentary Committees today have statutory authority as well as powers granted by Standing Orders ; but there exists, in addition, the inherent right of either House to create a Select Committee of its own members to conduct any specific inquiry on behalf of that House. The reports of Committees, when brought up to the Tables of the Houses by Committee Chairmen, are ordered to be printed and are classified as D papers.

Whole chapters of the Standing Orders of the two Houses are devoted to the rules and instructions for the presentation of petitions and, although these have become fewer of recent years, the practice is by no means extinct. Usually a petition is merely tabled ; on some occasions the House has received it and ordered the Clerk to read it ; on even rarer occasions a debate may ensue ; but it is not since 1912 that a Victorian House of Parliament has ordered a petition to be printed. Petitions, when they become printed papers, are classified E.

In addition to the foregoing alphabetical classifications of printed papers, there is a vast quantity of annual reports of various government departments which are presented pursuant to statute and these, like the

reports of Royal Commissions which are presented to Parliament by the Command of His Excellency the Governor, receive a purely numerical classification.

All papers presented to Parliament, whether printed and appearing in the various classifications above or not, are Parliamentary Papers and are retained for all time. The act of tabling a paper in Parliament is to make the contents public. It is then open to all Members of Parliament, the press, and the public to take note of such matters. Papers which are not available in a printed form from the Government Printer can be inspected by interested parties on application to the Clerks of the Houses.

Parliamentary Papers presented during session 1969-70 and ordered to be printed are listed on pages 89 to 91.

Members of the State Parliament

Political parties

In the following pages political party affiliations of Members of State Parliament are indicated thus :

(ALP) Australian Labor Party.

(CP) Country Party.

(IND LAB) Independent Labor.

(LP) Liberal Party.

Legislative Council

The following list shows members of the Legislative Council elected at the last triennial election held on 30 May 1970. Their term of office commenced on 27 June 1970.

Member	Province	Number of electors on rolls	Number of electors who voted	Total percentage of electors who voted
Byrne, The Hon. Murray (LP)	Ballaarat	60,232	57,781	95.93
Clarke, The Hon. Michael Alastair (CP)	Northern	59,797	57,607	96.34
Dunn, The Hon. Bernard Phillip (CP)	North-Western	47,475	45,585	96.02
Eddy, The Hon. Randolph John (ALP)	Doutta Galla	126,260	118,183	93.60
Garrett, The Hon. Raymond William, A.F.C., A.E.A. (LP)	Templestowe	148,433	140,895	94.92
Granter, The Hon. Frederick James (LP)	Bendigo	63,239	60,246	95.27
Gross, The Hon. Kenneth Samuel (LP)	Western	60,281	58,329	96.76
Harner, The Hon. Rupert James, E.D. (LP)	East Yarra	121,326	112,982	93.12
Hamilton, The Hon. Harold Murray, E.D. (LP)	Higinbotham	122,449	115,714	94.50
Hauser, The Hon. Vernon Thomas (LP)	Boronia	152,109	144,618	95.08
Jenkins, The Hon. Owen Glyndwr (LP)	South-Western	95,644	91,408	95.57
Kent, The Hon. Daniel Eric (ALP)	Gippsland	85,763	81,221	94.70
Nicol, The Hon. Graham John (LP)	Monash	124,218	114,453	92.14
O'Connell, The Hon. Geoffrey John (ALP)	Melbourne	112,014	102,045	91.10
Swinburne, The Hon. Ivan Archie (CP)	North-Eastern	55,008	52,293	95.06
Thomas, The Hon. Herbert Arthur (ALP) (a)	Melbourne West	133,584	107,891	80.77
Walton, The Hon. John Malcolm (ALP)	Melbourne North	112,869	107,092	94.88
Ward, The Hon. Hector Roy (LP)	South-Eastern	150,158	142,464	94.88

(a) Elected on 24 October 1970 at a by-election following the decision on 4 September by the Court of Disputed Returns that Mr R. W. Walsh's election on 30 May 1970 was void.

Members of the Legislative Council who did not come up for election at the 1970 triennial election are shown in the following table; they were elected on 29 April 1967 and their term of office commenced on 15 July 1967.

Member	Province	Number of electors on rolls	Number of electors who voted	Total percentage of electors who voted
Bradbury, The Hon. Archibald Keith (CP)	North-Eastern	53,354	50,822	95.25
Campbell, The Hon. William Montgomery (LP)	East Yarra	120,066	112,116	93.38
Chandler, The Hon. Gilbert Lawrence, C.M.G. (LP)	Boronia	126,475	119,885	94.79
Dickie, The Hon. Vance Oakley (LP)	Ballaarat	59,203	56,984	96.25
Elliot, The Hon. Douglas George (ALP)	Melbourne	118,436	106,948	90.30
Fry, The Hon. William Gordon (LP)	Higinbotham	118,025	110,970	94.02
Galbally, The Hon. John William, Q.C. (ALP)	Melbourne North	113,880	108,465	95.24
Gleeson, The Hon. Stanley Edmond (LP)	South-Western	89,727	85,131	94.88
Grimwade, The Hon. Frederick Sheppard (LP)	Bendigo	62,300	59,061	94.80
Houghton, The Hon. William Vasey (LP)	Templestowe	127,304	120,162	94.39
Hunt, The Hon. Alan John (LP)	South-Eastern	127,426	120,893	94.87
Knight, The Hon. Alexander Wilson (ALP)	Melbourne West	118,501	111,267	93.90
McDonald, The Hon. Stuart Richard (CP)	Northern	58,242	56,463	96.95
Mack, The Hon. Sir Ronald William (LP) (a)	Western	58,880	56,955	96.73
Mansell, The Hon. Arthur Robert (CP)	North-Western	47,390	45,431	95.87
May, The Hon. Robert William (CP)	Gippsland	82,057	77,746	94.75
Thompson, The Hon. Lindsay Hamilton Simpson (LP) (b)	Monash	121,916	113,298	92.93
Tripovich, The Hon. John Matthew (ALP)	Doutta Galla	120,799	112,775	93.36

(a) The Hon. Sir Ronald William Mack died on 12 February 1968. At a by-election held on 6 April 1968, the Hon. Clive Alexander Mitchell (CP) was elected in his stead.

(b) The Hon. Lindsay Hamilton Simpson Thompson resigned to contest the election for the Legislative Assembly Electoral District of Malvern held on 30 May 1970. At a by-election held on 20 June 1970 the Hon. Charles Allen Moir Hider (LP) was elected in his stead.

President: The Hon. Raymond William Garrett, A.F.C., A.E.A.

Chairman of Committees: The Hon. Graham John Nicol.

Clerk of the Parliaments and Clerk of the Legislative Council: Alfred Reginald Bruce McDonnell, Esquire.

Legislative Assembly

The following list shows members of the Legislative Assembly elected at the general election held on 30 May 1970. It also includes details of electoral districts and voting at this last general election.

Member	District	Number of electors on rolls	Number of electors who voted	Total percentage of electors who voted
Amos, Derek Godfrey Ian (ALP)	Morwell	24,058	22,872	95.07
Balfour, The Hon. James Charles Murray (LP)	Narracan	22,567	21,518	95.35
Billing, Norman Alexander William, K.S.U. (LP)	Heatherton	32,629	31,056	95.18
Birrell, Hayden Wilson (LP)	Geelong	23,051	21,916	95.08
Bolte, The Hon. Sir Henry Edward, K.C.M.G. (LP)	Hampden	17,990	17,289	96.10
Bornstein, David Leon Frank (ALP)	Brunswick East	23,750	21,947	92.41
Borthwick, The Hon. William Archibald (LP)	Monbulk	29,096	27,389	94.13
Broad, Henry George (CP)	Swan Hill	18,726	17,936	95.78
Burgin, Cecil William (LP)	Polwarth	18,320	17,745	96.86
Christie, The Hon. Vernon (LP)	Ivanhoe	26,654	25,031	93.91
Clarey, Reynold Arthur (ALP)	Melbourne	24,656	22,393	90.82
Crellin, Maxwell Leslie (LP)	Sandringham	25,657	24,138	94.08
Curnow, Esmond Julian (ALP)	Kara Kara	16,875	16,363	96.97
Dixon, Brian James (LP)	St Kilda	25,768	23,604	91.60
Doube, The Hon. Valentine Joseph (ALP)	Albert Park	22,740	21,003	92.36
Doyle, Julian John (LP)	Gisborne	24,174	22,862	94.57
Dunstan, The Hon. Roberts Christian, D.S.O. (LP)	Dromana	23,027	21,612	93.86
Edmunds, Cyril Thomas (ALP)	Moonee Ponds	25,266	24,044	95.16
Evans, Alexander Thomas (LP)	Ballaarat North	24,137	23,206	96.14
Evans, Bruce James (CP)	Gippsland East	19,368	18,289	94.43
Fell, Robert William (ALP)	Greensborough	36,330	34,654	95.39
Floyd, William Laurence (ALP)	Williamstown	28,171	26,702	94.79
Fordham, Robert Clive (ALP)	Footscray	24,472	23,236	94.95
Ginifer, John Joseph (ALP)	Deer Park	37,093	35,489	95.68
Goble, Mrs Dorothy Ada (LP)	Mitcham	29,303	27,777	94.79
Hayes, Geoffrey Phillip (LP)	Scoresby	40,486	38,594	95.33

Member	District	Number of electors on rolls	Number of electors who voted	Total percentage of electors who voted
Holding, Allan Clyde (ALP)	Richmond	21,339	19,602	91.86
Jona, Walter (LP)	Hawthorn	24,974	23,081	92.42
Kirkwood, Carl (ALP)	Preston	24,293	23,000	94.68
Lewis, Edward Wallace (ALP)	Dundas	18,433	17,828	96.72
Lewis, William John (ALP)	Portland	18,641	18,033	96.74
Lind, Alan Alfred Campbell (ALP)	Dandenong	32,802	31,418	95.78
Lovegrove, Denis (ALP)	Sunshine	25,557	24,227	94.80
Loxton, Samuel John Everett (LP)	Prahran	25,827	22,899	88.66
McCabe, James Edmund (LP)	Lowan	18,553	18,020	97.13
MacDonald, James David (LP)	Glen Iris	24,992	23,339	93.39
McDonald, Russell Stanley Leslie (CP)	Rodney	19,245	18,562	96.45
McLaren, Ian Francis, O.B.E. (LP)	Bennettswood	27,469	26,164	95.25
Maclellan, Robert Roy Cameron (LP)	Gippsland West	18,666	17,812	95.42
Manson, The Hon. James Williamson (LP)	Ringwood	31,471	29,948	95.16
Meagher, The Hon. Edward Raymond, M.B.E., E.D. (LP)	Frankston	36,809	34,601	94.00
Mitchell, The Hon. Thomas Walter (CP)	Benambra	19,016	18,077	95.06
Moss, The Hon. George Colin (CP)	Murray Valley	19,498	18,419	94.47
Mutton, John Patrick (IND LAB)	Coburg	23,289	22,138	95.06
Rafferty, The Hon. Joseph Anstice (LP)	Glenhuntly	27,796	25,903	93.19
Reese, William Frederick Llewellyn (LP)	Moorabbin	27,405	26,118	95.30
Reid, The Hon. George Oswald (LP)	Box Hill	36,217	34,516	95.30
Ross-Edwards, Peter (CP)	Shepparton	20,041	19,274	96.17
Rossiter, The Hon. John Frederick (LP)	Brighton	24,721	22,991	93.00
Rylah, The Hon. Sir Arthur Gordon, K.B.E., C.M.G., E.D. (LP)	Kew	25,807	23,998	92.99
Scanlan, Alan Henry (LP)	Oakleigh	25,162	23,889	94.94
Shilton, Leslie Victor (ALP)	Midlands	23,127	21,767	94.12
Simmonds, James Lionel (ALP)	Reservoir	26,854	25,650	95.52
Smith, Aurel (LP)	Bellarine	24,485	23,408	95.60
Smith, The Hon. Ian Winton (LP)	Warrnambool	19,091	18,462	96.71
Stephen, William Francis (LP)	Ballaarat South	23,073	22,085	95.72
Stokes, Russell Newton (LP)	Evelyn	21,211	20,062	94.58
Suggest, Robert Harris (LP)	Bentleigh	26,642	25,449	95.52
Tanner, Sir Edgar Stephen, C.B.E., E.D. (LP)	Caulfield	26,691	24,433	91.54
Taylor, Alexander William, E.D. (LP)	Balwyn	27,124	25,326	93.37
Taylor, James Allister (LP)	Gippsland South	19,770	18,679	94.48
Templeton, Thomas William, J.P. (LP)	Mentone	26,925	25,302	93.97
Thompson, The Hon. Lindsay Hamilton Simpson (LP)	Malvern	25,836	23,398	90.56
Trethewey, Robert Hugh (LP)	Bendigo	23,715	22,746	95.91
Trewin, Thomas Campion (CP)	Benalla	18,504	17,737	95.85
Trezie, Neil Benjamin (ALP)	Geelong North	25,206	23,981	95.14
Turnbull, Campbell (ALP)	Brunswick West	23,067	21,901	94.95
Wheeler, Kenneth Henry (LP)	Essendon	26,398	25,180	95.39
Whiting, Milton Stanley (CP)	Mildura	18,690	17,801	95.24
Wilcox, The Hon. Vernon Francis (LP)	Camberwell	24,742	22,948	92.75
Wilkes, Frank Noel (ALP)	Northcote	24,180	22,686	93.82
Wilton, John Thomas (ALP)	Broadmeadows	34,766	33,228	95.58
Wiltshire, Raymond John (LP)	Syndal	35,111	33,611	95.73

Speaker : The Hon. Vernon Christie.

Chairman of Committees : Sir Edgar Stephen Tanner, C.B.E., E.D.

Clerk of the Legislative Assembly : John Harold Campbell, Esquire.

Number of Parliaments and their duration

Between 1856 and 1967 there have been forty-four Parliaments. The Forty-fourth Parliament was opened on 16 May 1967. A table showing the duration in days of each Parliament (1856 to 1927), the number of days in session, and the percentage of the latter to the former was published in the *Victorian Year Book* 1928-29, page 21. Similar information for the Twenty-ninth to the Thirty-ninth Parliaments (1927 to 1955) was published in the *Victorian Year Book* 1952-53 and 1953-54, page 31. As from the commencement of the Thirty-eighth Parliament (20 June 1950), information about the duration of each Parliament, the number of sittings of each House, and the percentage of the latter to the former is shown in the following table :

VICTORIA—DURATION OF PARLIAMENTS AND NUMBER OF SITTINGS OF EACH HOUSE

Number of Parliament	Period	Duration of Parliament (a) (days)	Sittings			
			Legislative Assembly		Legislative Council	
			Number of sittings	Percentage of sittings to duration	Number of sittings	Percentage of sittings to duration
Thirty-eighth	1950-52	865	131	15.1	81	9.4
Thirty-ninth	1952-55	852	92	10.8	61	7.2
Fortieth	1955-58	1,038	139	13.4	99	9.5
Forty-first	1958-61	1,059	150	14.2	103	9.7
Forty-second	1961-64	1,015	149	14.7	112	11.0
Forty-third	1964-67	980	146	14.9	119	12.1
Forty-fourth	1967-70	1,002	152	15.2	124	12.4

(a) Calculated from the date of opening to the date of dissolution of the Parliament.

Cost of Parliamentary Government

The following table reviews the expenditure arising from the operation of Parliamentary Government in Victoria. It comprises the State Governor, the Ministry, the Legislative Council, the Legislative Assembly, and electoral activities. It does not attempt to cover the expenditure on State Administration generally.

The table shows this expenditure for the State for the years ended 30 June 1966 to 1970. In order to avoid incorrect conclusions about the cost of the Governor's establishment, it is pointed out that a large part of the expenditure (with the exception of the item "Salary") under the general heading "Governor" represents official services.

Parliamentary salaries and allowances were amended as from 1 December 1968. As from that date, the President of the Legislative Council and the Chairman of Committees, the Speaker of the Legislative Assembly and the Chairman of Committees, and Ministers of the Crown receive salaries and allowances only in connection with their offices.

VICTORIA—COST OF PARLIAMENTARY GOVERNMENT (\$'000)

Period	Governor		Ministry	Parliament		Electoral	Royal Commissions, Select Committees, etc.	Total
	Salary	Other expenses (a)		Salaries of members	Other expenses (b)			
1965-66	18	190	114	791	715	112	45	1,985
1966-67	18	225	131	796	761	509	49	2,489
1967-68	20	294	90	870	828	154	41	2,297
1968-69	20	231	116	1,039	1,052	164	66	2,688
1969-70	20	218	168	1,138	1,184	506	114	3,349

(a) Includes salaries of staff and maintenance of house and gardens.

(b) Includes cost of members' railway passes, parliamentary staff, and maintenance.

State Acts passed during 1969

The following Acts were passed by State Parliament during the year ended 31 December 1969 :

No.		No.	
7786	Summary Offences (Sunday Newspapers) Act amends the <i>Summary Offences Act 1966</i> to allow publication of newspapers on Sundays		<i>Act 1966</i> with respect to proceedings for and the imposition and recovery of penalties
7787	Town and Country Planning (Transitional Appeals) Act amends the <i>Town and Country Planning Act 1961</i> with respect to the hearing of certain appeals by the Minister and to validate the determination thereof by the Minister	7802	Lotteries Gaming and Betting (Calcutta Sweepstakes) Act amends the <i>Lotteries Gaming and Betting Act 1966</i> with respect to the conduct of Calcutta sweepstakes and provides for fees for the issue of permits for the use of pinball or similar machines
7788	Discharged Servicemen's Preference (Amendment) Act amends the <i>Discharged Servicemen's Preference Act 1943</i>	7803	Belmont Common Recreation Ground Lands Act authorises the granting of development leases of certain lands in the Parishes of Corio and Conewarre temporarily reserved as a site for public recreation
7789	Water (Amendment) Act amends the <i>Water Act 1958</i>	7804	Listening Devices Act regulates the use of listening devices
7790	Agricultural Education Cadetships Act provides for the granting of cadetships to certain students for the study of courses approved by the Minister of Agriculture	7805	Coal Mines (Pensions) Act amends the <i>Coal Mines Act 1958</i>
7791	Trustee (Amendment) Act amends the <i>Trustee Act 1958</i>	7806	Marine (Amendment) Act amends the <i>Marine Act 1958</i>
7792	Appeal Costs Fund (Amendment) Act amends the <i>Appeal Costs Fund Act 1964</i>	7807	Theatres (Amendment) Act amends the <i>Theatres Act 1958</i>
7793	Footscray (Lower Yarra Crossing Access Road) Land Act authorises the City of Footscray to sell certain parts of land to the Country Roads Board for the construction of an access road for the Lower Yarra Crossing	7808	Victorian Inland Meat Authority (Amendment) Act amends the <i>Victorian Inland Meat Authority Act 1958</i>
7794	River Improvement (Amendment) Act amends the <i>River Improvement Act 1958</i>	7809	The Constitution Act Amendment (Electoral) Act amends <i>The Constitution Act Amendment Act 1958</i> and the <i>Commonwealth Arrangements Act 1958</i>
7795	Geelong Waterworks and Sewerage (Amendment) Act amends the <i>Geelong Waterworks and Sewerage Act 1958</i>	7810	Consolidated Revenue Act grants supply to the Government for the year 1969-70
7796	West Moorabool Water Board (Amendment) Act amends the <i>West Moorabool Water Board Act 1968</i>	7811	Gas and Fuel Corporation (Borrowing) Act amends the <i>Gas and Fuel Corporation Act 1958</i>
7797	Sewerage Districts (Amendment) Act amends the <i>Sewerage Districts Act 1958</i>	7812	Weights and Measures (Amendment) Act amends the <i>Weights and Measures Act 1958</i> and the <i>Weights and Measures (Pre-packed Articles) Act 1967</i> with respect to pre-packed articles
7798	Drought Relief (Amendment) Act amends the <i>Drought Relief Act 1968</i>	7813	Health (Municipal Charges) Act amends the <i>Health Act 1958</i> to enable municipal councils to make charges for certain services in relation to certain lands
7799	Legal Profession Practice (Amendment) Act amends the <i>Legal Profession Practice Act 1958</i>	7814	Transfer of Land (Subdivision of Allotments) Act amends the <i>Transfer of Land Act 1958</i> and the <i>Local Government Act 1958</i> with respect to the subdivision of allotments of land
7800	Parliamentary Salaries and Superannuation (Administration) Act amends the <i>Parliamentary Salaries and Superannuation Act 1968</i>	7815	St. Vincent's Private Hospital (Guarantees) Act authorises the Treasurer
7801	Protection of Animals (Penalties) Act amends the <i>Protection of Animals</i>		

No.		No.	
7816	of Victoria to guarantee the repayment of certain moneys proposed to be borrowed by the Trustees of the Sisters of Charity of Australia Strata Titles (Amendment) Act amends the <i>Strata Titles Act 1967</i> , the <i>Home Finance Act 1962</i> , and the <i>Town and Country Planning Act 1961</i>	7829	Commercial Goods Vehicles (Tow Trucks) Act amends the <i>Commercial Goods Vehicles Act 1958</i> with respect to the conditions of tow truck licences and amends the <i>Transport Regulation Act 1958</i>
7817	Sunday Entertainment (Evidence) Act amends the <i>Sunday Entertainment Act 1967</i>	7830	Stamps (Amendment) Act amends the <i>Stamps Act 1958</i>
7818	Dried Fruits (Packing Houses) Act amends the <i>Dried Fruits Act 1958</i> with respect to the registration of packing houses and the control and regulation of insecticides and like substances	7831	Gas and Fuel Corporation (Sale Undertaking) Act relates to the purchase by the Gas and Fuel Corporation of Victoria of the Sale gas undertaking of the Gas Supply Company Limited
7819	Town and Country Planning (Further Amendment) Act postpones the coming into operation of certain provisions of the <i>Town and Country Planning (Amendment) Act 1968</i> affecting the <i>Melbourne and Metropolitan Board of Works Act 1958</i>	7832	Melbourne (St. Kilda-road Underpass) Lands Act relates to certain lands in the Cities of Melbourne and South Melbourne
7820	Milk Board (Amendment) Act amends the <i>Milk Board Act 1958</i>	7833	Trustee (Authorized Investments) Act amends the <i>Trustee Act 1958</i>
7821	Medical (Pharmaceutical Chemists) Act amends the <i>Medical Act 1958</i>	7834	Consolidated Revenue Act grants supply to the Government for the year 1968-69
7822	Melbourne Wholesale Fruit and Vegetable Market (Amendment) Act amends the <i>Melbourne Wholesale Fruit and Vegetable Market Act 1968</i>	7835	Local Government Act amends the <i>Local Government Act 1958</i> and the <i>Forests Act 1958</i>
7823	Education (Director-General) Act amends the <i>Education Act 1958</i> and the <i>Public Service Act 1958</i> to provide for the appointment of a Director-General and Assistant Directors-General of Education	7836	Melbourne Wholesale Fruit and Vegetable Market (Advisory Committee) Act amends the <i>Melbourne Wholesale Fruit and Vegetable Market Act 1968</i>
7824	Wombat Bonuses Act amends the <i>Vermin and Noxious Weeds Act 1958</i> with respect to payment of bonuses for destruction of wombats	7837	Teaching Service (Amendment) Act amends the <i>Teaching Service Act 1958</i>
7825	Revocation and Excision of Crown Reservations Act revokes the permanent reservations and Crown grants of certain lands	7838	State Electricity Commission (Borrowing and Investing Powers) Act amends the <i>State Electricity Commission Act 1958</i> with respect to the borrowing and investing powers of the State Electricity Commission
7826	Mildura Irrigation and Water Trusts Act amends the <i>Mildura Irrigation and Water Trusts Act 1958</i> to provide for the re-subdivision of certain lands in the First Mildura Irrigation District	7839	Motor Car (Amendment) Act amends the <i>Motor Car Act 1958</i>
7827	South Melbourne (Roman Catholic Orphanage) Lands Act revokes a Crown grant and permanent reservation of certain lands in the City of South Melbourne to make further provision for such lands and other neighbouring lands	7840	Mines (Abolition of Courts) Act abolishes Courts of Mines and Warden's Courts and transfers the jurisdiction thereof to the County Court and Courts of Petty Sessions respectively
7828	Racing (Amendment) Act amends the <i>Racing Act 1958</i> and the <i>Lotteries Gaming and Betting Act 1966</i>	7841	Manango (O'Shannassy River Watershed) Lands Act relates to the O'Shannassy River watershed lands in the Parish of Manango
		7842	State Savings Bank (Amendment) Act amends the <i>State Savings Bank Act 1958</i>
		7843	Apprenticeship (Commission) Act amends the <i>Apprenticeship Act 1958</i> with respect to the constitution of the Commission
		7844	Swan Hill Race-course and Golf-course Lands Act makes provision concerning certain Crown lands at Swan Hill used as a race-course and golf-course

No.		No.	
7845	Imitation Milk Act prohibits the manufacture and sale of imitation milk	7862	Goods (Trade Descriptions) Act amends the <i>Goods Act 1958</i>
7846	Finance Brokers Act provides for the registration of finance brokers	7863	Marine Stores and Old Metals (Amendment) Act amends the <i>Marine Stores and Old Metals Act 1958</i>
7847	Local Government (Rating Exemptions) Act amends the law relating to the exemptions from rating under the <i>Local Government Act 1958</i>	7864	Fire Authorities (Borrowing Powers) Act amends the <i>Country Fire Authority Act 1958</i> and the <i>Metropolitan Fire Brigades Act 1958</i> with respect to borrowing powers
7848	Labour and Industry (Amendment) Act amends the <i>Labour and Industry Act 1958</i>	7865	Acts Interpretation (Time) Act amends the <i>Acts Interpretation Act 1958</i>
7849	Groundwater Act provides for the conservation of underground water	7866	Narree Warran Lands Act authorises the granting of a development lease of certain lands in the Parish of Narree Worrان permanently reserved for public purposes and revokes the permanent reservation so far as it relates to certain other lands
7850	Consolidated Revenue Act grants supply to the Government for the year 1969-70	7867	Moorpanyal Lands Act relates to certain lands in the Parish of Moorpanyal
7851	Mental Health (Chairmanship) Act declares the office of Chairman of the Mental Health Authority to be vacant and provides for the appointment of a Chairman of the Mental Health Authority	7868	Juries (Amendment) Act amends the <i>Juries Act 1967</i>
7852	Instruments (Bills of Exchange Amendment) Act amends the <i>Instruments Act 1958</i>	7869	Apprenticeship (Regulations) Act enables the making of regulations with respect to the conditions of employment of the President of the Apprenticeship Commission
7853	Supreme Court (Correction of Sentences) Act amends the <i>Supreme Court Act 1958</i>	7870	Portland Lands Exchange Act provides for the exchange of certain lands in the Township of Portland
7854	Summary Offences Act amends the <i>Summary Offences Act 1966</i> with respect to hours for burning-off operations	7871	Melbourne University (Property) Act amends the <i>Melbourne University Act 1958</i> with respect to the acquisition of land for university purposes
7855	Church of England in Australia (Mount Shadwell Land) Act makes provision with respect to Trusts upon which land at Mount Shadwell is held by The Ballarat Diocesan Trustees and with respect to the sale or other disposition of such land and the application of the proceeds thereof	7872	Latrobe Valley (Lands for Ambulance Services) Act enables the transfer of certain lands from the Latrobe Valley Hospitals and Health Services Association to the Latrobe Valley District Ambulance Service
7856	State Rivers and Water Supply Commission (Special Projects) Act authorises the State Rivers and Water Supply Commission to assist in special development projects outside Victoria	7873	Ministry of Transport (Director of Transport) Act amends the <i>Ministry of Transport Act 1958</i> with respect to the title of the office of Co-ordinator of Transport and amends the <i>Metropolitan Transportation Committee Act 1963</i>
7857	Coal Mines (Pensions Increase) Act amends the <i>Coal Mines Act 1958</i>	7874	Administration and Probate (Foreign Grants) Act makes provision for the recognition of certain foreign grants of probate and administration and amends the <i>Administration and Probate Act 1958</i>
7858	Trustee Companies (Burns Philp Trustee Company Limited) Act amends the <i>Trustee Companies Act 1958</i> to authorise Burns Philp Trustee Company Limited to act as a trustee company	7875	Road Traffic (Amendment) Act amends the <i>Road Traffic Act 1958</i>
7859	Latrobe Valley (Amendment) Act amends the <i>Latrobe Valley Act 1958</i>	7876	Justices (Amendment) Act amends the <i>Justices Act 1958</i>
7860	Maintenance (Amendment) Act amends the <i>Maintenance Act 1965</i>	7877	Country Fire Authority (Amendment) Act amends the <i>Country Fire Authority Act 1958</i>
7861	Aboriginal Affairs (Amendment) Act amends the <i>Aboriginal Affairs Act 1967</i>		

No.		No.	
7878	Coal Mines (Accident Relief) Act amends the <i>Coal Mines Act 1958</i>		
7879	Preston School of Design and Free Library Land Act makes provision concerning land at Preston formerly used for a School of Design and Free Library		
7880	Lands Compensation (Costs and Expenses) Act re-enacts with amendments section 47 of the <i>Lands Compensation Act 1958</i>	7895	Revenue Deficits Funding Act sanctions the issue and application of loan money for transfer to the consolidated revenue to meet the deficits therein for the years 1967-68 and 1968-69
7881	Evidence (Bankers' Books) Act amends the <i>Evidence Act 1958</i> with respect to bankers' books	7896	Land Tax (Rates) Act declares the rates of land tax for the year ended 31 December 1970
7882	Transport Regulation (Financial) Act amends the <i>Transport Regulation Act 1958</i>	7897	Probate Duty Act amends the <i>Probate Duty Act 1962</i>
7883	Railways (Surplus Lands) Act amends the <i>Railways Act 1958</i>	7898	Sale of Land (Amendment) Act amends the <i>Sale of Land Act 1962</i> , the <i>Local Government Act 1958</i> , and the <i>Transfer of Land Act 1958</i>
7884	Abolition of Obsolete Offences Act amends the <i>Crimes Act 1958</i> , the <i>Legal Profession Practice Act 1958</i> , and the <i>Wrongs Act 1958</i> for abolishing certain obsolete criminal offences	7899	Racing (Trotting Racing) Act amends the <i>Racing Act 1958</i>
7885	Fire Brigades (Contributions) Act provides for defraying the costs incurred by the Metropolitan Fire Brigades Board and the Country Fire Authority	7900	Crown Proceedings (Forfeited Recognisances) Act amends the <i>Crown Proceedings Act 1958</i> and the <i>Justices Act 1958</i> with respect to the recovery of moneys due under forfeited recognisances
7886	Gas Act consolidates and amends the law with respect to the supply of gas and amends the <i>Health Act 1958</i>	7901	Weights and Measures (Fees) Act amends the <i>Weights and Measures Act 1958</i> to enable the charging and payment of certain fees
7887	Tobacco Leaf Industry Stabilization (Tobacco Quotas) Act amends the <i>Tobacco Leaf Industry Stabilization Act 1966</i> with respect to the allocation of tobacco quotas	7902	Town and Country Planning (Compensation) Act amends the <i>Town and Country Planning Act 1961</i> with respect to the payment of compensation in relation to planning schemes
7888	The Constitution Act Amendment (Standing Appropriations) Act amends <i>The Constitution Act Amendment Act 1958</i>	7903	Wheat Industry Stabilization (Amendment) Act amends the <i>Wheat Industry Stabilization Act 1968</i> with respect to the operation of a quota scheme for deliveries of wheat to the Australian Wheat Board
7889	Legal Profession Practice Act amends the <i>Legal Profession Practice Act 1958</i>	7904	Railway Loan Application Act sanctions the issue and application of loan money for works and purposes relating to Railways
7890	Navigable Waters (Oil Pollution) (Amendment) Act amends the <i>Navigable Waters (Oil Pollution) Act 1960</i>	7905	North Melbourne Lands (Loans to Lessees) Act amends the <i>North Melbourne Lands Act 1966</i>
7891	Stamps (Mortgages) Act amends the Third Schedule to the <i>Stamps Act 1958</i>	7906	Theatres (Performance of Sacred Works) Act amends the <i>Theatres Act 1958</i> with respect to certain performances on Christmas Day or Good Friday
7892	State Forests Loan Application Act sanctions the issue and application of loan money for works and other purposes relating to State Forests	7907	Marketing of Primary Products (Amendment) Act amends the <i>Marketing of Primary Products Act 1958</i> with respect to the eligibility of persons to sign petitions and to vote at polls and elections
7893	Melbourne and Metropolitan Board of Works (Amendment) Act amends the <i>Melbourne and Metropolitan Board of Works Act 1958</i>	7908	Water Supply Loan Application Act
7894	Wheat Marketing Act makes provision with respect to the determination of quotas in respect of		

No.		No.	
	sanctions the issue and application of loan money for works and other purposes relating to irrigation, water supply, drainage, sewerage, flood protection, and river improvement	7923	Labour and Industry (Further Amendment) Act amends the <i>Labour and Industry Act 1958</i> and repeals the <i>Master and Apprentices Act 1958</i>
7909	Health (Amendment) Act amends the <i>Health Act 1958</i>	7924	Forests (Softwood Timber Agreement) Act ratifies, validates, approves, and otherwise gives effect to an agreement between the Forests Commission and A. V. Wehl Industries Limited with respect to the establishment of an industry for the manufacture of particle board from softwood timber obtained from forests under the control of the Forests Commission
7910	Superannuation (Amendment) Act amends the <i>Superannuation Act 1958</i> , the <i>Police Regulation Act 1958</i> , the <i>Pensions Supplementation Act 1966</i> , and the <i>Married Women's Superannuation Fund Act 1968</i>	7925	Public Works Loan Application Act sanctions the issue and application of loan money for public works
7911	Friendly Societies (Amendment) Act amends the <i>Friendly Societies Act 1958</i>	7926	Metropolitan Fire Brigades (Amendment) Act concerns the reconstitution of the Metropolitan Fire Brigades Board and the administration of brigades, and amends the <i>Metropolitan Fire Brigades Act 1958</i>
7912	The Constitution Act Amendment (Conjoint Elections) Act amends <i>The Constitution Act Amendment Act 1958</i> with respect to the holding and conduct of conjoint elections	7927	Consolidated Revenue Act grants supply to the Government for the year 1968-69
7913	Labour and Industry (Long Service Leave) Act amends the <i>Labour and Industry Act 1958</i>	7928	National Parks (Amendment) Act includes additional land in certain National Parks, declares certain other lands to be National Parks, and amends the <i>National Parks Act 1958</i> and the <i>National Parks (Amendment) Act 1965</i>
7914	Public Service (Amendment) Act amends the <i>Public Service Act 1958</i> and certain other Acts to change the title of the Secretary for Public Works	7929	Railways (Offences) Act amends the <i>Railways Act 1958</i>
7915	Motor Car (Traffic Offenders) Act amends the <i>Motor Car Act 1958</i> to make provision for suspending the licence to drive a motor car of any frequent traffic offender	7930	Tourist Act establishes a Ministry of Tourism
7916	Motor Car Act amends the <i>Motor Car Act 1958</i>	7931	Country Roads (Amendment) Act re-classifies by-pass roads as free-ways, makes provision with respect to overpasses and subways, traffic control signals, advertising near main roads, the construction and maintenance of roads, the establishment of roadside reserves, and the payment of costs of permanent works, and amends the <i>Country Roads Act 1958</i>
7917	Farm Produce Merchants and Commission Agents (Amendment) Act amends the <i>Farm Produce Merchants and Commission Agents Act 1965</i>	7932	Appropriation of Revenue Act grants supply for the year ending 30 June 1970 and appropriates supplies granted in this and the last preceding session of Parliament
7918	Education (Army Apprentices School) Act relates to the Army Apprentices School at Balcombe		
7919	Legal Aid Act makes provision for legal aid		
7920	Education Grants (Amendment) Act amends the <i>Education Grants Act 1967</i>		
7921	Crown Reservations (Revocation and Excision) Act revokes the permanent reservations and Crown grants of certain lands		
7922	Firearms (Amendment) Act amends the <i>Firearms Act 1958</i>		

Parliamentary Papers

The following Papers were presented to the Legislative Assembly during session 1969-70 and ordered by the House to be printed. Copies may be purchased on application to the Sales Section, Government Printing Office, Macarthur Street, Melbourne, 3002.

Finance :

A.1 Finance 1968-69—Treasurer's Statement of Receipts and Expenditure for the year 1968-69 ; and Report of the Auditor-General

A.2 Supplementary Report of the Auditor-General for the year 1968-69

Messages from His Excellency the Governor :

B.1 Estimates of Revenue and Expenditure for the year 1968-69

B.2 Final Supplementary Estimates for the year 1968-69

Returns to orders of the House :

C.1 Report to the Standing Committee of State and Commonwealth Attorneys-General on the Law relating to Consumer Credit and Moneylending

C.2 Report to the Standing Committee of Attorneys-General on Special Investigations

C.3 Report to the Standing Committee of Attorneys-General on Accounts and Audit

C.4 Fourth Interim Report to the Standing Committee of Attorneys-General

Reports from Select Committees :

D.1 Joint Select Committee on Road Safety—3rd Progress Report—upon an Investigation into the Desirability of the Compulsory Fitting and the Compulsory Wearing of Seat Belts

D.2 Statute Law Revision Committee—Report upon the Operation of Sections 53, 166 and 181 of the *Local Government Act 1958*

D.3 Treasury Minute on Committee of Public Accounts—Report on Subscriber Trunk Dialling Telephones

D.4 Meat Industry Committee—Interim Report—on Abattoirs, Meat Inspection and Animal Health

D.5 Public Accounts Committee—Report upon the Control and Management of Stores operated by Government Departments and Public Authorities

D.6 Statute Law Revision Committee—Report upon the Law and Practice in Relation to the Granting and Respite of Bail

D.7 Statute Law Revision Committee—Report upon the Commorientes and the *Property Law Act 1958* (Section 184)

D.8 Little Desert Settlement Committee—Report upon the proposal to open the Little Desert to Settlement

D.9 Subordinate Legislation Committee—Report upon the General Inquiry into Subordinate Legislation

D.10 Joint Select Committee on Road Safety—Fourth Progress Report—An Aspect of the Alcohol and Drug Factor

D.11 Joint Select Committee on Drainage—Final Report

D.12 Statute Law Revision Committee—Report upon the Proposals contained in the *Wrongs (Industrial Accidents) Bill*

Papers presented to Parliament :

No. 15 Aboriginal Affairs, Ministry of—Report for the year 1968-9

No. 29 Consumers Protection Council—Report for the year ended 30th June, 1969

No. 3 Co-operative Housing Societies—Report of the Registrar for the year 1967-8

No. 4 Co-operative Societies—Report of the Registrar for the year 1967-8

No. 36 Country Roads Board—Report for the year 1968-9

No. 34 Education—Report of the Minister for the year 1967-8

No. 16 Egg and Egg Pulp Marketing Board—Report for the pool year 1968-9

No. 6 Forests Commission—Report for the year 1968-9

No. 27 Gas and Fuel Corporation of Victoria—Report for the year 1968-9

No. 19 Health—Report of the Commission of Public Health for the year 1968-9

No. 31 Hospitals and Charities Commission—Report for the year 1968-9

No. 30 Hospitals Superannuation Board—Report for the year 1968-9

No. 24 Housing Commission—Report for the year 1968-9

No. 33 Labour and Industry Department—Report for the year 1969

No. 25 Liquor Control Commission—Report for the year 1968-9

No. 37 Medeniaks, Mr. J.—Report of Board of Inquiry into the conduct of, at Janefield Training Centre.

No. 1 Mental Health Authority—Report for the year 1967

No. 35 Mental Health Authority—Report for the year 1968

No. 32 Parole Boards (Adult)—Reports for the year 1968-9

No. 20 Parole Boards (Youth)—Reports for the year 1968-9

No. 10 Police—Report of the Chief Commissioner for the year 1968

No. 28 Public Education—Council of—Report for the year 1968-9

No. 21 Public Service Board—Report for the year 1968-9

No. 23 Rural Finance and Settlement Commission—Report for the year 1968-9

No. 26 Social Welfare Department—Report for the year 1968-9

No. 14 Soil Conservation Authority—Report for the year 1968-9

No. 17 State Coal Mines—Report for the half year ended 31 December 1968

No. 8 State Development Committee—Effects of the Construction of the Lower Yarra

Crossing on areas West of Melbourne

No. 11 State Electricity Commission—Report for the year 1968-9

No. 12 State Rivers and Water Supply Commission—Report for the year 1968-9

No. 5 State Savings Bank—Reports, statements, returns, etc., for the year 1968-9

No. 18 State Superannuation Board—Report in connexion with the Pensions Supplementation Fund—for the year 1968-9

No. 2 Teachers Tribunal—Report for the year 1967-8

No. 13 Transport Regulation Board—Report for the year 1968-9

No. 22 Victoria Institute of Colleges—Report for the year 1968

No. 9 Victorian Pipelines Commission—Report for the year 1968-9

No. 7 Victorian Railways—Report of the Commissioners for the year 1968-9

STATE ELECTORAL SYSTEM

General*Electoral basis of the two houses*

When first constituted the Legislative Council or Upper House was composed of thirty members, aged 30 years and over, and possessed of freehold of the annual value of £500. Property qualifications were abolished by the *Legislative Council Reform Act* 1950, and today the main qualification of members and electors of the Legislative Council is the attainment of the age of 21 years. A similar provision applies to the Legislative Assembly.

For Legislative Council purposes Victoria is divided into eighteen Electoral Provinces, each represented by two members elected for six years—one in each Province retiring every three years by rotation—except at a general election following the dissolution of the Council, when one half of the members are to be elected for only three years. (See folding map facing page 96.)

For Legislative Assembly purposes the State is divided at present into seventy-three Electoral Districts, each returning one member. Members are elected for three years, unless Parliament is dissolved before this period. (See folding map facing page 94.)

Electoral redivision, 1965

Pursuant to the *Electoral Provinces and Districts Act* 1965 a new redivision of Victoria for electoral purposes was carried out at the end of 1965 on the following basis :

1. the so-called "Port Phillip Area", consisting of thirty-eight existing metropolitan and semi-metropolitan Districts and six parts of other Districts, was redivided into forty-four Electoral Districts for the Assembly, each containing approximately 25,000 electors ;
2. the remaining area of the State, i.e., "Country Area", was divided into twenty-nine Electoral Districts for the Legislative Assembly consisting of eight "Provincial Centre" electorates, each containing approximately 22,250 electors and twenty-one other electorates of a rural nature, each containing approximately 18,200 electors ; and
3. the "Southern Area" containing the nine existing Electoral Provinces of Doutta Galla, East Yarra, Higinbotham, Melbourne, Melbourne North, Melbourne West, Monash, Southern, and South-Eastern was redivided into ten new Provinces for the Legislative Council. The remaining eight Country Provinces were unchanged.

The new Electoral Provinces and Districts formulated by the Commissioners empowered to undertake the above redivision were deemed to be

accepted by Parliament, and the names and boundaries of the new Provinces and Districts were declared on 17 December 1965.

The provisions in *The Constitution Act Amendment Act 1958* relating to the automatic redivision of the State on the basis of two State Districts per Commonwealth Division disappeared when the new Districts came into force.

Enrolment of electors

Enrolment on the electoral roll is compulsory for every person of the age of 21 years or over who is a natural-born or naturalised subject of the Queen and who has resided in Australia for six months continuously, and in Victoria for at least three months and in one subdivision for at least one month. The electoral rolls for the State are compiled by the Commonwealth Electoral authorities under a joint Commonwealth-State agreement, each Government paying half the cost of compilation. All Commonwealth and State parliamentary elections in Victoria are conducted on the basis of these joint rolls.

The compilation of the rolls is aided by the fact that the respective Legislative Council Provinces and Electoral Districts, as well as the Commonwealth Electoral Divisions, are subdivided into common subdivisions, which form the basic units for enrolment on the joint Commonwealth-State of Victoria rolls. When the new Provinces and Districts referred to above came into force the number of common subdivisions into which they are divided was increased from 297 to 323. This number was further increased by administrative action on 17 March 1969 to 386.

Number of enrolments on the joint rolls

Since 1924, when the Joint Rolls Arrangement was made between the Commonwealth of Australia and the State of Victoria, the electoral rolls prepared and maintained by the Commonwealth Electoral Officer for Victoria have been used at all Commonwealth elections and elections for the Legislative Assembly of Victoria.

The *Legislative Council Reform Act 1950*, which came into force on 1 November 1951, provided in substance for all electors for the Legislative Assembly to be automatically enrolled also for Legislative Council elections.

The Joint Rolls Arrangement was, therefore, appropriately amended and since 1952 the joint rolls have been used in Victoria for all Commonwealth elections and State parliamentary elections, whether for the Legislative Assembly or the Legislative Council.

VICTORIA—ELECTORS ENROLLED ON JOINT ROLL

At 30 June—	Number of electors enrolled	At 30 June—	Number of electors enrolled
1962	1,588,633	1967	1,745,919
1963	1,596,807	1968	1,759,803
1964	1,650,042	1969	1,789,153
1965	1,657,798	1970	1,852,023
1966	1,681,514		

Voting features of State elections

There is no plural voting at elections for either the Legislative Council or the Legislative Assembly. Provision for voting by post by electors who

are ill or temporarily absent from their electorates, whether they are within Australia or not, is made at elections for both Houses, and there is also a system of "absent" voting whereby any elector who is not able to record a vote within his own subdivision is enabled to record a vote at any polling booth open in Victoria on the day of the poll. In addition, a method of so-called "unenrolled voting" has been instituted, under which an elector whose name has been omitted from the official electoral rolls in error is enabled to record a vote upon making a prescribed declaration.

Voting at elections for both Houses is compulsory and is conducted under an adaptation of Ware's system of preferential voting.

This system of preferential voting at Victorian parliamentary elections was provided for by statute in 1911 for Legislative Assembly elections, in 1921 for Legislative Council triennial elections, and in 1936 for Legislative Council general elections following directly upon a dissolution of the Council in consequence of disagreements or deadlock between the two Houses. Under this system a voter is required to number the candidates in order of preference on the ballot-paper, the figure "1" being written opposite the name of the candidate whom the elector wishes to be returned, and sequential figures (2, 3, 4, etc.) indicating his relative degree of preference being written opposite the names of the other candidates. Where an elector has so indicated his order of preference for all candidates except one, he is deemed to have given his last contingent vote or preference to such candidate.

Where only two candidates are involved, the candidate who receives an absolute majority (i.e., half the number of formal votes cast plus one) is declared elected. Similarly, where there are more than two candidates, if one of them receives an absolute majority on the count of first preferences, then he is declared elected.

Where no absolute majority is attained by a candidate at the count of first preference votes, the candidate who has received the fewest first preference votes is declared defeated, and his ballot-papers examined and his second preferences allotted to the candidates to whom they relate. The process of excluding the candidate with the lowest number of votes and distributing his ballot-papers according to the preferences shown on them to the unexcluded or continuing candidates is followed until one candidate attains an absolute majority.

At a general election for the Legislative Council when two members are required to be elected for each Province, the election of the first member is carried out as above. In the case of the election of the second member, however, a slight variation of procedure is necessary. The first step is to take the ballot-papers of the *first elected* candidate and allot the second preferences on them to the candidates to whom they relate. The remaining candidates begin the counting process with their own first preferences plus the second preferences allotted in the distribution of the elected candidate's ballot-papers. If one of the remaining candidates has an absolute majority, he is declared elected to the second vacancy. If, however, no such candidate has an absolute majority, the candidate with the fewest votes is declared defeated and the ballot-papers counted to him are then distributed according to the preferences shown thereon among the various continuing or unexcluded candidates.

The process of excluding the lowest candidate and distributing his ballot-papers according to the preferences on them to unexcluded or continuing candidates is followed until one candidate attains an absolute majority.

At a general election for the Legislative Council, the candidate first elected is entitled to hold the seat for six years, and the candidate next elected holds his seat for three years.

Areas of Legislative Assembly Districts

The following table shows the areas of the Districts of the Legislative Assembly created by the redivision in 1965 :

VICTORIA—LEGISLATIVE ASSEMBLY: AREAS OF DISTRICTS (Sq miles)

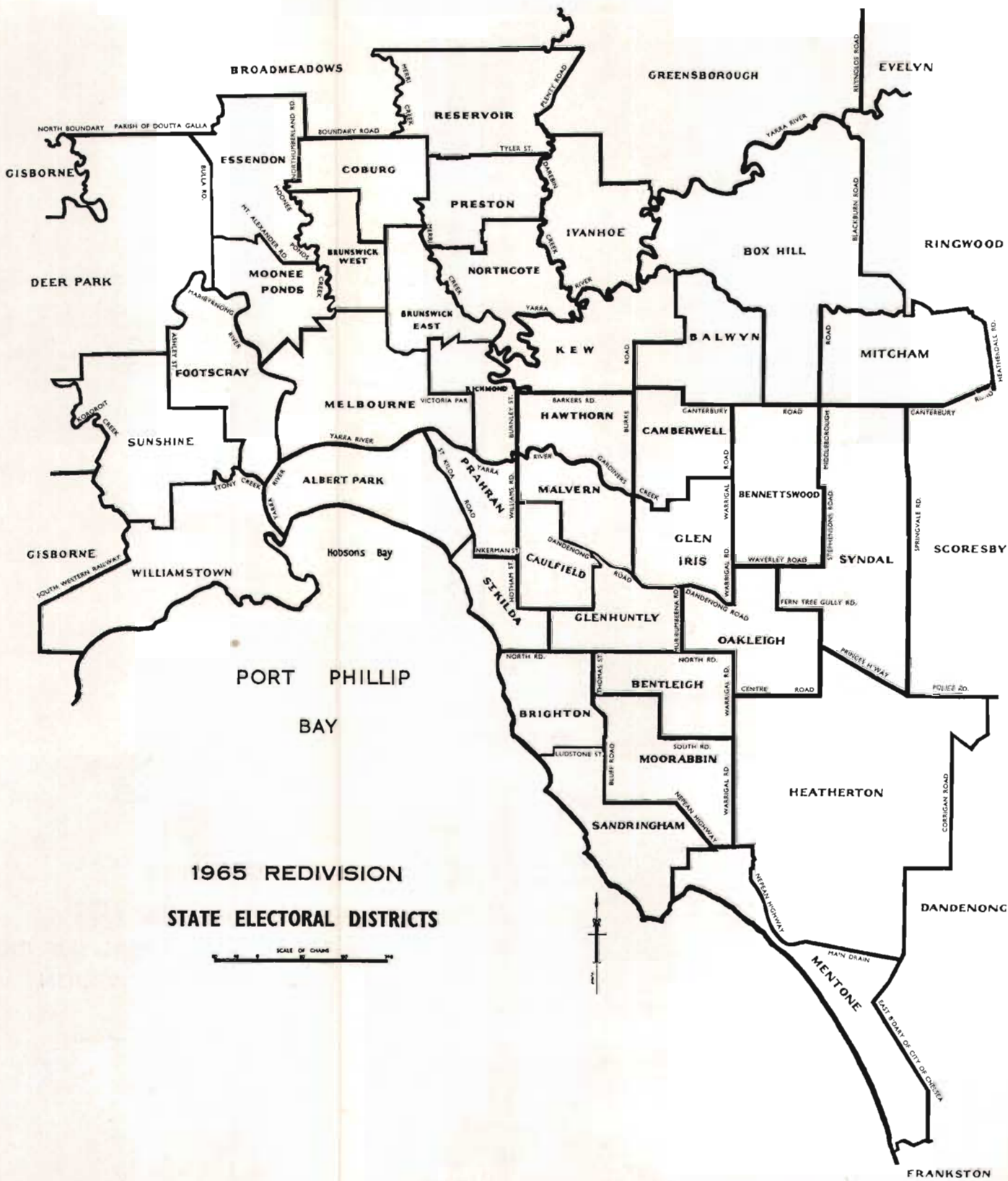
State Electoral District	Area	State Electoral District	Area
Albert Park	7.50	Heatherton	27.34
Ballaarat North	805.00	Ivanhoe	7.00
Ballaarat South	1,160.00	Kara Kara	4,470.00
Balwyn	6.30	Kew	7.15
Bellarine	570.00	Lowan	6,590.00
Benalla	5,375.00	Malvern	4.36
Benambra	4,020.00	Melbourne	10.42
Bendigo	890.00	Mentone	8.40
Bennettswood	7.62	Midlands	2,520.00
Bentleigh	4.85	Mildura	8,670.00
Box Hill	19.60	Mitcham	8.20
Brighton	4.80	Monbulk	147.00
Broadmeadows	57.20	Moonee Ponds	4.80
Brunswick East	4.25	Moorabbin	6.69
Brunswick West	3.95	Morwell	1,150.00
Camberwell	5.00	Murray Valley	2,165.00
Caulfield	3.59	Narracan	1,190.00
Coburg	5.22	Northcote	5.72
Dandenong	44.80	Oakleigh	6.41
Deer Park	60.60	Polwarth	2,730.00
Dromana	780.00	Portland	4,500.00
Dundas	6,300.00	Prahran	3.31
Essendon	7.25	Preston	5.00
Evelyn	2,575.00	Reservoir	8.65
Footscray	7.15	Richmond	3.57
Frankston	61.80	Ringwood	48.80
Geelong	10.42	Rodney	2,335.00
Geelong North	12.58	St Kilda	3.05
Gippsland East	11,030.00	Sandringham	6.70
Gippsland South	2,900.00	Scoresby	56.00
Gippsland West	945.00	Shepparton	1,080.00
Gisborne	1,340.00	Sunshine	9.35
Glenhuntly	4.55	Swan Hill	5,885.00
Glen Iris	5.20	Syndal	13.50
Greensborough	48.30	Warrnambool	934.00
Hampden	4,430.00	Williamstown	12.49
Hawthorn	4.56		
		Total	88,150.00

NOTE. The officially recognised "land area" of the State is 87,884 sq miles. The difference of 266 sq miles between "land" and "electoral" area is due to the inclusion of coastal waters such as Western Port and Corner Inlet in the electoral descriptions.



* See Melbourne area over page.

** See margin in top right corner.



1965 REDIVISION
STATE ELECTORAL DISTRICTS

SCALE OF CHAINS

Areas of Legislative Council Provinces

The following table shows the areas of the provinces of the Legislative Council created by the redivision in 1965 :

VICTORIA—LEGISLATIVE COUNCIL :
AREAS OF PROVINCES
(Sq miles)

State Electoral Province	Area
Ballaarat	5,505·00
Bendigo	4,452·00
Boronia	1,040·00
Doutta Galla	318·00
East Yarra	26·90
Gippsland	16,270·00
Higinbotham	33·54
Melbourne	25·83
Melbourne North	27·27
Melbourne West	603·00
Monash	22·46
Northern	9,055·00
North Eastern	11,672·00
North Western	20,680·00
South Eastern	1,856·00
South Western	4,042·00
Templestowe	431·00
Western	12,090·00
Total	88,150·00

NOTE. The officially recognised "land area" of the State is 87,884 sq miles. The difference of 266 sq miles between "land area" and "electoral area" is due to the inclusion of coastal waters such as Western Port and Corner Inlet in the electoral descriptions.

Parliamentary elections*Legislative Assembly*

At the Legislative Assembly election held on 30 May 1970 there were contests in all of the seventy-three Electoral Districts and in seventy-two of them more than two candidates were engaged.

In twenty-two of these contests the successful candidate had an absolute majority of the total first preferences recorded and consequently no distribution of further preferences was necessary. After the necessary distribution of second or subsequent preferences had been completed in the other fifty-one contests, the leading candidate, on the first count, was elected in forty-one instances but was defeated in the remaining ten instances.

The following table shows the voting in general elections held for the Legislative Assembly since 1952 :

**VICTORIA—VOTING AT GENERAL ELECTIONS FOR THE
LEGISLATIVE ASSEMBLY**

Year of election	Whole State	Contested Districts				
	Electors enrolled	Electors enrolled	Votes recorded		Informal votes	
			Number	Percentage of voters	Number	Percentage of total votes recorded
1952	1,402,705	1,119,486	1,047,671	93·59	18,991	1·81
1955	1,422,588	1,402,806	1,318,937	94·02	28,934	2·19
1958	1,478,065	1,478,065	1,392,813	94·23	24,760	1·78
1961	1,554,856	1,554,856	1,467,862	94·41	35,937	2·45
1964	1,635,311	1,635,311	1,543,778	94·40	35,631	2·31
1967	1,723,981	1,723,981	1,625,239	94·27	51,384	3·16
1970	1,827,595	1,827,595	1,728,362	94·57	55,141	3·19

NOTE. Detailed statistics are available in publications issued by the Chief Electoral Officer for Victoria.

The following table shows certain particulars of the representation in the Legislative Assembly in which general elections have been held since 1952:

VICTORIA—PARLIAMENTARY REPRESENTATION

Year of election	Number of members of Legislative Assembly	Population per member	Proportion of persons enrolled to total population	Number of electors enrolled on date of election	Average number of electors per member
			per cent		
1952	65	36,100	59·9	1,402,705	21,580
1955	66	38,200	56·4	1,422,588	21,554
1958	66	41,200	54·4	1,478,065	22,395
1961	66	44,300	53·1	1,554,856	23,558
1964	66	47,100	52·7	1,635,311	24,777
1967	73	44,900	52·6	1,723,981	23,616
1970	73	47,200	53·1	1,827,595	25,036

Proportion of voters at elections

The first general election for the Legislative Assembly was held in 1856. The proportion of voters to electors of contested districts at each of the general elections held until 1955 for the Legislative Assembly is found on page 86 of the *Victorian Year Book* 1961.

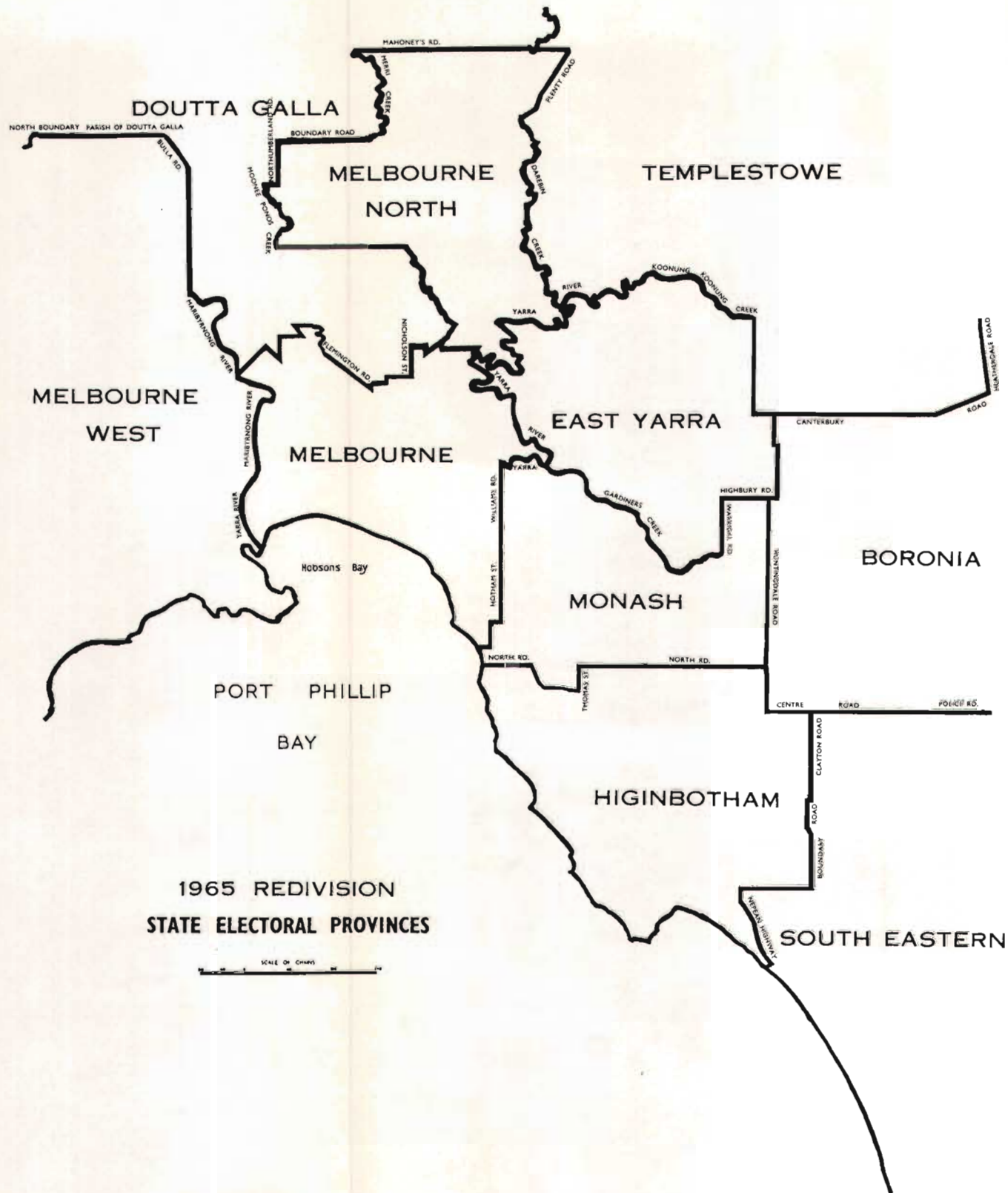
Legislative Council

The Legislative Council consists of thirty-six members representing eighteen Provinces. Voting in elections held for the Legislative Council since 1952 is shown in the next table. At the triennial election of 30 May 1970, there were contests in all Provinces and in all of them more than two candidates were engaged.

In five of these the successful candidate had an absolute majority of the total first preferences recorded and consequently no distribution of further preferences was necessary. After the necessary distribution of second or subsequent preferences had been completed in the other thirteen contests,



* See Melbourne area over page.



the leading candidate, on the first count, was elected in ten instances but was defeated in the remaining three instances.

The following table shows particulars of elections for the Legislative Council :

VICTORIA—VOTING AT ELECTIONS FOR THE LEGISLATIVE COUNCIL

Year of election	Whole State		Contested Provinces			
	Electors enrolled	Electors enrolled	Votes recorded		Informal votes	
			Number	Percentage of voters	Number	Percentage of total votes recorded
1952	1,395,650	1,078,959	994,190	92·14	22,595	2·27
1955	1,430,130	1,216,010	1,112,951	91·52	23,189	2·08
1958	1,488,293	1,387,097	1,283,665	92·54	22,085	1·72
1961	1,554,856	1,554,856	1,467,482	94·38	46,697	3·18
1964	1,635,311	1,635,311	1,543,584	94·39	45,627	2·96
1967	1,723,981	1,723,981	1,625,371	94·28	59,895	3·69
1970	1,827,595	1,827,595	1,726,668	94·48	67,710	3·92

Further references, CHIEF ELECTORAL OFFICER FOR VICTORIA. Various publications giving detailed statistics of State elections

COMMONWEALTH PARLIAMENT

Victorian members

Political party affiliations of Victorian members of the Commonwealth Parliament are indicated thus :

(ADLP) Australian Democratic Labor Party

(ALP) Australian Labor Party

(CP) Australian Country Party

(LP) Liberal Party of Australia

Senate

The following are the Senators elected for Victoria sitting in the Senate as at 1 July 1970 :

*Brown, William Walter Charles (ALP)	Little, John Albert (ADLP)
Cormack, Sir Magnus Cameron (LP)	McManus, Francis Patrick (ADLP)
†Greenwood, Ivor John, Q.C. (LP)	Poyser, Arthur George (ALP)
Hendrickson, Albion (ALP)	Webster, James Joseph (CP)
Kennelly, The Hon. Patrick John (ALP)	Wedgwood, Dame Ivy Evelyn, D.B.E. (LP)

* Filling casual vacancy consequent upon the death of S. H. Cohen.

† Filling casual vacancy consequent upon the election of the Rt Hon. J. G. Gorton to the House of Representatives.

House of Representatives

The Victorian Members elected to the House of Representatives on 25 October 1969 and the divisions they represent are shown below :

Member	Division
Brown, N. A. (LP)	Diamond Valley
Bryant, G. M. (ALP)	Wills
Buchanan, A. A. (LP)	McMillan
Cairns, J. F. (ALP)	Lalor
Calwell, Rt Hon. A. A. (ALP)	Melbourne
Cass, M. H. (ALP)	Maribyrnong
Chipp, Hon. D. L. (LP)	Hotham
Crean, F. (ALP)	Melbourne Ports
Erwin, Hon. G. D. (LP)	Ballaarat
Fox, E. M. C. (LP)	Henty
Fraser, Hon. J. M. (LP)	Wannon
Garrick, H. J. (ALP)	Batman
Gorton, Rt Hon. J. G. (LP)	Higgins
Hamer, D. J., D.S.C. (LP)	Isaacs
Holten, Hon. R. McN. (CP)	Indi
Howson, Hon. P. (LP)	Casey
Jarman, A. W. (LP)	Deakin
Jenkins, H. A. (ALP)	Scullin
Jess, J. D. (LP)	La Trobe
Johnson, L. K. (ALP)	Burke
Kennedy, A. D. (ALP)	Bendigo
Kent Hughes, Hon. Sir Wilfred S., K.B.E., M.V.O., M.C., E.D. (LP) (a)	Chisholm
King, R. S. (CP)	Wimmera
Lynch, Hon. P. R. (LP)	Flinders
McEwen, Rt Hon. Sir John, C. H., K.C.M.G. (CP)	Murray (b)
McIvor, H. J. (ALP)	Gellibrand
Nixon, Hon. P. J. (CP)	Gippsland
Peacock, Hon. A. S. (LP)	Kooyong
Reid, L. S., D.F.C. (LP)	Holt
Scholes, G. G. D. (ALP)	Corio
Snedden, Hon. B. M., Q.C. (LP)	Bruce
Street, A. A. (LP)	Corangamite
Turnbull, W. G., C.B.E. (CP)	Mallee
Whittorn, R. H. (LP)	Balaclava

(a) The Hon. Sir Wilfred Kent Hughes died on 31 July 1970. At a by-election held on 19 September 1970, Mr A. A. Staley (LP) was elected in his stead.

(b) See Supplement at end of this *Year Book*.

Agent-General for Victoria in the United Kingdom and Northern Ireland, 1964

GOVERNMENT ADMINISTRATION

The administration of the Victorian State Government consists of the central government, that is the departments of State and statutory bodies as listed in the following pages, and a local government network of 210 municipalities as described in Part 5.

Departments

Agriculture	Law
Chief Secretary's	Local Government
Crown Lands and Survey	Mines
Education	Premier's
Health	Public Works
Labour and Industry	Treasury

Ministries

Ministry of Aboriginal Affairs

Minister : Minister for Aboriginal Affairs

Permanent head : Director of Aboriginal Affairs

Formerly a branch of the Chief Secretary's Department, the Ministry was created by Act of Parliament on 1 January 1968. Its functions are to promote the social and economic advancement of Aborigines in Victoria, including assistance with housing, health services, employment, and school books and uniforms for Aboriginal children.

Ministry of Tourism

Minister : Minister for Tourism

Permanent head : Director of Tourism

Previously a branch of the Premier's Department, the Ministry was created by the *Tourist Act* 1969 and became operative on 8 February 1970. Its function is to promote tourism in Victoria and encourage and assist the development of tourist attractions and facilities and provide an advisory service to travellers.

Ministry of Transport

Minister : Minister of Transport

Permanent head : Director of Transport

Created by the *Transport Act* 1951, this Ministry is concerned with the improvement, development, and better co-ordination of rail, tram, road, and air transport in Victoria.

NOTE. The Ministry of Fuel and Power functions administratively as a branch of the Premier's Department.

Statutory authorities

The functions of the following public corporations are set out in the relevant sections of this *Victorian Year Book* :

Country Roads Board

Forests Commission

Gas and Fuel Corporation

Hospitals and Charities Commission

Housing Commission

Melbourne and Metropolitan Board of Works

Melbourne and Metropolitan Tramways Board

Railways Commissioners

State Electricity Commission

State Rivers and Water Supply Commission

Further reference, 1970

Government instrumentalities

The term "instrumentalities" is limited to statutory bodies which are not departments even though some are administered within or associated with departments.

The general features of the instrumentalities are constitution by Act of Parliament, a controlling Board or Commission appointed by the Governor in Council, freedom from direct ministerial control over day to day administration (but subject to governmental or ministerial control in matters of major policy), and subject in some cases to the approval of the Governor

in Council or the Minister, control over the appointment of staff and the determination of salaries and other conditions of employment. Financial arrangements differ considerably.

The largest of the instrumentalities are engaged in public utility or developmental fields of activity, for example, Victorian Railways Commissioners, State Electricity Commission, Melbourne and Metropolitan Tramways Board, and Country Roads Board.

The following statement lists the instrumentalities according to the Minister under whom each instrumentality is administered, and shows which instrumentalities are staffed by members of the Public Service and, in these cases, the department with which the instrumentality is associated :

Minister	Instrumentalities with Public Service staffs and Department with which the instrumentality is associated		Other instrumentalities
	Department	Instrumentality	
Minister for Aboriginal Affairs	Aboriginal Affairs	Aboriginal Affairs Advisory Council	
Minister of Agriculture	Agriculture	Dairy Produce Board Milk Board Milk Pasteurization Committee Tobacco Quota Committee (a) Tobacco Quota Appeals Tribunal (a) Wheat Quota Review Committee (a)	Australian Barley Board (a) Dried Fruits Board Grain Elevators Board Marketing boards— Chicory Egg and Egg Pulp Maize Tobacco Leaf Onion Veterinary Board of Victoria (a) Victorian Inland Meat Authority Wheat Quota Committee (a)
Attorney-General	Law	Appeals Costs Board (a) Companies Auditors Board	Council of Legal Education Discharged Servicemen's Employment Board Legal Aid Committee (a) Metropolitan Fair Rents Board Patriotic Funds Council Raffles Board (a)
Chief Secretary	Chief Secretary's	Commercial Fisheries Council Council of Trustees of the National Gallery Family Welfare Advisory Council Library Council Liquor Control Commission Parole Boards Police Discipline Board Police Medical Board Police Service Board Police Superannuation Board Premiums Committee Racecourses Licences Board	Country Fire Authority Dog Racing Control Board Exhibition Trustees Metropolitan Fire Brigades Board Totalisator Agency Board Trotting Control Board Zoological Board

Minister	Instrumentalities with Public Service staffs and Department with which the instrumentality is associated		Other instrumentalities
	Department	Instrumentality	
Chief Secretary— <i>continued</i>	Chief Secretary's <i>—continued</i>	Seamans Welfare Advisory Council (a) Seamans Welfare Trust Committee (a) Social Welfare Training Council Street Traders Licences Board Traffic Commission Trustees, Institute of Applied Science Trustees, National Museum Workers Compensation Boards Youth Advisory Council	
Minister for Conservation	Premier's	Soil Conservation Authority	Land Conservation Council
Minister of Education	Education	Council of Public Education Teachers' Tribunal	Council of Adult Education Victoria Institute of Colleges
Minister of Forests	State Forests	Forests Commission (b)	
Minister for Fuel and Power			Gas and Fuel Corporation Victorian Pipelines Commission State Electricity Commission
Minister of Health	Health	Advisory Committee to Mental Health Authority Cinematograph Operators Board Clean Air Committee Commission of Public Health Consultative Council for Influenza Consultative Council for Maternal Mortality Consultative Council for Poliomyelitis Consultative Council for Quarantinable Diseases Food Standards Committee Mental Health Authority (medical officers not subject to Public Service Act) Plumbers and Gas-fitters Board Poisons Advisory Committee Proprietary Medicines Advisory Committee Psychological Council Superintendents Committee Tuberculosis Advisory Committee	Anti-Cancer Council Cancer Institute Board Fairfield Hospital Board Hospitals and Charities Commission Hospitals Superannuation Board National Fitness Council Trustees, various cemeteries Various professional and occupational registration boards— Chiropodists Registration (a) Dental Dietitians Registration Hairdressers Registration Masseurs Registration Medical Nurses Council Opticians Registration Pharmacy

Minister	Instrumentalities with Public Service staffs and Department with which the instrumentality is associated		Other instrumentalities
	Department	Instrumentality	
Minister of Housing	Treasury	Housing Commission	
Minister of Labour and Industry	Labour and Industry	Apprenticeship Commission Industrial Safety Advisory Council Wages Boards Consumers Protection Council	Board of Reference under Boilers Inspection Act Board of Examiners of Engine Drivers and Boiler Attendants
Minister of Lands	Crown Lands and Survey	Place Names Committee Port Phillip Authority Surveyors' Board Vermin and Noxious Weeds Destruction Board	
Minister for Local Government	Local Government	Building Regulations Committee Land Valuation Boards of Review Local Government Advisory Board Municipal Auditors Board Municipal Building Surveyors Board Municipal Clerks Board Municipal Electrical Engineers Board Municipal Engineers Board Municipal Scaffolding Inspectors Board Scaffolding Regulations Committee Town Planning Appeals Tribunal (a)	Country Roads Board Local Authorities Superannuation Board Melbourne and Metropolitan Board of Works Town and Country Planning Board
Minister of Mines	Mines	Board of Examiners for Mine Managers Board of Examiners for Engine Drivers Coal Mine Workers' Pensions Tribunal Coal Miners' Accident Relief Board Drillers' Licensing Board (a) Extractive Industries Advisory Committee (a) Groundwater Advisory Committee (a) Sludge Abatement Board	
Premier	Premier's	National Parks Authority Public Service Board	State Relief Committee Victorian Documentary Film Council (a)

Minister	Instrumentalities with Public Service staffs and Department with which the instrumentality is associated		Other instrumentalities
	Department	Instrumentality	
Minister of Public Works	Public Works	Marine Board	Architects Registration Board Geelong Harbor Trust Commissioners Melbourne Harbor Trust Commissioners Portland Harbor Trust Commissioners
Minister of Soldier Settlement			Rural Finance and Settlement Commission
Minister of State Development			Central Planning Authority (a)
Minister of Transport			Melbourne and Metropolitan Tramways Board Victorian Railways Commissioners Transport Regulation Board Railway Construction Board (a)
Treasurer	Treasury	Home Finance Trust Superannuation Board Tender Board	State Savings Bank
Minister of Water Supply	Water Supply	State Rivers and Water Supply Commission (b)	Dandenong Valley Authority (a) First Mildura Irrigation Trust (a) Geelong Waterworks and Sewerage Trust Latrobe Valley Water and Sewerage Board West Moorabool Water Board (a) Various local water (181) and sewerage (98) authorities Various river improvement and drainage trusts (29)

(a) These instrumentalities have been added since the list was published in 1969.

(b) These statutory corporations also appeared in the *Victorian Year Book* 1963 as a Government department which it is only for the purposes of personnel administration under the Public Service Act.

Classification of instrumentalities according to function

In the following list, each instrumentality is classified under the heading which is nearest to its main function :

- | | |
|--|--|
| <p>1. Legal, protective, registry services—
 Appeals Costs Board
 Country Fire Authority
 Legal Aid Committee
 Metropolitan Fire Brigades Board
 Parole Boards</p> | <p>Raffles Board</p> <p>2. Regulation of primary production—
 Australian Barley Board
 Chicory Marketing Board
 Commercial Fisheries Council</p> |
|--|--|

Dairy Produce Board
 Dried Fruits Board
 Egg and Egg Pulp Marketing Board
 Maize Marketing Board
 Milk Board
 Onion Marketing Board
 Sludge Abatement Board
 Tobacco Leaf Board
 Tobacco Quota Committee
 Tobacco Quota Appeals Tribunal
 Wheat Quota Committee
 Wheat Quota Review Committee

3. Regulation of industry and commerce—
 Consumers Protection Council
 Extractive Industries Advisory Committee

Metropolitan Fair Rents Board
 Premiums Committee
 Street Traders Licences Board
 Transport Regulation Board

4. Regulation of labour conditions—

Apprenticeship Commission
 Coal Mine Workers' Pension Tribunal
 Coal Miners' Accident Relief Board
 Hospital Superannuation Board
 Local Authorities Superannuation Board
 Wages Boards
 Workers Compensation Boards

5. Regulation of general standards—

Building Regulations Committee
 Food Standards Committee
 Land Valuation Boards of Review
 Liquor Control Commission
 Marine Board
 Place Names Committee
 Scaffolding Regulations Committee

6. Regulation of professional and occupational standards—

Architects Registration Board
 Board of Examiners of Engine Drivers and Boiler Attendants
 Board of Examiners for Mine Managers
 Board of Examiners of Engine Drivers (Mining)
 Boards of Reference Under Boilers Inspection Act
 Chiropractors Registration Board
 Cinematograph Operators Board
 Companies Auditors Board
 Council of Legal Education
 Dental Board
 Dietitians Registration Board
 Drillers' Licensing Board
 Hairdressers Registration Board
 Masseurs Registration Board
 Medical Board
 Municipal Auditors Board
 Municipal Building Surveyors Board
 Municipal Clerks Board
 Municipal Electrical Engineers Board
 Municipal Engineers
 Municipal Scaffolding Inspectors Board
 Nurses' Council

Opticians Registration Board
 Pharmacy Board
 Plumbers and Gasfitters Board
 Psychological Council
 Surveyors Board
 Valuers' Qualifications Board
 Veterinary Board of Victoria

7. Public utility, conservation, and development—

Central Planning Authority
 Country Roads Board
 Dandenong Valley Authority
 Exhibition Trustees
 First Mildura Irrigation Trust
 Forests Commission
 Gas and Fuel Corporation
 Geelong Harbor Trust Commissioners
 Geelong Waterworks and Sewerage Trust
 Grain Elevators Board
 Groundwater Advisory Committee
 Home Finance Trust
 Housing Commission
 Land Conservation Council
 Latrobe Valley Water and Sewerage Board
 Local Government Advisory Board
 Melbourne and Metropolitan Board of Works
 Melbourne and Metropolitan Tramways Board
 Melbourne Harbor Trust Commissioners
 Portland Harbor Trust Commissioners
 Port Phillip Authority
 Railway Construction Board
 Rural Finance and Settlement Commission
 Soil Conservation Authority
 State Electricity Commission
 State Rivers and Water Supply Commission
 State Savings Bank
 Town and Country Planning Board
 Town Planning Appeals Tribunal
 Traffic Commission
 Trustees of various cemeteries
 Various local water and sewerage authorities
 Various river improvement and drainage trusts
 Vermin and Noxious Weeds Destruction Board
 Victorian Inland Meat Authority
 Victorian Pipelines Commission
 Victorian Railways Commissioners
 West Moorabool Water Board

8. Social welfare—

Aboriginal Affairs Advisory Council
 Discharged Servicemen's Employment Board
 Family Welfare Advisory Council
 Patriotic Funds Council
 Seamans Welfare Advisory Council
 Seamans Welfare Trust Committee
 Social Welfare Training Council

- State Relief Committee
Youth Advisory Committee
9. Education and recreation—
Council of Adult Education
Council of Public Education
Council of Trustees of the National Gallery
Dog Racing Control Board
Library Council
National Parks Authority
Racecourses Licences Board
Totalisator Agency Board
Trotting Control Board
Trustees, Institute of Applied Science
Trustees, National Museum
Victoria Institute of Colleges
Victorian Documentary Film Council
Zoological Board
10. Public health—
Advisory Committee to Mental Hygiene Authority
Anti-Cancer Council
Cancer Institute Board
Clean Air Committee
Commission of Public Health
Consultative Council for Influenza
- Consultative Council for Maternal Mortality
Consultative Council for Poliomyelitis
Consultative Council for Quarantinable Diseases
Fairfield Hospital Board
Hospitals and Charities Commission
Mental Hygiene Authority
Milk Pasteurisation Committee
National Fitness Council
Proprietary Medicines Advisory Committee
Superintendents Committee
Tuberculosis Advisory Committee
11. Industrial health—
Industrial Safety Advisory Council
12. Internal administrative services—
Police Discipline Board
Police Medical Board
Police Service Board
Police Superannuation Board
Public Service Board
Superannuation Board
Teachers Tribunal
Tender Board

Further references, 1969**History of State Government Departments**

A series of short, comprehensive histories of the State Government Departments has appeared in this part of previous editions of the *Victorian Year Book* since 1963. They have included the Chief Secretary's Department (1963), the Premier's Department (1964), the Crown Law Department (1965), the Treasury (1966), the Public Works Department (1967), the Department of Crown Lands and Survey (1968), the Education Department (1969), and the Mines Department (1970). The following article gives a brief history of the Department of Agriculture.

History of the Department of Agriculture

Some of the functions carried out by the present Department of Agriculture began in the earliest days of the Colony. Sheep suffered greatly from scab and catarrh, and numerous regulations for the prevention of scab spreading, and its care on established stations, were administered by inspectors employed by the Superintendent of Port Phillip. There was little cultivation in the early years and few experiments in agriculture until after separation from New South Wales.

The first official recognition of the part agriculture might play in Victoria was the establishment of a Board of Agriculture in 1859. It was a very large body, composed of members of Parliament and of agricultural societies, with Mr R. Brough Smyth as the first acting secretary. He was succeeded in 1860 by Mr J. M. Matson. Its main business was to distribute a Government grant among the societies, and to conduct an experimental farm at Royal Park. By 1869 Parliament was convinced that the Board was not useful, and thus withdrew its grant and abolished it.

The Government tried to introduce new agricultural industries, with only limited success, by the *Land Act* 1862. Large scale selection of land began

early in 1870, in many cases by men with limited knowledge of farming, and it became obvious that some Government assistance and regulation would be necessary. The Department of Crown Lands and Survey established a Department of Agriculture as a branch in 1872, with Mr A. R. Wallis, a well qualified agriculturist, as secretary. Mr J. J. Casey, Commissioner for Crown Lands and Survey, was also Minister for Agriculture. Its staff was small, and consisted mainly of stock and sheep inspectors, concerned with preventing the spread of disease and the eradication of sheep scab. The same year a Diseases in Stock Act was passed to prevent the spread of foot and mouth disease, and one year later outbreaks of phylloxera in Europe led to the Vine Diseases Act and under it the prohibition of imports of vine cuttings to Victoria, unfortunately too late to prevent the introduction of that destructive insect.

The scope of the two Acts was greatly extended by a series of later ones. Stock Diseases and Vegetation and Vine Disease Acts covered an ever-widening range of diseases, prescribing quarantine, prohibitions of import, slaughtering and destruction. This involved a much closer supervision of farming activities and in the case of cattle and pigs led to a series of Cattle and Swine Compensation Acts, which included the imposition of duties on sales to raise money for compensation to men whose stock was compulsorily destroyed. This supervision of diseased stock was extended to bees in 1910.

Administration of these Acts occupied most of the attention of the Department, but it did have an analyst who could investigate soil possibilities. Forestry, another branch of the Department of Crown Lands and Survey, came to be included with Agriculture, and lists of officers show that there were more dealing with forests than with agriculture.

In 1884 there was enough confidence in the future of agriculture to establish agricultural colleges. Nearly 13,000 acres of land were set aside for colleges, experimental farms, and for endowment in five separate sites. The two best-known were at Dookie (selected in 1875 and established in 1886) and Longerenong (established in 1889). These two colleges were under the direction of a Council of Agricultural Education. The Secretary for Agriculture was a member, with representatives of agricultural interests. A Viticultural College was established at Rutherglen in 1899 but the wine industry suffered so severely through the advent of phylloxera in the vineyards that the College was never used as such but became the Viticultural Station, conducting experimental work and producing vines on resistant rootstocks. The Burnley College of Horticulture was established by the Department in 1891.

About the late 1880s and early 1890s the Department employed a chemist, an entomologist who dealt with noxious insects, and experts in dairying, fruit growing, wine making, drying fruit, and growing perfume herbs. In 1890 the Department of Agriculture was removed from the administration of the Department of Crown Lands and Survey and was established as a department in its own right. Its new status was also seen in the number of Acts which it had to administer and the pattern behind them is clear. Many of them arose out of the research, experiments, and demonstrations which were carried out by the Department. It also showed interest in marketing by appointing a London superintendent of Victorian exports in 1895.

Among the Acts which it has administered or been associated with are the *Agricultural Colleges Act 1884*, *Veterinary Surgeons Act 1887*, *Adulteration of Seeds Act 1896*, *Artificial Manures Act 1897*, *Milk and Dairy Supervision Act 1905*, *Fruit Cases Act 1906*, *Chaff and Stock Food Act 1909*, *Sheep Dipping Act 1909*, *Fruit and Vegetables Packing and Sale Act 1913*, *Cool Stores for Fruit Act 1914*, *Fungicides Act 1916*, *Horse Breeding Act 1919*, *Dried Fruits Act 1924*, *Dairy Products Act 1933*, *Milk Board Act 1933*, *Grain Elevators Act 1934*, *Stock Medicines Act 1937*, *Cattle Breeding Act 1938*, *Western Metropolitan Market Act 1938*, *Margarine Act 1940*, *Victorian Inland Meat Authority Act 1942*, *Milk Pasteurization Act 1943*, *Vegetation Diseases (Fruit Fly) Act 1947*, *Barley Marketing Act 1948*, *Filled Milk Act 1958*, *Pesticides Act 1958*, *Stock (Artificial Breeding) Act 1962*, *Sheep Branding Fluids Act 1963*, *Tomato Processing Industry (Uniform Agreement) Act 1964*, *Poultry Levy (Collection Arrangement) Act 1965*, *Aerial Spraying Control Act 1966*, *Tobacco Leaf Industry Stabilisation Act 1966*, *Rain Making Control Act 1967*, *Melbourne Wholesale Fruit and Vegetable Market Act 1968*, *Poultry Processing Act 1968*, *Wheat Industry Stabilisation Act 1968*, *Agricultural Education Cadetships Act 1969*, *Imitation Milk Act 1969*, and *Wheat Marketing Act 1969*.

In every case, except for the more recent Acts, each has been frequently amended or replaced with later Acts, to keep them up to date with modern developments. They lay down standards of quality and composition, and appropriate regulations relating to labelling, inspection, requirements for registration, and provision for constant improvement.

The Milk and Dairy Supervision Act was the first step towards a close regulation of milk, butter and cheese production and marketing. By it the Department took over control of hygiene from local councils which had exercised that authority under the Health Acts. A series of later Acts led to licensing and supervision of all types of milk, butter and cheese producers, and ultimately of many retailers. In many cases administration of these Acts was carried out through some form of departmental committee or statutory authority.

Agricultural research developed steadily, particularly after Dr S. S. Cameron became Director in 1911. Experimental farms were set up at Werribee and Rutherglen in 1912; and a number of others at various later dates, dealing with particular forms of agriculture of interest to particular districts. The *Agricultural Education Act 1919* provided for a special grant to the University of Melbourne for the establishment of a separate Faculty of Agricultural Science, and this achieved its objective of providing a steady flow of well-trained scientists for research and extension in the Department. In 1919 a grant was made to the University of Melbourne for veterinary research which continued for many years. In the same year new courses were introduced at the agricultural colleges. In 1944 the Council of Agricultural Education was abolished and the Department took control of the Dookie and Longerenong Colleges, again increasing the scope of the courses. The latest college, at Glenormiston, opened in 1971.

The Department's first "full-time" Minister was Mr John Morrissey, appointed in 1900; but the position reverted to "part-time" in 1903 before permanently becoming "full-time" in 1915.

Some regulatory powers regarding marketing of primary produce,

particularly of stock, had existed from early times under some sections of the Auction Sales Act. They were made more specific by the Fruit Cases Act and the Fruit and Vegetable Packing and Sale Act, which regulated packing of fruit; were expanded considerably in 1920, when dealers in farm produce were required to take out licences; and increased greatly again in 1935, when the Marketing of Primary Products Act led to the establishment of several marketing boards.

A number of activities of a peripheral character also developed, such as the *Shearers' Hut Accommodation Act* 1911, which laid down minimum standards of accommodation for shearers and the *Sheep Owners Protection Act* 1935, regulating the carriage of sheep by motor vehicle and the buying of raw sheep skins. The administration of the latter Act was transferred to the Chief Secretary's Department in 1961.

The Department carries out experimental work in the field, either on its own land or on private properties, publishing the results and giving demonstrations to increase the efficiency of farmers. Research, extension, and inspection are carried out by six divisions—Animal Industry, Animal Health, Agriculture, Agricultural Chemistry, Horticulture, and Dairying. The Agricultural Education Division controls the colleges. The central administration has branches dealing with biology and publications and there is also a Government Cool Store.

Among the statutory bodies placed within the Department for administrative purposes are the Agricultural Colleges Advisory Committee, Consumers Committee, Filled Milk Advisory Committee, Fruit and Vegetable Marketing Advisory Committee, Imitation Milk Advisory Committee, Tobacco Quota Committee, Tobacco Quota Appeals Tribunal, Veterinary Board of Victoria, Western Metropolitan Market Trust, Wheat Quota Committee, Wheat Quota Review Committee, Stock Medicines Board, Victorian Dairy Products Board, Dairy Produce Board, Milk Pasteurization Committee, Milk Board, Victorian Inland Meat Authority, Victorian Dried Fruits Board, Grain Elevators Board, Australian Barley Board, and marketing boards for egg and egg pulp, onions, tobacco leaf, and chicory. It also administers in Victoria the Commonwealth Commerce and Quarantine Acts in so far as they relate to the export and import of plants and animals and their products.

3

DEMOGRAPHY

POPULATION

Historical

According to manuscript notes made by Captain Lonsdale, the first enumeration of the people was taken by an officer from Sydney on 25 May 1836, less than one year after the date of the arrival of John Batman (29 May 1835). This was the first official census in Victoria, which was at that time known as the District of Port Phillip, and it disclosed that the band of first arrivals consisted of 142 males and 35 females of European origin.

At the Census taken in 1838 it was ascertained that the number of inhabitants had increased to 3,511. By the Census of 1851 the population had reached 77,345.

The discovery of gold in 1851 gave considerable impetus to the growth of population in Victoria. The intercensal increase in the decade 1851 to 1861 was 461,283. This increase, on a base population of 77,345, is noteworthy when compared with an increase of 767,185 on a base population of 2,452,341 in the twelve years from 1954 to 1966.

The 1850s and the 1950s represented the two outstanding periods of gain from migration into Victoria. An extended period of emigration from Victoria, mainly to Western Australia following discoveries of gold, was experienced between 1892 and 1907. In each of the years 1896, 1902, and 1903, due to the net loss from migration exceeding the gain from natural increase, a fall in total population was recorded. Falls were also recorded in 1915 and 1916, but these reflected embarkations on overseas service, which were taken into account in population estimates during the First World War.

Following the Second World War, coinciding with the generally increased level of migration, natural increase maintained a higher level than during the great economic depression of the late 1920s and early 1930s, but did not attain the yet higher levels characteristic of the earlier years of settlement. In Victoria natural increase figures decreased each year from 1961 to 1966, but increased in 1967, 1968, and 1969.

The estimated population of Victoria at the end of 1969 was 3,420,142.

Census populations 1933 to 1966

The following table shows the census populations, excluding Aborigines, of Australian States from 1933 to 1966 :

AUSTRALIA—CENSUS POPULATIONS OF STATES AND TERRITORIES

State or Territory	Population at Census of—				
	1933	1947	1954	1961	1966
New South Wales	2,600,847	2,984,838	3,423,529	3,917,013	4,233,822
Victoria	1,820,261	2,054,701	2,452,341	2,930,113	3,219,526
Queensland	947,534	1,106,415	1,318,259	1,518,828	1,663,685
South Australia	580,949	646,073	797,094	969,340	1,091,875
Western Australia	438,852	502,480	639,771	736,629	836,673
Tasmania	227,599	257,078	308,752	350,340	371,435
Northern Territory	4,850	10,868	16,469	27,095	37,433
Australian Capital Territory	8,947	16,905	30,315	58,828	96,013
Australia	6,629,839	7,579,358	8,986,530	10,508,186	11,550,462

Details of the average annual rate of increase of population in each State and Territory and in Australia during intercensal periods from 1933 to 1966 are given below:

AUSTRALIA—AVERAGE ANNUAL RATE OF INCREASE OF POPULATION DURING INTERCENSAL PERIODS

(Per cent)

State or Territory	Intercensal period			
	1933-1947	1947-1954	1954-1961	1961-1966
New South Wales	0.99	1.98	1.94	1.57
Victoria	0.87	2.56	2.58	1.90
Queensland	1.11	2.53	2.04	1.84
South Australia	0.76	3.05	2.83	2.41
Western Australia	0.97	3.51	2.03	2.58
Tasmania	0.87	2.65	1.82	1.18
Northern Territory	5.93	6.12	7.37	6.68
Australian Capital Territory	4.65	8.70	9.94	10.29
Australia	0.96	2.46	2.26	1.91

Numbers and rates of natural increase, i.e., excess of births over deaths in each State and Territory, between 1931 and 1969 are given in the following tables :

AUSTRALIA—NATURAL INCREASE

Period	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
ANNUAL AVERAGES									
1931-1940 (a)	22,159	10,811	9,880	3,716	4,396	2,438	32	138	53,570
1941-1950 (a)	34,041	21,292	15,681	8,003	7,006	3,768	131	472	90,394
1951-1960	43,607	33,948	20,980	11,554	10,930	5,523	468	946	127,956
ANNUAL TOTALS									
1965	39,120	35,519	19,437	12,103	9,912	4,492	753	1,803	123,139
1966	37,212	35,335	17,982	10,996	10,235	4,242	818	1,877	118,697
1967	39,228	37,112	19,956	11,315	11,244	4,319	1,394	2,025	126,593
1968	39,893	40,261	19,112	11,291	12,073	5,033	1,541	2,155	131,359
1969	45,371	42,059	20,790	12,640	13,404	5,136	1,789	2,491	143,680

(a) For the period September 1939 to June 1947, natural increase was calculated as the excess of births over civilian deaths.

AUSTRALIA—NATURAL INCREASE PER 1,000 OF THE MEAN POPULATION

Period	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
ANNUAL AVERAGES									
1931-1940 (a)	8.32	5.87	10.14	6.33	9.74	10.50	5.73	(b)13.18	7.92
1941-1950 (a)	11.53	10.45	14.35	12.50	14.02	14.83	11.86	(b)28.03	12.04
1951-1960	12.32	13.20	15.55	13.81	16.50	17.23	26.49	(b)26.63	13.71
ANNUAL TOTALS (c)									
1965	9.37	11.22	11.90	11.38	12.16	12.21	21.29	20.40	10.86
1966	8.78	10.97	10.81	10.07	12.22	11.41	21.78	19.45	10.27
1967	9.10	11.32	11.72	10.18	12.82	11.47	23.36	19.52	10.71
1968	9.09	12.10	11.02	10.03	13.27	13.17	23.97	19.11	10.91
1969	10.13	12.42	11.75	10.88	14.15	13.22	26.23	20.38	11.67

(a) For the period September 1939 to June 1947 natural increase was calculated as the excess of births over civilian deaths.

(b) Rates affected by special local features.

(c) Rates from 1966 onwards are subject to revision.

The growth which has taken place in Victoria since the 1930s is evidenced by the fact that during the 33 years from 1933 to 1966 the increase in population was 1,399,265 compared with an increase of 619,191 over the period of 32 years from 1901 to 1933, representing a percentage increase of 76.87 per cent and 51.55 per cent on the respective base populations.

Between 1947 and 1966 Victoria's population increased by 1,164,825. Of this increase 501,998 (43.1 per cent) were born overseas, mainly in the United Kingdom and the Republic of Ireland, Italy, Greece, Malta, Germany, and the Netherlands. In 1966, 32 per cent of Australia's overseas born population lived in Victoria and 21 per cent of the State's population was overseas born.

The population of Victoria at each Census from 1901 to 1966, and the numerical and percentage increase during each intercensal period, are shown in the following table:

VICTORIA—POPULATION

Year of Census	Persons			Males			Females		
	Population	Intercensal increase		Population	Intercensal increase		Population	Intercensal increase	
		Numerical	Percentage		Numerical	Percentage		Numerical	Percentage
1901	1,201,070	(a)60,982	(a)5·35	603,720	(a)5,498	(a)0·92	597,350	(a)55,484	(a)10·24
1911	1,315,551	114,481	9·53	655,591	51,871	8·59	659,960	62,610	10·48
1921	1,531,280	215,729	16·40	754,724	99,133	15·12	776,556	116,596	17·67
1933	1,820,261	288,981	18·87	903,244	148,520	19·68	917,017	140,461	18·09
1947	2,054,701	234,440	12·88	1,013,867	110,623	12·25	1,040,834	123,817	13·50
1954	2,452,341	397,640	19·35	1,231,099	217,232	21·43	1,221,242	180,408	17·33
1961	2,930,113	477,772	19·48	1,474,395	243,296	19·76	1,455,718	234,476	19·20
1966	3,219,526	289,413	9·88	1,613,904	139,509	9·46	1,605,622	149,904	10·30

(a) Since 1891.

The populations of Australian capital cities at each Census, 1933 to 1966, are shown in the following table :

AUSTRALIA—POPULATIONS OF CAPITAL CITIES (a)

Metropolitan Area	Population at Census of—				
	1933	1947	1954	1961	1966
Sydney	1,235,267	1,484,004	1,863,161	2,197,022	2,446,345
Melbourne	991,934	1,226,409	1,524,111	1,858,534	2,110,168
Brisbane	299,748	402,030	502,320	587,634	718,822
Adelaide	312,619	382,454	483,508	580,449	727,916
Perth	207,440	272,528	348,647	423,930	499,969
Hobart	60,406	76,534	95,206	110,217	119,469
Canberra	7,325	15,156	28,277	55,746	92,308
Total	3,114,739	3,859,115	4,845,230	5,813,532	6,714,997
Percentage of Australia	47	51	54	55	58

(a) Some of the apparent increase in the percentage of total population living in capital cities is due to periodic revision and extension of Metropolitan boundaries ; in particular the 1966 Census figures have been based on the "Linge Concepts" explained on page 120. Figures for 1961 in the above table have been revised in accordance with these concepts.

Sydney has been the most populous city in Australia since 1902. However, the absolute increase in population in Melbourne over the period 1954 to 1966 has slightly exceeded the increase in Sydney over the same period.

An analysis of intercensal increases in the population of Victoria between 1933 and 1966 is made in the following table :

VICTORIA—ANALYSIS OF INTERCENSAL INCREASES IN POPULATION

Intercensal period	Population at end of period	Total increase	Natural increase	Net migration (a)
1933 to 1947	2,054,701	234,440	192,260	42,180
1947 to 1954	2,452,341	397,640	192,741	204,899
1954 to 1961	2,930,113	477,772	256,420	221,352
1961 to 1966	3,219,526	289,413	189,372	100,041

(a) Net intercensal gain after deducting natural increase from total increase.

For purposes of the 1966 Census (see page 120), the Melbourne Statistical Division and Melbourne Metropolitan Area, previously conterminous, became separate entities. The boundary of the Melbourne Metropolitan Area, located within the long term Melbourne Statistical Division, shows the limits of urban development about the capital city at Census dates. Simultaneously with the defining of the Melbourne Statistical Division the former Central Statistical Division became reduced and divided, and the two parts were named the West Central Statistical Division and East Central Statistical Division, respectively. The boundaries of these new Statistical Divisions are shown in a map of Victoria to be found in the pocket inside the back cover of this *Victorian Year Book*.

VICTORIA—POPULATION IN STATISTICAL DIVISIONS

Statistical Division	Census (a)				
	1933	1947	1954	1961	1966
Melbourne	1,094,269	1,341,382	1,589,185	1,984,815	2,230,580
West Central	76,345	82,739	107,163	129,843	147,684
North Central	58,860	54,780	67,657	63,085	64,124
Western	158,374	159,368	180,051	198,022	203,350
Wimmera	61,131	54,171	57,686	58,799	59,989
Mallee	63,404	52,770	58,070	62,952	64,967
Northern	128,766	121,674	139,977	156,364	167,280
North Eastern	59,736	60,160	78,770	86,406	86,711
Gippsland	83,905	91,400	128,531	149,051	155,556
East Central	33,893	32,406	37,210	36,167	36,297
Migratory	1,578	3,851	8,041	4,609	2,988
Total	1,820,261	2,054,701	2,452,341	2,930,113	3,219,526

(a) Figures from 1933 to 1961 have been adjusted to show population in Statistical Divisions as defined for the Census 30 June 1966. Figures for Melbourne and East Central Statistical Divisions for 1933, 1947, and 1954 have been estimated.

VICTORIA—COMPONENTS OF INTERCENSAL CHANGES IN POPULATIONS OF STATISTICAL DIVISIONS, CENSUSES 1954 TO 1966

Statistical Division	Population at Census 1954	1954-1961		Population at Census 1961	1961-1966		Population at Census 1966
		Natural increase	Net migration (a)		Natural increase	Net migration (a)	
Melbourne	1,589,185	(b)167,209	(b)250,058	1,984,815	122,554	123,211	2,230,580
West Central	107,163	(c)	(c)	129,843	9,022	8,819	147,684
North Central	67,657	5,587	— 10,159	63,085	3,215	— 2,176	64,124
Western	180,051	20,738	— 2,767	198,022	12,537	— 7,209	203,350
Wimmera	57,686	6,388	— 5,275	58,799	3,892	— 2,702	59,989
Mallee	58,070	10,044	— 5,162	62,952	6,460	— 4,445	64,967
Northern	139,977	17,680	— 1,293	156,364	12,011	— 1,095	167,280
North Eastern	78,770	8,290	— 654	86,406	5,189	— 4,884	86,711
Gippsland	128,531	20,484	36	149,051	12,323	— 5,818	155,556
East Central	37,210	(c)	(c)	36,167	2,169	— 2,039	36,297
Migratory	8,041	..	— 3,432	4,609	..	— 1,621	2,988
Total	2,452,341	256,420	221,352	2,930,113	189,372	100,041	3,219,526

NOTE. In the above table, populations of statistical divisions in 1954 and 1961 have been adjusted to conform with boundaries as defined at the 1966 Census. Figures shown for natural increase in the Melbourne, West Central, and East Central Statistical Divisions have been estimated. As changes affecting the North Central and Northern Statistical Divisions had only a slight effect on population, figures of components of increase for these divisions have been shown without adjustment.

Minus (—) sign denotes decrease.

(a) Total increase less natural increase.

(b) Figures for Melbourne, West Central, and East Central Statistical Divisions. Separate figures not available.

(c) See note to Melbourne Statistical Division.

In the above table "net migration" is considered to be the net intercensal gain or loss of population after deducting natural increase.

Population of the Melbourne Statistical Division and remainder of the State

The figures in the following table have been re-calculated on the basis of the boundary of the Melbourne Statistical Division as determined at the 1966 Census. The table shows that as early as the 1921 Census the population of the Melbourne Statistical Division exceeded that of the rest of the State.

VICTORIA—POPULATION OF VICTORIA, MELBOURNE STATISTICAL DIVISION, AND REMAINDER OF THE STATE

Census year	Victoria	Melbourne Statistical Division (a)		Remainder of State	
		Number	Percentage of Victoria	Number	Percentage of Victoria
1901	1,201,070	535,008	44.54	666,062	55.46
1911	1,315,551	643,027	48.88	672,524	51.12
1921	1,531,280	863,692	56.40	667,588	43.60
1933	1,820,261	1,094,269	60.12	725,992	39.88
1947	2,054,701	1,341,382	65.28	713,319	34.72
1954	2,452,341	1,589,185	64.80	863,156	35.20
1961	2,930,113	1,984,815	67.74	945,298	32.26
1966	3,219,526	2,230,580	69.28	988,946	30.72

(a) Area as defined for Census, 30 June 1966.

Ages of the population

VICTORIA—AGES (a) OF THE POPULATION: PERCENTAGE INTERCENSAL INCREASES, 1947 TO 1966

Age group (years)	Population at Census				Percentage increase		
	1947	1954	1961	1966	1947-1954	1954-1961	1961-1966
0-4	197,239	258,335	307,532	320,581	30.98	19.04	4.24
5-9	154,111	238,857	288,770	320,587	54.99	20.90	11.02
10-14	135,393	180,807	277,854	298,725	33.54	53.67	7.51
15-19	151,994	153,721	219,365	289,716	1.14	42.70	32.07
20-24	165,883	160,930	195,076	237,896	-2.99	21.22	21.95
25-29	159,483	194,470	186,724	209,731	21.94	-3.98	12.32
30-34	160,325	195,595	209,542	194,382	22.00	7.13	-7.24
35-39	151,734	173,694	217,856	216,297	14.47	25.43	-0.72
40-44	139,302	172,584	187,624	217,853	23.89	8.71	16.11
45-49	133,002	152,358	181,826	186,125	14.55	19.34	2.36
50-54	122,875	137,512	158,846	176,845	11.91	15.51	11.33
55-59	112,040	114,856	131,730	150,817	2.51	14.69	14.49
60-64	89,379	108,442	115,027	122,989	21.33	6.07	6.92
65-69	68,608	83,158	95,755	100,326	21.21	15.15	4.77
70-74	49,523	58,227	73,610	78,660	17.58	26.42	6.86
75-79	35,129	36,970	45,364	54,474	5.24	22.70	20.08
80-84	19,569	20,454	24,232	28,078	4.52	18.47	15.87
85-89	7,397	8,733	10,080	11,546	18.06	15.42	14.54
90-94	1,505	2,346	2,809	3,269	55.88	19.74	16.38
95-99	199	276	451	582	38.69	63.41	29.05
100 and over	11	16	40	47	45.45	150.00	17.50
Total	2,054,701	2,452,341	2,930,113	3,219,526	19.35	19.48	9.88
Under 21	670,448	861,456	1,133,379	1,280,838	28.49	31.57	13.01
21-64	1,202,312	1,380,705	1,544,393	1,661,706	14.84	11.86	7.60
65 and over	181,941	210,180	252,341	276,982	15.52	20.06	9.76

(a) Recorded ages, adjusted by distribution of unspecified ages. Minus sign (-) denotes decrease.

The age distribution of the population has shown considerable change between 1933 and 1966. Most notable is the growth of the under 21 years group.

VICTORIA—PROPORTIONS OF POPULATION IN AGE GROUPS (a)
(Per cent)

Age last birthday (years)	Census				
	1933	1947	1954	1961	1966
0-4	7.94	9.60	10.53	10.50	9.96
5-9	9.01	7.50	9.74	9.85	9.96
10-14	8.99	6.59	7.37	9.48	9.28
15-19	8.85	7.40	6.27	7.49	9.00
20-24	8.53	8.07	6.56	6.66	7.39
25-29	8.01	7.76	7.93	6.37	6.51
30-34	7.58	7.80	7.98	7.15	6.04
35-39	7.29	7.39	7.08	7.43	6.72
40-44	7.05	6.78	7.04	6.40	6.77
45-49	6.08	6.47	6.21	6.20	5.78
50-54	5.08	5.98	5.61	5.42	5.49
55-59	4.15	5.45	4.68	4.50	4.68
60-64	3.88	4.35	4.42	3.93	3.82
65-69	3.29	3.34	3.39	3.27	3.12
70-74	2.35	2.41	2.38	2.51	2.44
75-79	1.23	1.71	1.51	1.55	1.69
80-84	0.46	0.95	0.83	0.83	0.87
85-89	0.18	0.36	0.36	0.34	0.36
90 and over	0.05	0.09	0.11	0.12	0.12
All ages	100.00	100.00	100.00	100.00	100.00
Under 21	36.57	32.63	35.13	38.68	39.79
21-64	55.87	58.57	56.30	52.71	51.61
65 and over	7.56	8.80	8.57	8.61	8.60

(a) Recorded ages adjusted by distribution of unspecified ages.

VICTORIA—MASCULINITY (a) OF POPULATION IN AGE GROUPS (b)

Age last birthday (years)	1933	1947	1954	1961	1966
0-4	104.11	104.59	104.78	105.02	105.11
5-9	104.32	104.07	104.76	105.43	105.02
10-14	103.59	103.13	104.00	104.70	105.30
15-19	101.66	101.93	105.11	105.38	104.31
20-24	100.97	98.04	108.47	106.81	102.55
25-29	103.75	97.47	108.93	108.48	105.65
30-34	101.93	97.11	105.66	110.07	107.07
35-39	92.44	100.75	102.26	105.67	108.37
40-44	94.34	105.25	105.37	102.83	104.26
45-49	96.03	99.81	107.60	103.42	102.15
50-54	95.49	92.13	102.83	104.90	100.88
55-59	92.26	93.81	92.01	102.96	102.16
60-64	88.53	89.07	85.99	88.45	96.54
65-69	92.07	84.45	83.43	77.79	80.03
70-74	90.60	77.44	75.41	73.81	68.62
75-79	87.39	75.56	68.96	66.56	63.31
80-84	72.66	72.51	62.29	58.24	54.66
85-89	62.61	64.41	59.77	51.28	46.45
90-94	57.20	56.93	50.10	47.76	39.88
95-99	39.13	50.76	35.29	37.50	33.79
100 and over	33.33	10.00	33.33	25.00	17.50
All ages	98.50	97.41	100.81	101.28	100.52

(a) Number of males per 100 females.

(b) Recorded ages adjusted by distribution of unspecified ages.

Census 1966
VICTORIA—AGE DISTRIBUTION OF THE POPULATION

Age last birthday (years)	Census 1961			Census 1966			Increase in persons 1961 to 1966
	Males	Females	Persons	Males	Females	Persons	
0-4	157,534	149,998	307,532	164,283	156,298	320,581	13,049
5-9	148,199	140,571	288,770	164,216	156,371	320,587	31,817
10-14	142,119	135,735	277,854	153,220	145,505	298,725	20,871
15-19	112,556	106,809	219,365	147,914	141,802	289,716	70,351
20-24	100,750	94,326	195,076	120,447	117,449	237,896	42,820
25-29	97,160	89,564	186,724	107,745	101,986	209,731	23,007
30-34	109,792	99,750	209,542	100,508	93,874	194,382	— 15,160
35-39	111,929	105,927	217,856	112,493	103,804	216,297	— 1,559
40-44	95,120	92,504	187,624	111,196	106,657	217,853	30,229
45-49	92,443	89,383	181,826	94,051	92,074	186,125	4,299
50-54	81,322	77,524	158,846	88,808	88,037	176,845	17,999
55-59	66,826	64,904	131,730	76,214	74,603	150,817	19,087
60-64	53,988	61,039	115,027	60,411	62,578	122,989	7,962
65-69	41,897	53,858	95,755	44,600	55,726	100,326	4,571
70-74	31,258	42,352	73,610	32,010	46,650	78,660	5,050
75-79	18,127	27,237	45,364	21,117	33,357	54,474	9,110
80-84	8,919	15,313	24,232	9,923	18,155	28,078	3,846
85-89	3,417	6,663	10,080	3,662	7,884	11,546	1,466
90-94	908	1,901	2,809	932	2,337	3,269	460
95-99	123	328	451	147	435	582	131
100 and over	8	32	40	7	40	47	7
Total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526	289,413
Under 21	581,042	552,337	1,133,379	655,694	625,144	1,280,838	147,459
21-64	788,696	755,697	1,544,393	845,812	815,894	1,661,706	117,313
65 and over	104,657	147,684	252,341	112,398	164,584	276,982	24,641
Total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526	289,413

NOTE. Minus sign (—) denotes decrease.

VICTORIA—NATIONALITY OF THE POPULATION

Nationality	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
British (a)—						
Born in Australia	1,161,006	1,199,417	2,360,423	1,249,368	1,289,560	2,538,928
Born outside Australia	198,484	165,744	364,228	255,273	219,718	474,991
Total British	1,359,490	1,365,161	2,724,651	1,504,641	1,509,278	3,013,919
Foreign—						
Austrian	3,000	2,069	5,069	1,941	1,438	3,379
Dutch	15,091	12,540	27,631	8,655	7,394	16,049
German	13,448	10,456	23,904	8,529	6,903	15,432
Greek	14,705	13,449	28,154	26,104	27,337	53,441
Hungarian	3,120	2,317	5,437	1,230	949	2,179
Italian	37,507	30,821	68,328	37,499	34,030	71,529
Polish	4,538	3,629	8,167	2,838	2,414	5,252
Russian(b)	1,448	1,215	2,663	1,102	922	2,024
Spanish	490	300	790	1,536	1,269	2,805
U.S. American	1,427	976	2,403	1,790	1,265	3,055
Yugoslav	6,570	3,823	10,393	8,029	5,678	13,707
Other (including stateless)	13,561	8,962	22,523	10,010	6,745	16,755
Total foreign	114,905	90,557	205,462	109,263	96,344	205,607
Grand total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

(a) All persons of individual citizenship status who by virtue of the *Nationality and Citizenship Act 1948* are deemed to be British subjects. For purposes of this table Irish nationality is included with British.
(b) Includes Ukrainian.

VICTORIA—BIRTHPLACE OF THE POPULATION

Birthplace	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
Australia	1,161,006	1,199,417	2,360,423	1,249,368	1,289,560	2,538,928
New Zealand	5,624	5,852	11,476	5,738	5,945	11,683
Europe—						
United Kingdom and Republic of Ireland	108,693	97,676	206,369	124,415	114,991	239,406
Germany	20,723	18,568	39,291	18,982	18,288	37,270
Greece	17,246	14,517	31,763	32,884	31,391	64,275
Italy	52,110	38,965	91,075	61,091	50,128	111,219
Malta	10,216	7,628	17,844	14,804	11,648	26,452
Netherlands	20,201	16,083	36,284	19,092	15,554	34,646
Poland	13,807	9,988	23,795	13,986	10,711	24,697
Yugoslavia	10,867	6,351	17,218	14,574	10,060	24,634
Other	32,037	23,950	55,987	31,082	24,496	55,578
Total Europe	285,900	233,726	519,626	330,910	287,267	618,177
Other birthplaces	21,865	16,723	38,588	27,888	22,850	50,738
Grand total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

VICTORIA—PERIOD OF RESIDENCE IN AUSTRALIA OF PERSONS WHO WERE BORN OUTSIDE AUSTRALIA

Number of completed years of residence	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
Under 1	24,855	17,313	42,168	24,474	21,213	45,687
1	16,376	13,499	29,875	20,061	17,973	38,034
2	16,279	15,451	31,730	19,153	17,784	36,937
3	13,428	15,442	28,870	15,352	14,184	29,536
4	15,079	15,672	30,751	11,349	12,884	24,233
Under 5	86,017	77,377	163,394	90,389	84,038	174,427
5 and under 12	221,386	173,906	395,292	104,277	96,881	201,158
12 and over				161,959	128,470	290,429
Not stated	5,986	5,018	11,004	7,911	6,673	14,584
Born outside Australia	313,389	256,301	569,690	364,536	316,062	680,598
Born in Australia	1,161,006	1,199,417	2,360,423	1,249,368	1,289,560	2,538,928
Total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

VICTORIA—MARITAL STATUS OF POPULATION

Marital status	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
Never married—						
Under fifteen years of age	447,852	426,304	874,156	481,719	458,174	939,893
Fifteen years of age and over	303,290	222,756	526,046	344,297	260,301	604,598
Total never married	751,142	649,060	1,400,202	826,016	718,475	1,544,491
Married	664,992	660,473	1,325,465	725,320	722,266	1,447,586
Married but permanently separated	18,302	21,927	40,229	19,938	24,134	44,072
Widowed	31,497	113,940	145,437	32,875	128,311	161,186
Divorced	8,462	10,318	18,780	9,755	12,436	22,191
Total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

VICTORIA—RELIGION OF THE POPULATION

Religion	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
Christian—						
Baptist	18,225	20,402	38,627	19,469	21,950	41,419
Brethren	1,558	1,799	3,357	1,605	1,741	3,346
Catholic, Roman(a)	134,536	116,287	250,823	134,108	119,839	253,947
Catholic(a)	254,236	257,676	511,912	314,704	320,844	635,548
Churches of Christ	17,883	20,056	37,939	18,560	20,703	39,263
Church of England	443,023	450,136	893,159	455,772	467,306	923,078
Congregational	5,552	6,552	12,104	5,394	6,426	11,820
Lutheran	18,267	17,101	35,368	19,052	18,585	37,637
Methodist	134,040	141,165	275,205	135,296	144,004	279,300
Orthodox	29,759	25,064	54,823	52,279	48,108	100,387
Presbyterian	179,466	187,880	367,346	188,067	199,041	387,108
Protestant, undefined	20,348	19,592	39,940	22,046	22,410	44,456
Salvation Army	6,323	7,274	13,597	6,954	7,796	14,750
Seventh-day Adventist	2,560	3,161	5,721	3,220	3,929	7,149
Other	11,858	13,032	24,890	16,554	17,339	33,893
Total Christian	1,277,634	1,287,177	2,564,811	1,393,080	1,420,021	2,813,101
Non-Christian—						
Hebrew	14,993	14,939	29,932	15,456	15,602	31,058
Other	1,962	911	2,873	2,699	1,491	4,190
Total non-Christian	16,955	15,850	32,805	18,155	17,093	35,248
Indefinite	3,637	3,014	6,651	5,078	4,400	9,478
No religion	7,081	3,715	10,796	17,569	10,396	27,965
No reply	169,088	145,962	315,050	180,022	153,712	333,734
Grand total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

(a) So described on individual census schedules.

VICTORIA—INDUSTRY OF THE POPULATION

Industry group	Census 1966			Percentage of work force		
	Males	Females	Persons	Males	Females	Persons
Primary production	92,791	19,179	111,970	9.76	4.49	8.13
Mining and quarrying	4,799	400	5,199	0.51	0.09	0.38
Manufacturing	311,680	126,810	438,490	32.80	29.71	31.84
Electricity, gas, water and sanitary services (production, supply, and maintenance)	31,416	2,383	33,799	3.30	0.56	2.45
Building and construction	104,783	4,093	108,876	11.03	0.96	7.91
Transport and storage and communication	86,104	13,077	99,181	9.06	3.06	7.20
Finance and property	30,219	20,520	50,739	3.18	4.81	3.68
Commerce	135,139	81,352	216,491	14.22	19.06	15.72
Public authority (n.e.i.) and defence services	41,964	11,254	53,218	4.42	2.64	3.87
Community and business services (incl. professional) (a)	65,087	88,322	153,409	6.85	20.69	11.14
Amusements, hotels and other accommodation, cafes, personal service, etc.	34,444	46,077	80,521	3.62	10.80	5.85
Other industries and industry inadequately described or not stated	11,801	13,354	25,155	1.25	3.13	1.83
Total in work force	950,227	426,821	1,377,048	100.00	100.00	100.00
Persons not in work force	663,677	1,178,801	1,842,478	..	..	..
Grand total	1,613,904	1,605,622	3,219,526	..	..	..

(a) Includes police, fire brigades, hospitals, medical and dental services, education, and business services such as consultant engineering and surveying, accountancy and auditing, industrial and trade associations, advertising, etc.

The preceding table showed the industries in which persons were engaged at the time of the Census. Population has also been classified according to the actual occupation carried on by each person, and in the following table the numbers in broad groups of these occupations are shown :

VICTORIA—OCCUPATIONS OF THE POPULATION IN MAJOR GROUPS

Occupation group	Census 1966			Percentage of work force		
	Males	Females	Persons	Males	Females	Persons
Professional, technical, and related workers	76,622	54,301	130,923	8·06	12·72	9·51
Administrative, executive and managerial workers	79,074	10,584	89,658	8·32	2·48	6·51
Clerical workers	80,828	122,898	203,726	8·51	28·79	14·80
Sales workers	57,441	48,045	105,486	6·04	11·26	7·66
Farmers, fishermen, hunters, timber getters, and related workers	98,112	18,728	116,840	10·33	4·38	8·49
Miners, quarrymen, and related workers	2,376	2	2,378	0·25	0·01	0·17
Workers in transport and communication operations	66,693	9,352	76,045	7·02	2·19	5·52
Craftsmen, production process workers and labourers (not elsewhere classified)	428,287	93,502	521,789	45·07	21·90	37·89
Service, sport and recreation workers	38,505	57,103	95,608	4·05	13·38	6·94
Members of armed forces, enlisted personnel	14,530	725	15,255	1·53	0·17	1·11
Occupation inadequately described or not stated	7,759	11,581	19,340	0·82	2·72	1·40
Total persons in the work force	950,227	426,821	1,377,048	100·00	100·00	100·00
Persons not in the work force	663,677	1,178,801	1,842,478	..	..	..
Grand total	1,613,904	1,605,622	3,219,526	..	..	..

VICTORIA—OCCUPATIONAL STATUS OF THE POPULATION

Occupational status	Census 1966			Percentage of Population		
	Males	Females	Persons	Males	Females	Persons
IN WORK FORCE—						
Employed—						
Employer	67,236	16,747	83,983	4·16	1·04	2·61
Self-employed	92,302	20,008	112,310	5·72	1·25	3·49
Employee	777,217	374,625	1,151,842	48·16	23·33	35·77
Helper (not on wage or salary)	3,333	8,191	11,524	0·21	0·51	0·36
Total employed	940,088	419,571	1,359,659	58·25	26·13	42·23
Unemployed(a)	10,139	7,250	17,389	0·63	0·45	0·54
Total in work force	950,227	426,821	1,377,048	58·88	26·58	42·77
NOT IN WORK FORCE—						
Child not attending school	167,858	159,767	327,625	10·40	9·95	10·17
Full-time student or child attending school	376,213	345,855	722,068	23·31	21·54	22·43
Independent means, including "Retired" (so described)	14,602	17,544	32,146	0·91	1·09	1·00
Home duties		508,249	508,249		31·66	15·79
Pensioner or annuitant	72,213	117,975	190,188	4·47	7·35	5·91
Inmate of institution	10,402	11,867	22,269	0·64	0·74	0·69
Other	22,389	17,544	39,933	1·39	1·09	1·24
Total not in work force	663,677	1,178,801	1,842,478	41·12	73·42	57·23
Grand total	1,613,904	1,605,622	3,219,526	100·00	100·00	100·00

(a) At the 1966 Census this category was restricted to persons actively looking for work, i.e., (1) registered with Commonwealth Employment Service or (2) approaching prospective employers or (3) placing or answering advertisements or (4) writing letters of application or (5) awaiting the result of recent applications.

VICTORIA—POPULATION BY EDUCATIONAL ATTAINMENT, CENSUS 1966

Highest level of education attained	Census 1966			Percentage of population		
	Males	Females	Persons	Males	Females	Persons
Tertiary—						
University	25,385	8,467	33,852	1·57	0·53	1·05
Other tertiary qualifications	40,149	29,031	69,180	2·49	1·81	2·15
Secondary—						
Passed Leaving or Matriculation	147,237	129,937	277,174	9·12	8·09	8·61
Passed Intermediate	208,282	208,183	416,465	12·91	12·96	12·94
Attended secondary school(a)	394,502	381,174	775,676	24·44	23·74	24·09
Primary—						
Attended primary school(b)	588,593	643,663	1,232,256	36·47	40·09	38·27
No schooling	176,230	169,419	345,649	10·92	10·55	10·74
No reply	33,526	35,748	69,274	2·08	2·23	2·15
Total	1,613,904	1,605,622	3,219,526	100·00	100·00	100·00

(a) Passed no examination at Intermediate level or above.

(b) Or passed final primary examinations.

Delimitation of urban boundaries

The concepts applied to the 1966 Census in delimiting urban boundaries were adopted by the Statisticians Conference in August 1965 and follow closely a set of recommendations made by Dr G. J. R. Linge of the Australian National University after a study of methods used in other countries.

For the purpose of presenting population and dwelling statistics obtained at the Census of 30 June 1966 the new concepts have been used for the delimitation of the boundaries of the Melbourne Metropolitan Area and certain other urban centres.

Around each capital city and each town with a population of 75,000 or more *two* boundaries have been drawn.

The *Outer* boundary, which is fixed, circumscribes the area in close economic and social contact with the main city or town. These areas are designated Statistical Divisions or Statistical Districts. Thus in Victoria there is the Melbourne Statistical Division and the Geelong Statistical District.

The *Inner* boundary indicates the area within which, at the time of the census, there was a density of at least 500 persons per square mile. This density is determined for each Census Collector's District (the smallest geographical area available). From census to census, as urbanisation proceeds, this inner boundary will move outwards to encompass peripheral development. Some specified areas of lower density (e.g., industrial areas) are classified as urban on other grounds.

The principal urban centre within the Melbourne Statistical Division has been designated the Melbourne Metropolitan Area. Outside the Melbourne Metropolitan Area population clusters of 1,000 or more persons, having a minimum density of 500 persons per square mile, have been designated urban centres. Because of practical difficulties the new criteria have at present been uniformly applied only to urban centres within the Melbourne Statistical Division, to the Geelong Statistical District, to urban centres in Victoria with a population of 30,000 or more, and to the Moe-Yallourn Urban Centre. It is proposed to extend the application of the new criteria to smaller centres in future censuses.

The results of the 1966 Census showed Victoria's population had increased 56·7 per cent since 1947, to reach 3,219,526, which is 28 per cent of the Australian population.

Victoria's density of 37 persons per square mile is considerably higher than the Australian average of 3·9 persons per square mile. However, the population is unevenly distributed throughout the State, as is shown by the table below :

VICTORIA—PERCENTAGE OF AREA IN STATISTICAL DIVISIONS AND POPULATION IN STATISTICAL DIVISIONS, CENSUS 30 JUNE 1966

Statistical Division	Per cent area of State	Males	Females	Persons	Per cent population of State
Melbourne	2·80	1,108,020	1,122,560	2,230,580	69·28
West Central	2·71	74,813	72,871	147,684	4·59
North Central	5·28	33,303	30,821	64,124	1·99
Western	16·28	102,091	101,259	203,350	6·32
Wimmera	13·89	30,342	29,647	59,989	1·86
Mallee	16·35	33,447	31,520	64,967	2·02
Northern	11·58	84,553	82,727	167,280	5·20
North Eastern	13·90	45,252	41,459	86,711	2·69
Gippsland	15·24	80,935	74,621	155,556	4·83
East Central	1·97	18,629	17,668	36,297	1·13
Migratory	..	2,519	469	2,988	0·09
Total	100·00	1,613,904	1,605,622	3,219,526	100·00

The concentration of population in the urban areas of the State is shown in the following table :

VICTORIA—PERCENTAGE OF POPULATION AND MASCULINITY IN METROPOLITAN, URBAN, AND RURAL AREAS (a)

Area(a)	Percentage of population				Masculinity(b)
	Census 1961	Census 1966			Census 1966
	Persons	Males	Females	Persons	
Urban— Metropolitan	63·42	64·81	66·28	65·54	98·28
Other	19·80	19·82	20·12	19·97	99·00
Rural	16·62	15·22	13·57	14·40	112·76
Migratory	0·16	0·15	0·03	0·09	535·96
Total	100·00	100·00	100·00	100·00	100·52

(a) Metropolitan, urban, and rural in this table are determined on the basis of the "Linge Concepts" explained under the heading *Delimitation of urban boundaries* on page 120.

(b) Number of males per 100 females.

The proportion of the population of the State in rural areas has again declined between the Censuses of 1961 and 1966.

Populations in local government areas in Victoria at the Census 1966 and as estimated at 30 June 1969 appear in the table on pages 127 to 132.

Urban centres

The concepts applied in delimiting urban boundaries have been referred to on page 120. Urban centres outside the Melbourne Metropolitan Area account for 20 per cent of the State's population. Geelong is the largest of these with a population of 105,059, followed by Ballarat (56,290), Bendigo (42,208), and Moe-Yallourn (23,198).

Urban centres with a population between 10,000 and 20,000 include Shepparton (17,506), Warrnambool (17,499), Morwell (16,610), Wangaratta (15,175), Traralgon (14,079), Mildura (12,931), Horsham (10,562), and Hamilton (10,054). In the 7,000 to 10,000 population groups are Ararat, Bairnsdale, Benalla, Castlemaine, Colac, Dromana-Sorrento, Echuca, Maryborough, Mornington-Balcombe, Sale, Swan Hill, Werribee, and Wodonga.

It should be remembered in reading the tables relating to urban centres which follow that where the populations given relate to the limits of urban development at each Census date, as determined by application of the concepts for delimiting urban boundaries, the areas are not necessarily the same. The geographical limits of urban development may undergo change from one census date to another.

VICTORIA—SUMMARY OF POPULATION

Area	1961 Census population	1966 Census		
		Population	Dwellings	
			Occupied	Total
Melbourne Metropolitan Area	1,858,534	2,110,168	593,408	616,609
Other urban :				
Geelong—				
Bellarine Shire (Part)	2,914	6,584	1,663	1,741
Corio Shire (Part)	24,542	33,296	7,695	7,846
Geelong City	17,427	18,129	5,348	5,598
Geelong West City	17,681	17,538	5,327	5,569
Newtown and Chilwell City	11,788	11,700	3,391	3,553
South Barwon Shire (Part)	13,570	17,812	4,730	4,915
Total urban Geelong	87,922	105,059	28,154	29,222
Ballarat—				
Ballarat City (Part)	40,520	41,026	11,418	11,956
Ballarat Shire (Part)	8,348	10,245	2,251	2,323
Grenville Shire (Part)	50	53	14	14
Sebastopol Borough	4,663	4,966	1,206	1,261
Total urban Ballarat	53,581	56,290	14,889	15,554
Bendigo—				
Bendigo City (Part)	29,634	30,159	8,897	9,357
Eaglehawk Borough (Part)	4,426	5,033	1,444	1,542
Marong Shire (Part)	2,527	2,988	767	793
Strathfieldsaye Shire (Part)	2,859	4,028	995	1,033
Total urban Bendigo	39,446	42,208	12,103	12,725

VICTORIA—SUMMARY OF POPULATION—*continued*

Area	1961 Census population	1966 Census		
		Population	Dwellings	
			Occupied	Total
Other urban—<i>continued</i>				
Moe-Yallourn—				
Moe City	15,463	16,531	4,091	4,221
Morwell Shire (Part)	653	537	153	171
Narracan Shire (Part)	1,867	1,880	445	471
Yallourn Works Area	5,010	4,250	1,020	1,096
Total urban Moe-Yallourn	22,993	23,198	5,709	5,959
Urban centres with—				
10,000–19,999	(8) 101,241	114,416	30,014	31,212
9,000–9,999	(2) 17,520	19,433	6,156	12,364
8,000–8,999	(5) 36,564	(a)41,978	10,696	11,131
7,000–7,999	(6) 40,208	(b)44,368	12,344	13,632
6,000–6,999	(2) (c)16,571	13,536	3,716	3,971
5,000–5,999	(2) 10,610	11,414	3,224	3,382
4,000–4,999	(3) 12,627	13,484	3,774	4,134
3,000–3,999	(11) 35,068	(d)37,050	9,808	11,146
2,000–2,999	(21) 50,442	52,618	14,728	16,370
1,000–1,999	(45) 50,839	62,030	17,160	19,403
Less than 1,000	(8) 5,307	(e)5,905	1,878	4,381
Total other urban	580,939	642,987	174,353	194,586
Rural	486,031	463,383	121,222	142,546
Migratory	4,609	2,988	..	..
Total Victoria	(118) 2,930,113	3,219,526	888,983	953,741

(a) Includes that part of urban Albury-Wodonga in Victoria (Population 8,653). Total population of Albury-Wodonga—1961, 28,796 ; 1966, 32,032.

(b) Includes that part of urban Echuca-Moama in Victoria (Population 7,043). Total population of Echuca-Moama—1961, 7,253 ; 1966, 8,010.

(c) Includes urban Laverton in 1961. This formed part of the Melbourne Metropolitan Area in 1966.

(d) Includes that part of urban Yarrawonga-Mulwala in Victoria (Population 3,163). Total population of Yarrawonga-Mulwala—1961, 3,770 ; 1966, 3,990.

(e) Includes that part of urban Barham-Koondrook in Victoria (Population 604). Total population of Barham-Koondrook—1961, 1,736 ; 1966, 1,743.

NOTE. Figures in brackets indicate the number of urban centres in the size groups in 1966.

It should be noted that the boundary of an urban centre is not necessarily identical with the boundary of a municipality of the same name. Figures of census populations in local government areas of the State appear on pages 127 to 132.

Figures of population and total dwellings in urban centres are given in the following table. Again, where necessary, 1961 Census populations have been adjusted to conform with boundaries in force in 1966.

VICTORIA—POPULATIONS OF URBAN CENTRES, CENSUSES 1961 AND 1966, AND NUMBER OF DWELLINGS, CENSUS 1966

Urban centre	1961 Census population	1966 Census		Urban centre	1961 Census population	1966 Census	
		Population	Total number of dwellings			Population	Total number of dwellings
Melbourne Metropolitan Area—				Other urban centres— continued			
Altona	15,758	25,020	6,252	Beaufort	1,240	1,264	404
Berwick(a)	6,526	13,124	2,796	Beechworth	3,508	3,554	703
Box Hill	50,412	54,529	15,284	Benalla	8,234	8,224	2,336
Brighton	41,302	40,617	13,355	Bendigo	39,446	42,208	12,725
Broadmeadows(a)	64,992	86,911	20,122	Berwick	1,262	1,720	515
Brunswick	53,093	52,012	15,286	Birchip	1,065	1,147	302
Camberwell	99,353	99,908	32,011	Bright	705	747	383
Caulfield	74,859	76,119	26,598	Broadford	1,678	1,605	476
Chelsea	22,355	24,789	7,669	Camperdown	3,446	3,540	1,060
Coburg	70,771	68,568	19,257	Casterton	2,442	2,492	722
Collingwood	25,413	22,459	6,373	Castlemaine	7,216	7,103	2,220
Cranbourne (a)	(b)	143	40	Charlton	1,587	1,603	444
Croydon (a)	14,803	21,353	6,008	Cobden	(d)	1,233	342
Dandenong (a)	23,379	31,054	8,242	Cobram	2,498	2,888	785
Diamond Valley (a)	11,693	20,997	5,306	Cohuna	1,843	2,061	577
Doncaster and Templestowe (a)	13,940	33,382	9,333	Colac	9,252	9,498	2,732
Eltham (a)	10,545	15,216	4,180	Coleraine	1,503	1,518	466
Essendon	58,987	58,258	17,894	Corryong	1,129	1,665	425
Fitzroy	29,399	27,219	7,484	Cowes	607	765	694
Footscray	60,734	58,823	16,790	Creswick	1,670	1,658	488
Frankston (a)	23,692	38,718	11,833	Crib Point	2,078	1,829	428
Hawthorn	36,707	36,728	13,749	Daylesford	2,776	2,664	1,076
Heidelberg	59,795	63,929	16,813	Dimboola	1,923	1,872	589
Keilor (a)	26,798	40,430	10,337	Donald	1,517	1,626	493
Kew	33,341	32,816	9,827	Dromana-Sorrento	8,268	9,935	9,632
Knox (a)	15,697	32,394	8,927	Drouin	2,511	2,655	791
Laverton (b)		6,128	1,169	Echuca-Moama (part) (f)	6,443	7,043	2,017
Lillydale (a)	5,329	14,066	4,177	Euroa	3,020	2,789	882
Malvern	47,870	50,059	17,133	Geelong	87,922	105,059	29,222
Melbourne	76,810	75,997	21,554	Hamilton	9,495	10,054	2,774
Moorabbin	94,242	103,787	28,778	Hastings (d)		1,136	393
Mordialloc	26,526	28,076	8,530	Healesville	2,368	2,676	840
Mornington (a)	546	1,704	787	Heathcote	1,287	1,187	347
Northcote	55,750	56,200	17,078	Heyfield	1,917	1,893	505
Nunawading	53,133	74,577	20,086	Heywood (d)		1,011	275
Oakleigh	47,300	52,766	14,011	Hopetoun (d)		1,024	291
Port Melbourne	12,370	12,591	3,487	Horsham	9,240	10,562	3,024
Prahran	52,554	54,655	21,537	Inverloch	845	851	696
Preston	84,146	89,767	23,202	Kerang	3,838	4,164	1,175
Richmond	33,863	32,530	9,913	Kilmore	1,010	1,096	292
Ringwood	24,136	29,141	7,943	Koo-Wee-Rup (d)		1,014	294
St Kilda	52,205	58,129	24,511	Koroit	1,466	1,416	375
Sandringham	37,001	36,671	11,241	Korumburra	3,237	2,991	882
Sherbrooke (a)	9,414	9,999	3,449	Kyabram	3,936	4,645	1,303
South Melbourne	32,528	30,233	9,918	Kyneton	3,366	3,446	1,115
Springvale (a)	25,630	37,668	10,049	Lakes Entrance	1,602	1,837	764
Sunshine (a)	61,960	69,072	16,566	Laverton (g)	4,152	3,246	943
Waverley (a)	43,269	68,896	17,982	Leongatha	3,059	958	735
Whittlesea (a)	6,646	11,491	2,923	Lorne	1,080	1,065	432
Williamstown	30,962	30,449	8,819	Maffra	3,404	3,569	1,018
				Maldon	1,071	1,065	432
Total Melbourne Metropolitan Area	1,858,534	2,110,168	616,609	Mansfield	1,944	2,019	572
Other urban centres—				Maryborough	7,235	7,707	2,365
Albury-Wodonga (Part) (c)	7,398	8,653	2,340	Merbein	1,737	1,684	494
Alexandra	1,945	2,014	610	Mildura	12,279	12,931	3,755
Angelsea	522	726	901	Moe-Yallourn	22,993	23,198	5,959
Apollo Bay	948	957	346	Mooroopna	2,505	2,568	683
Ararat	7,934	8,233	2,116	Mornington-Balcombe	5,701	7,349	2,799
Avoca (d)	3,336	1,016	336	Mortlake	1,297	1,248	369
Bacchus Marsh	3,427	3,707	1,039	Morwell	14,542	16,610	4,113
Bairnsdale	53,581	7,785	2,231	Mount Beauty	1,509	1,568	496
Ballarat		56,290	15,554	Murtoa	1,135	1,109	343
Barham-Koon-drook (part) (e)	600	604	175	Myrtleford	2,163	2,545	673
				Nathalia	1,276	1,369	394
				Nhill	2,233	2,251	756
				Numurkah	2,687	2,770	800
				Ocean Grove-Barwon Heads	2,585	3,144	1,772

VICTORIA—POPULATIONS OF URBAN CENTRES, CENSUSES 1961 AND 1966, AND NUMBER OF DWELLINGS, CENSUS 1966—*continued*

Urban centre	1961 Census population	1966 Census		Urban centre	1961 Census population	1966 Census	
		Population	Total number of dwellings			Population	Total number of dwellings
<i>Other urban centres—continued</i>				<i>Other urban centres—continued</i>			
Orbost	2,613	2,797	726	Tatura	2,166	2,496	709
Ouyen	1,628	1,645	414	Terang	2,137	1,991	611
Pakenham East	1,324	1,680	485	Torquay	1,243	1,477	1,060
Portarlinton	1,003	1,224	539	Trafalgar	1,774	1,729	518
Port Fairy	2,426	2,579	849	Traralgon	12,300	14,079	3,662
Portland	6,014	6,690	2,063	Wangaratta	13,784	15,175	4,139
Queenscliffe	2,659	2,787	1,531	Warburton	1,630	1,545	591
Red Cliffs	2,440	2,439	727	Warracknabeal	3,061	3,151	1,014
Robinvale	1,243	1,404	344	Warragul	6,405	6,846	1,908
Rochester	1,965	2,122	611	Warrandyte	(d)	1,085	337
Rushworth	1,077	1,093	341	Warrnambool	15,702	17,499	4,839
Rutherglen	1,222	1,287	410	Werribee	5,099	8,228	2,025
Sale	7,899	8,640	2,317	Wonthaggi	4,853	4,675	1,654
Sea Lake	(d)	1,026	284	Woodend	1,224	1,221	391
Seymour	5,104	5,505	1,536	Wycheproof	(d)	1,005	276
Shepparton	13,899	17,506	4,910	Yarra Junction	1,259	1,121	398
St Arnaud	3,150	3,004	948	Yarram	2,001	2,015	588
Stawell	5,506	5,909	1,846	Yarrawonga— Mulwala (part) (h)	3,022	3,163	945
St Leonards	(d)	297	419	Yea	1,113	1,084	337
Sunbury	3,131	3,526	589				
Swan Hill	6,186	7,381	2,007	Total other urban centres	580,939	642,987	194,586
Tallangatta	1,003	1,000	295				

(a) Includes only that part of the local government area which is within the Melbourne Metropolitan Area. The remainder is in each case included under other urban or is rural.

(b) Non-Metropolitan in 1961.

(c) That part of Albury—Wodonga in Victoria. See notes to previous table.

(d) Non-urban in 1961.

(e) That part of Barham—Koondrook in Victoria. See notes to previous table.

(f) That part of Echuca—Moama in Victoria. See notes to previous table.

(g) Part of Melbourne Metropolitan Area in 1966.

(h) That part of Yarrawonga—Mulwala in Victoria. See notes to previous table.

Population estimates

The following table gives the estimated population of each Australian State and Territory at 31 December 1969.

The estimated population in each State or Territory is now derived by a new method and represents the population ascertained at the Census plus recorded natural increase and recorded net gain from overseas migration for that State or Territory; gains and corresponding losses that result from movements between States and Territories are also taken into account insofar as they are recorded as transfers of State of residence under child endowment procedures or Commonwealth electoral procedures, supplemented by results of any special count or sample survey. Holiday, business, or other similar short-term movements between States and Territories are omitted. As records of migration by State or Territory are not complete the estimated State and Territory populations so derived are approximate and are subject to revision when the actual population of each State is ascertained at the next Census.

AUSTRALIA—ESTIMATED POPULATION (a) OF STATES AND TERRITORIES
AT 31 DECEMBER 1969

State or Territory	Area in square miles	Estimated population at 31 December 1969	Persons to the square mile	Percentage of population in each State or Territory
New South Wales	309,433	4,529,918	14.64	36.40
Victoria	87,884	3,420,142	38.92	27.48
Queensland	667,000	1,785,394	2.68	14.34
South Australia	380,070	1,155,303	3.04	9.28
Western Australia	975,920	966,740	0.99	7.77
Tasmania	26,383	391,151	14.83	3.14
Northern Territory	520,280	69,657	0.13	0.56
Australian Capital Territory(b)	939	127,722	136.02	1.03
Australia	2,967,909	12,446,027	4.19	100.00

(a) Including Aborigines.

(b) Including Jervis Bay.

The following table shows the estimated population of Victoria from 1836 to 1969 :

VICTORIA—ESTIMATED POPULATION

Year	Estimated population, 31 December		
	Males	Females	Persons
1836 (25 May)	142	35	177
1840	7,254	3,037	10,291
1850	45,495	30,667	76,162
1860	330,302	207,932	538,234
1870	397,230	326,695	723,925
1880	450,558	408,047	858,605
1890	595,519	538,209	1,133,728
1900	601,773	594,440	1,196,213
1910	646,482	654,926	1,301,408
1920	753,803	774,106	1,527,909
1930	892,422	900,183	1,792,605
1940	947,037	967,881	1,914,918
1950	1,114,497	1,122,685	2,237,182
1959	1,413,523	1,397,906	2,811,429
1960	1,453,815	1,434,475	2,888,290
1961	1,485,348	1,469,951	2,955,299
1962	1,511,418	1,499,625	3,011,043
1963	1,540,749	1,530,297	3,071,046
1964	1,573,966	1,563,955	3,137,921
1965	1,602,058	1,593,802	3,195,860
1966	1,628,672	1,621,198	3,249,870
1967	1,655,935	1,647,696	3,303,631
1968	1,683,474	1,673,407	3,356,881
1969	1,716,126	1,704,016	3,420,142

NOTE. Estimates of population from 1961 onwards include Aborigines.

The following table shows the population and the number of dwellings in each of the municipalities and Statistical Divisions of Victoria at the 1966 Census and as estimated at 30 June 1969, together with the area of

the municipality at 30 June 1969. In this table both Census figures and estimates are inclusive of Aborigines. However, the difference between the Census date figures including Aborigines and Census figures published earlier, although occasioned by the necessity to include full-blooded Aborigines for comparison with later populations, is not to be taken as a reliable measure of Aboriginal population of the area concerned. Census information regarding Aborigines is to be found in the Special Census publication *The Aboriginal Population of Australia*, issued on 16 April 1969.

For the purpose of the Census, a "dwelling" is any habitation occupied by a household group living together as a domestic unit, with common eating arrangements, whether comprising the whole or any part of a building. The term has, therefore, a very wide reference and includes, in addition to houses and flats, anything from a single-roomed shack to a multi-roomed hotel or institution. In the following tables, the figures for dwellings represent all dwellings, whether private or other, and whether occupied or unoccupied.

VICTORIA—POPULATION, DWELLINGS, AND AREA BY MUNICIPALITY

Local government area	Population		Dwellings (a)		Area at 30.6.1969 (sq miles)
	Census 30.6.1966	Estimate 30.6.1969	Census 30.6.1966	Estimate 30.6.1969	
MELBOURNE STATISTICAL DIVISION					
Altona City (d)	25,020	27,800	6,252	7,297	15.52
Berwick Shire (part)(b)	19,880	21,800	4,913	5,636	108.94
Box Hill City	54,534	55,900	15,284	15,781	8.30
Brighton City	40,618	40,800	13,355	13,677	5.28
Broadmeadows City	88,080	93,900	20,403	22,644	27.33
Brunswick City	52,018	51,600	15,286	15,928	4.10
Bulla Shire	5,711	6,700	1,145	1,541	163.00
Camberwell City	99,913	100,400	32,011	32,901	13.57
Caulfield City	76,119	78,200	26,598	30,270	8.49
Chelsea City	24,789	26,200	7,669	8,207	4.72
Coburg City	68,577	68,700	19,257	19,455	7.21
Collingwood City	22,469	21,500	6,373	6,553	1.84
Cranbourne Shire (part) (b)	9,307	10,400	3,023	3,523	153.69
Croydon Shire	21,769	24,900	6,106	7,290	13.00
Dandenong City	31,700	35,900	8,410	10,004	14.00
Diamond Valley Shire	22,999	28,700	5,852	7,999	32.94
Doncaster and Templestowe City (d)	38,087	48,400	10,719	14,656	34.52
Eltham Shire	20,211	22,100	5,828	6,543	116.01
Essendon City	58,258	58,800	17,894	18,878	6.36
Fitzroy City	27,227	26,600	7,484	7,545	1.41
Flinders Shire	12,525	14,100	11,409	12,952	125.00
Footscray City	58,832	59,200	16,790	17,419	6.94
Frankston City (d)	42,085	49,200	12,759	15,463	27.28
Hastings Shire	7,280	8,100	2,847	3,303	112.00
Hawthorn City	36,728	37,200	13,749	14,943	3.77
Healesville Shire (part)(b)	5,136	5,300	1,612	1,693	108.88
Heidelberg City	63,932	67,700	16,813	18,214	12.50
Keilor City	43,398	49,000	11,146	13,322	37.91
Kew City	32,819	33,000	9,827	10,250	5.62
Knox Shire	36,514	44,500	10,089	13,136	42.50
Lilydale Shire	24,494	28,500	7,746	9,469	153.50
Malvern City	50,061	51,400	17,133	17,975	6.15
Melbourne City	76,006	76,500	21,554	23,623	12.13
Melton Shire	2,559	3,600	734	1,133	173.91
Moorabbin City	103,787	109,100	28,778	30,808	19.77

For footnotes see page 132.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30.6.1969 (sq miles)
	Census 30.6.1966	Estimate 30.6.1969	Census 30.6.1966	Estimate 30.6.1969	
MELBOURNE STATISTICAL DIVISION—<i>continued</i>					
Mordialloc City	28,078	30,100	8,530	9,575	4.71
Mornington Shire	10,217	11,900	4,201	5,133	35.00
Northcote City	56,213	57,500	17,078	18,498	6.60
Nunawading City	74,578	84,100	20,086	23,649	16.05
Oakleigh City	52,769	55,900	14,011	15,178	11.70
Port Melbourne City	12,591	12,500	3,487	3,451	4.11
Prahran City	54,658	57,100	21,537	23,841	3.69
Preston City	89,775	93,200	23,202	24,487	14.30
Richmond City	32,532	31,700	9,913	9,805	2.36
Ringwood City	29,141	32,000	7,943	9,046	8.79
St Kilda City	58,138	60,300	24,511	26,037	3.31
Sandringham City	36,672	36,900	11,241	11,581	5.78
Sherbrooke Shire	17,674	18,400	6,636	6,977	74.50
South Melbourne City	30,233	28,900	9,918	9,805	3.44
Springvale City	39,431	48,500	10,512	13,980	37.68
Sunshine City	69,264	73,700	16,605	18,636	30.89
Waverley City	69,845	81,400	18,303	22,712	22.61
Werribee Shire	18,380	21,300	4,035	5,134	258.00
Whittlesea Shire	16,713	21,000	4,372	6,021	231.00
Williamstown City	30,449	30,600	8,819	9,340	5.60
Total Division	2,230,793	2,372,700	661,788	732,917	2,368.25
WEST CENTRAL STATISTICAL DIVISION					
Bacchus Marsh Shire	4,674	4,840	1,319	1,391	218.60
Ballan Shire	2,349	2,330	909	918	355.00
Bannockburn Shire	2,213	2,210	692	690	272.00
Barrabool Shire	2,914	3,230	1,963	2,269	229.00
Bellarine Shire	14,523	16,260	5,425	6,312	128.00
Bungaree Shire	2,207	2,330	599	644	88.00
Buninyong Shire	4,836	5,030	1,345	1,423	300.00
Corio Shire	36,222	39,000	8,689	9,819	270.00
Geelong City	18,129	18,220	5,598	5,739	5.19
Geelong West City	17,538	17,500	5,569	5,671	2.03
Gisborne Shire	2,311	2,440	914	981	107.40
Kilmore Shire (part)	720	700	220	230	99.00
Newtown City (e)	11,700	11,670	3,553	3,669	2.31
Queenscliffe Borough	2,788	2,930	1,531	1,643	3.28
Romsey Shire	2,516	2,490	885	906	239.00
South Barwon Shire	22,056	24,200	7,026	7,979	63.84
Total Division	147,696	155,380	46,237	50,284	2,382.65
NORTH CENTRAL STATISTICAL DIVISION					
Alexandra Shire	4,484	4,450	1,648	1,685	735.00
Broadford Shire	1,978	1,950	633	668	222.50
Castlemaine City	7,103	7,070	2,220	2,263	9.00
Creswick Shire	3,540	3,520	1,117	1,134	213.00
Daylesford and Glenlyon Shire	4,398	4,390	1,832	1,858	235.27
Kilmore Shire (part)	2,019	2,060	483	522	97.50
Kyneton Shire	5,970	5,970	2,033	2,051	280.00
Maldon Shire	1,953	1,920	729	729	216.00
Maryborough City	7,707	7,850	2,365	2,463	9.00
McIvor Shire	1,896	1,870	580	589	558.00
Metcalfe Shire	2,163	2,140	747	755	228.00
Newham and Woodend Shire	1,995	1,970	707	734	95.00
Newstead Shire	1,781	1,760	667	680	158.00

For footnotes see page 132.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30.6.1969 (sq miles)
	Census 30.6.1966	Estimate 30.6.1969	Census 30.6.1966	Estimate 30.6.1969	
NORTH CENTRAL STATISTICAL DIVISION—<i>continued</i>					
Pyalong Shire	456	460	129	128	233·00
Seymour Shire	11,272	11,580	2,550	2,806	366·65
Talbot and Clunes Shire	1,514	1,480	534	533	206·00
Tullaroop Shire	1,277	1,250	424	428	246·00
Yea Shire	2,620	2,610	927	935	528·35
Total Division	64,126	64,300	20,325	20,961	4,636·27

WESTERN STATISTICAL DIVISION					
Ararat City	8,246	8,430	2,116	2,268	7·36
Ararat Shire	4,644	4,660	1,382	1,393	1,411·92
Ballaarat City	41,661	41,890	12,133	12,270	13·36
Ballarat Shire	12,246	12,870	2,876	3,306	184·00
Belfast Shire	1,857	1,870	477	480	200·00
Camperdown Town	3,540	3,590	1,060	1,100	5·61
Colac City	9,499	9,650	2,732	2,873	4·20
Colac Shire	6,959	6,900	1,960	1,957	563·00
Dundas Shire	3,923	3,920	1,183	1,206	1,337·60
Glenelg Shire	5,838	5,850	1,735	1,761	1,383·00
Grenville Shire	1,692	1,700	581	610	326·00
Hamilton City	10,062	10,180	2,774	2,852	8·36
Hampden Shire	8,773	8,730	2,598	2,574	1,011·00
Heytesbury Shire (c)	8,182	8,350	2,129	2,255	584·00
Koroit Borough	1,416	1,400	375	376	8·90
Leigh Shire	1,402	1,380	394	391	379·00
Lexton Shire	1,375	1,370	373	380	317·00
Minhamite Shire	2,824	2,800	769	778	527·00
Mortlake Shire	4,400	4,380	1,215	1,211	825·00
Mount Rouse Shire	3,042	3,050	905	933	548·00
Otway Shire (c)	3,908	3,900	1,486	1,582	736·30
Port Fairy Borough	2,579	2,590	849	860	8·88
Portland Town (c)	6,697	7,300	2,063	2,382	13·17
Portland Shire (c)	6,875	6,570	2,152	2,135	1,421·17
Ripon Shire	3,520	3,510	1,104	1,129	592·00
Sebastopol Borough	4,966	5,070	1,261	1,339	2·73
Wannon Shire	4,059	4,030	1,199	1,205	763·40
Warrnambool City	17,500	18,170	4,839	5,225	11·08
Warrnambool Shire	7,506	7,540	2,032	2,063	613·00
Winchelsea Shire	4,241	4,230	1,743	1,772	495·70
Not Incorporated (Lady Julia Percy Island and Tower Hill Lake Reserve)	..	..	..	..	3·30
Total Division	203,432	205,880	58,495	60,666	14,305·04

WIMMERA STATISTICAL DIVISION					
Arapiles Shire	2,142	2,150	589	597	768·00
Avoca Shire	2,133	2,130	719	731	434·00
Dimboola Shire	5,907	5,890	1,745	1,750	1,899·00
Donald Shire	2,947	2,950	852	857	559·00
Dunmunkle Shire	3,952	3,920	1,162	1,166	597·00
Horsham City	10,562	11,020	3,024	3,312	9·28
Kaniva Shire	2,371	2,360	708	719	1,191·00
Kara Kara Shire	1,360	1,360	411	415	885·25
Kowree Shire	5,362	5,380	1,535	1,576	2,080·00

For footnotes see page 132.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30.6.1969 (sq miles)
	Census 30.6.1966	Estimate 30.6.1969	Census 30.6.1966	Estimate 30.6.1969	
WIMMERA STATISTICAL DIVISION—<i>continued</i>					
Lowan Shire	3,824	3,830	1,218	1,243	1,036·00
St Arnaud Town	3,004	2,990	948	964	9·81
Stawell Town	5,909	6,020	1,846	1,909	9·30
Stawell Shire	2,345	2,370	792	812	1,009·75
Warracknabeal Shire	4,714	4,710	1,478	1,501	710·00
Wimmera Shire	3,485	3,460	912	913	1,009·00
Total Division	60,017	60,540	17,939	18,465	12,206·39
MALLEE STATISTICAL DIVISION					
Birchip Shire	1,919	1,930	503	503	567·00
Karkaroc Shire	4,247	4,270	1,186	1,207	1,436·00
Mildura City	12,934	13,200	3,755	3,957	8·45
Mildura Shire	16,315	16,410	4,980	5,078	4,071·00
Swan Hill City	7,398	7,820	2,007	2,264	5·27
Swan Hill Shire	13,000	13,230	3,451	3,521	2,530·00
Walpeup Shire	4,431	4,430	1,208	1,246	4,168·00
Wycheproof Shire	4,777	4,800	1,263	1,291	1,589·00
Total Division	65,021	66,090	18,353	19,067	14,374·72
NORTHERN STATISTICAL DIVISION					
Bendigo City	30,806	31,520	9,500	9,951	12·55
Bet Bet Shire	1,975	1,930	682	665	358·00
Charlton Shire	2,499	2,490	697	692	454·00
Cobram Shire	5,261	5,390	1,375	1,446	170·00
Cohuna Shire	4,658	4,760	1,271	1,330	192·00
Deakin Shire	5,705	5,820	1,546	1,609	371·00
Eaglehawk Borough	5,230	5,370	1,602	1,685	5·60
East Loddon Shire	1,722	1,760	486	512	461·00
Echuca City	7,044	7,400	2,017	2,181	7·84
Gordon Shire	3,320	3,360	936	957	781·00
Goulburn Shire	1,842	1,860	653	685	398·00
Huntly Shire	2,323	2,380	699	730	339·00
Kerang Borough	4,164	4,250	1,175	1,228	8·83
Kerang Shire	5,264	5,260	1,468	1,473	1,278·17
Korong Shire	3,663	3,630	1,186	1,169	921·00
Kyabram Borough	4,645	4,950	1,303	1,460	8·05
Marong Shire	6,488	6,750	1,847	1,996	575·00
Nathalia Shire	3,225	3,400	928	964	478·00
Numurkah Shire	6,242	6,340	1,661	1,713	279·00
Rochester Shire	7,428	7,640	2,141	2,259	749·00
Rodney Shire	11,891	12,260	3,159	3,341	397·00
Shepparton City	17,488	18,480	4,906	5,405	10·31
Shepparton Shire	6,183	6,350	1,564	1,668	357·06
Strathfieldsaye Shire	6,703	7,160	1,749	2,004	239·00
Tungamah Shire	3,237	3,270	812	831	441·00
Waranga Shire	4,506	4,540	1,313	1,346	638·00
Yarrowonga Shire	3,805	3,930	1,180	1,257	243·00
Total Division	167,317	172,250	47,856	50,557	10,172·41
NORTH EASTERN STATISTICAL DIVISION					
Beechworth Shire	4,806	4,790	1,110	1,133	297·90
Benalla City	8,224	8,330	2,336	2,478	6·77
Benalla Shire	3,728	3,750	1,056	1,072	896·53
Bright Shire	4,526	4,680	1,655	1,755	1,146·00

For footnotes see page 132.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30. 6. 1969 (sq miles)
	Census 30. 6. 1966	Estimate 30. 6. 1969	Census 30. 6. 1966	Estimate 30. 6. 1969	
NORTH EASTERN STATISTICAL DIVISION—<i>continued</i>					
Chiltern Shire	1,522	1,490	492	495	192·10
Euroa Shire	4,589	4,560	1,470	1,506	545·00
Mansfield Shire	4,275	4,310	1,709	1,825	1,508·00
Myrtleford Shire	4,374	4,530	1,140	1,243	275·00
Omoo Shire	2,026	2,020	627	652	2,232·00
Oxley Shire (c)	5,362	5,390	1,486	1,518	1,079·57
Rutherglen Shire	2,556	2,530	821	826	205·00
Towong Shire	4,079	4,060	1,243	1,274	1,602·00
Upper Murray Shire	3,337	3,410	952	999	949·00
Violet Town Shire	1,236	1,200	436	438	361·00
Wangaratta City (c)	15,181	15,790	4,139	4,459	9·30
Wangaratta Shire (c)	1,957	1,880	588	583	353·49
Wodonga Shire (f)	11,878	12,600	2,779	3,081	134·00
Yackandandah Shire	3,063	3,050	879	887	429·00
Total Division	86,719	88,370	24,918	26,224	12,221·66
GIPPSLAND STATISTICAL DIVISION					
Alberton Shire	5,844	5,830	1,861	1,908	721·00
Avon Shire (c)	3,236	3,160	838	857	976·50
Bairnsdale Town (c)(d)	..	8,360	..	2,527	10·50
Bairnsdale Shire (c)	11,566	3,500	3,550	1,273	879·50
Buln Buln Shire	8,700	8,850	2,525	2,658	486·00
Maffra Shire	8,510	8,500	2,463	2,546	1,611·00
Mirboo Shire	2,116	2,130	586	598	98·00
Moe City	16,555	16,760	4,221	4,385	8·26
Morwell Shire	20,829	21,800	5,257	5,998	259·00
Narracan Shire	9,045	9,030	2,616	2,713	892·00
Orbost Shire	6,434	6,700	1,999	2,136	3,700·00
Rosedale Shire	4,904	5,020	1,719	1,861	879·00
Sale City (c)	8,643	9,250	2,317	2,709	9·88
South Gippsland Shire	5,407	5,580	1,725	1,882	553·00
Tambo Shire	5,558	5,620	2,038	2,239	1,356·00
Traralgon City	14,080	14,510	3,662	3,907	7·70
Traralgon Shire	1,264	1,280	336	353	180·30
Warragul Shire	9,928	10,150	2,783	2,941	136·00
Woorayl Shire	8,927	9,160	3,039	3,300	481·00
Yallourn Works Area	4,250	4,160	1,096	1,084	13·52
Not incorporated (Gippsland Lakes, Bass Strait Islands)	..	..	..	..	129·51
Total Division	155,796	159,350	44,631	47,875	13,387·67
EAST CENTRAL STATISTICAL DIVISION					
Bass Shire	3,857	3,870	1,505	1,598	203·00
Berwick Shire (part) (b)	8,909	8,960	2,907	3,043	280·06
Cranbourne Shire (part) (b)	3,793	3,810	1,101	1,150	133·31
Healesville Shire (part) (b)	1,299	1,290	482	493	239·12
Korumburra Shire	7,354	7,310	2,171	2,206	237·00
Phillip Island Shire	1,408	1,440	1,468	1,838	39·00
Upper Yarra Shire	5,456	5,460	2,112	2,252	612·00
Wonthaggi Borough	4,026	4,010	1,419	1,476	20·45
Not incorporated (French Island)	210	190	34	40	65·00
Total Division	36,312	36,340	13,199	14,096	1,828·94

For footnotes see page 132.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30.6.1969 (sq miles)
	Census 30.6.1966	Estimate 30.6.1969	Census 30.6.1966	Estimate 30.6.1969	
SUMMARY					
Statistical Divisions—					
Melbourne	2,230,793	2,372,700	661,788	732,917	2,368.25
West Central	147,696	155,380	46,237	50,284	2,382.65
North Central	64,126	64,300	20,325	20,961	4,636.27
Western	203,432	205,880	58,495	60,666	14,305.04
Wimmera	60,017	60,540	17,939	18,465	12,206.39
Mallee	65,021	66,090	18,353	19,067	14,374.72
Northern	167,317	172,250	47,856	50,557	10,172.41
North Eastern	86,719	88,370	24,918	26,224	12,221.66
Gippsland	155,796	159,350	44,631	47,875	13,387.67
East Central	36,312	36,340	13,199	14,096	1,828.94
Migratory	2,988	2,900	..	..	..
Total Victoria	3,220,217	3,384,100	953,741	1,041,112	87,884.00

NOTE. Due to rounding, the sums of the areas of the individual municipalities do not add to the area of their Statistical Division in all cases, nor to the area of the State as a whole.

(a) Dwellings include private and other dwellings, whether occupied or unoccupied.

(b) The following portions of the Shires of Berwick, Cranbourne, and Healesville are included in the Melbourne Statistical Division:

Berwick: Berwick and Doveton Ridings, and parts of Pakenham and Beaconsfield Ridings.

Cranbourne: Cranbourne Riding and part of Tooradin Riding.

Healesville: Town Riding, West Riding and part of Central Riding.

(c) During the period 1 July 1966 to 30 June 1969 the boundaries of the municipalities listed below were re-defined with change of area. The effective date of the transfer of the area transferred and the square miles involved are shown in each case.

Avon Shire to Sale City—1 October 1966, 0.017 sq miles.

Avon Shire to Sale City—31 May 1967, 1.48 sq miles.

Bairnsdale Shire to Bairnsdale Town—31 May 1967, 10.50 sq miles.

Oxley Shire to Wangaratta City—1 June 1968, 0.23 sq miles.

Portland Shire to Portland Town—31 May 1968, 3.83 sq miles.

Wangaratta Shire to Wangaratta City—1 June 1968, 0.51 sq miles.

Otway Shire to Heytesbury Shire—31 May 1969, 10.00 sq miles.

(d) Bairnsdale Town was created on 31 May 1967. The following Shires were declared Cities: Frankston (24 August 1966), Doncaster and Templestowe (28 February 1967), Altona (21 December 1968).

(e) The City of Newtown and Chilwell was renamed Newtown City (14 November 1967).

(f) The population of the Shire of Wodonga includes residents at Bonegilla Migrant Centre. The Benalla Migrant Centre closed on 8 December 1967.

Immigration

General

Since the end of the Second World War, a programme of planned, large-scale immigration has been one of Australia's major objectives. The reasons included:

Economic factors. The desire to develop Australia's resources in order to strengthen and diversify the economy, increase living standards, and maintain full employment.

Strategic factors. The Second World War brought realisation of the need to populate and develop Australia as rapidly as possible.

Social and humanitarian factors. The desire to help many refugees and others in Europe, who were unable or unwilling to return to former homelands, and who wished to emigrate overseas.

Demographic factors. The low birthrate during the depression years meant that the numbers entering the workforce would not be sufficient to meet the needs of expansion.

Between October 1945 and December 1969, 3,256,994 persons came to Australia as "permanent and long-term arrivals", 1,594,135 of whom were assisted migrants.

Annual immigration programmes

Australia's annual immigration programmes are based on "settler arrivals", i.e., persons who on arrival in Australia declare their intention of remaining here permanently. The target figure for each year is based on an appraisal of the likely availability of suitable migrants in the overseas source countries, and the absorptive capacity of the Australian economy. The 1968-69 immigration programme provided for 160,000 settlers. During this period arrivals against this programme totalled 175,657, constituting a record immigration year.

Sources of migrants

The immigration programme has three major components:

1. assisted migrants from the United Kingdom, Europe, and certain other countries ;
2. the traditional "free flow" of British subjects coming to Australia outside the assisted immigration programme ; and
3. other persons coming to Australia outside the assisted passage programme who, before entry, are required to obtain visas.

Australian migration representatives overseas

The Commonwealth Department of Immigration maintains representatives in the United Kingdom, Eire, Austria, Argentina, Belgium, Chile, Denmark, France, Germany, Greece, Italy, Malta, Netherlands, Spain, Sweden (covering Norway, Finland, and Iceland), Switzerland, Yugoslavia, Turkey, Lebanon, United Arab Republic, Hong Kong, India, Ceylon, Fiji, and the United States of America.

Assisted migration

Australia has assisted migration agreements with the United Kingdom, Malta, Germany, the Netherlands, Italy, and Turkey. In addition, there are migration arrangements, made in conjunction with the Intergovernmental Committee for European Migration, with Austria, Belgium, Greece, and Spain. (The Intergovernmental Committee for European Migration also takes part in assisted migration from Germany and Italy.)

AUSTRALIA—PERSONS ARRIVING UNDER ASSISTED
MIGRATION SCHEMES

Assisted migration scheme	Date of commencement of scheme	Number assisted to December 1969
United Kingdom	April 1947	897,981
Refugee	November 1947	233,961
German	August 1952	89,521
Netherlands	April 1951	77,441
Greek	August 1952	58,419
Italian	August 1951	50,364
General Assisted Passage Schemes	September 1954	40,370
Maltese	January 1949	40,312
Special Passage Assistance Programme and United States Passage Assistance Programme	July 1966	39,581
Austrian	August 1952	21,010
Spanish	August 1958	9,615
Belgian	February 1961	2,695
Turkish	October 1968	3,533
Other schemes		29,332
Total		1,594,135

Assistance is also given by Australia under the Special Passage Assistance Programme which is available to selected applicants (who are not eligible under national or refugee assisted passage schemes) resident in most of the countries in which Australia has a representative. A similar programme operates in the United States of America.

Immigration organisation

The State Government, through its Immigration Office, plays an important part in British assisted migration. (See also below.) It receives personal nominations for relatives and friends, and employer nominations for workers, and is also responsible for the reception and after-care arrangements for those migrants. Other official immigration functions are the responsibility of the Commonwealth Department of Immigration, which has a branch office in Melbourne.

Government activity in the field of migration is aided and supplemented by a number of advisory bodies and voluntary organisations, including the Commonwealth Immigration Planning Council, the Commonwealth Immigration Advisory Council, the Commonwealth Immigration Publicity Council, the Citizenship Convention held every second year in Canberra, and the Good Neighbour Movement. The Good Neighbour Movement is a nation-wide voluntary organisation formed with the basic objective of assisting the satisfactory integration of every new settler into the national community family. In Victoria there are over 150 centres of operation and 181 affiliated organisations. Contained in these bodies are 600 members of branches and committees and eighty-five individual representatives who are directly engaged in the specific task of aiding the integration of newcomers.

Welfare

The Commonwealth provides the services of professional social workers, welfare aides, translators, and interpreters through its Melbourne Immigration Office. In addition, grants in aid are paid to selected voluntary welfare agencies in the community for the employment of qualified social workers who assist with settlement problems. Commonwealth Hostels Limited has available within its hostel network a number of welfare services officers who help migrants with their social problems arising soon after arrival in Australia.

English instruction

The ability to speak and understand English is a vital link in the process of integration. The Commonwealth Department of Immigration operates, in conjunction with State Education Departments, a free "Learn English" programme to assist migrants above the normal school leaving age to overcome their language problems.

Language instruction is given in Europe, on board ships sailing to Australia, and throughout Australia. Class tuition, correspondence, radio, and recorded courses are provided, as is a television series. Recently, part-time and full-time intensive and accelerated courses were introduced to meet the needs of certain groups of migrants. Expenditure on this Adult Migrant Education Programme has increased from \$381,442 in 1951-52 to an estimated expenditure of \$1,076,000 for 1969-70. Since

the inception of the programme in 1947 some 680,000 migrants have enrolled for instruction.

Accommodation

Initial accommodation may be provided in centres and hostels for assisted migrants. The Victorian State Government has a reception centre for British migrants arriving under State auspices.

The Commonwealth Department of Immigration has a Migrant Reception Centre at Bonegilla for assisted European migrants, while Commonwealth Hostels Limited has nine hostels in Victoria at Altona, Broadmeadows, Brooklyn, Fishermens Bend, Holmesglen, Maribyrnong, Norlane, Nunawading, and Preston where assisted British and European migrants stay until they have arranged private accommodation.

Additionally, 100 self-contained flats are to be provided in Melbourne as transitory accommodation for Commonwealth sponsored assisted passage migrants. These flats represent Melbourne's share out of a total of 350 flats being provided as an experiment in Melbourne, Sydney, Perth, and four centres in Tasmania.

The Commonwealth Department of Labour and National Service administers a scheme under which migrant families arriving as Commonwealth nominees and electing to settle in country areas may be accommodated in selected private establishments for periods of up to twenty-six weeks. While in private accommodation the difference between board and lodging charges and prevailing tariffs in Commonwealth hostels is met by a Commonwealth subsidy of up to \$10 weekly per person.

State Immigration Office

The State Immigration Office was formed as a result of an agreement at the Premiers' Conference of 1946, when the States undertook the responsibility of dealing with nominations of British migrants, their reception, transit accommodation, travel to their final destination, and aftercare.

The ultimate arrival of a migrant in Victoria usually stems from a personal nomination lodged on his account by a resident of the State or by a group nomination. The former may be a relative, friend, or employer; the latter are usually commercial enterprises which seek to recruit particular categories of workers. The most essential requirement of any nomination is that an adequate guarantee of accommodation be provided. Between January 1947 and December 1969, the State approved 60,569 personal nominations involving 151,696 persons. Under personal and group nominations, 144,677 British migrants have arrived in Victoria. Many of these migrants have been skilled technicians sponsored by group nominations such as Victorian Railways, Melbourne and Metropolitan Tramways Board, and the State Electricity Commission. Their arrival has greatly augmented Victoria's labour force.

The State Immigration Office has its own group nomination, under which single persons or married couples who are without sponsors may apply for assisted passages. The nomination is in no way restricted to any particular type of occupation; it is open to all. Migrants who arrive under this nomination are provided with accommodation at the State Immigration Reception Centre until such time as private accommodation

is available. At the same time, the Office undertakes to secure employment for these migrants.

The State Immigration Office renders every assistance in order that migrants may be quickly assimilated into the Victorian community. Where migrants who have arrived under personal nomination are experiencing accommodation difficulties, temporary hostel accommodation is sometimes provided. Assistance is also given in securing suitable employment. The welfare facilities of the State Office are also available to migrants and close liaison is maintained with churches and social organisations.

In co-operation with the State Immigration Office the Commonwealth Department of Immigration undertakes research into aspects of migrant integration and welfare, and for this purpose employs a number of psychologists, and has an establishment in Melbourne. Such field research provides essential information concerning the adjustment of migrants, and allows the identification of problems and remedial action to be taken where problems are found to exist.

Immigration into Victoria

Because of interstate movements, overseas migration for a particular State can only be measured at the time of a census from information gathered on birthplace, nationality, and period of residence in Australia.

A comparison of the results of the 1966 Census with those of the 1947 Census shows clearly the contribution of immigration to Victoria's population growth. Between 1947 and 1966 the State's population grew from 2,054,701 to 3,219,526—an increase of 1,164,825. Persons born overseas who had arrived in Australia since 30 June 1947, totalled 565,431 in 1966, representing just under half—48·5 per cent—of the increase in the population of Victoria during that time. (This gain is augmented when births to migrant parents are taken into consideration.)

Of all overseas-born persons living in Australia at 30 June 1966, 31·9 per cent were living in Victoria. At 30 June 1966 one person in every five in Victoria was born outside Australia—680,598 persons in a population of 3,219,526. This is more than twice the proportion and nearly four times the number in 1947—178,600, 8·7 per cent of a population of 2,054,701. Major birthplaces of the overseas-born in 1966 were United Kingdom and Republic of Ireland 239,406, Italy 111,219, Greece 64,275, Germany 37,270, Netherlands 34,646, Malta 26,452, Poland 24,697, Yugoslavia 24,634, and New Zealand 11,683. Of the 680,598 Victorian residents born overseas, 174,427 had been in Australia for less than five years, 391,004 arrived between 1947 and 1961, and 100,583 arrived prior to 1947. (Details for the remaining 14,584 overseas-born persons are not known.)

Overseas visitors to Australia

Policy in relation to the admission of overseas visitors to Australia is administered by the Commonwealth Department of Immigration. The Department has branch offices under the control of a Commonwealth Director of Migration in the capital city of each Australian State and the Northern Territory.

Bona fide business and tourist visitors are welcome in Australia and Government policy is designed to facilitate their travel by keeping to a minimum the formalities for obtaining visas where these are required.

British Europeans traditionally have had freedom of movement to Australia and do not require visas.

Visitor visas are available from Australian representatives abroad as a rule within 24 hours of receipt of completed applications. Visas are granted normally for initial periods of stay of three months but extensions up to a maximum of twelve months may be granted after arrival to persons whose continued bona fides as visitors are not in doubt. In many cases, particularly where businessmen are concerned, multiple entries may be made on the one visa. Persons wishing to enter Australia temporarily for periods in excess of twelve months would not normally be considered under visitor policy, but under a policy relating to admission for temporary residence.

Overseas arrivals and departures

AUSTRALIA—OVERSEAS ARRIVALS AND DEPARTURES BY STATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
ARRIVALS									
1965	346,099	100,525	32,766	9,869	31,735	101	4,041	(a)	525,136
1966	369,679	94,276	39,188	10,095	39,565	185	4,603	(a)	557,591
1967	428,797	95,852	51,874	6,963	47,536	281	5,418	449	637,170
1968	558,512	82,452	60,264	7,175	56,360	421	6,393	215	771,792
1969	676,452	79,955	66,528	7,264	59,736	79	8,744	100	898,858
DEPARTURES									
1965	297,716	55,706	32,374	8,706	22,298	208	3,272	(a)	420,280
1966	331,993	58,667	39,362	9,019	26,776	317	4,531	(a)	470,665
1967	386,130	60,393	51,668	8,222	32,697	346	5,480	325	545,261
1968	493,290	58,956	51,698	7,912	40,213	310	6,128	232	658,739
1969	584,574	60,600	60,371	8,792	46,388	291	8,546	250	769,812

NOTE. The above table indicates the State or Territory where passengers disembarked from or embarked on the ship or aircraft. Because numbers of passengers use interstate transport to commence or complete their journey the figures do not indicate the precise effect on the population of the States of movements to and from overseas countries.

(a) Included with New South Wales.

AUSTRALIA AND VICTORIA—OVERSEAS MIGRATION

Year	Australia					Victoria (a)			
	Permanent and long-term movement (b)		Short-term movement		Total	Permanent and long term movement (b)	Short-term movement		Total
	Settlers	Other	Australian residents returning or departing temporarily	Visitors			Australian residents returning or departing temporarily	Visitors	
ARRIVALS									
1965	147,507	43,757	160,544	173,328	525,136	62,375	22,093	16,057	100,525
1966	141,033	47,526	181,770	187,262	557,591	55,254	23,230	15,792	94,276
1967	135,019	57,292	223,038	221,821	637,170	54,409	24,800	16,643	95,852
1968	159,270	59,860	252,773	299,889	771,792	44,443	22,029	15,980	82,452
1969	183,416	65,175	288,990	361,277	898,858	39,394	22,104	18,457	79,955
DEPARTURES									
1965	14,803	64,852	161,692	178,933	420,280	18,373	23,138	14,195	55,706
1966	18,343	74,285	183,161	194,876	470,665	20,822	23,478	14,367	58,667
1967	22,302	73,451	217,746	231,762	545,261	20,071	24,482	15,840	60,393
1968	23,814	71,864	251,880	311,181	658,739	19,096	23,845	16,015	58,956
1969	24,739	83,521	288,805	372,747	769,812	18,177	24,533	17,890	60,600

(a) See note to preceding table.

(b) "Permanent and long-term" movement relates to persons arriving who state that they intend to reside in Australia permanently or for a period of one year or more, and to persons departing who state that they intend to reside abroad permanently or for a period of one year or more.

Citizenship and naturalisation

The *Nationality and Citizenship Act* 1948 commenced on Australia Day (26 January) 1949 and repealed all previous Commonwealth legislation on this subject. The most significant effect of the Act was the creation for the first time of the status of "Australian Citizen". In this respect the Act was complementary to citizenship legislation passed or about to be passed by other countries of the British Commonwealth. All Australian citizens, and the citizens of other countries of the British Commonwealth, are declared to be British subjects. Australian citizenship was automatically acquired as from 26 January 1949 by persons who were British subjects at that date and who either (a) were born in Australia or New Guinea; or (b) were naturalised in Australia; or (c) had been residing in Australia during the five years immediately preceding 26 January 1949; or (d) were born outside Australia of fathers to whom (a) or (b) above applied (provided the persons concerned had entered Australia without being placed under any immigration restriction); or (e) were women who had been married to men who became Australian citizens under the above headings (provided that the women concerned had entered Australia without being placed under immigration restriction). For the purposes of the Act, "Australia" includes the Territories of the Commonwealth that are not Trust Territories. On 4 June 1969 the *Nationality and Citizenship Act* became the *Citizenship Act* 1949-1969.

Australian citizenship may now be acquired in the following ways: (a) by birth in Australia; (b) by birth outside Australia. In such cases citizenship is acquired through the registration of the birth at an Australian consulate. Births may be registered if, at the time of the child's birth, the father was an Australian citizen or in the case of a child born out of wedlock if the mother was an Australian citizen; (c) by registration. Australian citizenship may be granted to citizens of other Commonwealth countries and Irish citizens who, after one year of residence in Australia, satisfy the Minister that they comply with specified requirements relating to good character and intention to reside in Australia; and (d) by naturalisation. Australian citizenship may be granted to aliens and protected persons who can comply with the requirements of the Act. Generally the Act requires an applicant to have lived here for 5 years, be of good character, have an adequate knowledge of English and other responsibilities and privileges of Australian citizenship, and an intention to continue to reside here. Persons who are able to read and write English proficiently may be granted citizenship after three years residence. Persons who have either voluntarily enlisted in the Commonwealth Forces or who are called up for National Service may be granted Australian citizenship after three months service or upon discharge if discharged earlier on medical grounds attributable to that service.

Under the Act, the independence of married women in nationality matters is recognised, and marriage does not affect a woman's nationality. Alien women who marry Australian citizens may, however, be naturalised under easier conditions than those which apply to other aliens.

The following table shows the persons of each nationality granted naturalisation certificates in Victoria during the five years 1965 to 1969:

VICTORIA—PREVIOUS NATIONALITY OF PERSONS NATURALISED

Nationality	Number of naturalisation certificates granted					Total granted 1965 to 1969	
	1965	1966	1967	1968	1969	Number	Per cent
Albanian	15	15	20	10	7	67	0·11
Austrian	207	175	269	183	136	970	1·57
Belgian	7	13	40	12	21	93	0·15
Bulgarian	15	14	18	14	7	68	0·11
Byelorussian	10	15	16	5	6	52	0·08
Chinese	59	106	332	237	177	911	1·48
Czechoslovak	84	56	52	45	35	272	0·44
Danish	46	26	40	29	23	164	0·27
Dutch	1,503	1,047	1,495	1,138	764	5,947	9·64
Estonian	16	27	21	16	9	89	0·14
Finnish	54	36	64	67	50	271	0·44
French	32	35	52	39	50	208	0·34
German	1,062	890	1,320	990	595	4,857	7·88
Greek	1,579	1,322	2,853	2,852	2,943	11,549	18·73
Hungarian	599	446	564	328	238	2,175	3·53
Israeli	128	67	160	148	83	586	0·95
Italian	3,209	3,296	5,742	3,549	2,763	18,559	30·10
Japanese	16	11	10	8	8	53	0·09
Latvian	108	122	147	72	36	485	0·79
Lebanese	35	31	70	70	87	293	0·47
Lithuanian	66	63	48	35	24	236	0·38
Norwegian	15	16	15	12	10	68	0·11
Polish	903	626	1,028	734	477	3,768	6·11
Romanian	29	24	57	23	20	153	0·25
Russian	72	98	152	137	96	555	0·90
Spanish	16	22	40	68	95	241	0·39
Swedish	6	13	15	5	11	50	0·08
Swiss	33	31	56	51	31	202	0·33
Turkish	12	11	15	6	18	62	0·10
Ukrainian	199	160	158	71	67	655	1·06
United Arab Republic	4	8	21	94	199	326	0·53
U.S. American	16	20	38	26	27	127	0·21
Yugoslav	1,120	946	1,907	1,591	1,235	6,799	11·03
Other nationalities	26	22	75	75	83	281	0·45
Stateless	97	59	122	92	100	470	0·76
Total	11,398	9,869	17,032	12,832	10,531	61,662	100·00

NOTE. The above figures relate to the number of certificates granted, and do not represent the total number of persons affected by the certificates. In addition to the figures shown, there were 1,670 children in 1965, 1,330 in 1966, 1,974 in 1967, 1,523 in 1968, and 1,229 in 1969 affected by grant of certificates.

Aboriginals in Victoria

The Ministry of Aboriginal Affairs was constituted by the *Aboriginal Affairs Act* 1967 which came into operation on 1 January 1968. The purpose of the Ministry is to promote the social and economic advancement of Aboriginals in Victoria. The method by which this is achieved is to open to Aboriginals new opportunities for education and employment. They are also assisted to achieve better health standards, housing, house-keeping, and child care, where this is necessary.

The present Aboriginal population in Victoria is approximately 5,000. Since this population is overall a young one and large families are customary, it is growing rapidly. The majority of Aboriginal people reside in country towns and about 1,000 live in the Melbourne metropolitan area. The main districts of residence are Shepparton-Mooroopna, Echuca, Swan Hill, Robinvale, Horsham-Dimboola, Heywood-Portland, Warrnambool-Purnim, Drouin-Warragul, Latrobe Valley, East Gippsland, Healesville, and the Melbourne metropolitan area.

As at 30 June 1969 the Ministry had provided 186 houses, including six housing loans for Aboriginal families. A total of 171 Aboriginal families received Ministry rental subsidies for Housing Commission

tenancies and additional families are tenants and purchasers of Housing Commission homes without Ministry assistance.

A small number of Aborigines is self-employed or follows skilled trades. Some follow semi-skilled occupations where skill is learned on the job without formal training, but the majority are unskilled labourers or casual or itinerant workers. Few Aborigines are employed as pastoral workers or farm hands, but many work on farms as pickers and harvesters for short periods during the summer.

As at 30 June 1969 the staff of the Ministry of Aboriginal Affairs consisted of seventy-four persons, the majority being attached to country offices at Bairnsdale, Horsham, Lake Tyers, Morwell, Robinvale, Shepparton, Swan Hill, and Warrnambool. Twenty-three of the staff were Aboriginal persons.

Aboriginal Affairs Advisory Council

Aboriginal people themselves are consulted by the Ministry and their wishes carried out as far as it is practicable. The Ministry provides a formal framework for this consultation through the Aboriginal Affairs Advisory Council. Under the Director of Aboriginal Affairs as Chairman, the Council consists of six members elected by Aborigines themselves and six other members appointed by the Minister. Of the latter members two are Aborigines, giving a majority of Aborigines on the present Council. Other consultation takes place through contact with Aboriginal people in groups or individually.

During the financial year ended 30 June 1969 the Ministry expenditure on Aboriginal Affairs was \$751,034.

VITAL STATISTICS

Introduction

Registration of births, deaths, and marriages

The system of compulsory registration of births, deaths, and marriages in Victoria has been in force since 1853, and the registers contain all necessary information bearing on the family history of the people. The statutory duties under the Registration Acts are performed by the Government Statist, who has supervision over registration officers, registrars of marriages, and (relating to their registration duties) the clergymen who celebrate marriages. Copies of entries certified by the Government Statist or by an Assistant Government Statist or an authorised registration officer are *prima facie* evidence in the Courts of Australia of the facts to which they relate. At the Government Statist's Office there is kept for reference a complete collection of all registrations effected since 1 July 1853, as well as originals or certified copies of all existing church records relating to earlier periods, as far back as 1837.

Law relating to births, deaths, and marriages

The various Acts relating to the registration of births, deaths, and marriages in Victoria were consolidated in 1958.

In November 1959 a Bill was placed before Parliament to reorganise the system of registration of births and deaths in Victoria. This new

legislation known as the *Registration of Births, Deaths, and Marriages Act 1959*, which came into operation on 1 October 1960, was designed to allow registrations of births and deaths to be effected by post instead of through those persons who previously held office as Registrars of Births and Deaths. No alteration, however, was made to the system of registration of marriages. In 1961 the Commonwealth Parliament passed the *Marriage Act 1961*. A few minor provisions (relating mainly to certain extensions of the application of the prohibited degrees) came into operation on the date the Act received the Royal Assent (6 May 1961), and the remainder of the Act came into operation on 1 September 1963. On this date the Act superseded the marriage laws of all the States, the two mainland Territories, and Norfolk Island.

The principal numbers and rates relating to vital statistics in Victoria from 1965 to 1969 are given in the following table :

VICTORIA—SUMMARY OF VITAL STATISTICS

Year	Number of—				Rate per 1,000 of mean population			Infant mortality
	Marriages	Live births	Deaths	Infant deaths (a)	Marriages	Live births	Deaths	Deaths under one year per 1,000 live births
1965	26,421	63,550	28,031	1,109	8·35	20·08	8·86	17·5
1966	27,089	64,008	28,673	1,116	8·41	19·87	8·90	17·4
1967	28,004	65,485	28,373	1,101	8·55	19·98	8·66	16·8
1968	29,724	70,228	29,967	1,010	8·93	21·10	9·01	14·4
1969	30,860	71,035	28,976	1,066	9·11	20·97	8·55	15·0

(a) Included in deaths.

Marriages

Marriages in Victoria in 1969 numbered 30,860, an increase of 1,136 on the number registered in 1968. The rate per 1,000 of mean population in 1969 was 9·11, compared with a rate of 8·93 in 1968. The highest rate ever recorded in Victoria was 12·06 in 1942, and the lowest 5·66 in 1931.

The following tables show the number of marriages and the marriage rate per 1,000 of mean population in the Australian States and Territories for each of the five years 1965 to 1969 and relative ages of bridegrooms and brides for Victoria in 1969.

AUSTRALIA—NUMBER OF MARRIAGES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1965	35,176	26,421	12,967	8,680	6,448	2,888	296	670	93,546
1966	35,575	27,089	13,325	9,051	7,001	2,946	312	747	96,046
1967	37,077	28,004	13,634	9,434	7,430	3,213	325	883	100,000
1968	39,213	29,724	14,860	9,652	8,086	3,426	419	965	106,345
1969	41,286	30,860	15,669	10,599	8,993	3,532	413	1,118	112,470

AUSTRALIA—MARRIAGE RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory (a)	Australian Capital Territory (a)	Australia
1965	8.43	8.35	7.94	8.16	7.91	7.85	8.4	7.6	8.25
1966	8.40	8.41	8.01	8.29	8.36	7.93	8.3	7.7	8.31
1967	8.60	8.55	8.01	8.49	8.47	8.53	5.4	8.5	8.46
1968	8.94	8.93	8.57	8.57	8.89	8.96	6.5	8.6	8.83
1969	9.22	9.11	8.86	9.26	9.49	9.09	6.1	9.1	9.14

(a) Based on too few events to warrant calculation to second place of decimals.

VICTORIA—RELATIVE AGES OF BRIDEGROOMS AND BRIDES, 1969

Ages of bridegrooms (a) (years)	Ages of brides (a) (years)													Total bridegrooms	
	14	15	16	17	18	19	20	21 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49		50 and over
16	1	..	..	..	..	..	..	..	..	1
17	4	11	12	7	..	1	..	..	..	..	..	..	36
18	1	1	80	135	164	76	25	35	11	..	..	..	..	..	517
19	..	6	102	229	330	274	146	142	2	..	..	..	..	..	1,242
20	..	2	93	224	450	436	337	370	23	2	..	..	..	..	1,937
21 to 24	..	8	167	496	1,302	2,135	2,893	7,283	594	49	9	..	..	..	14,940
25 to 29	..	1	41	84	272	494	690	3,786	1,370	206	34	13	1	1	6,996
30 to 34	5	12	37	66	91	724	642	310	90	26	13	6	2,022
35 to 39	1	1	9	10	14	122	239	217	131	69	34	15	862
40 to 44	2	..	..	6	4	40	111	143	136	126	63	30	661
45 to 49	1	..	19	34	64	82	123	104	74	501
50 to 54	5	16	19	30	60	85	122	330
55 to 59	1	..	..	3	3	11	12	33	68	169	300
60 to 64	4	..	4	9	27	142	186
65 and over	1	2	8	16	295	322
Total brides	1	18	495	1,192	2,577	3,506	4,200	12,530	3,048	1,024	530	469	415	855	30,860

(a) The number of bridegrooms under 18 years and brides under 16 years of age is restricted by the provisions of the *Marriage Act* 1961. See page 141.

Of every 1,000 men who married during 1969, 761 were older and 133 were younger than their brides, and 106 were of the same age. In 1969 the oldest bridegroom was aged 86 years and the oldest bride was also aged 86 years.

VICTORIA—PERCENTAGES OF BRIDEGROOMS AND BRIDES IN AGE GROUPS, 1969

Age group (years)	Percentage of total		Age group (years)	Percentage of total	
	Bridegrooms	Brides		Bridegrooms	Brides
14	..	(a)	30 to 34	6.6	3.3
15	..	0.1	35 to 39	2.8	1.7
16	(a)	1.6	40 to 44	2.1	1.5
17	0.1	3.9	45 to 49	1.6	1.4
18	1.7	8.3	50 to 54	1.1	1.0
19	4.0	11.4	55 to 59	1.0	0.6
20	6.3	13.6	60 and over	1.6	1.1
21 to 24	48.4	40.6			
25 to 29	22.7	9.9	Total	100.0	100.0

(a) Less than 0.1.

VICTORIA—MARRIAGES OF MINORS

Year	Age in years							Total	
	14	15	16	17	18	19	20	Number	Percentage of total marriages
BRIDEGROOMS									
1965	..	..	3	40	531	1,009	1,501	3,084	11·67
1966	..	..	3	32	499	1,303	1,467	3,304	12·20
1967	..	..	..	36	479	1,204	1,798	3,517	12·56
1968	..	..	1	50	512	1,171	1,919	3,653	12·29
1969	..	..	1	36	517	1,242	1,937	3,733	12·10
BRIDES									
1965	1	17	519	1,165	2,271	2,848	3,305	10,126	38·33
1966	2	24	530	1,105	2,162	3,488	3,529	10,840	40·02
1967	4	23	479	1,138	2,118	3,283	4,291	11,336	40·48
1968	2	17	540	1,227	2,303	3,373	4,079	11,541	38·83
1969	1	18	495	1,192	2,577	3,506	4,200	11,989	38·85

A feature of Victorian marriages since the end of the Second World War has been the increase in the proportion of marriages which involve minors. In 1947, 4·82 per cent of bridegrooms and 22·94 per cent of brides were under 21 years of age. In 1969 these percentages were 12·10 and 38·85, respectively, and in 10·19 per cent of marriages both parties were under 21 years of age.

VICTORIA—MEAN AGE AT MARRIAGE

Year	Bridegrooms				Brides			
	Bachelors	Widowers	Divorced	All bridegrooms	Spinsters	Widows	Divorced	All brides
1965	25·6	56·0	41·8	27·5	22·5	50·1	37·9	24·3
1966	25·4	56·4	41·2	27·2	22·4	50·2	38·4	24·1
1967	25·3	56·3	41·6	27·0	22·4	50·3	38·0	24·1
1968	25·1	57·1	41·6	26·9	22·3	50·7	37·7	24·0
1969	24·8	56·8	41·0	26·7	22·3	50·5	37·5	23·9

In general terms, the age in relation to which approximately half the number of bachelors was younger, and approximately half was older (the median age), was 23·6 years. The corresponding age for spinsters was 21·4 years. More bachelors were married at 22 years and spinsters at 21 years (the modal ages) than at any other age.

The following tables show the number of persons in each conjugal condition marrying from 1965 to 1969 and the proportions in each condition for periods since 1940.

VICTORIA—CONJUGAL CONDITION OF PERSONS MARRYING

Period	Bridegrooms			Brides			Total marriages
	Bachelors	Widowers	Divorced	Spinsters	Widows	Divorced	
1965	24,190	870	1,361	24,126	927	1,368	26,421
1966	24,834	915	1,340	24,773	918	1,398	27,089
1967	25,786	845	1,373	25,704	931	1,369	28,004
1968	27,248	899	1,577	27,192	954	1,578	29,724
1969	28,308	965	1,587	28,324	1,023	1,513	30,860

VICTORIA—TOTAL MARRIAGES IN 1969 AND PERCENTAGE OF PERSONS MARRYING IN EACH CONJUGAL CONDITION, 1940 TO 1969

Marriages between—	1969		Conjugal condition	Percentage of total—			
	Number	Percentage		1940-49	1950-59	1960-69	1969
				BRIDEGROOMS			
Bachelors and spinsters	27,215	88·2	Bachelors	90·5	89·5	91·6	91·7
Bachelors and widows	292	0·9	Widowers	4·9	4·5	3·4	3·1
Bachelors and divorced women	801	2·6	Divorced	4·6	6·0	5·0	5·2
Widowers and spinsters	260	0·8	Total	100·0	100·0	100·0	100·0
Widowers and widows	504	1·6					
Widowers and divorced women	201	0·7					
Divorced men and spinsters	849	2·8					
Divorced men and widows	227	0·7					
Divorced men and divorced women	511	1·7					
				BRIDES			
			Spinsters	91·4	89·2	91·2	91·8
			Widows	3·9	4·4	3·6	3·3
			Divorced	4·7	6·4	5·2	4·9
Total marriages	30,860	100·0	Total	100·0	100·0	100·0	100·0

In 1969 the number of marriages celebrated by ministers of religion was 28,484 representing 92 per cent of the total marriages. Civil marriages numbered 2,376 or 8 per cent of the total.

VICTORIA—MARRIAGES, RELIGIOUS AND CIVIL, 1969

Category of celebrant	Number	Proportion of total marriages
Ministers of religion :		
Recognised denominations (a)—		
Roman Catholic Church	9,070	29·39
Church of England in Australia	7,142	23·14
The Presbyterian Church of Australia	4,767	15·45
The Methodist Church of Australia	3,269	10·59
Orthodox Church (b)	1,486	4·81
Churches of Christ in Australia	588	1·91
The Baptist Union of Australia	516	1·67
Congregational Union of Australia	383	1·24
Lutheran Church (b)	316	1·02
Jewry	267	0·87
The Salvation Army	153	0·50
Unitarians	116	0·38
Jehovah's Witnesses	74	0·24
Seventh-day Adventist Church	57	0·18
Church of Jesus Christ of Latter Day Saints	40	0·13
Christian Brethren	31	0·10
Other recognised denominations	145	0·47
Other ministers	64	0·21
Total ministers of religion	28,484	92·30
Civil officers	2,376	7·70
Total marriages	30,860	100·00

(a) Under authority of the Commonwealth *Marriage Act* 1961.

(b) Includes churches grouped under this heading in the proclamation made under the Commonwealth *Marriage Act* 1961.

The following table shows the number of civil marriages and proportion to total marriages performed for each of the five years 1965 to 1969. The number of civil marriages performed in the Office of the Government Statist and the proportion of these to total civil marriages are also shown.

VICTORIA—CIVIL MARRIAGES

Year	Total civil marriages		Performed in the office of the Government Statist	
	Number	Percentage of total marriages	Number	Percentage of total civil marriages
1965	2,254	8·53	1,962	87·05
1966	2,161	7·98	1,850	85·61
1967	2,203	7·87	1,846	83·79
1968	2,337	7·87	1,942	83·10
1969	2,376	7·70	2,041	85·90

Divorce

Until the operation of the *Matrimonial Causes Act* 1959 from 1 February 1961, the law in Victoria in regard to divorce was contained in the *Marriage Act* 1958. As the new Act introduced changes in provisions on divorce, figures since the date of operation of the Commonwealth Act may not be comparable with those of earlier years.

The following table gives the number of petitions filed by husbands and wives, respectively, and the number of dissolutions of marriage and nullities of marriage granted during the year 1969. Every decree of dissolution of marriage is in the first instance a decree *nisi* and is generally not made absolute until the expiration of not less than three months thereafter.

VICTORIA—DIVORCE, 1969

Petition for—	Petitions filed by—			Decrees granted to—		
	Husbands	Wives	Total	Husbands	Wives	Total
Dissolution of marriage	(a)1,189	(b)1,869	3,058	911	1,303	(c)2,220
Nullity of marriage	3	6	9	6	9	15
Judicial separation	..	1	1	..	..	..
Total	1,192	1,876	3,068	917	1,312	(c)2,235

(a) Includes four petitions for dissolution or nullity.

(b) Includes five petitions for dissolution or nullity.

(c) Includes six petitions granted to both parties of the marriage.

VICTORIA—DIVORCE: PETITIONS FILED AND DECREES GRANTED: DISSOLUTION, NULLITY, AND JUDICIAL SEPARATION

Year	Petitions filed			Decrees granted		
	Dissolution (a)	Nullity	Judicial separation	Dissolution	Nullity	Judicial separation
1965	2,516	12	4	2,089	13	1
1966	2,629	14	1	2,131	11	2
1967	2,714	16	2	2,039	15	..
1968	2,787	10	6	2,515	10	..
1969	3,058	9	1	2,220	15	..

(a) Includes fifteen petitions for dual relief in 1965, nine in 1966, fourteen in 1967, sixteen in 1968, and nine in 1969.

VICTORIA—GROUNDS FOR DIVORCE, 1969

Grounds on which granted	Dissolution of marriage		Nullity of marriage		Judicial separation	
	Husbands' petitions	Wives' petitions	Husbands' petitions	Wives' petitions	Husbands' petitions	Wives' petitions
Adultery	336	294	..	..	..	..
Adultery and desertion	5	10	..	..	..	..
Cruelty	2	39	..	..	..	..
Desertion	407	675	..	..	..	..
Separation	149	249	..	..	..	..
Desertion and separation	3	3	..	..	..	..
Other grounds	9	33	6	9	..	..
Total	911	1,303	6	9	..	..

NOTE. In addition to the above there were six instances where dissolutions were granted to both parties.

VICTORIA—DIVORCE PETITIONS GRANTED: AGES OF PETITIONERS (AT DATE OF DECREE) AND ISSUE, 1969

Ages of petitioners (years)	Dissolution of marriage ^(a)		Nullity of marriage		Judicial separation		Number of children ^(a)	
	Husbands' petitions	Wives' petitions	Husbands' petitions	Wives' petitions	Husbands' petitions	Wives' petitions	Husbands' petitions	Wives' petitions
Under 20	..	1	..	..	..	..	..	..
20-24	25	90	..	2	..	..	11	80
25-29	151	275	2	1	..	..	127	306
30-34	179	236	1	2	..	..	209	416
35-39	127	203	2	1	..	..	223	401
40-44	154	205	1	1	..	..	266	383
45-49	112	128	..	..	..	..	166	188
50-54	67	90	..	1	..	..	65	71
55-59	51	43	..	1	..	..	34	17
60 and over	45	32	..	..	..	..	16	..
Total	911	1,303	6	9	..	..	1,117	1,862

^(a) Of the total of 2,979 children shown above, two children were the issue of marriages for which nullities were granted. In addition to the above there were six instances involving a total of twelve children where dissolutions were granted to both parties.

VICTORIA—DISSOLUTIONS OF MARRIAGE: PETITIONS GRANTED: AGES OF PARTIES AT DATE OF DECREE, 1969

Ages of husbands (years)	Ages of wives (years)										Total husbands
	Under 21	21-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 and over	
21-24	5	40	6	..	..	..	..	..	..	..	51
25-29	4	115	213	18	4	..	..	..	..	..	354
30-34	1	20	195	169	19	2	..	..	1	..	407
35-39	..	4	46	160	109	25	6	..	1	..	350
40-44	..	..	12	43	138	150	27	6	1	1	378
45-49	..	..	6	9	44	112	83	25	2	1	282
50-54	..	..	..	3	6	29	63	52	12	3	168
55-59	..	..	1	2	6	12	22	47	20	7	117
60 and over	..	..	..	..	..	4	8	26	32	42	112
Total wives	10	179	479	404	326	334	209	156	68	54	(a) 2,219

^(a) Excludes one petition where the age of the wife was not stated but where the age of the husband was 28 years at time of dissolution.

VICTORIA—DISSOLUTIONS OF MARRIAGE : PETITIONS GRANTED :
DURATION OF MARRIAGE AND ISSUE, 1969

Duration of marriage (years)	Number of children							Total dissolutions of marriage	Total children (a)
	0	1	2	3	4	5	6 and over		
1	1	..	1	..	..	..	..	2	2
2	10	..	1	..	..	..	..	11	2
3	26	15	..	1	..	1	..	43	23
4	61	31	4	..	..	..	..	96	39
5	65	37	13	3	..	1	..	119	77
6	60	66	17	8	1	..	..	152	128
7	45	64	30	4	..	..	..	143	136
8	28	39	23	4	..	..	..	94	97
9	32	36	49	6	2	1	..	126	165
10	21	29	31	11	3	..	..	95	136
11	28	25	34	10	5	1	..	103	148
12	18	23	26	16	7	2	3	95	180
13	21	21	31	21	9	1	..	104	187
14	16	18	32	16	5	2	2	91	172
15-19	52	79	117	60	27	15	3	353	696
20-24	62	66	86	52	33	5	6	310	589
25-29	63	39	29	15	4	1	1	152	169
30-34	58	13	7	3	..	..	..	81	36
35-39	24	3	2	..	..	..	..	29	7
40 and over	21	..	..	..	..	..	..	21	..
Total dissolutions of marriage	712	604	533	230	96	30	15	2,220	..
Total children	..	604	1,066	690	384	150	95	..	2,989

(a) Of the total of 2,989 children, twelve children were the issue of marriages for which dissolutions were granted to both parties.

Births

General

The number of births registered in Victoria during the year 1969 was 71,035.

Stillbirths, which are excluded from births and deaths, numbered 761 and correspond to a ratio of 10.60 per 1,000 births live and still in 1969. The compulsory registration of stillborn children became effective in 1953.

The following tables show the number of births and rates per 1,000 of mean population in each State and Territory from 1965 to 1969 :

AUSTRALIA—NUMBER OF BIRTHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1965	78,069	63,550	33,551	20,891	16,186	7,535	914	2,158	222,854
1966	77,758	64,008	32,843	20,319	17,007	7,401	972	2,318	222,626
1967	78,841	65,485	34,692	20,386	18,023	7,547	1,921	2,401	229,296
1968	81,696	70,228	35,190	21,207	19,541	8,317	2,084	2,643	240,906
1969	86,036	71,035	36,576	21,977	20,754	8,445	2,274	3,079	250,176

AUSTRALIA—BIRTH RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory (a)	Australian Capital Territory (a)	Australia
1965	18·71	20·08	20·54	19·63	19·85	20·48	25·8	24·4	19·65
1966	18·35	19·87	19·74	18·62	20·31	19·92	25·9	24·0	19·27
1967	18·30	19·98	20·38	18·34	20·55	20·04	32·3	23·1	19·40
1968	18·62	21·10	20·30	18·83	21·47	21·76	33·4	23·4	20·00
1969	19·21	20·97	20·67	19·19	21·91	21·73	33·3	25·2	20·33

(a) Based on too few events to warrant calculation to second place of decimals.

The following table shows the number of births by sex, the ratio of male to female births, and the average ages of parents, in each year from 1965 to 1969:

VICTORIA—BIRTHS BY SEX, MASCULINITY, AVERAGE AGE OF FATHER AND MOTHER

Year	Males	Females	Total	Masculinity (a)	Average age (b)	
					Father	Mother
1965	32,494	31,056	63,550	104·63	30·9	27·5
1966	32,782	31,226	64,008	104·98	30·8	27·3
1967	33,529	31,956	65,485	104·92	30·6	27·2
1968	36,145	34,083	70,228	106·05	30·3	27·0
1969	36,421	34,614	71,035	105·22	30·2	27·0

(a) Number of male births per 100 female births.

(b) Average age of father and mother of nuptial children only.

The following tables relating to confinements show age group of mother together with previous issue, average issue, relative age of father, and duration of marriage.

VICTORIA—NUPTIAL CONFINEMENTS: AGE GROUP OF MOTHER AND PREVIOUS ISSUE, 1969

Age group of mother (years)	Number of married mothers with previous issue numbering—										Total married mothers	
	0	1	2	3	4	5	6	7	8	9		10 and over
Under 20	3,758	706	61	5	1	..	..	..	..	..	..	4,531
20-24	12,412	7,536	2,216	513	90	20	4	..	..	..	..	22,791
25-29	5,777	7,929	5,175	2,050	691	237	76	18	6	..	..	21,959
30-34	1,373	2,569	2,962	2,058	1,004	487	221	108	36	14	9	10,841
35-39	480	741	898	896	613	411	281	138	94	57	54	4,663
40-44	127	133	206	200	206	142	106	66	58	39	48	1,331
45-49	6	8	16	15	14	18	12	9	11	3	6	118
Age not stated	2	..	1	..	..	..	1	..	..	..	..	4
Total	23,935	19,622	11,535	5,737	2,619	1,315	701	339	205	113	117	66,238
Proportion of total married mothers	36·14	29·62	17·41	8·66	3·95	1·99	1·06	0·51	0·31	0·17	0·18	100·00

VICTORIA—NUPTIAL CONFINEMENTS:
NUMBER OF MOTHERS IN AGE GROUPS,
TOTAL ISSUE, AND AVERAGE ISSUE, 1969

Age group of mother (years)	Number of mothers	Total issue	Average issue
Under 20	4,531	5,411	1.19
20-24	22,791	36,951	1.62
25-29	21,959	51,214	2.33
30-34	10,841	34,716	3.20
35-39	4,663	18,958	4.07
40-44	1,331	6,460	4.85
45-49	118	667	5.65
Age not stated	4	12	3.00
Total	66,238	154,389	2.33

VICTORIA—NUPTIAL CONFINEMENTS; RELATIVE AGE GROUPS OF PARENTS, 1969

Age group of father (years)	Age group of mother (years)							Not stated	Total fathers
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49		
Under 20	728	136	1	..	..	..	..	..	865
20-24	3,050	8,818	744	.. 22	.. 2	..	..	..	12,636
25-29	599	10,890	10,499	803	49	..	..	..	22,844
30-34	116	2,443	8,216	4,895	449	4	..	3	16,157
35-39	28	392	2,012	3,803	2,032	177	2	..	8,446
40-44	4	74	365	1,067	1,626	613	23	..	3,772
45-49	..	21	84	197	388	361	61	..	1,112
50 and over	2	6	27	51	106	139	31	..	362
Not stated	4	11	11	3	11	2	1	..	44
Married mothers	4,531	22,791	21,959	10,841	4,663	1,331	118	4	66,238

VICTORIA—NUPTIAL FIRST BIRTHS: AGE GROUP OF MOTHER AND DURATION OF MARRIAGE, 1969

Age group of mother (years)	Duration of marriage															Total nuptial first births		
	Months											Years						
	0	1	2	3	4	5	6	7	8	9	10	11	1	2	3		4	5 and over
Under 20	44	78	140	218	368	743	786	275	105	137	134	109	521	86	11	3	..	3,758
20-24	28	40	65	135	279	615	763	336	300	681	558	471	4,130	2,448	1,097	354	112	12,412
25-29	8	12	11	23	34	56	65	63	102	207	159	141	1,248	1,144	1,035	703	766	5,777
30-34	6	4	3	5	12	19	20	18	22	67	57	34	328	217	109	116	335	1,372
35-39	4	..	..	3	3	7	9	11	11	19	14	14	114	66	42	33	130	480
40-44	..	1	..	1	2	..	..	1	1	4	5	5	35	13	15	9	34	127
45-49	..	..	..	..	..	1	..	..	..	..	..	..	2	..	..	..	3	6
Not stated	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
Total	90	135	220	385	698	1,441	1,643	704	541	1,115	927	774	6,378	3,975	2,309	1,218	1,380	23,933

On the average of the five years 1965 to 1969, mothers of twins were one in 89 of all mothers whose confinements were recorded, mothers of triplets one in 9,463 and mothers of all multiple births one in 88 mothers.

VICTORIA—MULTIPLE CONFINEMENTS (a)

Year	Cases of twins	Cases of triplets	Total multiple cases	Multiple cases per 1,000 of total confinements
1965	639	12	651	10.35
1966	714	7	721	11.39
1967	691	11	(b)703	10.85
1968	730	5	735	10.57
1969	742	7	(c)751	11.34

(a) Excludes confinements where the births were of stillborn children only.

(b) Includes one case of quadruplets.

(c) Includes two cases of quadruplets.

The following tables show details of ex-nuptial births in each State and Territory for the years 1965 to 1969 and the ages of mothers of ex-nuptial children in Victoria.

AUSTRALIA—EX-NUPTIAL BIRTHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1965	5,700	3,245	3,202	1,310	1,439	471	102	62	15,531
1966	6,024	3,578	3,227	1,372	1,607	524	135	74	16,541
1967	6,300	3,699	3,525	1,375	1,944	562	259	70	17,734
1968	6,622	4,166	3,756	1,558	2,014	657	312	86	19,171
1969	6,860	4,098	3,835	1,508	2,231	647	315	91	19,585

AUSTRALIA—EX-NUPTIAL BIRTHS: PERCENTAGE OF TOTAL BIRTHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1965	7.30	5.11	9.54	6.27	8.89	6.25	11.16	2.87	6.97
1966	7.75	5.59	9.83	6.75	9.45	7.08	13.89	3.19	7.43
1967	7.99	5.65	10.16	6.74	10.79	7.45	13.48	2.92	7.73
1968	8.11	5.93	10.67	7.35	10.31	7.90	14.97	3.25	7.96
1969	7.97	5.77	10.49	6.86	10.75	7.66	13.85	2.96	7.83

VICTORIA—AGES OF MOTHERS OF EX-NUPTIAL CHILDREN

Age of mother (years)	1965	1966	1967	1968	1969
12	..	..	1	1	..
13	1	4	..	1	1
14	20	21	11	10	17
15	80	79	70	66	69
16	167	178	207	200	194
17	276	328	320	396	345
18	376	381	417	477	447
19	335	413	401	475	452
20	282	271	373	386	363
21-24	673	778	823	952	1,001
25-29	416	478	502	553	580
30-34	303	290	283	320	322
35-39	204	219	179	194	215
40-44	80	93	56	81	81
45 and over	5	6	12	10	4
Not stated	..	..	3	1	7
Total	3,218	3,539	3,658	4,123	4,098

Adoption of children

Provision for the legal adoption of children and the registration of each adoption are contained in the Adoption of Children Act.

The following table shows the number of legal adoptions (male and female) from 1965 to 1969 :

VICTORIA—CHILDREN LEGALLY ADOPTED

Period	Number of children adopted	
	Males	Females
1965	1,005	946
1966	835	786
1967	1,011	1,057
1968	939	893
1969	1,052	1,073

Legitimations registered

Until the operation of the Commonwealth *Marriage Act* 1961 on 1 September 1963, provision for the legitimation of children was contained in the Victorian *Registration of Births, Deaths, and Marriages Act* 1959. Legitimations registered under the provisions of the new Act numbered 488 in 1969.

Deaths

The following tables show the number of deaths and the death rates per 1,000 of the mean population in each of the Australian States and Territories for each of the five years 1965 to 1969 :

AUSTRALIA—NUMBER OF DEATHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1965	38,949	28,031	14,114	8,788	6,274	3,043	161	355	99,715
1966	40,546	28,673	14,861	9,323	6,772	3,159	154	441	103,929
1967	39,613	28,373	14,736	9,071	6,779	3,228	527	376	102,703
1968	41,803	29,967	16,078	9,916	7,468	3,284	543	488	109,547
1969	40,665	28,976	15,786	9,337	7,350	3,309	485	588	106,496

AUSTRALIA—DEATH RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory(a)	Australian Capital Territory(a)	Australia
1965	9.33	8.86	8.64	8.26	7.70	8.27	4.6	4.0	8.79
1966	9.57	8.90	8.93	8.54	8.09	8.50	4.1	4.6	8.99
1967	9.19	8.66	8.65	8.16	7.73	8.57	8.8	3.6	8.69
1968	9.53	9.01	9.27	8.81	8.21	8.59	8.4	4.3	9.10
1969	9.08	8.55	8.92	8.15	7.76	8.51	7.1	4.8	8.65

(a) Based on too few events to warrant calculation to second place of decimals.

Causes of death*Classification*

The Eighth (1965) Revision of the International List of Causes of Death was used for the first time in 1968, replacing the Seventh (1955)

Revision which had been used from 1958 to 1967.

Major changes have been made in several sections of the International Classification of Diseases, namely, infective and parasitic diseases, mental disorders, diseases of the circulatory system, congenital malformations, diseases and conditions peculiar to the perinatal period, and the nature of injury and external causes in respect of accidents, poisonings, and violence.

Infective and parasitic diseases

The changes in the classification of infective and parasitic diseases reflect mainly the accumulation of knowledge on viral diseases. Also, more detailed classifications have been provided to show the various clinical manifestations of zoonotic bacterial diseases and of spirochaetal and mycotic diseases. An important change is the transfer to this section of diarrhoeal conditions, which, in the Seventh Revision, were distributed among several sections of the classification.

Neoplasms

No basic changes have been made in the classification of neoplasms, but more detail is provided on specific anatomical sites. Sub-divisions by detailed topography similar to those for the malignant neoplasms have been introduced under the categories for benign neoplasms and neoplasms of unspecified nature. For leukaemia a differentiation is now made between the acute and chronic forms of the disease. Polycythaemia vera and myelofibrosis now appear with neoplasms of the lymphatic and haematopoietic tissue.

Endocrine, nutritional and metabolic diseases

The most important change in this class is the transfer of allergic disorders to diseases of respiratory system (asthma and hay fever) and to diseases of skin and sub-cutaneous tissue. The section dealing with avitaminoses and other metabolic diseases has been reorganised and enlarged.

Diseases of blood and blood forming organs

In the Eighth Revision polycythaemia vera and myelofibrosis have been excluded from this class and transferred to the section dealing with neoplasms of lymphatic and haematopoietic tissue.

Mental disorders

The listing of mental disorders differs from that in the Seventh Revision both in detail and in arrangement. Important changes are the inclusion of categories showing the association between psychoses and physical conditions and the sub-divisions indicating the pathogenesis of mental retardation.

Diseases of circulatory system

The section on diseases of the circulatory system now includes the cerebrovascular diseases which have been transferred from the section on diseases of the nervous system and sense organs. Such conditions as occlusion of pre-cerebral arteries, cerebral thrombosis, cerebral embolism, and transient cerebral ischaemia are tabulated more specifically.

The Eighth Revision gives more emphasis to hypertension and its manifestations. In addition to the inclusion of categories for hypertensive

diseases, the associations of hypertension with ischaemic heart disease and cerebrovascular disease are identified at the fourth-digit level. Acute myocardial infarction is differentiated from the other forms of ischaemic heart disease.

Diseases of respiratory system

The classification of pneumonias is now by the type of infecting organism. Also, a new category has been created for emphysema which with asthma and chronic or unspecified bronchitis has been included in the group "Bronchitis, emphysema and asthma". Acute bronchitis does not appear in this group but has been placed with "Acute respiratory infections (except influenza)".

Congenital malformations

The section on congenital malformations has been greatly expanded; classification is again by the site but a substantial increase in individual categories will result in more precise classification. Mongolism (Down's disease) which in the Seventh Revision was classified as a mental disorder has been included under congenital syndromes affecting multiple systems.

Metabolic defects of congenital origin are included in the section on endocrine, nutritional, and metabolic diseases.

Perinatal morbidity and mortality

A new section on certain causes of perinatal morbidity and mortality was created by integrating the former section on certain diseases of early infancy with the classification of causes of stillbirth, the latter being a supplementary classification in the Seventh Revision. Whereas formerly the emphasis was on the disease or condition in the child which led to its death, the new classification often places emphasis on the maternal condition, or complication of pregnancy or labour, which led to the death of the child. This section also provides for specific perinatal conditions such as haemolytic disease of the newborn, whereas conditions that can occur in other periods of life are classified outside the perinatal classification.

The classification of immaturity as associated with the various diseases of early infancy in the previous revisions has been deleted as well as the age qualifications used to classify the same conditions in or outside this section.

External causes of accidents, poisonings, and violence

The section dealing with accidental poisoning by drugs and medicaments has been greatly expanded, as have the sections dealing with falls and fires which give more emphasis to the circumstances surrounding the accidents. In addition the "E code" also provides for the classification of those injuries where it cannot be determined whether the injury was accidental, suicidal, or homicidal.

In order to accommodate the expansion in the "E code", the number of categories relating to transport accidents has been reduced. However, the use of four digits now enables classes of persons killed in all transport accidents to be identified.

VICTORIA—CAUSES OF DEATH: NUMBERS AND RATES, 1969

Cause of death (a)	International List Numbers	Number of deaths	Proportion of total	Rate per 1,000,000 of mean population
3. Bacillary dysentery and amoebiasis	004-006	1	(d)	(d)
4. Enteritis and other diarrhoeal diseases	008-009	61	0·21	18
5. Tuberculosis of respiratory system	010-012	49	0·17	14
6. Other tuberculosis, including late effects	013-019	12	0·04	3
11. Meningococcal infection	036	4	0·01	1
14. Measles	055	7	0·02	2
17. Syphilis and its sequelae	090-097	6	0·02	2
18. All other infective and parasitic diseases	(b)	83	0·29	25
19. Malignant neoplasms—				
Digestive organs and peritoneum	150-159	1,743	6·02	515
Lung	162	848	2·93	250
Skin	172, 173	108	0·37	32
Breast	174	426	1·47	126
Genital organs	180-187	602	2·08	178
Urinary organs	188, 189	216	0·75	64
Leukaemia and aleukaemia	204-207	187	0·65	55
Other malignant and lymphatic neoplasms	(c)	812	2·80	240
20. Benign and unspecified neoplasms	210-239	51	0·18	15
21. Diabetes mellitus	250	613	2·12	181
22. Avitaminoses and other nutritional deficiency	260-269	25	0·09	7
23. Anaemias	280-285	67	0·23	20
24. Meningitis	320	26	0·09	8
25. Active rheumatic fever	390-392	10	0·03	3
26. Chronic rheumatic heart disease	393-398	285	0·98	84
27. Hypertensive disease	400-404	469	1·62	138
28. Ischaemic heart disease	410-414	8,820	30·44	2,604
29. Other forms of heart disease	420-429	1,191	4·11	352
30. Cerebrovascular disease	430-438	3,861	13·32	1,140
31. Influenza	470-474	45	0·16	13
32. Pneumonia	480-486	634	2·19	187
33. Bronchitis, emphysema and asthma	490-493	1,057	3·65	312
34. Peptic ulcer	531-533	166	0·57	49
35. Appendicitis	540-543	19	0·07	6
36. Intestinal obstruction and hernia	550-553, 560	107	0·37	32
37. Cirrhosis of liver	571	209	0·72	62
38. Nephritis and nephrosis	580-584	157	0·54	46
39. Hyperplasia of prostate	600	81	0·28	24
40. Abortion	640-645	1	(d)	(d)
41. Other complications of pregnancy, childbirth and the puerperium	630-639	9	0·03	3
42. Congenital anomalies	650-678	328	1·13	97
43. Birth injury, difficult labour and other anoxic and hypoxic conditions	740-759	268	0·92	79
44. Other causes of perinatal mortality	764-768			
	772, 776			
	760-763			
	769-771			
	773-775			
	777-779	301	1·04	89
45. Symptoms and ill-defined conditions	777-796	82	0·28	24
General arteriosclerosis	780-796	822	2·84	243
Other diseases of circulatory system	440	441	1·52	130
46. Other diseases of respiratory system	441-458	259	0·89	76
All other diseases	460-466	1,208	4·17	357
47. Motor vehicle accidents	500-519	1,087	3·75	321
48. All other accidents	Residual			
49. Suicide and self-inflicted injury	E810-E823	652	2·25	192
50. All other external causes	E800-E807	337	1·16	99
	E825-E949	123	0·43	36
	E950-E959			
	E960-E999			
Total all causes		28,976	100·00	8,554

(a) No deaths were recorded in the following categories in 1969: 1. Cholera (000), 2. Typhoid fever (001), 7. Plague (020), 8. Diphtheria (032), 9. Whooping cough (033), 10. Streptococcal sore throat and scarlet fever (034), 12. Acute poliomyelitis (040-043), 13. Smallpox (050), 15. Typhus and other rickettsioses (080-083), 16. Malaria (084).

(b) 002, 003, 005, 007, 021-031, 035, 037-039, 044-046, 051-054, 056, 057, 060-068, 070-079, 085-089, 098-136.

(c) 140-149, 160, 161, 163, 170, 171, 190-199, 200-203, 208, 209.

(d) Too small to register within the limits of the table.

Deaths in 1969 comprised 15,860 males and 13,116 females.

The following table shows deaths in 1969, in certain age groups, detailing the selected main causes of death within those age groups :

VICTORIA—MAIN CAUSES OF DEATH (IN AGE GROUPS), 1969

International List Numbers	Age group and cause of death	Deaths from specified cause			
		In age group		At all ages	
		Number	Per cent	Number	Per cent (a)
	Under 1 year	1,066	100.0		
740-759	Congenital anomalies	234	21.9	328	71.2
776	Anoxic and hypoxic conditions, not elsewhere classified	204	19.1	204	100.0
760-763, 769, 773, 777-779, 470-493	Other causes of perinatal mortality	200	18.8	201	99.5
764-768, 772	Influenza, pneumonia, bronchitis, emphysema and asthma	70	6.6	1,736	4.0
770, 771	Birth injury and difficult labour	64	6.0	64	100.0
000-136	Conditions of placenta and cord	64	6.0	64	100.0
774, 775	Infective and parasitic diseases	38	3.6	223	17.1
800-999	Haemolytic disease of newborn	37	3.5	37	100.0
	Accidental and violent deaths	14	1.3	2,199	0.6
	Other causes	141	13.2		
	1-4 years	234	100.0		
800-999	Accidental and violent deaths	88	37.6	2,199	4.0
740-759	Congenital anomalies	28	12.0	328	8.5
140-209	Cancer (all forms)	28	12.0	4,942	0.6
000-136	Infective and parasitic diseases	23	9.8	223	10.3
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	14	6.0	1,736	0.8
	Other causes	53	22.6		
	5-14 years	276	100.0		
800-999	Accidental and violent deaths	129	46.7	2,199	5.9
140-209	Cancer (all forms)	48	17.4	4,942	1.0
740-759	Congenital anomalies	19	6.9	328	5.8
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	9	3.2	1,736	0.5
000-136	Infective and parasitic diseases	5	1.8	223	2.2
	Other causes	66	24.0		
	15-19 years	291	100.0		
800-999	Accidental and violent deaths	221	76.0	2,199	10.1
140-209	Cancer (all forms)	15	5.2	4,942	0.3
740-759	Congenital anomalies	6	2.1	328	1.8
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	6	2.1	1,736	0.3
000-136	Infective and parasitic diseases	3	1.0	223	1.3
	Other causes	40	13.6		
	20-24 years	334	100.0		
800-999	Accidental and violent deaths	252	75.4	2,199	11.4
140-209	Cancer (all forms)	25	7.5	4,942	0.5
391, 393-398, 402, 404, 410-414, 420-429, 471-493	Diseases of the heart	6	1.8	10,585	(b)
345	Influenza, pneumonia, bronchitis, emphysema and asthma	10	3.0	1,736	0.6
	Epilepsy	5	1.5	42	11.9
	Other causes	36	10.8		
	25-34 years	429	100.0		
800-999	Accidental and violent deaths	240	56.0	2,199	10.9
140-209	Cancer (all forms)	64	14.9	4,942	1.3
391, 393-398, 402, 404, 410-414, 420-429, 470-493	Diseases of the heart	33	7.7	10,585	0.3
430-438	Influenza, pneumonia, bronchitis, emphysema and asthma	15	3.5	1,736	0.9
	Cerebrovascular disease	12	2.8	3,861	0.3
	Other causes	65	15.1		

For footnotes see page 156.

VICTORIA—MAIN CAUSES OF DEATH (IN AGE GROUPS), 1969—*continued*

International List Numbers	Age group and cause of death	Deaths from specified cause			
		In age group		At all ages	
		Number	Per cent	Number	Per cent (a)
	35-44 years	967	100.0		
800-999	Accidental and violent deaths	250	25.9	2,199	11.4
391, 393-398, 402, 404, 410-414, 420-429 } 140-209	Diseases of the heart	219	22.6	10,585	2.1
430-438	Cancer (all forms)	214	22.1	4,942	4.3
470-493	Cerebrovascular disease	66	6.8	3,861	1.7
	Influenza, pneumonia, bronchitis, emphysema and asthma	47	4.9	1,736	2.7
	Other causes	171	17.7		
	45-54 years	2,250	100.0		
391, 393-398, 402, 404, 410-414, 420-429 } 140-209	Diseases of the heart	794	35.3	10,585	7.5
800-999	Cancer (all forms)	600	26.7	4,942	12.1
430-438	Accidental and violent deaths	258	11.5	2,199	11.7
470-493	Cerebrovascular disease	172	7.6	3,861	4.4
	Influenza, pneumonia, bronchitis, emphysema and asthma	94	4.2	1,736	5.4
	Other causes	332	14.7		
	55-64 years	4,580	100.0		
391, 393-398, 402, 404, 410-414, 420-429 } 140-209	Diseases of the heart	1,923	42.0	10,585	18.2
430-438	Cancer (all forms)	1,133	24.7	4,942	22.9
800-999	Cerebrovascular disease	437	9.5	3,861	11.3
470-493	Accidental and violent deaths	254	5.6	2,199	11.6
	Influenza, pneumonia, bronchitis, emphysema and asthma	227	5.0	1,736	13.1
	Other causes	606	13.2		
	65-74 years	7,067	100.0		
391, 393-398, 402, 404, 410-414, 420-429 } 140-209	Diseases of the heart	3,004	42.5	10,585	28.4
430-438	Cancer (all forms)	1,402	19.8	4,942	28.4
470-493	Cerebrovascular disease	944	13.4	3,861	24.4
	Influenza, pneumonia, bronchitis, emphysema and asthma	467	6.6	1,736	26.9
440-448	Disease of arteries, arterioles and capillaries	211	3.0	1,196	17.6
	Other causes	1,039	14.7		
	75 years and over	11,481	100.0		
391, 393-398, 402, 404, 410-414, 420-429 } 430-438	Diseases of the heart	4,593	40.0	10,585	43.4
140-209	Cerebrovascular disease	2,219	19.3	3,861	57.5
440-448	Cancer (all forms)	1,408	12.3	4,942	28.5
470-493	Diseases of arteries, arterioles and capillaries	892	7.8	1,196	74.6
	Influenza, pneumonia, bronchitis, emphysema and asthma	777	6.8	1,736	44.8
	Other causes	1,592	13.8		

(a) Deaths in this age group expressed as a percentage of all deaths from this cause.

(b) Less than 0.1.

Tuberculosis

The number of deaths ascribed to tuberculosis during 1969 was 61, the rate per million of mean population being 18.

Deaths from tuberculosis of the respiratory system in 1969 numbered 49 and equalled a rate of 14 per million of the mean population. Rates for earlier periods were 130 for 1950-54, 294 in 1945-49, 660 in 1918-22, 855 in 1908-12, and 1,365 in 1890-92. In 1969 tuberculosis of the respiratory system was responsible for 80 per cent of the total deaths from tuberculosis. Of the 40 males and 9 females dying from tuberculosis of the respiratory system in 1969, only one male and one female were under the age of 45 years.

The introduction of compulsory chest X-rays for the detection and treatment of tuberculosis is discussed on pages 505 and 506.

Malignant neoplasms

Since the introduction of the Eighth Revision of the International Classification of Diseases in 1968, deaths classified as malignant neoplasms include deaths from polycythaemia vera and myelofibrosis. These were not previously included with neoplasms. Deaths from malignant neoplasms in 1969 numbered 4,942, and represented a rate of 1,459 per million of mean population.

Deaths from malignant neoplasms are prominent at most age periods, but the rates in the table below show characteristic increases with age, reaching a maximum mortality rate in the oldest age group.

Ninety-two per cent of the deaths from malignant neoplasms in the year 1969 were at ages 45 years and over.

Satisfactory comparisons of death rates relating to malignant neoplasms are only obtained by relating the deaths to the number of persons in the community of the same sex, in age groups. This has been done for periods centred around the past six censuses, when the numbers of persons in age groups were accurately known, and the results are given in the following table :

VICTORIA—DEATH RATES FROM MALIGNANT NEOPLASMS IN AGE GROUPS

Age group (years)	Annual deaths from malignant neoplasms per 10,000 of each sex in each age group					
	1920-22	1932-34	1946-48	1953-55	1960-62	1965-67
MALES						
Under 5	0·46	0·27	0·60	1·11	1·06	0·79
5-9	0·13	0·20	0·34	0·98	0·85	0·95
10-14	0·14	0·24	0·24	0·69	0·59	0·57
15-19	0·30	0·37	0·61	0·93	0·95	0·86
20-24	0·64	0·73	0·69	1·27	0·86	1·25
25-34	0·76	0·93	1·20	1·32	1·34	1·62
35-44	3·31	3·04	3·00	4·01	3·93	4·50
45-54	13·94	10·13	11·65	13·25	14·54	14·64
55-64	40·46	37·25	32·73	36·99	41·16	42·09
65-74	78·21	85·19	80·46	82·41	90·40	98·12
75 and over	110·12	133·78	148·20	163·06	161·58	170·73
All ages	9·52	11·63	13·51	13·76	14·15	14·90

VICTORIA—DEATH RATES FROM MALIGNANT NEOPLASMS IN AGE GROUPS—*continued*

Age group (years)	Annual deaths from malignant neoplasms per 10,000 of each sex in each age group					
	1920-22	1932-34	1946-48	1953-55	1960-62	1965-67
FEMALES						
Under 5	0.39	0.38	0.48	1.37	1.04	0.68
5-9	0.17	0.17	0.18	0.60	0.92	0.66
10-14	0.05	0.08	0.40	0.71	0.64	0.46
15-19	0.15	0.17	0.04	0.49	0.66	0.71
20-24	0.30	0.39	0.60	0.56	0.99	0.82
25-34	1.28	1.57	1.75	1.81	1.88	1.50
35-44	6.61	6.00	6.23	6.14	5.76	5.38
45-54	19.14	17.31	16.47	16.46	15.02	16.40
55-64	34.48	35.82	33.40	30.93	30.20	30.30
65-74	63.05	61.17	61.44	59.38	50.34	57.01
75 and over	92.86	106.19	111.49	117.02	103.68	96.93
All ages	9.63	12.00	14.50	14.16	13.12	13.00

The following table shows deaths from malignant neoplasms recorded in 1969 in age groups according to the site of the disease :

VICTORIA—DEATHS FROM MALIGNANT NEOPLASMS BY SEX IN VARIOUS AGE GROUPS, 1969

Site of disease (a)	Sex	Age group (years)				
		Under 25	25-44	45-64	65 and over	Total
Buccal cavity and pharynx (140-149)	M	1	5	30	39	75
	F	1	..	15	18	34
Oesophagus (150)	M	..	3	26	39	68
	F	..	..	8	37	45
Stomach (151)	M	1	13	109	172	295
	F	..	6	51	155	212
Intestine, except rectum (152, 153)	M	1	16	65	150	232
	F	..	14	89	227	330
Rectum and rectosigmoid junction (154)	M	..	1	34	71	106
	F	..	4	27	81	112
Trachea, bronchus and lung (162)	M	..	17	304	401	722
	F	..	6	59	61	126
Breast (174)	M	..	..	1	..	1
	F	..	50	196	179	425
Cervix uteri (180)	F	..	16	50	41	107
Other and unspecified parts of uterus (181, 182)	F	..	2	17	42	61
Ovary, fallopian tube, and broad ligament (183)	F	..	3	70	72	145
Prostate (185)	M	1	..	24	226	251
Bladder (188)	M	1	1	26	56	84
	F	..	..	10	28	38
Other and unspecified urinary organs (189)	M	1	5	34	20	60
	F	..	1	13	20	34
Brain and other parts of nervous system (191, 192)	M	18	16	26	13	73
	F	9	11	30	6	56
Leukaemia (204-207)	M	31	10	37	37	115
	F	20	8	18	26	72
Other neoplasms of lymphatic and haematopoietic system (200-203, 208, 209)	M	5	20	47	71	143
	F	8	11	37	55	111
All other and unspecified sites	M	17	32	177	233	459
	F	6	7	103	234	350
Total	M	77	139	940	1,528	2,684
	F	44	139	793	1,282	2,258

(a) Figures in parentheses are in respect of the Eighth Revision of the International List of Causes of Death.

Diabetes mellitus

During 1969, diabetes was responsible for 269 male and 344 female deaths, representing a rate of 181 per million of the mean population.

The rates for previous periods were 209 in 1968, 173 in 1967, 181 in 1966, 166 in 1965, and 163 in 1964.

Cerebrovascular disease

In 1969, 1,566 male and 2,295 female deaths were ascribed to cerebrovascular diseases, the total corresponding to a rate of 1,140 per million of the mean population. The table on pages 155 and 156 shows that cerebrovascular diseases appear as one of the leading causes of death at ages from 25 years and over; they have become an increasing proportion of deaths at higher ages accounting for 19 per cent of deaths at ages 75 years and over. Deaths from this cause according to sex and age are given below:

VICTORIA—DEATHS FROM CEREBROVASCULAR DISEASES BY SEX IN VARIOUS AGE GROUPS, 1969

Cause of death (a)	Sex	Age group (years)					Total deaths
		Under 45	45-54	55-64	65-74	75 and over	
Subarachnoid haemorrhage (430)	M	22	19	16	15	9	81
	F	23	31	25	35	16	130
Cerebral haemorrhage (431)	M	21	34	93	114	142	404
	F	13	27	70	143	307	560
Cerebral infarction (432-434)	M	2	12	51	133	234	432
	F	..	3	33	119	458	613
Acute but ill-defined cerebrovascular disease (436)	M	1	23	70	153	245	492
	F	5	22	53	155	512	747
Other and ill-defined cerebrovascular diseases (435, 437, 438)	M	1	1	18	33	104	157
	F	1	..	8	44	192	245
Total	M	47	89	248	448	734	1,566
	F	42	83	189	496	1,485	2,295

(a) Figures in parentheses are in respect of the Eighth Revision of the International List of Causes of Death.

Diseases of the heart

During 1969 there were 10,585 deaths ascribed to diseases of the heart including 9 due to rheumatic fever with heart involvement, 285 due to chronic rheumatic heart disease, 280 to hypertensive heart disease, 6,210 to acute myocardial infarction, 2,610 to other ischaemic heart disease, and 1,191 to other forms of heart disease. The total of these causes in 1969 represented a rate of 3,125 per million of the mean population. Only a small proportion of deaths from heart diseases occurs at ages under 45 years. However, as the table on pages 155 and 156 shows, increases in the number of deaths from heart diseases are already apparent at ages between 25 and 45 years, and become the major cause of death at ages 45 and over. Deaths in 1969 from this cause by sex and age group are given in the following table:

VICTORIA—DEATHS FROM HEART DISEASES BY SEX IN VARIOUS
AGE GROUPS, 1969

Cause of death (a)	Sex	Age group (years)					Total deaths
		Under 45	45-54	55-64	65-74	75 and over	
Rheumatic fever with heart involvement (391)	M	1	2	1	1	1	6
	F	..	..	2	1	..	3
Chronic rheumatic heart disease (393-398)	M	15	13	35	35	26	124
	F	12	17	38	43	51	161
Hypertensive heart disease (402, 404)	M	3	3	14	30	48	98
	F	..	..	12	39	131	182
Acute myocardial infarction (410)	M	95	404	977	1,212	1,075	3,763
	F	24	100	320	766	1,237	2,447
Other ischaemic heart disease (411-414)	M	66	179	317	391	521	1,474
	F	7	35	114	270	710	1,136
Other forms of heart disease (420-429)	M	26	26	59	114	293	518
	F	22	15	34	102	500	673
Total	M	206	627	1,403	1,783	1,964	5,983
	F	65	167	520	1,221	2,629	4,602

(a) Figures in parentheses are in respect of the Eighth Revision of the International List of Causes of Death.

Diseases of the respiratory system

In 1969 deaths from diseases of the respiratory system numbered 1,995 which represented a rate of 589 per million of the mean population. Of these deaths in 1969, 45 were due to influenza, 114 to other acute respiratory infections, 634 to pneumonia, 1,057 to bronchitis, emphysema and asthma, and 145 to other diseases.

The 45 deaths from influenza in 1969 represented a rate of 13 per million of the mean population. Seventy-one per cent of the deaths were of persons aged 50 years or over.

Diseases of the digestive system

In 1969 there were 421 male and 322 female deaths from diseases of the digestive system, representing a rate of 219 per million of the mean population. Deaths from causes in this group in 1969 were: 166 from ulcers of the stomach and duodenum, 6 from gastritis and duodenitis, 19 from appendicitis, 107 from intestinal obstruction and hernia, 10 from chronic enteritis and ulcerative colitis, 209 from cirrhosis of the liver, 64 from cholelithiasis and cholecystitis, and 162 from other diseases.

Diseases of the genito-urinary system

In 1969 there were 515 deaths attributed to diseases of the genito-urinary system. This number represented a rate of 152 per million of the mean population. In 1969 nephritis and nephrosis were responsible for 157 deaths, infections of the kidney for 177, calculi of the urinary system for 17, hyperplasia of prostate for 81, and other diseases of the genito-urinary system for 83.

Deaths from external causes

Deaths in 1969 from external causes, including suicide and homicide, represented approximately 8 per cent of total deaths. Accidents and violence feature as the main cause of death after the first year of life until middle age, but in age groups from 40 years onward they progressively assume a less prominent position. In 1969 male deaths from external causes were 68 per cent of the total deaths in this category.

Accidental deaths involving motor vehicles

The number of motor vehicles (including motor cycles) registered in Victoria and the deaths in which they were involved were as follows for the years 1965 to 1969 :

VICTORIA—DEATHS INVOLVING MOTOR VEHICLES

Year	Number of motor vehicles on register at 30 June	Deaths involving motor vehicles		
		Number (a)	Per 10,000 motor vehicles	Per 1,000,000 of mean population
1965	1,049,814	907	8.6	283
1966	1,092,980	918	8.4	285
1967	1,136,548	993	8.7	303
1968	1,193,536	904	7.6	272
1969	1,254,638	1,087	8.7	321

(a) Deaths of pedestrians included in this column numbered 238, 242, 260, 238, and 286, respectively.

Transport accidents

In 1969 deaths from all transport accidents numbered 1,137, as against 948 in 1968, 1,052 in 1967, 968 in 1966, and 957 in 1965. During 1969 deaths connected with transport represented 65 per cent of the total deaths from accidents.

Injury undetermined whether accidentally or purposely inflicted

In many cases it is not possible to determine whether death from an external cause was accidentally or purposely inflicted, i.e., whether the death was due to accident, suicide, or homicide. Before 1968 such deaths had been included with known accidental deaths. With the introduction of the Eighth Revision of the International List of Causes of Death a separate category was created to include cases where the mode of infliction was undetermined. Deaths allocated to this category in 1969 totalled 91.

Suicide and self-inflicted injury

In 1969 deaths from suicide or wilfully self-inflicted injury numbered 230 males and 107 females. These deaths represented a rate of 99 per million of the mean population. Of the 230 male deaths in 1969, 64 were connected with firearms and explosives, and 54 with poisoning by solid or liquid substances. The latter accounted for 66 of the 107 female deaths.

Homicide

The number of deaths ascribed to homicide and registered in 1969 was 30 (20 males and 10 females). Deaths from criminal abortion are excluded from this category and are included with deaths from maternal causes.

Infant mortality

The mortality of children under one year, in proportion to live births, has revealed a remarkable decline. The deaths per 1,000 children born

fell from 133 in 1885-1889 to 16 in 1965-1969 (a reduction of 88 per cent). In other words, of every 100 infants who died in the earlier period, only 12 would have died in the latter.

A significant part of the improvement in the rate in recent years has been effected in relation to deaths of infants during the first four weeks of life, commentary on which appears on the following pages.

The following tables show the number of infant deaths and the infant death rate per 1,000 live births in each of the Australian States and Territories for the years 1965 to 1969 :

AUSTRALIA—INFANT DEATHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1965	1,492	1,109	598	385	351	125	23	34	4,117
1966	1,490	1,116	581	356	329	108	19	46	4,045
1967	1,452	1,101	678	346	314	130	122	44	4,187
1968	1,525	1,010	716	345	397	143	101	45	4,282
1969	1,625	1,066	691	347	453	139	103	58	4,482

AUSTRALIA—INFANT MORTALITY RATES (a)

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1965	19.1	17.5	17.8	18.4	21.7	16.6	25.2	15.8	18.47
1966	19.2	17.4	17.7	17.5	19.3	14.6	(b)	19.8	18.17
1967	18.4	16.8	19.5	17.0	17.4	17.2	63.5	18.3	18.26
1968	18.7	14.4	20.3	16.3	20.3	17.2	48.5	17.0	17.77
1969	18.9	15.0	18.9	15.8	21.8	16.5	45.3	18.8	17.92

(a) Number of deaths under one year of age per 1,000 live births.

(b) Less than 20 deaths; rates not calculated.

The infant death rates for the Melbourne Statistical Division, for the remainder of the State, and for the whole State, for the years 1965 to 1969, are shown in the following table. Figures relate to the Melbourne Statistical Division as defined for the 1966 Census (see page 120).

VICTORIA—INFANT MORTALITY

Year	Melbourne Statistical Division		Remainder of State		Victoria	
	Number of deaths under one year	Rate per 1,000 live births	Number of deaths under one year	Rate per 1,000 live births	Number of deaths under one year	Rate per 1,000 live births
1965	738	17.0	371	18.4	1,109	17.5
1966	784	17.8	332	16.7	1,116	17.4
1967	746	16.4	355	17.8	1,101	16.8
1968	685	13.9	325	15.4	1,010	14.4
1969	730	14.5	336	16.2	1,066	15.0

NOTE. Births and deaths are allotted to the place of usual residence of the parties. In the cases of births and infant deaths, the mother's residence is considered to be that of the child.

Infant death rates have shown a decrease in each quinquennial period from 1885 onwards. In 1954 the rate fell below 20 per 1,000 live births for the first time. In 1968 the rate was 14.4, the lowest ever recorded in Victoria.

The decrease in the infant death rate since the earlier periods has been shared proportionally by each age group except that of "under one week". The rate for infants "one week and under one month" declined from 11.1 in 1910-1914 to 1.3 in 1965-1969, a decrease of 88 per cent, and that for infants "one month and under one year" from 41.2 to 4.2, a decrease of 90 per cent. Between the ages of one month and one year, Victoria lost 64 out of every 1,000 children born in 1900-1904, 33 in 1915-1919, and 4 in 1965-1969. The rate per 1,000 live births for infants "under one week" has declined from 21.5 in the quinquennium 1910-1914 to 10.7 in 1965-1969. In 1969 the mortality of infants "under one week" comprised 65 per cent of the total infant mortality.

The following tables show mortality rates at certain ages under one year for the years 1965 to 1969 :

VICTORIA—INFANT MORTALITY AT CERTAIN AGES

Year	Deaths under one year per 1,000 live births							Males	Females
	Under one week	One week and under one month	One month and under three months	Three months and under six months	Six months and under twelve months	Total under one year			
1965	11.0	1.7	1.5	1.6	1.7	17.5	19.2	15.6	
1966	11.7	1.4	1.4	1.5	1.4	17.4	18.8	16.0	
1967	11.4	1.3	1.5	1.5	1.1	16.8	18.2	15.3	
1968	9.6	1.0	1.3	1.4	1.1	14.4	16.1	12.6	
1969	9.7	1.2	1.2	1.5	1.4	15.0	16.6	13.4	

VICTORIA—INFANT MORTALITY AT CERTAIN AGES, BY SEX, 1969

Sex	Under one week	One week and under one month	One month and under three months	Three months and under six months	Six months and under twelve months	Total under one year
Males—						
Number	403	45	43	60	52	603
Rate (a)	11.1	1.2	1.2	1.7	1.4	16.6
Percentage of deaths in each age group	66.8	7.5	7.1	10.0	8.6	100.0
Females—						
Number	288	41	44	47	43	463
Rate (a)	8.3	1.2	1.3	1.4	1.2	13.4
Percentage of deaths in each age group	62.2	8.8	9.5	10.2	9.3	100.0

(a) Number of deaths in each age group per 1,000 live births.

The rate for male infants is consistently higher than that for females, and in the period 1965-1969 exceeded the female rate by 22 per cent.

In 1969, 302 or 28 per cent of infant deaths were attributed to maternal conditions or complications of pregnancy or labour. Other perinatal causes, including anoxic and hypoxic conditions not elsewhere classified, accounted for 266 deaths. Congenital anomalies were responsible for 234 or 22 per cent and pneumonia for 64 or 6 per cent of infant deaths.

The following table shows the number of deaths of infants at certain ages, by cause, in 1969 :

VICTORIA—INFANT MORTALITY AT CERTAIN AGES, BY CAUSE, 1969

Cause of death (a)	Deaths under one year					Total under one year
	Under one week	One week and under one month	One month and under three months	Three months and under six months	Six months and under twelve months	
Chronic circulatory and genito-urinary disease in mother (760)	7	1	..	..	..	8
Other maternal conditions unrelated to pregnancy (761)	12	1	..	..	..	13
Toxaemias of pregnancy (762)	22	..	..	..	..	22
Maternal ante- and intrapartum infection (763)	11	2	..	..	..	13
Difficult labour (764-768)	32	2	..	..	..	34
Other complications of pregnancy and childbirth (769)	75	2	..	..	..	77
Conditions of placenta (770)	55	..	..	..	..	55
Conditions of umbilical cord (771)	9	..	..	..	..	9
Birth injury and termination of pregnancy without mention of cause (772, 773)	29	3	..	1	1	34
Haemolytic disease of newborn (774, 775)	35	2	..	..	..	37
Anoxic and hypoxic conditions, not elsewhere classified (776)	194	9	1	..	..	204
Immaturity, unqualified (777)	45	1	..	..	..	46
Other conditions of newborn (778, 779)	12	3	1	..	..	16
Congenital anomalies (740-759)	112	33	27	36	26	234
Infections (000-136)	3	6	9	8	12	38
Pneumonia (480-486)	15	6	15	17	11	64
Other diseases (140-474, 490-738, 780-796)	21	15	33	41	38	148
Inhalation or ingestion of food or other object causing obstruction or suffocation, and accidental mechanical suffocation (E911-E913)	1	..	1	2	4	8
Other external causes (E800-E910, E914-E999)	1	..	..	2	3	6
Total all causes	691	86	87	107	95	1,066

(a) Figures in parentheses are in respect of the Eighth Revision of the International List of Causes of Death.

A comparison of infant mortality rates from the principal causes for certain periods from 1891 to 1949 was shown on page 506 of the *Victorian Year Book* 1954-58.

Stillbirths

Registration of stillbirths came into operation in Victoria in 1953. For registration purposes a stillborn child means "any child born of its mother after the 28th week of pregnancy, which did not at any time after being born, breathe or show any other sign of life, and, where the duration of pregnancy is not reliably ascertainable, includes any foetus weighing not less than 2 lb 12 oz". Action is being taken with a view to having a uniform definition of stillbirth for all States, using the 20th week of pregnancy.

VICTORIA—STILLBIRTHS AND INFANT MORTALITY

Year	Stillbirths		Deaths under one month		Deaths under one month plus stillbirths		Deaths under one year plus stillbirths	
	Number	Rate per 1,000 births (live and still)	Number	Rate per 1,000 births (live and still)	Number	Rate per 1,000 births (live and still)	Number	Rate per 1,000 births (live and still)
1965	747	11·62	807	12·55	1,554	24·17	1,856	28·87
1966	762	11·76	844	13·03	1,606	24·80	1,878	28·99
1967	797	12·02	828	12·49	1,625	24·52	1,898	28·64
1968	734	10·34	746	10·51	1,480	20·86	1,744	24·58
1969	761	10·60	777	10·82	1,538	21·42	1,827	25·45

Cremation

There are four crematoria in Victoria, of which three are situated in the metropolitan area.

The number of cremations in relation to total deaths from 1965 to 1969 is shown in the following table :

VICTORIA—CREMATIONS AND DEATHS

Year	Total cremations	Total deaths	Percentage of cremations to deaths
1965	9,857	28,031	35·16
1966	10,362	28,673	36·14
1967	10,173	28,373	35·85
1968	10,939	29,967	36·50
1969	10,617	28,976	36·64

4

INDUSTRIAL CONDITIONS, EMPLOYMENT, AND PRICES

INDUSTRIAL CONDITIONS

Industrial arbitration

In Victoria there are two systems of industrial arbitration for the adjustment of relations between employers and employees : the State system which operates under the law of the State within its territorial limits, and the Commonwealth system which applies to industrial disputes extending beyond the limits of the State and includes the stevedoring industry and maritime industries.

In addition, under Commonwealth law there is a special tribunal to determine the industrial conditions of employment in the Public Service of the Commonwealth ; there is also a flight crew officers industrial tribunal.

Commonwealth-State relations

The relation between the State and Commonwealth systems of industrial arbitration depends on the distribution of legislative powers between the Commonwealth and the States.

Under the Commonwealth of Australia Constitution Act, the Commonwealth jurisdiction is limited to "conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State". The High Court of Australia has also ruled that the Commonwealth Parliament cannot empower an industrial tribunal to declare an award a "common rule", or industry wide award, to be observed by all persons engaged in the industry concerned.

The Act also provides that if a State law is inconsistent with a valid Commonwealth law, the latter prevails, with the inconsistent portions of the State law becoming inoperative. An award by the Commonwealth Conciliation and Arbitration Commission has been held to be a Commonwealth law, and, in certain circumstances awards of Commonwealth industrial tribunals override those made by State tribunals.

Despite the limitations of its jurisdiction the Commonwealth system has gradually become predominant in the sphere of industrial arbitration throughout Australia. Its influence extended, in the first place, with the gradual adoption of the principle of federation in trade unionism and in political organisation, a tendency which gathered force during the First World War period. As industry expanded over interstate borders, uniformity of industrial

conditions was sought by employers, while employees were attracted to the Commonwealth jurisdiction in the expectation of better terms as to wages, etc., than those awarded under State legislation. In many cases, also, the organisations concerned in a Commonwealth award have taken action to have its terms embodied in State awards so that they become binding as a common rule in the industry. Again, for the sake of uniformity, legislatures of some States, notably Victoria and New South Wales, adopted the Commonwealth wage standards as the basis of State awards and agreements.

Commonwealth Industrial Court and Commonwealth Conciliation and Arbitration Commission

The Conciliation and Arbitration Act of 1904 established the Commonwealth Court of Conciliation and Arbitration. The Act was extensively amended in 1956 and this amendment altered the structure of the arbitration machinery by separating the judicial functions from the conciliation and arbitration functions. The Commonwealth Industrial Court was established to deal with judicial matters, and the Commonwealth Conciliation and Arbitration Commission to handle the functions of conciliation and arbitration. Further amendments have since been incorporated.

The *Conciliation and Arbitration Act 1904-1968* defines an industrial dispute as “(a) A dispute (including a threatened, impending or probable dispute) as to industrial matters which extends beyond the limits of any one State; and (b) a situation which is likely to give rise to a dispute as to industrial matters which so extends; and includes—(c) such a dispute in relation to employment in an industry carried on by, or under the control of, a State or an authority of a State; (d) a dispute in relation to employment in an industry carried on by, or under the control of, the Commonwealth or an authority of the Commonwealth, whether or not the dispute extends beyond the limits of any one State; and (e) a claim which an organisation is entitled to submit to the Commission under section eleven A of the *Public Service Arbitration Act 1920-1964* or an application or matter which the Public Service Arbitrator has refrained from hearing, or from further hearing, or from determining under section fourteen A of that Act, whether or not there exists in relation to the claim, application or matter, a dispute as to industrial matters which extends beyond the limits of any one State”.

The Commonwealth Industrial Court is at present composed of a Chief Judge and seven other Judges. The Commonwealth Conciliation and Arbitration Commission comprises a President, five Deputy Presidents, a Senior Commissioner, thirteen Commissioners, and four Conciliators. Judges of the Commonwealth Court of Conciliation and Arbitration were made either members of the Commonwealth Industrial Court or presidential members of the Commonwealth Conciliation and Arbitration Commission. Conciliation Commissioners became non-presidential members of the Commission.

A fuller treatment of the Commonwealth and State arbitration systems is given on pages 462-6 of the *Victorian Year Book 1964*.

Wages Boards

In Victoria the regulation and arbitration of industrial matters is carried out by Wages Boards, which are statutory bodies under the State Department of Labour and Industry for purposes of administration.

The Wages Board method of fixing wages and settling conditions of employment was instituted in Victoria by an Act of Parliament in 1896, and represented the first example in Australia of legal regulation of wage rates.

Wages Boards are established for specific industries or occupations, and a General Board deals with certain trades not covered by Determinations of other Wages Boards. A Board may be appointed for any trade or branch of it, and each Board consists of an even number of members and a chairman. Originally each Board was composed of equal numbers of employers and employees, with a qualification that each representative should be actively engaged in the trade concerned. This qualification was later extended to include, as representatives of employers, officers of appropriate organisations or associations, or persons nominated to represent corporations or public bodies, and, as representatives of employees, officers of appropriate organisations or associations.

The *Labour and Industry Act 1958* (in general a consolidation of the previous Acts) requires that every Wages Board shall, in determining wage rates or piece work prices, take into consideration relevant awards of, or agreements certified by, the Commonwealth Conciliation and Arbitration Commission. The Act gives Wages Boards similar powers relating to wages and conditions of labour to those incorporated in the Commonwealth Conciliation and Arbitration Act. These powers enable Wages Boards to make determinations concerning any industrial matter whatsoever in relation to any trade or branch of trade for which such a board has been appointed and, in particular, to determine all matters relating to :

1. pay, wages, and reward ;
2. work days and hours of work ;
3. privileges, rights, and duties of employers and employees ;
4. the mode, terms, and conditions of employment or non-employment ;
5. the relations of employers and employees ;
6. the employment or non-employment of persons of either sex or any particular age ;
7. the demarcation of functions of any employees or class of employees ; and
8. questions of what is fair and right in relation to any industrial matter, having regard to the interests of the persons immediately concerned and of society as a whole.

Wages Boards are not empowered to determine any matter relating to the preferential employment or dismissal of persons as being or as not being members of any organisation, association, or body.

Industrial Appeals Court

An Industrial Appeals Court was first set up in 1903 by the Victorian Parliament. Appeals against the determination of a Wages Board may be made to the Industrial Appeals Court. Such appeals must be made by the employer's or employee's organisation or by a majority of the employer or employee representatives on the Board concerned or by any person with the leave of the Industrial Appeals Court. In addition, any person may apply to the Supreme Court to have a determination quashed on grounds of illegality.

Intervention by Minister

The *Labour and Industry (Amendment) Act 1960* empowers the Minister of Labour and Industry to intervene in the public interest in any appeal to the Industrial Appeals Court against a determination of a Wages Board. Further, as consumers are not represented on Wages Boards, the Act also authorises the Minister to refer, under appropriate circumstances, the determination of a Wages Board to the Court.

The *Labour and Industry (Amendment) Act 1965* further provides that where a matter requires to be determined by ten or more Wages Boards the Minister may refer the matter to the Industrial Appeals Court. This provision was added to by the *Labour and Industry (Amendment) Act 1966* which empowers the Minister to refer any residue of less than ten applications to the Court. The aim of the amendments is to remove the necessity to convene individual meetings of the Boards in such cases.

Action to prevent or minimise industrial disputes

Section 41 (2) of the Labour and Industry Act provides that "Any interested organisation of employers or employees shall inform the chairman of the appropriate Wages Board of any threatened probable impending or actual strike or industrial dispute in any trade subject to such Wages Board, and thereupon the Chairman shall immediately call a meeting of the Board to consider the matter." During 1969 there were 83 meetings of Wages Boards called under Section 41 (2) to deal with 43 disputes. Of these, 26 were settled by the Boards at the first meeting, 15 at subsequent meetings, and 2 were not resolved by the end of the year.

Incidence of industrial awards, determinations, and agreements

In April 1954, May 1963, and May 1968, surveys were conducted to determine the approximate proportions of employees covered by awards, determinations, and registered industrial agreements under the jurisdiction of Commonwealth and State industrial authorities. The proportions of employees not so covered (including those working under unregistered industrial agreements) were also obtained.

Returns were collected from: (a) a stratified random sample of those private employers and local government authorities subject to pay-roll tax, and (b) practically all Commonwealth and State Government and semi-government authorities, and public hospitals. Because of coverage difficulties, employees on rural holdings and in private households were excluded altogether from the surveys.

VICTORIA—INCIDENCE OF INDUSTRIAL AWARDS, ETC.

Date	Males				Females			
	Employees represented in estimates	Employees affected by awards, etc.		Other employees	Employees represented in estimates	Employees affected by awards, etc.		Other employees
		Commonwealth	State			Commonwealth	State	
	'000	per cent	per cent	per cent	'000	per cent	per cent	per cent
April 1954	509	59·4	27·4	13·2	194	47·7	45·2	7·1
May 1963	588	57·3	27·9	14·8	244	44·3	47·0	8·7
May 1968	667	57·7	24·6	17·7	312	39·9	50·8	9·3

VICTORIA—PERCENTAGE OF PRIVATE AND GOVERNMENT
EMPLOYEES AFFECTED BY AWARDS, ETC., MAY 1968
(Per cent)

Particulars	Males			Females		
	Employees affected by awards, etc.		Other employees	Employees affected by awards, etc.		Other employees
	Commonwealth	State		Commonwealth	State	
Private employees	51.9	25.0	23.1	40.4	50.3	9.3
Government employees	70.6	23.8	5.6	37.5	52.9	9.6
Total private and Government	57.7	24.6	17.7	39.9	50.8	9.3

VICTORIA—PERCENTAGE OF EMPLOYEES AFFECTED BY
AWARDS, ETC., BY INDUSTRY GROUPS, MAY 1968
(Per cent)

Industry group	Males			Females		
	Employees affected by awards, etc.		Other employees	Employees affected by awards, etc.		Other employees
	Commonwealth	State		Commonwealth	State	
Manufacturing groups	65.9	17.5	16.6	65.6	26.1	8.4
Non-manufacturing groups	51.4	30.1	18.5	20.9	69.1	10.1
All industry groups	57.7	24.6	17.7	39.9	50.8	9.3

Rates of wage

In 1913 the Commonwealth Bureau of Census and Statistics first collected information on current wage rates for different callings and for occupations in various industries.

Early in 1960 the Bureau introduced new indexes of minimum weekly wage rates for adult males and females (base 1954 = 100) to replace the old series of nominal weekly wage rate index numbers for adult males and females with 1911 and 1914, respectively, as base years. In general, this revision was necessary to match changes in the industrial structure. The particulars are obtained primarily from awards, determinations, and agreements under Commonwealth and State Industrial Acts and are, therefore, the minimum rates prescribed. They refer generally to the capital city in each State, but in industries which are not carried on in the capital cities, e.g., mining, agriculture, etc., the rates in the more important centres are taken.

The new index numbers are based on the occupation structure of 1954 and cover fifteen industrial groups for adult males and eight industrial groups for adult females. Weights for each occupation and each industry were

derived from two sample surveys made in that year. The first was the Survey of Awards in April 1954, which showed the number of employees covered by individual awards, determinations, and agreements. This provided employee weights for each industry as well as a basis for the Survey of Award Occupations made in November 1954. This second survey showed the number of employees in each occupation within selected awards, etc., thereby providing occupation weights.

The minimum wage rates used are for representative occupations within each industry. They have been derived from representative awards, determinations, and agreements in force at the end of each quarter, as from March 1939, for adult males and March 1951, for adult females. Using the industry and occupation weights determined by the surveys, the various rates were combined to give weighted averages for each industry group for Australia, and weighted averages for industry groups for each State. These weighted averages are shown in the following table, in dollars, and as index numbers. The indexes are designed to measure movements in prescribed minimum rates of "wages" as distinct from "salaries". Consequently, awards, etc., relating solely or mainly to salary earners are excluded.

MINIMUM WEEKLY WAGE RATES (a)

At end of—	Rates of wage (b) (\$)		Index numbers (Australia 1954=100) (c)	
	Victoria	Australia	Victoria	Australia
ADULT MALES				
December 1962	36.37	36.66	128.8	129.8
December 1963	37.20	37.55	131.7	133.0
December 1964	39.47	39.65	139.8	140.4
December 1965	40.34	40.76	142.8	144.3
December 1966	42.78	43.05	151.5	154.2
December 1967	44.59	45.00	157.9	159.3
December 1968	48.86	48.98	173.0	173.4
December 1969	51.70	51.83	183.1	183.5
March 1970	51.73	51.92	183.2	183.8
June 1970	52.17	52.28	184.7	185.1
ADULT FEMALES				
December 1962	25.67	26.15	128.9	131.4
December 1963	26.08	26.69	131.0	134.1
December 1964	27.67	28.34	139.0	142.3
December 1965	28.46	29.10	143.0	146.2
December 1966	30.06	30.70	151.0	154.2
December 1967	32.04	32.57	160.9	163.6
December 1968	34.52	34.85	173.4	175.0
December 1969	37.07	37.68	186.2	189.3
March 1970	37.44	38.09	188.1	191.3
June 1970	37.73	38.23	189.5	192.0

(a) Weighted average minimum weekly rates, all groups, shown as rates of wage and in index numbers; excludes rural industry.

(b) The amounts shown should not be regarded as actual current averages, but as indexes expressed in money terms, indicative of trends.

(c) Base: weighted average weekly wage rate for Australia, 1954=100.

MINIMUM WEEKLY WAGE RATES (a): INDUSTRY GROUPS,
30 JUNE 1970

Industry group	Rates of wage (b) (\$)		Index numbers (Australia 1954=100) (c)	
	Victoria	Australia	Victoria	Australia
ADULT MALES				
Mining and quarrying (d)	51.40	59.41	182.0	210.4
Manufacturing—				
Engineering, metals, vehicles, etc.	51.14	50.90	181.1	180.2
Textiles, clothing, and footwear	48.12	48.28	170.4	171.0
Food, drink, and tobacco	52.14	50.42	184.6	178.5
Sawmilling, furniture, etc.	49.08	49.96	173.8	176.9
Paper, printing, etc.	56.88	55.89	201.4	197.9
Other manufacturing	50.50	50.40	178.8	178.5
All manufacturing groups	50.98	50.75	180.5	179.7
Building and construction	55.71	53.31	197.3	188.8
Railway services	46.96	49.65	166.3	175.8
Road and air transport	50.92	51.39	180.3	182.0
Shipping and stevedoring (e)	60.25	59.61	213.3	211.1
Communication	66.01	65.58	233.7	232.2
Wholesale and retail trade	52.25	51.67	185.0	183.0
Public authority (n.e.i.) and community and business services	52.94	52.81	187.5	187.0
Amusement, hotels, personal service, etc.	46.65	47.30	165.2	167.5
All industry groups	52.15	52.19	184.6	184.8
ADULT FEMALES				
Manufacturing—				
Engineering, metals, vehicles, etc.	40.11	39.86	201.5	200.2
Textiles, clothing, and footwear	34.36	34.77	172.6	174.6
Food, drink, and tobacco	35.98	36.50	180.7	183.3
Other manufacturing	37.41	37.10	187.9	186.4
All manufacturing groups	35.94	36.40	180.5	182.9
Transport and communication	40.46	41.10	203.2	206.4
Wholesale and retail trade	40.92	40.39	205.5	202.9
Public authority (n.e.i.) and community and business services	41.90	41.02	210.4	206.0
Amusement, hotels, personal service, etc.	35.54	36.84	178.5	185.0
All industry groups	37.72	38.22	189.5	192.0

(a) Weighted average minimum weekly rates shown as rates of wage and in index numbers ; excludes rural industry.
(b) The amounts shown should not be regarded as actual current averages, but as indexes expressed in money terms, indicative of trends.

(c) Base : weighted average weekly wage rate for Australia, 1954=100.

(d) For mining, the average rates of wage on which index numbers are based are those prevailing at the principal mining centres in each State.

(e) For shipping, average rates of wage on which index numbers are based are for occupations other than masters, officers, and engineers in the merchant marine service, and include value of keep, where supplied.

Standard hours of work

In the fixation of weekly wage rates most industrial tribunals prescribe the number of hours constituting a full week's work for the wage rates specified. In 1914 the 48 hour week was the recognised standard working week for most industries.

In 1927 the Commonwealth Court of Conciliation and Arbitration granted a 44 hour week to the Amalgamated Engineering Union and intimated that this reduction in standard hours of work would be extended to industries

operating under conditions similar to those in the engineering industry. However, the economic depression delayed the extension of the standard 44 hour week until improvement in economic conditions made possible a general extension to employees under Commonwealth awards.

40 hour week

Soon after the end of the Second World War applications were made to the Commonwealth Court of Conciliation and Arbitration for the introduction of a 40 hour week. The judgment, given on 8 September 1947, granted the reduction to 40 hours from the start of the first pay period in January 1948. In Victoria, the Wages Boards incorporated the shorter working week in their determinations. From the beginning of 1948 practically all employees in Australia whose conditions of labour were regulated by industrial authorities had the advantages of a standard working week of 40 hours or, in certain cases, less.

In the 1952-53 Basic Wage and Standard Hours Inquiry, the employers sought an increase in the standard hours of work per week claiming it to be one of the chief causes of inflation. (See Commonwealth Arbitration Report, Vol. 77, page 505.) The Court found that the employers had not proved that the existing economic situation called for a reduction of general standards in the matter of the ordinary working week.

Weekly hours of work

The number of hours constituting a full week's work (excluding overtime) differs in some instances between various trades and occupations and between the same trades and occupations in the several States. The particulars of weekly hours of work given in the tables on page 174 relate to all industry groups except rural, shipping, and stevedoring. These groups are excluded because for earlier years the hours of work for some of the occupations included were not regulated either by awards or determinations of industrial tribunals or by legislation. As a result, the necessary particulars for the computation of average working hours for these groups are not available.

Average weekly earnings

The figures in this section are derived from particulars of employment and of wages and salaries recorded on pay-roll tax returns, from other direct collections, and from estimates of the unrecorded balance. The figures relate to civilians only.

Particulars of wages and salaries paid are not available for males and females separately from these sources; average weekly earnings have, therefore, been calculated in terms of male units, i.e., total male employees plus 55 per cent of female employees. This proportion is derived from the estimated ratio of female to male earnings in Australia. As it was not possible to estimate the ratio of female to male earnings in the several States the same ratio has been used in each State. Because the actual ratio may vary between States, precise comparisons between average earnings in different States cannot be made.

Corresponding figures for each quarter are published in the *Monthly Review of Business Statistics* and the monthly bulletin *Wage Rates and Earnings*. Quarterly figures of average weekly earnings are also published in the *Victorian Monthly Statistical Review*.

**VICTORIA—WEEKLY HOURS OF WORK (EXCLUDING OVERTIME):
ADULT MALES : INDUSTRY GROUPS (a)**

Industry group	Hours of work (b)			Index numbers (c)		
	31 March 1939	31 March 1948	31 December 1969	31 March 1939	31 March 1948	31 December 1969
Mining and quarrying (d)	44·34	40·52	40·00	111·0	101·4	100·1
Manufacturing—						
Engineering, metals, vehicles, etc.	44·05	40·00	40·00	110·2	100·1	100·1
Textiles, clothing and footwear	44·40	40·03	40·00	111·1	100·2	100·1
Food, drink, and tobacco	44·82	40·12	40·00	112·2	100·4	100·1
Sawmilling, furniture, etc.	44·37	40·00	40·00	110·0	100·1	100·1
Paper, printing, etc.	43·68	39·94	39·94	109·3	99·9	100·0
Other manufacturing	44·02	39·97	39·96	110·2	100·0	100·0
All manufacturing groups	44·19	40·05	39·99	110·6	100·2	100·1
Building and construction	44·18	40·00	40·00	110·6	100·7	100·1
Railway services	43·96	39·97	39·96	110·0	100·0	100·0
Road and air transport	46·70	40·10	40·00	116·9	100·4	100·1
Communication	44·00	40·00	40·00	110·1	100·1	100·1
Wholesale and retail trade	45·47	40·11	40·00	113·8	100·4	100·1
Public authority (n.e.i.) and community and business services	42·75	38·93	38·93	107·0	97·4	97·4
Amusement, hotels, personal service, etc.	45·86	40·03	40·00	114·8	100·2	100·1
All industry groups (a)	44·46	40·03	39·97	111·3	100·2	100·0

For footnotes, see end of following table.

**VICTORIA—WEEKLY HOURS OF WORK (EXCLUDING OVERTIME):
ADULT FEMALES : INDUSTRY GROUPS (a)**

Industry group	Hours of work (b)			Index numbers (c)		
	31 March 1951	30 June 1953	31 December 1969	31 March 1951	30 June 1953	31 December 1969
Manufacturing—						
Engineering, metals, vehicles, etc.	39·87	39·87	39·87	100·5	100·5	100·5
Textiles, clothing, and footwear	40·00	40·00	40·00	100·8	100·8	100·8
Food, drink, and tobacco	40·00	40·00	40·00	100·8	100·8	100·8
Other manufacturing	39·94	39·94	39·94	100·7	100·7	100·7
All manufacturing groups	39·97	39·97	39·97	100·8	100·8	100·8
Transport and communication	37·94	37·94	37·94	95·6	95·6	95·6
Wholesale and retail trade	40·00	40·00	40·00	100·8	100·8	100·8
Public authority (n.e.i.) and community and business services	39·25	39·25	39·25	98·9	98·9	98·9
Amusement, hotels, personal service, etc.	39·94	39·94	39·94	100·7	100·7	100·7
All industry groups (a)	39·81	39·81	39·81	100·3	100·3	100·3

NOTE. Weighted average standard hours of work (excluding overtime) for a full working week and index numbers of hours of work.

(a) Excludes rural industry, shipping and stevedoring for males and females, and also mining and quarrying and building and construction for females.

(b) The figures shown should not be regarded as actual current averages, but as indexes expressed in hours, indicative of trends.

(c) Base : weighted average for Australia, 1954=100.

(d) For mining, the average hours of work are those prevailing at the principal mining centres.

AUSTRALIA AND VICTORIA :
AVERAGE WEEKLY EARNINGS
PER EMPLOYED MALE UNIT (a)
(\$)

Period	Victoria	Australia
1960-61	47.20	46.00
1961-62	48.50	47.20
1962-63	50.10	48.40
1963-64	52.50	50.90
1964-65	56.40	54.60
1965-66	59.20	57.00
1966-67	63.00	60.70
1967-68	66.80	64.30
1968-69	71.20	68.90
1969-70	77.00	75.00

NOTE. For a number of reasons, average weekly earnings per employed male unit cannot be compared with the weekly wage rates shown on page 179.

(a) Includes, in addition to wages at award rates, earnings of salaried employees, overtime earnings, over-award and bonus payments, payments made in advance or retrospectively during the period specified, etc. See explanatory notes above.

AUSTRALIA : INDEXES OF AVERAGE
WEEKLY EARNINGS (a)
(Base of each index : year 1953-54 = 100)
(Seasonally adjusted)

Period	All industries (b)	Manufacturing (c)
1960-61	140.6	141.1
1961-62	144.7	143.4
1962-63	148.3	147.7
1963-64	155.9	154.8
1964-65	167.3	167.1
1965-66	174.6	173.1
1966-67	186.0	184.3
1967-68	197.0	194.9
1968-69	211.7	208.7
1969-70	229.5	224.7

NOTE. The index numbers for "All industries" and "Manufacturing" show the movement in average earnings for each group over a period of time. However, they do not give, at any point of time, a comparison of actual earnings in the two groups.

- (a) See explanatory notes above.
 (b) Average earnings per employed male unit. Based on pay-roll tax returns and other data.
 (c) The index for manufacturing industries for the years 1960-61 to 1967-68 is based on the average earnings of male wage and salary earners employed in factories as disclosed by annual Factory Censuses. The figures for periods subsequent to June 1968 are interim estimates based on pay-roll tax returns and are subject to revision when the Factory Census for 1968-69 is tabulated.

Survey of weekly earnings and hours

General

Sample surveys in respect of most private employers subject to pay-roll tax (i.e., those paying more than \$400 per week in wages and salaries) have

been conducted as at the last pay period in October during recent years. Details of earlier surveys are contained in *Victorian Year Books* from 1966 onwards.

In addition to obtaining data for the calculation of average weekly earnings, average weekly hours paid for, and average hourly earnings, the surveys carried out in recent years obtained information on overtime and ordinary time earnings and hours for full-time employees (other than managerial, etc., staff).

Coverage

The results of the surveys are based on returns from stratified random samples of private employers subject to pay-roll tax. Employees in rural industry and in private domestic service are excluded because most employers in these two industries are not subject to pay-roll tax. Also excluded from the surveys are employees of government and semi-government authorities, and employees of religious, benevolent, and other similar organisations exempt from pay-roll tax. The earnings and hours of waterside workers employed on a casual basis are excluded because they are subject to wide fluctuations for short periods such as those covered by these surveys.

Since the surveys are based on samples the resultant estimates are subject to sampling variability, that is, variations which might occur by chance because only a sample of employers is surveyed. The extent of detail published is determined after considering estimated measures of sampling variability. In addition to affecting the results of each sample survey, sampling variability also affects comparison between each year's results.

The industry classification adopted for earnings and hours surveys from 1963 onwards is that used for the 1961 and 1966 Population Censuses.

Definitions of the terms used in the following tables may be found in the bulletin, *Survey of Weekly Earnings and Hours*, October 1969, available from the Commonwealth Bureau of Census and Statistics. This publication also contains further information on the construction of the sample, and more detailed tables.

VICTORIA—AVERAGE EARNINGS AND HOURS OF FULL-TIME
EMPLOYEES (OTHER THAN MANAGERIAL, ETC., STAFF) (a)
CLASSIFIED BY INDUSTRY GROUPS, OCTOBER 1969 (b)

Industry group	Average weekly earnings (\$)				Average weekly hours paid for				Average hourly earnings (\$)			
	Adult males	Junior males	Adult females	Junior females	Adult males	Junior males	Adult females	Junior females	Adult males	Junior males	Adult females	Junior females
Manufacturing— Founding, engineering, vehicles, etc.	73.80	37.30	(d)	(d)	44.4	41.2	(d)	(d)	(d)	(d)	(d)	(d)
Other	73.10	37.40	(d)	(d)	44.2	41.8	(d)	(d)	(d)	(d)	(d)	(d)
Total manufacturing	73.40	37.30	40.80	28.40	44.3	41.5	39.7	39.3	1.66	0.90	1.03	0.72
Non-manu- facturing	74.00	36.60	45.50	30.70	42.4	40.1	39.0	38.5	1.74	0.91	1.17	0.80
All industry groups (c)	73.60	37.00	42.50	29.90	43.6	40.8	39.4	38.7	1.69	0.91	1.08	0.77

For footnotes, see end of following table.

VICTORIA—AVERAGE WEEKLY EARNINGS OF FULL-TIME EMPLOYEES
(OTHER THAN MANAGERIAL, ETC., STAFF) (a) CLASSIFIED BY
INDUSTRY GROUPS, OCTOBER 1967, 1968, AND 1969 (b)
(\$)

Industry group	Average weekly earnings											
	Adult males			Junior males			Adult females			Junior females		
	October 1967	October 1968	October 1969	October 1967	October 1968	October 1969	October 1967	October 1968	October 1969	October 1967	October 1968	October 1969
Manufacturing— Founding, engineering, vehicles, etc.	65.10	70.60	73.80	33.01	35.80	37.30	(d)	(d)	(d)	(d)	(d)	(d)
Other	65.80	67.60	73.10	32.40	34.20	37.40	(d)	(d)	(d)	(d)	(d)	(d)
Total manufacturing	65.50	68.90	73.40	32.70	34.90	37.30	36.50	37.80	40.80	24.40	26.20	28.40
Non-manu- facturing	64.70	69.00	74.00	31.20	34.20	36.60	39.50	41.90	45.50	26.60	27.40	30.70
All industry groups (c)	65.20	69.00	73.60	32.00	34.60	37.00	37.60	39.20	42.50	25.70	26.90	29.90

(a) Private employees only.

(b) Last pay period in October.

(c) Excludes rural industry and private domestic service.

(d) Information not available because the figures are subject to sampling variability too high for most practical uses.

VICTORIA—AVERAGE WEEKLY EARNINGS OF FULL-TIME
MANAGERIAL, EXECUTIVE, ETC., STAFF (a) CLASSIFIED BY
INDUSTRY GROUPS, OCTOBER 1967, 1968, AND 1969 (b)
(\$)

Industry group	Average weekly earnings					
	Males			Females (d)		
	October 1967	October 1968	October 1969	October 1967	October 1968	October 1969
Manufacturing	107.50	110.60	117.90	60.50	60.60	64.90
Non-manufacturing	105.50	112.00	119.50	58.90	63.50	68.00
All industry groups (c)	106.50	111.30	118.70	59.40	62.50	67.10

(a) Private employees only. Includes managerial, executive, professional, and higher supervisory staff.

(b) Last pay period in October.

(c) Excludes rural industry and private domestic service.

(d) Australian figures only are available for females because of the small number involved by States.

Basic wage

Until June 1967 the concept of a "basic" or "living" wage was common to rates of wage determined by industrial authorities in Australia.

Initially the concept was interpreted as the "minimum" or "basic" wage necessary to maintain an average employee and his family in a reasonable state of comfort. However, it came to be generally accepted "that the wage should be fixed at the highest amount which the economy can sustain and that the 'dominant factor' is the capacity of the community to carry the resultant wage levels". (See Commonwealth Arbitration Reports, Vol. 77, p. 494.)

In addition to the basic wage, "secondary" wage payments, including margins for skill, loadings, and other special considerations peculiar to the occupations or industry, were determined by Commonwealth and State industrial authorities. The basic wage, plus the "secondary wage", where prescribed, made up the "minimum" wage for a particular occupation. The term "minimum wage" (as distinct from basic wage) is currently used to express the lowest rate payable for a particular occupation or industry.

Wage determinations

In all States, including Victoria, wages are determined in two ways. First, for industries which extend beyond the boundaries of any one State, the total wage is determined by the Commonwealth Conciliation and Arbitration Commission. Second, industrial tribunals, which in Victoria are Wages Boards, are set up for industries which do not extend beyond the State boundary. (For further information on industrial arbitration, see "Industrial Conditions", page 166.) The Boards constituted from representatives of employers and employees and an independent chairman for each industry group or calling, determine the minimum rate of wage to be paid in each industry or calling.

Commonwealth wage determinations

1. *Basic Wage 1907.* The first basic wage, as such, was declared in 1907 by Mr Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration. The rate of wage declared as appropriate for a "family of about 5" was 70c per day or \$4.20 per week for Melbourne, and because it arose from an application by H. V. McKay that the remuneration of labour employed at the Sunshine Harvester Works was "fair and reasonable" it became popularly known as the "Harvester Judgment", and this standard was adopted by the Commonwealth Court of Conciliation and Arbitration for incorporation in its early awards.

2. *Wage inquiries and judgments from 1907 to 1969.* The total wage decision of the Conciliation and Arbitration Commission in June 1967 eliminated basic wages and margins from Commonwealth Awards and Victorian Wages Boards' Determinations, and introduced the total wage concept. Detailed particulars of all wage inquiries and judgments from 1907 to 1969 may be obtained in previous *Victorian Year Books* and *Labour Reports*.

3. *National Wage Case, 1970.* See Supplement at end of this *Year Book*.

Further references, 1970

A table of selected basic weekly rates of wage is shown below. A complete table of basic wage rates in shillings and pence is given in the *Victorian Year Book 1964*.

MELBOURNE—BASIC WEEKLY WAGE RATES FIXED BY COMMONWEALTH
CONCILIATION AND ARBITRATION COMMISSION
(Adult males)
(\$)

Year (a)	Amount	Year (a)	Amount	Year (a)	Amount
1923	9.15	1937	7.70	1951	19.90
1924	8.45	1938	7.90	1952	22.80
1925	8.75	1939	8.00	1953—August	23.50
1926	8.90	1940	8.40	1956—June	24.50
1927	9.00	1941	8.80		
1928	8.60	1942	9.70	1957—May	25.50
1929	9.00	1943	9.80	1958—May	26.00
1930	8.30	1944	9.80	1959—June	27.50
1931	6.34	1945	9.80		
1932	6.17	1946	10.60	1961—July	28.70
1933	6.28	1947	10.90		
1934	6.40	1948	12.00	1964—June	30.70
1935	6.60	1949	13.00	1966—July	32.70
1936	6.90	1950	16.20	1967—July	(b)

(a) The system of making regular quarterly adjustments was instituted in 1922 and was discontinued after the August 1953 adjustment. From 1923 to 1952 the rate ruling at 31 December, the middle of the financial year, is shown.

(b) From July 1967, basic wages and margins were deleted from awards and wage rates expressed as total wages.

MELBOURNE—MINIMUM WEEKLY WAGE
RATES FIXED BY COMMONWEALTH
CONCILIATION AND ARBITRATION
COMMISSION
(Adult males)
(\$)

Date operative (a)	Amount
1966 11 July	36.45
1967 1 July	37.45
1968 25 October	38.80
1969 19 December	42.30
1971 1 January	46.30

(a) Rates are operative from the beginning of the first pay period commencing on or after the date shown.

Commonwealth wage rates for females

Over the years judgments of the Court proportioned the minimum or basic weekly wage for adult females at varying percentages of the corresponding male rate.

In the *Equal Pay Cases*, 1969, two branches of the Commonwealth Conciliation and Arbitration Commission jointly decided in June 1969 that there was no real bar either "conceptual or economic" to a consideration of "equal pay for equal work". However, the view of the Commission was that the equality of the work must be first determined and principles were set out in the judgment to be applied in deciding applications. Where an arbitrator or commissioner was satisfied that equal pay should be awarded the implementation was to be spread over a period according to defined scales.

Details of judgments affecting wage rates for adult females may be obtained in the *Victorian Year Book* 1970 and *Labour Reports*.

Wages Board determinations in Victoria

1. *General.* By an amendment to the *Factories and Shops Act* 1934, Wages Boards were given discretionary power to include in their determinations appropriate provisions of relevant Commonwealth awards. A further amendment to this Act in 1937 made it compulsory for Wages Boards to adopt such provisions of the Commonwealth awards. This amending Act also gave Wages Boards power to adjust wage rates "with the variation from time to time of the cost of living as indicated by such retail price index numbers published by the Commonwealth Statistician as the Wages Board considers appropriate". The Wages Boards thus adopted the basic wages declared by the Commonwealth Court of Conciliation and Arbitration (now Commonwealth Conciliation and Arbitration Commission) and followed that Court's system of adjusting the basic wage in accordance with variations in retail price index numbers.

2. *Quarterly adjustments 1953 to 1956.* After the system of automatic adjustment of the Commonwealth basic wage was discontinued, a number of Wages Boards met in September 1953, and deleted references to these adjustments. However, an amendment to the *Factories and Shops Act* in November 1953 required Wages Boards to provide for automatic adjustment of wage rates in accordance with variations in retail price index numbers.

In general, this requirement was repealed by the *Labour and Industry Act* 1953 which replaced the *Factories and Shops Act* 1928. An amendment to this new Act, proclaimed on 17 October 1956, deleted the automatic adjustment provision and directed Wages Boards in determining wage rates to take into consideration relevant awards of, or agreements certified by, the Commonwealth Conciliation and Arbitration Commission. The last automatic quarterly adjustment of the basic wage, based on the variation in retail price index numbers for the June Quarter 1956, became payable from the beginning of the first pay period in August 1956.

3. *Minimum wage—adult males.* Subsequent to the Commonwealth Conciliation and Arbitration Commission's decision of 8 July 1966 to insert minimum wage prescriptions in Federal Awards in an attempt to grant some economic relief to adult male low wage earners, the prescribed minimum wage payable in Victoria (other than Yallourn and the Hazelwood Power Station) since 1 January 1971 has been \$46.30. A substantial number of Wages Boards have incorporated similar wage clauses in their Determinations. The minimum wage provisions do not apply to females nor to any male employee who during any week receives "over-award" payments which are in excess of the prescribed minimum wage for work performed for ordinary hours.

VICTORIA—WAGES BOARDS' DETERMINATIONS

Date operative (a)	Adult males	Adult females
1967 1 July	\$1.00	\$1.00
1968 25 October	\$1.35	\$1.35
1969 19 December	3 per cent	3 per cent
1971 1 January	6 per cent	6 per cent

(a) Operative from the beginning of the first pay period commencing on or after the date shown.

4. *Total wage.* Since the implementation in Victoria from 7 August 1967 of the total wage concept and the consequent elimination of basic wage and margins from Wages Boards' Determinations, both adult male and adult female weekly rates have been increased as shown on page 180. Details for periods prior to this are available in *Wage Rates and Earnings Bulletins* and *Labour Reports*.

Wage margins

Until June 1967 wage margins were defined as "minimum amounts awarded above the basic wage to particular classifications of employees for the features attaching to their work which justify payments above the basic wage, whether those features are the skill or experience required for the performance of that work, its particularly laborious nature, or the disabilities attached to its performance". (See Commonwealth Arbitration Reports, Vol. 80, p. 24.)

The total wage decision of the Conciliation and Arbitration Commission in June 1967 eliminated basic wages and margins from Commonwealth Awards and Victorian Wages Boards' Determinations, and introduced the total wage concept.

Detailed particulars of judgments affecting wage margins may be obtained in previous *Victorian Year Books* and *Labour Reports*.

Annual leave

From 1936, when the Commonwealth Court of Conciliation and Arbitration granted one week's annual leave on full pay to employees in the commercial printing industry, annual leave has been introduced industry by industry when and if the Judge responsible for the industry considered it proper.

A number of inquiries into annual leave have been conducted and a summary of the most recent follows.

The Commonwealth Conciliation and Arbitration Commission declared its judgment on annual leave on 18 April 1963 and varied the Metal Trades Award by granting three weeks annual leave. This provided a new standard for secondary industry in other Federal Awards. As a result, Victorian Wages Boards altered provisions of their determinations to grant employees an extra week's leave. A fuller treatment of this judgment is given on pages 436-7 of the *Victorian Year Book* 1965.

The Labour and Industry (Annual Holidays) Order, made under authority of the *Labour and Industry Act* 1958, became operative from 1 April 1967 and granted three weeks annual holidays on ordinary pay to those employees not provided for by any determination of a Wages Board or Industrial Appeals Court.

Long service leave

1. *Victoria.* The *Factories and Shops (Long Service Leave) Act* 1953 first provided for long service leave for workers in Victoria. The provisions of this Act were subsequently incorporated in the Labour and Industry Act which provided for thirteen weeks leave after twenty years continuous service with the same employer. In 1965 the qualifying period was reduced to fifteen years.

2. *Commonwealth.* The applicability of long service leave provisions under State law to workers under Federal awards has been tested before the High Court and the Privy Council, and such provisions have been held to be valid.

Before 1964 the Commonwealth Conciliation and Arbitration Commission had not included provisions for long service leave in its awards. The Commission gave its judgment on the Long Service Leave case on 11 May 1964. The main provisions of the judgment were that in respect of service after 11 May 1964 (or in New South Wales, 1 April 1963) entitlement to the first period of long service leave would be calculated at the rate of thirteen weeks for fifteen years unbroken service; and after a further period or periods of ten years, employees would be entitled to an additional pro rata period of leave calculated on the same basis.

Industrial disputes

The collection of information relating to industrial disputes involving stoppage of work was initiated by the Commonwealth Statistician in 1913 and figures have been published regularly ever since.

The statistics of industrial disputes are compiled from data obtained from the following sources: (a) direct collections from employers and trade unions concerning individual disputes; (b) reports from government departments and authorities; (c) reports of State and Commonwealth industrial authorities; and (d) information contained in trade journals, employer and trade union publications, and newspaper reports. Particulars of some stoppages (e.g., those involving a large number of establishments) may be estimated and the statistics therefore should be regarded as giving a broad measure of the extent of stoppages of work (as defined).

An industrial dispute occurring in more than one State is counted as a separate dispute in each State. A dispute involving workers in more than one industry group in a State or Territory is counted once only in the number of disputes—in the industry group that has the largest number of workers involved; but workers involved, working days lost, and estimated loss in wages are allocated to their respective industry groups. Disputes not settled at the end of a year are included as new disputes in the figures for the following year. Disputes not settled at the end of a quarter are not counted in the number of disputes for the following quarter, but additional workers involved and working days and wages lost are included.

The following tables give statistics of the numbers of industrial disputes and workers involved, numbers of working days lost, and the estimated loss in wages:

VICTORIA—INDUSTRIAL DISPUTES (a)

Year	Number of disputes	Number of workers involved			Number of working days lost
		Directly	Indirectly (b)	Total	
		'000	'000	'000	'000
1965	208	118.5	3.3	121.8	214.3
1966	179	99.6	1.9	101.5	219.6
1967	212	83.2	1.3	84.5	107.3
1968	327	169.3	3.5	172.8	243.9
1969	367	336.7	19.7	356.4	717.2

(a) Refers only to disputes involving a stoppage of work of ten man-days or more.

(b) Persons placed out of work at the establishments where the stoppages occurred but not themselves parties to the disputes.

VICTORIA—INDUSTRIAL DISPUTES (a): INDUSTRY GROUPS

Year	Mining and quarrying	Manufacturing	Building and construction	Transport		Other groups	All groups
				Stevedoring	Other		
NUMBER OF DISPUTES							
1965	..	109	22	60	8	9	208
1966	1	114	30	17	11	6	179
1967	2	119	39	29	6	17	212
1968	1	122	76	101	12	15	327
1969	1	159	81	90	19	17	367
WORKERS INVOLVED (DIRECTLY AND INDIRECTLY) ('000)							
1965	..	38.3	3.5	60.7	10.7	8.5	121.8
1966	1.1	55.1	19.3	1.2	15.9	8.9	101.5
1967	0.1	55.1	6.1	14.3	2.7	6.3	84.5
1968	(b)	71.6	31.8	41.0	17.7	10.6	172.8
1969	..	127.6	41.2	68.3	85.1	34.0	356.4
WORKING DAYS LOST ('000)							
1965	..	111.0	10.2	48.9	22.6	21.6	214.3
1966	2.3	123.2	41.2	0.6	41.8	10.5	219.6
1967	0.6	75.7	12.8	8.6	1.6	8.0	107.3
1968	0.2	128.9	40.9	35.0	18.0	20.8	243.9
1969	4.9	344.6	101.6	84.0	127.9	54.2	717.2
ESTIMATED LOSS IN WAGES (\$'000)							
1965	..	1,039.2	121.1	499.7	206.5	194.7	2,061.2
1966	23.4	1,163.1	394.8	6.4	414.9	94.6	2,097.2
1967	8.1	774.7	147.9	92.4	19.2	64.4	1,106.6
1968	2.5	1,395.0	553.8	359.1	215.9	205.1	2,731.3
1969	116.7	4,170.1	1,563.8	926.5	1,249.7	593.0	8,619.6

(a) Refers only to disputes involving a stoppage of work of ten man-days or more.

(b) Less than 50.

Industrial safety

Industrial injuries, like other injuries, cause human suffering and personal loss, and the original approach to industrial safety was based on humanitarian motives. More recently it has been realised that industrial accidents also cause economic loss to the community. Efforts for the prevention of accidents must be directed along three lines: (1) to make the working environment safer; (2) to educate people to work more safely; and (3) to have recourse to law where appropriate. Several departments and authorities now have particular statutory responsibilities for particular aspects of industrial safety, but the general responsibility lies with the Department of Labour and Industry through the *Labour and Industry Act 1958* and associated legislation.

The most important Acts and Regulations concerning industrial safety regulations and inspections, with reference to the administrative authority responsible in each case, have been dealt with in previous *Victorian Year Books*.

Workers compensation

Legislation has been provided by all State Parliaments, and in Commonwealth Territories and for Commonwealth Government employees, for compensation to be paid to injured workers. The details which follow refer to the legislation in force in Victoria.

The first Workers Compensation legislation in Victoria was passed in 1914 to give certain industrial workers and their dependants the right to claim limited compensation from their employer, without proof of negligence

or breach of statutory duty by the employer, in respect of accidental injuries sustained by them arising out of and in course of their employment.

Since the passing of the original legislation the class of persons entitled to benefit, the scope of employment, the types of injuries included, and the extent of the benefits have all been greatly widened by frequent amendments, which were consolidated by the *Workers Compensation Act 1958*.

The general principle of the legislation is to cover workers who have entered into or work under a contract of service or apprenticeship with an employer, whether by way of manual labour, clerical work, or otherwise. Such workers are also protected, while travelling to and from work, during recess periods, or from injury by the recurrence, aggravation or acceleration of pre-existing injury where employment is a contributing factor.

As the law now stands any worker is covered who is not an outworker or whose remuneration does not exceed \$6,000 a year (excluding overtime).

It is compulsory for every employer (with the exception of certain schemes approved by the Board) to obtain from the State Accident Insurance Office, or from an insurance company approved by the Governor in Council, a policy of accident insurance for the full amount of his liability under the Act.

Judicial administration is carried out by a County Court Judge, sitting with workers' and employers' representatives as the Workers Compensation Board.

The extent of the principal benefits obtained under the *Workers Compensation Act 1958* are :

1. *Where death results from the injury—*

(a) If the worker leaves full dependants, compensation payable is \$9,000 plus \$200 for each child under 16 years.

(b) If the worker leaves partial dependants, the amount of compensation shall be a sum reasonable and proportionate to the injury, but not exceeding the sum of \$9,000, as is awarded by the Workers Compensation Board.

(c) If the worker has no dependants, reasonable medical and burial expenses are payable.

(d) If the worker was a minor leaving no dependants but had contributed towards the maintenance of the home or of members of his family, such members are deemed to be partial dependants.

2. *Where total incapacity for work results from the injury—*

The weekly payment during the total incapacity is \$20 for an adult worker (\$18 for a minor) or his average weekly earnings, whichever is the least, plus \$6 for his wife or relative standing in *loco parentis* to the children, if the wife or relative is fully or mainly dependent on the earnings of the worker, plus \$2.50 for each dependent child under sixteen years of age.

The combined total weekly payment is limited to the worker's average weekly earnings or \$31 for an adult (\$26 for a minor), whichever is the least, and the whole maximum amount payable is limited to \$10,000 unless the Workers Compensation Board otherwise determines.

3. *Where partial incapacity results from the injury—*

(a) The worker is paid an amount which is calculated according to the variation between his average weekly earnings before injury and the average weekly amount he is earning or is able to earn after injury.

(b) Where the worker is unable to obtain employment for which he is fit, the Board may order that he be treated as totally incapacitated.

4. Other miscellaneous benefits—

(a) In addition to compensation, legislation provides for the payment of the reasonable cost of hospital, medical, nursing and ambulance services, payable whether or not the worker is incapacitated. Reasonable funeral expenses are also payable.

(b) Coverage is provided where a worker contracts an industrial disease and the definition of "injury" specifically includes a disease contracted during the course of work which contributed to the disease.

(c) Lump sum payments in redemption of weekly payments in respect of total or partial incapacity may be made at any time upon application by either party but at the absolute discretion of the Board which fixes the amount.

More detailed particulars of Workers Compensation legislation may be obtained in the *Conspectus of Workers Compensation Legislation in Australia and Papua New Guinea* published by the Department of Labour and National Service and the *Labour Report*.

The following table shows details of workers compensation business transacted during each of the years 1964-65 to 1968-69 :

VICTORIA—WORKERS COMPENSATION BUSINESS

Year	Wages on which premiums were charged	Gross premiums received less adjustments	New claims arising during year		Claims paid during year	Claims outstanding at end of year
			Fatal	Non-fatal		
	\$'000	\$'000			\$'000	\$'000
1964-65	2,382,194	34,539	613	221,474	22,815	34,823
1965-66	2,404,459	48,816	525	205,735	24,925	42,277
1966-67	2,730,791	52,521	490	203,537	25,787	48,864
1967-68	2,979,540	54,797	(a) 718	204,057	29,828	56,224
1968-69	3,286,808	57,160	663	203,111	32,528	63,487

(a) The rise in the number of fatal accidents arising during 1967-68 was due partly to a change in recording methods.

The amount paid in claims during 1968-69 was allocated as follows :

A. Under Workers Compensation Act—

(a) Compensation	\$'000	\$'000
1. Weekly compensation	8,920	
2. Lump sum—death	4,756	
3. Lump sum—maim	3,600	
		17,276
(b) Medical, etc., services		
1. Doctor	4,086	
2. Hospital	2,890	
3. Chemist or registered nurse	216	
4. Ambulance	139	
5. Other curative, etc., services	429	
		7,760

(c) Legal costs, etc.

B. Under other Acts and at common law, damages, etc.

7,760
3,397
4,095

Total

32,528

Figures for premiums and claims in this table differ somewhat from those shown on pages 669-671 of the Finance section of this *Year Book*. In that section most schemes of compensation are not included and the figures shown do not always relate strictly to the financial year, as some insurance companies close their books at other times. With regard to claims paid,

the Finance section refers to claims paid during the period, plus claims outstanding at the end of the period, less outstanding claims at the beginning.

Industrial accidents

Official collection of data on industrial accidents in Victoria was first undertaken when Regulations under the Workers Compensation Act were amended in 1957. Benefits to be obtained under the *Workers Compensation Act* 1958 are set out on pages 183 to 185.

Source

The *Workers Compensation Act* 1958 requires all insurance companies which insure against workers compensation and organisations with approved workers compensation schemes to submit to the Government Statist a report on each claim for workers compensation, when the claim is closed, or at the expiry of three years if the claim is unclosed at the end of that time.

Scope

1. Each original claim is considered to be a separate "industrial accident" and although reports are received of re-opened claims details are not included in published statistics.
2. At present the collection is restricted to fatal cases, and those where the worker is incapacitated for work for a period of one week or more.
3. Although some employers do insure against liability for employees whose income exceeds \$6,000 (the amount specified in the Act), it is not mandatory to do so and consequently some employees in this category may not be included in the tabulations.
4. Commonwealth Government employees are exempt from the State Act and are covered exclusively by the *Commonwealth Employees' Compensation Act* 1968. Consequently some industry classifications are not covered at all while coverage is reduced in some instances (e.g., defence services and communications).
5. Self employed persons, with the exception of certain contractors as defined in the Act, are also not covered and therefore industrial accidents occurring to them will not appear in published statistics. This is likely to have considerable effect when considering, for instance, rural industries.

Definitions

1. *Industrial accident.* A compensated work injury causing death, permanent disability, or absence of the injured person from work for one week or more, excluding journey cases, cases occurring during a recess period, and all disease cases except where the disease is considered to be precipitated or aggravated by an accidental event.
2. *Industry group.* In Victoria, employers are rated for the purpose of workers compensation premiums according to the type of business conducted, a premium being fixed for each "trade", and all employees, regardless of occupation, take the "trade" classification of their employer with the exception of clerical workers and domestics. When the list of "trades" was compiled by insurers, it was allied closely with the industry classification used for the 1947 Census. This has been brought up to date from time to time and accordingly, the industry groups shown here approximate to those used for Census purposes. However, as "communication" employees are almost

exclusively employed by the Commonwealth, and are consequently exempt from the provisions of the State Act, the remaining small numbers are included with "transport". Also "finance" employees, whose work is normally of a clerical nature are included with "other" industry together with clerical workers generally, who are subject to a special premium rate distinct from that charged for the industry in which they are employed. It should be noted that accidents to employees of the Gas and Fuel Corporation, the State Electricity Commission, the Victorian Railways, and the Melbourne and Metropolitan Tramways Board are included under the "government, semi-government, finance, and other" industry group, as are employees of certain other State bodies.

3. *Accident factor.* This should not be interpreted as "cause of accident". In general it is defined as "that underlying agency, other than human failing, which appears to contribute most materially to an accident, and which would be most likely to receive attention in efforts to prevent occurrence of similar accidents".

4. *Injury site.* In most cases the injury has been allocated to that part of the body affected by the injury. However, since effects of poisons, electrocutions, weather, etc., cannot be assigned in most cases to any particular site, they are included in the heading "General and unspecified".

The following table shows the number of fatal and non-fatal industrial accidents to males in each industry group for each of the years 1966-67 to 1968-69 :

VICTORIA—NUMBER OF INDUSTRIAL ACCIDENTS TO MALES
BY INDUSTRY GROUP

Industry group	Number of accidents					
	1966-67		1967-68		1968-69	
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal
Primary	6	1,746	4	1,569	5	1,451
Mining and quarrying	..	173	1	127	..	128
Manufacturing	10	12,952	16	11,798	12	10,998
Electricity, gas, water, sanitary	..	296	1	275	..	288
Building and construction	6	4,013	3	3,560	8	3,444
Transport, storage, and communication	2	1,928	1	1,596	7	1,710
Commerce	3	3,726	2	3,477	3	3,358
Community services, etc.	2	1,535	1	1,483	4	1,392
Amusement, personal service, etc.	..	764	..	690	..	715
Government, semi-government, finance, and other	14	5,020	11	3,621	11	3,145
Total	43	32,153	40	28,196	50	26,629

The following table shows the number of non-fatal industrial accidents to females in each industry group for each of the years 1966-67 to 1968-69 :

VICTORIA—NUMBER OF INDUSTRIAL ACCIDENTS
TO FEMALES, BY INDUSTRY GROUP

Industry group	Number of non-fatal accidents		
	1966-67	1967-68	1968-69
Primary	95	85	92
Mining and quarrying	..	..	..
Manufacturing	2,373	2,304	2,120
Electricity, gas, water, sanitary	..	..	..
Building and construction	..	..	..
Transport, storage, and communication	11	11	5
Commerce	660	607	551
Community services, etc.	743	812	792
Amusement, personal service, etc.	520	490	408
Government, semi-government, finance, and other	650	445	435
Total	5,052	4,754	4,403

NOTE. In addition to the above non-fatal accidents, the following fatal accidents to females were reported:

- 1 in the primary industry group in 1966-67.
- 1 in the manufacturing industry group in 1966-67.
- 1 in the commerce industry group in 1967-68.
- 1 in the amusement, personal service, etc., industry group in 1968-69.

Further information in respect of industrial accidents to females has not been included in this *Year Book*, but details may be obtained in the *Industrial Accidents and Workers Compensation* bulletin issued annually by this Office.

The following table shows the period of incapacity and the cost of claims incurred through non-fatal industrial accidents to males in each industry group for each of the years 1966-67 to 1968-69 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES: PERIOD OF
INCAPACITY AND COST OF CLAIMS, BY INDUSTRY GROUP

Industry group	Period of incapacity (weeks)			Cost of claims (\$'000)		
	1966-67	1967-68	1968-69	1966-67	1967-68	1968-69
Primary	7,569	7,467	6,736	465	418	470
Mining and quarrying	672	767	789	78	63	86
Manufacturing	49,339	45,859	42,116	3,925	3,852	4,064
Electricity, gas, water, sanitary	1,161	1,012	980	100	74	59
Building and construction	17,969	14,696	14,942	1,466	1,291	1,365
Transport, storage, and communication	7,514	6,045	6,663	379	382	412
Commerce	13,135	11,519	11,845	840	762	832
Community services, etc.	6,203	6,624	5,866	349	419	357
Amusement, personal service, etc.	3,228	2,809	3,179	139	169	179
Government, semi-government, finance, and other	20,928	15,313	13,884	1,362	1,142	931
Total	127,718	112,111	107,001	9,103	8,572	8,755

The following table shows the number of non-fatal industrial accidents to males, by accident factor and industry group, for the year 1968-69 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES :
INDUSTRY GROUP BY ACCIDENT FACTOR, 1968-69

Industry group	Accident factor									
	Machinery	Vehicles	Electricity, etc. (a)	Harmful substances	Falling, slipping	Stepping on objects (b)	Handling objects (c)	Hand tools (d)	Other and unspecified	Total
Primary	109	84	24	8	284	68	535	156	183	1,451
Mining and quarrying	11	9	4	..	38	6	47	7	6	128
Manufacturing	1,517	191	352	96	1,828	542	5,377	782	313	10,998
Electricity, gas, water, sanitary	4	16	6	1	79	32	130	12	8	288
Building and construction	171	84	62	22	879	180	1,712	260	74	3,444
Transport, storage, and communication	30	137	11	8	507	78	878	31	30	1,710
Commerce	169	145	78	22	652	163	1,576	453	100	3,358
Community services, etc.	33	78	29	7	356	82	693	60	54	1,392
Amusement, personal service, etc.	25	19	26	7	168	20	230	36	184	715
Government, semi-government, finance, and other	74	210	58	13	940	144	1,394	145	167	3,145
Total	2,143	973	650	184	5,731	1,315	12,572	1,942	1,119	26,629

(a) Includes explosions, flames and hot substances.

(b) Includes striking against objects.

(c) Includes strain in handling, struck by objects.

(d) Includes power-operated.

The following table shows the number of non-fatal industrial accidents to males, by industry group and site of injury, for the year 1968-69 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES :
INDUSTRY GROUP BY SITE OF INJURY, 1968-69

Industry group	Site of injury									
	Head	Eye	Neck (a)	Trunk	Arm	Hand	Leg	Foot	Un-specified	Total
Primary	61	36	38	327	210	324	328	112	15	1,451
Mining and quarrying	8	6	3	29	13	22	29	15	3	128
Manufacturing	240	299	254	3,119	1,289	3,197	1,458	1,105	37	10,998
Electricity, gas, water, sanitary	12	2	6	94	38	42	63	27	4	288
Building and construction	101	107	107	1,014	387	716	626	358	28	3,444
Transport, storage, and communication	65	14	61	542	228	196	406	181	17	1,710
Commerce	102	64	79	920	401	965	533	283	11	3,358
Community services, etc.	44	31	36	515	162	226	277	95	6	1,392
Amusement, personal service, etc.	46	11	24	171	108	150	141	61	3	715
Government, semi-government, finance, and other	116	64	84	1,032	342	476	738	259	34	3,145
Total	795	634	692	7,763	3,178	6,314	4,599	2,496	158	26,629

(a) Includes vertebral column.

The following table shows the number of non-fatal accidents to males, by industry group and type of injury, for the year 1968-69 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES :
INDUSTRY GROUP BY TYPE OF INJURY, 1968-69

Industry group	Type of injury										Total	
	Contusions, lacerations, etc.	Burns and scalds	Bone fractures	Dislocations	Sprains and strains	Amputations	Concussion	Internal injury	Effects of poisons	Effects of electricity		Other and unspecified
Primary	625	33	210	49	442	20	14	4	6	1	47	1,451
Mining and quarrying	38	9	22	2	47	..	2	..	..	..	8	128
Manufacturing	4,244	506	1,381	284	4,051	193	42	22	14	10	251	10,998
Electricity, gas, water, sanitary	105	8	30	6	130	..	1	..	..	2	6	288
Building and construction	1,213	77	522	110	1,330	34	21	6	3	10	118	3,444
Transport, storage and communication	544	19	221	51	789	11	12	1	1	3	58	1,710
Commerce	1,355	121	360	76	1,289	21	18	5	2	2	109	3,358
Community services, etc.	447	36	146	38	662	2	7	2	1	..	51	1,392
Amusement, personal service, etc.	226	39	147	32	225	5	14	..	..	2	25	715
Government, semi-government, finance, and other	986	56	402	105	1,369	23	28	10	2	11	153	3,145
Total	9,783	904	3,441	753	10,334	309	159	50	29	41	826	26,629

The table which follows shows the number of non-fatal industrial accidents to males, by accident factor and site of injury, for the year 1968-69 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES :
ACCIDENT FACTOR (a) BY SITE OF INJURY, 1968-69

Accident factor	Site of injury									Total
	Head	Eye	Neck (b)	Trunk	Arm	Hand	Leg	Foot	General and unspecified	
Machinery	34	112	7	55	181	1,599	81	73	1	2,143
Vehicles	136	10	28	166	133	134	229	111	26	973
Electricity, etc. (a)	71	28	1	26	101	142	89	147	45	650
Harmful substances	12	55	3	5	15	29	21	15	29	184
Falling, slipping	159	9	144	1,480	856	345	2,326	396	16	5,731
Stepping on objects (a)	65	10	13	122	242	301	378	183	1	1,315
Handling objects (a)	209	180	434	5,552	1,375	2,351	1,052	1,399	20	12,572
Hand tools (a)	33	107	10	61	158	1,291	159	122	1	1,942
Other and unspecified	76	123	52	296	117	122	264	50	19	1,119
Total	795	634	692	7,763	3,178	6,314	4,599	2,496	158	26,629

(a) For footnotes see page 189.

(b) Includes vertebral column.

The table which follows shows the age groups of males involved in non-fatal industrial accidents, by accident factor, for the year 1968-69 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES:
ACCIDENT FACTOR (a) BY AGE GROUP, 1968-69

Accident factor	Age group (years)						Total
	Under 20	20-29	30-39	40-49	50-59	60 and over	
Machinery	275	658	450	421	267	72	2,143
Vehicles	85	284	225	188	130	61	973
Electricity, etc. (a)	86	195	150	123	72	24	650
Harmful substances	14	44	45	57	15	9	184
Falling, slipping	384	1,234	1,338	1,382	945	448	5,731
Stepping on objects (a)	103	309	311	280	217	95	1,315
Handling objects (a)	804	2,817	2,971	2,967	2,183	830	12,572
Hand tools (a)	310	645	368	329	225	65	1,942
Other and unspecified	107	314	251	222	157	68	1,119
Total	2,168	6,500	6,109	5,969	4,211	1,672	26,629

(a) For footnotes see page 189.

Labour organisations

Registration

1. *Under Trade Union Acts.* In 1884 the Victorian Parliament passed a Trade Union Act, based on an English Act of three years earlier, but the unions refused to register under it and the Act was amended in 1886. The *Trade Unions Act 1958* still makes provision for registration on compliance with certain standards. Registration gives a trade union a corporate identity and legal status for the purpose of engaging in strikes. However, registration has never been compulsory and few unions have sought the provisions of the legislation.

2. *Under the (Commonwealth) Conciliation and Arbitration Act.* Under Part VIII. of the *Conciliation and Arbitration Act 1904-1967*, any association of employers in any industry who have, or any employer who has employed, on an average taken per month, not less than 100 employees during the six months preceding application for registration, or any association of not less than 100 employees in any industry, may be registered. However, the Public Service Arbitration Act provides that an association of less than 100 employees may be registered as an organisation under the Conciliation and Arbitration Act if its members comprise at least three fifths of all persons engaged in that industry in the Service. Such Public Service organisations are included in the figures shown below. Registered unions include both interstate associations and associations operating within one State only. Registration under Commonwealth legislation began in 1906. At the end of 1969 the number of employers' organisations registered under the provisions of the Conciliation and Arbitration Act was 75. The number of unions of employees registered at the end of 1969 was 149, with a membership of 1,901,100 representing 85 per cent of the total membership of all trade unions in Australia.

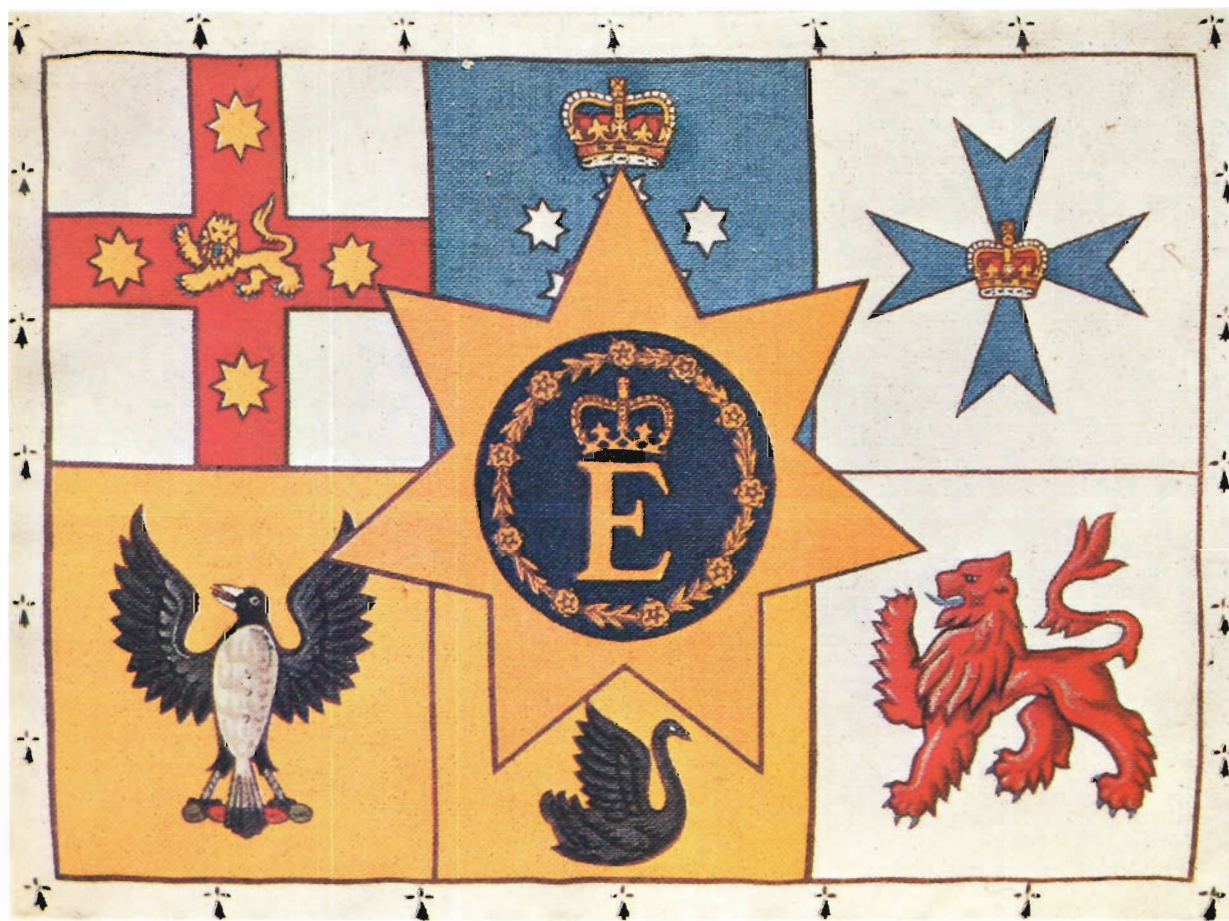
*Trade unions**Historical*

Trade unions are continuous associations of wage earners whose ultimate objective is the improvement of industrial conditions of employment. Over the last 100 years the framework of trade union organisation in Victoria has been radically affected by economic, industrial, political and technological change. As Australia's union members in the workforce constitute one of the highest percentages in the world, the importance of trade unions as socio-economic institutions is obvious.

Before 1850 mutual benefit societies had been set up by groups of workers to provide funeral and sick benefits and unemployment allowances. Typical of this trend was the first society established in Melbourne in 1844 by printing trade workers. In many instances these societies were the forerunners of present day trade unions. There were also isolated instances of workers forming temporary combinations to present a united front to employers. During the period 1850 to 1870, following the influx of people to the goldfields and the resultant development of industry and agriculture, widespread social and economic changes in Victorian society encouraged the formation of trade unions based on the English pattern. The first such union was the Operative Stonemasons Society established in Melbourne in 1850 and in the following year the Typographical Association of Victoria was formed. In some cases the early trade unions collapsed during the peak period of the gold rushes and were re-formed in the late 1850s. The main objective of these early unions was to gain recognition of the principle of an 8 hour day and on 21 April 1856 the Stonemasons Society in Melbourne was the first Australian union to achieve employer acceptance of this aim. Coach builders and some building workers also gained a similar concession during 1856 and in the latter part of that year the first 8 hour celebration was held in Melbourne.

The original trade unions were almost entirely associations of skilled craftsmen who were concerned with maintaining their position and privileges against the less skilled workers as well as against employers. However, during the 1870s and 1880s this attitude was modified by the influence of ex-Chartist unionists who were concerned with the emancipation of all workmen and by the general level of prosperity. During this period Victoria saw the establishment of unions in such diverse areas as mining (1872), agricultural implement making (1873), seamen (1874), tanners and leather dressers (1875), operative bootmakers (1879), tailoresses (1882), and ironworkers and japanners (1883). Before the industrial depression and strikes of the 1890s trade unionism had been firmly established in Victoria and although during this difficult period the union movement temporarily lost many of the advantages which it had previously gained, one important result was recognition of the need for direct Parliamentary representation. Although Charles Jardine Don had been a Labor member of the Victorian Parliament during the 1850s the majority of trade unionists held the traditional view that the only legitimate area of concern of a union was with the particular affairs of its own trade. Consequently there was little support for views advanced by some of the more radical union members that the attainment of organised Labor's industrial aims could only be fully achieved by representation in the colonial Parliaments. With the Melbourne

Royal Visit, April 1970



The Queen's Personal Flag for Australia.
Prime Minister's Department



Her Majesty Queen Elizabeth II and His Royal Highness The Duke of Edinburgh with Their Royal Highnesses The Prince of Wales and The Princess Anne on arrival at the Town Hall, Melbourne.

Australian News and Information Bureau



Her Majesty The Queen, accompanied by Councillor E. W. Best, The Lord Mayor of Melbourne, meeting citizens in Collins Street, Melbourne.

Australian News and Information Bureau

Their Royal Highnesses The Duke of Edinburgh and The Princess Anne in Collins Street.

Australian News and Information Bureau





Her Majesty The Queen declares open the Captain Cook Bi-centenary Exhibition at the National Gallery of Victoria.

National Gallery of Victoria

Mounted police escort the Royal Visitors after their walk along Collins Street.

Victoria Police



Trades Hall Council acting as the co-ordinating body, a Labor political organisation was developed in Victoria and, whereas at the 1889 election only three members who could be considered Labor candidates were returned, in 1894 sixteen Labor members were elected. The decision of trade unions to directly enter the political arena met with a large degree of success and at a comparatively early stage they were able to secure majorities and form governments in some States and the Commonwealth Parliament. Because of the existence of a powerful political wing the Australian trade union movement has, over the years, tended to use political avenues as well as industrial action to seek broad changes.

Present position

By comparison with some other countries, the typical trade union in Australia is quite small, 70 per cent of unions representing approximately 7 per cent of the nation's 2·24 million members. On the other hand, forty to fifty of the larger unions, such as the Australian Workers Union, the metal trades group of unions, the Australian Railways Union, and the Postal Workers Union account for 75 per cent of the total membership. The same pattern applies to Victoria. It is felt that the continued existence of a large number of small craft-type unions is justified on the grounds that greater attention can be given to the particular problems of members and that management is often prepared to make concessions to a small group which they would not offer to a larger group. On the other hand, the larger industry-based unions are usually able to offer a wider range of facilities to their members at a proportionately lower cost. Generally, they are also in a stronger bargaining position in the pursuit of their industrial objectives. With the growth of industry, there has been some amalgamation and federalisation of unions as exemplified by the recent amalgamation of the brushmakers and the storemen and packers. Contemporary conditions are such that trade unions are becoming hybrid and moving more towards an occupational rather than a single or even multi-craft organisational basis. One alternative to amalgamation that has been adopted by a number of unions is to band together in a loose federation to deal with employers on an industry basis. The metal trades, paper, and building industry unions are typical of those who have followed this course.

Victorian trade unions usually have three clearly identifiable operational levels. The union is represented at the plant or factory level by a shop steward who enrolls members, collects dues, and acts as the intermediary between ordinary members and union management. The centre of individual trade union activity and control is at the State or branch level. Normally the State Secretary is an elected full-time officer who is, subject to the policy decisions and ultimate control of an honorary president and executive, in charge of the day-to-day activities of the union. The Secretary has the assistance of organisers who visit the individual plants and confer with shop stewards and members. The branches receive members dues (usually \$16 per annum per member), maintain membership records, and provide personal services such as giving advice on workers compensation and interpreting members entitlements under the various determinations and awards. Where necessary, the union will either act, or provide legal assistance, for members in industrial matters. Many of the claims which are ultimately heard before industrial

tribunals are also prepared at the State branch level.

Most Victorian trade unions are affiliated with the Victorian Trades Hall Council and, because individual union activity is so important at State level, the role of the Trades Hall Council as co-ordinator and spokesman in industrial and political matters is of major significance. The Council Executive consists of the president, vice-president and eleven members elected by delegates to an annual meeting. No union, irrespective of size, can nominate more than five delegates to attend the meeting. The Secretary and the Assistant Secretary, who are elected full-time officers, are also members of the Executive. In addition to its overall responsibilities, the Council through its Disputes Committee controls strikes which involve more than one union. At the national level the highest policy making and co-ordinating body is a Federal Council in the case of the larger trade unions and since its establishment in 1927, the Australian Council of Trade Unions which acts for the trade union movement as a whole.

Returns showing membership by States as at 31 December each year are obtained for all trade unions and employee organisations. The affairs of single organisations are not disclosed in the published results and this has assisted in securing complete information. In addition to the number of unions and of members, the following table shows the estimated percentages of wage and salary earners in employment who are members of trade unions. As estimates of wage and salary earners in employment do not include employees engaged in rural industry or in private domestic service, the percentages have been calculated on figures obtained by adding, to the end of the year estimates, the estimated number of employees in rural industry and in private domestic service recorded at the nearest available population census. For this reason, and also because the membership of trade unions includes some persons not in employment, the percentages shown in the table must be regarded as approximations.

VICTORIA—TRADE UNIONS

Year	Number of separate unions	Number of members			Proportion of total wage and salary earners		
		Males	Females	Total	Males	Females	Total
		'000	'000	'000	per cent	per cent	per cent
1965	156	418·0	119·8	537·8	56	36	50
1966	154	415·9	123·4	539·4	54	32	47
1967	151	413·9	131·6	545·5	53	33	46
1968	153	417·6	133·0	550·7	53	32	46
1969	152	421·7	138·0	559·8	52	32	45

The following table shows the number of unions and membership classified by industry groups at the end of each of the years 1968 and 1969. The table does not supply a precise classification of trade union members by industry because in cases where the members of a union are employed in a number of industries they have been classified under the predominant industry of the union concerned.

VICTORIA—TRADE UNIONS : INDUSTRY GROUPS

Industry group	1968		1969	
	No. of unions	No. of members	No. of unions	No. of members
		'000		'000
Agriculture, grazing, etc.	2	11.4	2	11.1
Manufacturing—				
Engineering, metals, vehicles, etc.	8	82.0	8	84.8
Textiles, clothing, and footwear	4	52.7	4	45.6
Food, drink, and tobacco	14	23.9	13	26.8
Sawmilling, furniture, etc.	3	7.7	3	7.3
Paper, printing, etc.	5	19.2	5	19.6
Other manufacturing	12	31.3	12	31.6
Total manufacturing	46	216.9	45	215.8
Building and construction	9	34.7	9	35.2
Railway and tramway services	5	24.6	5	23.9
Road and air transport	7	19.2	8	19.7
Shipping and stevedoring	7	7.3	7	7.1
Banking, insurance, and clerical	9	34.0	8	35.1
Wholesale and retail trade	3	20.6	3	18.1
Public authority (n.e.i.), etc. (a)	38	105.0	38	109.4
Amusement, hotels, personal service, etc.	9	14.5	9	16.7
Other industries (b)	18	62.5	18	67.8
Total	153	550.7	152	559.8

(a) Includes communication and municipal, etc.

(b) Includes mining and quarrying and community and business services.

Central labour organisations

Delegate organisations, usually known as Trades Hall Councils or Labour Councils and consisting of representatives from a number of trade unions, have been established in each of the capital cities and in a number of other centres in each State. Their revenue is raised by means of a *per capita* tax on the members of each affiliated union. In most of the towns where such councils exist, the majority of the local unions are affiliated. At the end of 1969 there were in Victoria nine trades and labour councils and 279 unions and branches of unions affiliated. These figures do not necessarily represent separate unions since the branches of a large union may be affiliated with the local trades councils in the several towns in which they are represented.

Control of labour conditions

Department of Labour and Industry

The State Department of Labour and Industry deals generally with the registration and inspection of factories and shops, boilers and pressure vessels, and lifts and cranes. Wages Boards and the Apprenticeship Commission are statutory bodies placed within the Department for purposes of administration. The *Labour and Industry Act 1953* revised and consolidated the earlier Factories and Shops Acts and was consolidated in 1958. Included in the present functions of the Department are the following :

1. Inspection and enforcement of conditions of labour generally, including wages, hours of work, rest periods, holidays, annual leave, and long service leave.
2. Employment of women, children and young persons including the training,

oversight of schooling and supervision of apprentices.

3. Industrial relations, including the prevention and settlement of industrial disputes and advice on industrial matters.

4. Industrial safety, health and welfare, including the training of workers in safe practices, control of dangerous methods and materials, guarding of machinery, prevention of accidents, the control and regulation of industrial aspects of noxious trades.

5. Initiation and direction of research and the collection, preparation, and dissemination of information and statistics on matters within Departmental jurisdiction.

6. Consumer protection, including measures to achieve truthful description of goods (generally), correct labelling, branding or stamping of textiles, leather goods, footwear and furniture, and measures to prevent false or misleading advertising, deceitful sales practices, and other methods of selling or providing services which place the consumer at a disadvantage.

Labour legislation

The earliest attempt at regulating the conditions of labour in Victoria was made by the passing of an Act dated 11 November 1873, forbidding the employment of any female in a factory for more than eight hours in any day. This Act defined "factory" to be a place where not fewer than ten persons were working. Since 1873 the definition of "factory" has been broadened until now it includes any place in which mechanical power exceeding one-half horsepower is in use or in which two or more persons are engaged in any manufacturing process. In some circumstances, one or more persons constitute a factory even where no mechanical power is used. The general recognition of the necessity of securing the health, comfort, and safety of the workers has been expressed in many further legislative enactments.

The industrial legislation which was formerly included in the Factories and Shops Acts has now been consolidated in the *Labour and Industry Act* 1958.

Closing hours of shops

Trading hours for shops are fixed by the Labour and Industry Act, and by Regulations made under that Act.

The general hours are from 8 a.m. to 6 p.m. on Mondays to Fridays and from 8 a.m. to 1 p.m. on Saturdays. However, because some Wages Boards have fixed penalty rates for work done, for example, before 9.05 a.m. and after 5.30 p.m., these times are the effective trading hours for many shops.

The following review broadly summarises the current position of trading hours for shops.

The hours generally followed are modified to some extent for butchers, hairdressers, and motor car shops, e.g., motor car shops may remain open until 10 p.m. on Friday nights. The *Labour and Industry (Petrol Shops) Act* 1966 removed restrictions on the trading hours of petrol shops except Good Friday, when they are required to be kept closed all day, and Christmas Day and Anzac Day, when they are required to be kept closed until 2 p.m.

Extensions made to trading hours now permit shops selling caravans, trailers and boats, to remain open until 10 p.m. on Friday nights and 6 p.m. on Saturdays. Dry cleaners' shops may now open at 7 a.m. instead of 8 a.m.

The council of a municipality whose area is outside a radius of 20 miles from the G.P.O. Melbourne may apply to the Minister of Labour and Industry for exemption from shop trading hours for shops in an area which is for the time being wholly or partly a holiday resort. The Minister is to refer such application to the Tourist Development Authority for a report as to— (a) whether the area is a holiday resort for the period of the application and (b) whether the holiday population is large by comparison with the resident population. The Minister may, after having considered the report, subject to such terms as he thinks fit, exempt any shopkeeper in the area from the observance of shop trading hours for a period not exceeding fifteen weeks.

The Minister may also exempt any shopkeeper from the specified closing hours in a municipal district where a large work force is temporarily employed and where the hours of work do not permit shopping within the ordinary trading hours. On application by a municipal council, and after consultation with the Tourist Development Authority, the Minister may exempt shopkeepers in tourist resorts selling goods which are attractive to tourists from observance of the normal shop trading hours.

Owners of shops listed in the Fifth Schedule to the Act, the trading hours of which are not restricted, including bread, pastry and confectionery, cooked meat, fish and oyster, flower, fruit and vegetable, aquarium fish, aviary and cage birds, and booksellers' and newsagents' shops, may sell certain goods detailed in the Sixth Schedule to the Act, in addition to those normally stocked.

Under the *Labour and Industry (Bread) Act* 1967 which commenced from December 1967 and permitted the introduction of weekend baking and delivery of bread, a baker may elect to bake on Saturday or Sunday, but not on both days.

Apprenticeship Commission

Victoria's official system of apprenticeship training began with the passing of the Apprenticeship Act in 1927. This Act established the Apprenticeship Commission of Victoria, which, since it first met in 1928 has been the guiding influence in promoting and supervising apprenticeship in skilled trades in Victoria.

The original legislation of 1927 has been amended and replaced from time to time. The principal Act now in force (No. 6199) is that resulting from a consolidation of Statutes in 1958. This legislation forms the basis of Victoria's apprenticeship system today and is designed to utilise the knowledge, ability, and experience of representatives of employers and employees, together with the State Government, in supervising the training of indentured apprentices, and co-ordinating technical schools and industry for the purpose of supplementing the training received in employers' workshops.

Under an amending Act passed in 1969, membership of the Apprenticeship Commission was increased to ten members comprising a full-time president, appointed on the recommendation of the Minister of Labour and Industry, a deputy president, who is an officer of the Education Department nominated by the Minister of Education, four representatives of employers, and four representatives of employees.

The Commission is assisted in its functions by trade committees which are appointed under the Act for a trade or group of trades. Trade committees

provide specialist advice and make recommendations to the Commission on matters pertaining to the trades for which they are appointed. At 30 June 1970 there were forty-one trade committees functioning in respect of 143 apprenticeship trades in which nearly 30,000 apprentices were employed.

The Apprenticeship Act also provides for the appointment of advisory committees to assist the Commission in its work in country areas. Nineteen such committees are operating at present.

The authority of the Apprenticeship Commission is restricted, by the Apprenticeship Act, to trades which have been proclaimed apprenticeship trades by the Governor in Council. Since 1927 all major trades have been so proclaimed. The Commission maintains a very close liaison with the Education Department in order that the latter may provide appropriate technical school facilities for indentured apprentices who are directed to attend classes or undertake correspondence courses by the Commission.

Until recently "day release" training was the only form of schooling available to an apprentice. However, since 1964 the Commission has examined, and in some cases, implemented a system of "block release" training whereby an apprentice obtains his schooling in fortnightly periods instead of attending on specified days or evenings in each week. This system has particular advantages for apprentices in outlying country areas who find it difficult or impossible to attend classes under the "day release" system. These apprentices are brought to "block release" classes in Melbourne or Geelong and the Government subsidises their accommodation and provides free rail travel. The cost of these payments in 1969-70 was \$41,694.

The welfare and training of apprentices in employers' workshops is also supervised by the Commission, which, through its field officers, investigates complaints and carries out routine inspections of the training methods and facilities provided for apprentices by their employers.

The period of apprenticeship for each trade is determined by the Governor in Council on the recommendation of the Commission. It varies from trade to trade depending upon the scope of learning required by the skills of the various trades. The prescribed term is generally either four or five years but in most cases an apprentice, because of his school qualifications or experience, is entitled to a credit of six or twelve months so that the actual terms being served average from four to four and a half years. The first three months of employment are called the probationary period. This period enables the apprentice and employer to assess whether each will be satisfied in the coming years of employment. At or towards the end of the probationary period the Commission prepares indentures free of cost.

The proclaimed apprenticeship trades and the number of probationers and apprentices employed under the Act on 30 June in each of the years 1966 to 1970 are shown in the following table. These figures are extracted from the Annual Reports of the Apprenticeship Commission.

VICTORIA—NUMBER OF PROBATIONERS AND APPRENTICES EMPLOYED

Trade	1966	1967	1968	1969	1970
Building trades—					
Plumbing and gasfitting	1,962	2,151	2,368	2,400	2,413
Carpentry and joinery	2,620	2,923	3,009	3,085	3,059
Painting, decorating, and signwriting	422	459	445	474	396
Plastering	44	56	56	73	43
Fibrous plastering	190	217	225	204	208
Bricklaying	151	196	208	238	199
Tile laying	..	3	12	19	28
Stonemasonry	..	..	..	1	1
Total building, etc.	5,389	6,005	6,323	6,494	6,347
Metal trades—					
Engineering	4,484	4,659	4,454	4,606	4,378
Electrical	2,818	2,983	3,184	3,468	3,371
Motor mechanic	3,458	3,655	3,825	3,857	3,699
Moulding	116	122	109	115	113
Boilermaking and/or steel construction	741	801	834	954	1,104
Sheet metal	420	437	456	482	513
Electroplating	33	28	37	38	38
Aircraft mechanic	186	201	205	193	162
Radio tradesman	322	313	331	339	332
Instrument making and repairing	178	181	197	200	183
Silverware and silverplating	13	14	14	13	15
Vehicle industry	1,406	1,525	1,567	1,643	1,671
Refrigeration mechanic	121	135	145	179	184
Optical tradesmen	..	..	29	63	80
Total metal trades	14,296	15,054	15,387	16,150	15,843
Food trades—					
Breadmaking and baking	63	114	156	144	152
Pastrycooking	82	137	143	179	158
Butchering and/or small goods making	729	691	732	693	829
Cooking	131	172	207	263	275
Waiting	..	..	..	7	11
Total food trades	1,005	1,114	1,238	1,286	1,425
Miscellaneous—					
Bootmaking	301	263	221	173	172
Printing	1,707	1,765	1,774	1,792	1,719
Hairdressing	1,937	2,204	2,447	2,570	2,275
Dental mechanic	50	59	59	69	63
Watchmaking	36	44	48	53	51
Furniture	747	798	886	956	933
Glass	44	47	54	63	72
Gardening	..	2	28	77	91
Textile mechanic	..	..	..	..	11
Shipwrighting and boatbuilding	..	..	..	..	5
Total miscellaneous	4,822	5,182	5,517	5,753	5,392
Total	25,512	27,355	28,465	29,683	29,007

EMPLOYMENT AND UNEMPLOYMENT

Control of employment*Commonwealth Department of Labour and National Service*

At the Commonwealth level some of the more important of the functions of the Department of Labour and National Service are the operation of the Commonwealth Employment Service; the administration of the *National Service Act* 1951–1968 and the reinstatement of National Servicemen in civil employment under the provisions of the *Defence (Re-establishment) Act* 1965–1968; the formulation of industrial relations policy; conciliation and arbitration in relation to industrial disputes, with special responsibilities for the coal, stevedoring, and maritime industries; analysis, interpretation, and provision of information on the labour market and changes in employment; and the provision of assistance and advice to industry with regard to training, safety, physical working conditions, personnel practices, and food services.

Commonwealth Employment Service

The Commonwealth Employment Service (C.E.S.) was established under section 47 of the *Re-establishment and Employment Act* 1945–1966. The principal functions of the service are to assist people seeking employment to obtain positions best suited to their training, experience, abilities and qualifications; and to assist employers seeking labour to obtain employees best suited to their needs.

The C.E.S. functions within the Employment and Industrial Services Division of the Department on a decentralised basis. At the State level the C.E.S. and the other elements of the Department are under the control of a Regional Director responsible to the Permanent Head of the Department. In Victoria the Regional Office Headquarters are located in Melbourne and there are twenty-two District Employment Offices in the metropolitan area and sixteen in country centres. In addition there are a number of agencies in smaller country centres which work in conjunction with the District Employment Office responsible for the area in which they are located.

Specialist facilities are provided by the C.E.S. for young people, persons with physical and mental handicaps, older workers, ex-members of the defence forces, migrants, rural workers, and persons with professional and technical qualifications. Vocational guidance is provided free of charge by a staff of qualified psychologists. It is available to any person, but is provided particularly for young people, ex-servicemen, and handicapped persons.

The C.E.S. assists in the administration of the unemployment and sickness benefits provisions of the *Social Services Act* 1947–1969. All applicants for unemployment benefit must register at a District Employment Office or agency, which is responsible for certifying whether or not suitable employment can be offered to them.

The C.E.S. is responsible for placing in initial employment all Commonwealth nominated migrant workers coming to Australia under the assisted passage schemes from Great Britain and other countries, and, as required, it provides assistance to other migrants wishing to obtain employment. When migrants coming under Commonwealth nomination arrive in Australia, the C.E.S. arranges for them to move to their initial employment and for their admission, if necessary, to Commonwealth controlled hostels.

Since 1951 the C.E.S. has been responsible for recruiting Australian experts for overseas assignments under the Colombo Plan, the United Nations Development Programme, and other technical assistance schemes. The principal spheres in which experts have been supplied are agriculture, education, engineering, geology, health, and economic and scientific research and development. The C.E.S. also arranges training in industry for students who come to Australia for training under the various technical assistance schemes with which the Commonwealth is associated.

In association with its placement activities, the C.E.S. carries out regular surveys of the labour market in all areas and industries and supplies detailed information to interested Commonwealth and State Government departments and instrumentalities and to the public. It also advises employers, employees, and others on labour availability and employment opportunities in various occupations and areas and on other matters concerning employment.

No charge is made for any of the services rendered by the C.E.S.

Particulars of the major activities of the C.E.S. during the five years ended 30 June 1970 are given in the following table :

VICTORIA—COMMONWEALTH EMPLOYMENT SERVICE

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Applications for employment (a)	237,026	251,065	271,994	261,537	264,476
Number placed in employment	96,974	101,611	108,748	116,477	121,803
Number of vacancies notified	151,345	156,488	154,682	165,493	179,517
Vacancies at 30 June	13,751	11,459	9,411	11,777	12,326

(a) Includes unemployed persons and persons already in employment who are seeking improved positions.

Work force

Introduction

At the 1961 and previous Censuses the work force was determined as : "Those who are engaged in an industry, business, profession, trade or service at the time of the Census (including those on long service leave, etc.)" ; and " those out of a job at time of the Census but who are usually engaged in an industry, business, profession, trade or service"

At the 1966 Census additional questions were asked in order to obtain information on the basis of which the work force could be determined more precisely.

The work force now includes all persons who did any paid work for an employer or who had a job as an employee from which they were temporarily absent or who were looking for work. Persons helping but not receiving wages or a salary who usually worked less than 15 hours a week were excluded from the work force.

The net effect of the new definition was to include approximately 33,000 additional persons in the Victorian work force, i.e., a proportionate increase in the Victorian work force of approximately 2.5 per cent. The major factor in this change was females working part-time (sometimes for only a few hours a week) some of whom, in 1961, did not consider themselves as " engaged in an industry, business, profession, trade or service ".

Occupational status

The occupational status of persons classified as in the work force at population census date covers two broad groups : those employed and those unemployed. The first group includes employers, self-employed persons, employees, and helpers working more than 15 hours a week.

Industry

Persons in the work force were asked to state industry in accordance with the following instructions :

State the exact branch of industry, business or service in which mainly engaged last week, using two or more words where possible. For example, ' Dairy Farming ', ' Coal Mining ', ' Woollen Mills ', ' Retail Grocery ', ' Road Construction ', etc. Employees should state the industry of their employer. For example, a carpenter employed by a coal mining company should state ' Coal Mining '. If employed by a Government Department or other public body, state also its name. For paid housekeepers and domestic servants in private households, write ' P.H. '

VICTORIA—MALES AND FEMALES IN THE WORK FORCE CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS IN CONJUNCTION WITH AGE :
CENSUS, 30 JUNE 1966

Age last birthday (years)	Employed					Unem- ployed	Total in work force
	Employer	Self- employed	Employee (on wage or salary)	Helper (not on wage or salary)	Total		
MALES							
15-19	295	1,339	83,896	1,440	86,970	1,931	88,901
20-24	1,813	5,116	103,211	521	110,661	1,470	112,131
25-29	4,950	8,500	90,236	213	103,899	996	104,895
30-34	7,084	9,860	80,423	115	97,482	835	98,317
35-39	9,433	12,023	87,630	105	109,191	847	110,038
40-44	10,285	11,911	85,092	99	107,387	825	108,212
45-49	9,445	10,511	70,165	88	90,209	778	90,987
50-54	8,656	9,952	65,344	100	84,052	716	84,768
55-59	6,716	8,807	54,085	127	69,735	732	70,467
60-64	4,337	6,728	38,397	155	49,617	640	50,257
65 and over	4,222	7,555	18,738	370	30,885	369	31,254
Total in work force	67,236	92,302	777,217	3,333	940,088	10,139	950,227
FEMALES							
15-19	122	300	81,802	626	82,850	2,223	85,073
20-24	699	1,020	69,849	585	72,153	1,336	73,489
25-29	1,205	1,686	34,010	693	37,594	707	38,301
30-34	1,716	2,108	27,801	769	32,394	609	33,003
35-39	2,428	2,571	34,186	936	40,121	613	40,734
40-44	2,807	2,622	37,483	1,079	43,991	543	44,534
45-49	2,495	2,577	30,969	994	37,035	416	37,451
50-54	2,078	2,397	25,880	877	31,232	343	31,575
55-59	1,454	1,835	17,844	623	21,756	255	22,011
60-64	784	1,265	9,029	448	11,526	116	11,642
65 and over	959	1,627	5,772	561	8,919	89	9,008
Total in work force	16,747	20,008	374,625	8,191	419,571	7,250	426,821

VICTORIA—MALES AND FEMALES IN THE WORK FORCE CLASSIFIED ACCORDING TO INDUSTRY IN CONJUNCTION WITH OCCUPATIONAL STATUS: CENSUS, 30 JUNE 1966

Industry	Employed					Un-employed	Total in the work force
	Em- ployer	Self- employed	Em- ployee (on wage or salary)	Helper (not on wage or salary)	Total		
MALES							
Primary production	17,115	45,758	27,174	2,267	92,314	477	92,791
Mining and quarrying	94	92	4,574	2	4,762	37	4,799
Manufacturing	7,974	6,066	295,682	179	309,901	1,779	311,680
Electricity, gas, water and sanitary services (production, supply and maintenance)	95	87	31,142	20	31,344	72	31,416
Building and construction	9,923	12,038	81,583	96	103,640	1,143	104,783
Transport and storage	2,907	7,853	51,612	42	62,414	428	62,842
Communication	..	2	23,180	12	23,194	68	23,262
Finance and property	1,221	1,627	27,285	22	30,155	64	30,219
Commerce	16,244	10,845	106,991	253	134,333	806	135,139
Public authority (n.e.i.) and defence services	..	..	41,890	..	41,890	74	41,964
Community and business services (including professional)	6,011	2,462	56,256	191	64,920	167	65,087
Amusement, hotels and other accommodation, cafes, personal service, etc.	5,483	5,156	23,284	157	34,080	364	34,444
Other industries	4	7	16	..	27	1	28
Industry inadequately described or not stated	165	309	6,548	92	7,114	4,659	11,773
Total in the work force	67,236	92,302	777,217	3,333	940,088	10,139	950,227
FEMALES							
Primary production	2,826	6,341	5,678	4,261	19,106	73	19,179
Mining and quarrying	9	8	380	2	399	1	400
Manufacturing	1,800	1,640	122,079	361	125,880	930	126,810
Electricity, gas, water and sanitary services (production, supply and maintenance)	12	3	2,361	4	2,380	3	2,383
Building and construction	635	277	2,980	183	4,075	18	4,093
Transport and storage	321	288	5,745	111	6,465	36	6,501
Communication	..	2	6,523	12	6,537	39	6,576
Finance and property	126	250	20,022	47	20,445	75	20,520
Commerce	6,062	5,376	68,248	1,170	80,856	496	81,352
Public authority (n.e.i.) and defence services	..	..	11,214	2	11,216	38	11,254
Community and business services (including professional)	841	1,640	84,917	427	87,825	497	88,322
Amusement, hotels, and other accommodation, cafes, personal service, etc.	3,993	3,871	36,953	819	45,636	441	46,077
Other industries	..	1	6	..	7	1	8
Industry inadequately described or not stated	122	311	7,519	792	8,744	4,602	13,346
Total in the work force	16,747	20,008	374,625	8,191	419,571	7,250	426,821

From the answers to this question persons were classified according to the Bureau's "Classification of Industries" which provides for each person to be classified according to the nature of the business in which the person is mainly engaged, regardless of whether operated by a government authority, corporation, or individual.

The precise classification of persons in the work force according to industry is extremely difficult but is subject to continuing efforts to improve

the quality of the data from census to census. Consequently the comparison of data compiled at the 1966 census with that obtained at previous censuses is not only influenced by changes in the definition and content of the work force, but by the different responses which may have been evoked by efforts to improve the questions on the census schedule, and by some changes in coding rules designed to rectify known deficiencies in the data. Classification is difficult mainly because of the problem of conveying through a printed form the exact nature of the information required (e.g., the conceptual difference between "occupation" and "industry") and the consequential inadequacy of many replies.

Further information on the 1966 census is given in Part 3 of this *Year Book*. Information on the 1961 census will be found on pages 208-9 of the *Victorian Year Book 1967*.

Wage and salary earners in civilian employment

General

Previous *Year Books* contained estimates of wage and salary earners in civilian employment based on comprehensive data derived for the purpose from the population censuses of June 1954 and June 1961. For the intercensal period 1954-1961 and from July 1961 to February 1969 the figures shown were estimates designed to measure month to month changes. The series were revised in the light of the 1966 population census results, and the new series of estimates of wage and salary earners in civilian employment are based on comprehensive data derived for the purpose from the population census of June 1966. The statistics shown for June 1966 are referred to as "benchmarks". For the period from July 1966 to June 1970 the figures are estimates designed to measure changes in the sector of employment to which the benchmarks relate.

Between population censuses the employment data are obtained from three main sources, namely, (a) current pay-roll tax returns; (b) current returns from government bodies; and (c) some other current returns of employment (e.g., for hospitals); the balance, i.e., unrecorded private employment, is estimated. At June 1966 recorded employment obtained from the foregoing sources accounted for about 85 per cent of the total number of employees in the industries covered, as determined by the census.

The figures in the following tables relate only to civilian wage and salary earners, not the total labour force. They therefore exclude employers, self-employed persons, unpaid helpers, and defence forces. Also excluded, because of the inadequacy of current data, are employees in agriculture (formerly referred to as rural industry) and in private domestic service.

The new series are generally at higher levels than the old series, owing to the adoption of a new definition of the labour force in the 1966 population census, which resulted in the inclusion of a considerable number of part-time employees (mostly females) who had previously been excluded. The concepts and definitions adopted at the 1966 census from which the benchmarks for the new series were derived conformed closely to the recommendations of the Eighth International Conference of Labour Statisticians.

Current data supplied by reporting enterprises or establishments generally refer to persons of the pay-roll for the last pay period in each month. Persons

who are on paid leave or who work during part of the pay period and are unemployed or on strike during the rest of the period are generally counted as employed. Those not shown on employers' pay-rolls because they are on leave without pay, on strike, or stood down for the entire period are excluded.

Pay-roll tax returns are lodged at present by all employers paying more than \$400 a week in wages (other than certain Commonwealth Government bodies, religious and benevolent institutions, public hospitals, and other similar organisations specifically exempted under the *Pay-roll Tax Assessment Act 1941-1969*).

Particulars of employment obtained from other collections, such as the annual manufacturing census and censuses and sample surveys of retail establishments, are used to check and, where desirable, to revise estimates. Some figures are subject to further revision as the results of later censuses and surveys become available.

Although the series measure reasonably well the short-term trends in employment in the defined field, they may be less reliable for longer-term measurement. There are conceptual differences between benchmark and pay-roll data, and changes in such factors as labour turnover, multiple jobholding and part-time working all affect the trend over longer periods.

The following table shows, for Victoria, the estimated number of wage and salary earners in civilian employment (excluding employees in agriculture and private domestic service) in the principal industry groups at June of each of the years 1966 to 1970. The number of employees of government bodies and private employers is also shown.

VICTORIA—WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT :
INDUSTRY GROUPS (a)
(‘000)

Industry group	June 1966	June 1967	June 1968	June 1969	June 1970
MALES					
Mining and quarrying	4.7	4.4	4.3	4.1	4.5
Manufacturing (b)	300.9	306.3	307.2	316.0	324.4
Electricity, gas, water, and sanitary services	31.4	31.5	31.9	31.6	31.3
Building and construction	81.7	81.3	83.9	84.5	83.3
Road transport and storage	21.0	21.2	22.0	22.7	23.6
Shipping and stevedoring	8.9	8.6	9.3	9.4	9.7
Rail and air transport	19.1	18.9	19.2	19.3	19.7
Communication	23.3	24.0	24.7	24.8	25.4
Finance and property	27.8	29.1	30.5	32.3	34.0
Retail trade	53.9	54.3	56.0	56.8	58.0
Wholesale and other commerce	53.9	54.1	54.6	55.8	57.2
Public authority activities (n.e.i.)	27.7	29.2	30.3	31.0	32.2
Health, hospitals, etc.	10.4	10.7	11.0	11.5	12.3
Education	23.9	24.7	26.6	28.3	29.6
Amusement, hotels, personal service, etc. (c)	21.7	23.0	24.1	25.8	27.4
Other (d)	25.4	26.1	27.9	28.2	29.5
Total	735.7	747.7	763.5	782.2	802.2
Private	541.0	549.9	560.1	579.2	596.4
Government (e)	194.7	197.8	203.4	203.0	205.8
Total	735.7	747.7	763.5	782.2	802.2

For footnotes see next page

VICTORIA—WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT:
INDUSTRY GROUPS (a)—continued
(‘000)

Industry group	June 1966	June 1967	June 1968	June 1969	June 1970
FEMALES					
Mining and quarrying	0·4	0·5	0·5	0·5	0·6
Manufacturing (b)	123·1	126·5	129·1	134·2	138·6
Electricity, gas, water, and sanitary services	2·4	2·4	2·4	2·6	2·7
Building and construction	3·1	3·2	3·5	3·7	3·9
Road transport and storage	2·8	2·8	2·8	2·9	3·1
Shipping and stevedoring	0·6	0·6	0·6	0·6	0·7
Rail and air transport	2·6	2·7	2·7	2·7	2·8
Communication	6·6	6·8	7·0	7·2	7·4
Finance and property	20·4	21·5	22·3	23·7	25·5
Retail trade	51·0	54·5	55·6	57·5	59·6
Wholesale and other commerce	20·9	20·9	21·4	22·0	23·1
Public authority activities (n.e.i.)	11·1	11·8	12·4	13·1	14·0
Health, hospitals, etc.	37·9	39·1	40·1	41·7	44·0
Education	30·6	32·7	35·0	38·3	40·3
Amusement, hotels, personal service, etc. (c)	29·1	30·8	32·8	33·8	36·2
Other (d)	18·6	19·8	20·2	21·4	23·0
Total	361·2	376·5	388·2	405·8	425·7
Private	304·6	317·5	327·5	341·1	357·4
Government (e)	56·6	59·0	60·7	64·7	68·3
Total	361·2	376·5	388·2	405·8	425·7
PERSONS					
Mining and quarrying	5·1	4·9	4·8	4·6	5·1
Manufacturing (b)	424·0	432·8	436·3	450·2	463·0
Electricity, gas, water, and sanitary services	33·8	33·9	34·3	34·2	34·0
Building and construction	84·8	84·5	87·4	88·2	87·2
Road transport and storage	23·8	24·0	24·8	25·6	26·7
Shipping and stevedoring	9·5	9·2	9·9	10·0	10·4
Rail and air transport	21·7	21·6	21·9	22·0	22·6
Communication	29·9	30·8	31·7	32·0	32·8
Finance and property	48·2	50·6	52·8	56·0	59·6
Retail trade	104·9	108·8	111·6	114·3	117·6
Wholesale and other commerce	74·8	75·0	76·0	77·8	80·2
Public authority activities (n.e.i.)	38·8	41·0	42·7	44·1	46·2
Health, hospitals, etc.	48·3	49·8	51·1	53·2	56·3
Education	54·5	57·4	61·6	66·6	70·1
Amusement, hotels, personal service, etc. (c)	50·8	53·8	56·9	59·6	63·7
Other (d)	44·0	45·9	48·1	49·6	52·5
Total	1,096·9	1,124·2	1,151·7	1,188·0	1,227·9
Private	845·6	867·4	887·6	920·3	953·8
Government (e)	251·3	256·8	264·1	267·7	274·1
Total	1,096·9	1,124·2	1,151·7	1,188·0	1,227·9

(a) Excludes employees in agriculture and private domestic service, and defence forces.

(b) Includes employees engaged in selling and distribution, who are outside the scope of the factory employment figures as defined and published in Part 7 of the *Year Book*.

(c) Includes restaurants and hairdressing.

(d) Includes forestry, fishing and trapping; law, order, and public safety; religion and social welfare; and other community and business services.

(e) Includes employees of Commonwealth, State, semi-government, and local government bodies.

Government bodies

The following table includes employees, within Victoria, of government bodies on services such as railways, tramways, banks, post office, air transport, education (including universities), broadcasting, television, police, public works, factories and munitions establishments, departmental hospitals and institutions, migrant hostels, etc., as well as administrative employees :

VICTORIA—WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT:
GOVERNMENT BODIES
(‘000)

At end of June—	Commonwealth government			State and semi-government			Local government			Total government		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1966	61.0	18.7	79.6	117.6	35.3	152.9	16.1	2.7	18.8	194.7	56.6	251.3
1967	63.1	19.5	82.7	118.4	36.7	155.1	16.2	2.8	19.0	197.8	59.0	256.8
1968	64.4	19.9	84.3	121.2	37.8	159.0	17.8	3.0	20.8	203.4	60.7	264.1
1969	65.5	20.8	86.3	121.1	40.7	161.8	16.5	3.2	19.6	203.0	64.7	267.7
1970	67.4	21.9	89.4	121.5	43.0	164.6	16.8	3.4	20.2	205.8	68.3	274.1

Further references

Further details on subjects dealt with in this part are contained in other publications of the Commonwealth Bureau of Census and Statistics. Detailed information on employment and unemployment is contained in the monthly mimeographed bulletin *Employment and Unemployment*. Current information is also available in the *Monthly Review of Business Statistics* and the *Victorian Monthly Statistical Review*, and preliminary estimates of civilian employment are issued in a monthly statement *Wage and Salary Earners in Civilian Employment*. In addition, wages information is published monthly in the bulletin *Wage Rates and Earnings*. Seasonally adjusted series of employment and unemployment statistics are also available.

PRICES

Retail price indexes

A retail price index is designed to measure the change over time in the level of retail prices in a selected field. The basic principle of an index is to select a list of commodities and services which are representative of the field to be covered, and to combine the prices of these commodities and services at regular intervals by the use of "weights" which represent the relative importance of the items in that field.

Five series of retail price indexes have been compiled for Australia by the Commonwealth Statistician at various times before the current Consumer Price Index was introduced in 1960.

Information about retail price indexes in general and retail price indexes compiled by the Commonwealth Statistician before 1960 is set out on pages 510 to 513 of the *Victorian Year Book 1964*.

Consumer Price Index

The Consumer Price Index is a quarterly measure of variations in retail

prices of goods and services representing a high proportion of the expenditure of wage earners' households.

The Consumer Price Index covers a wide range of commodities and services arranged in the following five major groups: Food, Clothing and Drapery, Housing, Household Supplies and Equipment, Miscellaneous. These groups do not include every item of household spending. It is both impracticable and unnecessary for them to do so. However, substantial changes in the pattern of expenditure of wage earner households have occurred since the Index was first introduced and this has made it necessary to construct indexes with additional items and changes in the weighting patterns at intervals. These indexes are "linked" to form a "chain" of fixed weight aggregative indexes which is called the "Consumer Price Index". Under this method average percentage price movements are assessed on one pattern up to the time of the link and on another pattern thereafter.

Linking ensures that the series reflects only price variations and not differences in cost of old and new combinations and lists of items. The introduction of new items and weights by linking does not of itself affect the level of the index.

Significant changes in composition and weighting have been effected at the links of June Quarter 1952, June Quarter 1956, March Quarter 1960, December Quarter 1963, and December Quarter 1968. Details of the principal changes made at these points of time are shown in the *Victorian Year Books* 1964, 1968, and 1970.

The sets of weights used for the different periods covered by the Index have been derived from analysis of statistics of production and consumption, censuses of population and retail establishments, the continuing Survey of Retail Establishments, from information supplied by manufacturing, commercial and other relevant sources, and from special surveys.

Until the December Quarter 1968, the Index had been compiled for each quarter from the September Quarter 1948 and each financial year from 1948-49, the reference base year being 1952-53 = 100.0. As from the March Quarter 1969, the reference base year has been changed to that of 1966-67 = 100.0, index numbers for past periods having been re-calculated on the new base year. Apart from slight rounding differences, index numbers for past periods have exactly the same percentage movement on either reference base.

"All Groups" index numbers, and group index numbers for each of the five major groups are compiled and published regularly for the six State capital cities separately and combined and for Canberra. The separate city indexes measure price movements within each city individually. They enable comparisons to be drawn between cities about differences in degree of price movement, but not about differences in price level. Similarly, the separate group indexes measure price movement of each group individually. They enable comparisons to be drawn about differences in the degree of price change in the different groups, but do not show the comparative cost of the different groups.

Consumer Price Index numbers for Melbourne are shown in the following table :

MELBOURNE—CONSUMER PRICE INDEX
(Base of each index : Year 1966-67 = 100.0)

Year	Food	Clothing and drapery	Housing	Household supplies and equipment	Miscellaneous	All groups
1960-61	92.4	93.6	82.2	93.6	84.6	89.5
1961-62	90.7	94.6	85.6	94.9	84.7	89.8
1962-63	89.4	94.9	87.6	94.8	84.9	89.7
1963-64	90.3	95.5	89.4	93.6	85.7	90.4
1964-65	95.1	96.9	92.0	95.8	90.6	94.0
1965-66	99.0	98.0	96.3	98.7	95.1	97.5
1966-67	100.0	100.0	100.0	100.0	100.0	100.0
1967-68	106.3	102.1	103.8	101.4	102.5	103.7
1968-69	107.3	104.2	107.9	102.9	107.3	106.2
1969-70	109.1	107.4	112.2	103.5	110.2	108.7

Retail prices of food

The average retail prices of various food and grocery items in Melbourne are shown in the following table for each of the years 1947, 1957, and 1967 to 1969. Some minor changes of basis are incorporated in the figures for 1969.

MELBOURNE—AVERAGE RETAIL PRICES OF SELECTED COMMODITIES (a)
(cents)

Item	Unit	1947	1957	1967	1968	1969
Groceries, etc.—						
Bread (delivered)	2 lb	4.8	12.9	17.8	19.0	20.0
Flour—Self raising	2 lb pkt	6.3	16.7	17.2	18.3	19.7
Tea(b)	lb	26.7	66.9	31.6	31.7	30.7
Sugar(c)	lb	3.4	8.3	39.5	42.4	42.2
Jam, plum	1½ lb	11.0	25.5	29.6	32.0	33.9
Peaches, canned(d)	29 oz	12.6	35.8	28.4	28.9	29.9
Pears, canned(d)	29 oz	13.7	33.0	28.7	29.5	30.3
Potatoes	7 lb	7.9	32.5	46.2	57.8	35.4
Onions	lb	2.5	7.3	10.7	14.0	10.2
Dairy produce, etc.—						
Butter	lb	17.3	45.5	49.8	50.2	52.5
Eggs(e)	doz	23.2	57.7	65.2	65.0	68.9
Bacon rashers(f)	lb	19.9	70.9	52.2	51.5	51.3
Milk, fresh bottled(g)	quart	6.4	15.2	18.2	19.0	19.0
Meat—						
Beef, rib(h)	lb	9.7	35.2	59.5	61.9	63.0
„ steak, rump	lb	18.0	51.2	98.4	107.6	112.8
„ „ chuck	lb	8.6	28.6	50.7	51.9	52.4
„ sausages	lb	7.0	20.2	31.4	31.8	30.8
„ corned silverside	lb	11.0	34.4	59.9	63.1	64.0
„ „ brisket	lb	7.6	24.9	42.8	45.0	44.0
Mutton, leg	lb	10.1	23.2	29.9	28.8	28.3
„ chops, loin	lb	9.7	22.6	28.4	27.5	29.1
„ „ leg	lb	10.3	25.3	32.0	31.8	31.6
Pork, leg	lb	13.9	50.7	64.4	65.2	62.5
„ loin	lb	14.8	51.8	65.8	67.7	65.7
„ chops	lb	15.7	51.9	65.6	67.5	65.9

(a) In some cases the averages are price relatives.

(b) From 1962 ¼ lb.

(c) From 1966 ¼ lb.

(d) Prior to 1956 30 oz tins.

(e) Extra large grade as from April 1961; 24 oz from August 1965.

(f) From 1965 ¼ lb. "pre-pack".

(g) Delivered. Milk prices prior to 1950 are for loose milk.

(h) Prior to 1955 prices are for "Bone-in".

Wholesale price indexes

Since 1928, the Commonwealth Statistician has compiled a wholesale price index known as the Wholesale Price (Basic Materials and Foodstuffs) Index. Through the years the validity of the weighting and the representativeness of the Index have become increasingly affected by changes in usage and in industrial structures. For this and other reasons, new indexes of wholesale price movements are being prepared which will ultimately replace the Wholesale Price (Basic Materials and Foodstuffs) Index. The first of these, which refers to materials used in building other than house building, has been issued (see below). Others to follow in due course will cover, respectively, materials used in house building and in manufacturing industry.

Meanwhile, the Commonwealth Statistician is continuing the monthly publication in abbreviated form, of the Wholesale Price (Basic Materials and Foodstuffs) Index. Index figures for each group of commodities contained in the Index may be found for years up to 1967-68 in the 1969 *Victorian Year Book* and previous issues.

Wholesale prices of principal products

The following table shows the monthly average of Melbourne wholesale prices of the principal agricultural, dairying, and pastoral food products for the years 1947, 1957, and 1967 to 1969 :

MELBOURNE—WHOLESALE PRICES

Item	Unit	1947	1957	1967	1968	1969
cents						
Agriculture—						
Wheat	bushel	39.4	138.4	157.3	165.9	170.7
Barley, English	"	60.8	138.5	150.8	154.4	146.3
Oats, milling	"	46.5	92.8	87.3	102.0	58.3
Maize	"	85.0	190.6	190.0	264.6	240.8
\$						
Bran	ton	13.07	44.17	43.35	46.02	43.52
Pollard	"	13.07	44.17	46.35	49.02	46.43
Flour (first quality)	"	26.85	68.19	85.36	88.31	92.11
Chaff	"	14.83	39.71	47.33	64.50	48.83
Potatoes	"	16.42	52.19	71.42	90.82	31.57
Onions	"	32.06	74.25	95.03	132.80	79.08
cents						
Dairy and farmyard produce—						
Butter	lb	15.1	42.6	48.0	48.0	49.9
Bacon	"	13.2	46.4	55.4	58.6	58.5
Ham	"	15.9	54.0	72.8	70.2	66.0
Cheese (matured)	"	13.4	32.4	37.0	37.0	37.0
Honey	"	6.2	14.6	14.8	14.4	14.5
Eggs(a)	doz.	20.0	51.2	56.8	57.3	60.5
\$						
Butchers' meat—						
Beef, prime	100 lb	5.25	14.42	26.96	27.04	26.30
cents						
Mutton	lb	5.0	8.8	12.0	10.3	10.1
Veal	"	5.1	17.0	31.5	32.1	33.9
Pork	"	8.1	28.6	37.4	36.3	32.7
Lamb	"	8.6	21.8	23.2	20.0	19.1

(a) Extra large grade from April 1961 ; 24 oz from August 1965.

Wholesale Price Index of Materials Used in Building Other than House Building

This Index was introduced in April 1969 and to a considerable extent provides an up-to-date replacement for the Building Materials Group of the Wholesale Price (Basic Materials and Foodstuffs) Index. It is issued monthly.

The Index measures changes in prices of selected materials used in the construction of buildings other than houses and "low-rise" flats (in general those up to three storeys). It includes seventy-two items, combined in eleven groups, in addition to an "All Groups" Index. Although the selected materials (or many of them) are also used in house (and low-rise flat) building, in building repair, maintenance and alteration work, and in "engineering construction" work (e.g., projects such as roads, dams, bridges, and the like), the weighting pattern of the Index, being designed for the specific purpose mentioned above, is not applicable to these other activities of the construction industry. In addition, since the weights are based on an average materials usage over a range of types of building within the defined area (building other than house building), the Index is not necessarily applicable to any specific building or type of building included in that area.

The Index is a fixed-weights index and is calculated by the method known as "the weighted arithmetic mean of price relatives". The items and weights were derived from reported values of materials used in selected representative buildings constructed in or about 1966-67. The single weighting pattern relates to the whole of Australia, and is applied (with minor exceptions) in calculating indexes for each State capital city.

Prices are collected as at the mid-point of the month to which the Index refers, or as near thereto as practicable. They relate to specified standards of each commodity and are obtained in all State capital cities from the representative suppliers of materials used in building. There are, however, some exceptions to the use of local prices in the indexes for each capital city. The main exception is that, for each city, the whole of the group "Electrical installation materials" and the majority of the items in the group "Mechanical services components" are based on Sydney and Melbourne price series.

MELBOURNE—WHOLESALE PRICE INDEX OF MATERIALS USED IN
BUILDING OTHER THAN HOUSE BUILDING
(Base of each index : Year 1966-67 = 100·0)

Group	1967-68	1968-69	1969-70
Concrete mix, cement, sand, etc.	99·9	101·1	104·4
Cement products	101·0	103·1	108·5
Bricks, stone, etc.	102·4	107·3	110·5
Timber, board and joinery	100·8	104·0	107·8
Steel and iron products	102·4	106·2	110·4
Aluminium products	100·9	104·0	108·7
Other metal products	105·8	106·7	124·1
Plumbing fixtures	102·4	103·4	111·8
Miscellaneous materials	102·8	104·3	106·4
Electrical installation materials	100·9	102·1	112·2
Mechanical services components	101·4	108·0	112·1
All groups	101·7	105·0	109·8

Index numbers for each of the eleven groups and for "All groups" have been compiled for the six State capital cities separately and combined for each month from July 1966 and for the financial years from 1966-67. The reference base year for each index is 1966-67 = 100.0.

Export Price Index

For the period from July 1959 to June 1969 changes in the level of export prices of selected major groups of items were indicated by a fixed weights index which made no allowance for variations in quantities exported (see *Victorian Year Book* 1970). Since June 1969 the index has been compiled on an interim basis which incorporates a re-weighting of the items contained in the previous series and the inclusion of some additional items. This interim basis will apply until completion of the review of content and weighting pattern referred to in the *Victorian Year Book* 1970.

In the interim series weights have been derived from values of exports for the year 1969-70 and the group weights have been adjusted to reflect the proportion that the value of wool bore to the value of all exports in that year. In addition to the 29 items of the previous index the interim index includes a further four items, namely, iron ore, bauxite, alumina, and mineral sands. Pending re-grouping in the final index these items are not attached to any of the previous single groups whose item content is therefore unchanged. The four new items are incorporated in the "all groups" index number but only from the link date June 1969. The 33 items contained in the interim series constituted 74 per cent of the total value of Australian exports (merchandise and non-merchandise) in 1969-70.

The price series used in these indexes relate generally to specified standards for each commodity and in most cases are combinations of prices for a number of representative grades, types, etc. For some commodities price movements in the predominant market, or markets, are used, while for other commodities average realisations in all export markets are used. As nearly as possible, prices used are on the basis f.o.b. at the main Australian ports of export.

Index numbers for each of the groups of the previous index and for "all groups" are shown in the table below (linked as at June 1969). The index is published monthly and the index figures in the table are simple averages of the twelve monthly index numbers in each respective year.

EXPORT PRICE INDEX NUMBERS
(Base of each index : Year 1959-60 = 100)

Period	Wool	Meats	Dairy produce	Cereals	Dried and canned fruits	Sugar	Hides and tallow	Metals and coal	Gold	All groups
1960-61	92	104	82	99	99	101	92	97	100	95
1961-62	97	100	81	106	95	91	84	91	100	96
1962-63	104	101	88	107	90	107	72	89	100	101
1963-64	120	105	93	107	98	175	73	101	100	114
1964-65	102	110	94	107	100	100	91	123	101	105
1965-66	107	120	86	107	102	84	107	122	101	107
1966-67	103	124	84	114	101	67	89	117	101	105
1967-68	95	125	79	109	95	67	67	120	104	100
1968-69	99	131	72	104	97	72	73	123	117	102
1969-70 (a)	87	148	73	96	100	94	94	143	109	103

(a) Interim series, subject to revision.

Further reference. COMMONWEALTH BUREAU OF CENSUS AND STATISTICS. *Labour Reports*. Canberra, Government Printer, issued annually.

5

LOCAL GOVERNMENT

ADMINISTRATION

Local Government Department

The *Local Government Department Act* 1958 constituted a department called the Local Government Department "for the better administration of the laws relating to local government in Victoria". The legislation was brought into operation on 23 December 1958 by a proclamation of the Governor in Council published in the *Government Gazette* on that date. Officers and employees of the Local Government Branch of the Public Works Department were, as a result, transferred and attached to the new Department.

The following Acts of Parliament come within the ambit of the responsibilities of the Minister for Local Government :

Local Government Act

Acts relating to local government in the Cities of Melbourne and Geelong

Cultural and Recreational Lands Act

Dog Act

Drainage Areas Act

Hawkers and Pedlars Act

Litter Act

Local Authorities Superannuation Act

Markets Act

Melbourne and Metropolitan Board of Works Act

Newmarket Sheep Sales Act

Petrol Pumps Act

Pounds Act

Public Authorities Marks Act

Public Contracts Act

Town and Country Planning Act

Tramways Act

Valuation of Land Act

Weights and Measures Act

Constituting and altering the constitution of municipalities

The *Local Government Act* 1958 provides machinery for the creation of new municipalities and for alterations to the boundaries of existing

ones. The power to make Orders on this subject is conferred on the Governor in Council, who acts on the recommendation of the Minister for Local Government. All such Orders are published in the *Government Gazette*. The powers conferred on the Governor in Council include authority to do the following :

1. To constitute new shires. Practically the whole of Victoria is included in municipal districts, and therefore any new municipalities will almost inevitably be created from the territories of existing ones. Before any area of land in Victoria may be constituted a shire it must contain rateable property having a net annual value of not less than \$400,000 which yielded not less than \$60,000 in general and extra rates for the last completed municipal year.

2. To constitute new boroughs, towns, or cities. Any area of land in Victoria may be constituted a borough provided such area :

- (i) is substantially urban in character ;
- (ii) has a population of at least 4,000 inhabitants ;
- (iii) contains rateable property having a net annual value of at least \$400,000 ; and
- (iv) contains rateable property which yielded a revenue of at least \$60,000 from general and extra rates for the last completed municipal year.

To be constituted a town or city the area must meet the appropriate requirements set out in (6) below.

3. To unite two or more municipalities whose municipal districts form one continuous area.

4. To sever part of one municipality and annex such part to another municipality.

5. To subdivide or re-subdivide any municipality or to alter the boundaries of or abolish the subdivisions of any municipal district. (The subdivisions of a city, town, or borough are called "wards" and those of a shire "ridings". The maximum number of subdivisions permitted in any municipality except the City of Melbourne, is eight. Melbourne has eleven wards. Most Victorian municipalities are subdivided.)

6. To proclaim municipalities which are substantially urban in character to be boroughs, towns, or cities. Any such shire which satisfies the requirements set out in (2) above may be proclaimed a borough. Any such municipality which has a population of at least 5,000 inhabitants and yielded a revenue of at least \$80,000 from general and extra rates in the last completed municipal year may be proclaimed a town. Any such municipality which has a population of at least 10,000 inhabitants and yielded a revenue from general and extra rates of not less than \$160,000 in the last completed municipal year may be proclaimed a city.

Action on these matters can be initiated locally, in some instances, by a request addressed to the Governor in Council and signed by a prescribed number of persons enrolled on the municipal voters' roll. The proposal set out in the request must be submitted to a poll held in conjunction with the next annual election of councillors. In other instances a petition under the seal of the council suffices. There is an Advisory Board of three persons, constituted under the Local Government Act, which investigates these matters and advises the Minister on them.

During the period 1 July 1969 to 30 June 1970 no new municipalities were created, but the Shire of Knox was proclaimed a City from 4 July 1969.

Valuer-General and Valuers' Qualification Board

A Valuer-General was first appointed in Victoria under the *Valuation of Land Act* 1960. The purpose of this legislation is the co-ordination of rating valuations for municipalities and other rating authorities and the improvement of the standard of valuations in Victoria. Municipalities are now the only rating authorities making valuations in the State, and each attends to the special rating valuation requirements of other authorities in its municipal district.

The Valuer-General's Office confers with the valuers appointed to make the valuation and with councils on the general levels of values to be used, and is available to give advice during the valuation or subsequently. The Valuer-General is empowered to make valuations on request for all Government Departments and public authorities, for probate duty and stamp duty and, by agreement, for settling disputes as to the value of property.

The Valuers' Qualification Board may either conduct examinations of persons desiring to qualify as valuers or prescribe examinations or qualifications which it is prepared to accept for the purpose. A two year (four year part-time) diploma course is conducted by the Royal Melbourne Institute of Technology. Successful candidates must also have four years practical work within six years prior to their application in order to obtain a certificate.

Land Valuation Boards of Review

Land Valuation Boards of Review were provided for by the *Valuation of Land (Valuations) Act* 1964. The purpose of the legislation was the provision of an informal and inexpensive means of determining disputes as to the valuation of real property whether for rating or taxing purposes or in respect of compulsory acquisitions.

In rating and taxing matters appeals are heard by a Board except where the appeal is against a capital improved value of \$10,000 or more, a net annual valuation of \$500 or more, or an unimproved capital value of \$2,000. In those cases the appellant may have the appeal heard by a Board or the Supreme Court, at his option.

In disputes on land acquisition the hearing is before a Board when the claim does not exceed \$10,000 unless the Supreme Court decides on application by either party that the issues involved warrant a Court hearing. When the claim exceeds \$10,000 the hearing may be before either the Court or a Board at the option of the claimant.

Each Board of Review is composed of a chairman and two valuers. The latter are selected from a panel having regard to the location and use of the land.

Weights and measures

The administration of the Victorian Weights and Measures Act is divided into central and local administration. The Weights and Measures Branch under the Superintendent of Weights and Measures is responsible for central administration. Local administration is carried out by municipal

councils or groups of councils known as Weights and Measures Unions. The *Commonwealth (Weights and Measures) National Standards Act 1960* also affects administration in Victoria. That Act established a National Standards Commission which is responsible for national standards and also examines and approves patterns of weighing and measuring instruments proposed to be used for trade.

Inspection of scaffolding

The Local Government Act makes municipal councils responsible for the inspection of scaffolding erected to support workmen engaged in the construction of buildings or in carrying out other works. Councils administer the Scaffolding Regulations made by the Governor in Council. Draft regulations are prepared by a Scaffolding Regulations Committee comprising representatives from Government Departments, the Municipal Association, the Master Builders' Association, the Trades Hall Council, and the Australian Institute of Building Surveyors. The work of councils in this field is supervised by a Supervisor of Scaffolding Inspection and Assistant Supervisors who are officers of the Local Government Department. There is a Municipal Scaffolding Inspectors Board which examines and issues certificates of qualification to municipal scaffolding inspectors. The Board is also empowered to issue certificates of competency to scaffolders. Since January 1971 it has been necessary for every person who erects, alters, or demolishes certain types of scaffolding, to hold either a certificate of competency or a permit to work under the supervision of a qualified scaffolder. The scaffolding concerned is cantilever scaffolding, suspended scaffolding, bracket scaffolding from which a person could fall a greater distance than 14 ft, or any other scaffolding (not being a ladder) the working platform of which has a height greater than 14 ft above the supporting surface. Legislation is referred to on page 224 of the *Victorian Year Book 1968*.

Municipalities

At 30 June 1970 Victoria was divided, for local government purposes, into 210 municipal districts and the Yallourn Works Area. This latter was severed from the municipal districts of which it then formed part by the *State Electricity Commission (Yallourn Area) Act 1947*. For certain purposes, it is deemed to be a borough, and municipal administration is the responsibility of the Commission, assisted by an Advisory Council. The 210 municipalities comprised :

Cities	61
Towns	5
Boroughs	8
Shires	136
	<hr/>
	210

The only unincorporated areas of the State are French Island (65 sq miles) in Western Port, Lady Julia Percy Island (1.02 sq miles) off Port Fairy, Bass Strait Islands (1.51 sq miles), Gippsland Lakes (Part) (128 sq miles), and Tower Hill Lake Reserve (2.28 sq miles) adjacent to the Borough of Koroit.

Municipal councils

The powers vested in municipal corporations are exercised by councils elected by persons who are enrolled on the municipal voters' rolls. The number of councillors for each municipality must be some multiple of three, not less than six, nor more than twenty-four (except the City of Melbourne, which has thirty-three councillors). Subdivided municipalities have three councillors for each subdivision.

Any person who is the owner or occupier of property of a rateable annual value of at least \$40, is eligible to stand for election as a councillor of the municipality in which the property is situated. Councillors serve in an honorary capacity. They must elect one of their number to be chairman. In a city, town, or borough, the chairman is known as the Mayor (the Lord Mayor in the case of the City of Melbourne) and in a shire, the President. Councillors hold office for three years, and each year one third of the total number allotted to each municipality retires in rotation.

A councillor who has any direct or indirect pecuniary interest in any contract or proposed contract with the municipality or in any other matter in which the municipality is concerned, and is present at any meeting of the council at which the contract or other matter is being considered must disclose his interest and is not permitted to remain in the room where the meeting is being held during discussion of or voting on the contract or other matter. Councillors are liable for heavy penalties if moneys are wrongfully borrowed or expended, and may have to repay the moneys so borrowed or expended.

Elections

Municipal elections are held annually in August. Extraordinary elections may be held to fill vacancies occurring between annual elections. A person is entitled to be enrolled on the voters' roll of any municipality if he or she is a natural born or naturalised subject of Her Majesty and has attained the age of 18 years (an amendment of the Local Government Act in April 1970 reduced the age provision from 21 to 18 years) and :

(a) is liable to be rated in respect of property within a municipal district ;

(b) is the spouse of a person entitled to be enrolled in respect of property within a municipal district upon which that person and his or her spouse reside if the said spouse is not liable to be rated in respect of such property ; and provided that the spouse shall make written application for enrolment to the council ;

(c) is the owner of any rateable property in respect of which some other person is liable to be rated as occupier.

If a corporation owns or occupies rateable property it must appoint some person to be enrolled in its place. In the case of public statutory corporations, however, this is optional. No person is entitled to be enrolled for property which has a net annual value of less than \$25, unless there is a house on such property and the person resides there.

Plural voting was abolished by legislation enacted in 1969. Each person enrolled on the municipal roll now receives only one vote. A person may, however, be enrolled in more than one subdivision of a

municipality and may vote once at any election of councillors for each such subdivision. In the case of polls under Part II of the Local Government Act (i.e., on severances, re-subdivisions, and the constitution of new municipalities, etc.), polls on changes in the basis of rating, and polls on proposed borrowings, each voter has only one vote whether enrolled in more than one subdivision or not.

Voting is compulsory in 71 municipalities.

Officers

Each council must appoint a municipal clerk (he is known as the town clerk in a city, town, or borough, and the shire secretary in a shire), an engineer, and such other officers as may be necessary. The other officers usually include a building surveyor, a valuer, a rate collector, a medical officer of health, and a health inspector. The Local Government Act requires that certain officers must obtain special qualifications from examining boards constituted under the Act. The officers who must hold these special qualifications before appointment are municipal clerks, engineers, electrical engineers, and building surveyors. The Health Act requires that medical officers of health shall be duly qualified medical practitioners, and that every health inspector shall hold a prescribed certificate of competency. In the terms of the Valuation of Land Act an appropriate certificate must also be held by municipal valuers.

Powers and duties of municipalities

The Local Government Act and other Acts of Parliament confer powers and impose duties on municipal councils. Some of these are as follows:

By-laws

Councils may make by-laws on a number of subjects specified in the Local Government Act and other Acts. The power to make laws of local application is delegated by Parliament, and councils must be careful not to exceed the authority conferred upon them.

Roads and bridges

The construction and maintenance of roads and bridges has always been one of the principal functions of municipalities. With the exception of those roads which are the responsibility of the Country Roads Board or the Melbourne and Metropolitan Board of Works, councils have the care and management of all public highways (i.e., streets and roads which the public have a right to use) in the municipal district, and have a duty to keep them open for public use and free from obstruction. The Country Roads Board is wholly responsible for the cost of maintaining proclaimed State highways, freeways, tourists' roads, and forest roads, and shares with local councils the cost of maintaining main roads. Subsidies are also granted to councils from the funds administered by the Board for works on unclassified roads. In the Melbourne metropolitan area, the Melbourne and Metropolitan Board of Works is wholly responsible for any roads or bridges declared to be metropolitan main highways or metropolitan bridges.

Private streets

A "private street" as defined in Division 10 of Part XIX of the Local Government Act is, broadly speaking, a street set out on privately owned land, as opposed to a street set out on land of the Crown or of a

public authority. Under certain circumstances, councils may construct such private streets and charge the cost, or part of the cost, to the owners of the land abutting on the street.

After construction, the maintenance of a private street becomes the responsibility of the council. When a council constructs a street which is not a private street as defined above, it may charge abutting owners half the cost of making the footpath and kerb (or the kerb and channel if these are cast in one piece).

Sewers, drains, and watercourses

With certain exceptions, every council has vested in it responsibility for all public sewers and drains within its municipal district, or, of which it has the management and control, and all sewers and drains, whether public or not, in and under the streets of such municipal district. The exceptions to this rule are sewers and drains vested in any other municipality, the Melbourne and Metropolitan Board of Works, the Geelong Waterworks and Sewerage Trust, the Latrobe Valley Water and Sewerage Board, and any sewerage authority under the Sewerage Districts Act. Councils may enlarge or otherwise improve any sewers or drains vested in them and may also scour, cleanse, and keep open all ditches, creeks, gutters, drains, or watercourses within or adjoining their municipal districts. When a drainage area is constituted in any municipal district under the Drainage Areas Act, additional drainage powers are conferred on the council. Drainage areas may be constituted by the Governor in Council on the petition of the council or of land owners in the area. Both the Local Government Act and the Health Act confer powers on councils to provide for the proper drainage of houses, buildings, or land, and, in some instances, the owners of land benefiting as a result of this may be required to meet the cost.

Water supply and sewerage

In the Melbourne metropolitan area, the Melbourne and Metropolitan Board of Works is responsible for water supply and sewerage (see pages 252–7). The members of the Board are municipal councillors nominated by the councils in the metropolitan area. Outside the metropolitan area, the special water and sewerage needs of the Geelong district and the Latrobe Valley are served by the Geelong Waterworks and Sewerage Trust and the Latrobe Valley Water and Sewerage Board, respectively. Elsewhere outside the metropolitan area, the Governor in Council may constitute waterworks trusts and sewerage authorities, under the provisions of the Water Act and the Sewerage Districts Act, respectively (see pages 248–9). Members of a municipal council may, together with Government nominees, be the members of the sewerage authority or waterworks trust. Alternatively, some members of these bodies may be elected by councillors or ratepayers. In many instances, municipal officers also carry out duties for waterworks trusts and sewerage authorities. The Water and Sewerage Districts Acts are administered by the Minister of Water Supply. Seventeen councils operate waterworks under powers provided in the Local Government Act and, in addition, thirteen municipalities have been constituted local governing bodies, under the provisions of the *Water Act* 1958, with defined water supply districts.

Building control

Since 1945 building in most municipalities in Victoria has been subject to a building code, known as the Uniform Building Regulations, which is administered by municipal councils. These regulations apply in cities and towns and may be applied in the whole or any part of any borough or shire, if the council concerned so desires. At 30 June 1969 only nine shires had not adopted the regulations.

Municipalities have power to make by-laws regulating buildings, but the Uniform Building Regulations, in the municipalities where they apply, would override any provisions of such by-laws. The regulations leave certain matters to be determined by councils which are empowered to make by-laws for the purpose. These by-laws are subject to approval by the Governor in Council. The Uniform Building Regulations are made on the recommendation of the Building Regulations Committee. The members of this body are appointed by the Governor in Council and include representatives of Government departments, the municipalities, the Royal Victorian Institute of Architects, the Institution of Engineers (Australia), and the Master Builders' Association of Victoria. In addition to its function of preparing draft regulations, the Committee acts as a referee to determine disputes arising out of the regulations and may also, on the application of any party concerned, modify or vary the regulations in special cases.

Town and country planning

Councils have power under the Local Government Act to make by-laws prescribing areas as residential or business areas, and, by this means, may achieve a degree of town planning. Since 1944, however, councils have had power to prepare planning schemes to regulate the use of land in the whole or any part of their municipal districts. When a council has commenced preparation of a planning scheme, it may make an Interim Development Order to control use of land in the planning area until a scheme is in force. Both the Interim Development Order and the planning scheme are subject to the approval of the Governor in Council. The Town and Country Planning Board, constituted under the Town and Country Planning Act, makes reports and recommendations to the Minister on planning schemes and town planning matters generally. The Board may itself prepare a planning scheme for a particular area at the direction of the Minister. By legislation enacted in 1949 the Melbourne and Metropolitan Board of Works was charged with the duty of preparing a planning scheme for the Melbourne metropolitan area. This scheme—the Melbourne Metropolitan Planning Scheme—was approved on 30 April 1968 and came into operation on 22 May 1968. Subsequent to approval of the scheme the Board delegated to municipal councils in the planning area certain of its powers, authorities, and responsibilities in relation to the administration, enforcement, and carrying out of the scheme.

Local planning schemes and interim development orders were continued in operation to permit any desirable features of the local schemes to be incorporated in the metropolitan scheme by way of amendment. This is now being done and local schemes and interim development orders have been or will in due course be revoked.

Legislation enacted in 1969 to amend the Town and Country Planning Act provided for a State Planning Council and for the establishment of regional planning authorities. The State Planning Council will co-ordinate planning by State instrumentalities and semi-government authorities for future works and development and will act as a consultant and advisor to the Town and Country Planning Board on planning at the State level. Regional planning authorities may be constituted for the purpose of preparing planning schemes for areas extending beyond the boundary of one municipal district and may also subsequently administer such schemes. The same legislation also made substantial additions to the Melbourne metropolitan area to enable the Melbourne and Metropolitan Board of Works to prepare a planning scheme for the extended area.

Town Planning Appeals Tribunal

This body was initially provided for by the *Town and Country Planning (Amendment) Act 1968*. It currently consists of six persons and sits in divisions each of which is composed of a chairman, who is required to be a barrister and solicitor, and two members being, respectively, persons with a knowledge of town planning and of public administration, commerce, or industry.

The Tribunal hears and determines appeals by applicants for a permit under interim development orders and planning schemes against the refusal or failure of the responsible authority to grant a permit or against any unacceptable condition in a permit; also appeals by objectors against the determination of the responsible authority to grant a permit. The members of the Tribunal are not officers of the Department. Appeals must be lodged with the Registrar of Town Planning Appeals. He and his staff are officers of the Department.

Other powers and duties

Councils are empowered to deal with slum reclamation and to provide dwellings for persons of small means. Some councils have entered this field in conjunction with the Housing Commission.

Under financial agreements between certain councils and the Housing Commission for the purpose of slum reclamation, the following amounts have been provided by councils up to 30 June 1969: City of Melbourne \$1,224,000, City of Port Melbourne \$39,600, City of Prahran \$280,000, City of Richmond \$15,850, City of South Melbourne \$75,800, City of St Kilda \$20,000, and City of Williamstown \$70,400.

To enable the erection of dwellings for elderly persons with limited means, many councils in various parts of the State have acquired land and donated it to the Housing Commission.

Some of the powers available to municipal councils have rarely been used or are now falling into disuse. They may operate gasworks or generate electricity, but there are now no municipalities operating gasworks and only the City of Melbourne generates electricity. However, a number still purchase electricity in bulk and retail it. Some of the other more usual functions of municipalities are:

1. supervision of land subdivision and the laying out of streets on private property;
2. removal and disposal of household and trade waste;

3. sweeping, cleansing, and watering of streets ;
4. supervision of boarding houses, lodging houses, eating houses, and food premises, including inspection of foodstuffs in shops ;
5. provision and maintenance of parks, gardens, recreation reserves, swimming pools, libraries, and museums ;
6. registration of dogs ;
7. establishment of infant and pre-school welfare centres ;
8. establishment of emergency home-help services ;
9. appointment of street parking areas and off-street parking areas for motor cars, and the collection of parking fees ;
10. supervision of weights and measures ; and
11. traffic engineering.

Revenue

The works and services provided by Victorian municipalities are financed largely from local taxes (rates) which are levied on the owners or occupiers of rateable property in each municipal district.

Other sources of revenue include income from public works and services, Government grants, licence fees, and miscellaneous income.

Revenue from public works and services comprises charges for garbage disposal, sanitary and other health services, contributions to road and pavement works, and sundry income from the hire of council properties.

Some municipalities also operate business undertakings, such as electric supply, abattoirs, pipe works, quarries, and waterworks, and for the 1968 municipal year the combined turnover of these undertakings was approximately \$55m.

Rating of land and property

All land (including houses and buildings) in a municipal district is rateable, unless specifically exempted by the Local Government Act.

Non-rateable land is defined fully in the Act, but, in general, it consists of land owned or used by the Government, by certain public bodies, churches, and charitable organisations.

The council of every municipality is required, from time to time, to have a valuation made of all rateable property within the municipal district.

Metropolitan municipalities which have at least one whole subdivision subject to any rate made by the Melbourne and Metropolitan Board of Works must have valuations at not more than four year intervals. In other municipalities valuations must be made at not more than six year intervals. These provisions are aimed at ensuring a uniformity of municipal valuations used by large rating authorities covering more than one municipality.

In Victoria, a municipality is required to rate on the net annual value of rateable property unless, at the instance of the council, or as the result of a poll of its ratepayers, it has decided to rate on unimproved capital value, or (since 1 June 1968), partly on net annual value and partly on unimproved capital value. Under the latter system a proportion of the required revenue is obtained by levying an appropriate rate on the net annual value of rateable property and the balance from an appropriate rate on the unimproved capital value of the rateable property. The proportions are fixed when the system is adopted.

The amending legislation which provides for a combination rate also provides for the gradual replacement of unimproved capital value as a basis of rating by a modified form of unimproved capital value known as site value. Replacement will be effected gradually as valuations are made on the new bases throughout the State.

The net annual value of a property is the rental it might be expected to earn from year to year if let, after deducting expenses such as rates, taxes, and insurances, but shall not be less than 5 per cent of the capital value.

The unimproved capital value, however, is the amount a property might be expected to realise if sold in an unimproved state. It is the amount a purchaser might reasonably expect to pay for land, assuming that no improvements had been effected to it.

Site value differs from unimproved capital value in that the valuer is not required to notionally restore the land to its primitive condition. Instead, the improvements which are to be imagined as not existing are those which can be seen, i.e., buildings, fences, sown pastures, etc., and including works undertaken on the land such as the removal of timber or stone, draining or filling of the land, erosion works, etc., which have been made within the 15 years last preceding the valuation.

Of the 210 municipalities in Victoria at 30 September 1969, 153 were rating on net annual value and 57 on unimproved capital value.

The principal rate levied by a municipality is the general rate. This is made for the purpose of defraying the ordinary expenditure of the council, and is paid into the general fund of the municipality known as the Municipal Fund.

The general rate must be made at least once in each municipal year, and in any one year shall not exceed 20c in the \$1 or be less than 3c in the \$1 of the net annual value of the rateable property. For certain special purposes, however, a municipality may raise its general rate above the limitation imposed by the Local Government Act.

Before making a general rate, a municipality must prepare an estimate of the amount required to defray the expenditure of the council for the period to be covered by the rate, and then to strike a rate that will be sufficient to raise the money so required. In a subdivided municipality, an extra rate may be made by the Council, in any subdivision or any part of it, on the request of not less than two thirds of the councillors of the subdivision in which it is to be raised. In certain circumstances, an extra rate may also be made and levied in a municipality which is not subdivided.

Except for the special purposes mentioned above, the aggregate amount of general and extra rates levied in any subdivision is not to exceed 20c in the \$1 of the net annual value of the rateable property. An extra rate may be made for a period not exceeding one year or less than three months, as the council thinks fit.

A ratepayer may elect to pay any general or extra rate made for a period of one year in four equal instalments on or before the last day of December, February, May, and August, respectively. If the rate notice is posted on or after 18 December, the first instalment may be paid within fourteen days of the date of posting of the rate notice.

Apart from general and extra rates, a municipality, in certain circumstances, may levy a separate rate (or make a special improvement charge) on a section of the municipality, for the purpose of defraying the cost of special works or undertakings which benefit the ratepayers in that particular area.

Other types of rates, which may be levied by municipalities, include a sanitary rate (or sanitary charge) under the provisions of the Health Act, for the purpose of providing for the disposal of refuse or nightsoil, and a rate under the provisions of the Country Roads Act for the purpose of raising certain moneys payable by the council to the Country Roads Board.

Government grants

Although Government grants (apart from those allocated through the Country Roads Board) form only a small part of municipal revenue, the special purposes for which they may be obtained have tended to increase. These purposes include pre-natal and infant welfare centres, crèches and pre-school centres, elderly citizens centres, immunisation, home help service, libraries, public halls, recreation areas and swimming pools, vermin destruction bonuses, main drains in country centres, and drainage works in drainage areas. Municipal endowment for the more needy municipalities was paid almost from the inception of local government in Victoria until the onset of the depression. Subsequently, unemployment relief grants were made annually for a number of years for various municipal works, and, since the Second World War, an amount (currently \$500,000) is provided annually towards the cost of works of municipalities and other public bodies. In 1950, the Municipalities and Other Authorities Finances Act put this arrangement on a permanent basis.

Municipalities Assistance Fund

The *Municipalities and Other Authorities Finances Act* 1950 provided that one half of the revenue received from motor drivers' licence fees, less the cost of collection, was to be paid into a Fund to be known as the Municipalities Assistance Fund. The Fund was established on 1 January 1951.

From 1 January 1965 the fee for a motor driver's licence was increased from \$3 to \$6 (licence current for a three-year period) by the *Motor Car (Fines and Drivers' Licence Fees) Act* 1964 and, as the whole of this increase was payable to Consolidated Revenue, the Act provided that henceforth one quarter of the amount collected from such licences, less the cost of collection, was to be paid to the Municipalities Assistance Fund. One half of the amount of all motor driving instructors' licence fees, less the cost of collection, paid under the *Motor Car Act* 1958 is also credited to the Fund.

Payments are made from the Fund, first, towards the cost of works of municipalities and other public bodies, and second, towards the annual cost of the Country Fire Authority, in order to relieve country municipalities of the contributions to that body which they were formerly required to make. The municipal works, usually subsidised from the Fund, are the establishment and improvement of recreation reserves (including toilet blocks, dressing sheds, and fencing), children's playgrounds, and public comfort stations.

The amount which may be allocated by the Minister from the Fund, in any one financial year, for subsidies towards the cost of works of municipalities and other public bodies was originally fixed at \$200,000. Subsequent legislation increased this amount in 1959 to \$300,000, in 1961 to \$400,000, and in 1967 to \$500,000.

For the year ended 30 June 1969 subsidies for works paid to various municipalities from the Municipalities Assistance Fund amounted to \$356,806, while, for the same period, the amount contributed to the Country Fire Authority was \$1,037,630.

Country Roads Board recoups and grants

Municipalities throughout Victoria undertake construction and maintenance work on main roads within their boundaries, on behalf of the Country Roads Board, under the provisions of the Country Roads Act. Expenditure on this work is incurred in the first instance by the municipalities, but, subject to adherence to prescribed conditions and satisfactory performance of the work, this expenditure is refunded to the municipalities by the Board. Each municipality undertaking main road maintenance work is required, however, to make an annual contribution to its cost and this is calculated by the Board as a proportion of the total maintenance expenditure on each road for the particular year. The proportion payable varies according to the capacity of the municipality to pay, and the extent to which it has benefited from the work done.

For the purpose of making and maintaining certain rural roads (known as unclassified roads), municipalities also receive grants from the Country Roads Board from funds provided by the Commonwealth Government under the provisions of the Commonwealth Aid Roads Acts. (See page 247.)

Expenditure

The ordinary revenue of a municipality is applied to providing works and services for its ratepayers. These works and services comprise construction and maintenance of roads, streets, and bridges, provision of sanitary, garbage, and other health services, provision and maintenance of parks, gardens, and other council properties, repayment of moneys borrowed for permanent works and undertakings, and other sundry works and services.

Borrowing powers

Extensive borrowing powers are conferred on municipalities by the Local Government Act to enable them to undertake large scale works, or purchase expensive equipment in circumstances where it is advisable, on economic grounds, for the costs to be spread over a number of years. In practice, municipalities seldom borrow to the limit of their powers, and their capacity to borrow is limited by the general allocation of loan funds and the state of the loan market.

Money may be borrowed for permanent works and undertakings (as defined in the Local Government Act), or to liquidate the principal moneys owing by the municipality on account of any previous loan. Under a municipality's ordinary borrowing powers, the amount borrowed shall not exceed the net annual valuation of all rateable property in the municipal district, as shown by the municipality's last audited financial statement ;

provided that, where money is borrowed for gas or electric supply, water, quarrying, or abattoirs, an additional amount may be borrowed, not exceeding one half of the net annual value of all rateable property in the municipal district, as shown by the last audited financial statement.

Under extended borrowing powers, a municipality may borrow additionally, on the security of its income, an amount not exceeding five times the average amount of such income for the preceding three years. Income for this purpose excludes rates and licence fees.

Moneys borrowed under the ordinary or extended borrowing powers may be raised by the sale of debentures or by mortgage agreement. Repayment of any such loan may be made by periodical instalments of principal and interest, or by the creation of a sinking fund for the purpose of liquidation of the loan at the end of its term.

Before proceeding to borrow money for permanent works and undertakings, a municipality is required to prepare plans and specifications and an estimate of the cost of the works and undertakings to be carried out, together with a statement showing the proposed expenditure of the amount to be borrowed. This information is to be available for a specified period for inspection by any ratepayer. The Local Government Act provides that notice of intention to borrow shall be advertised, and also contains provisions under which a number of ratepayers may oppose the proposal to borrow and demand that it be submitted to a poll of ratepayers. Should a poll be held and a majority of ratepayers vote against the proposal, the loan is forbidden.

Subject to the approval of the Governor in Council, a municipality may also borrow, to a limited extent, from an adjoining municipality, by a mortgage or first charge over a proportion of its income, for the purpose of making or repairing roads leading into the district of the municipality which lends the money.

A municipality may also borrow by mortgage agreement or by the issue of debentures, on the security of a separate rate or special improvement charge, for the purpose of carrying out the works for which the rate was levied or the charge made.

In addition to the powers mentioned above, a municipality may borrow, by means of overdraft from its bankers, for the following purposes :

1. temporary accommodation on current account ;
2. private street construction ;
3. works carried out under the Country Roads and Commonwealth Aid Roads Acts ; or
4. purchase and acquisition of land, or the payment of compensation in connection with certain specified schemes.

Investment of municipal funds in the short-term money market

Since June 1962 it has been lawful for any municipality to invest by deposit part of its municipal fund, or other moneys belonging to it, in the short-term money market.

The councils, however, may invest only with authorised dealers who have been so declared for the purpose under the provisions of Section 38 of the *Companies Act* 1961. Through these dealers (at present nine in

number) municipalities may invest at call, or for short-term, minimum amounts of \$50,000. (See also pages 689 to 691.)

Loans to this market are fully secured by Australian Government securities equal in market value to the amounts deposited. The Reserve Bank stands behind the dealers as a lender of last resort. Authorised dealers are thus at all times in a position to meet their obligations.

Investment in the short-term money market can be a useful source of additional revenue for councils. Frequently, municipalities have substantial loan funds idle for short periods, and at certain times of the year may accumulate substantial revenue credits on current account. These are likely sources of municipal investment in the short-term market.

Accounts

Every municipality is required to keep proper books of account in the form prescribed for use by all municipalities in Victoria, and these must be balanced to 30 September in each year. The accounts must be audited by an auditor qualified in terms of the Local Government Act and appointed by the Governor in Council.

Municipal Association of Victoria

All municipalities in Victoria are members of the Municipal Association which was founded in 1879 and given statutory recognition by the *Municipal Association Act 1907*. The Association was established, to quote the preamble to that Act, "for the purpose of promoting the efficient carrying out of municipal government throughout the State of Victoria and of watching over and protecting the interests, rights, and privileges of Municipal Corporations". The State Government has also found the Association a valuable organisation, because it simplifies its task of dealing with the municipalities. The Association operates the Municipal Officers' Fidelity Guarantee Fund and under the *Municipal Association (Accident Insurance) Act 1964* was empowered to issue accident insurance policies insuring councillors of any municipality against accidents arising in the course of their municipal duties.

Local Authorities Superannuation Board

The Local Authorities Superannuation Act provides for a compulsory superannuation scheme for permanent employees of municipal councils, water and sewerage authorities, weights and measures unions, cemetery trusts, the Portland Harbor Trust, and the First Mildura Irrigation Trust.

The scheme is administered by a Local Authorities Superannuation Board and provides benefits for employees on retirement at the age of 65 years, or for their dependants should the employees die before reaching that age.

Important changes in the scheme, however, were provided for by the *Local Authorities Superannuation (Amendment) Act 1960*. Before this amending legislation, the scheme had been operated by the Board in conjunction with several approved life insurance organisations. Most permanent employees were required to effect, with an approved insurer, policies of endowment insurance maturing on retirement at 65 years of age. Those who became permanent employees when over 55 years of age, however, were required to contribute to a provident fund which was

invested for their benefit by the Board. Benefits, in each case, took the form of lump sum payments on retirement at 65 years of age, or on prior death.

The amending Act reconstituted the Board by providing for the addition of two new members, increasing its membership from three to five. Provision was also made, as from the commencement of the amending Act, for the discontinuance of policies of insurance, and for the Board to take over and administer the insurance section of the scheme. It provided for the Board to "enter into contracts to provide benefits by way of superannuation, annuities, retiring allowances or payments on death, in respect of permanent employees".

Two important advantages seen in the new provisions are :

1. substantially increased benefits to contributors, payable on death before the age of 65 years, and expected increased benefits on retirement at the age of 65 ; and
2. an important new source of loan funds for local authorities.

Contributions to the scheme are based on a percentage of the salaries and wages of employees, and are met in equal proportions by employees and employers.

Before 1962 the accounting period of the Board ended at 30 June whereas the premium and contribution year closed at the end of February. Since 1962 the Board has adopted the year ending February as its accounting period.

Under the new scheme a Local Authorities Benefit Contracts Account was established by the Board in 1961. Transactions for the years 1964-65 to 1968-69 are given in the following table :

**VICTORIA—LOCAL AUTHORITIES SUPERANNUATION BOARD:
BENEFIT CONTRACTS ACCOUNT
(\$'000)**

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
INCOME					
Premium income	1,906	2,094	2,502	2,807	2,998
Interest, dividends and rents	610	712	828	955	1,106
Total	2,516	2,806	3,329	3,761	4,104
EXPENDITURE					
Contributions, refunds, death and withdrawal benefits	688	736	1,168	1,318	1,423
Contributions to management	145	168	198	210	246
Total	833	904	1,366	1,528	1,669
Operating surplus for year	1,683	1,902	1,963	2,234	2,434
Accumulated funds at end of year	10,785	12,686	14,649	16,883	19,317

The accumulated funds at 28 February 1969 consisted of investments in semi-governmental and local government loans and cash deposits.

History of Local Government Administration, 1961

Melbourne City Council

Organisation and functions

Melbourne has the distinction of being the oldest municipality in Victoria. Incorporated as a town by Act of the New South Wales Governor and Legislative Council in 1842, it was raised to the status of city by Letters Patent of Queen Victoria dated 25 June 1847.

The City of Melbourne still operates under sections of the 1842 Act and its amendments. All other municipalities (with the exception of Geelong which was given local government in 1849 by an extension of the 1842 Act) receive their enabling powers from the Local Government Act of Victoria. Parts only of this general Act apply to Melbourne. As regards other Acts of Parliament, there is no such nice distinction, and in common with other municipalities, Melbourne derives powers from or administers such Acts as Health, Pounds, Dog, Country Roads, Road Traffic, Weights and Measures, Town and Country Planning, Summary Offences, Petrol Pumps, Motor Car, Electric Light and Power, and Markets.

With a net annual value (for the year 1968-69) of \$50.4m, rate income of \$7.1m, other revenue of \$24.7m, and a work force of approximately 2,800 employees, it is the foremost municipality in the State. Though its daily influx of population is high, its resident population of 76,500 at 30 June 1969 ranked only eighth among metropolitan municipalities. For electoral purposes, it is divided into eleven wards, and each ward returns three members, giving a full council of thirty-three members. Elections are held annually and one member from each ward retires in rotation, a member thus holding office for three years.

Melbourne is distinctively a garden city. Of its total area of 7,765 acres no less than 2,079 acres are parklands and reserves. On those parklands and reserves under its control, the City Corporation annually expends more than \$1m.

The Corporation both generates and reticulates electricity. In this respect, it is completely integrated into the State electricity grid. In its power station at Lonsdale Street, it is able to generate, at a maximum, 108,000kW. It is expected, as the generating capacity of the State Electricity Commission increases, that the Council's power generation will decrease until the power station is closed down and held as reserve capacity.

The detailed work of the Council at councillor level is achieved by the division of its powers and responsibilities among a number of committees. The permanent or standing committees number nine, while special committees are constituted from time to time for specific purposes. No councillor may be chairman of more than one permanent committee or serve on more than three committees. The committees are the workshops of the Council, but the Local Government Act does not allow even partial delegation of authority, and all the work of the committees must be reported back to the Council and all decisions approved. Despite this, the organisation is effective and achieves all the desirable advantages which spring from the division of labour.

Of the nine permanent committees, two, Finance and General Purposes, are primarily co-ordinating, while the others are functional in their purpose.

The authorities delegated to committees are made mutually exclusive and cover the full field of the Council's activities.

Administrative organisation

The work force is organised on a departmental basis, but no precise pattern of organisation has emerged. Broadly, the departments are either organised by major process or by purpose, but, in some cases, a hybrid of these two forms has been brought about. There are eleven departments comprised of the Town Clerk's, Electric Supply, City Engineer's, Parks, Gardens and Recreations, City Treasurer's, City Architect's, Building Surveyor's, City Valuer's, Abattoirs and Cattle Markets, Markets (fruit, vegetable, and fish), and Health. The Town Clerk's Department handles liaison work which achieves the necessary co-ordination and integration both of the deliberative body as organised by committees and the administrative staff as organised by departments, and of the departments themselves. For the effective functioning of the committees and for purposes of staff review and control, departments are married to committees, but this does not mean the committee has exclusive access to the activities of that particular department. Obviously departments, particularly when organised by major activity, are there to provide service to any committee requiring it. This underlines the need for a general co-ordinating staff as exemplified by the Town Clerk's Department. At present the dovetailing of committees and departments is as follows :

Public Works and Traffic Committee	City Engineer's Department City Architect's Department
Health Committee	Health Department
Finance Committee	City Treasurer's Department City Valuer's Department
Electric Supply Committee	Electric Supply Department
General Purposes Committee	Town Clerk's Department
Abattoirs and Markets Committee	Abattoirs (a) and Cattle Markets Department Markets Department (fruit, vegetables, and fish)
Parks, Gardens, and Recreations Committee	Parks, Gardens and Recreations Department
Building and Town Planning Committee	Building Surveyor's Department
Town Hall and Properties Committee	No specific links. Departmental services available as required.

(a) Abattoirs leased to private enterprise in 1969.

Further references, 1961 to 1969

Financing of major works

Since 1954 the Melbourne City Council has undertaken capital works for the community to the extent of \$56.7m. This commitment has extended the resources of the Council. New loan money has been about \$2m per annum, so that other internal funds have had to be fully utilised. Loan monies are obtained by private treaty rather than by public subscription and are repayable over thirty years, usually by means of a 1.5 per cent cumulative sinking fund. At 30 September 1969 the Council's

loan indebtedness amounted to \$49.4m offset by a sinking fund of \$8.2m.

In essence, the Australian Loan Council, through the State Treasury, exercises control over the extent of the Council's loan raising and, therefore, controls the rate of growth of the municipality. This is done by yearly allocation. In an endeavour to bring the concept of long term planning into the capital works programme, the Council's works schedule is prepared on a three year basis, necessitating the preparation of a capital budget for the period. This involves assessment of proposed projects, the allocation of priorities to them, and a determination of financial resources, i.e., what funds will be available from what sources. Control over the programme is exercised by the Council's Finance Committee, which places a limit over each Committee's loan expenditure for each year of the three year period, such limit being reviewed annually in the light of changing circumstances, particularly the amount of the allocation by Loan Council. The Council's capital works programme for the year 1969-70 covered an expenditure of \$6m in addition to the above total figures.

Among the major works undertaken by the Council in recent years was the new Melbourne Wholesale Fruit and Vegetable Market. Standing on a 54 acre site in Footscray Road, West Melbourne, the market replaces the present 16.5 acre Victoria Market site in North Melbourne. When officially opened on 1 December 1969, the new market had cost \$11m. A further project of major dimensions is the development of the civic square on the block bounded by Swanston Street, Collins Street, Regent Place, and Flinders Lane, to provide an uninterrupted vista between the Town Hall and St Paul's Cathedral as well as a "breathing space" in the heart of the City. This will have cost over \$8.3m when all properties have been purchased.

The problems of traffic have also involved the Council in heavy expenditure. Since 1954 a sum of \$16m has been spent on roads, bridges, and traffic control devices. The Dynon Bridge, adjacent to the North Melbourne Railway Station, was completed in 1968 at a cost of approximately \$2m. Off-street car parking has also been a major item of investment. With a total expenditure to date of approximately \$4m on the purchase of suitable sites, the Council has provided, in association with private enterprise, off-street parking space for nearly 13,000 vehicles in the central city area alone. Several sites on the fringe of this area have been reserved for future development.

A town planning project currently being undertaken is the widening of Flinders Lane between Spencer and William Streets. Following the construction of the Flinders Street overpass, which reduced Flinders Street, for the length of the overpass, to the status of a rear access lane, the Council resolved to redevelop the area bounded by Spencer, Flinders, William, and Collins Streets, by constructing an alternative thoroughfare of such width as would provide an attractive frontage for development. The estimated cost of this project is \$1.8m. Altogether some \$6.5m has been expended on town planning.

For health, social services, and recreational needs, approximately \$4m has been spent. This covers establishment of baby health centres, crèches, kindergartens, playgrounds, elderly citizen's clubs, libraries, community

recreation centres, and playing arenas for almost all types of organised sport.

Improvements and developments in the supply and reticulation of electrical power has cost about \$22.6m since 1954.

STATISTICS OF LOCAL GOVERNMENT

General

Municipal finance statistics are compiled from statements of accounts and returns furnished by the local councils.

In tables for the year 1967-68 which follow, municipalities have been divided into City of Melbourne, other municipalities in Melbourne Statistical Division, and municipalities outside Melbourne Statistical Division.

The municipal areas which comprise the Melbourne Statistical Division are set out on pages 127-8 of this *Year Book*. Three of these areas are parts only of the Shires of Berwick, Cranbourne, and Healesville, but because it is not practicable to dissect the finances of municipalities for statistical purposes, the whole of each of these shires has been treated in the tables which follow as being within the Melbourne Statistical Division.

At 30 September 1968, in municipalities throughout the State, there were 2,322 councillors, namely, 33 in the City of Melbourne, 645 in 54 other municipalities in the Melbourne Statistical Division, and 1,644 in 155 municipalities in the remaining Statistical Divisions.

Properties rated, loans outstanding, etc.

In the following table, the number of properties rated, the value of rateable property, receipts and expenditure of all funds, and the amount of loans outstanding, are shown for each of the years 1963-64 to 1967-68. The large increase in the value of rateable properties in the year 1964-65 was due to the implementation of the *Valuation of Land (Amendment) Act 1961* which required all metropolitan municipalities and certain major country cities and towns to arrange a valuation to be returned by 30 September 1964 and assessed at the general value current at 31 December 1961.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES: PROPERTIES RATED, LOANS OUTSTANDING, ETC.

Year ended 30 September—	Number of properties rated	Value of rateable property		Receipts all funds	Expenditure all funds	Loans out- standing
		Net annual value	Estimated capital improved value			
	'000	\$'000	\$'000	\$'000	\$'000	\$'000
1964	1,252	393,462	7,786,666	201,416	200,919	140,357
1965	1,290	559,247	10,995,815	227,146	225,849	156,012
1966	1,306	593,250	11,716,929	235,206	240,932	169,060
1967	1,344	634,352	12,373,547	262,161	256,839	189,147
1968	1,383	673,662	13,141,234	278,893	274,182	206,080

Municipal revenue and expenditure

The following table shows for each of the years ended 30 September 1964 to 1968 the general revenue and expenditure of municipalities in Victoria on account of ordinary services, together with similar details for the business undertakings under municipal control.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES : ORDINARY SERVICES
AND BUSINESS UNDERTAKINGS : REVENUE AND EXPENDITURE
(\$'000)

Year ended 30 September—	Ordinary services		Business undertakings	
	Revenue	Expenditure	Revenue	Expenditure
1964	92,008	92,925	40,067	39,883
1965	102,995	103,187	45,352	45,117
1966	110,726	112,661	47,604	47,962
1967	124,354	124,307	50,884	50,963
1968	137,922	135,645	55,251	54,739

General account

The ordinary revenue of a municipality, consisting of rates, Government grants, etc., is payable into the General Account, and this account is applied toward the payment of all expenses incurred in respect of administration, debt services, ordinary municipal services, etc.

Details of the principal items of revenue received during the year ended 30 September 1968 are given below :

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
ORDINARY SERVICES : REVENUE, 1967-68
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division ^(a)		Municipali- ties outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Taxation—				
Rates (net)	6,173	52,377	28,621	87,171
Penalties	7	261	90	359
Licences—				
Dog	4	246	126	376
Other	24	141	55	220
Total taxation	6,208	53,025	28,893	88,126
Public works and services—				
Roads, streets, bridges, drains	104	2,549	2,463	5,116
Council properties—				
Parks, gardens, baths, and other recreational facilities	178	1,244	1,035	2,458
Markets	1,130	359	523	2,012
Halls	60	370	329	760
Libraries	6	49	49	104
Sale of materials	2	191	800	994
Plant hire	..	2,229	5,603	7,832
Rents, n.e.i.	665	252	318	1,235
Other	25	1,187	443	1,655

(a) See definition on page 232.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
 ORDINARY SERVICES : REVENUE, 1967-68—*continued*
 (\$'000)

Particulars	Municipalities in Melbourne Statistical Division ^(a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Health—				
Sanitary and garbage	153	2,478	1,184	3,815
Other	38	805	308	1,151
Other works and services—				
Car parking	748	221	631	1,601
Building fees	94	910	187	1,191
Supervision of private streets	..	1,209	161	1,370
Other	22	587	317	926
Total public works and services	3,225	14,643	14,351	32,219
Government grants—				
Roads, etc.	12	299	658	969
Drought relief works	..	..	3,039	3,039
Parks, gardens, etc.	..	186	918	1,104
Infant welfare	25	498	249	771
Pre-school	56	209	160	425
Home help	28	537	142	706
Libraries	30	661	404	1,095
Other	34	328	635	997
Total government grants	185	2,718	6,203	9,106
Transfers from business undertakings	90	609	46	745
Transfers from other council funds	1,315	2,120	1,366	4,801
Interest on investments, etc.	282	364	111	756
Fines (traffic, etc.)	819	470	79	1,368
Other revenue	182	380	238	800
Total revenue	12,306	74,328	51,288	137,922

(a) See definition on page 232.

After exclusion of \$4,801,000 transferred from other funds, the net General Account income during 1967-68 was \$133,121,000. Of this total 66.2 per cent was derived from taxation (65.8 per cent from rates and penalties, and 0.4 per cent from licences); 24.2 per cent from public works and services; 0.6 per cent from transfers from business undertakings; 6.8 per cent from Government grants; and 2.2 per cent from other sources. The total amount collected from taxation (\$88,126,000) was equivalent to \$26.59 per head of population.

Excluding \$4,766,000 transferred to other funds, the net General Account expenditure during 1967-68 was \$130,879,000. Of this total 13.4 per cent was for administration; 13.4 per cent for debt charges; 10.3 per cent for health services; 17.9 per cent for parks, gardens and other council properties; 33.5 per cent for roads, streets, etc.; 4.1 per cent of other public works and services; 4.7 per cent for grants and contributions; and 2.7 per cent for miscellaneous items.

Details of the principal items of expenditure from the General Account during the year ended 30 September 1968 follow:

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
ORDINARY SERVICES : EXPENDITURE, 1967-68
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division ^(a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
General administration	1,744	9,205	6,531	17,481
Debt charges (excluding business undertakings)—				
Interest—				
Loans	2,166	3,727	1,868	7,761
Overdraft	..	296	253	549
Redemption	271	4,704	3,256	8,231
Sinking fund	427	388	89	904
Other	3	43	9	54
Total debt charges	2,867	9,156	5,475	17,499
Public works and services—				
Roads, streets, bridges, drains—				
Construction, maintenance, plant, etc.	861	15,199	20,204	36,263
Cleaning and watering	526	2,346	494	3,366
Street lighting	(b)	2,124	545	2,669
Other	171	1,214	210	1,595
Council properties—				
Parks, gardens, baths, and other recreational facilities	1,300	5,831	3,692	10,824
Markets	467	170	362	999
Halls	272	1,621	927	2,819
Libraries	120	2,052	896	3,068
Land, property purchases, n.e.i.	..	713	206	919
Materials	..	13	108	121
Plant (excluding road plant)	205	1,212	292	1,709
Elderly citizens centres	11	335	117	462
Other	242	1,200	1,082	2,525
Health—				
Sanitary and garbage services	522	5,082	1,592	7,195
Infant welfare	92	1,208	622	1,921
Pre-school	140	451	237	829
Home help	46	1,207	282	1,534
Other	105	1,394	549	2,048
Other works and services—				
Car parking	519	1,485	290	2,294
Building inspection	26	637	100	763
Other	8	1,725	555	2,287
Total public works and services	5,632	47,218	33,362	86,212
Grants—				
Country Roads Board	..	686	1,072	1,758
Metropolitan Fire Brigades Board	231	1,802	..	2,032
Hospitals and other charities	64	179	153	396
Superannuation	113	788	543	1,444
Other	256	136	86	478
Total grants	663	3,591	1,853	6,108

(a) See definition on page 232.

(b) Cost of street lighting is charged to electricity undertaking.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
ORDINARY SERVICES : EXPENDITURE, 1967-68—*continued*
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division(a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Transfers to other council funds	979	2,019	1,767	4,766
Pay-roll tax	128	622	435	1,186
Insurances	201	911	830	1,943
Miscellaneous	..	286	165	451
Total expenditure	12,216	73,010	50,419	135,645

(a) See definition on page 232.

Municipal administrative costs

Particulars of the principal items of expenditure during each of the years ended 30 September 1964 to 1968, in respect of general municipal administration, are given in the following table :

VICTORIA—COST OF MUNICIPAL ADMINISTRATION
(\$'000)

Particulars	Year ended 30 September—				
	1964	1965	1966	1967	1968
Salaries(a)	9,324	10,021	11,773	12,747	13,319
Mayoral and presidential allowances	257	271	289	317	341
Audit expenses	92	111	120	129	153
Dog registration expenses	167	190	195	210	228
Election expenses	92	113	107	112	127
Legal expenses	264	311	316	356	426
Printing, advertising, postage, telephone, etc.	1,375	1,539	1,772	1,837	2,070
Other	228	346	509	632	815
Total	11,800	12,900	15,079	16,340	17,481

(a) Including cost of valuations and travelling expenses, but excluding health officers' salaries which are included under "Health—other" on previous page.

Municipal business undertakings

In Victoria during 1967-68 fourteen municipal councils conducted electricity supply undertakings. These constituted the principal trading activities of municipalities. Other trading activities included water supply, abattoirs, hydraulic power, quarries, iceworks, and reinforced concrete pipe and culvert works, but, relatively, these were not extensive. A list of the principal local authorities which have assumed responsibility for water supply is to be found on page 249.

The tables which follow show, for the year ended 30 September 1968, revenue and expenditure of the various types of local authority business undertakings :

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
BUSINESS UNDERTAKINGS, 1967-68
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division(a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
REVENUE				
Water supply—				
Rates, sale of water, etc.	..	97	622	719
Electricity—				
Charges for services and sales of products, etc.	16,578	34,993	549	52,119
Abattoirs—				
Charges for services and sales of products, etc.	651	224	502	1,377
Other(b)—				
Charges for services and sales of products, etc.	9	470	556	1,035
Total revenue	17,237	35,785	2,229	55,251
EXPENDITURE				
Water supply—				
Working expenses	..	57	412	469
Depreciation	..	1	58	60
Debt charges	..	14	139	153
Other expenditure	..	4	1	4
Total water supply	..	76	610	686
Electricity—				
Working expenses	15,163	32,152	422	47,737
Depreciation	672	640	4	1,315
Debt charges	461	1,283	51	1,795
Other expenditure	90	472	24	586
Total electricity	16,385	34,547	502	51,434
Abattoirs—				
Working expenses	637	136	453	1,226
Depreciation	31	24	153	209
Debt charges	86	..	42	128
Other expenditure	37	91	41	169
Total abattoirs	791	251	690	1,733
Other(b)—				
Working expenses	12	316	404	732
Depreciation	..	10	35	45
Debt charges	..	..	28	28
Other expenditure	..	64	18	82
Total other	12	390	484	887
Total expenditure	17,188	35,264	2,286	54,739

(a) See definition on page 232.

(b) Includes hydraulic power, quarries, iceworks, and reinforced concrete pipe and culvert works.

Municipal loan finance*Municipal loan receipts and expenditure*

The following tables show loan receipts and expenditure of municipalities exclusive of redemption loans and loans raised for works on private streets.

The first table shows total loan receipts and expenditure for each of the years 1963-64 to 1967-68, the second table details the loan raisings for ordinary services and business undertakings during the year ended 30 September 1968, and the third table details the principal items of expenditure from loan funds during the year.

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES: LOAN RECEIPTS,
LOAN EXPENDITURE**

(Excluding redemption loans and private street loans)
(\$'000)

Year ended 30 September—	Receipts				Expenditure			
	Loans for—		Other	Total	Ordinary services	Business under- takings	Other (non- works)	Total
	Ordinary services	Business under- takings						
1964	15,196	2,516	1,716	19,428	15,944	3,513	(a)	19,457
1965	19,521	2,851	2,105	24,477	19,151	3,508	(a)	22,659
1966	18,879	1,842	2,352	23,073	21,468	3,570	199	25,237
1967	23,136	3,032	2,318	28,486	19,855	4,013	192	24,060
1968	20,405	2,691	1,792	24,887	21,158	3,940	217	25,315

(a) Included with ordinary services.

At 30 September 1968 there were unexpended balances in loan accounts amounting to \$18.7m.

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES:
LOAN RECEIPTS, 1967-68**

(Excluding redemption loans and private street loans)
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division (a)		Municipali- ties outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Loan raisings for—				
Ordinary services	2,150	11,678	6,577	20,405
Business undertakings—				
Water supply	..	..	132	132
Electricity	..	1,275	..	1,275
Abattoirs	..	..	1,284	1,284
Other receipts (Government grants, recoups, etc., to loan fund)	1,151	346	295	1,792
Total receipts	3,301	13,299	8,287	24,887

(a) See definition on page 232.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES:
LOAN EXPENDITURE, 1967-68
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division (a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Ordinary services—				
Roads, streets, bridges, and drains	1,460	4,240	3,488	9,188
Council properties—				
Parks, gardens, baths, and other recreational facilities	268	1,825	982	3,075
Halls	..	1,304	1,250	2,554
Plant(b)	64	121	69	254
Markets	2,068	1	148	2,216
Libraries	26	560	70	655
Land, property purchase, n.e.i.	..	558	95	653
Other	76	690	457	1,223
Infant welfare, pre-school	..	372	70	442
Off-street parking	(c)	786	20	806
Other	..	48	44	92
Total ordinary services	3,961	10,504	6,693	21,158
Business undertakings—				
Water supply	..	2	77	78
Electricity	1,128	1,470	12	2,610
Abattoirs	..	..	1,251	1,251
Pipe works	..	..	1	1
Total business undertakings	1,128	1,472	1,340	3,940
Other (non-works)	..	130	86	217
Total expenditure	5,089	12,106	8,120	25,315

(a) See definition on page 232.

(b) Excluding road plant, which is included with "Roads, streets, bridges, and drains".

(c) Under \$500.

Municipal loan liability

The loan liability of the municipalities in Victoria at the end of each of the five years 1963-64 to 1967-68 is given below. Liability of municipalities for private street construction is included, but liability to the Country Roads Board is excluded.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES: LOAN LIABILITY

At 30 September—	Due to—		Gross loan liability	Accumulated sinking funds	Net loan liability	
	Government	Public			Amount	Per head of population
	\$'000	\$'000	\$'000	\$'000	\$'000	\$
1964	5,404	134,952	140,357	7,854	132,503	42.49
1965	5,601	150,412	156,012	8,765	147,247	46.34
1966	5,644	163,416	169,060	10,207	158,853	49.15
1967	5,705	183,442	189,147	11,836	177,311	53.94
1968	5,785	200,295	206,080	13,720	192,360	57.87

Construction of private streets

The council of any municipality may construct roads or streets on private property, and may also construct, on land of the Crown or of any public body, means of back access to, or drainage from, property adjacent to such land. The cost of this work is recoverable from the owners of adjoining or neighbouring properties where, in the opinion of the council, the work performed accrues to the benefit of those properties. At the request of any owner, the amount apportioned as his total liability may be made payable by forty or, if the council so directs, sixty quarterly instalments, bearing interest on the portion that, from time to time, remains unpaid.

For the purpose of defraying the costs and expenses of work for which any person is liable to pay by instalments, the council may, on the credit of the municipality obtain advances from a bank by overdraft on current account, or borrow money by the issue of debentures, but such borrowings shall not exceed the total amount of instalments payable.

The following table details the receipts and expenditure, etc., for the year ended 30 September 1968, of the Private Street Account for areas outside that controlled by the Melbourne City Council (which has no such account) :

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES: PRIVATE STREET
ACCOUNT: RECEIPTS, EXPENDITURE, ETC., 1967-68
(\$'000)**

Particulars	Municipalities in Melbourne Statistical Division (a)	Municipalities outside Melbourne Statistical Division	Total
Receipts—			
Loans	5,138	495	5,633
Bank overdraft (increase)	1,268	240	1,508
Owners' contributions	16,662	1,790	18,452
Other	731	96	827
Total	23,799	2,621	26,420
Expenditure—			
Works	13,502	1,687	15,189
Bank overdraft (decrease)	2,071	194	2,265
Debt charges—			
Interest—			
Loans	1,214	124	1,339
Overdraft	629	33	662
Redemption	2,537	268	2,805
Sinking fund	232	18	249
Other	1,405	153	1,558
Total	21,590	2,476	24,066
Cash in hand or in bank at 30 September 1968	7,409	696	8,105
Bank overdraft at 30 September 1968	10,213	1,650	11,863
Loan liability at 30 September 1968	24,281	2,316	26,597

(a) See definition on page 232.

Details of receipts and expenditure of the Private Street Account including the net increase or decrease in bank overdraft, during each of the years 1963-64 to 1967-68 are shown in the following table :

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES: PRIVATE STREET
ACCOUNT: RECEIPTS, EXPENDITURE, ETC.
(\$'000)**

Particulars	Year ended 30 September—				
	1964	1965	1966	1967	1968
Receipts—					
Loans	5,111	2,901	2,812	5,562	5,633
Bank overdraft (increase)	15	2,371	2,130	624	..
Owners' contributions	14,066	16,025	17,235	17,237	18,452
Other	388	514	652	664	827
Total	19,580	21,811	22,829	24,087	24,913
Expenditure—					
Works	14,159	17,935	19,514	17,370	15,189
Bank overdraft (decrease)	..	..	..	..	758
Debt charges—					
Interest—					
Loans	1,086	1,112	1,207	1,182	1,339
Overdraft	154	125	365	618	662
Redemption	1,624	1,894	2,123	2,426	2,805
Sinking fund	121	166	138	180	249
Other	1,176	1,144	749	1,383	1,558
Total	18,320	22,377	24,097	23,159	22,559
Loan liability at 30 September	18,970	19,950	20,626	23,762	26,597

Country Roads Board Account

Works on main roads and unclassified roads carried out by municipalities on behalf of the Country Roads Board are financed by means of a Country Roads Board bank account. Expenditure is made initially from overdraft, claims subsequently being made on the Board for recovery of funds expended. With the exception of any disallowances by the Board, the full amount expended on main roads is recoverable from the Board and credited to the Country Roads Board Account, with the council later making an annual payment from General Revenue to the Country Roads Board for the council's share of the cost. The Country Roads Board assists municipal councils financially to carry out construction and maintenance works on approximately 20,000 miles of unclassified roads each year. Funds expended by councils on these roads, after deduction of councils' proportion of the cost (which is charged to General Account), are also recoverable from the Country Roads Board. Direct payments by the Country Roads Board itself on works, or for supply of materials, etc., for works, are included on both sides of the Country Roads Board Account so that the full amount of the expenditure on relevant roads may be shown in the Account for the year concerned. Any expenditure by a council on State highways, freeways, tourists' roads, and forest roads, is charged to the Country Roads Board Account and is fully recoverable from the Country Roads Board.

The following table summarises the receipts and expenditure of the Country Roads Board Account of Victorian municipalities for the year ended 30 September 1968 :

VICTORIA—LOCAL GOVERNMENT AUTHORITIES: COUNTRY ROADS
BOARD ACCOUNT, 1967-68
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division (a)	Municipalities outside Melbourne Statistical Division	Total
Receipts—			
Refunds from Country Roads Board	8,448	14,657	23,105
Direct payment by Country Roads Board	1,359	5,196	6,556
Council's proportion of works on unclassified roads	1,679	2,249	3,928
Bank overdraft (increase)	455	300	755
Other	53	18	71
Total	11,993	22,420	34,413
Expenditure—			
Main roads	6,561	9,537	16,098
Unclassified roads	4,985	11,853	16,837
Other roads (State highways, etc.)	112	517	629
Bank overdraft (decrease)	302	491	793
Other	34	22	56
Total	11,993	22,420	34,413
Bank overdraft at 30 September 1968	954	1,390	2,344

(a) See definition on page 232.

Length of roads and streets

The following table shows the estimated length of all roads and streets open for general traffic in the State in 1969. The mileages of State highways, freeways, main roads, tourists' roads, and forest roads, were supplied by the Country Roads Board, and the mileage of other roads and streets has been compiled from information furnished by municipal and other authorities.

VICTORIA—LENGTH OF ALL ROADS AND STREETS OPEN FOR
GENERAL TRAFFIC AT 30 JUNE 1969
(Miles)

Type of road or street	State highways, freeways	Main roads	Tourists' roads, forest roads	Other roads and streets	Total
Portland cement, concrete, etc.	3	2	..	208	213
Bituminous seal	4,300	8,171	526	17,116	30,113
Water-bound macadam, gravel, sand, and hard loam pavements	201	887	418	27,652	29,158
Formed, but not otherwise paved	..	22	..	20,770	20,792
Not formed but open for general traffic	..	5	..	20,427	20,432
Total	4,504	9,087	944	86,173	100,708

SEMI-GOVERNMENTAL AUTHORITIES *

Country Roads Board*Introduction*

The Country Roads Board was constituted under the *Country Roads Act* 1912 and commenced operations in 1913. Under the Country Roads Act, any road in Victoria may, with the confirmation of the Governor in Council, be declared or proclaimed by the Country Roads Board to be a State highway, a freeway, a tourists' road, a forest road, or a main road. Of the 100,000 miles of public roads in Victoria, some 14,500 miles comprise the State's principal system of Country Roads Board declared roads.

State highways, freeways, tourists' roads, and forest roads are wholly financed from funds available to the Board. State highways and freeways, while serving the immediate district through which they pass as arterial routes, also carry much long distance traffic. Tourists' roads and forest roads generally pass through areas where little or no rate revenue is available to the local municipality. Main roads, the construction and maintenance costs of which are partly borne by local municipal councils, form what may be described as the secondary system of important roads in the State. In addition, there is a vast network of unclassified roads, many of which carry considerable traffic and which, within the limits of available finance, are subsidised by the Board as needs and priorities warrant.

The Board's system of classified or declared roads as at 30 June 1969 comprised 4,460 miles of State highways, 44 miles of freeways, 483 miles of tourists' roads, 461 miles of forest roads, and 9,087 miles of main roads.

Roads (Special Projects) Act 1965

The *Roads (Special Projects) Act* 1965 has been in operation since 1 July 1965. Its prime purpose was to provide funds to enable the appropriate authorities to carry out an accelerated programme of major road and bridge works. The Act increased motor registration fees for private, business, and commercial vehicles and provided for the additional revenue to be paid into a new Treasury trust fund entitled the "Roads (Special Projects) Fund". Motor registration fees were further increased on 1 March 1968. Approximately one third of the total amount of registration fees is paid into the Fund.

Each financial year the Board submits recommendations through the Minister of Public Works to the Treasurer of Victoria for Special Projects to be financed from the Roads (Special Projects) Fund during the year. The Fund has enabled the Board to provide substantial increases in the mileage of dual carriageways on the heavily trafficked State highways radiating from Melbourne in addition to the Board's own major works programme, and the extension of the mileage of roads of tourist interest throughout the State.

Victorian highways

The word "highway" is synonymous with road. Under legislation dating from 1924, however, a "State highway" in Victoria has a specific meaning. It is a road declared as such by the Board with the confirmation of the Governor in Council. State highways are developed to cater for road traffic

* This section includes only those semi-governmental authorities having close associations with local government.

between capital cities and provincial centres of importance. At 30 June 1969 the 4,460 miles of State highways consisted of 4,259 miles of sealed surface and 201 miles of gravel or improved wearing surface.

The Princes Highway, National Route 1, runs from the South Australian border to New South Wales, passing through Warrnambool, Geelong, Melbourne, Warragul, Sale, Bairnsdale, and Orbost. Other State highways include the Calder Highway, named after the first Chairman of the Country Roads Board, which joins Melbourne and Mildura passing through Bendigo, Charlton, and Ouyen. The Western Highway provides another route between Melbourne and Adelaide and passes through Ballarat, Horsham, and Nhill, while the Sturt Highway crosses the north-west corner of Victoria on the direct route from Sydney to Adelaide through Mildura.

The fertile Murray Valley settlements are joined by the Murray Valley Highway which runs from Corryong in north-eastern Victoria to Hattah in the north-west, while the Omeo Highway passes through the mountainous country from Tallangatta in the north-east to Bairnsdale in the south-east.

Freeways

Freeways provide safe direct routes for heavy volumes of traffic, their distinguishing feature being that access is controlled. Traffic is permitted entry to and exit from a fully developed freeway only at planned interchanges. Traffic crossing a freeway at other points is taken directly over or under the through carriageways.

An example of a planned freeway route is on the Princes Highway between Melbourne and Geelong. At present the Maltby Freeway of 6½ miles has been fully developed to by-pass the township of Werribee, while the 8 mile section from Kororoit Creek, 8½ miles from Melbourne to the start of the Maltby Freeway, has been declared as the Princes Freeway. Other freeways declared by the Board include the Hume Freeway (Craigieburn Section), the Hume Freeway (Chiltern-Barnawartha Section), the Princes Freeway (Morwell Section), the Princes Freeway (Moe Section), the Frankston Freeway, and the Western Freeway at Pykes Creek Reservoir.

Tourists' roads

As a result of the *Tourists' Roads Act* 1936, the Board has been empowered to carry out permanent works on and maintain tourists' roads which are proclaimed as such by the Governor in Council. Of the 483 miles of tourists' roads, the best known is the Ocean Road between Torquay and Peterborough. The Ocean Road is believed to be the only memorial road in Australia. It was built by the Board for the Great Ocean Road Trust to give employment to returned soldiers and sailors and as a memorial to their fallen comrades. It was proclaimed a tourists' road in 1936. Other tourists' roads have been built to open up places of interest such as the Grampians and the alpine ski resorts.

Forest roads

Forest roads are proclaimed or constructed in those areas of the State within or adjacent to any State forest area or those the Board considers to be timbered, mountainous, or undeveloped areas. Under the *Forest Roads*

and *Stock Routes Act* 1943, municipalities are relieved of all costs of construction and maintenance of such roads of which there are now 461 miles.

Main roads

The *Country Roads Act* empowers the Board to declare as main roads any road which in the opinion of the Board is of sufficient importance. Main roads are generally roads linking a centre of population with other centres or with areas of settlement. There are 610 miles of main roads within the Melbourne Metropolitan Planning Area of 1,942 sq miles and 8,477 miles over the rest of the State.

At 30 June 1969 the mileage of declared roads in each classification and the mileage with bituminous surface were as follows:

VICTORIA—MILEAGE OF DECLARED ROADS AT
30 JUNE 1969

Classification	Mileage	Mileage scaled
State highways	4,460	4,259
Freeways	44	44
Tourists' roads	483	297
Forest roads	461	229
Main roads	9,087	8,173
Total	14,535	13,002

Road design

In carrying out its task of developing the State's principal road system, the Board pays strict attention to the standards to which roads and bridges must be constructed. A road which carries a large volume of fast moving heavy traffic must be constructed to higher standards than one which carries mainly light tourist traffic. It is necessary, therefore, for the Board to be aware of the volume and nature of the traffic using its roads. In addition to a programme of regular traffic counts taken throughout the year, the Board conducts a 24 hour State-wide census of traffic in March each year. This practice was begun in 1928 on State highways and was subsequently extended to other categories of roads.

Construction methods and materials research

Besides determining standards of construction, the Board continually carries out research to decide which materials and methods are the most effective and economical. In 1923 the Board established a laboratory in conjunction with the engineering school at the University of Melbourne. As its activities increased the Board founded its own laboratory, and today materials research is one of the most important of its many tasks.

Bridges

In 1913 most of the 14,000 bridges in Victoria were of timber construction and many of these were in poor condition. It was obvious that they should quickly be replaced with bridges of more durable materials such as reinforced concrete. Between the two wars many reinforced concrete bridges were constructed, although, because of limited funds, it was still necessary to construct some timber bridges. In recent years, considerable progress has

been made with the production of pre-cast reinforced concrete components and this, together with standardisation of design, enables the Board to make good the deficiencies as quickly as its finances permit.

Plant

Fifty years ago, there was very little mechanical road construction plant in Victoria and most of the work of construction was carried out by horse drawn equipment and pick and shovel labour. Today, pneumatic drills, front-end loaders, mechanical excavators, and the bulldozer with its variations are used. Many other types of plant have also been designed for special purposes.

Maintenance

A road must be properly maintained if the asset provided by its construction is not to be lost. In the early days maintenance was carried out by patrolmen equipped with horses and drays, each patrolman looking after a length of about 5 to 10 miles. Where the pavement was of gravel, the patrolman was also provided with a drag to assist him in maintaining a good riding surface. With the increase in the length of bituminous roads the necessary work can be carried out more economically by truck patrols generally responsible for lengths of up to 40 or 50 miles of road. As a result of economies obtained, this form of patrol was extended in the 1930s to unsealed roads by providing the patrols with small graders which can be towed behind the truck. On roads carrying particularly heavy traffic, the assistance of a heavy power grader is often provided.

Roadside development

Roads are among the most permanent of structures, and once built they cannot be considered apart from their surroundings. Roadside development has always been an important consideration and has been actively pursued within the limits of available funds, but it has been possible only in recent years to intensify activities towards the development of what is termed the complete highway to provide a balanced combination of safety, utility, economy, and beauty.

Such factors as the preservation of flora, conservation of landscape features, rehabilitation of cleared areas, and erosion control are important aspects of the Board's road design practices. Some 50,000 trees and shrubs are planted annually on declared road reserves.

Motorists can now travel several hundred miles in a single day. This has produced a demand for frequent wayside stops where motorists can relax, enjoy a meal, or view the surroundings from a safe position clear of the road pavement. The Board is developing roadside stopping places at various locations adjacent to those declared roads of the State which carry heavy traffic. Such stopping places include rest areas with water and toilet facilities, wayside stops, scenic view points, and parking bays.

Finance

To enable the Board to carry out its responsibilities, two main sources of finance are available, namely, State and Commonwealth funds. Funds derived from State sources are listed.

1. Motor registration fees less cost of collection. (Metropolitan bus registration fees and the specified proportion of registration fees paid to the Roads [Special Projects] Fund of which the Board derives a share are not included here—see item 9 following.)

2. Two thirds of additional motor registration fees levied on first registration and subsequent change of ownership, less cost of collection.
3. Trailer registration fees less cost of collection other than the amount paid to the Roads (Special Projects) Fund.
4. One quarter of drivers' licence fees, less one quarter cost of collection.
5. Drivers' licence testing fees, less cost of collection.
6. One half of driving instructors' licence fees, less one half cost of collection.
7. Examiners' licence fees—motor car roadworthiness examinations.
8. All fees from the issue of authorised log books, less cost of collection.
9. Receipts from the Roads (Special Projects) Fund.
10. All moneys received under Part II of the Commercial Goods Vehicles Act (ton mile tax).
11. Municipal contributions on account of main road works.
12. State Loan Fund money.

From Commonwealth sources, money is provided to the State under the Commonwealth Aid Roads Act. The Board's share of this money amounted to \$32.7m in 1968–69. Total funds from all sources available to the Board in 1968–69 amounted to \$79m.

Receipts and expenditure

Receipts and expenditure covering the operations of the Board for each of the years 1964–65 to 1968–69 are as follows:

VICTORIA—COUNTRY ROADS BOARD : RECEIPTS AND EXPENDITURE (\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
RECEIPTS					
Fees—Motor Car Act (less cost of collection)	23,378	24,690	25,871	26,805	28,888
Municipalities contributions—Permanent works and maintenance—Main roads	1,690	1,691	1,824	1,845	1,931
Commonwealth Aid Roads Acts	25,182	27,175	29,050	30,895	32,723
Roads (Special Projects) Fund	..	1,654	3,311	2,652	3,055
Proceeds from Commercial Goods Vehicles Act	5,926	6,379	6,732	7,248	7,842
State loan funds	762	1,020	834	987	3,389
Grants under Public Works Loan Application Act	700	768	715	700	784
Other receipts	889	971	459	380	520
Total	58,527	64,348	68,796	71,513	79,132
EXPENDITURE					
Construction and maintenance of roads and bridges	50,556	53,076	57,503	61,078	64,776
Traffic line marking and traffic lights	196	238	252	240	270
Plant purchases	697	1,149	1,388	1,234	1,583
Interest and sinking fund payments	1,988	2,056	2,140	2,190	2,306
Payment to Tourist Fund	469	468	494	517	536
Payment to Transport Regulation Board	..	178	383	404	435
Payment to Traffic Commission Fund	..	..	..	30	271
General expenditure	4,619	6,113	5,416	6,750	7,275
Total	58,525	63,278	67,575	72,443	77,452

Expenditure on roads and bridges

The following is a summary of the total expenditure by the Country Roads Board on roads and bridges during each of the five years 1964-65 to 1968-69:

VICTORIA—COUNTRY ROADS BOARD : EXPENDITURE ON
ROADS AND BRIDGES

(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
State highways—					
Construction	13,000	13,408	14,984	13,654	12,714
Maintenance	4,080	4,296	4,689	5,349	5,635
Freeways—					
Construction	4,805	3,690	5,059	7,840	11,570
Maintenance	48	55	112	129	113
Main roads—					
Construction	11,490	12,301	12,416	12,303	12,198
Maintenance	3,699	4,268	4,350	4,466	4,742
Unclassified roads—					
Construction	9,366	10,654	10,892	11,550	12,001
Maintenance	1,764	2,055	1,907	2,189	2,247
Tourists' roads—					
Construction	959	911	1,753	2,430	2,229
Maintenance	463	599	559	427	564
Forest roads—					
Construction	486	408	442	424	423
Maintenance	227	291	295	234	255
River Murray bridges and punts—					
Maintenance	167	140	45	82	86
Total construction	40,107	41,372	45,547	48,202	51,134
Total maintenance	10,449	11,704	11,956	12,876	13,642
Total expenditure	50,556	53,076	57,503	61,078	64,776

Further references, 1962 to 1970

Water supply authorities

The principal authorities controlling water supply for domestic purposes in Victoria at 30 June 1969 are listed on page 249.

The West Moorabool Water Board was constituted in May 1968 for the purpose of constructing and operating water storage works on the West Moorabool River. Its general expenses are reimbursed by the Ballarat Water Commissioners and the Geelong Waterworks and Sewerage Trust in the proportions of one third from the former and two thirds from the latter.

Information about the activities of the State Rivers and Water Supply Commission will be found on pages 283 to 291. The finances of the Commission (which form part of the Public Account and are subject to annual budget review) are included in the tables on pages 625, 626, and 644 in Part 9 of the *Year Book*.

VICTORIA—WATER SUPPLY AUTHORITIES

Authorities	Administered under the provisions of—
Melbourne and Metropolitan Board of Works	Melbourne and Metropolitan Board of Works Act
State Rivers and Water Supply Commission	} Water Act
Waterworks Trusts (178)	
Local governing bodies—	
Ballarat Water Commissioners	
Municipal councils—	
Ararat City	
Bacchus Marsh Shire	
Beechworth Shire	
Bet Bet Shire	
Camperdown Town	
Creswick Shire	
Korong Shire	
Kyabram Borough	
Stawell Town	
Talbot and Clunes Shire	
Walpeup Shire	
Warrnambool City	
Werribee Shire	
Sale City	} Local Government Act
Geelong Waterworks and Sewerage Trust	} Geelong Waterworks and Sewerage Act
Latrobe Valley Water and Sewerage Board	} Latrobe Valley Act
First Mildura Irrigation Trust	} Mildura Irrigation and Water
Mildura Urban Water Trust	} Trusts Act
West Moorabool Water Board	} West Moorabool Water Board Act

Melbourne and Metropolitan Board of Works*Introduction*

The Board was constituted by Act of Parliament in 1890 and commenced operations on 18 March 1891. The original functions of the Board were to take over, control, and manage the existing metropolitan water supply system and to provide the metropolis with an efficient sewerage system. In 1922 responsibility for the disposal of nightsoil from unsewered properties within the same area was transferred from metropolitan municipalities to the Board.

In 1923 the Board was empowered to deal with main drains and main drainage works and to control and manage the rivers, creeks, and watercourses within the metropolis; in 1949 it was entrusted with the task of preparing a planning scheme for the Melbourne metropolitan area for the approval of the Governor in Council and, by legislation passed in 1954, it became a permanent planning authority.

In 1956 the Board was made responsible for metropolitan highways, bridges, parks, and foreshores, while under the *Road Traffic Act 1956* it was required to appoint to the Traffic Commission an officer experienced in traffic engineering.

The Board consists of a chairman and fifty-two commissioners. Each commissioner is appointed by, and must be a member of, one of the municipal councils entitled to representation. Members cannot sit longer than three years without reappointment. The chairman, however, is appointed for a

four-year term. This appointment, formerly made by the Board, is now made (under an amendment of the Melbourne and Metropolitan Board of Works Act dated December 1968) by the Governor in Council after consultation between the Minister and a committee appointed by the Board.

Area under the control of the Board

The area under the Board's control has been expanded in stages. The areas over which the Board exercises its several functions are now: water supply, 681 sq miles ; sewerage, 463 sq miles ; drainage and river improvements, 437 sq miles. Its town planning commitment extends over 1,942 sq miles.

Works programme

Water

The current programme of large-scale works being undertaken by the Melbourne and Metropolitan Board of Works involves the augmentation of the water supply, new water storages, amplification of the sewerage system, and freeways.

The major project to increase the metropolitan water supply is the 12 mile long tunnel through the Thomson-Yarra Divide. It is the first stage of the Thomson River development scheme and when completed in July 1973 will divert 20,000 mill. gals of water a year from the Thomson River into the Upper Yarra catchment. The Board commissioned the Snowy Mountains Hydro-Electric Authority to prepare designs for the new 63,500 mill. gals Cardinia Creek Dam, about 25 miles east of Melbourne. Construction of the major conduit between the Silvan Reservoir and this new dam, which is required to transfer water from the Thomson River scheme for storage in the new dam, is continuing. The dam is to begin storing water in 1972 and be completed in 1973.

Construction of the new 6,000 mill. gals Greenvale Reservoir at Bulla to serve the rapidly developing northern and western suburbs is scheduled for completion late in 1971. The reservoir, an "offstream" type of storage with virtually no catchment of its own, will be supplied by pipeline from either the Yan Yean or Silvan reservoir systems. It will comprise an earth and rockfill embankment 165 ft high, with a water depth of 150 ft and a full supply level of 550 ft above sea level. The horseshoe shaped main embankment has a crest length of 8,150 ft. Greenvale is the first large dam to be constructed by the Board of Works since the Upper Yarra dam was completed in 1957.

Sewerage

The first stage in the replacing and lowering of the Hobsons Bay main sewer under the River Yarra, necessitated by the Melbourne Harbor Trust's decision to deepen and widen the river to accommodate larger ships, has been completed. The new sewer, of reinforced concrete with a 7 ft internal diameter, with an invert about 62 ft below sea level, was constructed on a new alignment from the east bank, terminating in a connecting sewer to the Brooklyn trunk sewer. (The Hobsons Bay main sewer is one of the two major collecting sewers in the Board's system which together convey about 97 per cent of the wastewater from the Melbourne metropolitan area to the Board's Farm at Werribee.)

Work continued on construction of the 5 mile long Caulfield Intercepting Sewer, and on the new North Road pumping station, as part of the South-eastern Sewerage System. The intercepting sewer will take the flow from Hobsons Bay main sewer into the South-eastern Trunk Sewer and, when completed in 1973, will serve Sandringham, Brighton, parts of Moorabbin, and Caulfield.

Work also continued on construction of the South-eastern Trunk Sewer with special tunnelling machines being used to drive the sewer tunnel through the 10½ mile rock section between Kew and Clarinda, and the four mile soft ground section between Braeside and Clarinda. The six mile long concrete conduit between Braeside treatment plant and the new purification complex to be built at Carrum Downs is being constructed in stages by open cut.

Roads

The following projects have been undertaken by the Board with the assistance of allocations by the Treasurer of Victoria from the Roads (Special Projects) Fund.

Tullamarine Freeway. The 3.6 mile long section of Tullamarine Freeway constructed by the Board from Flemington Road to an interchange at Bell Street, Coburg, constructed by the Country Roads Board, is part of a freeway from the city to the Melbourne Airport. The project has been designed to full freeway standard, and is planned for incorporation into a metropolitan freeway system. Connections to the local street system are by means of diamond interchanges at Ormond Road and Moreland Road, providing for traffic movements to and from the north and south, respectively. The route is in the valley of Moonee Ponds Creek, which was diverted to minimise meanders across the path of the freeway. There are seventeen structures in the project. In addition to those at the interchanges, pre-stressed concrete overpasses provide grade separation for local cross traffic at Dean, Victoria, Albion, and Reynard Streets, and concrete pedestrian overpasses are provided at Evans and McColl Streets and Brentwood Avenue, together with an underpass at Wheeler Street. Six reinforced concrete bridges carry the freeway across the creek. Cost of the project was \$17m and it has been designed for traffic moving at speeds of up to 70 mph.

South-eastern Freeway, Section 2. Construction of this extension of the existing freeway, from Burnley Street, Richmond, to Toorak Road, Malvern, with a temporary extension to Tooronga Road, was opened in May 1970. The four-lane freeway has been designed to carry a peak hour traffic volume of 3,500 vehicles per hour at a design speed of 60 mph.

Special features of the project included the diversion of the River Yarra at Heyington, and construction of a new railway bridge to span the diverted river, the freeway, and the Boulevard; construction of an elevated structure to carry the freeway over the river at Heyington, over Gardiners Creek and over Glenferrie Road into the H. A. Smith Reserve at Kooyong; diversion of Gardiners Creek in Kooyong Park; diversion of the Boulevard in Survey Park with the Boulevard passing over the Freeway on a new bridge near Loyola Grove, and extension of MacRobertson Bridge to enable the freeway to pass beneath, together with a flood protection wall along the river. The cost of the project was \$15m.

One of the next major projects of the Board is the construction of the Eastern Freeway from Alexandra Parade and Hoddle Street, Collingwood,

to Thompsons Road, North Balwyn, to serve the rapidly developing eastern suburbs. The 5.4 mile long freeway will have six lanes as far as the Chandler Highway and four lanes to Thompsons Road. These will be expanded to eight lanes throughout as traffic demand increases. The freeway is estimated to cost \$24m. Provision has been made for a railway to be built in the freeway's central median.

Melbourne's water supply

At 30 June 1969 Melbourne's water supply system consisted of six storage reservoirs (Yan Yean, Toorourrong, Maroondah, O'Shannassy, Silvan, and Upper Yarra), with an available storage capacity of 65,452 mill. gals, forty-nine service reservoirs and elevated tanks with a total capacity of 373 mill. gals, and 7,034 miles of aqueducts, mains, and reticulation.

The water from the storage reservoirs flows by gravitation in aqueducts and pipelines to distributing reservoirs near the perimeter of the metropolitan area, thence by large mains to service reservoirs located at elevated positions within the metropolis from which the distribution mains radiate. The function of the service reservoirs is to regulate the pressure in their various zones of supply, to meet the daily peak demand, and to provide a reserve against failure of the main supply lines.

The distribution mains from the service reservoirs feed the reticulation system from which private service pipes are laid onto properties. As well as supplying metropolitan consumers, Melbourne's water supply has been extended to certain mountain districts in the Dandenong Ranges.

Further reference, 1964

Cost of water supply system

The cost of capital works in respect of the water supply system under the control of the Board is shown in the following table for each of the years 1964-65 to 1968-69, together with the total expenditure (less depreciation) to 30 June 1969:

**VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
CAPITAL OUTLAY ON WATERWORKS
(\$'000)**

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69	Total cost to 30 June 1969
Yan Yean System (including Greenvale)	6	69	288	432	2,618	5,156
Maroondah System	19	120	946	263	833	5,753
O'Shannassy, Upper Yarra and Silvan Systems	1,146	146	117	2,868	3,385	54,880
Service reservoirs	220	202	75	232	940	6,033
Large mains	2,669	3,689	2,309	1,438	1,332	53,019
Reticulation	4,130	3,562	3,683	3,977	4,146	50,729
Afforestation	4	2	2	10	4	669
Investigations, future works	32	42	22	161	993	1,373
Total outlay	8,226	7,832	7,442	9,380	14,250	177,613

Output of water

Output of water from the Board's storages rose gradually from 44,000 mill. gals in 1956-57 to 69,000 mill. gals in 1966-67. There was a substantial fall in output in 1967-68 due to extreme drought conditions experienced during that year and consequent restrictions on consumption by all users.

The total output of water from the various sources of supply for each of the years 1964-65 to 1968-69 was as follows:

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
OUTPUT OF WATER
(Million gallons)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Yan Yean Reservoir	2,786	4,130	5,650	2,461	4,477
Maroondah Reservoir	15,496	12,953	13,245	9,788	15,961
O'Shannassy River, Upper Yarra, and Silvan Reservoirs	43,150	48,117	49,929	38,628	42,856
Total output	61,432	65,200	68,824	50,877	63,293

Consumption of water

During the year ended 30 June 1969 the maximum consumption of water in Melbourne and suburbs on any one day was 386.0 mill. gals on 30 January 1969, and the minimum consumption was 100.0 mill. gals on 21 July 1968.

The following table shows, for each of the years 1964-65 to 1968-69, the number of properties supplied with water and sewers, the quantity of water consumed, the daily average consumption, and the daily average consumption per head of population served:

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
WATER CONSUMPTION AND SEWERAGE CONNECTIONS

Year	Properties supplied with water at 30 June	Properties for which sewers were provided at 30 June	Total annual consumption of water	Daily average of annual consumption of water	Daily consumption of water per head of population served
	number	number	million gallons	million gallons	gallons
1964-65	595,727	453,078	61,409	168.24	80.93
1965-66	612,844	467,705	65,218	178.68	84.28
1966-67	626,690	484,798	68,815	188.53	87.98
1967-68	642,039	509,185	50,876	139.00	64.06
1968-69	658,944	528,983	63,288	173.39	77.86

Sewerage system

There are now one major and five minor systems collecting, purifying, and disposing of wastewater from the metropolis. These are the Farm System (major) and Braeside, Kew, Watsonia, Maribyrnong, and Laverton Systems (minor).

The Farm System serves approximately 98 per cent of the sewered areas of the metropolis. Except for wastes from the greater part of the municipality of Sunshine, which are discharged directly into the Main Outfall Sewer, and from Williamstown, which enter the main system at Spotswood, all wastes collected by the Farm System flow by gravity through two main sewers—the North Yarra and the Hobsons Bay Main Sewers—which unite at Spotswood. The combined flow then continues for 2.25 miles through a 9 ft 3 inch diameter trunk sewer which terminates at the Brooklyn Pumping Station.

At the Pumping Station, the wastewater is screened and then electrically driven pumps lift it 140 ft to the head of the 11 ft diameter Main Outfall Sewer, along which it gravitates 16 miles to the Board's Farm just beyond Werribee, where it is purified by either land filtration, grass filtration, or ponding.

The effluents resulting from these methods of purification comply with the prescribed standards set out in the Stream Pollution Regulations of the Department of Health and are finally discharged into Port Phillip Bay.

The Braeside System disposes of the wastewater from Mordialloc, Mentone, Parkdale, Cheltenham, and parts of Moorabbin and Oakleigh which, for economic reasons, could not be brought into the Farm System. The Braeside System came into operation on 22 May 1940, and has been extended north to include Monash University and adjacent areas. The treatment process includes sedimentation of the wastewater and subsequent biological purification by trickling filters and oxidation ponds.

The Kew, Watsonia, Maribyrnong, and Laverton Systems serve small areas that could not be connected economically with the Farm System. Purification is biological as at Braeside.

Cost of the sewerage system

The cost of sewerage works during each of the years 1964–65 to 1968–69, and the total cost (less depreciation) to 30 June 1969 are shown in the following table:

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS: CAPITAL OUTLAY ON SEWERAGE SYSTEM (\$'000)

Particulars	1964–65	1965–66	1966–67	1967–68	1968–69	Total cost to 30 June 1969
Farm purchase and preparation	457	388	416	464	526	11,302
Treatment works	291	909	1,829	1,667	2,182	7,920
Outfall sewer and rising mains	101	158	185	164	61	3,949
Pumping stations, buildings, and plant	406	1,297	686	184	521	15,010
Main and branch sewers	10,950	9,643	10,533	12,584	10,853	91,157
Reticulation sewers	4,672	6,418	5,306	7,828	6,187	89,719
Cost of house connections chargeable to capital	..	..	..	..	..	794
Sanitary depots	14	6	..	Cr. 24	Cr. 18	748
Investigations	51	72	71	137	244	903
Total outlay	16,941	18,893	19,026	23,004	20,557	221,502

Board of Works farm at Werribee

Ideally, the minerals and organic matter contained in a city's domestic and industrial wastewaters should be returned to the land from which they were originally derived. The Board's farm at Werribee is an example of profitable use of sewerage wastes. The once barren plain is enriched by treatment with these wastes to the extent that intensive grazing of sheep and cattle is possible, at the same time saving ratepayers up to \$500,000 a year. The revenue from the sale of livestock is set off against the cost of wastewater purification and results in the imposition of a lower sewerage rate than would otherwise be necessary.

Statistical data for the year ended 30 June 1969 are as follows:

Total area of farm	26,809 acres
Area used for wastewater disposal	17,093 acres
Average rainfall over 76 years	18.93 inches
Net cost of wastewater purification per head of population served	62c
Profit on cattle and sheep	\$573,097

Further reference, 1965

Disposal of nightsoil from unsewered premises

The responsibility for the collection, removal, and disposal of nightsoil from unsewered premises within the metropolis was transferred from the individual municipal councils to the Melbourne and Metropolitan Board of Works by legislation in 1922. By agreement, each council pays to the Board a prescribed amount per annum to offset the cost of the service, etc. For the year 1968-69 working expenses were \$119,455 and interest \$38,927, making a total of \$158,382. Revenue was \$201,342, giving a surplus of \$42,960.

Stormwater drainage and river improvements

In 1923 the Board was made responsible, by Act of Parliament, for the drainage of surface and storm water that flowed through two or more municipalities. Subsequent legislation gave the Board power to control the principal stormwater drainage throughout the metropolis irrespective of municipal boundaries and to construct such drainage and river improvement works as it deemed necessary.

Finance for carrying out drainage works is provided mainly by Loan Funds, but a small proportion of capital works has been financed from the revenue derived from the Metropolitan Drainage and River Improvement Rate payable in respect of all rateable property in the metropolis since 1 July 1927. The costs of maintenance and operation, as well as interest charges, are also met from this annual rate.

Besides being responsible for underground main drains and many hundreds of miles of creeks and watercourses, the Board is responsible for metropolitan rivers, except in a limited area under the control of the Melbourne Harbor Trust. It keeps these rivers dredged for flood control and for the safe passage of small boats and pleasure craft; maintains the banks to prevent erosion; exercises control over trade discharges into the streams in the metropolis; and administers the by-law relating to the use of the rivers, thus ensuring that they will continue to be a source of pleasure to the people of Melbourne.

The total cost of drainage and river improvement works (less depreciation) to 30 June 1969 was \$36m. The length of main drains under the control of the Board at 30 June 1969 was 250 miles.

Metropolitan Rivers and Streams, 1969

Assessed value of property

The net annual value of property in 1968–69 for the purpose of the Board's rating was as follows:

	\$m
Water rate	393.6
Metropolitan general rate (for sewerage services)	331.1
Metropolitan drainage and river improvement rate	367.5
Metropolitan improvement rate	404.1

Finance for capital works

Capital works are financed mainly from moneys which the Board is given approval to borrow after the annual meeting of the Australian Loan Council has considered the projected loan programmes of semi-governmental authorities throughout Australia.

Board's borrowing powers and loan liability

The amount that the Board is empowered to borrow was increased from \$400m to \$500m on 7 May 1968 and is exclusive of loans amounting to \$4.8m originally raised by the Government for the construction of waterworks for the supply of Melbourne and suburbs. These works were vested in and taken over by the Board on 1 July 1891. The Board's total loan liability at 30 June 1969 was \$417m. All money borrowed is charged and secured upon the Board's revenues.

Revenue, expenditure, etc.

The following is a table of the revenue, expenditure, surplus or deficit and capital outlay of the Board in respect of its water supply, sewerage, and drainage functions during each of the years 1964–65 to 1968–69. The Board keeps a separate account of its financial activities as Metropolitan Planning Authority. These activities are summarised in the table on page 258.

**VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
REVENUE, EXPENDITURE, ETC.
(\$'000)**

Particulars	1964–65	1965–66	1966–67	1967–68	1968–69
REVENUE					
Water supply—					
Water rates and charges (including revenue from water supplied by measure)	12,160	13,701	14,559	14,957	16,007
Sewerage—					
Sewerage rates	10,160	12,736	13,378	15,167	18,541
Trade waste charges	554	789	1,212	1,170	2,013
Sanitary charges	212	232	241	253	367
Metropolitan farm—					
Grazing fees, rents, pastures, etc.	10	9	8	7	9
Balance, live stock account	468	569	526	416	573
Metropolitan drainage and rivers—					
Drainage and river improvement rate	1,729	2,112	2,170	3,600	4,450
River water charges	14	14	17	17	21
Total	25,307	30,165	32,111	35,588	41,981

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS : REVENUE,
EXPENDITURE, ETC.—*continued*
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
EXPENDITURE					
Water supply—					
Management	1,540	1,790	1,830	2,096	2,438
Maintenance	2,384	2,682	2,829	3,409	3,793
Water supply works	..	..	..	1,421	200
Sewerage—					
Management	1,186	1,451	1,532	1,780	2,069
Maintenance	1,480	1,792	2,051	2,217	2,638
Sewerage works	..	..	..	..	1,200
Metropolitan Farm—					
Management	84	93	99	110	132
Maintenance	760	831	845	882	951
Metropolitan drainage and rivers—					
Management	210	270	275	318	381
Maintenance	178	267	365	507	589
Drainage works	..	..	..	355	934
Pensions and allowances	313	264	297	267	436
Loan flotation expenses	263	303	457	333	589
Interest (including exchange)	14,856	16,526	17,835	19,258	21,184
Contributions to—					
Sinking fund	971	1,046	1,131	1,206	1,315
Loans redeemed reserve	988	1,228	1,420	1,479	1,921
Renewals fund	610	663	968	749	774
Depreciation	82	77	352	59	53
Superannuation account	152	201	285	336	441
Municipalities—					
For road maintenance	34	34	..	..	49
Valuations	33	44	96	101	97
Rates equalisation reserve	Cr. 817	600	Cr. 609	Cr. 1,278	Cr. 202
Other	..	..	50	50	..
Total	25,307	30,162	32,111	35,655	41,981
Net surplus (+) or deficit (—)	..	+ 3	..	— 67	..
Capital outlay at 30 June—					
Water supply	138,708	146,540	153,983	163,363	177,613
Sewerage	140,023	158,915	177,941	200,945	221,502
Drainage and river improvement works	24,983	27,964	31,436	33,149	35,654

Town planning

Like most cities, Melbourne has suffered from unco-ordinated and uncontrolled development. As a remedial step, the Government in 1949 requested the Board to prepare a planning scheme for the whole area of the metropolis.

Accordingly, the Board made a survey that provided data for detailed basic plans showing the state of the metropolis in 1949, and these plans were used as a framework for the Master Plan which was made public in 1954. Shortly after this the Board was made the permanent metropolitan planning authority.

Between 1 March 1955 and 22 May 1968 the development of the Melbourne metropolitan area was controlled by the Board under an Interim Development Order, and on the latter date the Planning Scheme, as finally approved by the Governor in Council, became operative.

The advantages of an overall metropolitan development policy, as expressed by the Scheme, are now evident—particularly in the more orderly development of the newer suburbs. The proposals for public development

in the form of roads, schools, hospitals, and parks act as a framework or guide to private development which is continuously taking place within the various land-use zones.

Further reference, 1966

Highways, bridges, and freeways

A complete network of highways and freeways designed to meet the needs of the Melbourne metropolitan area for the next twenty to thirty years is one of the major provisions of the Planning Scheme. The Board was made a responsible authority for metropolitan highways and bridges because Parliament recognised the vital importance of integrating such construction works with planning.

The most costly traffic delays occur within the central area, and new freeways and the major reconstruction of some existing roads, together with new overpasses and bridges, constitute the most pressing need. Comprehensive studies to determine construction priorities have been made and a programme, which forms the first and urgent part of the new network, has been drawn up. This programme is in progress, and projects have been completed at High Street, Kew; Hanna and Roy Streets (re-named Kings Way), South Melbourne; the first section of the South-Eastern Freeway from Batman Avenue to Grange Road Bridge; St Kilda Junction improvements; the Tullamarine Freeway; and the second section of the South-Eastern Freeway extending from Burnley to Toorak Road, Malvern.

Further references, 1967 to 1969

Revenue, expenditure, etc.

The following table summarises the revenue, expenditure, and capital outlay of the Board in connection with its functions as Metropolitan Planning Authority during the period 1964-65 to 1968-69:

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
PLANNING AND HIGHWAYS ACCOUNT, ETC.
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
REVENUE					
Metropolitan improvement rate and sundry income	3,909	4,914	5,136	6,022	6,223
EXPENDITURE					
Management	553	623	633	721	904
Maintenance	60	66	67	108	140
Interest	50	51	51	52	54
Contributions to sinking fund	24	24	24	24	24
Transfer to planning and highways reserve	3,188	4,114	4,311	5,064	5,032
Other	34	36	51	53	70
Total	3,909	4,914	5,136	6,022	6,223
Capital outlay at 30 June (a)	15,131	19,598	26,724	38,152	54,172

(a) Includes expenditure of the following amounts paid from the Roads (Special Projects) Fund; 1965-66, \$1,346,000; 1966-67, \$3,630,000; 1967-68, \$7,098,000; 1968-69, \$9,387,000.

Foreshores

The Board is responsible for the protection and improvement of 49 miles of the foreshore of Port Phillip Bay, from near the Point Cook aerodrome on the western side of the Bay to Canadian Bay in the east.

Works have been carried out at a number of places to arrest erosion, and other protective works are undertaken from time to time as the need arises.

Parklands

In addition to the parklands existing at the time of the preparation of the Planning Scheme, further lands in the metropolitan area have been reserved for public open space. The Board may acquire and develop such lands as parklands, gardens, or playing fields or transfer them to the relevant municipal councils to develop.

Water supply and sewerage in country towns*Introduction*

Constituted under the *Water Act* 1905, the State Rivers and Water Supply Commission commenced operations in 1906. In that year it took over from the Victorian Water Supply Department the general control of water supply to 111 towns, comprising a total population of 261,000. The Commission assumed direct responsibility for supplying 75,000 persons in fifteen centres. These centres included the mining towns of Bendigo and Castlemaine and the sea port of Geelong (now served by the Geelong Waterworks and Sewerage Trust System).

The other ninety-six centres which had operated through local authorities now came under general supervision of the Commission. Of these local authorities, one quarter were within the Wimmera-Mallee Waterworks Districts, a similar number along the route from Melbourne to Wodonga, and the rest concentrated in the Ballarat area and the old mining towns to the north and north-west of that city, towns in the Sunbury-Kyneton-Lancefield area, and the northern irrigation areas.

During 1968-69 the Commission directly administered the water supply to 148 towns with a population of 235,000. The major urban systems directly involving the Commission are the Mornington Peninsula, Bellarine Peninsula, Otway, and Coliban systems. The Mornington Peninsula System dates back to 1916 when the Flinders Naval Base was supplied. Water is derived from the Bunyip and Tarago Rivers and travels over 100 miles to Point Nepean on the tip of the Mornington Peninsula. The Bellarine System serves all the major coastal towns to the east and south of Geelong on the Bellarine Peninsula from Portarlington to Anglesea. The Otway System, with headworks located in the Otway Ranges, supplies the major towns from Camperdown to Warrnambool. The Coliban System serves the Bendigo-Castlemaine area and also supplies limited irrigation water which is delivered under a permit system on a volume basis.

Other important groups include nearly forty small towns in the Wimmera-Mallee and twenty-two centres in the irrigation areas, but most of the urban population in the latter areas is served by local authorities taking bulk supply from the Commission.

At 30 June 1969 local authorities constituted for the administration of town water supplies numbered 198, of which 191 had works in operation serving 256 towns. The remaining authorities had works under construction. In all, about 680,000 persons in 265 towns will be served when these are completed. The predominance of local control is indicated by these figures which show that the population served from locally controlled schemes is nearly treble the population supplied from schemes directly managed by the Commission. In addition to their function as water supply authorities three local authorities are also responsible for sewerage systems. A brief description of the activities of these authorities follows.

Geelong Waterworks and Sewerage Trust

The Trust was constituted as the Geelong Municipal Waterworks Trust on 25 January 1908. It was reconstituted as a Water and Sewerage Authority under the *Geelong Waterworks and Sewerage Act* 1909, and further reconstituted in September 1950 to include a Government nominee as chairman. An amendment in December 1966 provided that there shall be six commissioners comprising the chairman and a representative from each of five electoral districts.

The amount of loans which may be raised is limited to \$30m for water supply, \$20m for sewerage works, and \$1.32m for sewerage installations to properties under deferred payments conditions. The expenditure on these services to 30 June 1969 was: water supply \$18.85m; sewerage \$13.52m; and sewerage installation \$1.23m, of which \$0.16m was outstanding. The revenue for the year ended 30 June 1969 was \$1.76m on account of waterworks and \$1.16m on account of sewerage. Since 1913 the Trust has appropriated and set apart sums out of revenues for the creation of a sinking fund to redeem loans. To 30 June 1969 the amount so appropriated was \$2.01m and of this sum \$1.05m had been used to redeem maturing loans.

At 30 June 1969 the population served was estimated by the Trust at 117,191, the number of buildings within the drainage area was 32,558, and the number of buildings within sewered areas was 29,357.

Water supply

The water supply systems of the Trust are the Moorabool System and the Barwon System.

Moorabool System. The catchment of the watersheds is about 38,000 acres. There are six storage reservoirs and five service basins. The total storage capacity of the reservoirs and service basins of the Moorabool System is 4,318 mill. gals.

Barwon System. This was acquired from the State Rivers and Water Supply Commission in 1955.

The catchment area of the watersheds is about 17,000 acres and comprises the head waters of the Barwon River and its tributaries. There are two storage reservoirs and six service basins. The total storage of the reservoirs and service basins of the Barwon System is 8,974 mill. gals. The Trust is required to supply up to 700 mill. gals per year to the State Rivers and Water Supply Commission's Bellarine Peninsula System.

Sewerage

The sewerage area, which is 21,220 acres, includes the Cities of Geelong,

Geelong West, and Newtown and Chilwell, and suburban areas in the Shires of Corio, South Barwon, and Bellarine. At 30 June 1969 the sewerage system consisted of 352·2 miles of reticulation sewers and two main sewers extending from Geelong for six miles to join a single main outfall sewer seven miles in length reaching the ocean at Black Rock.

Latrobe Valley Water and Sewerage Board

The Latrobe Valley Water and Sewerage Board was constituted on 1 July 1954. The Board consists of seven members: the manager, who is *ex officio* chairman, appointed by the Governor in Council ; three members being elected by water supply, sewerage, and river improvement authorities within the Latrobe Valley ; one member representing the State Electricity Commission of Victoria ; one member representing private industry in the Latrobe Valley ; and one member appointed by the Governor in Council as a Government nominee. Further information about the Latrobe Valley will be found on pages 791-7 of the *Victorian Year Book* 1965.

Water supply

The Board is empowered to construct water supply works within the area of the Latrobe Valley, but at present is confining its main construction activities to the central and industrialised area, particularly around the towns of Morwell, Traralgon, and Churchill.

The Board has constructed a storage of 7,000 mill. gals capacity on the Upper Tyers River. From this storage water is conveyed a distance of approximately 10 miles through a 60 inch diameter pipeline.

The capital cost of construction of waterworks was \$11·58m to 30 June 1969. Liabilities amounted to \$12·26m at 30 June 1969, including loans due to the Government totalling \$11·19m. The income for the year 1968-69 was \$0·74m and expenditure during the year amounted to \$0·58m, including interest on loans \$0·34m. Redemption payments made during the year absorbed \$0·20m. The Board does not strike a rate, but charges consumers, including local water supply authorities, by measure. Water supplied during the year ended 30 June 1969 totalled 13,425 mill. gals.

Sewerage

The Board has constructed an outfall sewer some 52 miles in length to convey wastes to an area where they are disposed of on agricultural land. Wastes conveyed by the outfall sewer consist mainly of industrial wastes such as paper wastes, together with small quantities of domestic sewage.

During 1968-69 sewerage works were confined mainly to investigations and design of a sewer to convey salt water effluent from Hazelwood Power Station to the Board's outfall sewer. The total capital cost of sewerage construction works to 30 June 1969 was \$6·93m.

The scheme is financed by Government loan, the liabilities on account of loans at 30 June 1969 totalling \$6·04m. Income during 1968-69 was \$0·33m and expenditure, which included interest on loans of \$0·11m, was \$0·53m. Redemption payments made during the year amounted to \$0·11m.

The Board does not strike a sewerage rate, but charges by measure for the receipt of wastes, both from industries and public authorities, such as sewerage authorities, in the area.

The Ballarat Water Commissioners

The local governing body by the name of "The Ballarat Water Commissioners" was constituted on 1 July 1880 by the Waterworks Act of that year.

The water supply district of The Ballarat Water Commissioners covers an area of approximately 65 sq miles, including the City of Ballarat, the Borough of Sebastopol, and portions of the Shires of Ballarat, Buninyong, Bungaree, and Grenville. Water is also supplied in bulk to the Buninyong Waterworks Trust, the Miners Rest Waterworks Trust, the Smythesdale-Scarsdale Waterworks Trust, and to the Bungaree-Wallace Waterworks Trust. The total estimated population supplied is 65,800. The works comprise seven reservoirs, which have a total storage capacity of 5,435 mill. gals. The catchment area is 24,182 acres. The Commissioners supply water to 21,416 tenements.

The total consumption of water for the year 1969 was 2,047 mill. gals, and the average per capita consumption was 82 gal per day. Approximately 85 per cent of the properties supplied are metered.

To 31 December 1969 the capital cost of construction was \$6.28m, and loans outstanding (including private loans) were \$3.93m. During 1969 revenue amounted to \$0.52m and expenditure to \$0.52m.

Further reference, 1961

Ballarat Sewerage Authority

The Ballarat Sewerage Authority was constituted under the provisions of the *Sewerage Districts Act* 1915 by Order in Council dated 30 November 1920, which provides that the members of the Water Commissioners shall be the Sewerage Authority.

The Ballarat Sewerage District covers the City of Ballarat, the Borough of Sebastopol, and portions of the Shires of Ballarat, Bungaree, and Grenville.

At 31 December 1969 there were 20,590 assessments in the sewerage districts and 19,100 in declared sewerage areas, where 16,419 tenements were connected.

The capital cost of sewerage construction works to 31 December 1969 was \$5.83m. Construction is financed by debenture issue loans from various financial institutions. The liabilities on account of loans secured for construction at 31 December 1969 amounted to \$4.92m; redemption payments at that date totalled \$0.98m. Revenue during 1969 amounted to \$0.54m, and expenditure, which included \$0.35m on interest and redemption, was \$0.54m. During 1969, 109 contracts were completed under the deferred payments system, the amount outstanding at 31 December being \$0.18m.

Further reference, 1961

Country sewerage authorities

With the exception of sewerage systems operated by the State Electricity Commission and the Eildon Sewerage District (under the direct administration of the State Rivers and Water Supply Commission), country sewerage works are controlled by local authorities. These local sewerage authorities operate under the direct supervision of the State Rivers and Water Supply Commission in a similar manner to the local water supply authorities. Of the ninety-eight local sewerage authorities constituted at 30 June 1969

(including the Geelong Waterworks and Sewerage Trust, the Latrobe Valley Water and Sewerage Board, and the Ballarat Sewerage Authority), seventy-one authorities had systems in operation. A further twelve authorities had systems under construction.

The following table shows particulars of all country sewerage systems which were in operation, or in course of construction (with the exception of those controlled by the State Electricity Commission), for each of the years 1964 to 1968:

**VICTORIA—COUNTRY SEWERAGE AUTHORITIES:
POPULATION SERVED, PROPERTIES CONNECTED,
INCOME, EXPENDITURE, ETC.**

Particulars	1964	1965	1966	1967	1968
Number of systems in operation	56	57	61	63	67
Number of systems under construction	2	6	6	5	11
Estimated population served (at end of year)	495,785	522,885	544,248	572,001	612,633
Number of properties connected to sewers (at end of year)	138,654	147,537	156,863	167,071	176,964
	\$'000	\$'000	\$'000	\$'000	\$'000
Income—					
Rates	3,392	3,666	4,061	4,556	5,221
Other	1,568	1,810	1,923	1,963	2,362
Total	4,960	5,476	5,984	6,519	7,583
Expenditure—					
Working expenses	1,593	1,841	2,077	2,192	2,587
Other	3,356	3,516	3,844	4,290	4,811
Total	4,949	5,357	5,922	6,482	7,397
Loan account—					
Receipts	4,902	4,818	7,165	10,783	12,254
Expenditure	4,362	4,989	7,038	12,631	11,157
Loan liability (at end of year)	47,990	51,677	56,844	65,612	75,880

Metropolitan Fire Brigades Board

Municipalities within the Metropolitan Fire District contribute one third and fire insurance companies transacting business in the same area provide two thirds of the amount required to maintain metropolitan fire brigades. During 1968–69 contributions by municipalities were equivalent to 0·55 cents in the dollar of the annual value of property amounting to \$375m, while fire insurance companies contributed at a rate of \$16·25 for every \$100 of fire insurance premiums paid on insured property. Premiums received in the Metropolitan Fire District in 1967 amounted to \$25·6m.

Particulars of revenue, expenditure, and loan indebtedness of the Metropolitan Fire Brigades Board for each of the five years 1964–65 to 1968–69 are as follows:

**VICTORIA—METROPOLITAN FIRE BRIGADES BOARD:
REVENUE, EXPENDITURE, ETC.
(\$'000)**

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
REVENUE					
Statutory contributions—					
Municipalities	1,421	1,569	1,734	2,026	2,065
Insurance companies	2,843	3,139	3,468	4,027	4,156
Charges for services	487	510	515	527	688
Interest and sundries	300	301	350	324	376
Total	5,051	5,519	6,066	6,904	7,285
EXPENDITURE					
Salaries	3,261	3,710	4,117	4,345	5,082
Administrative charges, etc.	509	612	704	646	759
Partially-paid firemen and special service staff allowances	268	294	306	313	388
Plant, purchase and repairs	349	330	416	532	568
Interest	37	36	35	34	33
Repayment of loans	22	23	24	25	21
Superannuation fund	196	213	229	243	287
Motor replacement reserve	86	91	96	103	120
Pay-roll tax	93	105	115	122	143
Miscellaneous	66	320	111	98	446
Total	4,887	5,734	6,153	6,461	7,847
Net surplus (+) or deficit (—)	+ 164	— 215	— 87	+ 443	— 561
Loan indebtedness (at 30 June)	669	646	622	597	576

The following table shows particulars of the number of fire stations operated by the Metropolitan Fire Brigades Board and the number of staff employed at 30 June in each of the years 1965 to 1969:

**VICTORIA—METROPOLITAN FIRE BRIGADES BOARD:
NUMBER OF FIRE STATIONS AND STAFF EMPLOYED**

Particulars	At 30 June—				
	1965	1966	1967	1968	1969
Fire stations	45	44	45	45	45
Staff employed (a)—					
Fire fighting	1,051	1,088	1,124	1,153	1,175
Partially-paid firemen and special service staff	114	113	104	105	112

(a) Excluding clerical staff.

Further reference, 1961

Country Fire Authority

The headquarters of the Authority are situated in Malvern where an operations centre is in direct radio contact with every fire control region throughout the State. At 30 June 1969 there were sixty-eight permanent

firemen employed in brigades at Ballarat, Bendigo, Geelong, and Dandenong, with a total of fifty-three permanent brigade officers at these stations and one each at Chelsea, Doveton, Frankston, North Geelong, Geelong West, Mildura, Morwell, Norlane, Shepparton, Springvale, Traralgon, Wangaratta, and Warrnambool.

With the establishment of a Training Wing in 1967, increased emphasis on training is now placed on study periods attended by selected officers who in their turn pass on the experience gained to other brigade members at regional schools of instruction. Study periods are held for officers of urban brigades, officers of rural brigades, and for group communications officers. Permanent officers of the Authority are given courses in teacher training.

The revenue of the Country Fire Authority consists mainly of statutory contributions, in the proportion of one third from the Victorian Treasury and two thirds from insurance companies underwriting fire risks in the country area of the State. There were 192 insurance companies so contributing during 1968-69.

Up to 30 June 1969 the Authority had raised seventy-three loans, representing a total of \$4.89m, which had been used for the provision of buildings and equipment for brigades.

Particulars of revenue, expenditure, surplus, and loan expenditure and indebtedness of the Country Fire Authority, for each of the years 1964-65 to 1968-69, are shown in the first of the following tables. The second table gives details of the number of fire brigades, personnel, and motor vehicles for the same years.

VICTORIA—COUNTRY FIRE AUTHORITY: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
REVENUE					
Statutory contributions—					
Municipalities assistance fund	568	691	835	953	1,038
Insurance companies	1,136	1,382	1,669	1,907	2,075
Other	69	67	77	93	101
Total	1,773	2,140	2,581	2,953	3,213
EXPENDITURE					
Salaries and wages	658	823	995	1,101	1,300
Depreciation	78	85	102	115	130
Insurance	73	92	99	108	113
Interest	87	94	116	136	161
Maintenance	247	408	482	640	567
Motor replacement fund	168	184	208	229	257
Other	293	272	342	435	526
Total	1,604	1,958	2,344	2,764	3,054
Net surplus	169	182	236	189	159
Loan expenditure	243	431	433	554	606
Loan indebtedness (at 30 June)	1,719	1,870	2,286	2,630	3,034

VICTORIA—COUNTRY FIRE AUTHORITY: NUMBER OF FIRE BRIGADES,
PERSONNEL, AND MOTOR VEHICLES

Particulars	At 30 June—				
	1965	1966	1967	1968	1969
Fire brigades—					
Urban	205	206	208	208	209
Rural	1,043	1,048	1,051	1,048	1,050
Personnel—					
Professional	147	162	169	180	185
Volunteer	111,599	112,984	114,730	117,333	118,530
Motor vehicles—					
Transport	59	63	67	70	75
Fire service	958	996	1,036	1,079	1,134

Further reference, 1969

Local government and semi-governmental bodies : new money loan raisings

In the following statement particulars are given of the new money loan raisings for capital works, during each of the years 1965–66 to 1968–69, by local government, semi-governmental, and other public bodies in Victoria:

VICTORIA—LOCAL GOVERNMENT, SEMI-GOVERNMENTAL, AND
OTHER PUBLIC BODIES: NEW MONEY LOAN RAISINGS
(\$'000)

Particulars	At 30 June—			
	1966	1967	1968	1969
LOCAL GOVERNMENT				
Due to government	261	279	396	340
Due to public creditor	23,207	28,926	31,995	28,515
Total local government	23,467	29,205	32,391	28,855
SEMI-GOVERNMENTAL, ETC.				
Due to government (a)	45,614	43,763	53,425	55,236
Due to public creditor	93,793	101,210	102,617	124,269
Total semi-governmental, etc.	139,408	144,973	156,042	179,505
ALL AUTHORITIES				
Due to government (a)	45,874	44,042	53,822	55,576
Due to public creditor	117,000	130,135	134,611	152,784
Total	162,875	174,178	188,433	208,359

(a) Including the following advances by the Commonwealth Government under the Commonwealth-State Housing Agreement : \$24,229,000 in 1965–66, \$23,354,000 in 1966–67, \$23,866,000 in 1967–68, and \$25,688,000 in 1968–69.

Port Phillip Authority

The Authority was constituted under the *Port Phillip Authority Act 1966* and commenced operation on 7 September 1967. Its responsibilities are to advise the Minister of Lands, under whose jurisdiction the Act is administered, on methods of:

1. co-ordinating development in the Port Phillip area ;
2. preserving the existing beaches and natural beauty of the Port Phillip area and preventing deterioration of the foreshore ; and
3. improving facilities in the Port Phillip area to enable the full enjoyment of the area by the people.

The Authority's policy is directed primarily towards co-ordination in respect to correct land use, planned conservation, the identification and the preservation of the natural beauty and existing beaches of the Port Phillip area consistent with the needs of development.

Port Phillip Bay covers an area of about 735 sq miles and is the most important body of sheltered water in southern Australia. It provides the two main harbours for the ports of Melbourne and Geelong, through which most of the State's sea trade is conducted. Around and close to its coastline reside two thirds of the population of the State. Its total coastline measures approximately 164 miles.

The bed of Port Phillip below high water mark is unreserved Crown land and most of the foreshore area above high water mark is Crown land which was reserved for public purposes in 1872-73. Where not used for port or defence purposes, most of the foreshore areas have been placed under the control of local committees of management appointed under the Land Act. In general terms the Port Phillip area is that area of Crown land and land vested, occupied, or controlled by the Crown or by any public authority and the inshore waters which fall within the boundaries of an imaginary line ten chains to landward of low water mark and thirty chains to seaward from high water mark around Port Phillip ; it also embraces the inshore waters and foreshores of Bass Strait from the Barwon River to Cape Schanck, a distance of some 40 miles.

The Authority consists of a chairman, independently appointed by the Government, and four members nominated by the government departments which have an interest in and responsibility for the control, condition, or development of Port Phillip. These departments comprise the Crown Lands and Survey Department, Public Works Department, Soil Conservation Authority, and Town and Country Planning Board.

In addition to the Authority, the Act provides for a consultative committee to comprise members of the Authority together with representatives of other government and semi-government bodies, municipal councils, and other organisations having an interest in the area.

In its early years the Authority is seeking to establish information and data of the condition of the Port Phillip foreshores and of the present and future recreational needs of the public. Such information is a necessary prerequisite to any real assessment of the present capacity and ability of the area to meet the needs of a large and growing population. The following investigations are currently being carried out by the Authority:

1. a survey into the occupancy of, and buildings on, the foreshore;
2. a survey into the car parking space available on and within one mile of the foreshore ;
3. a survey into the existing condition of the foreshore beaches and inshore waters ; and
4. a beach usage and economic survey.

In addition the Authority is participating with the Melbourne and Metropolitan Board of Works, the Fisheries and Wildlife Department, and the Health Department in the Joint Environmental Study of Port Phillip Bay.

In 1968 the Government approved new legislation for the promotion and co-ordination of urban and regional planning at the State level and provided for the creation of regional planning authorities. The impact of the functions of these bodies will be significant to the Authority's role. Since that time a Geelong Regional Planning Authority and Western Port Regional Planning Authority have been established. The jurisdiction of these bodies, together with the planning responsibilities of the Melbourne and Metropolitan Board of Works, now embraces the whole of the foreshores on the Port Phillip area.

Western Port Regional Planning Authority

The Mornington Peninsula and Western Port Regional Planning Authority was established in 1969 as the first Regional Planning Authority formed under the provisions of the 1968 Amendment of the Town and Country Planning Act. The name of the Authority changed to Western Port Regional Planning Authority in August 1970.

The area covered by the Authority is 648 sq miles, embracing all of the Shires of Mornington, Flinders, Hastings, Phillip Island, and part of the Shires of Cranbourne and Bass.

The Authority was established to prepare and submit for approval a planning scheme for the region and for the carrying out of the approved scheme in that area. The Authority consists of twelve members, with two representatives from each of the six municipalities within the region and has formed technical advisory committees studying conservation, pollution, tourism and recreation, and industrial development to assist in the initial work of preparing a planning scheme for the region.

6

PRIMARY PRODUCTION

LAND SETTLEMENT AND IRRIGATION

Land utilisation

Introduction

The climatic conditions of Victoria (for details see pages 52 to 70), especially the varying incidence of rain, have resulted in the development of a wide range of farming practices, but at the same time have been largely responsible for restricting the number of enterprises on individual farms. Farming is generally carried out on a single enterprise basis, a major exception being the association of cereal growing and sheep grazing in the main wheat areas. Other exceptions occur on a less extensive scale with other forms of production.

Most farms in the State are owner operated and, with the exception of the larger holdings, the routine work on the farm is carried out by the farmer and his family, but at times of peak labour requirement, such as during shearing or harvest, additional labour is employed.

Considerable areas in the State are retained as forest reserves and for water catchments (see page 275).

The pattern of land use is more or less clearly defined in each of the statistical districts (see map on page 301). Thus the Mallee and the northern part of the Wimmera District are used almost exclusively for cereal production and sheep raising. The more intensive carrying of livestock in these districts has been made possible by a channel system of domestic and stock water supply originating in the mountainous areas of the Grampians to the south. The agriculture of the Northern District is based largely on irrigation and ranges from dairying to fruit production. The non-irrigated parts of the district are used for cereal and sheep production. In the Western, Central, North-Central, North-Eastern, and Gippsland Districts, the rainfall is heavier and more reliable; consequently, there is more diversity in land utilisation. In these districts, sheep grazing and dairying are the most important industries. Cultivation is generally limited. Some wheat is grown in the North-Eastern and Western Districts and there is some production of potatoes, vegetables, and other intensive cultivation crops on the more fertile soils in the higher rainfall parts.

Mallee District

This district is situated in the far north-west of the State and has a total area of 10·8 mill. acres. However, there are extensive areas in the north

and west which, because of water shortage and the liability to severe soil erosion, have not been settled, and the total area occupied is 7.7 mill. acres.

The soils of the district being light in texture are easily and cheaply cultivated and the main farming enterprise is cereal cropping, associated with wool, and prime lamb production. Wheat is the principal crop grown in addition to oats for grain, hay and grazing, and barley. Yields from cereal crops vary widely according to seasonal conditions. The following table gives the areas sown and average yields per acre for the season 1968-69:

MALLEE DISTRICT—CEREAL CROPS, SEASON 1968-69

Crop	Area	Average yield per acre
	acres	
Wheat	1,836,889	17.31 bush
Oats—grain	177,256	14.45 bush
hay	25,730	..
grazing	28,098	..
Barley	161,568	16.37 bush

In the past, lack of suitable pasture species was a major problem in pasture development, and the grazing was provided largely by native pastures, green cereal crops, and crop stubbles. The discovery and introduction into crop rotations of suitable medics has resulted in marked benefit to both crop production and grazing. The use of medics is now widespread in the district and has greatly improved the conditions for production of early prime lambs mainly for the Melbourne market. Dry land lucerne has also contributed to the vastly improved grazing afforded by the pastures.

In 1968-69 the district carried 1.7 mill. sheep and produced 12.7 mill. lb of wool in addition to the early lambs.

Irrigation areas located close to the Murray River, which marks the northern boundary of the State, produce most of the State's dried vine fruits and considerable quantities of citrus fruits.

Wimmera District

The Wimmera occupies the central western part of the State and has an area of 7.4 mill. acres, of which 6.2 mill. acres are occupied. Average annual rainfall in the north is about 16 inches per year, increasing in the south to 20 inches. The Grampians in the south of the district have a higher rainfall. This area is unsuited to agricultural production and is retained by the Crown as a watershed area and forest reserve.

There are wide variations in soil type, but the district includes substantial areas of fertile self-mulching clay loams, which are among the most productive wheat-growing soils in Australia. South and east of the Grampians the soils are podzols and in the south-west there is a large area of light-textured grey soils.

Wheat farming in association with fine-wool growing or prime lamb production is the main farm enterprise over the north and central Wimmera. Both climate and soils are suited to cereal cropping and yields obtained are high. In recent years the development of suitable strains of medics and

clovers has resulted in the inclusion of a pasture phase in crop rotations.

The table below shows the areas of the cereal crops sown and average yields for the season 1968-69:

WIMMERA DISTRICT—CEREAL CROPS, SEASON 1968-69

Crop	Area	Average yield per acre
	acres	
Wheat	1,293,617	28·69 bush
Oats—grain	284,904	33·04 bush
hay	29,893	..
grazing	12,977	..
Barley	86,173	24·09 bush

In addition to mixed sheep and wheat farming, there are extensive areas, particularly in the south and west of the district where rainfall is higher and pasture establishment easier, which are used solely for grazing. Almost three quarters of the sheep carried in the area are Merinos, and, although a number of early fat lambs come from the wheat growing areas, emphasis here is more generally on fine-wool production and breeding. In 1968-69 the district carried about 4·5 mill. sheep and produced 41·5 mill. lb of wool. As is the case in the Mallee, dairying and beef cattle production are only of minor importance.

Northern District

This is an area of plains country extending from the Central Highlands in the south to the Murray River in the north. The total area of the district is 6·3 mill. acres, of which 5·6 mill. acres are occupied for agricultural purposes. The soils vary from typical light Mallee soils in the north-west to fertile red-brown earths in the east. Average annual rainfall is 14 inches in the north-west and increases to 25 inches over the foothills of the ranges, which are on the eastern boundary of the district. The district includes the major irrigation areas of the State, and because of this several different farming enterprises are carried out.

Wheat growing is an important industry and because of climatic and soil differences, yields vary widely across the area. As in the other wheat producing districts, oat crops are an important feature in rotations and for grazing. In the 1968-69 season the following areas of cereal crops were sown:

NORTHERN DISTRICT—CEREAL CROPS, SEASON 1968-69

Crop	Area	Average yield per acre
	acres	
Wheat	607,436	23·96 bush
Oats—grain	195,493	25·31 bush
hay	68,238	..
grazing	16,855	..
Barley	73,958	20·97 bush

In 1968-69 the district carried about 4.2 mill. sheep, largely on wheat farms, and emphasis is on prime lamb production rather than fine-wool growing. Extensive irrigation has made it possible to establish highly productive perennial pastures which are used mainly for dairy production, but, in addition, the irrigation areas fatten sheep and lambs from the non-irrigated area in Victoria and New South Wales. The milk produced is mostly used for butter, cheese, and other manufactured products, but small quantities are used for city whole milk supply. In 1968-69 there were over 467,000 dairy cattle in the district.

Apart from dairying, irrigation has permitted the establishment of an important fruit growing industry. This area supplies fresh fruit to Victorian and interstate markets and also provides fruit, mainly apricots, pears, and peaches, for the important canneries operating in the district. Tomatoes are also produced on a large scale.

North-Central District

This district includes much of the Central Highlands area and the average annual rainfall is generally over 28 inches, but on the northern slopes it is as low as 22 inches. There is wide variation in topography and soils and much of the area is used for grazing sheep and beef cattle. However, the district is relatively small, containing only 2.9 mill. acres, of which 2.1 mill. acres are occupied and used for farming production.

Cereal cropping is unimportant, but potatoes in the volcanic hills east of Ballarat and pome fruits in the Harcourt area are the most important crops grown. Although dairy farms are scattered throughout the district, it is marginal for this form of production and emphasis is on sheep production associated with beef production. In 1968-69 the district carried about 2.4 mill. sheep and about 116,000 beef cattle.

North-Eastern District

The district has a total area of 7.2 mill. acres, but includes substantial areas of Crown lands, many of which are very steep and heavily timbered. The area occupied is 3.7 mill. acres. Annual average rainfall varies from 20 inches in the north-western corner of the district to well over 60 inches over the mountains. Almost all of the area used for rural production has a 20 to 30 inch rainfall.

Although cereal cropping is not general, there is an interesting development of ley farming based on subterranean clover pastures. However, areas concerned and production are small in relation to the State totals. The fertile river valleys are suited to specialty crop production, and in 1968-69, 9,300 acres of tobacco and small quantities of hops were grown in these areas. In 1968-69 the district carried 122,000 dairy cattle, mainly along the river valleys.

Prime lamb growing and crossbred wool production are the main sheep enterprises in the north-western and western parts of the district, but fine-wool growing is more common on the unimproved pastures along the Murray Valley and in the Omeo area. The district carries about 2 mill. sheep.

The North-Eastern District is an important beef cattle breeding and fattening area, and in 1968-69 over 330,000 head were carried. The cattle make good use of the rough pastures of the foothill country and the productive pastures of the flats make suitable fattening areas.

Western District

Most of the district falls in the 25–30 inches average annual rainfall belt, but an area north and east of the Otways is influenced by a rain shadow effect and the average annual rainfall is about 24 inches. In the Otway Ranges the average annual rainfall is as high as 70 inches. The soils of the district vary considerably in type and fertility. Basaltic soils cover the great bulk of the plains area. In the north the soils are similar to those of the southern Wimmera. The total area of the district is 8·8 mill. acres of which 6·8 mill. acres are occupied. There are substantial areas of forest reserve in the Otways, which are in the south-eastern part of the district.

The only cereal crop of importance grown is oats which are used as a fodder crop, cut for hay, or harvested for grain which is also used very largely to feed stock. The more fertile soils produce both potatoes and onions, and about 60 per cent of the State's onion acreage is located on volcanic tuff soils near Colac and Warrnambool. However, emphasis is placed on animal production, and climatically the district is well suited to the development of improved pastures. It is the major wool producing area of the State, and in 1968–69 there were 10·9 mill. sheep in the district. Almost half the total sheep population is Merino, and the fine-wool breeds—Merino, Polwarth, and Corriedale—make up nearly three quarters of the total sheep population. There are relatively few crossbreds, and prime lamb production does not have the same importance as in other districts. The Western District is an important beef cattle breeding and fattening area and in 1968–69 carried 462,000 head. Many of the State's leading stud herds are located in the district and in addition, many sheep properties carry beef cattle.

Dairying is an important industry and there is widespread distribution of dairy cattle. However, the main concentrations are in the following areas : Colac, Camperdown, Koroit, Allansford, and the Casterton–Coleraine region. A proportion of production is used as whole milk for town supply, but a considerable proportion of the State's processed milk products and butter is produced in the district, which in 1968–69 carried 439,000 dairy cattle.

Central District

Average annual rainfall varies from 24 inches within the rain shadow area, north of Geelong, to more than 35 inches over the ranges north and east of Melbourne. Topographically there is variation from plains country on the western side of Port Phillip Bay to the steep hill country north and east of Melbourne. There is also a wide variation in soil type and fertility. The total area of the district is 4·1 mill. acres and 2·7 mill. acres are occupied—the remainder being reserved as forest and watershed areas.

The climate is suited to the production of malting barley and in 1968–69 50,000 acres were grown—mainly on the plains to the west. Potatoes are grown in the Romsey–Ballarat area, on the Bellarine Peninsula, and the Koo Wee Rup Swamp.

Market gardening is important in the area extending from the south-eastern suburbs of Melbourne to the northern shores of Western Port, and also on the irrigation settlements near Werribee and Bacchus Marsh.

The district is the major producer of apples ; dessert types of pears and peaches and other stone fruits are also important. Orchards are located in the eastern metropolitan area, on the Mornington Peninsula, and near Bacchus

Marsh and Pakenham. Ninety per cent of the State's strawberry crop is grown in the Dandenong Ranges some 25 miles east of Melbourne.

In 1968-69 the district carried 2.4 mill. sheep and production is almost evenly divided between fine-wool growing and fat lamb production.

Beef cattle are grazed in conjunction with sheep over most of the area, but in the east they are run with dairy cows to produce vealers.

The major dairying area is in the east, and this forms part of the most important dairying area of the State. The area is an important supplier of whole milk for city supply and for butter and cheese manufacture. In 1968-69 there were 276,000 dairy cattle in the district. Pig production is also important.

Gippsland District

The total area of this district is 8.7 mill. acres, but the northern and eastern parts are mountainous and are reserved by the Crown. The area occupied is 4.4 mill. acres and the bulk of settlement is south of a line between Dandenong and Bairnsdale. Average annual rainfall varies from just under 22 inches within the rain shadow near Maffra and Sale to 60 inches and above in the highlands. An intensive irrigation scheme has developed around Maffra with highly productive dairying being important. Average rainfall over most of the settled areas in the west is sufficient for the development of highly productive perennial pastures. The soils range from poor sands to relatively fertile loams. The highly fertile alluvial soils of the river valleys are important sources of production.

With the exception of forage crops, cropping is not important in the area, although certain speciality crops, such as maize, beans, and potatoes, contribute substantially to the State's total production.

Gippsland is the most important dairying district of the State and dairying is by far the most important rural industry in the district. The highly productive pastures of the 30 to 40 inches average annual rainfall areas are the basis of the industry. The district supplies the greater part of the whole milk requirements for the Melbourne market, and in addition, plays an important part in the production of butter, cheese, and other processed dairy products. In addition, the dairy herds contribute to veal and beef production. The district carries about 526,000 dairy cattle. Pig raising is associated with dairy farming, and there are 65,000 pigs carried in the area.

In western and southern Gippsland sheep production is small and consists largely of fat lamb producing flocks run in conjunction with dairy cattle. In parts of the district east of Rosedale, fine-woolled sheep and beef cattle are valuable enterprises.

Alienation of land

The total area of the State is approximately 56,245,760 acres. On 31 December 1968 this comprised :

	Acres
Lands alienated in fee-simple	32,156,168
Lands in process of alienation	2,140,293
Crown lands	21,949,299
	<hr/>
Total	56,245,760
	<hr/>

Crown lands comprise :

Reserved forest	5,668,197
State forest and timber reserves (under Land Act)	150,088
Water reserves	315,494
Reserves in the Mallee	410,000
Other reserves	701,121
Roads	1,707,565
Water frontages, beds of rivers, lakes, etc., unsold land in cities, towns, and boroughs	3,844,606
Land in occupation under—	
Perpetual leases	142,788
Leases of former agricultural college lands	9,559
Other leases and licences	1,407
Temporary grazing licences and leases	(a) 5,481,939
Unoccupied	3,516,535
Total	21,949,299

(a) In addition, 74,702 acres of land listed under Reserves are held under grazing licences.

In the following table are shown the area of Crown lands sold absolutely and conditionally, and the area of lands alienated in fee-simple during the five years 1964 to 1968. A portion of the area conditionally sold reverts to the Crown each year in consequence of the non-fulfilment of conditions by the selectors. The lands alienated each year include areas selected in previous years.

VICTORIA—ALIENATION OF CROWN LANDS

Year	Area of Crown lands sold			Crown lands alienated in fee-simple	
	Absolutely, at auction, etc.	Conditionally to selectors	Total	Area	Purchase money
	acres	acres	acres	acres	\$
1964	3,896	23,055	26,951	76,587	406,554
1965	4,705	20,757	25,462	76,965	280,839
1966	27,135	12,508	39,643	53,136	420,313
1967	18,120	48,239	66,359	40,780	566,717
1968	17,880	27,191	45,071	57,014	509,413

Information regarding the Assurance Fund is found on page 683 of this book.

Government Assistance to the Farming Industry, 1964

Soil Conservation Authority

Functions

The Authority is responsible for the mitigation and prevention of soil erosion ; promotion of soil conservation ; the determination of land use to achieve these objectives ; and the provision of an advisory service to landholders for the efficient use and development of their land and the water resources available to them. To perform these functions, it conducts surveys and investigations into the nature and extent of soil erosion and provides technical advice and assistance to landholders regarding water resources. It

investigates and designs preventive and remedial measures, and carries out soil conservation works, experiments and demonstrations of soil conservation, and reclamation of eroded lands. Its major field activity with landholders is the development of group conservation schemes in which the Authority engages in conservation projects in conjunction with groups of farmers having contiguous properties.

Principal aspects of current research are concerned with conservation hydrology, soil, ecological and land use surveys, conservation agronomy, soil analyses, and conservation economics.

The Engineering Division is responsible for the design and construction of concrete erosion control structures, and promotion of efficient use of farm water supplies.

Extractive industries

The *Extractive Industries Act* 1966 requires field inspections and submission of reports within 30 days by the Authority to the Secretary of Mines of those localities within proclaimed Water Supply Catchments for which applications have been made to the Department of Mines for lease or licence to carry on an extractive industry. The Extractive Industries Act amended the Soil Conservation and Land Utilisation Act so that Authority approval must be obtained to extract soil, sand, or other material to a depth not exceeding 6 ft from areas aggregating in excess of one half acre. The Authority is responsible for the necessary inspection, reporting, and notifying of applicants whether permission is granted and, if so, the conditions to be observed.

Soil Conservation Authority, 1961-70 ; Land Utilisation Advisory Council, 1962, 1967 ; Destruction of Vermin and Noxious Weeds, 1963 ; Soil, Land Use, and Ecological Surveys, 1966 ; Farm Water Supplies, 1968 ; Group Conservation, 1969

Rural finance facilities

Introduction

Australia's national policy for permanent land settlement has been based on the family unit farm. Financially this has seldom been easy because even in the early days settlers found it difficult to earn enough to maintain themselves while they were clearing and developing their blocks. The conditions of purchase were made very easy but considerable aggregation of holdings took place because settlers failed. Later, some of these large estates were re-purchased, subdivided, and the smaller farms made available to settlers under closer settlement schemes.

After each world war these schemes were expanded to enable ex-servicemen to acquire farms under generous terms of settlement. In addition, money was advanced to returned servicemen to enable them to buy their own "single unit" farms. Soldier settlers were also granted loans for the purchase of stock, plant, and equipment.

The State set up a Rural Finance Corporation with wide powers for assisting rural industry. This was later merged with the Soldier Settlement Commission into a Rural Finance and Settlement Commission.

The Commonwealth Bank has had a Rural Credits Department for many years. Its main function is to provide seasonal assistance in the marketing of products. Thus it cushions the effect of large interim payments at harvest time and provides credit for goods awaiting shipment or in transit. The Bank also administers the Farm Development Loan Fund, and assists in

financing research. The Commonwealth Development Bank is interested in making loans available for the improvement of approved properties.

The trading banks have many farmer clients who require finance mostly on a relatively short-term seasonal basis. Numerous pastoral finance companies act as agents for farmers and frequently provide credit for the purchase of properties or for their improvement or for the purchase of livestock. The State Savings Bank also makes limited financial advances to farmers.

Rural Finance and Settlement Commission

The Rural Finance and Settlement Commission was established by legislation passed in 1961, which began to merge the former Soldier Settlement Commission and the Rural Finance Corporation. The new Commission carried out the functions of the previous authorities temporarily in two separate branches, namely, those of Settlement and Finance, respectively, until further legislation passed in 1963 completed the merger by removing this division and co-ordinating the functions previously performed by the two separate authorities.

Rural Finance Act

The Rural Finance Corporation was established in April 1950. Its functions, which have since been taken over by the Commission, include the making of advances through loans at low rates of interest to existing or proposed country industries, both primary and secondary. The Commission is also empowered to advance moneys to, or for the benefit of, any farmer for carrying into effect a composition or scheme of arrangement between him and his creditors. The Commission is also empowered under the Act to carry out special lending as Agent of the Treasurer. Under these Agency provisions, the Commission administers relief lending to members of the rural community in times of adversity such as bushfires, floods, and drought. (See also page 280.)

VICTORIA—RURAL FINANCE ACT: REVENUE, EXPENDITURE, ETC. (\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Revenue					
Interest	1,237	1,346	1,447	1,559	1,689
Other	21	34	30	42	23
Total revenue	1,258	1,380	1,477	1,601	1,712
Expenditure					
Administration	143	169	185	247	230
Interest	947	1,021	1,108	1,169	1,295
Sinking fund	53	56	59	61	66
Other	63	61	49	92	8
Total expenditure	1,206	1,307	1,402	1,569	1,599
Net surplus	52	73	75	32	113
Loans and advances outstanding at 30 June	22,388	24,113	25,123	27,641	27,330
Loan indebtedness to State Government at 30 June	21,050	22,128	22,881	24,451	27,527
Government agency advances made	428	260	252	3,144	3,447
Part III advances made	4,051	3,559	4,236	5,289	2,699
Government agency advances outstanding	1,096	1,215	1,353	4,291	6,412

General settlement

Before the end of the Second World War, the Commonwealth Government and various State Governments made arrangements for the settlement of discharged soldiers on the land as part of a general scheme of rehabilitation of ex-members of the Services. In 1945 the Victorian Government completed an Agreement with the Commonwealth Government. The State Parliament ratified the Agreement and also passed legislation constituting the former Soldier Settlement Commission. Soldier settlement in all States has now reached the stage where no further allocations of blocks are proposed.

Under the Victorian legislation soldier settlement was carried out under two separate schemes. First, there was the general settlement scheme where the Commission acquired freehold land or Crown land for subdivision and development into holdings for application by ex-servicemen. Such holdings were allocated on a competitive basis, having regard to the merits of all applicants. The number of ex-servicemen settled under this scheme totalled 3,293. Second, there was the single unit farm scheme, where ex-servicemen were granted loans up to a maximum of \$18,000 to assist them in the purchase of existing farms of their own choosing. Under this scheme 2,878 ex-servicemen were granted loans amounting to \$23,917,338.

The Soldier Settlement Act enabled the Commission to make advances to general settlers and single unit farm settlers to assist them in the purchase of stock, plant, equipment, and shares in co-operatives. For this purpose \$12,568,333 has been advanced to settlers and at 30 June 1969, \$12,504,561 has been repaid and \$31,944 has been written off, leaving an outstanding balance of \$31,828. In addition to its functions under the Soldier Settlement Act, the Commission, on behalf of the Commonwealth Government, administered that portion of the *Commonwealth Re-Establishment and Employment Act 1945*, which related to agricultural loans and allowances.

With soldier settlement in its final stages, the following tables set out the particulars of rural rehabilitation of ex-servicemen in Victoria as at 30 June 1969 :

VICTORIA—LAND ACQUIRED AND COST OF DEVELOPMENT, 1945 TO 1969

Particulars	Land acquired and total expenditure to 30 June 1969		Balance outstanding at 30 June 1969
	acres	\$'000	
Freehold land	1,193,171 } 51,536 }	39,448 }	\$'000 ..
Crown land		53,877 }	
Development and improvement of holdings	Total realisations to 30 June 1969		
Sales of land not required for soldier settlement	65,046	(a) 3,303	(a) 277

(a) Sale price of land not required for settlement; balance outstanding represents instalments not yet due where terms were given to purchasers who are not necessarily ex-servicemen.

VICTORIA—ADVANCES TO EX-SERVICEMEN

Act	Total advances to 30 June 1969		Advances outstanding at 30 June 1969	
	No.	\$'000	No.	\$'000
Soldier Settlement Act—				
Advances for settlers' lease liability (a)	3,033	57,403	2,114	35,720
Advances to assist in acquiring and developing single unit farms	2,878	23,917	1,143	7,744
Advances for improvements, stock, implements, etc.	(b)	12,318	52	32
Advances for shares in co-operatives	327	250		
Commonwealth Re-establishment and Em- ployment Act—				
Advances to assist rehabilitation in farming industry	2,970	3,594	97	15

(a) The total number of settlers allocated holdings is 3,293 which includes 243 holdings re-allocated and 17 holdings disposed of.

(b) Not available.

Other land settlement

The *Land Settlement Act* 1959 extended the functions of the then Soldier Settlement Commission in that, under such Act, the Commission was given authority to administer a new land settlement scheme to cater for those men wishing to become farm owners—many of whom were too young to have been ex-servicemen and thus eligible for soldier settlement. The scheme generally is based on the same principles as the scheme for soldier settlement—the main differences being the interest rates payable and the basis of determining the capital liability of the settler for the farm. There is no provision in the Act for advances to buy single unit farms. The Commission is given authority to purchase privately owned land or set apart suitable Crown land for development and subdivision.

Any male British subject over the age of 21 years is eligible to apply for land made available, but the actual allocation is made on a competitive basis, having regard to a number of factors laid down in the Act, including the applicant's experience in farming and prospects of success. A feature of the legislation is that the farms are either brought to, or within sight of, production before allocation. Further details about the general principles of this legislation will be found on pages 494 to 496 of the *Victorian Year Book* 1963.

Up to 30 June 1969 the land being developed for allocation under this scheme has been on five developmental projects. These are at Heytesbury near Cobden, Yanakie on Wilsons Promontory, the East Goulburn Project near Shepparton, an irrigation project at Rochester, and Palpara in the south-western corner of Victoria.

The Yanakie and East Goulburn schemes have now been completed and all farms allocated to settlers.

The demand for all holdings allotted to date has been exceedingly keen and the 513 farms allocated (342 dairy farms under rainfall conditions, 92 irrigation dairy farms, and 79 soft fruit orchard holdings) attracted nearly 12,600 applications.

At 30 June 1969, the position of other land settlement in Victoria under the *Land Settlement Act* 1969 was as follows :

VICTORIA—OTHER LAND SETTLEMENT, 1959 TO 1969

Particulars	Land acquired and total expenditure to 30 June 1969		Balance outstanding at 30 June 1969	
	acres	\$'000	\$'000	
Land acquired—				
Freehold land purchased	24,425	2,068	8,964	
Crown land	126,752			
Development and improvement of holdings	..	24,482		
	Total realisations to 30 June 1969			
Sales of land not required for settlement	acres	\$'000		
	6,298	(a)639	(a)313	
	Total advances to 30 June 1969		Advances outstanding at 30 June 1969	
Advances to settlers under the Land Settlement Act	No.	\$'000	No.	\$'000
Liability of settlers granted purchase leases	(b)	1,444	78	141
	444	13,997	443	13,451

(a) Sale price of land not required for settlement; balance outstanding represents instalments not yet due where terms were given to purchasers.

(b) Not available.

Relief lending

In addition to its ordinary lending under the Rural Finance Act, the Commission is empowered to carry out special lending as Agent of the Treasurer. Under these Agency provisions it administers relief lending to the rural community in times of adversity such as bushfires, floods, and droughts. It was directed to do this during the 1967–68 drought. Special funds were provided to Victoria by the Commonwealth for various drought relief measures including lending to drought affected farmers for carry-on and re-stocking purposes where the farmers had exhausted their capacity to borrow through normal sources of finance. Advances were made at an interest rate of 3 per cent per annum with a repayment term of up to seven years. As at 30 June 1969 loans totalling \$5,802,495 had been made in 1,691 cases.

Other forms of drought relief carried out with the special funds provided by the Commonwealth were subsidies on the transport of fodder and water to farms and on the transport of livestock to agistment and later back to the home farm; provision of emergency communal water points in a number of country areas; and grants to municipalities and Government authorities to allow for works undertakings to alleviate unemployment arising from the drought.

In addition the Victorian Government passed legislation which allowed subsidies to be paid to farmers for purchasing fodder to maintain livestock and to buy wheat on terms under which farmers could use it as stock food. As at 30 June 1969 \$3,843,062 had been paid out. In addition, 756 farmers were sold 371,345 bushels of wheat on terms, with rebates amounting to \$125,041.

*Other rural finance facilities**State Savings Bank of Victoria*

State Savings Bank loans for rural purposes are available on the security of first mortgage over freehold property. Loans are repayable over periods varying between fourteen and a half and twenty years. Interest is charged at the rate ruling from time to time—at present ranging from 7 to 8·25 per cent per annum depending on the amount of the loan and whether the property is worked by the applicant. The maximum loan must not exceed two thirds of the value of the property.

Particulars for the year ended 30 June 1969 may be found on page 664.

Reserve Bank of Australia—Rural Credits Department

The Rural Credits Department was established in 1925 as a department of the Commonwealth Bank of Australia, now known as the Reserve Bank of Australia. Its function is to provide finance to statutory marketing boards and similar authorities and to co-operative associations of primary producers. Advances are used by borrowers principally for making payments to growers for their primary produce pending its sale and to finance marketing expenses which in some cases include processing and packing of the commodity.

Finance for the marketing of wheat, and to a lesser extent, dairy products, has comprised the major portion of credit provided, but the Department's operations have also covered such commodities as barley, cotton, canning fruits, dried fruits, meat, eggs, and superphosphate.

Interest rates since 8 August 1969 have been 5 per cent per annum, if against the security of a Commonwealth or State Government guarantee; and 5·25 per cent per annum against other securities.

Grants have also been made by the Rural Credits Development Fund for research and extension work to assist the development of primary industries. The Fund is financed by one half of the annual net profits of the Rural Credits Department.

Farm Development Loan Fund

The Farm Development Loan Fund was established in 1966 to provide loans to primary producers, at preferential rates and conditions, for drought relief and farm development purposes. Loans are made by the trading banks from their Farm Development Loan Fund Accounts with the Reserve Bank, and are designed to supplement other loans available from the banking system.

Commonwealth Development Bank

A brief outline of the functions of the Commonwealth Development Bank, together with particulars of rural loans outstanding at 30 June 1969, may be found on pages 658–9. Rural loans are made for a variety of purposes, e.g., clearing, fencing, pasture improvement, farm water conservation, erection of essential farm buildings, and the basic stocking of properties. Other aspects of assistance granted include aid to successful applicants in government sponsored rural development schemes and land ballots. Special attention is also given to providing finance to applicants opening up new areas. Particulars of rural loans approved in Victoria during the year ended 30 June 1969 are given in the following table:

VICTORIA—COMMONWEALTH DEVELOPMENT BANK
OF AUSTRALIA : RURAL LOANS APPROVED, 1968–69
(\$'000)

Type of rural activity	Value of rural loans approved
Sheep	1,171
Dairying	1,159
Cattle	1,192
Wheat and other grain crops	208
Fruit	333
Poultry	241
Other	356
Total	4,660

The average loan approved for rural purposes during 1968–69 was \$12,263.

Advances by major trading banks

The extent of rural lending in Victoria by the Commonwealth Trading and other major trading banks is illustrated by the following table which shows bank advances to borrowers outstanding at the end of June for the five years 1965 to 1969 :

VICTORIA—COMMONWEALTH TRADING BANK AND PRIVATE
TRADING BANKS : BUSINESS ADVANCES OUTSTANDING TO
RURAL INDUSTRY BORROWERS
(\$m)

Industry of borrower	Amount outstanding at the end of June—				
	1965	1966	1967	1968	1969
Sheep grazing	45.6	49.2	61.5	76.4	82.2
Wheat growing	12.2	15.2	18.6	27.5	26.5
Dairying and pig raising	31.2	31.9	40.8	51.0	54.2
Other rural	21.2	22.9	29.8	38.1	44.7
Total	110.2	119.2	150.7	193.1	207.6

Advances to rural industry borrowers represented 23.0 per cent of trading banks' business advances outstanding at the end of June 1969, and 18.5 per cent of all advances outstanding. The maximum rate of interest on bank overdrafts at 30 June 1969 was 7.50 per cent per annum but the average rate on rural loans would probably be below this level.

Advances of pastoral finance companies

The following table shows total rural advances outstanding to pastoral finance companies at the end of June for the five years 1965 to 1969 :

VICTORIA—RURAL ADVANCES (a)
OF PASTORAL FINANCE COMPANIES

(\$m)

At end of June—	Advances outstanding
1965	43·9
1966	40·9
1967	50·2
1968	54·8
1969	65·9

(a) Held by branches located in Victoria which is not necessarily the State of residence of the borrower.

Improvement purchase leases

Crown land can be made available for application under improvement purchase lease conditions and applications received are dealt with by a Local Land Board.

The essential conditions of an improvement purchase lease are as follows :

1. That the lessee will make such land improvements within the first six years as are specified. Land improvements means the clearing, draining, or grading of land, the preparation of land for the sowing of crops and pasture, and soil improvement and maintenance.
2. That the lessee will commence to carry out the land improvements within one year and will complete one quarter within three years.
3. That the lessee will not sell, assign, or part with possession of the leasehold during the first six years.
4. That the lessee will not mortgage his interest in the leasehold during the first six years without first obtaining the consent of the Department.
5. That the lessee will reside in person on or within twenty-five miles of the leasehold during the first six years.

The purchase money is payable in twenty annual instalments and on satisfactory compliance with the conditions of the lease and on payment of the balance of purchase money and fees, a Crown grant will be issued at any time after the first six years except where the lease contains a soil erosion prevention condition. The period is then twelve years or such further period as is provided in the lease.

Since the inception of improvement purchase leases in 1956 and up to 31 December 1968, 845 allotments comprising 281,279 acres of Crown land have been proclaimed available for settlement.

Water supply and land settlement

History

For practical purposes, the history of water supply in Victoria—outside the metropolitan area—can be taken up in the early 1880s when the miners who had left the goldfields to settle on the northern plains began to assess after a few exceptionally favourable years the true nature of the arid lands which they were pioneering. It was their agitation which led to the *Irrigation Act 1886* providing for elected local trusts to construct water supply works with Government loan funds.

Between 1886 and 1900, about ninety Trusts were set up under this Act, but for a variety of reasons they all proved a failure. By 1900 the need for a State-wide approach to the water supply problem was apparent and in 1905 the Water Act was passed. This revolutionary Victorian Act, which has since provided the basis for practically all of the rest of Australia's water supply development, had three main features :

1. it abolished all but one of the Trusts (Mildura) and wrote off their debts ;
2. it set up the State Rivers and Water Supply Commission to develop and control water supply and conservation throughout the State, with the exception of the Melbourne metropolitan area ; and
3. it completed the nationalisation of water resources commenced in the 1886 Act and vested in the Crown the right to the use and control of the water in the State's rivers, streams, etc., thus avoiding the litigation which has clouded the history of water supply elsewhere.

Control of surface waters and other functions

One of the State Rivers and Water Supply Commission's main functions is to exercise the Crown's rights to the control and use of rural surface waters, and to act on any infringement of these rights. The Crown's interest is to see that limited resources are distributed fairly and productively between users. This is done by licences and permits for private diversions from streams, and by the apportionment of resources to authorities constituted under the Water Act.

The Commission also investigates water resources and plans works. It operates 390 gauging stations on streams and publishes the information obtained. Records of river flows date back to the 1860s. Investigation and planning require surveys, and there are thirty-five surveyors working from ten centres. Other Commission investigatory services are its Testing Laboratory and Irrigation Research Section at Head Office and its Hydraulic Research Station at Werribee.

Ten year plan

The Premier announced a comprehensive programme of storage works in July 1963, the construction of which would be spread over the period 1964-74. The estimated cost in 1964 was \$77m ; the equivalent in 1970 would have been \$110m. The original estimate included one quarter the share of Chowilla (\$11m 1964 base) and the second stage of Buffalo, estimated cost (\$56.5m).

The projects included in the original programme were :

Devilbend Reservoir	Complete
Lake Bellfield	Complete
Buffalo Dam—first stage	Complete
Corop Lakes	Complete
Tarago Dam	Completed to about 20,000 acre feet, Enlargement to about 30,000 acre feet will be carried out 1970-71
Chowilla (one quarter share)	Deferred
Nillahcootie	Complete

Lake Merrimu	First stage complete except for minor works. Second stage programmed 1971-73
Lake Mokoan	Became available for storage August 1970. Completion expected in 1971.
Buffalo—second stage	Deferred. Dartmouth proposal will take priority.

The original programme has been modified by the proposal to construct Dartmouth rather than Chowilla with additioned output available to Victoria and New South Wales as well as to South Australia. The construction of Dartmouth, if ratified by all Parliaments concerned, would make the inclusion of the second stage Buffalo project unnecessary for some years. Apart from the programmed storage at Chowilla on the River Murray, and the second stage Buffalo Dam, the last project to complete the 10 year plan, Lake Mokoan, was ready to receive diversions from the Broken River in 1970.

The Government has approved a further works programme which provides for the commencement of the following projects :

<i>Project</i>	<i>Estimated cost</i>
Lake Merrimu (second stage)	\$2.5m
Millewa Domestic and Stock Scheme—replacement of open channels by pipelines	\$2.5m
Lake Howitt Project (Mitchell River)	\$5.0m
Little Scotland Project (Jacksons Creek)	\$3.0m
Dartmouth Dam (one quarter share River Murray Commission Project)	\$57.0m
South Otway Pipeline	\$3.0m
Bungal Dam (West Moorabool River)	\$4.75m

Construction of the Millewa scheme, the south Otway Pipeline and the Bungal Dam has already begun.

These works will provide additional security for existing rural developments and will allow the fast increasing urban demands in areas to the west of Melbourne and in the Mornington Peninsula to be met.

Commonwealth aid project

A storage on the King River (Lake William Hovell) has received approval from the Commonwealth Government and a grant of \$4m will be made available for its construction. Work began in April 1969 and excellent progress has been made. It is expected that the 10,000 acre feet storage will fill during the winter of 1971.

The purpose of the dam is to provide assured supplies for irrigation, particularly of tobacco, in the King River Valley and will ultimately provide additional urban supply to the City of Wangaratta.

Groundwater Act

The Groundwater Act, which was passed in the autumn session of Parliament 1969 and proclaimed in September 1970, enables the Mines Department and the Commission to establish the administrative procedures necessary for the investigation, conservation, and utilisation of the groundwater resources of Victoria.

The Act gives the Mines Department authority to investigate the State's

groundwater resources so that the State's total water resources and their proper use can in the future be considered by the Government.

Substantial progress has been made in the appointment of staff to administer the Act. The Groundwater Appeal Board has been appointed and will serve to protect the rights of the individual in the equitable distribution and use of groundwater resources.

The Mines Department is required to record the construction details of every bore in the State and the Commission will administer the abstraction of groundwater by a licensing and recording system. To avoid unnecessary inconvenience to groundwater users the administrative procedures of the two Departments concerned will be dovetailed to ensure a minimum time-lapse in dealing with an application to use groundwater.

This is an Act which will rank in historical importance with the Irrigation Act of 1886 and the Water Act of 1905, which together laid a sound foundation for the exploration and development of Victoria's surface water resources.

Irrigation

Most irrigation is carried out in districts directly controlled by the Commission, although there is an increasingly large proportion of "private diverters", irrigators who are authorised to take water from streams, lakes, etc., but who do not come within the boundaries of an irrigation district. (See private irrigation below.)

A feature of the districts is the system of "water rights". Under this system a certain quantity of water is assigned to each district and allotted to the lands commanded and suitable for irrigation. The irrigators pay a fixed sum for this water each year, whether they use it or not, and also pay a general rate. The irrigators get this water right in all except the very driest years and they can also buy water in excess of the water right in most seasons. The water right system assures irrigators of a definite quantity of water each year, and the Commission can rely on fairly constant revenue to meet the cost of district operation. Water usage varies according to seasonal conditions and the water right system provides a constant minimum income.

A feature of Victorian irrigation policy has been the development of closer settlement by intensive irrigation, that is, by allocating relatively large quantities of water per holding instead of limiting the allocation of water to a portion of each holding. This has meant that Victorian irrigation is predominantly devoted to dairying, fruit, and vegetables, rather than to sheep raising. The advantage of intensive irrigation is that much higher returns are available from a given quantity of water and, consequently, a much greater rural population is supported.

Private irrigation

Private irrigation by diversion of water from rivers, lakes, etc., has increased in recent years. From 1942-43 to 1968-69, the area watered privately increased from 23,462 acres to 194,241 acres, the latter being 14 per cent of the total area irrigated. The number of private diversions authorised during 1968-69 was 13,249 and the water delivered was used mainly to produce annual and perennial pastures and fodder, as well as potatoes, tobacco, hops, citrus, and cotton. About half the area privately watered is supplied from streams regulated by storages, the other half being

VICTORIA—AREA OF SYSTEMS AND LANDS IRRIGATED, AND WATER DELIVERED, 1968-69

System or District	Total area within constituted district (acres)	Area irrigated (acres)							Water deliveries acre ft	
		Pastures		Lucerne and sorghum	Vineyards	Orchards	Market gardens	Others		Total
		Native	Sown							
River Murray System—										
Torrumbarry System (a)	382,162	23,097	233,038	13,026	4,272	1,751	815	14,913	290,912	271,542
Murray Valley Area	301,888	87	106,693	9,484	260	6,634	575	542	124,275	178,990
Pumped Supply Districts (b)	80,583	235	364	1,189	39,830	3,026	163	1,156	45,963	128,021
Total River Murray	764,633	23,419	340,095	23,699	44,362	11,411	1,553	16,611	461,150	578,553
Goulburn-Loddon System	1,352,081	21,103	488,347	36,924	328	24,624	4,554	33,248	609,128	716,798
Macalister District	130,501	2,202	61,569	652	..	..	160	90	64,673	96,126
Werribee-Bacchus Marsh	16,339		5,677	927		641	4,177	6	11,428	20,626
Other northern systems (c)		472	12,478	1,220	1	2,910	495	47	17,623	26,204
Other southern systems (c)							1,457	287	1,744	
Private diversions (c)		3,212	139,284	20,092	3,000	6,796	14,966	6,891	194,241	354,053
Grand total	(d) 2,263,554	50,408	1,047,450	83,514	47,691	46,382	27,362	57,180	1,359,987	1,792,360

Source : State Rivers and Water Supply Commission.

(a) Includes 12,721 acres irrigated by private diversion.

(b) Including First Mildura Irrigation Trust (17,045 acres irrigated), supervised by the Commission.

(c) Not available.

(d) Incomplete.

from streams wholly dependent on rainfall. Many private storage dams are being built, frequently at substantial cost, on individual properties to insure against low flows in the streams normally used.

Major storages devoted principally to irrigation are shown in the following table :

VICTORIA—MAJOR IRRIGATION STORAGES

River	Name	Capacity	Principal system or district served
		acre ft	
Goulburn	Lake Eildon	2,750,000	Goulburn-Loddon
	Waranga Reservoir	333,400	" "
	Greens Lake	26,550	" "
	Goulburn Reservoir	20,700	" "
Campaspe Loddon	Lake Eppalock	252,860	" "
	Cairn-Curran Reservoir	120,600	" "
	Tullaroop Reservoir	60,000	" "
			Maryborough town supply; private diverters; and Goulburn-Loddon System
Broken	Lake Nillahcootie	32,260	Broken River Valley; private diverters
Murray	Lake Hume	(a) 1,240,000	Murray
	River Murray Weirs	(a) 111,575	"
	Kow Swamp	40,860	"
Macalister Ovens	Lake Glenmaggie	154,300	Macalister
	Lake Buffalo	19,500	Wangaratta town supply; private diverters; Ovens Valley
Werribee	Pykes Creek Reservoir	19,400	Bacchus Marsh District
	Melton Reservoir	15,500	Werribee District
	Lake Merrimu	15,000	Bacchus Marsh District
		(b) 5,212,505	

(a) Victoria's half share under the River Murray Agreement, subject to certain obligations to South Australia.

(b) In addition to the storages named, there is a system of natural lakes in the Kerang-Swan Hill Area forming part of the Torrumbarry System. The Coliban River storages are used for both irrigation and town supply around Bendigo and Castlemaine. A limited irrigation area is also supplied from the Wimmera-Mallee System.

Town supplies

The Commission operates major works for town water supplies outside the Melbourne metropolitan area—the Coliban System supplying Bendigo, Castlemaine, and other towns in that area; the Mornington Peninsula System supplying towns extending from Longwarry to portion of Dandenong, the bayside towns from Seaford to Portsea, the Western Port towns from Hastings to Flinders, and the township of Wonthaggi; the Bellarine Peninsula System supplying water to the towns extending from Portarlington to Anglesea; and the Otway System supplying water from the Otway Ranges to Camperdown, Cobden, Terang, and Warrnambool. The total towns supplied by the Commission are 148 and their total population is 235,380. (For other town supplies and sewerage see page 219.)

Water supply to Western Port

Industrial development

The quiet orchard and grazing district of Western Port is being transformed into one of Australia's leading industrial centres. It is situated on the western shore of Western Port, 40 miles south-east of Melbourne.

Three industries are already established—the B.P. Refinery at Crib Point, Esso-BHP and Cresco Fertilisers at Long Island Point—but the largest will be the John Lysaght steelmills at Long Island Point which expect, by 1972, to employ 1,700 persons.

Water supply

These new industries, especially the steel works, will need large quantities of water. The Commission has already constructed works more than adequate to meet the estimated requirements of some 440 million gallons per annum to 1972.

Water for Western Port comes from the Tarago and Bunyip Rivers which rise in the hills 50 miles to the north-east and from Tarago Reservoir 12 miles north of Warragul. It is then delivered by way of the Beaconsfield Reservoir to the Bittern and Devilbend Reservoirs through the Cranbourne and Bittern pipelines. To supply Bittern-Crib Point, including the B.P. Refinery, a major portion of the existing main from the Bittern pipeline was replaced with a larger main in 1964. The remaining section was being duplicated in 1969 at an estimated cost of \$125,000.

However, the supply to Long Island Point and Hastings was a much bigger undertaking. About \$0.5m were spent on works completed by June 1969. This involved the construction of the 15 million gallons Western Port Storage and the installation of 4 miles of a 24 inch diameter pipeline from the Bittern pipeline to Long Island Point. The Western Port Storage maintains a continuous water supply to the area if the Cranbourne and Bittern pipelines are shut down for maintenance. At times of peak demand, water can be pumped from Devilbend and Bittern Reservoirs to Hastings, Long Island Point, and Crib Point.

A new stage will be reached when industrial and domestic demand reaches 8,000 million gallons a year. This will depend to a large extent on the future expansion of the steelworks. Additional works will then be constructed by the Commission to supply water to the area.

Devilbend and Tarago Reservoirs

Until 1964, water supplies for the Mornington Peninsula and the Western Port area were mainly obtained from the Bunyip and Tarago river catchments by aqueducts leading from a small weir on each stream. As these streams are very reliable, no major storages were required for the system, apart from the 3,400 acre ft storage at Lysterfield, which has its own catchment. However, as the rapidly increasing growth of population and industry in the Peninsula was expected to tax the existing water supplies fully within a few years, the 1963 Ten Year Water Conservation Plan provided for two major storages to meet this expansion. These now play an important part in the water supply system for Western Port.

The first of these, the 12,000 acre ft off-stream Devilbend Reservoir, was completed in 1964. This storage accommodates the winter flows from the headwaters for distribution during times of peak demand in the summer months. The second, the 20,000 acre ft Tarago Reservoir completed in 1968, now stores surplus winter and spring flows in the Tarago River. In conjunction with the duplication of syphons along the existing Tarago aqueduct to raise its effective capacity from 16 to 32 cu ft per second, and a new pumping station on the edge of the reservoir, the new storage

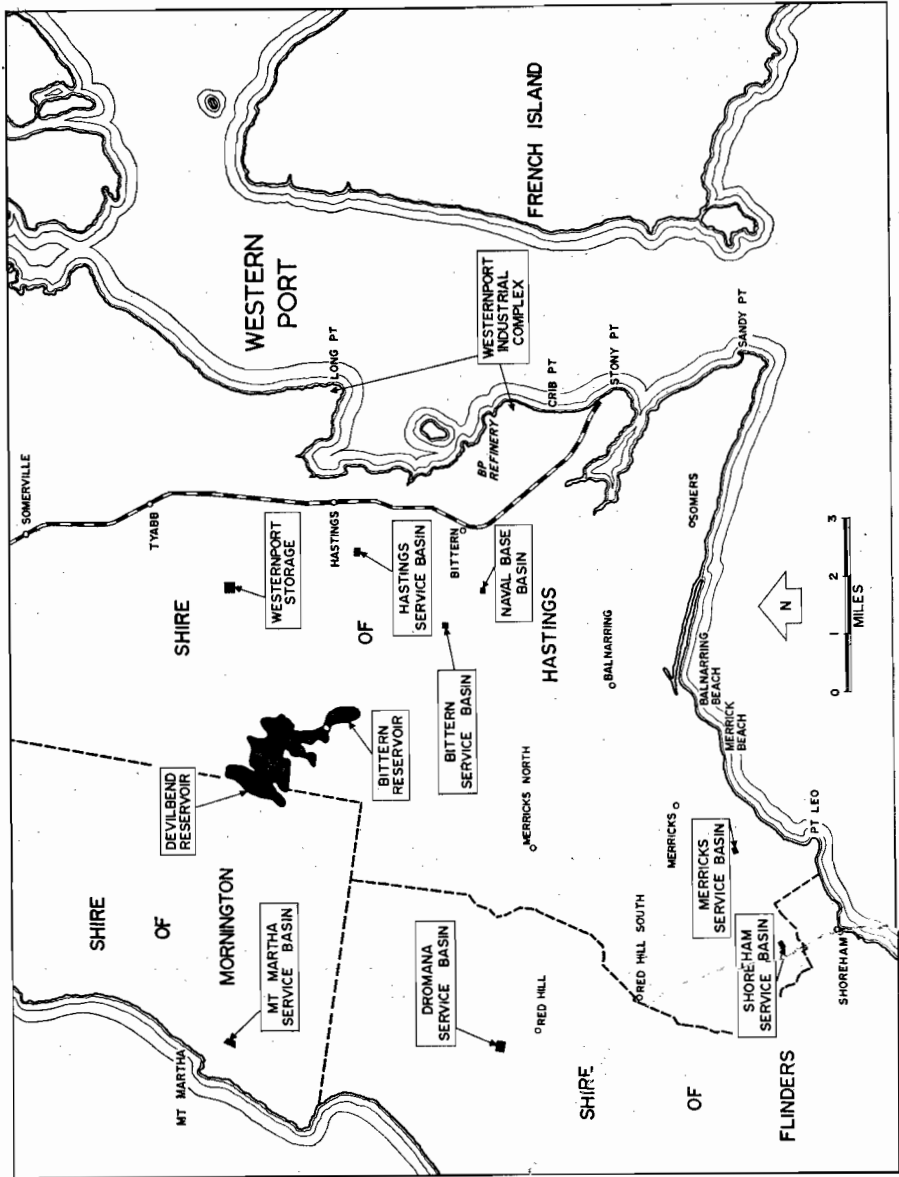


FIGURE 6. Western Port water supply.

enables additional water to be supplied to the Peninsula during periods of low river flow.

Finance

Acting as a Government authority, the Commission constructs its works with funds provided for the purpose by Parliament, amounting at 30 June 1969 to \$316m including contributions by the State of Victoria towards works carried out for the River Murray Commission. A further \$77m of Government loan moneys has been provided for expenditure by local

authorities under the supervision of the Commission. In recent years the rate of expenditure on construction of State works has been about \$13m annually, and the Commission also supervises the expenditure of about \$5.5m annually by local authorities.

The Commission administers, supplies water to, and collects revenue from nearly 120 separate districts, each of which is run financially as a separate undertaking. Revenue from its ten irrigation districts exceeds \$5m; from its urban districts about \$2.5m; from its ten rural waterworks districts about \$1m; and from its three flood protection districts about \$100,000; the total annual revenue, including other sources, is nearly \$9.2m.

Administration

The Commission is served by a decentralised organisation designed to carry out diverse functions all ultimately related to water. Central administrative, engineering, and clerical functions are carried out by a staff of 500 in the Head Office at Armadale. At the many country centres throughout the State there are 1,050 other officers and some 1,750 casual employees. Together they are engaged in planning, building, maintaining, and operating waterworks vital to the prosperity of rural Victoria.

Irrigation, 1962; Wimmera-Mallee Region Water Supply, 1963; Flood Protection, River Improvement, and Drainage, 1963; Underground Water, 1964; Water Supply in Victoria, 1964; Goulburn-Murray Irrigation District, 1965; Spray Irrigation in Agriculture and Dairying, 1965; Private Irrigation Development, 1966; Water Research Foundation, 1966; River Improvement, 1967; Rivers and Streams Fund, 1967; Dandenong Valley Authority, 1968; Water Conservation, 1969

AGRICULTURAL EDUCATION, RESEARCH, AND EXTENSION SERVICES

Tertiary agricultural education

Agricultural colleges

The legislation of 1884 which provided for the establishment of agricultural colleges set up a Council of Agricultural Education for their administration. Its revenue was derived from the rentals of endowment lands, sales of farm produce, and student fees, and it continued to administer the Colleges until 1944 when, with the passing of a new Agricultural Colleges Act, control was transferred to the Department of Agriculture in which a new Division of Agricultural Education was established. This move has provided adequate finance for maintenance and capital expenditure, the latter including a complete rehabilitation programme for both Dookie and Longerenong Agricultural Colleges in the period from 1959 to 1969.

The main purpose of the Colleges is to train agricultural technologists in the basic technical and scientific principles underlying all aspects of agriculture. Lectures on all topics are complementary with demonstrations, tours, laboratory work, and practical farm work, the latter being given on large farm areas attached to each College—6,048 acres at Dookie and 2,386 acres at Longerenong. Although the emphasis is placed on training technologists to assist in agricultural research and extension, intending farmers will gain a sound technical and scientific background to enable them to make use of modern agricultural and economic developments in operating their own properties.

In 1966 a revised syllabus was introduced at Dookie and Longerenong and after successful completion of the three year course, students gain a Diploma of Agricultural Science. The minimum entrance standard is a pass in five subjects including English and Chemistry at the Leaving or Leaving technical examination. In practice, however, it is found that most students have completed one year at Matriculation level.

The development of post-secondary education in all technical fields which has taken place since 1967 has made it desirable that the agricultural colleges raise the entrance standard to the Matriculation level, as has been done in other Australian States. The Colleges would then offer an Associate Diploma in Agricultural Science, but it is anticipated that this will not be effected before February 1971. The opening of a third agricultural college at Glenormiston will provide a two year course in production and management for the future practising farmer.

Short intensive courses for farmers, farmers' sons, and others engaged in rural pursuits are provided at Dookie Agricultural College.

In 1967 the three year course for the Diploma of Horticultural Science was introduced at the Burnley Horticultural College, with the same prerequisite entrance requirements as for the agricultural colleges. This replaced the Diploma of Horticulture course introduced in 1958. The new course is comprehensive, giving tuition and practical experience in fruit and vegetable production, ornamental horticulture, nursery management and landscape design, as well as training in the basic physical, biological, and applied sciences.

Part-time evening classes in horticultural, agricultural, and associated science subjects are also conducted at Burnley. The Agricultural Education Division also administers the Government grant to the Victorian Young Farmers.

University of Melbourne School of Agriculture

The Faculty of Agriculture was set up originally by the *Agricultural Education Act* 1920, which provided for permanent staff, for a building, and for the employment of graduates as scientific officers in the State Public Service. (There had been less permanent arrangements for teaching agriculture in the University earlier in the century.) The first full-time professor took up his appointment in 1926.

The primary purpose of the four year University course has been to give all students a common basic training in applied biology and agricultural economics. The first year is devoted to pure science subjects. This is followed by three years in which the scientific principles upon which agriculture is based, and their application to the practice of agriculture, are presented. The subjects of the later years include more advanced chemistry and biochemistry, plant physiology and pathology, soils, microbiology, genetics, animal physiology and husbandry, agronomy, economics, and land utilisation. The students in Agricultural Science also attend courses in engineering subjects, while a full-time degree in Agricultural Engineering is conducted elsewhere in the University.

The second year of the course is spent in residence at the University's field station at Mount Derrimut (near Deer Park). This is a property of 800 acres on which the students are shown the regular farm operations and live through a farming year, while spending their mornings on regular

lecture classes and coming to the University of Melbourne for one day a week.

Since the establishment of the Faculty of Agriculture almost 1,000 graduates have entered the profession. A quota of seventy is now placed on the numbers in the first year course, and the number of graduates is about fifty per annum. There are now twenty-four students working for higher degrees (M.Agr.Sc. and Ph.D.) either at the University or at Mount Derrimut. Substantial buildings have been established at Mount Derrimut from various industrial research funds for the study of beef and dairy cattle, pigs, poultry, sheep and wool, and wheat.

Further reference, 1969

Research Stations of the Victorian Department of Agriculture

Agricultural research began in Victoria more than 100 years ago with the establishment of an experimental farm at Royal Park by the Port Phillip Agricultural Society. The venture failed but, after the Department of Agriculture was formed in 1872, other experimental farms were established in the country at Rosedale, Whitfield, Wyuna, and Rutherglen. However, agricultural research as it is known today really dates from 1912 with the establishment of the State Research Farm, Werribee and the Rutherglen Research Station. At present, the Department owns seventeen research stations covering some 10,000 acres. Strategically located throughout the State, these research stations are equipped to conduct research on a wide variety of farming problems. The work is supported by a large number of experiments which are conducted on farms.

State Research Farm, Werribee

The State Research Farm, Werribee, has always been the central wheat and oat breeding station for Victoria and about 95 per cent of the wheat acreage is now sown to Werribee-bred varieties. The Alan Raw Laboratory, opened in 1965, provides modern facilities for this experimental programme. Irrigated pastures have also been closely studied at the Farm and the research findings have become the basis of irrigation farming in Victoria.

In 1939 a School of Dairy Technology was set up to train factory operatives and conduct research on cheese and butter. Now known as the Gilbert Chandler Institute of Dairy Technology, it has some of the best research and teaching facilities for this work in Australia.

Since 1940 plant breeding work has also been expanded to include such crops as barley, vegetables, tobacco, linseed, and pasture plants.

The S.S. Cameron Animal Research Laboratory is the headquarters for the Farm's livestock research programme. Organised animal research began at the Farm in 1944 with artificial breeding of cattle the first project. Later work also produced the HYPAR (hysterectomy produced artificially reared) process to breed pneumonia-free pigs. Independent units on the Farm include the Tractor Testing Station, a joint project of the Victorian and Commonwealth Governments, and the clinical centre of the University of Melbourne School of Veterinary Science.

Rutherglen Research Station

Rutherglen Research Station has a longer history than that of Werribee. A viticultural reserve was set up at Rutherglen in 1890 and a Viticultural

College was built there in 1897. Work done at the College enabled vineyards to be re-established on resistant rootstocks introduced from Europe and America after the disastrous outbreaks of phylloxera. In 1912 the experimental farm became a separate enterprise. The first permanent experimental plots concerned crop rotation, fertiliser and green manure on cereals, and the topdressing of pastures.

The achievements of the Rutherglen Research Station include the development of Wimmera ryegrass and subterranean clover pastures to form the basis of the clover ley farming system. These experiments showed that clover ley is more efficient in improving soil fertility than volunteer pasture. This type of farming has had far-reaching effects on wheat production throughout southern Australia. Extensive cereal research is still conducted at the Station, and includes testing of new varieties, fertilisers, chemical cultivation, resistance to diseases, and weed control. Pastures, beef cattle, prime lambs, and sheep are also subjects for considerable research.

At Myrtleford, also in the north-east of Victoria, studies are being conducted on tobacco culture, pathology, and breeding at the Tobacco Research Station. A substation at Gunbower, established in 1964, is used for studying tobacco agronomy.

North-central area

The Tatura Horticultural Research Station deals mainly with the problems of growing canning peaches, canning and export pears, apples, and apricots under irrigation. Experiments are carried out on varieties, irrigation, cultural systems and fertilisers, together with nutritional, pathological, and entomological studies.

Experimental work on irrigated pasture species, water efficiency and fertilisers is conducted at the Kyabram Irrigation Research Station. There are also experiments on vealer production, and wool and prime lamb production using crossbreds. Twenty-five acres are set aside for experiments on tomato culture and for developing and assessing new tomato varieties.

Cereal research in this area is centered at Dookie Agricultural College where (together with Longerenong), some of the earliest experiments in wheat breeding and cultivation in Victoria were carried out.

Mallee region

At Mildura, the Horticultural Research Station was established in 1954 after representation to the Victorian Government by growers' organisations for a site for long term research on citrus particularly with regard to rootstocks. The majority of plantings on this site are citrus, but in recent years work has also developed on other crops, including grapes. A new 140 acre property will also allow more intensive work on grape, tree-fruit, and vegetable growing as well as citrus.

A laboratory for research on insect pests and plant diseases of crops grown in the Sunraysia area was opened on the Research Station in 1967. The laboratory is a branch of the Victorian Plant Research Institute at Burnley.

At Walpeup, the Mallee Research Station was established in 1932 to investigate problems of Mallee agriculture. It is situated in a central

position and experiences average climatic conditions for the region. Many of the soil conservation and cereal growing practices used at present on Mallee farms were developed there. It also leads in work on prime lamb production in the Mallee. Present work includes experiments in all aspects of cereal growing, wheat breeding, fertilisers, cultivation, soil conservation, skeleton weed control, weed control, and medic pasture. There are also time of weaning and stocking rate experiments. The wheat seeding unit for the Mallee is also centred at Walpeup.

Wimmera region

For many years cereal research for the Wimmera was centred at the Longerenong Agricultural College. Some 275 acres at the College are used for experiments on soil fertility, crop rotation, pasture, and weed killers. Subsidiary experimental plots are operated through the district with co-operating farmers. The wheat seeding unit for the Wimmera is based at Longerenong.

However, the new Victorian Wheat Research Institute, built recently at Horsham with funds provided by the industry, will now become the centre for cereal research in the Wimmera. The Institute has laboratories for breeding, agronomy, pathology, and cereal chemistry. Large scale field experiments will be situated on private properties.

Western district

A Pastoral Research Station was established at Hamilton in 1959 with emphasis on sheep management and nutrition, and beef cattle. The Glenormiston Estate is also used as a site for some experimental work on cereals, fodder crops, and pasture improvement. Twenty-five acres on the property are used for experiments on onions and peas.

Research stations in the Melbourne area

Around Melbourne, the Department of Agriculture conducts research on stations at Werribee, Scoresby, Healesville, Burnley, and Frankston.

The Scoresby Horticultural Research Station, established in 1946, investigates problems associated with fruit growing in southern Victoria. The crops investigated include apples, pears, peaches, plums, cherries, apricots, and lemons.

The Sir George Knox Laboratories for cool storage experiments on fruit and vegetables are at Scoresby. The Station is the headquarters for the Department's berry fruit research. There is also some experimental work on vegetables and an Apicultural Research Unit is situated on the Station.

At Frankston, a Vegetable Research Station has been established to serve the sandy soil areas from which come over half of Melbourne's vegetables.

To the north-east at Healesville, the Potato Research Station deals with potato growing problems, breeding, the introduction of new varieties, and the storage of potatoes. This Station is also the centre for the multiplication of virus-free strains of strawberries.

The Victorian Plant Research Institute, formerly the Biology Branch of the Department of Agriculture, is located at Burnley. Research is conducted on applied mycology, plant virology, plant nematology, plant

bacteriology, and nutritional disorders of plants, while entomological research covers insect biology and physiology, insecticide resistance in insects and biological and insecticidal control. Facilities at the Institute have expanded since 1958. Laboratory facilities have been increased, and a modern insectary, a virus house, a radio-isotope laboratory, an electron microscope with associated equipment, and an ultra-microtome have been added.

In the Random Sample Laying Test, the egg production and economics of production of fowls raised from 300 eggs, sampled at random from the private poultry producers' flocks and kept under modern conditions and techniques, are being studied.

At the Plant Breeding Laboratory at Burnley, research is being done to improve varieties of vegetables, especially onions, beans, and tomatoes. Particular attention is paid to production of hybrid onions and disease resistance in beans and tomatoes. Another section at Burnley is the Seed Testing Laboratory where a new laboratory with facilities for seed testing and seed research were completed in 1966. The Department's College of Horticulture is also located at Burnley Gardens.

Gippsland region

Gippsland, one of the richest dairying areas in Australia, has a Dairy Research Station at Ellinbank about 70 miles east of Melbourne. Special attention is directed to the use of pasture by a grazing dairy herd. Other experiments cover calf rearing, pasture establishment, methods of silage conservation, and the use of spray irrigation in summer pasture production.

Farmer-owned research stations

Apart from these research stations there are also four research farms owned by local farmers and business men with the Department of Agriculture represented on a technical advisory committee. Other official bodies also co-operate in research on the farms. These farms are at Kerang, Maffra, Swan Hill, and Woorinen.

The Kerang Agricultural Research Farm has experiments covering reclamation of salt affected land, sheep husbandry, shade tree planting, and hydrology.

The Macalister Research Farm near Maffra in Gippsland is used for studies on irrigation problems under the local dairy farming conditions, particularly reclamation of salt affected land.

At the Swan Hill Irrigators' Research Farm the main aim is to carry out research on problems of salting and high water tables on irrigated pasture.

Woorinen Research Farm, 10 miles from Swan Hill, deals mainly with vines and deciduous fruits and includes drainage, trellising trials, and rehabilitation of old vine land and rootstock trials with deciduous fruit trees.

Bureau of Agricultural Economics, 1966; Farm Management, 1967; Agricultural Extension Services, 1968; Size Distribution of Rural Holdings, 1969; Research and Extension Activities of the Department of Agriculture, 1970; Application of Scientific Research to Agriculture, 1970.

FARMING

General

Collection of statistics

Before 1904 the statistics were collected by the municipal authorities who were required by statute to furnish information on such forms and in such manner as was required by the Governor in Council. During the period 1904 to 1966, police officers were required to collect agricultural, pastoral, and dairying statistics from land holders in Victoria. Commencing with the 1966-67 Farm Census, the collection of these statistics has been carried out on a direct postal basis.

The Bureau made an intensive coverage check of its listings of land holdings used in the collection of agricultural and pastoral statistics in Victoria, and these were reconciled with lists of rateable land of one acre or more in extent, as recorded by municipalities for rating purposes. As a result, 6,975 holdings totalling 1,462,229 acres were added to the annual collection as from the 1967-68 season. This change in coverage should be kept in mind when comparing figures for 1967-68 with those for previous years.

The rural statistics contained in this chapter are mainly compiled from annual returns of agricultural, pastoral, and dairying production collected from some 73,000 rural holdings in Victoria at 31 March each year. Statistics from these schedules are compiled for each county and municipality.

Every holding of 1 acre and upwards used for the production of agricultural products or for the raising of livestock and the production of livestock products is required to supply full particulars of the area occupied, the rural population, the number of persons employed, the area and yield of each kind of crop cultivated, artificial fertiliser usage, numbers of certain items of farm machinery, the number and description of livestock, the quantity of wool clipped, and other relevant matters.

Data relating to area sown, production, yield per acre, and number of holdings growing crops are for the season ended 31 March, thus including crops which are sown and harvested, or harvested, during the twelve months ended 31 March.

In cases where harvesting of certain crops has not been completed by 31 March (potatoes, fruit, vines, etc.), supplementary collections are made later in the year.

Livestock numbers, farm machinery on rural holdings, and the number of persons working are reported at 31 March, while wage and salary payments relate to the twelve months ended 31 March.

Summary of Australian statistics

The following table, which summarises the principal farming activities in Australia during the 1968-69 season, shows the position of farming in Victoria relative to other States :

AUSTRALIA—PRINCIPAL ITEMS OF FARM ACTIVITY, 1968-69

Particulars	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Australia
Rural holdings—								
Number	76,103	71,056	44,074	29,137	23,004	10,384	512	254,270
Area ('000 acres)	171,020	39,182	378,956	162,109	276,174	6,591	178,288	1,212,320
Principal crops—								
Wheat—								
Area ('000 acres)	9,962	3,984	1,789	3,748	7,295	17	4	26,799
Production ('000 bush)	215,119	90,728	42,000	83,160	112,450	410	84	543,950
Oats—								
Area ('000 acres)	1,185	991	55	516	1,092	31	1	3,872
Production ('000 bush)	27,454	30,230	1,119	11,895	22,942	583	27	94,250
Barley—								
Area ('000 acres)	486	409	427	1,413	553	26	..	3,314
Production ('000 bush)	11,211	8,885	12,870	29,551	9,187	884	..	72,587
Hay—all types—								
Area ('000 acres)	823	1,847	112	615	341	211	6	3,955
Production ('000 tons)	1,439	3,635	263	985	501	494	12	7,330
Tobacco—								
Area (acres)	2,190	9,727	13,837	..	..	..	..	25,754
Production (dried leaf '000 lb)	2,481	12,075	19,517	..	..	..	..	34,072
Onions—								
Area (acres)	1,520	3,634	3,756	1,883	359	155	(a)	(b) 11,307
Production (tons)	11,084	21,282	28,365	18,639	5,494	1,281	(a)	(b) 86,145
Potatoes—								
Area (acres)	29,236	39,979	18,515	7,643	6,588	11,461	15	113,437
Production (tons)	160,823	299,961	122,990	68,018	74,435	72,120	131	798,478
Other vegetables—Area (acres)	16,450	9,300	39,882	2,825	2,568	4,624	329	75,977
Fruit—Area (acres)	94,685	71,598	52,750	44,497	25,366	21,429	122	310,447
Vineyards—Area (acres)	22,749	48,970	3,508	60,574	7,270	..	..	143,071
Grapes for table (tons)	7,470	6,939	5,913	587	1,729	..	..	22,638
Wine made ('000 gals)	8,898	6,240	60	35,618	887	..	..	51,703
Currants (tons)	428	2,687	..	2,261	1,862	..	..	7,238
Sultanas and raisins (tons)	7,829	37,896	..	1,743	8	..	..	47,476
Livestock numbers, 31 March 1969—								
Sheep ('000)	68,153	30,185	20,324	18,392	32,901	4,395	253	174,602
Cattle ('000)	4,864	3,878	7,668	865	1,546	586	1,191	20,598
Pigs ('000)	690	422	535	288	220	95	2	2,253
Livestock slaughtered for human consumption—								
Sheep ('000)	5,806	5,609	2,075	1,555	2,373	577	61	18,056
Lambs ('000)	7,052	7,102	652	1,467	1,430	677	69	18,449
Cattle ('000)	1,035	1,010	1,511	175	347	134	89	4,301
Calves ('000)	388	462	329	48	22	46	..	1,294
Pigs ('000)	1,002	775	792	318	265	140	12	3,304
Wool production ('000 lb)	673,600	368,700	247,000	238,100	375,900	47,000	1,700	1,952,000
Whole milk production—								
All purposes ('000 gals)	278,930	815,791	171,686	102,808	58,222	102,164	996	1,530,597
Principal items of machinery on rural holdings—								
Tractors (No.)	86,341	82,059	70,238	36,574	35,005	12,750	629	323,596
Shearing machines (stands)	73,647	43,393	18,857	29,868	25,355	4,862	304	196,286
Milking machines (units)	39,557	112,618	35,401	17,908	9,036	17,057	121	231,698
Gross value of production—								
Agriculture (\$'000)	542,184	331,715	363,704	221,097	218,643	44,599	1,303	1,723,245
Pastoral (\$'000)	445,340	345,275	340,022	136,070	210,780	39,117	20,213	1,536,817
Dairying (\$'000)	154,840	202,245	64,267	39,016	25,101	27,713	560	513,742

(a) Not available for publication.

(b) Excludes N.T. and A.C.T.

Land occupied in different districts, 1968-69

For the season 1968-69 the number of occupiers of rural holdings was 71,056, the area devoted to agriculture 8,883,715 acres, and the total area occupied 39,181,537 acres.

It should be noted that statistics in this part of the *Year Book* have been compiled for statistical districts, which are groups of counties, namely, land areas with immutable boundaries. A map defining the boundary of each statistical district appears on page 301.

Classification of rural holdings by size and type of activity

Tabulations classifying rural holdings by principal characteristics have, in the past, been undertaken at irregular intervals. Since the Second World War they have been prepared for each of the years 1947-48, 1949-50, 1955-56, 1959-60, and 1965-66. The second detailed classification of

VICTORIA—LAND IN OCCUPATION IN EACH DISTRICT, SEASON 1968-69
(Areas of 1 acre and upwards)

Statistical District	Total area of Districts	Number of holdings	Area occupied				Total
			For agricultural purposes (a)	For pasture		Unproductive	
				Sown grasses, clover, or lucerne (b)	Natural grasses		
	'000 acres		'000 acres	'000 acres	'000 acres	'000 acres	'000 acres
Central	4,065	15,390	318	1,720	472	145	2,655
North-Central	2,930	4,504	132	1,208	672	86	2,098
Western	8,775	12,985	574	5,031	891	283	6,779
Wimmera	7,395	6,034	2,557	2,365	947	333	6,202
Mallee	10,784	6,062	3,594	1,449	2,163	502	7,708
Northern	6,337	11,697	1,470	2,726	1,337	104	5,637
North-Eastern	7,220	5,156	150	1,575	1,678	332	3,735
Gippsland	8,739	9,228	89	1,929	1,770	580	4,368
Total	56,246	71,056	8,884	18,003	9,930	2,365	39,182
PERCENTAGE OF ABOVE TO AREA OCCUPIED							
Central	..	..	11.98	64.78	17.78	5.46	100.00
North-Central	..	..	6.29	57.58	32.03	4.10	100.00
Western	..	..	8.47	74.22	13.14	4.17	100.00
Wimmera	..	..	41.23	38.13	15.27	5.37	100.00
Mallee	..	..	46.63	18.80	28.06	6.51	100.00
Northern	..	..	26.08	48.36	23.72	1.84	100.00
North-Eastern	..	..	4.02	42.17	44.93	8.88	100.00
Gippsland	..	..	2.04	44.16	40.52	13.28	100.00
Total	..	..	22.67	45.95	25.34	6.04	100.00
PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE							
Central	7.23	21.66	3.58	9.55	4.75	6.13	6.78
North-Central	5.21	6.34	1.49	6.71	6.77	3.64	5.35
Western	15.60	18.27	6.46	27.95	8.97	11.97	17.30
Wimmera	13.14	8.49	28.78	13.14	9.54	14.08	15.83
Mallee	19.17	8.53	40.45	8.05	21.78	21.23	19.67
Northern	11.27	16.46	16.55	15.14	13.47	4.39	14.39
North-Eastern	12.84	7.26	1.69	8.75	16.90	14.04	9.53
Gippsland	15.54	12.99	1.00	10.71	17.82	24.52	11.15
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(a) Excludes area of clover and grasses cut for hay and seed.

(b) Includes oats and barley sown for grazing and lucerne fed off.

VICTORIA—HOLDINGS CLASSIFIED ACCORDING
TO SIZE OF HOLDING : NUMBER AND TOTAL
AREA OF HOLDINGS, 1965-66

Size of holding (acres)	Number of holdings	Total area of holdings
		acres
1- 99	21,340	805,121
100- 199	12,219	1,742,700
200- 299	6,693	1,623,245
300- 399	5,312	1,803,816
400- 499	3,297	1,470,439
500- 999	11,037	7,797,393
1,000-1,399	3,738	4,404,898
1,400-1,999	2,573	4,255,922
2,000-2,999	1,599	3,817,242
3,000-4,999	926	3,453,964
5,000 and over	465	6,668,863
Total	69,199	37,843,603

holdings by principal type of activity was carried out in conjunction with the size classification of rural holdings, 1965-66. The following tables show some of the information, in summary form, from the 1965-66 classification of rural holdings by size and type of activity :

VICTORIA—NUMBER OF HOLDINGS GROWING WHEAT, AND NUMBER OF HOLDINGS ON WHICH LIVESTOCK WERE DEPASTURED, CLASSIFIED ACCORDING TO SIZE OF HOLDING, 1965-66

Size of holding (acres)	Number of holdings with—				
	Wheat	Sheep	Cattle for		Pigs
			Milk production	Beef production	
1- 99	159	2,544	6,958	5,057	2,259
100- 199	327	3,199	8,521	4,037	2,031
200- 299	418	2,926	4,259	3,046	1,127
300- 399	781	3,245	2,703	2,716	849
400- 499	705	2,483	1,417	1,947	467
500- 999	4,311	9,615	3,577	6,866	1,341
1,000-1,399	1,998	3,472	1,045	2,348	414
1,400-1,999	1,494	2,423	654	1,644	272
2,000-2,999	1,031	1,529	621	1,059	293
3,000-4,999	599	890			
5,000 and over	246	418	103	638	56
Total	12,069	32,744	29,858	29,701	9,109

NOTE. Individual holdings may appear in more than one category.

VICTORIA—HOLDINGS CLASSIFIED ACCORDING TO TYPE OF ACTIVITY :
NUMBER AND TOTAL AREA OF HOLDINGS AND AREA USED
FOR VARIOUS PURPOSES, 1965-66

Type of activity	Number of holdings	Total area of holdings	Area used for—				
			Fruit	Crops (exclud- ing fruit)	Fallow	Sown grasses and clovers	Balance of holding
			acres	acres	acres	acres	acres
Sheep—Cereal grain	6,160	8,285,531	26	2,215,984	1,074,082	2,411,438	2,584,001
Sheep	13,093	13,039,405	536	483,573	122,617	6,871,486	5,561,193
Cereal grain	3,453	4,712,777	262	1,903,412	1,187,381	580,179	1,041,543
Beef cattle	3,111	3,497,707	193	38,122	16,082	929,783	2,513,527
Dairying	20,087	4,474,207	1,500	239,007	57,339	2,781,603	1,394,758
Vineyards	2,165	85,878	48,803	3,694	1,526	7,546	24,309
Fruit (other than vine)	2,131	144,005	64,244	3,891	2,845	27,125	45,900
Vegetables—							
Potatoes	923	140,138	228	37,444	5,225	56,408	40,833
Other and mixed	1,528	265,154	2,549	76,149	8,236	113,765	64,455
Poultry	1,008	53,321	683	5,798	2,915	18,674	25,251
Pigs	273	33,337	33	2,718	2,925	8,959	18,702
Tobacco	284	65,887	60	10,285	1,182	16,469	37,891
Other	353	27,370	504	5,006	2,075	6,158	13,627
Multi-purpose	2,193	1,525,082	2,368	227,300	68,613	668,373	558,428
Total classified holdings	56,762	36,349,799	121,989	5,252,383	2,553,043	14,497,966	13,924,418
Unclassified holdings—							
Sub-commercial	7,848	750,292	1,964	19,802	25,885	215,197	487,444
Unused, special, etc.	4,589	743,512	797	1,294	41,398	90,710	609,313
Total all holdings	69,199	37,843,603	124,750	5,273,479	2,620,326	14,803,873	15,021,175

FIGURE 7. Counties and Statistical Districts of Victoria.



Superphosphate and fertiliser development

Approximately 90 per cent of the annual tonnage of fertilisers used in Victoria is superphosphate, all of which is manufactured locally.

James Cuming, who arrived in Victoria in 1862, established the superphosphate industry in Australia. Earlier, his father had made superphosphate from sulphuric acid and bone dust and had conducted experimental trials with it on their farm in Scotland. In 1872, Cuming purchased a small sulphuric acid plant at Yarraville and constituted Cuming Smith and Co. Evidently he began manufacturing superphosphate as early as 1874, since the Chemist for Agriculture of the day reports having analysed several superphosphates of local manufacture. But it was not until some years later that local farmers accepted superphosphate, since in 1880 all of Cuming Smith and Co's production was shipped to Mauritius in exchange for sugar.

The phosphatic material used in the manufacture of this early superphosphate were bone char, ground bones, and guano, but subsequently rock phosphate was imported from Florida and Tennessee, USA. However, since the First World War, the high grade deposits of Nauru, Ocean, and Christmas Islands have provided almost all of the rock phosphate used for superphosphate manufacture in Australia.

Fertiliser trials on farmers' properties initiated by the Department of Agriculture in 1888 provided the direct proof of the effectiveness of superphosphate needed to stimulate farmers, and by 1898 the annual usage of artificial fertilisers, mainly superphosphate for wheatgrowing, had reached 16,052 tons. The continued expansion that has taken place since is illustrated by the following figures :

VICTORIA—ARTIFICIAL FERTILISERS USED
(90 PER CENT SUPERPHOSPHATE)

Year	Tons	Year	Tons
1901-02	23,535	1939-40	340,633
1909-10	77,579	1949-50	550,020
1919-20	115,627	1959-60	740,000
1929-30	269,967	1966-67	1,113,000

Since the 1920s there has been a growing consciousness of the need to topdress pastures with superphosphate for maximum productivity. This has led to a very large increase in the use of superphosphate. From approximately 276,000 tons, half of which was used on pastures in 1936-37, the quantity has risen in 1966-67 to 989,984 tons of which 778,269 tons were used on pastures.

Fertiliser developments

Next to phosphorus, nitrogen is the most important nutrient element in Victorian agriculture. For many years, animal manures such as blood and bone and dried blood, supplemented by nitrate of soda and sulphate of ammonia, were the only nitrogenous fertilisers available. Production of animal manures is now insignificant, but urea, ammonium nitrate, calcium ammonium nitrate, urea-formaldehyde, and anhydrous ammonia are additions to the list of manufactured fertilisers. Also, ammonia is now

made synthetically in Australia, while production of sulphate of ammonia is being increased as a by-product of developing industries.

Recognition during the 1930s of marginal potassium deficiencies in many soils of the pastoral areas in southern Victoria has been responsible for a rapid increase in potash usage. The quantity used increased from 9,458 tons in 1957 to 42,590 tons in 1967.

The trend in fertiliser marketing is to provide the farmer with a choice of nutrient mixtures to meet his particular requirements. Not only are there brands containing different proportions of phosphorus, nitrogen, and potassium, but superphosphate and some of the mixed fertilisers are marketed containing one or more of the trace elements, copper, molybdenum, zinc, and cobalt.

Increasing numbers of high analysis fertilisers are appearing on the market. These include a concentrated phosphate fertiliser manufactured from ground rock phosphate and phosphoric acid. Compared with superphosphate this fertiliser contains about twice as much phosphorus and negligible sulphur.

Legislation

Since the Artificial Manures Act was introduced in 1897, the law has required fertilisers to be sold according to a guaranteed analysis. Under the present *Fertilisers Act* 1958, manufacturers must register the brands, analyses, and prices of their product with the Department of Agriculture. A list of registrations is published annually in the *Government Gazette*. The number of registered brands has increased from 72 in 1900 to 344 in 1969.

In 1968-69 artificial fertilisers were used on 3,825,048 acres of wheat ; 1,511,209 acres of other cereal crops ; 82,932 acres of vegetables ; 79,334 acres of orchards ; 155,362 acres of other crops ; and 9,233,389 acres of pastures. Superphosphate is the main fertiliser used on both crops and pastures and in 1968-69 amounted to 262,865 tons of single strength equivalent or 83.0 per cent of the total artificial fertiliser used on all crops and 568,648 tons or 89.0 per cent of that used on pastures.

A summary of the area fertilised, quantity used, and number of holdings on which artificial fertilisers were used is shown below for each of the years 1964-65 to 1968-69 :

VICTORIA—ARTIFICIAL FERTILISERS

Year	Crops			Pastures		
	No. of holdings	Area fertilised '000 acres	Quantity used '000 tons	No. of holdings	Area fertilised '000 acres	Quantity used '000 tons
1964-65	31,181	4,703	248	40,291	11,496	741
1965-66	30,582	4,664	255	40,637	11,730	800
1966-67	29,771	4,772	267	40,658	12,502	846
1967-68 (a)	30,253	4,961	289	39,636	11,359	780
1968-69 (a)	n.a.	5,654	316	34,994	9,233	638

a) Not strictly comparable with previous years due to changing coverage as mentioned on page 297

Artificial Fertilisers, 1970

Aerial agriculture

The aerial agriculture industry in Victoria has grown rapidly and aircraft are now extensively used for topdressing and sometimes for seeding, crop spraying with weedicides and insecticides, and the control of rabbits by the dropping of poisoned carrot baits. A more recent phase of aerial development is the dropping of young fish into Victorian lakes and streams. A full description of aerial agriculture will be found on pages 494 and 764-5 of the *Victorian Year Book* 1966.

Before 1 January 1967 statistics on aerial agriculture were collected by the Department of Civil Aviation who developed the series in 1956. Since 1 January 1967 these statistics have been compiled from quarterly returns collected by the Bureau of Census and Statistics from operators of aircraft engaged in aerial topdressing, seeding, spraying, and allied activity such as rabbit and dingo baiting.

VICTORIA—AERIAL AGRICULTURE

Particulars	Unit	Year ended 31 March—				
		1965	1966	1967	1968	1969
Total area treated (a)	'000 acres	1,896	2,472	2,424	1,803	1,956
Topdressed or seeded	'000 acres	1,429	1,630	1,945	(b)	(b)
Sprayed or dusted	'000 acres	386	702	(b)	266	(b)
Materials used— Superphosphate	tons	92,213	110,550	(b)	(b)	87,225
Seed	'000 lb	162	56	139	310	157
Aircraft utilisation (flying time)	hours	14,649	19,832	19,109	15,124	15,536

(a) Areas treated with more than one type of material on one operation are counted once only. Includes 81,200 acres baited for rabbit destruction in 1965, 139,910 acres in 1966, and 45,000 acres in 1969. Figures for 1967 and 1968 not available for publication.

(b) Not available for publication.

Farm machinery

VICTORIA—FARM MACHINERY ON RURAL HOLDINGS

Particulars	Number at 31 March—				
	1965	1966	1967	1968 (a)	1969 (a)
Milking machines—Units	101,994	105,004	108,664	109,137	112,618
Shearing machines—Stands	41,112	41,689	43,510	43,596	43,393
Tractors—Wheeled type	71,950	73,668	76,678	78,721	79,101
Crawler type	2,574	2,493	2,888	3,045	2,958
Rotary hoes	11,757	12,016	12,305	13,112	12,915
Fertiliser distributors and broadcasters	29,212	28,219	30,948	30,560	30,383
Grain drills—Combine	19,442	19,604	20,392	20,380	20,217
Other	9,846	9,586	9,574	9,187	9,002
Maize planters	756	762	747	750	909
Headers, strippers and harvesters	14,177	13,963	14,319	14,556	14,179
Pick-up balers	11,405	11,972	12,965	13,173	14,106
Forage harvesters	1,305	1,625	1,913	1,951	2,080

(a) Not strictly comparable with previous years; see page 297 for explanation.

NOTE. Details of items which have not been collected since 1955 are published in the *Victorian Year Book* 1954-58, page 88.

Mechanisation of Farming, 1962

Progress of cultivation

The first Statistical Register of Victoria published in 1854 shows that in 1836 there were 50 acres of land under cultivation in the Colony of Victoria. By 1840 this figure had increased to 3,210 acres. This progress continued until 1852 when 57,471 acres were under cultivation. With the discovery of gold in Victoria, agricultural progress received a temporary setback, the area of land cultivated declining to 34,816 acres in 1854. However, with the influx of population came a demand for agricultural products and, by the end of 1860, the area of land under cultivation amounted to 407,740 acres.

The following table shows the annual average area under cultivation in each decennium from 1856 to 1965 and the actual area for each of the five seasons 1965 to 1969 :

VICTORIA—ACREAGE CULTIVATED ANNUALLY

Period or year (ended March)	Annual average area in each decennium, 1856 to 1965, and actual area each year 1965 to 1969, under—		
	Crop (a)	Fallow	Total cultivation (a)
	acres	acres	acres
1856 to 1865	325,676	12,146	337,822
1866 to 1875	624,377	57,274	681,651
1876 to 1885	1,306,920	137,536	1,444,456
1886 to 1895	2,109,326	364,282	2,473,608
1896 to 1905	3,022,914	524,197	3,547,111
1906 to 1915	3,756,211	1,276,148	5,032,359
1916 to 1925	4,594,244	1,852,145	6,446,389
1926 to 1935	5,233,894	2,501,357	7,735,251
1936 to 1945	4,435,645	2,142,953	6,578,598
1946 to 1955	4,635,982	2,311,401	6,947,383
1956 to 1965	4,222,393	2,191,000	6,413,393
1965	5,019,479	2,484,423	7,503,902
1966	4,969,436	2,620,326	7,589,762
1967	5,143,495	2,751,499	7,894,994
1968	(b)5,202,729	(b)2,646,502	(b)7,849,231
1969	6,156,483	2,727,232	8,883,715

(a) Until 1960 the area of crop included pasture cut for hay and seed. For the decennium 1956 to 1965 and 1961 onwards, area of pasture cut for hay and seed is excluded in the above table.

(b) Includes 135,574 acres under crop and 55,814 acres under fallow resulting from change in coverage referred to on page 297.

Crops and growers

The following table shows the area under, the yield from, and the gross value of each of the principal crops in Victoria for the season 1968-69 :

VICTORIA—AREA, YIELD, AND GROSS VALUE OF CROPS, 1968-69

Crop	Area	Yield	Gross value (a)
	acres		\$'000
Cereals for grain—			
Barley—			
2-row	387,165	8,393,913 bush	8,575
6-row	21,856	490,711 bush	293
Maize	1,161	72,161 bush	108
Oats	991,334	30,230,084 bush	13,029
Rye	11,689	70,239 bush	73
Wheat	3,984,084	90,727,726 bush	122,008

VICTORIA—AREA, YIELD, AND GROSS VALUE OF CROPS, 1968-69—continued

Crop	Area	Yield	Gross value (a)
			\$'000
	acres		
Hay—			
Barley and rye	13,801	23,634 tons	309
Lucerne	99,683	223,176 tons	6,450
Meadow	1,420,851	2,814,006 tons	61,176
Oaten	270,785	510,095 tons	10,304
Wheaten	41,492	64,408 tons	1,035
Green fodder	91,764	..	2,589
Grey and other field peas	14,143	268,257 bush	532
Grass and clover seed	37,630	59,046 cents	1,216
Industrial crops—			
Broom millet	337	1,757 cwt fibre	43
Linseed	14,304	1,132 cwt seed	7
Hops	797	101,570 cwt	658
Mustard	1,000	11,614 cwt	1,115
Tobacco	9,727	5,790 cwt	77
Tobacco		107,812 cwt	13,910
Vegetables—			
Onions	3,634	21,282 tons	905
Potatoes	39,979	299,961 tons	10,343
Other	52,030	216,742 tons	21,312
Stock fodder—			
Pumpkins and root crops	6,902	..	504
Vineyards—			
Grapes—			
Table	2,582	6,939 tons	1,355
Wine	7,908	29,450 tons	1,423
Drying	34,229	168,682 tons	..
Vines, unproductive	4,251	..	..
Vines, unproductive			
34,323 tons of sultanas			13,109
3,573 tons of raisins			1,567
2,687 tons of currants			1,182
Orchards—			
Productive	57,094	..	30,804
Unproductive	14,504	..	..
All other crops	13,367	..	5,703
Total crops	7,650,083	..	331,715

(a) The gross value is based on the wholesale price realised in the principal markets. The places where primary products are absorbed locally or where they become raw materials for a secondary industry are presumed to be principal markets.

VICTORIA—GROWERS OF CERTAIN CROPS, SEASON 1968-69

Crops grown	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	Northern	North-Eastern	Gippsland	
Grain crops—									
Wheat	648	398	916	3,916	2,720	3,242	409	48	12,297
Oats	647	558	2,498	2,945	1,299	2,352	743	34	11,076
Barley	615	114	514	1,057	1,061	963	83	79	4,486
Maize	4	..	..	..	1	4	25	59	93
Green fodder—									
Maize	278	27	85	5	..	12	28	368	803
All other	904	328	1,123	53	98	610	372	883	4,371
Other—									
Potatoes	1,407	380	504	8	20	19	103	379	2,820
Onions	240	1	199	4	23	12	..	7	486
Other vegetables	1,284	21	321	40	352	409	29	191	2,647
Orchards	1,629	143	56	73	1,152	968	121	55	4,197
Vineyards	7	3	1	3	2,264	143	22	..	2,443
Grass and clover seed	26	90	189	36	25	74	159	1	600
Tobacco	..	..	..	..	..	27	351	..	378

The preceding table shows the numbers of growers of certain primary products, in each statistical district of the State, for the season 1968-69.

The information has no relation to the number of rural holdings in the State, as numbers of occupiers are engaged in the cultivation of more than one of the crops enumerated.

A summary of the area under cultivation and yield of crops in each statistical district of the State for the season 1968-69 is given in the following tables :

VICTORIA—AREA UNDER CULTIVATION, SEASON 1968-69
(Acres)

Crop	Statistical District							Total	
	Central	North-Central	Western	Wimmera	Mallee	Northern	North-Eastern		Gipps-land
Grain crops—									
Wheat	51,446	34,637	103,740	1,293,617	1,836,889	607,436	51,324	4,995	3,984,084
Oats	29,632	26,890	243,728	284,904	177,256	195,493	31,827	1,604	991,334
Barley	53,121	3,003	23,604	86,173	161,568	73,958	2,961	4,633	409,021
Maize	9				400	24	119	609	1,161
Field peas	5,076	399	2,722	2,491	3,010	103	144	198	14,143
All hay	237,919	103,677	547,329	196,007	76,954	369,576	119,783	195,367	1,846,612
Green fodder	17,819	6,367	28,925	1,308	2,651	11,875	7,016	15,803	91,764
Grass and clover for seed	1,018	4,694	11,726	1,687	3,042	4,830	10,593	40	37,630
Tobacco						430	9,297		9,727
Potatoes	20,798	5,948	6,161	20	174	134	770	5,974	39,979
Onions	1,293	3	1,982	5	113	193		45	3,634
All other vegetables	22,220	86	14,959	104	4,071	4,245		6,097	52,030
Vines	39	73	131	650	45,778	857	1,448		48,970
Orchards	21,901	1,994	516	2,130	8,529	34,241	1,799	488	71,598
All other crops	5,005	677	16,723	741	11,832	5,783	2,349	5,286	48,396
Total area under crop	467,296	188,448	1,002,246	1,869,837	2,332,267	1,309,178	239,672	241,139	7,650,083
Land in fallow	42,991	24,277	57,937	835,203	1,306,643	421,988	15,831	22,362	2,727,232
Total area under cultivation	510,287	212,725	1,060,183	2,705,040	3,638,910	1,731,166	255,503	263,501	10,377,315

(a) The total area under crop includes 1,420,851 acres of grass and clover cut for hay and 35,119 acres of double-cropping.

VICTORIA—YIELD OF PRINCIPAL CROPS, SEASON 1968-69

Crop	Statistical District							Total	
	Central	North-Central	Western	Wimmera	Mallee	Northern	North-Eastern		Gipps-land
Grain crops—									
Wheat bush	1,242,426	830,653	3,718,340	37,112,586	31,788,329	14,554,217	1,363,951	117,224	90,727,726
Oats "	1,146,284	719,047	10,424,708	9,412,141	2,561,188	4,948,667	976,446	41,603	30,230,084
Barley "	1,646,259	76,187	733,396	2,075,976	2,645,322	1,551,173	63,768	92,543	8,884,624
Maize "	380				23,000	1,755	7,332	39,694	72,161
Field peas "	129,822	7,698	67,533	37,023	18,492	2,502	2,397	2,790	268,257
All hay tons	479,873	205,743	1,150,812	329,024	118,399	656,637	250,926	443,905	3,635,319
Grass and clover for seed centsals	1,715	7,684	18,603	2,025	4,055	6,590	18,282	92	59,046
Tobacco cwt						3,551	104,261		107,812
Potatoes tons	154,631	46,233	48,878	88	741	841	3,836	44,713	299,961
Onions "	7,357	15	11,959	8	583	1,033		327	21,282
Wine made gal	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	6,241,000
Dried vine fruit—									
Raisins ton	..	..	..	..	3,573	..	..	..	3,573
Sultanas "	..	..	..	..	34,323	..	..	..	34,323
Currants, "	..	..	..	..	2,687	..	..	..	2,687

(a) Details for individual districts are not available for publication.

Principal crops

General

The cereals wheat, oats, and barley are the principal crops grown in Victoria and these, together with hay, represent about 90 per cent of the total area sown, although there is some variation from year to year. The growing of potatoes, grapes, and apples is also important.

In the following section some detailed descriptive and statistical information is given of all main crops grown in the State including those mentioned above.

Wheat

The acreage sown to wheat in recent years has been more than 3 mill. acres. This is about half the total area under crop in the State. Virtually all the wheat crop is used for grain production, only about 1 per cent being cut for hay. The average annual production for the five years ended 1966-67 was about 71 mill. bush of which about 65 per cent was exported. Grain yields during these five years averaged about 22 bush (60 lb per bush) per acre, but yields as high as 60 bush per acre are harvested on individual farms in most seasons. The highest officially recorded yield is 78.8 bush per acre for 50 acres grown near Murtoa in 1960. However, in the 1967-68 drought, wheat production fell to 29 mill. bush and the average yield to 8.8 bush per acre.

Record production occurred in the year following the drought when a crop of just over 4 million acres produced about 91 million bushels. Similar increases in several other States led to a considerable surplus over the requirements for export. The Wheat Marketing Act proclaimed on 9 December 1969 implemented in Victoria the Wheat Delivery Quota Scheme proposed by the Australian Wheat Growers' Federation and provided the administrative machinery decided upon by the Victorian Farmers' Union for the operation of the scheme. In the 1969-70 season the quota for wheat grown in Victoria and in the adjacent regions which normally deliver to silos operated in the Victorian grain handling system was 65 million bushels or about 5 per cent below the average of receipts during the previous five seasons. Some of the production in excess of the quota was, however, received by the Grain Elevators Board where space was available as advance deliveries against the quota for the following year.

The main wheat belt lies in the northern part of the State, in the Mallee, Wimmera, and Northern Districts, where about 94 per cent of the crop is grown. The average annual rainfall varies from about 12 inches in the north-west of the State to about 20-30 inches at the eastern and southern margins. About three quarters of the wheat crop is sown on bare fallowed land.

Superphosphate is applied at seeding to virtually all crops. Zinc sulphate is added in the Wimmera District, applications normally being made to each third or fourth wheat crop. Nitrogenous fertilisers are used in particular circumstances, namely, on light sandy soils and land infested with skeleton weed in the Mallee and on heavily cropped land in the Wimmera and southern areas. Diseases are not normally a major problem, but heavy losses occur due to foot rot and cereal cyst nematode in some seasons. Stem rust rarely causes much loss. Ball smut is effectively controlled by pickling with fungicide powder which is done at the same time as the

seed is graded. Weeds are controlled by fallow cultivation or by crop spraying. The crop is harvested from mid-November in the early districts to January under late conditions.

Wheat is grown in rotation with fallow, other cereal crops, and pastures. The use of subterranean clover and medic leys has greatly improved soil fertility, with resultant benefit to wheat yields and quality. Sheep grazed on these, and on native pastures, contribute materially to the State's wool and prime lamb production, especially to the production of early prime lambs.

Wheat is grown on three major soil types : (1) Mallee soils referred to as solonised brown soils ; (2) self-mulching grey soils of heavy texture and high fertility in the southern Wimmera ; and (3) red-brown earths of varying texture in the northern Wimmera and the Northern District.

Most wheat varieties grown in Victoria are of the soft white class. The environment generally does not favour the production of wheat of the harder types, but limited areas of the hard variety Emblem are sown in the eastern Mallee where wheat with protein content above the Victorian f.a.q. (fair average quality) is usually produced. Substantial improvement in wheat quality has been achieved by plant breeding during the past 30 years, and one of the leading soft wheats at present is in the medium to strong class. The adoption of clover and medic ley rotation systems has led to a substantial improvement in the protein content, and thus the quality, of Victorian wheat.

Virtually the whole of the wheat crop is handled, stored, and transported in bulk. The crop is marketed through the Australian Wheat Board. The greater part of the crop is marketed as one grade known as f.a.q. (fair average quality). A small amount of the semi-hard wheat grown in the eastern Mallee is segregated for separate sale.

Grain Elevators Board

In 1934 an Act was passed to provide for the handling of wheat in bulk in Victoria. The Act gave the Government power to constitute a Board of three members to implement the provisions of the Act. As a result of submissions made by the Board to, and approved by, the Government, 226 country receiving elevators and a shipping terminal have been constructed, the necessary finance being obtained from loans totalling \$30,259,000. Repayment of the principal and interest are guaranteed by the Victorian Government. In 1963 the Act was amended to provide for the handling of barley in bulk by the Grain Elevators Board.

The Grain Elevators Board first received and shipped Victorian wheat in bulk for the 1939-40 season and first received barley in bulk for the 1963-64 season.

The Board's Geelong Terminal is operated by push-button remote control with operational indicator lights appearing on a diagram panel of the whole terminal. Grain can be received from rail trucks and can be shipped from the terminal at the same rate of 1,600 tons per hour, either direct from the terminal storage bins or by a combination of storage bins and rail receivals.

The Grain Elevators Board has under its control storage for 127 million bushels of wheat. In comparison with the season 1968-69, when the record quantity of 93,773,000 bushels of bulk wheat and 5,882,000 bushels of bulk barley were delivered to the Board, the receivals for the 1969-70

season were 81 million bushels of bulk wheat and 7.3 million bushels of bulk barley. Wheat quotas were introduced for the 1969-70 season, Victoria's quota being fixed at 65 million bushels and the balance of the receivals being over-quota wheat.

The following statement shows the revenue and expenditure of the Grain Elevators Board in Victoria :

VICTORIA—GRAIN ELEVATORS BOARD : REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	Year ended 31 October—				
	1965	1966	1967	1968	1969
REVENUE					
Operating and maintenance expenses	1,763	1,731	1,974	1,435	2,108
Capital facilities allowance	1,946	2,205	2,401	2,544	2,546
Interest on investments	358	373	437	482	552
Other	..	..	..	3	..
Total revenue	4,067	4,309	4,812	4,464	5,206
EXPENDITURE					
Operating and maintenance expenses	1,362	1,317	1,517	1,093	1,651
Administration expenses	400	414	457	342	458
Depreciation and renewals	421	504	544	571	573
Interest on loans	1,058	1,230	1,348	1,420	1,516
Sinking fund charges	212	231	255	269	288
Appropriations to reserves	293	493	788	762	720
Other	3	45	2	6	..
Total expenditure	3,749	4,234	4,911	4,463	5,206
Net surplus	318	75	—99	1	..
Fixed assets (at 31 October)	23,880	26,611	28,909	30,700	31,823
Loan indebtedness (at 31 October)—					
State Government	1,755	1,729	1,706	1,683	1,672
Public	20,424	22,202	23,723	24,899	26,572

Australian Wheat Board

History

After the outbreak of the Second World War, the Australian Wheat Board was established in September 1939 under National Security legislation. When the war ended in 1945 the Board continued to operate until 1948 as an agent for the Commonwealth Government under "transitional legislation".

In 1948 agreement was reached between the Commonwealth and States for the first of the Wheat Industry Stabilisation Schemes. For constitutional reasons, it was necessary for each State to pass legislation accepting the Australian Wheat Board as the central marketing authority, and to permit it to operate within the States. Before the outbreak of the War progress had been made in Federal-State Conferences towards a comprehensive stabilisation scheme. The war intervened and full control over the sale of Australian wheat was given to the Board under the exigencies of war-time conditions.

The marketing experience of the Board, and the desires of the growers were finally combined in the wheat stabilisation legislation of 1948 and

renewed under successive five year schemes ever since. The Australian Wheat Board now functions under the present Wheat Stabilisation Act of 1968. This Act authorises the Board to market all wheat harvested between 1 October 1968 and 30 September 1975 (seven seasons) but limits the application of the revised guaranteed price provisions to wheat harvested between 1 October 1968 and 30 September 1973 (five seasons). Negotiations between the growers and the Government will be held before September 1973 to review the guarantee provisions.

Constitution

The Board comprises fourteen members, two growers from each of the five mainland States together with the chairman, a finance member, a millers' representative, and an employees' representative.

Functions and operations

Under complementary Commonwealth and State legislation :

1. the Board is the sole authority for the marketing of wheat in Australia and for both wheat and flour for export ;
2. growers are required to deliver to the Board all wheat grown by them except that required as seed or feed on the farms where it is grown ; and
3. the Board becomes the owner of all wheat delivered to it.

The Board employs the various bulk handling authorities and wheat merchant-shippers are employed by the Board for the receipt of bagged wheat.

The bulk of local sales of wheat is made to flour millers under agreements which provide for the Board to keep mills stocked with sufficient wheat to meet their trade requirements. The mills account to the Board for all wheat delivered to them. The local trade in wheat for stock and/or poultry feeding is arranged through distributing agents who lodge orders through the Board for their clients' requirements. The local price of wheat f.o.r. (free on rail) ports is a uniform home consumption price in all States established by legislation based on an annual review of the cost of production plus a surcharge to cover the cost of transporting the wheat from the mainland to Tasmania.

Export sales are negotiated by Head Office for all markets except those negotiated by the Australian Wheat Committee in London for the United Kingdom, European countries, and certain other markets in the Middle East. Sales of export flour are made by Head Office where the purchasers are government controlled instrumentalities, but mills and approved exporters are able to negotiate sales to private buyers subject to purchase of the flour from the Board. All export prices are determined by the Board on a competitive basis with other exporting countries, having due regard to the provisions of the International Grains Arrangement to which the Australian Government is a signatory.

The current five year Wheat Industry Stabilisation Plan commenced with the 1968-69 crop and provides for a guaranteed price to wheat growers on up to 200 million bushels of exports from each season's wheat. The guaranteed price is no longer linked with the cost of production but, for the 1968-69 season, was set at \$1.45 per bushel f.o.b.; at the commencement of each of the remaining four seasons this price may be varied according to changes in relevant costs associated with the production, transport, handling, or storage of wheat.

Total deliveries by wheat growers to the Victorian Branch of the Australian Wheat Board during the 1968-69 season were 94,672,000 bushels including 6,230,000 bushels of southern New South Wales wheat delivered to storages at railway sidings operated by Victorian Railways in New South Wales, and 2,386,000 bushels of southern New South Wales wheat delivered to storages in Victoria.

The 1968-69 crop was sown on the largest acreage since 1930-31 and enjoyed adequate autumn and winter rainfall, with spring rains below average in the Mallee and Wimmera districts. Whilst Mallee yields were reduced, Wimmera eventually yielded on a par with its best years. Intended acreage in northern and north-eastern areas was reduced because of excess moisture in the growing period but yields were quite good.

The State yield per acre from the 1968-69 crop was 22.77 bushels. The f.a.q. standard was set at 65 lb per bushel.

Wheat standard

The fair average quality (f.a.q.) standard is determined each season by a State Committee and is the basis for sales of each crop.

Samples of wheat from various districts are obtained each year and mixed to obtain a representative sample of the whole crop. The f.a.q. weight is then determined by use of the Schopper 1 litre scale chondrometer.

Area of wheat for grain, production, gross value, f.a.q., and holdings growing 20 acres and over

In the following table the area of wheat for grain, production, average yield, gross value of production of wheat, the f.a.q. standard determined in Victoria and the number of holdings growing wheat (20 acres or more) for each of the seasons 1964-65 to 1968-69 are shown :

VICTORIA—WHEAT STATISTICS

Season	Area	Production	Holdings growing wheat (20 acres and over)	Average yield per acre	Gross value	Weight of bushel of wheat, f.a.q.
	'000 acres	'000 bush	No.	bush	\$'000	lb
1964-65	3,237	78,166	11,981	24.15	109,396	64
1965-66	3,074	60,591	10,714	19.71	89,939	63½
1966-67	3,138	70,896	11,202	22.59	104,471	63½
1967-68	3,224	28,317	11,056	8.78	43,856	65
1968-69	3,984	(a) 90,728	11,686	22.77	122,008	65

a) Record production.

Wheat breeding

The objective of wheat breeding in Victoria is to produce new varieties which will give higher yields of better baking quality grain than existing varieties. Included in the yield objective is the reduction of losses due to drought and various diseases which include cereal cyst nematode (eelworm), stem rust, leaf rust, septoria, and eye spot lodging. The breeding work is a function of the Victorian Department of Agriculture, which undertakes plant breeding, field testing, and quality evaluation. In current breeding programmes, selections are being made from crosses between semi-dwarf and dwarf imported varieties of high yielding ability, and Victorian varieties.

The wheat breeding activities of the Department are centred on the State Research Farm at Werribee and the Victorian Wheat Research Institute at Horsham where the hybridisation is carried out, the early generations raised, and the initial quality and disease testing done. This work is supplemented by regional selection centres in other wheat growing districts.

Field testing is undertaken in all districts at Departmental research stations and colleges and on farmers' properties. There are about thirty-five centres for varietal testing in Victoria. Disease testing is carried out at research stations in appropriate areas and at the Victorian Plant Research Institute at Burnley. After the early generation quality testing, which is done at the State Research Farm, Werribee, and the Victorian Wheat Research Institute at Horsham, final evaluations, including test baking, are undertaken at the Department's cereal laboratories in Melbourne.

The wheat breeding work of the Department has been very successful. During the past fifty years, over forty new varieties of wheat have been released for cultivation by farmers. The mostly widely grown of these have been Free Gallipoli (1923), Ghurka (1924), Rancee 4H (1930), Magnet (1939), Quadrat (1941), Insignia and Pinnacle (1946), Sherpa (1953), Olympic (1956), Emblem (1963), and Summit (1966). Almost 90 per cent of the wheat acreage in Victoria is sown to varieties bred by the Department, and for some years Insignia has been the most widely grown variety in Australia.

Since 1930, the baking quality of Victorian wheat has improved markedly. This has been due partly to varietal improvement and partly due to improved soil fertility by the use of legume leys with a resultant continuing effect on grain protein content.

The following table shows the areas under the principal varieties of wheat, including wheat for hay, for the seasons 1966-67, 1967-68, and 1968-69. Varieties are tabulated in order of popularity for the last mentioned season.

VICTORIA—PRINCIPAL VARIETIES OF WHEAT SOWN

Variety (in order of popularity, season 1968-69)	Season 1966-67		Season 1967-68		Season 1968-69	
	Acres sown	Percentage of total area sown	Acres sown	Percentage of total area sown	Acres sown	Percentage of total area sown
Insignia	1,531,146	48·34	1,562,248	46·84	1,940,328	48·20
Olympic	744,798	23·51	823,033	24·68	813,166	20·20
Pinnacle	522,294	16·49	473,854	14·21	507,223	12·60
Heron	112,102	3·54	152,488	4·57	253,611	6·30
Summit	1,684	0·05	63,371	1·90	205,304	5·10
Emblem	87,421	2·76	110,491	3·31	136,870	3·40
Insignia 49	61,729	1·95	55,226	1·66	72,460	1·80
Sherpa	33,426	1·06	30,864	0·93	32,205	0·80
Falcon	15,557	0·49	15,212	0·46	16,102	0·40
Beacon	16,257	0·51	14,969	0·45	12,077	0·30
Quadrat	12,546	0·40	9,415	0·28	8,051	0·20
Baldmin					3,079	0·08
Stockade	7,623	0·24	4,640	0·14		
All other varieties	20,899	0·66	19,059	0·57	25,100	0·62
Total	3,167,482	100·00	3,334,870	100·00	4,025,576	100·00

Oats

Oats are the second most widely grown crop in Victoria, and in recent years the area of this cereal has averaged about 1·3 million acres. Nearly

72 per cent of this is normally harvested for grain, some of it after winter grazing. Although oaten hay was important in the past, only about 15 per cent of the acreage is now harvested for this purpose, the remainder (13 per cent) of the area being used solely for grazing.

As the land on which oats are grown is normally not fallowed or as well prepared as that intended for wheat, oat production shows greater fluctuations than wheat production. This seasonal variability is particularly marked in the northern parts of the State. While the average annual grain production is about 20 million bushels (40 lb per bushel), it was 31 million bushels in 1966-67, 6.9 million bushels in 1967-68, and 30 million bushels in 1968-69.

Over half the oat grain produced in Victoria is held on farms or is used within Victoria for stock feed. Large quantities are retained for feeding during periods of seasonal shortage or in drought conditions. About a quarter of the crop goes to mills, but only a relatively small proportion is used to manufacture foods for human consumption. Milling quality oats usually command a premium of 2 cents to 10 cents per bushel above feed oats. The other uses of the grain by the mills are for the manufacture of stock foods and for the manufacture of unkilned rolled oats, mainly for export. The remaining quarter of the crop is exported as grain. More than 95 per cent of the oats exported are sold as "Victorian No. 1" grade. Oat grain is sold in an open market through merchants or through the voluntary oat pool, and prices fluctuate widely according to seasonal conditions and supplies available. The merchants and the oat pool provide facilities for bulk deliveries at most main centres.

During the past ten years, the area cut for hay has fluctuated around 200,000 acres in normal seasons with an average production of about 335,000 tons. About double the normal acreage was cut for hay during the 1967-68 drought and production increased by about 100,000 tons. In 1968-69 the area cut for hay was 271,000 acres and production was 510,000 tons. The hay may be cut either for farm use or for sale (mainly to chaff mills near Melbourne, Ballarat, and Maryborough).

Most of the area fed-off completely is grazed by sheep in the winter, but in dairying districts oats are sometimes sown for autumn and winter grazing to supplement pasture growth. About 30 per cent of the oats completely grazed are in the Mallee District.

The main oat grain producing areas are in the Mallee, Wimmera, Northern, and Western Districts. The popularity of varieties has undergone marked changes in recent years. After having held supremacy for more than 40 years, Algerian was superseded as the leading variety by Orient in 1962, while Avon now holds this position. The area sown to the five leading varieties—Avon, Orient, Algerian, Kent, and Irwin—is almost 87 per cent of the total oat acreage in the State.

The area harvested (season 1968-69) for hay was 270,785 acres, and for grain 991,334 acres, which produced 510,095 tons of hay, and 30,230,084 bushels of grain, respectively. The area of oats sown for grazing purposes amounted to 141,836 acres. The following table shows the area, yield, and gross value of oats for grain for each of the five seasons 1964-65 to 1968-69 :

VICTORIA—OATS FOR GRAIN

Season	Area	Production	Average yield per acre	Gross value
	'000 acres	'000 bush	bush	\$'000
1964-65	966	22,446	23·23	16,237
1965-66	966	17,784	18·42	15,287
1966-67	1,079	(a) 31,248	28·96	19,033
1967-68	723	6,859	9·49	6,723
1968-69	991	30,230	30·49	13,029

(a) Record production.

Barley

In 1968-69 both the area sown for barley (409,000 acres) and production (8·9 million bush) were a record. The previous highest barley production was in 1958-59 when about 362,000 acres (2- and 6-row) were sown with a production of approximately 8·6 million bush (50 lb per bush), but, after that, area and production declined until the mid 1960s when acreage increased from 187,000 in 1964-65 to 305,000 acres in 1967-68. The upward trend continued in 1968-69 when many wheatgrowers increased their barley planting as wheat deliveries were limited by the quota scheme. About 95 per cent of the barley grown in Victoria is of 2-row, or malting type. The remainder is sown with 6-row varieties, which are used primarily for stock feed.

Although some barley is grown in all districts, the production has been traditionally centred in two distinct areas where high quality grain is produced. The largest production is in the south-western Mallee and the adjacent area of the north-western Wimmera. While wheat is the main cereal throughout the cereal growing districts, the barley crop occupies second position in the areas noted above, whereas, in most other portions of northern Victoria, oats occupy this position.

In this northern barley growing area, the best quality barley is grown on the sandier soil types. The crop is sown either on ley land cultivated in the autumn just prior to sowing or on wheat stubble land. The variety Prior was almost exclusively sown in this area until recently. Now a smaller area in the northern Mallee is also sown to Noyep. A new variety, Weeah, produced by the Department of Agriculture, was introduced in 1968. Superphosphate is the standard fertiliser applied. Average district yields are about 19 bush per acre.

The other important area is in southern Victoria between Melbourne, Geelong, and Bacchus Marsh. Here, barley is the main crop, and the normal practice is to sow it with superphosphate on fallowed land. The main variety has been Research, but Resibee, released by the Department of Agriculture in 1962, is now being grown to an increasing extent. While Research produced very good malting quality grain in this area, the newer variety has slightly superior quality characteristics. Yields are considerably higher than those obtained in the north, the average yield being about 32 bush per acre. This region is close to the main barley shipping terminals, and growers' freight costs are much lower than in the northern areas.

The Victorian Grain Elevators Board has provided a bulk handling scheme for barley since 1963. The provision of extra facilities, including

special aerated storages at Hopetoun, Rainbow, and Jeparit, and terminal storages at Geelong and Sunshine, with the use of existing elevators on a throughput basis before the wheat harvest, has made it possible for the crop to be handled in bulk in almost all the districts where it is grown. The increased production in 1969-70 exceeded the storage space available and growers' deliveries were regulated pending disposal of part of the crop.

Barley is marketed through the Australian Barley Board, which operates in Victoria and South Australia and provides an orderly marketing system for barley grown in those States. The barley is classified to suit specific purposes on delivery. Classification is, first, on varietal type—Chevalier (Prior, Weeah, and similar varieties) and Research (Research, Resibee, Anabee)—and, second, on quality—Malting, Milling (No. 3), and Feed (Nos. 4 and 5). There are price differentials between each grade.

The Victorian malting industry takes most of the malting quality grain for malt for local use and also uses some of the lower grade grain for producing malt for export—principally to eastern Asia, the Pacific Islands, and Africa. Lower quality barley is used for stock feeding as whole grain and manufacturing in the distilling, pearling, and prepared stock feed industries. Barley surplus to these requirements is exported.

The following table shows the area, yield, and gross value of barley for each of the five seasons 1964-65 to 1968-69 :

VICTORIA—BARLEY PRODUCTION

Season	Area		Production		Average yield per acre			Gross value \$'000
	2-row	6-row	2-row	6-row	2-row	6-row	Total	
	'000 acres	'000 acres	'000 bush	'000 bush	bush	bush	bush	
1964-65	177	10	4,140	194	23·36	20·01	23·19	4,828
1965-66	181	11	3,038	179	16·77	16·16	16·73	3,662
1966-67	213	14	5,066	355	23·74	24·85	23·81	7,260
1967-68	287	18	2,550	158	8·89	8·81	8·88	3,261
1968-69	387	22	8,394	491	21·68	22·45	21·72	8,868

Maize

Maize is grown in Victoria both for grain and for green fodder and cultivated mainly in Gippsland. Lower values in the late 1960s and other more profitable alternatives in vegetables and livestock led to a substantial decline in the production of maize grain. The area, yield, and gross value of maize for each of the five seasons 1964-65 to 1968-69 are given in the following table :

VICTORIA—MAIZE PRODUCTION

Season	For green fodder	For grain							Gross value \$'000
		Area			Production			Av. yield per acre	
		Hybrid	Other	Total	Hybrid	Other	Total		
acres	acres	acres	acres	bush	bush	bush	bush		
1964-65	5,793	2,148	205	2,353	107,911	6,271	114,182	48·53	213
1965-66	4,161	1,497	186	1,683	93,938	7,551	101,489	60·30	121
1966-67	3,421	1,261	146	1,407	67,044	5,074	72,118	51·26	115
1967-68	4,723	825	92	917	29,252	2,723	31,975	34·87	48
1968-69	3,588	1,059	102	1,161	68,553	3,608	72,161	62·15	108

Rye

Cereal rye is of minor importance in Victoria and is not usually grown as a cash crop. European migrants to Australia have created a small demand for this cereal for human consumption, thus helping to stabilise the market for rye grain.

The chief purpose for which rye is grown is the stabilisation of loose sand or sandhills in the Mallee District. There is some interest in it for winter grazing in cold districts during the winter months.

The following table shows the area, yield, and gross value of rye for each of the five seasons 1964-65 to 1968-69 :

VICTORIA—RYE PRODUCTION

Season	Area	Production	Average yield per acre	Gross value
	acres	bush	bush	\$'000
1964-65	13,581	109,162	8.04	139
1965-66	13,409	65,821	4.91	87
1966-67	11,608	77,722	6.70	106
1967-68	9,578	42,351	4.42	57
1968-69	11,689	70,239	6.01	73

Hay

The pattern of hay production in Victoria changed considerably in the post-war period. More complete mechanisation and the virtual disappearance of the working horse removed the previous emphasis from cereal hay. The harvesting of large areas of cereal crops, particularly oats, grown specifically for the production of hay for the maintenance of horse teams, is no longer necessary and so there has been a marked decline in the amount of cereal hay produced.

On the other hand, there were spectacular increases in the production of other forms of fodder. The annual production of meadow hay increased from about 400,000 tons to over 2 mill. tons during this period. There was also a substantial increase in the amount of lucerne hay conserved. Ensilage made mainly from pasture growth increased from about 25,000 tons annually to over 300,000 tons in the post-war period, yet it still supplies something under 10 per cent of the dry nutrients in Victoria's fodder reserves.

This increase in fodder conservation has resulted in more efficient utilisation of the extra herbage grown as the result of pasture improvement in all districts. Large numbers of livestock are now being maintained with greater safety following the conservation of portion of the surplus spring growth for feeding out during periods of seasonal shortage or in drought.

As pastures have been improved and livestock production intensified, the provision of supplementary fodder has become an important factor in the Victorian grazing industry. The conservation of meadow hay fits in well with farm management routine and is a convenient method of ensuring continuity of fodder supplies.

Further information on fodder conservation will be found on pages 328 and 329.

Particulars of areas harvested and production of the several kinds of hay appear in the following table :

VICTORIA—HAY PRODUCTION, 1968-69

Kind	Area	Production	Average yield per acre
	acres	tons	tons
Wheaten	41,492	64,408	1.55
Oaten	270,785	510,095	1.88
Lucerne	99,683	223,176	2.24
Barley, rye, etc.	13,801	23,634	1.71
Meadow	1,420,851	2,814,006	1.98
Total	1,846,612	3,635,319	1.97

The following table shows, in respect of each statistical district of the State, the quantity of ensilage made during the 1968-69 season and the stocks of ensilage and hay held on rural holdings at 31 March 1969 :

VICTORIA—ENSILAGE MADE AND FARM STOCKS
OF ENSILAGE AND HAY
(Tons)

Statistical District	Ensilage made, 1968-69	Stocks at 31 March 1969	
		Ensilage	Hay
Central	94,205	68,532	368,804
North-Central	10,668	9,656	144,772
Western	41,856	29,375	889,674
Wimmera	8,152	8,930	266,669
Mallee	3,304	4,599	97,711
Northern	11,984	14,679	590,771
North-Eastern	36,501	34,156	235,752
Gippsland	130,690	93,263	393,695
Total	337,360	263,190	2,987,848

Potatoes

Victoria is the largest producer of potatoes in Australia, contributing a little more than one third of the total annual requirement. Potatoes are generally used as a fresh vegetable, but substantial quantities are processed into chips, crisps, and other prepared forms, as well as dehydrated flakes. Generally regarded as a summer crop, potato planting goes on in one district or another for ten months of the year, while harvest extends over the whole year.

Early crops are grown in favoured localities where the risk of frost is not great, such as in the Bellarine Peninsula and the market garden areas south-east of Melbourne. These are lifted from October (or sooner) to December. Mid-season crops come on the market in January, February, and March from districts such as Koroit, Gembrook, Koo Wee Rup, and parts of Gippsland. The late or main crop is produced in the Central Highlands (Ballarat to Trentham), Kinglake, the Otways, and the Gippsland hill country. Its harvest commences in April and runs on until October.

About half the total area of potatoes planted in Victoria is grown under spray irrigation. In most cases the water is derived from farm storages or from bores. Potato growing has become increasingly mechanised and

production has, therefore, tended to pass into the hands of specialist growers having larger individual areas.

The following table shows the area, yield, and value of potatoes for each of the five seasons 1964-65 to 1968-69 :

VICTORIA—POTATO PRODUCTION

Season	Area	Production (a)	Average yield per acre	Gross value
	acres	tons	tons	\$'000
1964-65	32,931	183,665	5.58	24,820
1965-66	34,333	240,786	7.01	11,050
1966-67	37,167	225,186	6.06	15,291
1967-68	40,329	215,941	5.35	18,566
1968-69	39,979	299,961	(b) 7.50	10,343

(a) Includes amounts held on farms for seed, stock feed, etc., as follows : 23,795 tons in 1964-65, 27,851 tons in 1965-66, 26,394 tons in 1966-67, 28,783 tons in 1967-68, and 36,328 tons in 1968-69.

(b) Record average yield.

Onions

The principal onion growing areas are in the Central and Western Districts. In the season 1968-69 these areas were responsible for 98 per cent of the total onion production of the State. The following table shows the area, yield, and gross value for each of the five seasons 1964-65 to 1968-69 :

VICTORIA—ONION PRODUCTION

Season	Area	Production	Average yield per acre	Gross value
	acres	tons	tons	\$'000
1964-65	3,825	22,963	6.00	1,440
1965-66	2,955	17,115	5.79	1,814
1966-67	3,295	22,375	6.79	1,464
1967-68	3,617	11,339	3.13	1,427
1968-69	3,634	21,282	5.86	905

Linseed

Linseed is the major oil producing crop grown in Victoria. Its commercial production, which began in 1947, has increased to over 25,000 acres in suitable years, with an output in excess of 300,000 bushels. In wet seasons, however, such as 1963-64, weather and soil conditions seriously cut the intended acreage. Since 1964 acreage has been restricted following a reduction in demand due to the introduction of synthetic paints and floor coverings.

Linseed has proved to be well adapted to broad acre production over a wide area of mixed farming and pastoral country in the 20 to 30 inch rainfall zone in the western part of Victoria. Initially, the industry was developed on imported varieties, and, in the period up to 1955, yields were low because these varieties were not fully suited to Victorian conditions and because of their susceptibility to disease.

Greater stability has been given to the industry with the release by the Victorian Department of Agriculture of disease resistant and better adapted varieties.

Victorian linseed contains 38 to 40 per cent of oil of satisfactory quality. Linseed oil is one of the main components of paints, varnishes, and linoleum, and also has many other industrial uses. The meal or press cake which remains after the oil has been extracted is a valuable stock food.

The following table shows the area, yield, and value of linseed for each of the five seasons 1964-65 to 1968-69 :

VICTORIA—LINSEED PRODUCTION

Season	Area	Production	Average yield per acre	Gross value
	acres	bush	bush	\$'000
1964-65	9,953	106,824	10·73	394
1965-66	7,370	101,536	13·78	358
1966-67	5,012	92,752	18·51	302
1967-68	9,365	32,176	3·44	104
1968-69	14,304	203,140	14·20	658

Tobacco

Flue-cured Virginia tobacco is the only type produced in quantity in Australia and is mainly absorbed in the manufacture of cigarettes. The use of domestic leaf is encouraged by a statutory mixing percentage applied in conjunction with concessional rates of import duty. The statutory percentage is currently set at 50 per cent and at the present high level of usage it is important that only leaf of desirable smoking quality is produced. Such leaf can be grown with some certainty only in areas having sandy friable soils and, during the summer months, appreciable rainfall, moderate temperatures, and high atmospheric humidity.

The Victorian crop usually accounts for rather more than one third of the total Australian tobacco production. Suitable growing conditions are found in the north-eastern river valleys, and the industry is concentrated at present along the Ovens and King Rivers and their tributaries, with small outlying areas in the northern part of the State. Recent trends disclose a concentration of production in the higher parts of these valleys, with some contraction at certain climatically less favoured downstream centres and in the inundated area above the Buffalo River dam. The Mount Beauty district in the upper Kiewa Valley has also become established as a reliable centre for the production of good quality leaf.

Tobacco growing in Australia has traditionally been regarded as a rather speculative proposition due to wide fluctuations in production and market conditions, and it is only in the past decade that any degree of stability has become apparent due to a consistent upward trend in average yield which has resulted in the Victorian figure approaching a level comparable to that achieved by the world's major tobacco producing countries.

The fungus disease, blue mould, has often brought about drastic reduction of yield and has been the prime cause of most short Victorian crops in the past. At present growers are able to control this disease by implementing newly developed fungicidal spray programmes, and this is perhaps the main factor in current yield improvement.

The implementation in 1965 of a Tobacco Stabilisation Scheme, whereby a market is guaranteed for the annual sale of up to 28·5 mill. lb of leaf

meeting certain quality standards, has promoted further stability in the industry.

Victorian tobacco producers are assisted in their efforts to increase yield and improve leaf quality by the Department of Agriculture, which conducts research in agronomy, plant pathology, and plant breeding at the Tobacco Research Station at Myrtleford and its substation at Gunbower, and also provides an intensive farm to farm advisory service for growers.

The following table shows the area, yield, and gross value of tobacco in each of the five seasons 1964-65 to 1968-69 :

VICTORIA—TOBACCO PRODUCTION

Season	Area	Production	Average yield per acre	Gross value
	acres	cwt (dry)	cwt (dry)	\$'000
1964-65	9,720	107,855	11·10	11,678
1965-66	9,230	98,953	10·72	12,377
1966-67	8,455	97,792	11·57	11,938
1967-68	8,664	68,076	7·86	7,915
1968-69	9,727	107,812	11·08	13,910

Further reference, 1963 ; Marketing of Tobacco, 1969

Fruit industry

Victoria is a major producer of a wide variety of fruit and about 120,000 acres are used for orchards and vineyards. The three most important districts are the area within 50 miles of Melbourne (apples, dessert tree fruits, and berries), the Goulburn Valley (canning fruit), and the Mallee region (vine fruit and citrus).

Most of the fruit growing districts south of the Dividing Range receive an annual rainfall of between 25 and 35 inches. This rainfall is fairly evenly spread, but in many areas additional irrigation is essential from January to March. This water is supplied from natural catchments, rivers, or town supplies. The north-eastern section of the State has a rainfall of from 20 to 40 inches, but the average rainfall in the Goulburn Valley is 19 inches and in the Mallee only 10 inches. In these districts elaborate irrigation schemes of the Lower Murray Valley and of the Goulburn and Campaspe Rivers make possible the large scale development of the fruit industry. The distribution of water is effected mainly by gravity except for small areas of citrus under spray irrigation.

Because of the high capital expenditure invested in orchard land and equipment and with the keen competition for local and overseas markets, most Victorian growers realise that they have to produce increased quantities of better quality fruit without increasing costs. To achieve this, labour expenses are cut by high capacity spraying units for pest control and by bulk handling of the crop. Many orchardists use fruit thinning sprays to make hand thinning less time consuming. The increasing use of weedicides in orchards and vineyards has reduced the need for cultivation. Lighter pruning of apples is showing promising results in southern Victoria and this trend could also become an important factor in reducing labour costs.

Statistics on fruit growing are collected from all persons who grow fruit for sale (for all purposes). Particulars of fruit production (excluding vines) for the five seasons 1964-65 to 1968-69 are given in the following table :

VICTORIA—FRUIT GROWING

Particulars		1964-65	1965-66	1966-67	1967-68	1968-69
Number of growers		4,486	4,435	4,563	4,221	4,197
Area	acres	75,509	75,001	73,519	71,158	71,598
Gross value of fruit produced	\$'000	28,433	34,977	32,327	34,462	30,804
Kind of fruit—						
Apples	bush	4,394,197	4,206,028	4,356,989	3,874,995	4,857,746
Pears	"	4,025,455	5,453,339	4,700,818	5,341,706	3,419,992
Quinces	"	19,915	21,946	25,089	15,935	17,515
Apricots	"	293,497	545,547	529,551	503,965	440,205
Cherries	"	117,721	140,207	120,731	178,410	148,824
Nectarines	"	28,910	33,323	36,723	37,372	33,358
Peaches	"	2,362,620	2,602,822	2,731,525	3,344,333	2,721,995
Plums	"	144,069	154,453	147,643	145,202	124,591
Prunes	"	28,360	20,397	21,421	15,892	12,874
Lemons and limes	"	148,237	120,534	147,881	169,596	215,255
Oranges—						
Navels	"	541,371	437,318	454,929	452,903	527,480
Valencias	"	662,585	537,940	660,194	638,522	808,095
Other oranges	"	40,337	36,389	28,647	29,849	24,217
Mandarins	"	46,668	41,207	64,350	80,286	81,181
Grapefruit	"	83,630	82,399	73,273	86,954	95,498
Figs	"	1,362	1,314	1,127	602	1,049
Passionfruit	"	3,844	3,520	3,914	5,356	5,532
Olives	"	11,004	36,471	15,030	38,070	23,957
Gooseberries	cwt	722	735	872	599	380
Loganberries	"	1,193	1,098	909	819	641
Raspberries	"	2,827	3,268	2,859	3,091	2,138
Strawberries	"	20,112	19,247	24,387	30,464	33,473
Youngberries	"	4,221	4,711	4,044	4,403	2,695
Other berries	"	657	666	903	771	331
Almonds	lb	45,730	51,322	32,522	34,484	17,947
Filberts	"	11,420	12,060	11,680	5,840	2,935
Walnuts	"	99,270	138,930	69,606	158,272	182,889

Information on the number of trees of each variety is collected triennially ; the latest figures available are for the season 1967-68. The extent of cultivation of each important class of fruit and nuts of holdings of 1 acre and upwards during the seasons 1964-65 and 1967-68 is shown in the following table :

VICTORIA—FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS

Fruit and nuts	Number of trees, plants, etc.					
	1964-65			1967-68		
	Bearing	Not bearing	Total	Bearing	Not bearing	Total
Apples	1,622,392	642,444	2,264,836	1,637,939	523,087	2,161,026
Pears	1,269,225	491,594	1,760,819	1,437,252	356,080	1,793,332
Quinces	8,269	716	8,985	5,680	549	6,229
Plums	125,662	41,901	167,563	112,911	39,143	152,054
Prunes	21,652	6,086	27,738	15,496	2,642	18,138
Cherries	121,270	94,184	215,454	140,106	81,752	221,858
Peaches	1,176,184	291,910	1,468,094	1,140,965	279,718	1,420,683
Apricots	298,434	37,010	335,444	265,826	52,367	318,193
Nectarines	21,937	14,593	36,530	28,076	13,224	41,300
Oranges—						
Navels	180,459	82,914	263,373	202,853	64,590	267,443
Valencias	226,765	123,886	350,651	281,834	68,917	350,751
Other oranges	13,751	6,433	20,204	10,153	1,105	11,258
Mandarins	29,611	28,032	57,643	48,965	16,638	65,603
Grapefruit	20,988	5,640	26,628	25,795	6,940	32,735
Lemons and limes	71,284	26,531	97,815	71,497	30,266	101,763
Figs	1,830	842	2,672	1,733	916	2,649
Raspberries	221,500	30,000	251,500	200,000	46,000	246,000
Loganberries	72,146	1,590	73,736	24,645	795	25,440
Strawberries	8,302,500	495,000	8,797,500	8,475,000	1,350,000	9,825,000
Gooseberries	28,500	5,100	33,600	31,200	10,800	42,000
Youngberries	64,883	3,536	68,419	62,115	10,455	72,570
Other berries	10,106	10,106	20,212	13,650	1,950	15,600
Olives	86,032	51,830	137,862	62,847	20,174	83,021
Passionfruit	8,484	4,282	12,766	20,085	7,150	27,235
Almonds	15,307	1,264	16,571	8,148	1,070	9,218
Walnuts	5,895	1,623	7,518	5,061	1,574	6,635
Filberts	4,876	282	5,158	2,280	259	2,539

The production of the principal kinds of dried tree-fruits for each of the last five seasons is shown in the following table. Particulars in respect of dried vine-fruits appear on pages 324 and 325.

VICTORIA—DRIED TREE-FRUITS
(1b)

Season	Apricots	Peaches	Pears	Prunes	Others	Total
1964-65	27,170	28,125	16,665	380,803	..	452,763
1965-66	6,824	2,340	2,467	447,760	3,332	462,723
1966-67	16,175	716	250	306,958	215	324,314
1967-68	18,407	3,628	4,313	230,560	481	257,389
1968-69	29,832	3,038	9,916	164,909	70	207,765

The distribution of the fruit industry over the State is set out in the following table, where the number of trees of each kind in each statistical district is given for the season 1967-68 :

VICTORIA—NUMBER OF FRUIT TREES, PLANTS, ETC.,
SEASON 1967-68

Particulars		Statistical District							Total	
		Central	North-Central	West-ern	Wim-mera	Mallee	North-ern	North-East-ern		Gipps-land
Growers Area	number acres	1,686 22,295	145 2,039	59 526	75 2,258	1,121 8,226	970 33,683	114 1,672	51 459	4,221 71,158
Apples	trees	1,470,581	146,890	52,717	11,571	17,366	328,958	100,289	32,654	2,161,026
Pears	"	161,573	53,186	515	4,539	3,029	1,567,638	751	2,101	1,793,332
Peaches	"	233,612	2,588	268	10,726	19,285	1,150,598	878	2,728	1,420,683
Apricots	"	21,010	3,091	577	6,104	66,153	220,460	303	495	318,193
Plums	"	67,048	3,465	209	864	33,514	46,515	234	205	152,054
Prunes	"	411	61	17	5,816	4,272	7,542	9	10	18,138
Cherries	"	194,306	3,318	9	1,151	888	14,405	6,916	865	221,858
Quinces	"	3,773	43	13	131	216	2,037	12	4	6,229
Nectarines	"	21,230	264	92	200	12,680	6,295	344	195	41,300
Figs	"	639	2	8	43	77	1,856	14	10	2,649
Olives	"	286	380	..	43,426	35,509	866	2,494	60	83,021
Oranges	"	153	2	..	53	500,172	126,472	1,280	1,318	629,452
Mandarins	"	5	..	1	6	62,862	2,672	56	1	65,603
Grapefruit	"	84	..	1	1	22,733	9,877	33	6	32,735
Lemons and limes	"	56,781	8	2	262	21,190	21,887	1,255	378	101,763
Passionfruit	vines	8,475	270	..	..	2,174	3,235	4,785	8,296	27,235
Strawberries	plants	9,562,728	82,396	56,250	15,000	3,750	18,750	44,918	41,208	9,825,000
Raspberries	bushes	239,032	..	..	..	..	983	..	5,985	246,000
Loganberries	"	24,651	..	..	..	..	789	..	..	25,440
Gooseberries	"	37,500	3,600	..	..	..	900	..	..	42,000
Youngberries	"	17,336	..	773	..	..	461	..	..	72,570
Other berries	"	15,600	..	..	..	..	..	..	..	15,600
Almonds	trees	588	102	2	1,519	1,778	1,589	3,624	16	9,218
Walnuts	"	689	35	2	9	413	319	4,440	728	6,635
Filberts	"	173	..	..	..	9	1	2,346	10	2,539

Cool storage

The fruit industry has been well aware of the importance of refrigeration since the end of the last century. Before the First World War several co-operative and privately owned cool stores had been built, besides the first Government Cool Stores, at Flinders Street, Melbourne. The Government also built and operated five other stores situated in the fruit growing districts close to Melbourne. These have been gradually handed over to growers' co-operatives.

The extension of electric power to rural areas throughout the State has resulted in the construction of numerous small private cool stores. More efficient refrigeration techniques and insulating materials have also helped to spread the idea of cool storage. Since the Second World War there has been a rapid increase of cool store capacity in Victoria, mainly because

of the very rapid development of small cool stores built in individual orchards as illustrated by the following table :

VICTORIA—FRUIT GROWERS' COOL STORES,
1948 TO 1967

Year	Number	Capacity
		'000 bush
1948	72	600
1958	218	1,500
1961	311	1,800
1963	357	2,600
1967	392	3,100

Including co-operative and proprietary stores, the total for 1967 was 455 stores with a capacity of 7.3 mill. bushels.

Many of the small orchard cool stores are used to pre-cool highly perishable soft fruits (apricots, peaches, plums, and berries) and tomatoes before they are forwarded to Melbourne or interstate markets. These fruits ripen in the summer and at high summer temperatures often become over-ripe and worthless in the interval between picking and marketing, unless pre-cooled at the orchard within a few hours of picking.

Most of the orchard cool stores, situated within 50 miles of Melbourne, are used, together with the larger co-operative and proprietary stores, to achieve a more gradual marketing of Victoria's apple and pear crop. This supply of good quality fruit from store at regular intervals for a period of 6-9 months calls for considerable skill and knowledge. The fruit picked is still alive and it continues its living processes for a certain time, influenced by the variety, its ripeness at the time of harvesting ("picking maturity"), interval between harvesting and beginning of cool storage, temperature and humidity of cool chambers, and other factors. Cool storage behaviour of the fruit and the type of storage provided are also of great importance with the fruit exported to overseas markets.

To assist the industry with cool storage research, experimental cool chambers were set up at the Government Cool Stores, Victoria Dock, in 1923. In 1956 these were transferred to the Scoresby Horticultural Research Station, where large and better experimental chambers were constructed for this purpose.

Vine fruits

Most vine fruits grown in Victoria are marketed as dried fruits (currants, sultanas, and raisins). Smaller quantities are sold as fresh fruit or are used for wine production. Some 40,000 acres of vines are grown in the irrigated districts of the River Murray at Mildura, Robinvale, and Swan Hill. The climate at Mildura and Robinvale provides the high temperatures and clear sunny conditions during the growing season and drying period which are essential for the production of first quality dried fruit. In 1968-69 unseasonal rain and hail gently damaged the ripening fruit resulting in a 30 to 35 per cent reduction of the total harvest. The Swan Hill district with slightly lower temperatures and higher rainfall is less suitable than Robinvale and Mildura.

After dipping and sun drying by the grower, the dried fruit is processed and packed in packing houses. The production of dried fruits in Victoria

for the season 1968-69 amounted to 34,323 tons of sultanas, 2,687 tons of currants, and 3,573 tons of raisins. Approximately 70 per cent of this produce was exported to the United Kingdom, Canada, and New Zealand.

During recent years the growing of grapes for table use has expanded rapidly and with some growers has become a specialised industry. The main varieties are Waltham Cross, Purple Cornichon, Ohanez, Sultana, and Muscat. Melbourne and Sydney are the main market outlets, but Indonesia, Colombo, and Singapore may grow in importance as export markets.

Grapes are grown specifically for wine production at Rutherglen, Great Western, and Nagambie. While the wine growing area around Rutherglen is slowly expanding, increasing quantities of grapes for winemaking are produced in the River Murray irrigation districts. In 1968-69, 6.2 mill. gals of wine were produced.

Particulars of vine production for the five seasons 1964-65 to 1968-69, are given in the following table :

VICTORIA—VINE-FRUIT PRODUCTION

Season	Number of growers	Area		Production				
		Bearing	Not bearing	Grapes gathered	Wine made	Dried fruits		
						Raisins	Sultanas	Currants
acres	acres	'000 cwt	'000 gals	cwt	cwt	cwt		
1964-65	2,601	44,203	3,793	6,435	3,656	131,179	1,191,888	89,535
1965-66	2,561	44,788	3,829	5,660	3,152	141,206	1,047,149	62,545
1966-67	2,538	45,381	3,783	6,530	3,555	125,085	1,266,927	71,552
1967-68	2,490	44,802	3,923	5,975	5,180	101,014	1,083,418	63,314
1968-69	2,443	44,719	4,251	4,101	6,241	71,461	686,456	53,740

Growing of Grapes for Wine, 1964 ; Dried Fruits Industry, 1967 ; Wine, 1968

Vegetables

The climate of Victoria is such that practically every kind of vegetable can be grown in some part of the State during the favourable season in each area. Consequently, there is a plentiful supply of fresh vegetables on the market for the whole year in normal years. These vegetables (excluding potatoes and onions), worth about \$24m to Victoria, are harvested from about 50,000 acres.

Over half the area under vegetables is within 50 miles of Melbourne. Other vegetable producing centres south of the Dividing Range are in the Western District (the centre of processed pea production) and in Gippsland (the centre of the stringless bean growing industry for processing and also for seed bean production). These areas are fairly free of frosts and have a well distributed rainfall ranging from 20 to 35 inches. Vegetables are grown on a wide variety of soils (sand, sandy loam, clay loam, peat, and volcanic). Many vegetable growers use irrigation from town water supplies, storage catchments, streams, and dams to supplement rainfall.

North of the Dividing Range the summer is longer and hotter, but winter frosts are more frequent. Many areas along the lower Murray are ideal for growing early spring crops and efficient transport enables produce to be shipped to both Melbourne and Sydney. In some instances intercropping in orchards and vineyards is practised. Tomato production for processing is now largely concentrated in the Goulburn Valley but other important

production areas are situated along the Murray and Loddon Rivers and in the Maffra irrigation district in Gippsland. The greatest part of the Victorian crop comes from the Goulburn Valley.

Returns from vegetable growing can fluctuate greatly according to weather and market conditions and production methods have to be highly efficient. Market gardens near Melbourne may grow two and sometimes three crops in the one year. While a number of hand operations are still essential, mechanisation and the use of selective weedicides have greatly reduced labour costs. Peas, beans, and onions can be harvested mechanically and a number of mechanical aids are used for harvesting other crops. New varieties and improved storage and transport techniques have also increased production efficiency.

While most crops reach the consumer as fresh vegetables, an increasing amount of produce is being processed and a feature of the Victorian industry is the rapid increase in the production of peas and beans for freezing.

Details of the area, production, and gross value of vegetables are given in the table below for all the more important types, including potatoes and onions which are shown in greater detail under separate headings on pages 318 and 319.

VICTORIA—VEGETABLES FOR HUMAN CONSUMPTION,
1968-69

Type	Area sown	Production	Gross value
	acres	tons	\$'000
Potatoes	39,979	299,961	10,343
Onions	3,634	21,282	905
Carrots	2,116	28,384	3,218
Parsnips	577	6,427	1,167
Beetroot	198	1,900	247
Tomatoes	4,753	63,500	5,154
French beans	3,155	5,646	876
Green peas—			
Sold in pod	4,482	3,946	637
Canning, etc. (pod equivalent)	23,424	(a) 36,312	1,382
Cabbages	1,789	22,224	749
Cauliflowers	2,211	22,600	1,264
Brussels sprouts	642	2,817	757
Lettuce	2,150	8,503	1,455
Pumpkins	2,284	11,002	887
Other vegetables	4,249	23,467	3,518
Total	95,643	557,971	32,560

(a) Shelled weight 16,326 tons.

Minor crops

There are other crops cultivated in Victoria in addition to those enumerated on pages 305 to 307. The most important of these are nursery products, cut flowers, Japanese millet, sunflowers, agricultural seeds, vegetable seeds, and safflower.

Pastoral and dairying

Progress of stock breeding

The first great development in Victoria, or as it was then known, the district of Port Phillip, was the pastoral interest. Millions of acres of lightly timbered land lay before the newcomers, and the quickest way

to wealth was evidently by the division of the land into runs and the depasturing of sheep and cattle. Settlers and stock, at first from Tasmania and eventually from New South Wales, came from the very first year of settlement.

According to early statistical records, there were 26,000 sheep, 100 cattle, and 57 horses in the Colony on 25 May 1836. On 1 January 1841, as a result of five years of livestock importation and breeding, there were 782,283 sheep, 50,837 cattle, and 2,372 horses. By 1 January 1851 the livestock population had increased to 6,032,783 sheep, 378,806 cattle, 21,219 horses, and 9,260 pigs.

The following table shows the number of livestock in Victoria at decennial intervals from 1861 to 1961 and the numbers of livestock on rural holdings for each of the five years 1965 to 1969. As from 1957 no allowance has been made for the small number of livestock not on rural holdings.

VICTORIA—LIVESTOCK
(‘000)

Year	Horses (including foals)	Cattle (b)		Sheep	Pigs
		Dairy	Beef		
1861 at 31 March	77	722		5,781	61
1871 " "	167	721		10,762	131
1881 " "	276	12,86		10,360	242
1891 " "	436	1,783		12,693	282
1901 " "	392	1,602		10,842	350
1911 at 1 March	472	1,548		12,883	333
1921 " "	488	1,575		12,171	175
1931 " "	380	1,430		16,478	281
1941 " "	318	1,922		20,412	398
1951 at 31 March	186	1,489	727	20,012	237
1961 " "	64	1,717	1,147	26,620	319
1965 " "	56	1,901	1,415	30,437	378
1966 " "	(a)	1,921	1,416	30,968	384
1967 " "	55	1,968	1,560	31,239	351
1968 " "	(a)	1,963	1,511	27,909	377
1969 " "	(a)	1,960	1,918	30,185	422

(a) Not collected.

(b) Separate figures for beef and dairy cattle are not available for years before 1943.

A table showing the sizes of holdings and the numbers of holdings depasturing stock at March 1966 appears on page 300. Dot maps showing the distribution of livestock on rural holdings in Victoria at 31 March 1962 appear on pages 577 to 580 of the *Victorian Year Book* 1964.

Following an investigation into the adequacy of the wording and layout of the cattle sections of the Agricultural, Dairying, and Pastoral Statistics form, changes were introduced to the 1963–64 form.

Before 1964 farmers were asked to classify their herds as either "beef cattle" or "dairy cattle". As these two terms tended to confuse breed and purpose, farmers were asked in the new design to classify their cattle, with the exception of bulls, according to the two main purposes of (i) milk production and (ii) meat production, irrespective of breed, and to report separately the number of cows and heifers kept for their own domestic milk supply; bulls were to be reported according to their breed and age, i.e., dairy or beef and over or under one year of age. Consequently, the detailed statistics of cattle for 1969 set out in the following table are not comparable with those for years prior to 1964.

VICTORIA—DISTRIBUTION OF LIVESTOCK AT 31 MARCH 1969
(’000)

Particulars	Statistical District							Total	
	Central	North-Central	West-ern	Wim-mera	Mallee	North-ern	North-East-ern		Gipps-land
Cattle—									
Bulls for service—									
Bulls, 1 year and over—									
Dairy breeds	6	1	8	1	1	8	2	10	37
Beef breeds	6	3	12	2	1	6	6	8	44
Bull calves—under 1 year—									
Dairy breeds	2	(a)	3	(a)	(a)	3	1	3	13
Beef breeds	3	1	5	1	(a)	2	2	2	16
Cows and heifers for milk and cream—									
Cows in milk	130	12	175	5	11	249	43	290	915
Cows—dry	45	7	97	4	3	36	34	67	294
Heifers—1 year and over	52	7	85	3	4	87	23	98	359
Heifer calves—under 1 year	41	6	70	3	5	84	20	89	317
House cows and heifers	4	2	5	4	2	4	2	2	25
Other cattle and calves for meat production—									
Cows and heifers	144	59	259	30	16	103	165	172	949
Calves—under 1 year	87	35	125	19	13	86	93	115	572
Other	51	19	61	8	6	47	67	77	336
Total cattle	571	151	906	79	63	716	457	934	3,878
Pigs	67	11	36	32	28	147	43	58	422
Sheep	2,429	2,447	10,937	4,498	1,713	4,176	2,019	1,965	30,185

(a) More than nil but less than 500.

Changing Patterns in Animal Husbandry, 1963

Fodder conservation

The intensification of fodder conservation has been a natural development in farm management following pasture improvement and increased capacity for the carrying of livestock.

Even the best pastures do not provide a full ration for grazing animals throughout the year because of seasonal variations in their growth. In addition, droughts and other circumstances, such as floods or fires, have serious effects on the amount of grazing available. In most cases these feed shortages must be met by fodder conservation and hand feeding. Fodder conservation is, therefore, a highly important farm activity without which stable livestock production could not be maintained at high levels.

In Victoria, meadow hay is the main fodder conserved, being cheaply and readily available from surplus spring pasture growth in most seasons. In fact, this source of fodder is not fully exploited, since, while individual farms may cut 25 per cent or more of their farms for hay, on average less than 10 per cent of the State's improved pastures are cut each year. Nevertheless, Victoria produces some 60 per cent of Australia's meadow hay, although it has only about 30 per cent of Australia's sown grasses and clovers. Cereal hay (mainly oaten) is also made in large quantities, especially in drier districts and in drier years, i.e., in circumstances where good pasture production may be irregular, or low due to poor spring rains.

Lucerne hay is generally produced as a quality fodder intended for cash sale, and considerable quantities are conserved, especially in irrigated areas. However, the excellent quality of much of the clover and grass hay made from improved pastures has lessened interest in this fodder. Oat grain, which is easily stored, transported, and rationed, is an important livestock fodder favoured for sheep in both cereal growing and grazing districts.

Silage occupies a relatively minor position in the fodder conservation of the State, although important to dairy farmers meeting wholemilk supply contracts in dry farming areas. Silage is also used successfully for feeding beef cattle, and has special value as a drought reserve.

Most hay in Victoria is made with the mower, side-delivery rake, and pick-up baler. About one in six farms has a baler. After mowing, the crop dries for a time in the swath, and is then raked for further drying in the windrow before it is baled. Some farmers are using systems of loose hay handling and self-feeding based on simple low cost equipment, especially in northern areas or where short-term storage of hay is involved for early feeding needs.

Sometimes baled hay intended for summer or early autumn feeding is left in the paddock for self-feeding by the stock. Provided the hay is well made and, preferably, stored in stooks, there is little wastage in such temporary storage, especially if feeding is controlled. Long-term storage requires adequate protection, such as is given by a well constructed shed.

In recent years, increasing interest has been taken in new machines and techniques aimed at faster drying of hay. This is a most significant development, since it makes possible further increases in hay production as well as the production of higher quality hay because better use is made of the limited drying time available when the crop is at its best. The types of machines used include tedders, which loosen and aerate the hay lying in swath or windrow ; conditioners, which crush or crimp fresh hay between rollers and enable internal moisture to move faster through the fractured cuticle of the plants ; and rotary slashers and flail mowers, in which cutting by high speed impact replaces conventional mowing and the drying rate may increase as a result of the bruising and cuticle damage that the crop experiences.

Ensilage

Most ensilage is still made in open stacks using a mower and buckrake. This is simple, but wastage is high. The flail-type forage harvester is popular because of simple cutting action and relative cheapness. It consists of swinging blades which rotate at high speed on a horizontal shaft. The crop is thrown or blown into an accompanying trailer or truck for transport for storage. Flail cutting has opened the way to more effective ensilage making because the process may be better controlled. Improved storage and feeding techniques are leading to more effective use of ensilage, generally, than is possible with high wastage open stack methods.

Further references, 1963, 1964, 1966, 1967

Dairying industry

Victoria continues to increase its dairy cow population and now produces more than half the Australian output of milk. It is the major producer of dairy products for export.

Within the State a significant re-orientation has been taking place in the industry. From 1964 until 1969 the numbers of registered dairy farms decreased by 3,700, but the number of milking cows rose by 125,000. Cow numbers are increasing in three main areas: Gippsland, the northern irrigation districts, and the coastal fringe of the Western District. Elsewhere they are declining. The average herd size rose from 45 to 60 cows, partly

because farm carrying capacities had been increased, but also because those who left the industry were, in general, keeping smaller herds.

On the farm, increases in herd size without any change in the labour force have been made possible by the evolution of better, more efficient milking systems and by the application of machinery to other high labour demand tasks such as silage and hay making and irrigating. In order to gain economies of scale and to afford dairy farmers some of the leisure time enjoyed by those in other occupations, the one-man or one-family dairy farm is giving place to the unit operated by two men and supporting two families. The second man is generally a partner or share farmer rather than a worker on wages.

The following table shows the number of dairy herds in Victoria, grouped according to the number of cows, for each of the years 1961 to 1965 and 1967 :

VICTORIA—DAIRY HERDS, CONTAINING FIVE COWS OR MORE,
GROUPED ACCORDING TO SIZE

At 31 March—	Number of herds—							Total
	5 to 9 cows	10 to 14 cows	15 to 19 cows	20 to 29 cows	30 to 49 cows	50 to 99 cows	100 cows and over	
1961	4,213	2,149	1,545	2,738	5,915	8,723	1,549	26,832
1962	4,092	2,064	1,454	2,712	5,667	9,271	1,838	27,098
1963	3,660	1,904	1,405	2,537	5,486	9,569	2,015	26,576
1964 (a)	2,459	1,596	1,183	2,507	5,660	9,339	1,646	24,390
1965	2,281	1,462	1,025	2,202	5,342	9,462	1,759	23,533
1967	1,705	1,154	796	1,804	4,550	9,753	2,091	21,853

(a) Details from 1964 onwards are not comparable with those for earlier years. See last paragraph on page 327.

In the licensing year 1969–70 there were 101 licensed dairy factories in the hands of 61 separate managements, of whom seventeen were holders of restricted licences to manufacture only varieties of cheese other than cheddar. This is indicative of the widening interest of consumers in the so-called “continental” varieties of cheese. The remaining eighty-four factories are managed by only forty-four companies, and there is still a trend towards closure of some of the smaller factories with diversion of supplies by road tanker to larger plants. However, some companies with several plants now tend to devote some of their factories to single lines of manufacture.

The use of stainless steel in four main components of milking machines became mandatory in 1970. The elimination of copper-containing parts in accordance with this regulation has proceeded very rapidly and has gone beyond the components actually specified. As copper had been already virtually eliminated from processing plants, the industry has gone far towards overcoming defects in milk flavour and butter quality which are catalysed by traces of copper in milk.

The search for continuous manufacturing processes and eventual automation continues, but problems remain in the mechanisation of cheese making. Container handling offers further economies in labour, especially in the newer factories specifically designed to pack products in containers. Special efforts have been made towards product development, “tailor-making” products for specific markets, and methods of enabling butter to be spread more easily at low temperatures.

The following table shows the numbers of cow keepers and cows, the estimated total production of milk, and the gross value of dairy produce for each of the last five years :

VICTORIA—DAIRYING

At 31 March—	Number of cow keepers	Number o dairy cows	Estimated total production of milk for all purposes (year ended 30 June)	Gross value of dairy produce (a)
		'000	'000 gals	\$'000
1965	27,704	1,187	745,896	194,988
1966	(b)	1,192	751,564	190,141
1967	(b)	1,211	790,941	210,345
1968	(b)	1,200	734,451	181,541
1969	27,061	1,209	816,447	202,245

(a) Includes subsidy.

(b) Not collected.

Milk Board

In Victoria the liquid milk industry is administered by the Milk Board consisting of three full-time members appointed by the State Government. The Board was originally appointed in 1934 under the provisions of the *Milk Board Act* 1933. The Board's main function is to provide an adequate and regular daily supply of milk to the metropolitan area of Melbourne and to other areas which have been proclaimed as "milk districts" by the Governor in Council. While the initial area proclaimed in 1934 covered the metropolitan area of Melbourne, proclamations over the years have extended these areas to the stage where approximately 94 per cent of the population of Victoria is in proclaimed areas. In August 1951 an amending Act was passed to vest in the Board ownership of all milk distributed in proclaimed milk districts and to provide the Board with powers to operate as a milk marketing authority.

The Board has entered into contracts with some 6,000 dairy farmers and its annual purchases from them currently exceed 81 million gallons. The Board has a lien on the full production of contract suppliers (approximately 243 mill. gals) which provides it with a reserve for emergency conditions.

Authorised agents appointed by the Board receive, accept, and deal with milk on its behalf, and this milk is sold by the Board for sale in milk districts. Board milk sales for the year ended 30 June 1969 totalled \$35m. The Board specifies the dairies from which milk may be sold or distributed, determines whether additional licences for dairies are necessary, and licenses milk carriers. Since September 1958 the Board has also been responsible for the licensing and supervision of milk shops in milk districts.

Board price determinations fix the prices at which the Board purchases milk from dairy farmers, the retail and other prices to be charged by dairymen, and the rates for cartage of Board milk. In connection with these functions the Board conducts investigations into the production, collection, transport, treatment, and distribution of milk. It also conducts a continuous survey for the purposes of obtaining up to date information on the cost of producing milk for the liquid milk market.

The Milk Board is the authority which administers the Commonwealth Free Milk Scheme in Victoria. It also engages in promotion on behalf of the industry.

The quantities of butter, cheese, condensed and powdered full-cream milk, and casein produced during the last five years were as follows :

VICTORIA—BUTTER, CHEESE, CONDENSED AND POWDERED MILK,
AND CASEIN MADE
(*000 lb)

Year ended 30 June—	Butter (a)	Cheese (a)	Condensed milk	Powdered full-cream milk	Casein
1965 (a)	247,924	60,975	146,167	25,291	36,685
1966	251,268	58,158	122,650	24,506	48,531
1967	266,907	67,753	113,559	24,188	38,509
1968	241,245	75,553	95,064	24,258	37,399
1969	280,206	75,262	90,716	30,608	(b)

(a) Commencing with the year ended 30 June 1965, small quantities of butter and cheese made on farms are excluded from the above table.

(b) Not available.

Further reference, 1970 ; Eradication of Tuberculosis, 1962 ; Sharefarming in the Dairying Industry, 1967

Pig industry

Victoria is one of the major pig producing States of Australia, but has a lower than average ratio of pigs to people, and therefore draws a substantial part of its supplies of pig meat from other States.

Australians are relatively large meat eaters but eat much less pig meat than most other nations. Pig meat provides only about 10 per cent of the total meat consumed by Australians. That is due partly to traditional eating habits, and partly to the relative costs of sheep and cattle meat, produced on low cost pasture, and pig meat, produced from concentrate foods such as grain. Pigs have a limited capacity for consuming pasture. Pigs have always been used to salvage waste and by-products from the production, processing, and eating of human foods. The low cost of such foods enables pigs to be raised and sold profitably. When the supply of salvage fed pigs is insufficient to satisfy demands, grain and other foods are fed to pigs in increasing quantities, either with the salvaged foods or separately. Such pig production is more costly and is therefore sensitive to variations in the selling price of pigs. The pig industry was developed largely in conjunction with the dairy industry. Pigs were used to salvage separated milk, buttermilk and whey, the by-products of butter, cheese, and casein manufacture, and those foods provided the greater part of their diet. In the 1950s and 1960s, more milk was used for human food and less was available for pigs. Pig production then became based more on grain feeding and depended less on milk. With this change in the major source of food for pigs, the structure of the pig industry changed to fewer but larger pig herds.

Pigs mature early, are prolific, and grow fast. A sow can produce a litter of eight pigs when she is twelve months old, her pigs can be ready for pork when four months old, or for bacon when six months old, and then the sow can produce her second litter. There are large variations in the annual

production of pigs and this causes fluctuations in the prices farmers receive for their pigs. The variations in supply are caused more by the rapid production potential of pigs, and the absence of adequate forward information on trends, than by changes in seasonal conditions. There is usually ample grain to maintain pig production. There is no scheme to support pig prices in Australia.

In the 1930s and early 1940s Australia exported pig carcasses, mainly to the United Kingdom, where it had a protected market. In 1941 over one third of Australia's pig production was exported. Since then, production and demand have come closer together and only an insignificant part of the country's production is exported.

Most pig raising units now provide the major part of the income from the farms concerned. More capital and skilled management are involved in the individual units.

The number of pigs in Victoria at 31 March 1969 was 421,655. About 70 per cent of these are held in the Central, Western, Northern, and Gippsland districts. The following table shows classifications (in statistical districts) of pigs, together with the numbers of pig keepers :

VICTORIA—PIGS AND PIG KEEPERS, 31 MARCH 1969

Statistical District	Boars	Breeding sows	All other	Total pigs	Pig keepers
Central	998	10,013	55,982	66,993	909
North-Central	247	1,646	8,912	10,805	350
Western	755	5,928	29,548	36,231	918
Wimmera	744	4,606	26,321	31,671	1,068
Mallee	651	4,324	23,371	28,346	869
Northern	2,094	22,229	122,410	146,733	1,550
North-Eastern	834	6,687	35,696	43,217	830
Gippsland	1,021	8,737	47,901	57,659	958
Total	7,344	64,170	350,141	421,655	7,452

The following table shows the latest statistics available of the number of dairy herds (in size groups) separated into those where pigs are held, and those where no pigs are held. The sizes of pig herds are also shown.

VICTORIA—PIG KEEPING IN CONJUNCTION WITH DAIRYING :
NUMBER OF HOLDINGS AT 31 MARCH 1966

Size of dairy cattle herd (numbers)	Size of pig herd (numbers)								Holdings with pigs	Holdings with no pigs	Holdings with dairy cattle
	1-4	5-9	10-14	15-19	20-29	30-49	50-99	100 and over			
1-4	241	58	54	18	47	46	37	20	521	3,611	4,132
5-9	177	78	41	31	42	33	28	8	438	1,853	2,291
10-14	103	58	34	22	28	30	26	10	311	1,133	1,444
15-19	79	39	41	17	22	27	17	8	250	804	1,054
20-29	139	92	74	41	52	53	30	19	500	1,269	1,769
30-49	167	149	144	109	144	141	82	25	961	2,195	3,156
50-69	106	137	114	95	184	254	128	39	1,057	2,477	3,534
70-99	83	102	128	123	252	364	356	105	1,513	4,063	5,576
100-149	44	45	50	53	124	243	396	179	1,134	3,724	4,858
150 and over	12	14	12	13	37	72	178	164	502	1,542	2,044
Total	1,151	772	692	522	932	1,263	1,278	577	7,187	22,671	29,858

*Sheep industry**Sheep breeds*

The first sheep to arrive in Victoria were Tasmanian Saxon Merinos which were brought to the Portland area by Edward Henty in December 1834. In the following year William Furlonge landed Saxon Merinos at Port Phillip, and so shared with Henty the distinction of founding the sheep industry in Victoria. Sheep numbers increased rapidly until the early 1840s, largely because New South Wales pastoralists brought their flocks southwards and John Batman's Port Phillip Association landed Saxon Merinos from Tasmania. In November 1836 there were only 41,000 sheep in Victoria, increasing to 310,000 by 1838; two years later the sheep population was 782,000. By 1851 Victoria had over six million sheep. At this time, most of the available pastoral land had been taken up and was being used for grazing.

Despite periodic droughts, Victorian sheep numbers have shown a steady trend upwards. At the census of 31 March 1968 the State had nearly 28 million sheep which was 17 per cent of the total Australian sheep population. The geographical distribution of all sheep and rams in Victoria is shown on pages 335-6.

Relative to other States (except Tasmania) the most noticeable feature of Victorian sheep numbers is the smaller proportion of Merinos (46 per cent) and the larger proportion of crossbred and comeback sheep (29 per cent) and breeds other than Merino (25 per cent). By comparison the Australian flock consists of Merinos (73 per cent); comebacks and crossbreds (15 per cent); and of other recognised breeds (12 per cent). These figures indicate the importance to Victoria of the prime lamb industry which is largely based on first cross ewes (Border Leicester X Merino) and British breed rams.

Although Victoria has relatively fewer Merinos, they produce the finest quality wool. In particular, wools from the Western District enjoy a world wide reputation for their colour, style, fineness of spinning count, and their high yielding properties. With the exception of the Mallee and Wimmera and parts of the Northern District, where the South Australian types of Merino are more numerous, a majority of Merinos found in Victoria are fine- and medium-woolled types.

Corriedales comprise 14 per cent of the sheep population of Victoria. The breed is noted for its production of high quality, fine crossbred wool, and its meat producing ability. The breed originated in 1874 in New Zealand. However, it was not until 1882 when Henry Corbett mated Merino rams to Lincoln ewes, and fixed this "half-bred" type, that the breed was established in Australia. Corriedales are found throughout most of Victoria with a heavier concentration in the Western District.

Like the Corriedale, the Polwarth is regarded as a dual-purpose animal and is based on Lincoln ($\frac{1}{4}$) and Merino ($\frac{3}{4}$) blood lines. The breed was developed in Victoria for those areas which were believed to be too wet and cold for Merino wool growing. It comprises 3.5 per cent of the total sheep numbers and is concentrated in the southern parts of the Western District, the Central District, and North-Eastern District.

The main British breeds of sheep in Victoria are the Romney Marsh, Border Leicester, Dorset Horn, Poll Dorset, and Southdown. Romney

VICTORIA—GEOGRAPHICAL DISTRIBUTION OF BREEDS OF SHEEP (INCLUDING RAMS) AT 31 MARCH 1968

Statistical District	Merino	Corriedale	Polwarth	Dorset Horn	Border Leicester	Romney Marsh	Southdown	Merino Comeback	Crossbred	All other	Total
Central	591,295 24·50	423,699 17·56	140,365 5·82	58,433 2·42	60,686 2·51	25,741 1·07	26,101 1·08	156,177 6·47	895,393 37·10	35,416 1·47	2,413,306 8·65
North-Central	1,287,137 52·86	272,433 11·19	28,473 1·17	32,784 1·35	52,683 2·16	12,624 0·52	11,771 0·48	153,099 6·29	567,810 23·32	16,159 0·66	2,434,973 8·72
Western	4,245,429 43·38	2,208,984 22·57	688,627 7·04	60,282 0·66	73,587 0·75	441,687 4·51	22,266 0·27	710,894 7·26	1,287,367 13·15	47,873 0·41	9,786,996 35·07
Wimmera	2,972,874 78·27	340,273 8·96	7,357 0·19	19,683 0·52	54,865 1·45	32,958 0·87	1,699 0·04	63,641 1·68	288,254 7·59	16,485 0·43	3,798,089 13·61
Mallee	602,586 49·37	61,718 5·06	3,675 0·30	35,049 2·87	50,492 4·14	1,736 0·14	476 0·04	54,238 4·44	399,779 32·76	10,697 0·88	1,220,446 4·37
Northern	1,437,295 36·33	316,892 8·01	31,571 0·80	121,265 3·07	106,312 2·69	17,205 0·43	18,340 0·46	181,144 4·58	1,675,830 42·36	50,128 1·27	3,955,982 14·17
North-Eastern	798,873 37·93	236,111 11·24	71,785 3·44	49,972 2·37	49,398 2·35	19,166 0·91	8,223 0·31	136,527 6·48	716,442 34·01	19,954 0·96	2,106,451 7·55
Gippsland	874,676 39·89	221,718 10·10	9,778 0·45	32,306 1·47	61,206 2·79	46,835 2·14	19,632 0·90	128,474 5·86	774,083 35·31	23,803 1·09	2,192,511 7·86
Total	12,810,165	4,081,828	981,631	409,774	509,229	597,952	108,508	1,584,194	6,604,958	220,515	27,908,754
Percentage of total sheep	45·90	14·63	3·52	1·47	1·82	2·14	0·38	5·68	23·67	0·79	100·00

NOTE. Percentages refer to total number of sheep in each District.

VICTORIA—GEOGRAPHICAL DISTRIBUTION OF RAMS ACCORDING TO BREED AT 31 MARCH 1968

Statistical District	Merino	Corriedale	Polwarth	Dorset Horn	Border Leicester	Romney Marsh	Southdown	Merino Comeback	Crossbred	All other	Total
Central	4,521	5,345	1,554	9,044	1,508	709	5,434	42	197	3,721	32,075
North-Central	7,822	3,013	390	5,498	3,137	338	2,419	..	138	1,907	24,662
Western	50,984	31,199	9,712	7,802	2,967	13,088	3,954	373	536	5,084	125,699
Wimmera	23,778	5,814	73	2,932	4,454	1,290	82	178	43	1,558	40,202
Mallee	3,846	961	34	5,678	4,416	25	53	48	59	2,214	17,334
Northern	9,775	3,319	314	20,483	9,100	296	1,806	114	147	5,176	50,530
North-Eastern	4,540	2,082	678	8,762	3,354	703	1,351	29	147	2,860	24,506
Gippsland	6,433	2,493	152	4,475	2,420	1,561	3,672	7	180	3,504	24,897
Total	111,699	54,226	12,907	64,674	31,356	18,010	18,771	791	1,447	26,024	339,905
Percentage of total ram numbers	32·9	16·0	3·8	19·0	9·2	5·3	5·5	0·2	0·4	7·7	100·0

NOTE. Percentages refer to total number of sheep in each District

Marsh and Border Leicester rams are often joined with Merino ewes to produce prime lamb dams. Southdown, Dorset Horn, and Poll Dorset rams are the most important sires for prime lamb production.

The numbers of each of the breeds are continually changing as a result of seasonal conditions throughout the State, the relative prices of wool, meat, and cereal grains. In a poor season sheep numbers may decrease as a result of lower lambing percentages and increased slaughtering of "fat" stock. There is often a large seasonal variation in sheep numbers because of movement of fat and store sheep between Victoria and New South Wales and South Australia.

VICTORIA—BREEDS OF SHEEP (INCLUDING RAMS)

Breed	31 March 1962		31 March 1965		31 March 1968	
	Number	Percentage of total	Number	Percentage of total	Number	Percentage of total
Merino	12,115,368	44·00	14,148,138	46·48	12,810,165	45·90
Dorset Horn	519,265	1·89	423,600	1·39	409,774	1·47
Corriedale	4,009,470	14·56	4,581,697	15·05	4,081,828	14·63
Border Leicester	396,845	1·44	394,872	1·30	509,229	1·82
Southdown	171,008	0·62	108,588	0·36	108,508	0·39
Poiwarth	1,247,412	4·53	1,224,100	4·02	981,631	3·52
Romney Marsh	507,127	1·84	522,460	1·95	597,952	2·14
Ryeland	35,955	0·13	28,076	0·09	18,816	0·07
Poll Dorset	15,990	0·06	30,811	0·10	106,562	0·40
English Leicester	15,398	0·06	13,415	0·05	8,144	0·03
Cheviot	18,554	0·07	16,551	0·06	10,152	0·04
Zenith	36,584	0·13	45,938	0·15	56,493	0·20
Suffolk	3,995	0·02	2,912	0·01	4,365	0·02
Shropshire	1,333	(a)	426	(a)	1,708	0·01
Lincoln	9,255	0·04	18,765	0·06	6,881	0·02
Other (including Merino come-back and other crossbreds)	8,427,991	30·61	8,806,805	28·93	8,196,546	29·34
Total	27,532,550	100·00	30,437,154	100·00	27,908,754	100·00

(a) Less than 0·01 per cent of total.

The numbers of sheep in Victoria in selected years since 1861 are shown in the table on page 327. The distribution of all livestock is shown in the table on page 328.

The increase in sheep numbers in recent years has been due to pasture improvement and intensification of stocking rates on established improved pastures.

However, factors such as seasonal conditions, prices of wool, mutton, lamb, and to a lesser degree, wheat, affect the number of sheep in the State in any given year. In an adverse season flocks may be reduced by lack of fodder or water, by the increase in the slaughtering of fat stock, or by the decrease in lambing. Decreased imports from other States are another factor. In addition to the seasonal movements of sheep from New South Wales and South Australia for agistment, there is a regular importation of sheep from those States for slaughtering purposes.

Lambing

Climatic conditions also play a large part in determining the proportion of lambs marked to ewes mated, and thus the natural increase from season to season may vary considerably. The following table shows the number of ewes mated or intended to be mated, the number actually mated, and lambs marked, in each of the five seasons 1965 to 1969 :

VICTORIA—LAMBING

Season	Ewes intended for mating	Ewes actually mated	Lambs marked	Proportion of lambs marked to ewes mated
	'000	'000	'000	per cent
1965	12,560	12,501	10,556	84
1966	12,674	12,605	10,626	84
1967	13,205	12,476	10,101	81
1968	11,797	11,557	9,255	80
1969	14,037	13,910	12,266	88

Sheep and lambs in Statistical Districts

The following tables set out the number of rams, ewes, wethers, and lambs depastured in each statistical district of the State at 31 March 1969, and the numbers of ewes mated classified according to whether the progeny is intended for wool or for fat lamb production :

VICTORIA—SHEEP AND LAMBS IN EACH STATISTICAL DISTRICT AT
31 MARCH 1969
(^{'000})

Particulars	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-Eastern	Gipps-land	
Rams	31	25	136	45	20	56	25	25	364
Ewes	1,316	1,109	5,675	2,066	1,072	2,381	1,086	1,086	15,792
Wethers	677	941	2,969	1,563	236	872	594	465	8,317
Lambs	404	372	2,156	825	385	867	313	389	5,712
Total sheep and lambs	2,429	2,447	10,936	4,498	1,713	4,176	2,019	1,965	30,185

VICTORIA—LAMBING, 1968 SEASON

Particulars	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-Eastern	Gipps-land	
Ewes mated '000	1,006	850	3,875	1,334	726	1,980	880	907	11,557
Lambs marked '000	850	708	2,887	1,008	589	1,713	719	782	9,255
Percentage	84	83	75	76	81	87	82	86	80

VICTORIA—LAMBING FORECAST, 1969 SEASON
(As advised by farmers at 31 March 1969)
(^{'000})

Breed of rams used	Ewes mated or intended to be mated (for lambing during 1969 season)								Total
	Statistical District								
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-Eastern	Gipps-land	
Merino	211	360	2,041	1,044	168	415	238	264	4,740
Corriedale or Polwarth	231	101	1,522	209	57	147	94	100	2,459
Shortwool breeds	662	400	787	244	529	1,272	518	479	4,891
Longwool breeds	69	136	560	282	246	383	133	138	1,947
Total	1,173	996	4,910	1,778	1,001	2,215	983	981	14,037

Production of wool

Statistics of wool production are obtained direct from growers, from fellmongeries and, for wool exported on skins, from the Department of Customs and Excise.

VICTORIA—SHEEP AND LAMBS SHORN, SEASON 1968-69

Statistical District	Shorn		Wool clipped (including crutchings)		Average	
	Sheep	Lambs	Sheep's	Lambs'	Per sheep	Per lamb
	'000	'000	'000 lb	'000 lb	lb	lb
Central	2,292	462	21,648	1,410	9·45	3·05
North-Central	2,521	421	24,905	1,228	9·88	2·91
Western	10,407	2,298	100,774	6,962	9·68	3·03
Wimmera	4,200	900	44,009	2,697	10·48	3·00
Mallee	1,283	333	13,192	1,035	10·29	3·11
Northern	3,859	956	38,617	2,849	10·01	2·98
North-Eastern	2,105	365	18,805	937	8·93	2·57
Gippsland	1,985	491	18,562	1,354	9·35	2·76
Total	28,653	6,227	280,511	18,471	9·79	2·97

VICTORIA—SHEEP SHORN AND WOOL CLIPPED

Season	Shorn		Wool clipped (including crutchings)		Average	
	Sheep	Lambs	Sheep's	Lambs'	Per sheep	Per lamb
	'000	'000	'000 lb	'000 lb	lb	lb
1964-65	28,315	7,024	285,407	20,871	10·08	2·97
1965-66	29,668	8,003	285,564	21,779	9·63	2·72
1966-67	29,553	7,605	292,627	22,080	9·90	2·90
1967-68	28,304	6,940	257,042	17,787	9·08	2·56
1968-69	28,653	6,227	280,511	18,471	9·79	2·97

VICTORIA—WOOL PRODUCTION AND VALUE

Season	Clip	Stripped from and exported on skins, etc. (greasy)	Total quantity (greasy)	Gross value	Average price per lb
	'000 lb	'000 lb	'000 lb	\$'000	cents
1964-65	306,278	55,252	361,530	176,041	48·69
1965-66	307,343	59,601	366,943	193,797	52·81
1966-67	314,707	63,750	378,457	180,946	47·81
1967-68	274,829	57,598	332,427	133,213	40·07
1968-69	298,983	65,364	364,347	155,547	42·69

Sheep and Wool Growing Districts, 1967; Wool Marketing, 1963; Pastoral Industry, 1963

Meat industry

The farm lands of Victoria have proved most suitable for meat production and about 30 per cent of Australia's red meat is produced in this State.

The American market has brought big changes to the beef industry since the United States is interested mainly in lean meat. The demand created to supply this market has lifted the prices of bulls, dairy and beef cows, and

what are known to the trade as store cattle. The prices for these cattle are close to the prices paid per 100 lb dressed weight (chilled carcass) of the traditionally prime cattle used extensively in supplying the local trade.

The local market for lamb has always been good but the demand for export lamb is irregular largely because of variations in quality and supply affecting price. Grading is largely a matter of fatness and the leaner, meatier types used locally are the most profitable to produce in areas where lambs can be carried through for marketing from February to September. The supply of lambs is less from areas where the season favours marketing from February to September and growers have more control over lamb selling at prices above export parity.

Boneless mutton exports mainly to the United States and Japan have provided a good market for old sheep which at one time brought low prices for canning and small goods.

Pig production varies every few years but the trend is generally upward, in line with the human population. Almost all the pig meat produced is eaten in Australia. Although the consumption of pig meat per head of population in Australia is increasing slowly, it is only 10 per cent of the total meat consumption and is low in relation to that of other nations. There is considerable interstate trade in pig meat, as Victoria and New South Wales are net importers from the other States.

Table poultry production has changed dramatically in Victoria in recent years. The development of large modern production units has resulted in a big increase in broilers, turkeys, and ducks and consequent reduction in prices. Few people are keeping poultry for their own domestic requirements and consequently more poultry is purchased.

Australian Meat Board

Organisation

The Australian Meat Board was first established by Federal Parliament in 1936 and reconstituted in 1946. In addition to the chairman, six of the Board's members are chosen from organisations of primary producers, two from exporters' organisations, and there is a representative of the Commonwealth Government. The purpose of the Board is to protect the long-term interests of Australia's meat industry through a policy of orderly domestic and overseas marketing. The Board operates under the *Meat Industry Act 1964-1969*.

Funds

The Board's operations are financed by a levy on animals slaughtered in Australia for human consumption. The levy is 45 cents per head on cattle and 3.75 cents per head on sheep. Of this 25 cents and 1.75 cents per head, respectively, are allocated to research in each section of the industry. A further levy payable from 1 January 1969 of 1 cent per head on cattle and 0.10 cent on sheep helps finance C.S.I.R.O. research into the industry.

Exports

Although the Board advises meat processors and essential regulations control livestock diseases, the meat industry operates on a private enterprise basis. Domestic consumption on a per capita basis averages about 220 lb of red meats each year. While this is considered high by world standards about 35 per cent of Australia's meat production must be exported. In 1968

and 1969 meat exports were valued at about \$270m but were \$409m in 1970. Victoria exported 108,000 tons shipped weight of an Australian total of 397,000 tons in the year ended June 1969. Victorian exports in 1970 were 178,000 tons shipped weight of an Australian total of 546,000 tons.

The Board advises the Commonwealth Government on the meat export industry and works closely with the Government in negotiating agreements with other countries. Late in 1968 the Board designed a scheme to end the need for United States' quotas, which in 1964 had set a limit on total imports of beef and mutton. This was implemented through a voluntary agreement between major meat suppliers of the United States. Meat is Australia's top earner of American currency; in 1968-69 exports to the U.S. were worth \$A 189.4m and \$A 248.6m in 1969-70.

Promotion

The Board has representatives in London, New York, Tokyo, and Tehran to observe the local meat trade and to act in the best interests of the Australian trade. To promote Australian meat overseas visits may be made by Board members, some promotional activity is carried out in conjunction with the Department of Trade and Industry, and some Australian export firms act on their own initiative. Expenditure on overseas promotion in 1969-70 totalled \$210,400, of which the largest amount, \$137,600 was spent in Japan and Asia.

Research

The Board also engages in research providing facilities and staff for the Australian Meat Research Committee. This body co-ordinates research expenditure. Funds are divided between the C.S.I.R.O., State and Federal government departments, and universities. Of particular importance is the C.S.I.R.O. Meat Research Laboratory at Cannon Hill, Queensland, on which the Committee has spent about \$930,000. An annual contribution of \$405,000 is made to research at the laboratory. In the nine years to June 1971 the Committee has allocated nearly \$15m on cattle and beef research, and the recently established mutton programme has been allocated some \$2.7m since 1968.

Broiler industry

The raising of chickens for meat on a large scale has emerged in Victoria since the mid-1950s. Chickens are most efficient in converting poultry feeds, grains, and protein supplements to meat, and are also multiplied cheaply and rapidly through scientific breeding and modern artificial incubation methods.

It now takes approximately 2.5 lb of poultry feed to produce 1 lb of poultry meat, and a 3.5 lb chicken is grown in ten weeks. This efficient conversion and rapid growth has been achieved by extensive breeding programmes; the use of "high energy" poultry feeds, highly supplemented with vitamins and minerals; growth promoters and disease control drugs; and by the development of enclosed, factory-like broiler houses, with controlled temperature, humidity, ventilation, and light, all conducive to fast growth.

The organisation of the broiler industry as a continuous, production-line, factory-like operation, has been a major factor in the great reduction in price to consumers. Breeders, hatcheries, contract growers, poultry processors, and distributors have all co-ordinated to ensure efficient and continuous production. Seasonal effects are no longer a consideration and prices do not fluctuate. As a result, poultry meat, once a luxury, is now cheap and a

normal part of the diet. Turkey meat is also cheap and plentiful.

The main broiler production centres are located on the Mornington Peninsula and in areas south-east and east of Melbourne and the Geelong area near the processing works and the main centres of consumption. Most of Victoria's production is consumed locally; very little is exported, while considerable numbers of interstate broilers are imported.

Broiler houses are fully enclosed; each house grows a "crop" of about 10,000 to 15,000 broilers, about four times a year. Chickens are stocked at a rate of 0.6 to 0.8 sq ft of floor space per bird. A one-man or one-family farm raises approximately 120,000 to 160,000 birds a year. Growers are usually contracted to supply large broiler organisations which hatch and supply the specially bred meat chickens and receive broilers back for processing and distribution.

Egg industry

The trend in the Victorian egg industry is towards large specialised farms—egg producers, hatcheries, and pullet growers—utilising modern poultry housing, equipment, and labour saving machinery.

The greater proportion of the State's estimated 4 million adult female fowls are now part of the commercial egg industry. There are, however, large numbers of small household flocks in suburban and country areas. The main areas of commercial production are centered on the outskirts of the Melbourne metropolitan area and in the Bendigo district, with large centres around Ballarat and Geelong, and substantial populations in the Wimmera, Goulburn Valley, and north-east.

One-man or one-family farms usually manage 4,000 to 6,000 layers. There are, however, many larger farms employing labour, with up to 20,000 layers, and a smaller number of much larger farms.

Housing is planned on the intensive principle, with deep litter pens or multiple bird cage units. Most of the new housing is on the laying cage system. A small proportion of layers is kept in fully enclosed, windowless houses under a fully controlled environment. Artificial lighting is used on almost all commercial egg farms to stimulate egg production. Feeding is based on grains (wheat, oats, and barley) and their by-products (bran and pollard). Meatmeal is the major protein supplement. Wide ranges of commercial, ready-mixed poultry rations are also available.

Laying stock consists mainly of a specially produced crossbred between the White Leghorn and Australorp breeds. The average State egg production is estimated at approximately 210 eggs per bird per year. Commercial stock of the local breeding farms and hatcheries is tested for profitability at the Department of Agriculture's Random Sample Laying Test at Burnley. Chicks are hatched continuously throughout the year with an emphasis on the June–November period. Hatcheries are large and use modern incubators from 5,000 to 90,000 egg capacity. Most commercial egg-type chicks are sexed when a day old by machine or hand methods and the cockerels discarded. The main power source used in the brooding of chicks is electricity, but gas brooders and hot water brooders fired by oil burners are also used.

The marketing of eggs is controlled by the Victorian Egg and Egg Pulp Marketing Board. Flocks with over twenty adult female fowls come within the Board's jurisdiction, and owners of flocks with over forty adult female

fowls are required to market their eggs through the Board. Victoria produces a surplus of eggs which is exported through the Australian Egg Board.

Advisory and research services to the egg industry are provided by the Department of Agriculture, commercial firms concerned with sale of feed, chicken drugs, and equipment, and by the University of Melbourne.

Egg marketing

A monthly collection of statistics on chicken hatchings and poultry slaughterings was commenced in Victoria in January 1966 and the following table summarises the results for each of the years 1965-66 to 1968-69 :

VICTORIA—CHICKEN HATCHINGS AND POULTRY SLAUGHTERINGS ('000)

Period	Hen eggs set and chickens hatched					Total hatched	
	Hen eggs set (a)	Chicks hatched (b) intended to be raised for			Breeding		
		Meat production	Egg production	Pullets			Cockerels
			MEAT STRAINS				
1965-66	18,758	13,705	(c)	20	3	13,727	
1966-67	19,626	14,486	(c)	7	1	14,494	
1967-68	20,655	15,806	(c)	1	1	15,809	
1968-69	20,120	15,546	(c)	..	..	15,546
			EGG STRAINS (d)				
1965-66	10,956	2,135	3,710	202	41	6,087	
1966-67	12,206	1,509	4,114	217	30	5,869	
1967-68	12,578	1,567	4,251	209	31	6,059	
1968-69	13,104	880	4,455	184	26	5,545	

(a) Includes eggs which failed to hatch.

(b) Excludes chicks destroyed.

(c) Not applicable.

(d) Egg strain chicks reported as "unsexed" have been allocated half to chicks for meat production and half to chicks for egg production. The number so reported was 907,295 in 1965-66, 486,340 in 1966-67, 410,129 in 1967-68, and 223,321 in 1968-69.

VICTORIA—POULTRY SLAUGHTERED FOR HUMAN CONSUMPTION ('000)

Period	Chickens (i.e. broilers, fryers or roasters)	Hens and stags	Ducks and drakes	Turkeys				
1965-66	12,039	1,013	326	67				
1966-67	13,570	911	253	166				
1967-68	15,519	990	248	95				
1968-69	13,832	1,327	272	114				
DRESSED WEIGHT OF POULTRY SLAUGHTERED (a), AND INTENDED FOR SALE (b) ('000 lb)								
	Fresh	Frozen	Fresh	Frozen	Fresh	Frozen	Fresh	Frozen
1965-66	19,487	9,508	2,556	820	793	536	105	565
1966-67	20,020	14,742	2,520	449	728	169	131	1,487
1967-68	19,053	22,333	2,963	355	635	248	145	818
1968-69	21,093	18,393	3,791	882	830	192	204	844

(a) Dressed weight of whole birds, pieces and giblets as reported by producers.

(b) Fresh: Sold immediately after slaughter or chilled for sale soon after.

Frozen: Frozen hard for storage of indefinite duration.

The preceding statistics have been compiled from returns submitted by all known Victorian hatchers and all poultry slaughterers slaughtering more than 1,000 birds annually. It is considered that they give a high level of coverage of chicken hatchings and poultry slaughterings in Victoria.

Stock slaughtered

The following table shows the number of slaughtering establishments and details of the stock slaughtered in the State during each of the five years 1964-65 to 1968-69 :

VICTORIA—STOCK SLAUGHTERED (a)

Particulars	Stock slaughtered in establishments and on farms and stations				
	1964-65	1965-66	1966-67	1967-68	1968-69 (b)
	'000	'000	'000	'000	'000
Sheep	7,136	8,160	7,310	9,227	5,609
Lambs	5,433	5,205	5,875	5,816	7,102
Bulls and bullocks	295	270	244	237	270
Cows	577	558	485	516	401
Young cattle	365	359	361	337	339
Calves—Bobby	675	622	570	673	433
Other		44	77		29
Pigs	601	705	699	701	775
Number of slaughterhouses	270	262	263	240	247

(a) Includes numbers of livestock condemned as being unsuitable for human consumption.

(b) Average dressed weights per carcass during 1968-69 were: sheep 49·09 lb, lambs 37·50 lb, bulls and bullocks 608·49 lb, cows 532·56 lb, young cattle 335·45 lb, bobby calves 43·88 lb, other calves 105·93 lb, and pigs 107·31 lb.

Frozen Meat Exported, 1969

Honey industry

Victoria's hardwood forests each year provide an important contribution to the wealth of the State by virtue of timber production for various purposes. However, one little known facet of forest productivity is the annual harvest of honey and beeswax collected by bees from many species of eucalypts in all parts of the State. Today, Victoria ranks second among the States in apicultural activities. Eucalyptus species provide the bulk of the honey crop—up to 95 per cent of the total—with the balance made up of ground flora species such as clover and Paterson's Curse.

In recent years some concern has been felt in the industry at the increasing pressure for alienation of some types of Crown land for agricultural purposes. Much of this land has in the past been reliable bee keeping country because of its natural tree and shrub flora. These lands are generally cleared after alienation and so are lost for honey production. Parts of the Mallee, Wimmera, Western District, and north-east are areas most affected.

There are some 1,240 apiarists in Victoria with five or more hives. These apiarists produce an average of 8 mill. lb of honey per annum. Hive yields are relatively good and range from 90 to 150 lb per annum. The larger commercial enterprises would average 200 lb per annum.

The industry is, of necessity, migratory, whole apiaries with attendant plant being moved by road transport from one part of the State to another, following the flowering of various species of honey flora in the forests and

on the farm lands. Hives, trucks, and plant have been designed and modified to suit the requirements of mobility demanded by the industry.

Pollination of agricultural crops is a further aspect of the industry which has received considerable attention. Each year in the past, thousands of colonies have been hired out to fruit and seed growers to ensure profitable sets of seed and fruit. However, in recent years the advent of the newer types of insecticides and their increasing popularity, especially with fruit growers, has caused concern amongst apiarists, many of whom are no longer prepared to lease hives of bees for pollination because of serious bee losses following spray application of certain types of insecticides. It is anticipated that, with the increasing use of some of these chemicals, pollination of agricultural crops may become a serious problem in Victoria and elsewhere. The application of insecticides with the spreading of superphosphate on pastures, especially in irrigation areas, is also causing concern.

Marketing has always been a great problem to the industry. Violent fluctuations in the annual honey crop are always, in the absence of any organised marketing scheme, attended by similar fluctuations in prices. Considerable carry-overs occasionally aggravate this. However, late in 1962 Federal Parliament passed enabling legislation for the establishment of the Australian Honey Board. The functions of the Board are to regulate export of, and export prices for, honey. The activities of the Board are financed by means of a levy on domestic consumption of honey and a publicity and research programme is being undertaken.

In 1967 the Australian Honey Board established a finance scheme to enable apiarists to hold stocks of honey off the market in times of glut or poor prices. In 1968 the Department of Primary Industry developed an equalisation proposal for stabilising home and export market prices. The scheme is presently being considered by the industry.

State interest in the industry is authorised by the *Bees Act* 1966 and extends to disease control, advisory services, research into the problems of the industry, and hygiene in the production and processing of honey. An Apicultural Research Unit is in operation at the Scoresby Horticultural Research Station.

Particulars relating to apiculture for the five years 1965 to 1969 are given in the following table. Since 1958 bee keepers with less than five registered hives have been excluded from the collection.

VICTORIA—BEE HIVES, HONEY, AND BEESWAX

Season ended 31 May—	Bee keepers	Hives	Production		Gross value	
			Honey	Beeswax	Honey	Beeswax
	No.	No.	'000 lb	'000 lb	\$'000	\$'000
1965	1,276	99,345	9,181	105	1,377	52
1966	1,243	101,387	9,608	115	1,403	55
1967	1,158	96,274	7,160	88	1,045	44
1968	1,298	95,108	7,580	92	1,114	67
1969	1,240	99,953	3,638	50	520	37

PRIMARY INDUSTRIES OTHER THAN FARMING

Forestry

Forest estate

Of the 56,245,760 acres in Victoria, the forest estate consisted of 5,670,009 acres of reserved forest at 30 June 1969 and over this area the Forests Commission had full control. Only a proportion of this reserved forest produces commercial timber, as large areas come within the category of protection forests and are of value in safeguarding the State's water catchments. In addition, the State Forests Department has partial control over some 9 mill. acres of unoccupied Crown land which must, therefore, be included in the forest estate. These Crown lands include areas of mallee scrub and alpine grasslands as well as good timbered country.

The Forests Commission of Victoria was established by the *Forests Act* 1918 and consists of a chairman and two commissioners. Subject to the *Forests Act*, the Commission has the exclusive control and management of all matters of forest policy, the granting of leases, licences, permits and authorities, and the collection of rents, fees, royalties, and other revenue. It is the duty of the Commission to carry out plans and works for the establishment, maintenance, improvement, and renewal of natural forests and plantations of indigenous and exotic trees. It is also responsible for the prevention and suppression of fires, the training of forest officers, conduct of research work, provision of facilities for public recreation, and the protection of native flora and fauna in State forests.

Forest timber

The following table summarises the total output of all species from all forests in the State (including privately owned lands) for the years 1964-65 to 1968-69 :

VICTORIA—FOREST TIMBER
(^{'000} cu ft)

Item	1964-65	1965-66	1966-67	1967-68	1968-69 ^p
Logs for sawing, peeling, slicing, or pulping—					
Hardwoods	68,159	69,499	68,880	70,129	75,157
Softwoods—					
Indigenous forest pines	2				
Plantation grown pines	12,398	14,377	15,325	14,037	16,107
Total logs	80,559	83,876	84,205	84,166	91,264
Hewn and other timber (not included above)					
estimated volume—					
Firewood (a)	18,602	18,572	14,990	12,293	10,718
Other (b)	4,805	5,475	4,793	4,677	4,194

(a) Excludes mill waste used as firewood.

(b) Includes telephone and electric supply transmission poles, bridge and wharf piles and beams, fencing timbers, railway sleepers, and mining timbers from Crown lands. Similar information for private lands is not available.

p: Preliminary

The demand for sawn timber for house construction was very strong in 1968-69 and the volume of logs removed from State forests was one of the highest on record; but a decline in the output of softwood logs from State plantations was recorded for the second year in succession.

There was a sharp increase in the volume of hardwood pulpwood used in manufacture of paper and hardboard, and proposals to export hardwood chips to overseas paper industries are under consideration; but there has been a steady decline for several years in the output from State forests of softwoods for papermaking.

Trends in the output of other forest products were varied. A record volume of softwood logs was used for veneer, but hardwood log output for veneer was lower than previously. Poles for power transmission and telephone lines are now produced by preservative treatment of timbers which are not naturally durable. Poles of the durable timbers are not in demand. Fencing timbers have not been in good demand since the severe drought of 1967, and fewer railway sleepers were produced in 1968-69 than in previous years.

Softwood plantations

In recent years large scale plantings have been concentrated in the north-east and south-west adjacent to the South Australian border, where 5,000 and 3,000 acres, respectively, are being planted each year. The total net area of State softwood plantations at 31 December 1969 was 97,456 acres, the total annual planting being approximately 10,000 acres. It is proposed to increase this annual planting rate to 12,000 acres by 1971 under the Commonwealth-States Softwood Forestry Agreement.

Pinus radiata has proved itself adaptable to the sites available; it makes rapid growth; is hardy and relatively immune from insect and fungus attack; and produces a good quality timber. While *Sirex noctilio*, the wood wasp, has been found within commercial plantations in Victoria, good management techniques have so far prevented it causing any losses of consequence in softwood plantations. The area planted in *Pinus radiata* comprises 86,926 acres or 89 per cent of the total softwood planting. Many of the unsatisfactory areas originally planted with other conifers are now being converted to this species.

The older stands are mainly fifteen to forty years old. Although larger areas are now being clearfelled and replanted, the bulk of the timber being utilised is coming from silvicultural thinnings in the form of logs for peeling and sawing and pulpwood for paper manufacture.

Privately owned softwood plantations were estimated to comprise 115,014 acres at 31 March 1969, and the areas are steadily increasing. Large industrial companies are planting *Pinus radiata* to provide sustained yields of softwood for sawmilling and wood-fibre industries. Private individuals plant small areas as long-term investments and many State schools maintain small endowment plantations.

The *Land (Plantation Areas) Act 1959* is designed to encourage private establishment of softwood plantations by providing that Crown lands suitable for commercial plantations and unsuitable for agriculture may, with certain safeguards, be leased for timber growing purposes and subsequently sold to the lessee.

During 1964-65 an amendment to the *Forests Act 1958* was passed enabling loans of up to \$50 per acre to be advanced to landowners for planting softwood species on land approved by the Commission as being capable of producing an economic crop. The basic intention is to

encourage farmers to establish farm woodlots by providing funds interest free for the first twelve years to cover expenses.

The output from State plantations is summarised below:

**VICTORIA—OUTPUT FROM STATE PLANTATIONS
OF SOFTWOOD LOGS AND PULPWOOD**
(’000 cu ft)

Year	Sawlogs and peeling logs	Pulpwood
1964-65	4,026	2,037
1965-66	4,412	2,408
1966-67	4,830	2,323
1967-68	4,618	1,968
1968-69	4,425	1,589

Telecommunications

The Commission maintains a fire equipment workshop and a radio laboratory. The radio system consists of forty-six base stations, 190 mobiles, 180 hand held portables, and 450 portable/mobile radios. In addition, twenty stations are equipped with receivers for receipt of weather information and three trailer mounted base stations are held for use in fire emergencies. Three hundred and sixty-five miles of telephone lines erected by the Commission are maintained each year prior to and during the fire season.

Fire protection

The Forests Commission is responsible for the prevention and suppression of fires in all State forests and National Parks and in certain alienated lands within one mile of State forest or National Park. This area of responsibility is legally designated the Fire Protected Area. Legislation provides strict control over the lighting of fires, power to prohibit the use of fire, and to close down certain operations in the Fire Protected Area during any period of extreme fire danger.

The causes of fires attended by Forests Commission personnel in the period 1964-65 to 1968-69 were as follows:

VICTORIA—CAUSES OF FOREST FIRES

Cause	Number of fires				
	1964-65	1965-66	1966-67	1967-68	1968-69
Grazing interests	..	1	..	4	..
Landowners, householders, etc.	91	115	90	169	64
Deliberate lighting	38	57	104	167	74
Sportsmen, campers, tourists	41	63	33	51	20
Licenseses and forest workers	14	20	15	56	18
Smokers	43	50	36	61	15
Lightning	153	83	41	67	95
Tractors, cars, trucks, locomotives, and stationary engines	28	16	35	50	25
Children	25	21	9	19	13
Sawmills	11	8	8	15	7
Miscellaneous known causes	41	32	44	53	45
Unknown origin	72	63	71	75	15
Total	557	529	486	787	391

Forest fires (1968-69)

Summer in Victoria is frequently a long period of dry conditions with many days of high temperatures and strong dry winds which cause severe fire danger.

The summer of 1968-69 was short and mild in general, but acute fire danger developed on 8 January 1969 causing many severe fires in rural areas with extensive damage and loss of life. One fire spread rapidly through grassland near the township of Yea and into the forest on the Black Range, where a fire tornado developed. Pieces of burning material were carried aloft by the storm, causing several dangerous spot fires from 10 to 12 miles ahead of the main fire, and one 25 miles distant.

Air attack on fires

The importance of aircraft for fire fighting is increasing. A helicopter is maintained on immediate call for reconnaissance of fire edges. The helicopter is now also used with great success for backburning, an indispensable but difficult technique used to stop the spread of wildfires. The backburn is ignited from the helicopter with special incendiary devices. The location and timing of ignition of the unburnt fuels can be controlled very accurately to ensure that the backburn develops steadily and safely, within the established control lines.

The normal Forests Commission work force is augmented by two mobile support crews, each comprising eighteen university students, who are able to work on fires in any part of the State.

The areas of State forest burnt in the period 1964-65 to 1968-69 were as follows:

VICTORIA—AREAS OF STATE FOREST BURNT
(Acres)

Year	Commercial area	Non-commercial area	Total
1964-65	386,815	420,761	807,576
1965-66	20,313	50,733	71,046
1966-67	7,830	30,689	38,519
1967-68	306,350	240,698	547,048
1968-69	36,969	34,638	71,607

Forest management

The volume of timber to be harvested from the forests is carefully regulated to maintain the long-term productivity of the forests and to ensure steady output for the industries which use their products. The allowable rate of harvesting is determined by measurements of the forest and predictions of the rates of growth.

In the native forests which have been under close management for many years the rates of growth and harvesting are monitored by making periodical remeasurements of the trees on several hundred sample areas which are taken to represent the whole forest.

The vigorous young trees in the softwood plantations and the regrowth forests of mountain ash are growing so rapidly that their productivity is predicted by projecting their development far into the future. Comprehensive information on growth of these forests has been assembled in computer

programs which will calculate their future growth and production under many different plans of management. This enables the development of the forests to be simulated for study purposes so that the best plan of management may be selected.

Laboratory and field research

Studies of fire behaviour in a wide range of types of forests under various weather conditions are contributing to improvements in fire fighting methods, and also in methods of using controlled fire for protection of the forests, regeneration of new crops, maintenance of suitable habitats for wildlife, and other forestry purposes.

Aerial techniques have been developed for regeneration of logged areas of natural forest. Chemicals applied from agricultural aircraft desiccate scrubby growth to prepare the ground for seeding. Good control of drift during applications is obtained by using invert spray emulsions. An efficient system has been developed to spread the fine eucalypt seed evenly at the required rate.

The rapid increase in area of forests of radiata pine is supported by a vigorous research program. The nutrition of the pine is being studied in the nurseries and on new plantation sites, and the early growth of the pines is being improved also by new methods of controlling wattles, and other competing vegetation. A tree improvement research program has been in progress for some years, and a study of the wood grown in various types of plantations on various sites is in hand.

Entomological studies are being carried out to control some serious insects including the sirex wasp, the phasmatid, and other defoliators and boring insects. Pathological studies have concentrated on various tree diseases and the mycorrhizal associations on the roots of *Pinus radiata*. Forest hydrology studies are being carried out in relation to quality and quantity of water from forested water supply catchments. The Commission has undertaken laboratory studies of the viability and dormancy of tree seeds.

Further references, 1965 to 1970 ; Forestry Laboratory Research and Field Research, 1965 ; Economic Aspects of Forests, 1967 ; Commonwealth-State Reforestation Agreement, 1969 ; Forest Fires (1967-68), 1970

Fisheries and wildlife

General

Practical management of the fish and wildlife resources of Victoria is vested in the Department of Fisheries and Wildlife, which is responsible to the Chief Secretary for the administration of the Fisheries Act and the Game Acts, and for conservation, management, and research on native and introduced fishes, birds, and mammals.

The State Freshwater Fisheries Research Station and Native Fish Hatchery are located at Snobs Creek, near Eildon. A wildlife research centre is being developed at Lara, near Geelong. Fisheries and Wildlife officers (enforcement staff) are stationed at eighteen district centres throughout the State, and eight more district stations are proposed.

Economic aspects

Populations of fish are valuable as sources of food ; their exploitation creates employment and generates cash flows between fishermen, processors,

consumers, suppliers of boats and fishing gear, insurance agents, etc. A characteristic of most fish populations is that they are both self-renewing and the shared property of the fishermen who exploit them. The latter characteristic indicates that the fishing activities of each fisherman have a direct effect on the quality and quantity of subsequent catches made by other fishermen; and in fisheries where the entry of additional fishermen is not restricted, it is common that more fishermen enter the fishery than is desirable for the welfare of those already engaged. This state of "over-manning" has occurred in the Victorian fisheries for scallops, abalone, and rock lobster.

During December 1968 a revised Fisheries Act was passed by Parliament. This included the very unusual provision that the Minister has the right to grant or refuse an application for a licence, while having regard to the welfare of the fishery concerned and the persons engaged in the fishery. This provision implied that the Minister receives information relevant to both the biological state of the fish populations and the economic state of the fishery and its participants. The desired economic information includes the incomes from the catch, the associated costs, and the capital structure of the enterprises involved in making the catch. The fishing enterprise is regarded as the combination of physical components which operate to harvest the catch.

Information of the above type has been collected on an average per boat basis for the Port Phillip Bay scallop fishery and is summarised below for the years 1964-65 and 1968. This information, with biological information, enabled formulation of the management controls implemented in May 1968. In addition, the information collected was made available to the industry, and enabled the participants to determine their relative efficiencies, as well as assist them in making their business decisions. It was shown that the smaller, less expensive boats were economically the most efficient, and that considerable savings could be made by reducing crew numbers. Fishermen were also provided with a model designed to assist them rationalise their activities if prices or the availability of scallops changed.

A similar economic study has been undertaken for the southern rock lobster fishery, and is planned for the Victorian abalone fishery.

PORT PHILLIP BAY—SCALLOP FISHERY: AVERAGE
INCOME AND EXPENDITURE PER ENTERPRISE
(\$)

Particulars	1964-65	1968 (a)
Gross income	12,862	8,094
Costs—Operating costs	3,363	2,069
Depreciation	1,298	948
Crew costs	2,926	1,366
Total costs	7,588	4,383
Net income	5,274	3,711
Capital value	13,375	12,356

(a) Due to the seasonal type of activity in the scallop industry these figures are comparable although they relate to different twelve-monthly periods.

Fisheries statistics

The statistics of production shown in the following tables are in terms of live weight for fish, crustaceans, and molluscs. In interpreting fisheries statistics, allowance should be made for the incomplete coverage. Returns are collected from licensed professional fishermen only, and as a result the published totals fall short of total fish production to the extent of the catch by amateur fishermen, the commercial catch by persons not licensed as professional fishermen, and unrecorded catch by professional fishermen.

The following table shows the catch of fish, crustaceans, and molluscs for the years 1964-65 to 1968-69 landed at Victorian ports irrespective of the waters in which they were caught. Also included are fish, etc., landed by Victorian fishermen in South Australia.

VICTORIA—CATCH OF FISH, CRUSTACEANS, AND MOLLUSCS
(‘000 lb live weight)

Species	1964-65	1965-66	1966-67	1967-68	1968-69
Freshwater fish					
Eel	168	175	221	235	288
Perch	87	124	165	152	53
Other	37	43	34	36	53
Total	292	342	420	423	394
Marine fish					
Anchovy	275	375	441	343	2,395
Bream	204	235	490	726	709
Flathead	1,527	1,482	1,603	1,568	2,024
Flounder	231	135	151	160	130
Garfish	281	276	371	371	510
Morwong	426	427	272	167	291
Mullet	919	679	629	536	539
Pike	76	100	107	133	93
Salmon, Australian	1,223	1,805	1,252	1,303	943
Shark	5,076	5,266	5,694	5,810	6,616
Snapper	414	343	349	374	423
Snoek (barracouta)	4,134	5,268	2,790	3,676	5,360
Whiting	267	213	481	462	528
Other	1,340	1,520	997	964	2,614
Total	16,393	18,124	15,627	16,593	23,175
Crustaceans					
Rock lobster	1,291	1,681	1,723	1,533	1,581
Prawns	8	11	10	5	5
Total	1,299	1,692	1,733	1,538	1,586
Molluscs					
Abalone	393	961	3,379	7,470	5,950
Scallops	21,371	27,956	28,726	27,895	9,885
Other	468	591	569	524	392
Total	22,232	29,508	32,674	35,889	16,227
Total all species	40,217	49,667	50,456	54,441	41,380

The following table shows certain particulars about the fishing industry in Victoria for the years 1964-65 to 1968-69 :

VICTORIA—FISHERIES : MEN, BOATS, AND
EQUIPMENT EMPLOYED

Year	Number of men	Boats employed		Value of nets and other equipment
		Number	Value	
			\$'000	\$'000
1964-65	1,518	897	4,174	798
1965-66	1,566	910	4,432	821
1966-67	2,057	1,108	5,903	1,078
1967-68	2,053	1,084	6,808	1,153
1968-69	1,571	871	5,363	1,047

VICTORIA—FISHERIES: QUANTITY AND GROSS VALUE OF TAKE

Year	Recorded production							
	Fish		Rock lobster		Prawns		Molluscs	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	'000 lb	\$'000	'000 lb	\$'000	'000 lb	\$'000	'000 lb	\$'000
1964-65	16,685	2,030	1,291	903	8	5	22,232	695
1965-66	18,466	2,231	1,681	1,177	11	6	29,508	989
1966-67	16,048	1,959	1,723	1,034	10	6	32,674	1,981
1967-68	17,016	2,253	1,533	1,027	5	3	35,889	2,432
1968-69	23,568	2,678	1,581	1,455	5	3	16,227	1,695

Further references 1961-1970; *Wildlife in Relation to other Natural Resources, 1962*; *Introduced Fish, 1963*; *Commercial Fisheries, European Carp, 1964*; *Freshwater Research, 1965*; *Marine Fisheries, 1966*; *State Wildlife Reserves System, 1966*; *Scallop Fishery, 1967*; *Serendip Wildlife Research Station, 1968*; *Tower Hill State Game Reserve, 1969*; *Rehabilitation of Species, Arthur Rylah Fish and Wildlife Research Institute, 1970*.

Mining

The most notable recent development in Victoria's mineral industry besides the exploitation of natural gas and oil discoveries offshore, is the continued expansion of the non-metallic minerals and the decline of the metallic minerals, especially gold. Significant progress has been made in open cut mining, especially in the extraction of brown coal and construction materials. Exploratory offshore drilling on the Gippsland Shelf in Bass Strait has revealed the presence of considerable quantities of oil and natural gas. The principal oil and natural gas discoveries and plans for their development are described on pages 364-366 of the *Victorian Year Book 1968*. The major mineral resources of the State are described on pages 366-7 of the *Victorian Year Book 1967*. A further article on the State's minerals appears on pages 1-27 of the *Victorian Year Book 1970*.

Further reference, 1970

Natural gas and crude oil development 1969-70

The development of natural gas and crude oil in Victoria from 1964 to October 1969 is set out on pages 372 to 375 of the *Victorian Year Book 1970*.

The period between October 1969 and December 1970 was highly significant for Victoria. Two oilfields in waters off the east Gippsland coast began production, crude oil commenced being supplied to Victorian refineries, a large plant started producing liquefied petroleum gas, and the

appliance conversion programme was completed with all customers in Melbourne being connected to natural gas.

Exploration

Both on and offshore the exploration for gas and oil continued. Fourteen wells were drilled offshore in the Gippsland Basin in Victorian waters; some gas shows were encountered; and a confirmatory step-out well in the Snapper field proved that it was a commercial gas discovery with estimated reserves of 3.2 trillion (million million) cubic feet of recoverable gas. No offshore wells were drilled in the Otway Basin in Victorian waters but three onshore wells proved to be dry holes. Six wells were drilled onshore in the Gippsland Basin and two in the Murray Basin, but these also proved to be dry holes. Generally, apart from the earlier discovered Snapper field, the drilling for oil and gas proved to be disappointing throughout Victoria, and only in the Batfish 1 offshore well were shows of oil encountered.

Production

Natural gas. This commenced flowing from the Barracouta field on 7 March 1969 and from the Marlin field on 21 January 1970. Both of these fields are now the joint producers of gas for the Victorian market. To the end of 1970 the Barracouta field produced 16,027 million cubic feet of raw gas and Marlin 15,059 million cubic feet. This was conveyed to the Gippsland Gas Processing and Crude Oil Stabilisation Plant at Longford through 30 mile, 18 inch diameter and 67 mile, 20 inch diameter, half undersea and half onshore pipelines, respectively, for processing into dry, pipeline quality gas.

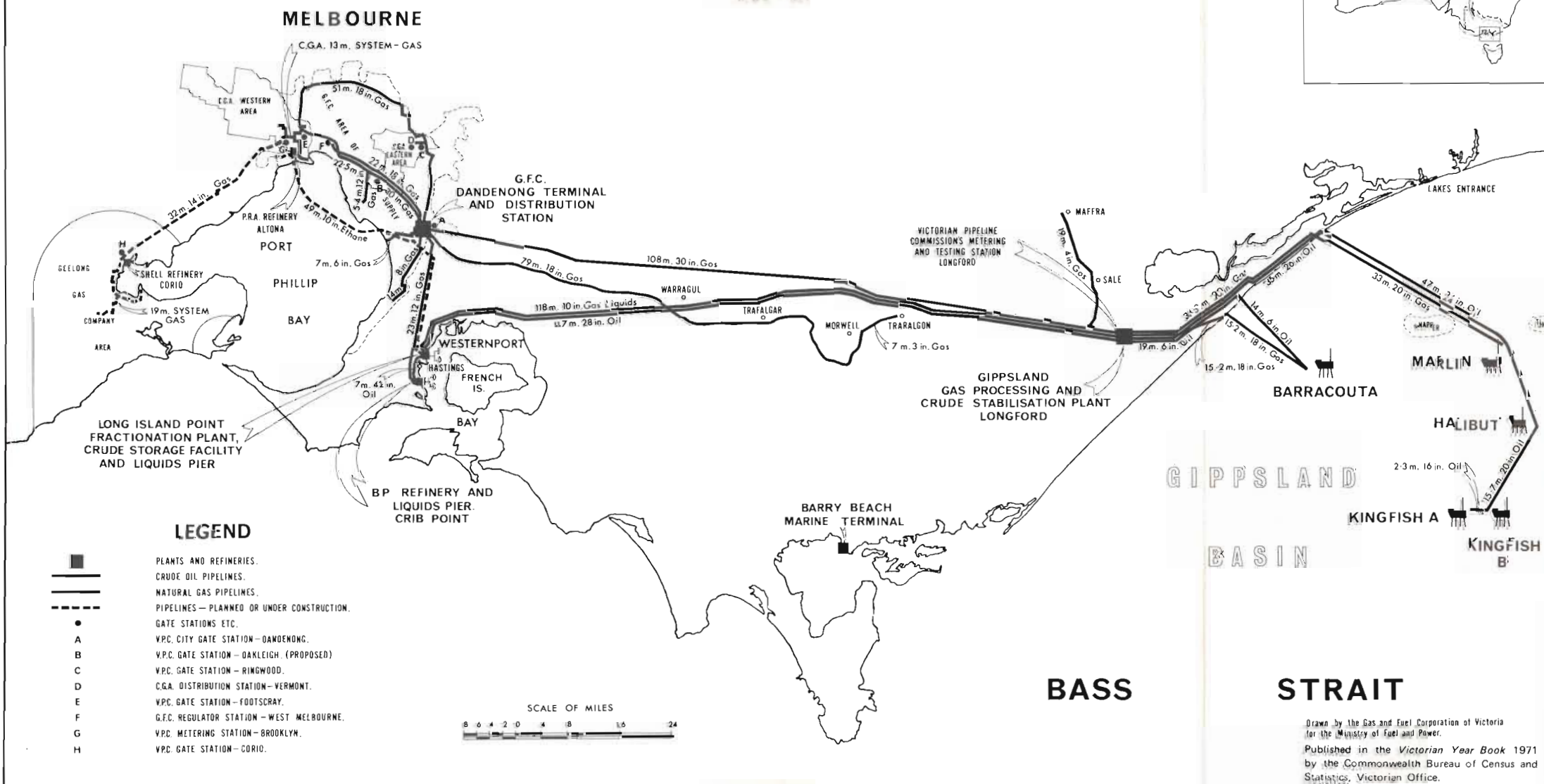
Construction of the gas processing facilities at the \$47m plant at Longford was substantially completed during the period under review and may be considered as being fully operational.

To the end of December 1970 the Victorian Pipelines Commission, which takes the treated gas from the plant, had conveyed 19,695 million cubic feet of gas to the Victorian gas utilities through its 108 mile, 30 inch diameter pipeline to Dandenong. The average rate of supply during the winter months of May to August 1970, was 55.7 million cubic feet a day.

Crude oil. Following the completion of the laying of the 33 mile, 6 inch diameter, general purpose pipeline in October 1969, the Barracouta oilfield came on stream on 8 October 1969, and has maintained a steady flow at the rate of 5,500 barrels a day from the 7 million barrel reserve reservoir. Early in March 1970, the laying of the 82 mile Halibut crude oil pipeline from the platform to Longford was completed and crude oil commenced flowing through it on 13 March. Development drilling on the Halibut platform was completed in August 1970, and production has progressively risen to a rate of 223,000 barrels a day. To the end of December 1970, Barracouta has produced a total of 2,831,561 barrels of unstabilised crude and Halibut 47,088,269 barrels, making a total of 49,919,830 barrels.

At Longford, construction of the crude oil stabilisation facilities at the Gippsland Gas Processing and Crude Oil Stabilisation Plant are well advanced; two processing trains each with a capacity of 100,00 barrels a day

MINISTRY OF FUEL AND POWER
VICTORIA
GIPPSLAND FIELDS
NATURAL GAS AND CRUDE OIL
DEVELOPMENT AND DISTRIBUTION
1966 - 1970



MELBOURNE

C.G.A. 13 m. SYSTEM - GAS

G.F.C. DANDENONG TERMINAL AND DISTRIBUTION STATION

VICTORIAN PIPELINE COMMISSION'S METERING AND TESTING STATION LONGFORD

GIPPSLAND GAS PROCESSING AND CRUDE STABILISATION PLANT LONGFORD

BARRACOUTA

GIPPSLAND BASIN

BASS

STRAIT

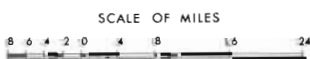
LONG ISLAND POINT FRACTIONATION PLANT, CRUDE STORAGE FACILITY AND LIQUIDS PIER

BP REFINERY AND LIQUIDS PIER. CRIB POINT

BARRY BEACH MARINE TERMINAL

LEGEND

- PLANTS AND REFINERIES.
- CRUDE OIL PIPELINES.
- NATURAL GAS PIPELINES.
- - - PIPELINES - PLANNED OR UNDER CONSTRUCTION.
- GATE STATIONS ETC.
- A V.P.C. CITY GATE STATION - DANDENONG.
- B V.P.C. GATE STATION - OAKLEIGH. (PROPOSED)
- C V.P.C. GATE STATION - RINGWOOD.
- D C.G.A. DISTRIBUTION STATION - VERMONT.
- E V.P.C. GATE STATION - FOOTSCRAY.
- F G.F.C. REGULATOR STATION - WEST MELBOURNE.
- G V.P.C. METERING STATION - BROOKLYN.
- H V.P.C. GATE STATION - CORIO.



Drawn by the Gas and Fuel Corporation of Victoria for the Ministry of Fuel and Power.
Published in the Victorian Year Book 1971 by the Commonwealth Bureau of Census and Statistics, Victorian Office.

have been completed, and the third one is nearly complete. When these have been fully commissioned the plant will be able to treat up to 350,000 barrels of unstabilised crude oil a day by removing the dissolved gases from the crude recovered from the oilfields, in particular Kingfish, prior to piping to Long Island Point through a 117 mile, 28 inch diameter pipeline, to ensure safe handling and storage at atmospheric pressure. To the end of August 1970 this pipeline had conveyed 47,360,070 barrels of stabilised crude to the eight 268,000 barrel capacity storage tanks at the Long Island Point storage and shipping terminal near Hastings.

Distribution of oil and LPG

The first load of Gippsland crude oil comprising 105,000 barrels of Barracouta oil left the Long Island Point liquids pier on 24 March 1970 in the tanker *Hemiglypta* bound for the P.R.A. refinery at Port Adelaide. Since then the Crib Point liquids pier, originally built in 1966 to service the BP refinery, has been connected to the Long Island Point Crude Oil Storage facilities by a 7.2 mile, 42 inch diameter pipeline laid during the first four months of 1970. To the end of December 1970, 114 tankers had been loaded with Gippsland crude at the Long Island Point jetty and 37 tankers at the Crib Point jetty, making a total of 151. These tankers loaded a total of 39,649,937 barrels for Australian refineries. A further 6,324,595 barrels have been conveyed by pipeline to the BP refinery at Crib Point making a total of 45,974,532 barrels transported to refineries.

In April 1970 construction of the first stage of the liquefied petroleum gas processing facilities at Long Island Point, comprising primarily a plant and three 135,000 barrel capacity refrigerated storage tanks, was completed. This plant, which fractionates gas liquids (remaining after processing at the Longford plant of the raw field gas from the Barracouta and Marlin fields) into saleable ethane, butane, and propane, commenced production in May 1970.

The first load of LPG comprising 16,342 metric tons (8,983 metric tons of butane and 7,359 metric tons of propane) left Long Island Point for Japan on 4 July 1970, in the refrigerated carrier *Bridgestone Maru 1*, as part of the Broken Hill Proprietary's contract with Bridgestone Liquefied Gas Co. Ltd, of Japan. The second load, comprising 12,577 metric tons of LPG (8,490 metric tons of butane and 4,087 metric tons of propane) left Long Island Point in the refrigerated carrier *Antilla Cape* for Japan as part of Esso Standard Oil's contract with Sumitomo Chemicals of Tokyo, Japan. To the end of December 1970 a total of 148,812 metric tons of LPG had been shipped from the Long Island Point liquids jetty.

Crude oil production rates

There is enough gas in the fields to supply Victoria's requirements for over 30 years but the currently known oil reserves will provide only about 60 to 65 per cent of Australia's total crude oil requirements for up to three years during the peak production period. It is expected that a production rate of up to 330,000 barrels a day of unstabilised crude will be reached by the end of 1971, when the large Kingfish field comes on-stream. This is expected to occur in April 1971. Peak production of 320,000 to 350,000 barrels a day of unstabilised crude from all fields, is expected to occur during 1972.

The announced recoverable reserves of natural gas and crude oil in the five commercial fields discovered offshore by B.H.P. and Esso in east Gippsland are as follows :

GIPPSLAND FIELDS—RESERVES OF GAS AND OIL

Field	Natural gas	Crude oil	Years field discovered and proved
Barracouta	trillion cubic feet 1.8	million barrels 7	1965 (gas) 1968 (oil)
Marlin	3.5	..	1966
Halibut	0.3	440	1967
	} dissolved gas in crude		
Kingfish		..	1,060	1967-68
Snapper	3.2	..	1968-69
Total	8.8	1,507	..

Source : Oil and Gas Division, B.H.P., August 1970.

Exploration and production wells

The following tables summarise Victorian petroleum exploration for the years 1964 to 1970 :

GIPPSLAND BASIN—OFFSHORE EXPLORATION WELLS DRILLED FROM
FIXED PLATFORMS OPERATED BY ESSO AND HEMATITE

Well	Date spudded	Platform	Total depth	Status
A-3	20.4.68	Barracouta	feet. 11,775	Oil discovered. Well completed as oil producer No commercial discovery of oil. Well completed as gas producer
A-6	11.8.68	Marlin	11,068	

GIPPSLAND BASIN—OFFSHORE PRODUCTION WELLS DRILLED FROM
FIXED PLATFORMS

Platform	Date drilling commenced	Number of wells drilled	Number of wells producing	Well capacity of platform
Barracouta	8.3.68	10	9	10
Marlin	2.8.68	(a) 6	4	24
Halibut	22.3.69	(b) 20	(c) 19	24
Kingfish A	31.3.70	19	..	21
Kingfish B	22.10.70	6	..	21
Total	..	61	32	100

Source : Esso Standard Oil (Aust.) Ltd., January, 1971.

(a) Includes two wells plugged and abandoned (A-2 and A-7). Drilling ceased after blowout on A-7 well on 2.12.68.

(b) Includes one well (A-2) abandoned due to mechanical difficulties.

(c) Total number to be drilled in current programme.

GIPPSLAND BASIN—OFFSHORE EXPLORATION WELLS
DRILLED FROM MOBILE RIGS

Well	Classification	Date spudded	Rig	Company	Total depth	Date completed	Status
					feet		
Barracouta 1	Wildcat	27.12.64	GIII	H/E	8,701	5.6.65	Gas discovery
Barracouta 2	Step-out	8.6.65	GIII	H/E	4,015	16.7.65	Confirmation gas discovery
Cod 1	Wildcat	20.9.65	GIII	H/E	9,540	2.12.65	Dry hole
Marlin 1	"	5.12.65	GIII	H/E	8,485	10.4.66	Gas discovery, oil shows
Marlin 2	Step-out	31.5.66	GIII	H/E	10,007	3.11.66	Confirmation gas discovery
Marlin 3	"	16.12.66	GIII	H/E	5,845	5.2.67	Confirmation gas discovery and oil shows
Golden Beach 1	Wildcat	3.4.67	Inv	BOC	1,226	2.5.67	Abandoned, mechanical difficulty
Kingfish 1	"	6.4.67	GIII	H/E	8,451	15.6.67	Oil discovery
Golden Beach 1A	"	3.5.67	Inv	BOC	9,534	29.8.67	Gas discovery
Halibut 1	"	20.6.67	GIII	H/E	10,011	26.9.67	Oil discovery
Dolphin 1	"	28.9.67	GIII	H/E	9,461	25.11.67	Oil shows, non-commercial
Kingfish 2	Step-out	28.11.67	GIII	H/E	8,021	31.1.68	Confirmation oil shows
Kingfish 3	"	2.2.68	GIII	H/E	8,299	5.3.68	Confirmation oil shows
Perch 1	Wildcat	13.3.68	GIII	H/E	9,416	1.5.68	Oil shows, non-commercial
Tuna 1	"	7.5.68	GIII	H/E	11,944	27.10.68	Gas and oil shows
Snapper 1	"	8.5.68	DII & OD	H/E	12,320	7.1.69	Gas discovery, oil shows
Flounder 1	"	10.7.68	OD	H/E	11,740	11.10.68	Oil shows
Tuna 2	Step-out	30.10.68	GIII	H/E	9,060	9.12.68	Confirmation gas and oil shows
Groper 1	Wildcat	18.12.68	GIII	H/E	3,379	7.1.69	Dry hole
Salmon 1	"	11.1.69	OD	H/E	9,865	15.2.69	Dry hole
Mullet 1 (a)	"	9.1.69	GIII	H/E	2,463	19.1.69	Dry hole
Bream 1	"	20.1.69	GIII	H/E	790	22.1.69	Abandoned, new location
Flounder 2	Step-out	19.2.69	OD	H/E	9,321	24.3.69	Confirmation oil shows
Bream 2	Wildcat	24.2.69	GIII	H/E	10,657	24.4.69	Gas shows
Mackerel 1	"	27.3.69	OD	H/E	10,003	23.4.69	Oil shows
Flounder 3	Step-out	24.4.69	OD	H/E	8,634	14.5.69	Confirmation oil shows
Flathead 1	Wildcat	25.4.69	GIII	H/E	3,494	26.5.69	Oil shows
Turrum 1	"	15.5.69	OD	H/E	10,029	27.6.69	Gas shows
Wahoo 1	"	27.5.69	GIII	H/E	2,446	12.6.69	Dry hole
Snapper 2	Step-out	16.6.69	GIII	H/E	10,010	2.8.69	Confirmation gas discovery
Barracouta 3	"	3.8.69	GIII	H/E	9,651	8.9.69	Confirmation gas discovery
Groper 2	"	9.9.69	GIII	H/E	2,870	24.9.69	Dry hole
Bluebone 1 (a)	Wildcat	26.9.69	GIII	H/E	1,984	2.10.69	Dry hole
Bonita 1	"	15.10.69	OD	H/E	4,146	21.10.69	Abandoned, mechanical difficulties
Gurnard 1	"	3.10.69	GIII	H/E	9,724	3.10.69	Dry hole
Bonita 1A	"	22.10.69	OD	H/E	10,430	15.11.69	Dry hole
Tailor 1	"	4.11.69	GIII	H/E	8,498	23.11.69	Dry hole
Bream 3	Step-out	16.11.69	OD	H/E	11,012	10.1.70	Confirmation gas discovery
Snapper 3	"	24.11.69	GIII	H/E	10,536	27.1.70	Confirmation gas discovery
Trevally 1	Wildcat	28.1.70	GIII	H/E	7,493	17.2.70	Dry hole
Tuna 3	Step-out	18.2.70	GIII	H/E	9,250	5.4.70	Confirmation gas and oil shows
Batfish 1	Wildcat	6.4.70	GIII	H/E	9,761	27.5.70	Gas shows
Albacore 1	"	6.5.70	OD	H/E	10,686	8.6.70	Dry hole
Emperor 1	"	5.6.70	GIII	H/E	6,545	29.6.70	Gas shows
Albatross No. 1	"	30.6.70	GIII	End	4,124	18.7.70	Dry hole
Gannet No. 1	"	18.7.70	GIII	End	4,786	29.7.70	Dry hole

Sources : Esso Standard Oil (Aust.) Ltd, and Oil and Gas Division, B.H.P., August 1970. Woodside Oil N.L. and Endeavour Oil Co. N.L., August 1970.

(a) Drilled in Tasmanian waters.

Abbreviations—GIII : Glomar III.
Inv : Investigator.
DII : Discover II.
OD : Ocean Digger.
H/E : Hematite and Esso.
BOC : Burmah Oil Co.
End : Endeavour Oil Co.

OTWAY BASIN—OFFSHORE EXPLORATION WELLS DRILLED FROM
MOBILE RIGS

Well	Classification	Date spudded	Rig	Company	Total depth	Date completed	Status
					feet		
Pecten No. 1	Wildcat	26.3.67	S135E	SD	887	11.4.67	Abandoned, mechanical difficulties
Pecten No. 1A	"	12.4.67	S135E	SD	9,352	14.6.67	Dry hole
Nerita No. 1	"	1.7.67	S135E	SD	6,700	17.8.67	Dry hole
Voluta No. 1	"	25.8.67	S135E	SD	13,037	21.12.67	Dry hole
Crayfish 1(a)	"	24.9.67	OD	H/E	10,497	24.12.67	Dry hole
Prawn 1	"	29.12.67	OD	H/E	10,477	9.4.68	Dry hole
Nautilus 1	"	13.4.68	OD	H/E	6,597	9.5.68	Dry hole
Argonaut 1 (a)	"	14.5.68	OD	H/E	12,163	4.7.68	Dry hole
Clam 1 (b)	"	19.7.69	OD	H/E	5,323	15.8.69	Dry hole
Mussel 1 (b)	"	18.8.69	OD	H/E	8,038	15.9.69	Dry hole
Chama 1 (a)	"	16.1.70	OD	H/E	4,227	25.1.70	Abandoned, mechanical difficulties
Chama 1A (a)	"	26.1.70	OD	H/E	9,015	2.3.70	Dry hole
Whelk 1 (b)	"	6.3.70	OD	H/E	4,800	17.3.70	Dry hole

(a) Drilled in South Australian waters.

(b) Drilled in Tasmanian waters.

Abbreviations—S 135E : SEDCO 135E.

OD : Ocean Digger.

SD : Shell Development.

H/E : Hematite and Esso.

VICTORIA—ONSHORE EXPLORATION WELLS

Well	Basin	Date spudded	Company (operator)	Total depth	Status
				feet	
South Longford No. 1	Gippsland	14.12.63	Arco	2,450	Dry hole
Fergusons Hill No. 1	Otway	24.12.63	Frome B. Hill	11,625	Dry hole
Seaspray No. 1	Gippsland	20.1.64	Arco	5,556	Dry hole
Duck Bay No. 1	Gippsland	15.2.64	Arco	4,235	Dry hole
Heathfield No. 1	Otway	6.3.64	Planet	7,500	Dry hole
Port Campbell No. 4	Otway	10.6.64	Frome B. Hill	8,500	Dry hole
Tulloch No. 1	Otway	4.8.64	Planet	5,360	Dry hole
North Seaspray No. 2	Gippsland	2.2.65	Woodside	5,358	Dry hole
Casterton No. 1	Otway	13.2.65	Planet	8,185	Dry hole
Lake Reeve No. 1	Gippsland	23.3.65	Woodside	6,635	Dry hole
Woodside South No. 1	Gippsland	30.5.65	Woodside	5,819	Dry hole
Tarwin Meadows No. 1	Gippsland	7.6.65	Alliance	3,948	Dry hole
Golden Beach West No. 1	Gippsland	11.9.65	Woodside	7,512	Dry hole
Sunday Island No. 1	Gippsland	19.11.65	Woodside	6,003	Dry hole
St Margaret Is. No. 1	Gippsland	29.1.66	Woodside	4,666	Dry hole
Dutson Downs No. 1	Gippsland	8.3.66	Woodside	6,113	Dry hole
Lakes Entrance No. 1	Gippsland	28.3.66	Woodside	1,386	Dry hole
Casterton No. 2	Otway	20.10.67	Planet	5,008	Dry hole
Woolsthorpe No. 1	Otway	18.5.68	Interstate	6,467	Dry hole
Garvoc No. 1	Otway	21.6.68	Interstate	5,035	Dry hole
Purrumbete No. 1	Otway	13.7.68	Interstate	6,005	Dry hole
Hindhaugh Creek No. 1	Otway	21.8.69	Pursuit	7,781	Dry hole
Moyne Falls No. 1	Otway	2.11.69	Shell	3,308	Dry hole
Milton No. 1	Gippsland	12.11.69	Ashburton	4,098	Dry hole
Hawkesdale No. 1	Otway	2.12.69	Shell	5,820	Dry hole
Colliers Hill No. 1	Gippsland	9.1.70	Woodside	5,612	Dry hole
Sunset No. 1	Murray	8.3.70	Assoc. Aust. O	3,284	Dry hole
Wellington Park No. 1	Gippsland	16.3.70	Woodside	4,127	Dry hole
Morkalla No. 1	Murray	20.3.70	Assoc. Aust. O	2,570	Dry hyle
Salt Lake No. 1	Gippsland	12.4.70	Woodside	5,395	Dry hole
Spoon Bay No. 1	Gippsland	10.10.70	Woodside	4,594	Dry hole
Seacombe South No. 1	Gippsland	1.11.70	Woodside	3,890	Dry hole

Sources : Company reports and press releases.

Mineral production

The mineral production of the State, as recorded by the Mines Department, from lands occupied under the Mines Act (excluding stone produced in quarries and salt) for the years ended December 1966, 1967, and 1968, is as follows :

VICTORIA—MINERAL PRODUCTION

Minerals	1966		1967		1968	
	Quantity	Value	Quantity	Value	Quantity	Value
	fine oz	\$'000	fine oz	\$'000	fine oz	\$'000
Precious metals—						
Gold	21,005	(a) 688	10,996	(a) 468	11,069	(a) 431
Silver	29	(b)	99	(b)	260	(b)
Other minerals—	ton		ton		ton	
Bauxite	.. 26	.. 55	2,020	11	.. 92	.. 162
Tin concentrates	35,519	497	32,066	251	26,314	209
Coal, black	21,782,977	20,064	23,383,607	20,686	22,970,653	21,555
Coal, brown	36	4	74	4	162	6
Copper concentrate	30,978	69	34,581	57	18,897	24
Fireclay	111,293	244	224,065	355	77,472	167
Gypsum	1,679,968	3,096	1,808,598	3,127	2,008,000	3,342
Kaolin and other clays	1,807,298	2,191	1,992,158	2,671	1,819,517	2,379
Limestone	422	6	480	6	174	1
Iron ore						

(a) Includes gold subsidy \$73,750 for 1966, \$125,332 for 1967, and \$87,824 for 1968.

(b) Value of silver production in Victoria \$13 in 1966, \$71 in 1967, and \$500 in 1968.

The following table shows the average annual production and value of black and brown coal for each of the five year periods from 1926 to 1960 and the production and value for each of the years 1961 to 1968 :

VICTORIA—COAL PRODUCTION AND VALUE (a)

Period	Black coal		Brown coal	
	Production	Value	Production	Value
	ton	\$'000	ton	\$'000
1926-1930	668,177	1,786	1,515,592	386
1931-1935	472,030	888	2,445,215	512
1936-1940	324,903	568	3,608,751	712
1941-1945	286,277	818	5,010,555	1,052
1946-1950	156,290	722	6,648,430	2,404
1951-1955	143,535	1,590	8,728,116	7,186
1956-1960	100,893	1,050	12,193,625	11,302
1961	66,363	718	16,279,168	15,444
1962	56,721	632	17,137,438	15,682
1963	50,481	588	18,456,445	16,158
1964	47,058	544	19,034,792	17,304
1965	42,247	515	20,658,856	18,436
1966	35,519	497	21,782,977	20,064
1967	32,066	251	23,383,607	20,686
1968	26,314	209	22,970,653	21,555

(a) Value of output at the mine.

Brown coal

The Latrobe Valley contains one of the largest single deposits of brown coal in the world. From 1889 to 1969 it has yielded about 371 mill. tons out of a State total of nearly 384.8 mill. tons. The remaining 13.8 mill. tons have been won from Bacchus Marsh 10 mill. tons, Winchelsea-Dean Marsh 3 mill. tons, Anglesea, 560,000 tons, Lal Lal 57,000 tons, Altona

31,500 tons, Gelliondale 14,500 tons, Thorpdale-Narracan 58,000 tons, and others, 29,000 tons. The Latrobe Valley coal reserves are a national asset which will yield about another 10,000 mill. tons of coal based on 1970 costs. The coal belt extends about 30 miles eastward from Yallourn and ranges from 5 to 10 miles in width. The seams range in thickness from 200 to 450 ft and are covered with sand and clay overburden from 30 to 60 ft thick.

Victorian brown coal is Tertiary in age compared with the Mesozoic black coals of the south Gippsland area. The brown coals vary from about 3,250 to 5,500 BTU's per lb gross in calorific value compared with black coal of about 12,000 BTU's. When dried and briquetted it makes a useful fuel with a calorific value of about 9,500 BTU's per lb.

Early developments

Brown coal was discovered in a shaft at Lal Lal in 1857. By 1864 it was being sent to Ballarat, Geelong, and Melbourne. Sales were few because it was an untreated solid fuel that burnt with a smoky flame and powdered easily when handled. Attempts were made to use brown coal from McKirleys Creek near Neerim, Haunted Hill near Morwell, and Elizabeth Creek near Childers from 1869 to 1874. Again the fuel was unpopular. People were used to burning the better quality imported black coals.

In 1889 a Royal Commission on Coal was appointed and the Government offered a bonus for the first company to make 100,000 tons of briquettes. In 1889 the Mirboo Collieries mined 5,400 tons from a shaft near Boolarra. In the same year the Great Morwell Coal Mining Company commenced operations at the open cut just north of the Latrobe River (now Yallourn North). During the next few years seams were found at Wonwron, Yarragon, Boolarra, Darlimurla, Hernes Oak, Morwell, and Altona.

The first briquette works was built near the Latrobe River in 1894 but was destroyed in a bush fire in 1895. After rebuilding, it operated until 1899 when the company was liquidated. In 1900 the Government Metallurgist examined the possibility of using brown coal at Morwell to generate electricity for transmission to Melbourne. However, the distance to Melbourne was too great to make the scheme economic because only low voltage transmission was then available.

When the black coal field at Wonthaggi was opened in 1909 the urgency for more fuel subsided and little exploration was done.

War-time fuel crisis: 1914-1919

A strike by New South Wales miners in 1916 created renewed interest in local fuels. The Great Morwell Company's open cut was reopened by the Mines Department and systematic drilling commenced nearby. Fundamental chemical and physical research on brown coal was also undertaken. The Government appointed a Brown Coal Advisory Committee to investigate power generation. Their report in 1917 forecast an industrial power shortage and recommended a power house on the Morwell coalfield. At this time an unsuccessful attempt was made to promote the use of Altona coal for power generation.

Establishment of State Electricity Commission

In October 1920 Sir John Monash became Chairman of the new State

Electricity Commission of Victoria. A new open cut south of the Latrobe River was planned to supply both the new briquette factory and the power houses. The operation soon became extensively mechanised. In 1921 an open cut was developed at Winchelsea South and coal was delivered by aerial ropeway to the railhead at Wensleydale. Fifteen thousand tons were produced from 1923 to 1932 and 2,875,000 tons from 1943 to 1959.

The Yallourn North open cut operations were transferred to the State Electricity Commission in 1924 and continued to supply coal until 1930 when operations were suspended. A severe flood in 1934 filled the Yallourn open cut with water and again coal was won from the more elevated Yallourn North pit. Improved methods of mining using electrically operated bucket dredges for both coal and overburden removal and the disposal of overburden in worked out sections of the pit all helped to make the operations efficient.

Cheap power was reticulated to industry and briquettes became common as an industrial and household fuel. At the same time as the Government sponsored fuel and power undertakings were achieving notable success at Yallourn, private ventures at Parwan, Altona, and Gelliondale, however, were less successful.

Second World War

Following the outbreak of war in 1939 more fuel and power was required for industry. Yallourn North was re-opened to supply some of this need and a few miles east the Yallourn North Extension cut was opened up on the same seam to supply local demand. The Wensley Bray open cut at Winchelsea was re-opened and tunnels and pits were opened up near Bacchus Marsh to supply Western Victoria.

During the immediate post-war fuel shortage, a small amount of brown coal was won from tunnels in the Benwerrin, Dean Marsh, and Thorpdale-Narracan areas.

Following intensive drilling in the Morwell area production of coal began in 1955 and increased to 18 mill. tons per annum in 1970 to supply

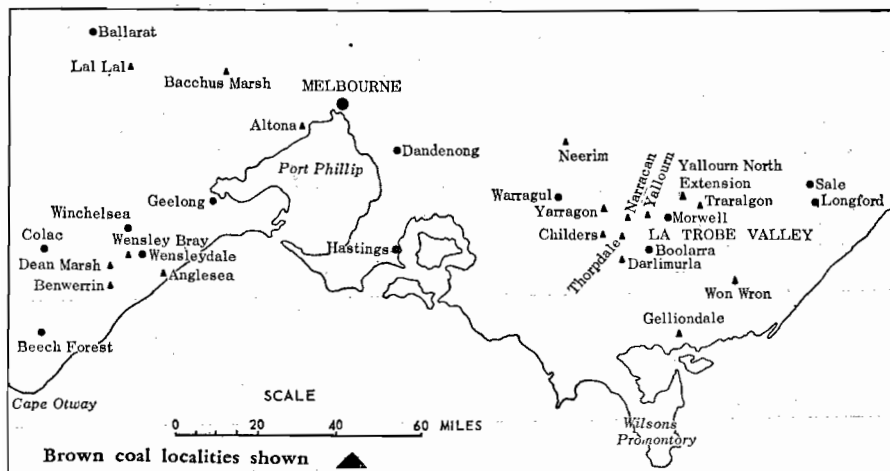


FIGURE 8. Known brown coal deposits in Victoria.

the needs of the Hazelwood Power Station. Associated with the Morwell Project was the Lurgi High Pressure gasification plant capable of producing 15 mill. cu ft per day of town gas from brown coal briquettes. This was opened in 1956. Now that natural gas has supplanted the need for the Lurgi gas, the manufacture of a hard char metallurgical coke is planned at Morwell. Following the exhaustion of economical coal at Wensley Bray in 1955 the Mines Department began exploratory drilling in the Otways. In October 1958 a workable deposit of good quality brown coal was located near Anglesea. Whilst small by comparison with the Latrobe Valley deposits, the reserves are sufficient to base a thermal power plant on them to supply an aluminium smelter and fabricating works at nearby Geelong.

Further references, 1965-1970; Mining in Victoria, 1964; Underground Water, 1964; Groundwater in Victoria, 1969; Victorian Clays, 1970

Quarrying

Information in the following table has been obtained from "regular" quarries which are known to have a fixed plant and which are in permanent production, and from mines producing construction materials as by-products of their main activity :

VICTORIA—CONSTRUCTION MATERIALS

Year	Number of returns	Production					Local value of production \$'000
		Sand	River gravel and gravel boulders	Dimension stone	Crushed and broken stone	Other quarry products	
		'000 cu yd		ton	'000 cu yd		\$'000
1964	223	2,442	526	10,268	8,685	932	19,886
1965	221	2,956	664	14,347	9,827	728	22,736
1966	209	3,148	492	9,546	11,198	754	24,206
1967	213	3,009	596	10,530	12,869	602	27,251
1968	217	3,687	570	7,149	12,255	1,022	28,374

In addition to the production set out in the preceding table, a considerable quantity of material is won by contractors operating shallow pits for or on behalf of local government authorities. Some of these work mine tailings. This itinerant activity was first covered by statistical returns for 1961. However, the statistics are available only from 1962. Reported production data for the years 1964 to 1968 are :

VICTORIA—CONSTRUCTION MATERIALS: ITINERANT ACTIVITIES

Type of material	1964	1965	1966	1967	1968
			'000 cu yd		
Sand	240	244	266	422	384
Gravel and gravel boulders	2,582	2,072	1,994	2,156	1,856
Crushed and broken stone	1,469	2,123	1,537	678	883
Other quarry products	1,241	1,040	818	875	435
			\$'000		
Local value	1,648	1,710	1,698	1,813	1,582

Further reference, 1966-1970

VALUE OF PRODUCTION

The value of production as estimated in the following tables is based to a large extent on returns received annually from individual producers throughout the State. As a measure of total production it is incomplete, as it does not include the building and construction industry. It also omits factories employing less than four hands (unless power-driven machinery is used) and excludes agriculturists with holdings of less than one acre.

A detailed account of the period covered for individual rural industries is given on page 297. Except in the case of mining and quarrying, statistics for the non-rural industries refer to the year ended 30 June. Statistics for mining and quarrying relate to the year ended 31 December of the first year shown.

Gross value

Gross value is defined as the value placed on recorded production at the wholesale price realised in the principal market. In cases where primary products are absorbed locally, or where they become raw material for secondary industry, these points are presumed to be the principal markets. Care is taken to prevent, as far as possible, all overlapping or double counting. The primary value of dairy production, in accordance with the above definition, is the price paid at the factory for milk or cream sold by the farmer; the value added by the process of manufacturing into butter, etc., is included in manufacturing production.

VICTORIA—GROSS VALUE OF PRIMARY PRODUCTION
(\$'000)

Industry	1964-65	1965-66	1966-67	1967-68	1968-69
Agriculture	295,013	262,852	325,461	221,960	331,715
Pastoral	373,501	413,558	376,196	355,318	345,275
Dairying (a)	194,988	190,141	206,638	181,541	202,245
Poultry and bees	47,776	51,975	57,658	51,316	47,377
Trapping	5,830	5,785	4,244	3,621	3,623
Forestry	29,167	29,691	29,675	27,845	29,920
Fisheries	3,731	4,403	4,980	5,725	5,851
Mining	44,892	48,926	53,156	57,339	59,026
Total primary industries	994,899	1,007,331	1,058,008	904,665	1,025,033

(a) Includes subsidy : 1964-65 \$14,642,000, 1965-66 \$14,569,000, 1966-67 \$14,575,000, 1967-68 \$14,913,000, 1968-69 \$16,667,000.

Local value

The gross value of production, less costs of marketing (freight, cartage, brokerage, commission, insurance, and containers), represents the gross production valued at the place of production, that is, local value, details of which are shown in the following table :

VICTORIA—LOCAL VALUE OF PRIMARY PRODUCTION
(\$'000)

Produce	1964-65	1965-66	1966-67	1967-68	1968-69
Agriculture—					
Barley	3,808	2,938	6,174	2,606	6,470
Maize	203	99	111	39	180
Oats	12,345	12,555	14,498	6,229	10,560

VICTORIA—LOCAL VALUE OF PRIMARY PRODUCTION—*continued*
 (\$'000)

Produce	1964-65	1965-66	1966-67	1967-68	1968-69
Agriculture—<i>continued</i>					
Wheat	91,950	75,456	87,279	36,735	95,832
Onions	1,140	1,507	1,188	1,266	649
Potatoes	22,705	7,763	12,649	16,132	6,891
Other vegetables for human consumption	17,350	19,425	21,862	20,713	19,668
Hay and straw	41,580	39,350	73,108	48,307	71,956
Fruit	22,047	27,654	24,302	26,940	23,469
Vineyards	19,806	17,670	18,688	19,496	16,160
Other crops	21,515	21,295	22,095	17,527	24,688
Total	254,449	225,713	281,954	195,992	276,423
Pastoral—					
Wool	150,987	168,613	167,123	124,143	145,557
Sheep, slaughtered	51,297	57,113	57,081	71,981	56,192
Cattle, slaughtered	130,201	145,403	119,187	128,648	118,882
Total	332,484	371,130	343,391	324,772	320,631
Dairying—					
Whole milk used for—					
Butter	87,345	87,544	96,922	72,345	95,110
Cheese	14,537	11,201	14,792	15,756	13,727
Condensing, concentrating, etc.	16,379	16,365	16,552	14,027	14,409
Human consumption and other purposes	34,348	35,410	37,731	39,925	37,844
Subsidy paid on wholemilk for butter and cheese	14,642	14,569	14,575	14,913	16,667
Pigs, slaughtered	20,165	17,513	17,540	16,905	16,392
Total	187,416	182,601	198,111	173,871	194,148
Poultry and bees—					
Eggs	30,183	33,914	35,173	33,535	31,163
Poultry	11,196	11,546	15,423	11,995	11,731
Honey and beeswax	867	989	758	782	396
Total	42,245	46,449	51,354	46,311	43,291
Trapping, etc.—					
Rabbits and hares	4,599	4,826	3,470	3,051	2,875
Rabbit and hare skins, etc.	870	595	506	359	524
Total	5,469	5,421	3,976	3,409	3,400
Forestry—					
Sawmills	22,391	22,494	23,798	23,235	25,865
Hewn timber	2,587	2,928	2,516	2,477	2,231
Firewood	3,232	3,278	2,554	1,586	1,371
Bark for tanning	90	108	89	80	63
Other	58	62	77	70	48
Total	28,358	28,870	29,036	27,448	29,577

VICTORIA—LOCAL VALUE OF PRIMARY PRODUCTION—*continued*
(\$'000)

Produce	1964-65	1965-66	1966-67	1967-68	1968-69
Fisheries—					
Fish	1,702	1 871	1,643	1,933	2,257
Crayfish	797	1,040	909	1,012	1,436
Oysters	2	(a)	1	(a)	(a)
Scallops	656	789	1,344	1,503	875
Other	57	96	409	874	697
Total	3,212	3,797	4,307	5,153	5,265
Mining—					
Gold	737	687	688	468	451
Coal—					
Black	544	515	497	251	209
Brown	17,304	18,436	20,064	20,686	21,555
Other metals and minerals	4,772	4,841	6,002	6,870	7,006
Quarrying	21,534	24,446	25,905	29,064	29,805
Total	44,892	48,926	53,156	57,339	59,026
Total primary industries	898,526	912,906	965,284	834,296	931,761

(a) More than nil, but less than \$500.

Net value of production

Net value of production is computed by subtracting from local value the cost of materials used in the process of production. These materials include stock feed, seed, manures, power, petrol, kerosene, other oils, dips, sprays, and other costs. No deductions have been made for depreciation or certain maintenance costs. The net value of production is the only satisfactory measure to use when comparing or combining the value of primary industries with those of other industries. Details for primary industries and manufacturing are shown in the table below :

VICTORIA—NET VALUE OF PRODUCTION
(\$'000)

Division of industry	1964-65	1965-66	1966-67	1967-68	1968-69
Rural—					
Agriculture	232,775	202,674	255,016	169,501	247,194
Pastoral	309,668	346,230	315,142	254,187	262,707
Dairying	136,097	135,601	145,567	140,097	166,117
Poultry	24,407	28,192	32,464	27,705	25,675
Bee farming	867	989	758	782	396
Total rural	703,814	713,686	748,947	592,272	702,089
Non-rural	74,091	78,046	80,757	83,561	86,118
Total primary	777,906	791,733	829,704	675,833	788,207
Manufacturing	1,949,665	2,027,685	2,237,159	2,394,801	n.a.
Total all industries	2,727,571	2,819,418	3,066,863	3,070,634	n.a.

MANUFACTURING INDUSTRY

NATURAL RESOURCES AND LOCATION

Natural resources

Victoria's temperate climate and its rainfall, soil, and water resources have been used to develop the production of wool, grains, fruit, dairy products, and timber. On these the State's early secondary industries were based. There are extensive fuel resources of brown coal in the Latrobe Valley. Of special importance to the industries of the State are the oil and natural gas fields in Bass Strait, the first of which was discovered in February 1965. On 14 April 1969 natural gas was made available to the first domestic consumer in Victoria at Carrum. In March 1969 natural gas for commercial use flowed from the Barracouta field. This was supplemented in 1970 from gas from the Marlin field. Oil in commercial quantities became available from the Barracouta field in October 1969 and from the Halibut field in March 1970. Reserves of gas and oil are known to be present in the Snapper and Kingfish fields, respectively.

The Latrobe Valley brown coal deposits, and to a much lesser degree those of south Gippsland and a number of small basins west of Melbourne, are the most important mineral deposits in Victoria. The open cuts of the Yallourn-Morwell area produce about 21 mill. tons of brown coal annually for briquette making and electricity generation. Small quantities of black coal (35,000 tons annually) were mined in south-western Gippsland until the end of 1968.

Clay deposits for brick, tile, and pottery industries are worked east of Melbourne and near Ballarat, Bendigo, Colac, Shepparton, and Wangaratta. Sand, for the concrete and glass industries and for use in foundries, is obtained in the Port Phillip and west Gippsland areas. Stone and gravel quarries are worked in many parts of the State. The main market for quarry products is the metropolitan area and as these products are bulky and expensive to transport, most quarrying is located within a 50 mile radius of the capital. Local limestone deposits attracted the establishment of cement works at Geelong and Traralgon while the Lilydale limestones are used in the manufacture of agricultural lime.

Other mineral resources of Victoria include gold mining in the Castlemaine district; salt production from deposits of the Mallee and Wimmera lakes and the western shores of Port Phillip; gypsum in the

north-western Mallee; and bauxite deposits in south Gippsland.

The forests of Gippsland and the Central Highlands form the basis of important forestry activities, especially in Gippsland where paper is produced at Maryvale. Victorian forests provide approximately one quarter of Australia's timber.

Power supplies are essential for industrial development. The lack of black coal once necessitated significant imports from New South Wales. During 1967-68, the State Electricity Commission generated 90.6 per cent of Victoria's electricity, mostly from steam plants fired by briquettes or brown coal in the Latrobe Valley; the balance is brought in, or produced in factories. Electricity is now transmitted throughout the State by the high voltage grid network shown on the map on page 425.

Recent discoveries of large offshore reserves of oil and natural gas in the Gippsland Basin (the potential of which has not been fully determined) make Victoria's power and chemical outlook promising. Estimates from exploratory drilling rank the Gippsland, Bass, and Otway Basins as having great oil and natural gas potential.

Other sources of power for industry are gas, produced in Melbourne and principal country centres, and brought by pipeline from Morwell to Melbourne, and oil and liquid petroleum gas from the refineries at Altona, Geelong, and Crib Point.

Water, needed in large quantities for industry, is available throughout the State from the dams and storages in the catchment areas of the main rivers (see map on page 478 of *Victorian Year Book* 1966). In most years Melbourne is well supplied with water from the storages to the north and north-east of the city in the Plenty, Upper Yarra, Maroondah, and O'Shannassy river catchments. However, severe water restrictions were imposed during the 1967-68 summer due to State-wide drought conditions. To meet future requirements, preparations for extending the water supply have begun. (See page 250.)

Location

The early concentration of industry in Melbourne has continued although power supplies now come largely from the Latrobe Valley. Of Victoria's 18,030 factories in 1967-68, 72.7 per cent were located in the Melbourne Statistical Division, which also had 83.0 per cent of the State's factory workers. Melbourne's factories contributed 80.6 per cent of the value added in manufacture. This concentration of manufacturing in the metropolitan area is partly due to the fact that Melbourne is Victoria's main port and the hub of the transport network. It is also the largest market in the State and the centre of commerce and finance; has a large labour force; and is the administrative and educational centre of Victoria.

Many types of secondary industry are well represented in Melbourne. There are particularly high concentrations of the State's chemical, metal processing, textile, paper, furniture, food, and building materials industries in the capital. In terms of numbers employed, the engineering and metal processing industry is the major industry of Melbourne. Initially, industries developed in the inner areas of Port Melbourne, South Melbourne, Richmond, Collingwood, Spotswood, Fitzroy, and Footscray. The more recently established industries such as the motor vehicle, chemical, rubber, and refining industries, have taken up land in the outer industrial areas of

Altona, Broadmeadows, Moorabbin, Oakleigh, and Dandenong, where considerable areas of flat land are available for future expansion.

Outside the metropolitan area, Geelong is the most important industrial centre, with port facilities, close proximity to the Melbourne market, and rich surrounding rural areas. Industries established in the area include petroleum refining, and the manufacture of agricultural machinery, motor vehicles, aluminium ingots and extruded products, textiles, chemical fertilisers, clothing, carpets, foodstuffs, cement, fertilisers, sporting ammunition, and grain storage.

The other country urban areas in which more than 1,000 persons are employed in factories (ranked in order of the number of persons employed in factories) are the Latrobe Valley, Ballarat Urban Area, Bendigo Urban Area, Warrnambool City, Wangaratta City, Shepparton City, Maryborough City, and Castlemaine City. Apart from the Latrobe Valley, which is primarily engaged in power generation and ancillary activities, the factory population elsewhere is engaged in the production of food, textiles and clothing from locally produced raw materials, in engineering plants, which sometimes had their origin in the gold mining era of the nineteenth century, and more recently, in decentralised plants with defence significance.

AUSTRALIAN INTEGRATED ECONOMIC CENSUSES, 1968-69

Meaning of integration

For the year ended June 1969 censuses of mining, manufacturing, electricity and gas production and distribution, retail trade and selected services, and wholesale trade were conducted for the first time on an integrated basis.

The manufacturing and mining censuses for 1968-69 were part of the series of regular annual censuses conducted for these industries, but the mining census was being held for the year ended June instead of the calendar year as in the past. Electricity and gas production had previously been included in the manufacturing census; for the year 1968-69 they were treated as a separate census and the scope of the returns was extended to cover distribution as well as production. The retail census had been held every four or five years, the previous retail census being for the year 1961-62. Wholesale trade had not been the subject of a census before, although there had been an exploratory partial wholesale census for the year 1963-64. In future, censuses of retail and wholesale trade will be held about every five years, the other censuses annually as in the past.

The integration of these censuses meant that for the first time they were being collected on the basis of a common framework of reporting units and data concepts and in accordance with a standard industrial classification. As a result the statistics for the industries covered by the censuses are provided with no overlapping or gaps in coverage, and in such a way that aggregates for certain important economic data such as value added, employment, salaries and wages, fixed capital expenditure, and stocks can be obtained on a consistent basis for all sectors of the economy covered by the censuses.

To make this integration possible, it was necessary to revise all the forms used in previous censuses to bring the items of data to a common basis of definition in all censuses. This revision was made after extensive

investigations of business record-keeping practices conducted by the Bureau over a period of years. For most businesses in the scope of the censuses—businesses which operate at one location only—this was the principal change brought about by the integration of the censuses. For businesses operating at more than one location the other principal change was that the census returns for all industries covered were collected through the head offices of the enterprises, each of which was asked to report in a consistent way for each of its establishments covered by the censuses and for the enterprise as a whole.

Purposes of integration

The integration of the economic censuses was undertaken as a major re-organisation of a large part of the Bureau's work, designed to increase substantially the usefulness and comparability of the kinds of statistics already being collected and published, for purposes of general economic analysis and market research.

Aggregation of economic data

The economic censuses of manufacturing, mining, and retail trade were introduced originally—many years ago—and subsequently developed in order to provide statistics for particular industries with special definitions of units and data adopted to suit the requirements of users interested in statistics of those industries. (The same is true of the annual agricultural and pastoral census—but this is not among the economic censuses integrated in 1968–69). More recently there has been a growth of interest in statistics describing activity in the economy as a whole—reflected, for example, in the post-war development of employment and earnings statistics, surveys of capital expenditure, stocks, and wages, and the whole field of national accounts statistics.

For such purposes economic census statistics in the past have had serious limitations despite the fact that they covered a broad area of the whole economy. Because of the special-purpose nature of each of the censuses, there were no common definitions of data, and there was no common system of reporting units, and therefore aggregation of statistics from different censuses was not possible. As no standard industrial classification existed, industry boundaries were not defined in ways which would prevent overlapping or gaps occurring between the industrial sectors covered by the censuses. This was a further reason why aggregation across industry boundaries was not possible. For estimation of the national accounts, therefore, little use was made of the results of the economic censuses, except the agricultural census, and there was much reliance on statistics compiled from income tax assessments. Employment and earnings statistics for the economy as a whole have been derived mainly from monthly returns of pay-roll taxpayers.

Benchmark data for surveys

For these reasons the economic censuses in the past have provided no basis for designing or adjusting the sample surveys which supply current economic statistics from quarter to quarter, particularly those of capital expenditure and stocks which are important components of the quarterly national income and expenditure estimates. To be accurate, such statistics

should be backed periodically by comprehensive benchmark data of the kind normally available only from censuses. The previous censuses of manufacturing, mining, and retail trade covered large and important sectors of the whole economy, and they included many of the same broad types of data as those needed for current economic indicators. However, because of the specialised nature of the units and data concepts on which the censuses were designed, and the lack of standard industry boundaries, it was not possible to use the results of these censuses as benchmark data for improving the accuracy of the surveys.

Similarly, the employment statistics derived from the censuses could not be used to improve the accuracy of the monthly employment and quarterly earnings series. The basic benchmark for these series is the population census, but the annual manufacturing and mining censuses, and the periodical retail trade census, were potential sources of data for checking the movements of these series.

The units employed in most of the surveys and for the private sector in the employment and earnings series are pay-roll taxpayers, broadly consisting of businesses (or the parts of interstate businesses operating in one State) whose pay-roll amounts to more than \$20,800 a year. The unit employed in the censuses is the establishment. In the manufacturing censuses prior to 1968-69, this was a unit engaged in manufacturing activity and employing four or more persons or using power (other than manual) in any manufacturing process. Any part of a business (or of a particular location at which a business operated) which met this definition was treated as a manufacturing establishment, and the form required that "manufacturing activity" should exclude selling and delivery. The value of output was to be reported exclusive of delivery costs, and employment was to exclude sales and delivery staff. The retail census covered the retail trading activities of establishments which normally sold goods to the general public from fixed premises. It omitted any wholesaling, manufacturing or other non-retailing activity carried on at the same location. Many types of repair activity, however, such as repairing of motor vehicles, shoes and watches, were included in the retail census, and were also included in the manufacturing census. The retail trade census also included any retailing activities carried on at locations primarily engaged in other activities such as wholesaling or manufacturing. The establishments from which mining census returns were collected were confined to units engaged in mining activity, including crushing and ore-dressing at or near the mine. All censuses (except the retail trade census, in respect of chain stores) excluded separately located head office staff, while including administrative staff located at the establishment. They also excluded any staff at separately located units providing ancillary services to the establishments, such as delivery fleet depots, research laboratories or storage warehouses.

Thus there were serious obstacles to the reconciliation of statistics from economic censuses on the one hand and the economic surveys and the employment and earnings series on the other, which would have been necessary if the censuses were to provide benchmark data and a sample framework for the surveys, and satisfactory interim data for checking the movements of the employment and earnings series.

National Accounts

Like employment statistics and the surveys that have been discussed, the national accounts have to be comprehensive for the whole economy. They run across all industries and, in the industry dissections they provide, all economic activities must find a place. The national accounts are partly based on actual statistics, and partly on estimates. This will probably always be the case, but progress in national accounting requires that the part based on actual statistics should progressively increase. A major step in this direction would have been achieved if consistent and integrated statistics were available, both for censuses and surveys, from businesses themselves. The main broad aggregates required for each industry are gross product (that is, contribution to Gross National Product), wages and salaries, capital expenditure, and stocks. The economic censuses were potential sources of this information.

Although it has always been desirable to have consistent figures of this kind as a basis for national accounts estimates, two developments in recent years have made the need urgent. One is the development, in response to strong demand, of quarterly estimates of national income and expenditure. Dependent as they are on the available current figures of wages and salaries, capital expenditure and stocks, the publication of these estimates in Australia has increased the significance of the lack of correspondence between the current survey-based data and the potential benchmark information available in the economic censuses—and between these and the tax-based statistics from which many of the annual estimates of national income and expenditure are derived.

The second development which has enhanced the importance of integrated economic statistics is the strong move in advanced countries towards the development of new types of national accounts: input-output tables, flow-of-funds tables and national balance sheets, and the obvious advantages of being able to present these accounts (together with the national income accounts themselves and the balance of payments) in a single co-ordinated framework. These efforts have led to the appearance of the new proposals by the United Nations Statistical Office for an integrated system of national accounts* which have now been endorsed by official statisticians throughout by the United Nations Statistical Office for an integrated system of national accounting concepts and frameworks must be co-ordinated, but in addition the basic data on which the estimates are based need to be fitted as closely as possible into the specified concepts and frameworks. The best hope for success in this objective is to integrate the conceptual framework in which the statistics are collected as closely as possible with the framework of the national accounts themselves. To give an example from the work being done in Australia at present: input-output tables are being prepared for the year 1962–63 on a conceptual framework consistent with the national income accounts. But many of the conceptual cells in the input-output table can only be filled for each industry by data obtained from the manufacturing and other economic censuses. These are the cells of the table showing what the industry buys from, and sells to, other industries and sells to end-users. In effect, these yield new estimates of the gross product of

* *A System of National Accounts*, Studies in Methods, Series F, No. 2, Rev. 3 (New York, 1968).

the industry which in present circumstances conflict with the estimates already published in the *Australian National Accounts*, based as these are mainly on tax statistics. To make them agree in future, a common set of concepts and a common set of statistical reporting units are needed for both the economic censuses and the national accounts.

The needs of national accounts statistics here do not conflict with those of the statistics for particular industries. On the contrary, the national accounts can provide the common conceptual basis needed for comparability of data between industries, without restricting the scope for the variation in detail which is necessary in order to provide each industry with its own statistics in the most suitable form. The interest of businesses themselves can be met by this common conceptual approach too, as there is no major conflict between national accounting concepts and the accounting concepts familiar to businesses themselves.

Comparability of statistics for different levels of unit

The national accounts illustrate a fact which underlies all economic statistics : that different levels of unit are appropriate for different kinds of statistics. In the case of the national accounts, statistics are required for items such as capital expenditure and stocks in some industry detail, and for items such as wages and salaries in geographical detail as well. To be classifiable in this way, such statistics should be collected and tabulated for a particular stratum of business unit, usually called the establishment. Statistics for national accounting items such as profit and interest receipts and payments, on the other hand, can only be collected and tabulated for a legal entity type of unit, which may be broader than the establishment. Commodity statistics are needed for estimates of input-output transactions, personal consumption expenditure, and aggregates at constant prices. For these statistics the unit being tabulated is narrower than the establishment ; it is, so to speak, the commodity itself : for example, the tonnage of ice-cream produced, whether made in establishments classified to the ice-cream industry class or not—although the statistics must of course be collected from a business unit. On the other hand, for studies of the sources and uses of capital funds, including overseas investment, the statistics needed are best collected and tabulated for units broader than the legal entity. This type of statistics would relate to business units of ownership and financial control, including groups of legal entities under common ownership and control. Although these examples are drawn from national accounts, there are similar relationships between types of unit and types of statistics in other forms of economic statistics.

This means that comparisons of industry detail cannot be made between statistics corresponding to different levels of unit, even if they are based on a common industry classification, unless something has been done to integrate the units at the various levels. This is one of the most important objectives of the integration of the economic censuses. It requires collecting data in such a way that reconciliation is made between the different levels of detail in each return, or set of returns, collected from each enterprise : commodity sales with establishment sales, establishment sales with enterprise sales, and so on. It also requires the facility to recast statistics collected and published for one level of unit to make them comparable with those for

a higher level unit. Salaries and wages, for example, would normally be published for establishments, and the salaries and wages for, say, the basic chemical industry group, would be those paid by all establishments classified to that industry group. If it were desired to compare the salaries and wages of this industry group with its operating surplus, for example, it would be necessary to use the statistics of the salaries and wages paid by all *enterprises* classified to the industry group. For a comparison with capital raisings or overseas investment it would probably be necessary to use the statistics of the salaries and wages paid by all *enterprise groups* classified to basic chemicals. The figure of salaries and wages would be different in each case, because the business unit classified to the industry group is progressively broader at each stage. Being classified on the basis of its main activity, it would tend to include progressively more salaries and wages paid to employees engaged in activities other than basic chemicals, because of the mixed nature of the activities of enterprises and enterprise groups. On the other hand, it would tend to exclude progressively more salaries and wages paid to employees of basic chemical establishments owned by enterprises predominantly operating in other industries.

Enterprise statistics

The establishment as used in economic censuses is defined mainly in terms of location, rather than in terms of ownership or management. With the growth of multi-establishment enterprises, especially those cutting across several industry boundaries, there has been increasing interest in statistics about enterprises as economic entities. These are the statistics relevant for comparisons with such things as the financial performance of companies, derived from company accounts or from taxation statistics, and in studies of the competitive position of firms. Size-distributions based on establishments can give only a partial picture of the structure of industries; they have to be supplemented by size-distributions of the enterprises engaged in the industry.

The enterprise statistics needed for these purposes must relate to all forms of business units—unincorporated enterprises as well as companies. For some purposes the need is for statistics based on operating legal entity units; other purposes require statistics based on groups of such legal entities operating under common ownership or control.

Provision for extension of economic censuses into other industries

The problems referred to earlier which have arisen from the specialised nature of the units and data concepts used in the existing economic censuses are likely to increase with the extension of economic censuses into other industries. A census of wholesale trade could not have been introduced without close attention being paid to its boundaries with manufacturing on the one hand and retail trade on the other. The treatment of the sales branches of manufacturing enterprises had to be determined, and the treatment of wholesaling activity by retailers. Similar problems arise with the planned future introduction of a census of construction. This industry, like wholesale trade, has areas of overlapping with manufacturing which have required special attention in the new standard industrial classification, in order to avoid the possibility of gaps or overlapping.

Steps in integration

To meet the purposes of integration, as they have been described, it was therefore necessary to take four major steps, which will ultimately affect most, if not all, of the economic censuses and surveys conducted by the Bureau :

1. Standardisation of census units : defining business units at standard levels, corresponding to the strata in the business structure for which various types of economic statistics are required and can be collected ; devising standard rules for identifying such business units.
2. Establishment of an integrated register of business units : identification of the standard units for all businesses to be covered by economic censuses and surveys, and recording them in a register to be used in the running of the censuses and surveys.
3. Standardisation of the industrial classification : adoption of a common system of classification suitable for all censuses and surveys, to which all the standard business units to be covered would be classified without gaps or duplication.
4. Standardisation of data concepts : defining in common terms the basic items of data for which statistics are required across all industries covered by economic censuses and surveys, to permit comparison and aggregation.

Standardisation of census units*Types of unit*

The business units, as standardised for purposes of the integrated economic censuses, are at three levels :

1. the establishment (and associated administrative offices and ancillary units),
2. the enterprise, and
3. the enterprise group.

The central unit from which statistical information is collected is the *enterprise*, defined broadly as an operating legal entity. Where a number of legal entities operate as a group, owned or controlled by a single company, the enterprise is not the group as a whole, but each individual operating legal entity in the group.

The group of legal entities owned or controlled by a single company is recognised as a separate type of unit—the *enterprise group*. This is to be used not for collection of census returns but subsequently for aggregation of certain census data. The enterprise group, in addition, may be appropriate as the collecting unit for certain types of survey, such as overseas investment and local capital raisings, for which the enterprise would be too narrow. The census data aggregated for enterprise groups will provide a body of statistics directly comparable (when classified by industry) with the results of surveys conducted among enterprise groups.

The basic unit for which most data are to be tabulated is the *establishment*, defined in general as a unit covering all the operations carried on under the ownership of one enterprise at a single physical location—such as an individual factory, shop or mine. Enterprises operating more than one establishment report the data for each of their establishments on an establishment return. They report summary data for all their establishments on

enterprise returns, together with some additional data for the enterprise as a whole. Enterprises operating only one establishment supply a combined establishment-enterprise return. For small businesses a special short form is used.

Administrative offices and *ancillary units* are units such as head offices, storage premises, transport garages, and laboratories serving or administering establishments within the same enterprise and located away from them. They do not supply separate returns. If they administer or serve only one establishment their figures are included in the total for that establishment, in the establishment return. If they administer or serve more than one establishment their figures are included in the enterprise return. To enable geographical details to be published, certain figures for individual administrative offices or ancillary units are separately specified in the establishment and enterprise returns; these figures are confined to employment, wages and salaries, and capital expenditure.

Manufacturers' sales branches located away from establishments are included among the ancillary units, but only if they are of the kind which do not distribute goods to customers from stocks held by themselves. Any which do distribute from stocks in this way are treated as establishments, to be included in the wholesale census.

The word "operating", in the definition of the enterprise as an operating legal entity, is intended to exclude the numerous "paper companies" which may exist as parents, subsidiaries or associates of operating companies for various reasons. In general such non-operating companies are attached in the Bureau's lists to individual related operating companies in the enterprise group, for purposes of identifying the enterprise unit. Holding companies without employees are attached to the principal operating company in the group of companies owned by them.

However, subsidiary companies performing financial services for other companies within the group, such as instalment credit companies or companies operating superannuation funds, are recognised as separate enterprises, even though they might have no separate employees of their own. These belong to a different sector of the national accounts from that of trading companies. They are not in the integrated censuses but are covered in separate inquiries.

Some holding companies without operations of their own perform administrative services for some or all of their subsidiary companies and have staff of their own for this purpose. These companies receive a special abridged enterprise return for "ancillary enterprises". This abridged return is used also for property-owning companies in an enterprise group which own property used by more than one other enterprise in the group; such companies may be responsible for the capital expenditure of the group.

Some operating companies are found to have the accounts they use for management purposes inextricably mixed with those of a related operating company; in such cases the two companies are amalgamated for statistical purposes to form one enterprise.

The above description of the types of units used in the integrated economic censuses is necessarily abbreviated. For a more extensive description see *The Australian Standard Industrial Classification (Preliminary Edition)*, 1969, Vol. 1.

Establishment of Integrated Register of businesses

Integrated Register

In order to provide and maintain accurate records of the enterprises and establishments to be covered in economic censuses and surveys it was necessary to set up an *Integrated Register* of businesses. In this register the units of each business corresponding to the three standard levels—establishments (and administrative offices and ancillary units), enterprises, and enterprise groups—are identified and numbered in such a way as to record the links between the units at the different levels. The register is recorded on magnetic tapes and provides the means for operating an automated system for addressing and dispatching census forms for enterprises and establishments and for handling the subsequent receipt and processing of completed returns.

Much of the information about the parent-subsidary relationships of companies embodied in the register was originally obtained by means of questionnaires addressed to Group Employers registered with the Commonwealth Taxation Office under the pay-as-you-earn system of income tax deductions. The questionnaires related also to the activities carried on at the various locations of the Group Employers, and the results were used together with the lists of establishments used for previous censuses of manufacturing, mining, and retail trade, to build up the original integrated register.

The lists recorded in the register are kept up to date by regular checks from a wide variety of sources. In addition to sources used for updating the previous lists of mining, manufacturing, and retail establishments (such as factory registrations, lists of retail shops compiled by postmen, etc.) the Bureau collects questionnaires from new Group Employers, and periodically updates the information on larger companies by referring listings produced from the Bureau's current records back to the companies themselves for amendment.

Changes in the establishment concept

The adoption of a new establishment concept in each of the economic censuses entails an unavoidable break in the continuity of the statistics in comparison with previous years. Special analyses are being made from which it is hoped to derive some estimates of the order of magnitude of the changes, for publication along with the results of the integrated censuses. The main changes in the establishment concept affecting the continuity of statistics can be summarised as follows:

1. In general the establishment in each census now consists of the whole of each physical location, operated by one enterprise, whose main activity is within the scope of the census. There is usually one return only for each establishment, classified to the industry of its main activity. This is in contrast to the previous censuses, in which an establishment could be the part of a location engaged in an activity covered by one of the censuses, and separate returns were required, where practicable, if the activities at the location corresponded to different industries in the same census, or different censuses. From the viewpoint of businesses completing census returns, the new establishment concept requires much less apportionment of data between returns than was necessary in previous censuses. There are still some

locations which are divided between different censuses, or between different industries in the same census, and which accordingly supply more than one establishment return each. However, such cases are restricted broadly to those where the "secondary" activity produces a substantial revenue. With some specific exceptions described in *The Australian Standard Industrial Classification, Vol. 1*, no separate return is required for such "secondary" activity unless the gross receipts from its activity amount to \$1m or more.

2. A particular effect of the new concept in manufacturing statistics is that establishments in the manufacturing census now include selling and delivery activities at the location, which were formerly excluded from the scope of the factory establishment. On the other hand, the statistics of factory establishments now exclude manufacturing activity carried on as a minor activity of predominantly retail establishments, such as the making up of blinds to customers' orders, dressmaking at frock shops, etc. However, the continuity of the statistics of commodity output will not necessarily be affected by this change. Manufacturing by retailers and wholesalers is reported in the retail and wholesale trade censuses, and commodity detail for this activity is being collected, at least for the larger establishments.

3. The treatment of outlying parts of an establishment has been standardised: if the outlying part is in the same local government area it is merged with the establishment. Thus, a factory which had extended its operations to a neighbouring location for lack of space would include the extension in its return if it was in the same local government area. Similarly, if two locations in the same local government area and industry (for example, used car lots at different addresses) have common employees and combined accounts, they are treated as a single establishment.

4. Administrative offices and ancillary units located away from establishments (apart from some owned by chain stores) were formerly outside the scope of the censuses, although stocks at such locations were to be included in the manufacturing and retail trade returns. As previously mentioned, they are now included in the census return of the establishment they serve, or if they serve more than one establishment they are included in the return supplied for the whole enterprise. In either case they appear in the census statistics for the local government area in which they are located, and for the predominant industry of the establishment or establishments they serve. From the viewpoint of businesses supplying returns this treatment is likely to minimise the need for special adjustment and dissection of data in accounting records, and to produce more homogeneous and meaningful statistics of the industry in which the business operates than before. The inclusion of administrative or ancillary activities in a census is no longer dependent on their being carried out at an establishment; instead they are treated as an integral part of the industry's statistics wherever they are located. Nevertheless, some published tables will show certain data separately for administrative offices and ancillary units. This treatment of ancillary units is expected to cause some former manufacturing establishments to become ancillary units: for example, engineering workshops doing maintenance and repair work on the plant and equipment of establishments in the same enterprise, and located away from them. The statistics of those items which are still reported for ancillary units (that is, employment, wages and salaries, and capital expenditure) will be included in the statistics for

the industry of the establishments served by the ancillary units, instead of the industry to which the workshops were classified. If the establishments served are outside the scope of the integrated censuses, the workshops, of course, will disappear from the scope of the manufacturing census.

5. The establishment concept used for the electricity and gas industries is an exception to the general concept. Because of the nature of their activities, the single operating location is not suitable as a basis for the establishment engaged in producing or distributing electricity or gas. The establishment unit used consists of all locations operated by the enterprise in the one State.

Standardisation of the industrial classification

Australian Standard Industrial Classification

The Australian Standard Industrial Classification (ASIC), which is a prerequisite to the integration of the economic censuses and surveys, is described in a publication of the Bureau: *Australian Standard Industrial Classification (Preliminary Edition)*, 1969, *Vol. 1*. The classification system described in that publication defines the industries for which statistics are collected in the economic censuses, thus permitting the scope of each census to be marked out without any gaps or overlapping between them. It also defines the statistical units (establishments, administrative offices and ancillary units, enterprises, etc.) which are classified by industry, and lays down standard rules for identifying them and coding them to the industries of the classification.

Besides being used in the 1968–69 economic censuses, the ASIC will be used in other economic censuses and surveys, population censuses and surveys, and other statistics (national accounts, etc.) derived from the basic statistics. Data classified according to the ASIC can be converted to conform essentially with the International Standard Industrial Classification. It is proposed to publish summary tables of census results converted in this way to facilitate international comparisons.

The structure of the ASIC comprises four levels. The broadest of these is the "division" level, which relates to wide categories such as "manufacturing", "wholesale and retail trade", and "community services". The structure may be illustrated by the following example. A factory mainly engaged in making aluminium window frames would be classified to:

Division	C	Manufacturing
Sub-division	31	Fabricated metal products
Group	311	Fabricated structural metal products
Class	3112	Architectural aluminium products

The fundamental concept of the ASIC is that an industry, that is an individual class, or group, etc., in the ASIC is an entity composed of the establishments, administrative offices and/or ancillary units which have been classified to it.

Each ASIC class is defined in terms of a specified range of economic activities, designated as primary to it. (Manufacturing aluminium window frames, as shown in the above example, is primary to class 3112.) Similarly, each ASIC group is defined in terms of the economic activities designated as primary to the classes within that group, and so on. An establishment which is engaged mainly in economic activities which have been designated

as primary to a particular class is classified to that class whether or not that establishment is also engaged in other "secondary" activities. An administrative office or ancillary unit will be classified to an ASIC class according to the predominant industry of the establishments it administers or serves, while an enterprise will be classified according to the predominant industry of its establishments and ancillary units.

Standardisation of data concepts : establishment statistics

In previous economic censuses much of the data asked for in one census was broadly similar to data asked for in others. All asked for employment, and the manufacturing and mining censuses asked for value of output and the cost of materials, fuels, etc., used, from which value added could be derived—somewhat similar to the gross margin that could be derived in the retail trade census by subtracting the value of purchases from the value of sales and adjusting for stock changes. Value of stocks was asked for in manufacturing and retail trade censuses, and fixed capital expenditure (in the form of "additions and replacements" to fixed tangible assets) was asked for in manufacturing and mining censuses.

With integration of the economic censuses it became necessary to seek a common conceptual basis for the items of data of this kind, not merely in order to suit the needs of the Bureau in compiling national accounts estimates or deriving benchmark statistics for monthly or quarterly surveys or employment and earnings series, although these were important reasons for doing so. It was also necessary to find such a common basis in order to enable the returns to be completed more readily and accurately by the enterprises responsible for them. As the enterprise is the basic unit from which statistics are collected in the censuses, the data for the establishment returns had to be capable of being drawn from the records of the enterprise in such a way that they could be reconciled with the corresponding totals for the enterprise as a whole. The establishment returns for a single enterprise with more than one establishment might belong to different economic censuses, but they would need to balance with a single enterprise return for the whole enterprise. This enterprise return is common to all industries and all economic censuses.

The key items of data entering into this reconciliation, and therefore requiring a common conceptual basis, are turnover, stocks, purchases and selected expenses, employment, salaries and wages, and fixed capital expenditure.

These key items also encompass the main benchmark data required for improving the accuracy of quarterly sample surveys and employment and earnings series, and the data needed from establishments for consistent estimating of the main national accounts aggregates.

In order to provide for the inclusion of these key items in all censuses, questions on fixed capital expenditure, wages and salaries, and selected expenses were added to the retail trade census forms, and questions on stocks to the mining census forms.

The following table sets out in skeleton form the content of the establishment forms and the enterprise form for an enterprise with more than one establishment, to illustrate the inter-relationships among the forms and among the data items in the 1968-69 economic censuses:

MAIN ITEMS ON INTEGRATED ECONOMIC CENSUS RETURNS, 1968-69 (a)
(For enterprises with more than one establishment)

Establishment returns		Enterprise return
Factories, mines, electricity, gas	Retail, wholesale, selected services	
SALES, ETC. Sales of goods produced by this establishment (ex-tax) (b) Sales of goods not produced by this establishment (ex-tax) Subsidies All other income from outside the enterprise <i>except</i> rents, leasing revenue, interest and dividends Capital work on own account	SALES, ETC. Sales of goods (owned by the enterprise) (ex-tax) (b) (Sales of goods produced in this establishment, included above) Commission received on sales of goods for other enterprises (wholesale only) All other income from outside the enterprise <i>except</i> rents, leasing revenue, interest and dividends Capital goods withdrawn from stock on own account	
Total sales, etc.	Total sales, etc.	Sales, etc. (c)
STOCKS At 30 June 1968 At 30 June 1969	STOCKS At 30 June 1968 At 30 June 1969	Stocks at 30 June 1968 (c) Stocks at 30 June 1969 (c)
PURCHASES AND SELECTED EXPENSES Purchases of materials, fuel, etc. (d) Purchases of goods for re-sale Repair and maintenance expenses Charges for sub-contract and commission work Outward freight and cartage Motor vehicle running expenses Sales commission payments	PURCHASES AND SELECTED EXPENSES Purchases of goods for re-sale Purchases of materials for manufacturing Purchases of wrapping and packaging materials and electricity and gas; repair and maintenance Charges for sub-contract and commission work Outward freight and cartage Motor vehicle running expenses Sales commission payments	
Total above purchases and expenses	Total above purchases and expenses	Purchases and selected expenses (c)
TRANSFERS Transfers of goods out (to other establishments of the enterprise) Transfers of goods in (from other establishments of the enterprise)	TRANSFERS Transfers of goods out (to other establishments of the enterprise) (wholesale only) Transfers of goods in (from other establishments of the enterprise)	
Rent and leasing charges	Rent and leasing charges	Rent and leasing charges (c)
Depreciation	Depreciation	Depreciation
Wages and salaries (e)	Wages and salaries (e)	Wages and salaries (c) (e)

MAIN ITEMS ON INTEGRATED ECONOMIC CENSUS RETURNS, 1968-69 (a)—continued
(For enterprises with more than one establishment)

Establishment returns		Enterprise return
Factories, mines, electricity, gas	Retail, wholesale, selected services	
Sales tax	Sales tax	Sales tax
Fixed capital expenditure	Fixed capital expenditure	Fixed capital expenditure (c) (e)
Employment (e)	Employment (e)	Employment (c) (e)
		Land tax, rates and pay-roll tax Interest payments Royalty payments Employer contributions to superannuation schemes All other expenses (f)
		Rent and leasing revenue Interest receipts Revenue from royalties
		Value of fixed tangible assets

- (a) The outline omits some details. For example, stocks are shown by stage of processing in the enterprise return and in the establishment returns for factories, mines, electricity and gas; capital expenditure is shown in all returns by type of asset and distinguishing new and secondhand assets, and purchases and disposals; employment and salaries and wages are broken down by type in establishment returns. However, the reconciliation between establishment and enterprise returns makes use only of the summary totals shown in the last column of the table.
- (b) To agree with total of sales in detailed commodity part of return.
- (c) Separate totals for these items are shown in enterprise return for: all establishments in the intergrated censuses combined, all administrative offices and ancillary units reported on enterprise returns, all units of the enterprise in industries not covered by the integrated censuses. These three totals add up to the enterprise total.
- (d) To be compatible with total value of materials, etc., used in detailed commodity part of return (along with transfers in).
- (e) The return has an additional figure for this item for each separately located administrative office or ancillary unit reported in the return; this is to permit tabulation in fine geographical detail.
- (f) A single total, including travelling expenses, insurance premiums, accounting and legal costs, postage and telephone charges, office supplies, advertising, bank charges and the like, but not "provisions".

Value added

The fundamental measure of the "magnitude" or importance of an establishment, in economic censuses, is its *value added*.* This measure can be aggregated for all establishments and industries covered by the censuses without duplication and is the concept generally accepted throughout the world as the measure of the relative importance of industries in economic censuses. It means the value added to materials in manufacturing, the value of minerals mined less that of the materials used in mining, and the value added to merchandise in retail and wholesale trading.

*See below for discussion of the allied concept of gross product.

In the integrated economic censuses the common measure of value added in all industries is as follows : *value added* equals *turnover* plus *increase in stocks* minus *purchases, transfers in, and selected expenses*.

Transfers in are goods transferred from another establishment of the same enterprise, either for further processing or for sale. (*Transfers out* are included in turnover.) The *selected expenses* do not include salaries and wages, interest, rent, depreciation, or overhead expenses usually recorded only for the enterprise as a whole. Broadly speaking, therefore, the value added is the source from which establishments derive the surplus to meet salaries and wages, interest, rent, depreciation, and overhead expenses of the enterprise (that is, those not specified as *selected expenses* on establishment forms), and to provide a contribution to the profits of the enterprise.

Value added is the concept corresponding to value of production in manufacturing and mining censuses in the past, although it is derived in a different manner. Value of production was obtained by deducting the cost of materials, fuel, etc., used from the value of output at the factory or mine. Further points of difference appear below in the detailed explanation of items of turnover and purchases, etc.

Turnover

This item includes the components listed below.

1. Manufacturing, mining, electricity and gas censuses:
 - sales of goods produced by the establishment ;
 - sales of goods not produced by the establishment ;
 - transfers of goods out to other establishments of the same enterprise ;
 - bounties and subsidies on production ;
 - all other operating income (that is, excluding revenue from rent and leasing, interest other than hire purchase interest, dividends, and sales of fixed tangible assets) ; and
 - capital work done for own use or for rental or lease.
2. Retail and wholesale trade censuses :
 - sales of goods (owned by the enterprise) ;
 - transfers of goods out to other establishments of the same enterprise (wholesale only) ;
 - selling and purchasing commissions received (wholesale only) ;
 - all other operating income (with the same exclusions as above); and
 - goods withdrawn from stock for own use (as fixed tangible assets, or for rental or lease).

It will be seen that, despite the differences in the terms used for its components, the concept of turnover is identical in all the integrated economic censuses. In all these censuses, similarly, the details shown in the section of the form for sales of individual commodities are required to agree with one of the items of turnover : sales of goods produced by the establishment, for factories and mines ; and sales of goods (owned by the enterprise), for retail and wholesale trade. The commodity details in the manufacturing census now relate to the value of sales instead of the value of output, as formerly, although the output of individual commodities is still asked for in terms of quantities, along with the quantity and value of their sales.

In the case of the mining census, the value of output (valued at or near the mine) will be calculated or estimated, as a supplementary series, and will continue to be published.

Stocks

The main change to statistics of stocks brought about by the integration of the censuses is due to the use of the new establishment concept: the statistics will relate to total stocks of the establishment, not merely those associated with the main activity covered by the census. Thus manufacturing establishments now include in their returns any stocks of merchanted goods held, and retail establishments include any stocks of materials held for wholesaling or manufacturing. For mining there is a division in the "finished-goods" category between "minerals produced in this establishment" and stocks of "other goods and minerals purchased for re-sale". This is to enable a reconciliation to be made between the aggregate stocks figures and the commodity details of stocks, production, and sales of minerals.

Purchases and selected expenses

Purchases, etc., items in manufacturing and mining

1. The new way of deriving value added (that is, as compared with the previous way of deriving value of production) has required that value of purchases be asked for instead of the value of materials, etc., used. The commodity detail in the manufacturing census form is still in respect of usage of materials, etc., but the total figure is on the basis of purchases.
2. The value of purchases on the form is supplemented by the value of transfers in from other establishments of the enterprise.
3. In accordance with the broadened establishment concept, purchases of goods for resale are included as well as purchases of materials for use in manufacturing or mining.
4. Because sales by manufacturing establishments are now valued at actual sales value, whereas factory value of output as asked for in previous censuses was valued on a "factory-door" basis excluding delivery expenses, some additional expense items are now collected. These are: "outward freight and cartage" and "motor vehicle running expenses". "Sales commission payments" is also included. These three items are among those deducted from turnover in deriving value added.
5. In the mining census, output was formerly valued at point of sale, with transport costs shown separately, to enable value at mine to be calculated within the Bureau. In the new census the point-of-sale basis is retained for sales, but the transport cost item is replaced by the standard three items included in all censuses: outward freight and cartage, and motor vehicle running expenses. Sales commission payments are also asked for. As in the other censuses, these relate only to payments made outside the enterprise, as any employees of the mining establishment engaged in transport or selling the mine's products (with certain exceptions for major own-account rail and sea transport operations above a certain traffic limit) are treated as part of the mining establishment.
6. Charges for commission work and sub-contract work are specified as separate items of expense.

Purchases, etc., items in retail and wholesale trade

1. Because of the extension of the establishment concept, purchases in the retail trade census now include goods purchased for wholesale sale as well as those for retail sale. (Similarly the purchases item in the wholesale trade census includes purchases for retail as well as wholesale sale.)
2. For the same reason, there are items "purchases of materials for manufacturing" and "charges for commission and subcontract work" in both censuses.
3. The items "outward freight and cartage", "motor vehicle running expenses", and "sales commission payments" are included for the same reasons as the corresponding items in the manufacturing and mining censuses.
4. To complete the range of expenses of retail and wholesale establishments in order to enable value added to be derived consistently, there is a "residual" item: "purchases of wrapping and packaging materials, electricity and fuel, repair and maintenance expenses".

Transfer values

As mentioned earlier, turnover in all censuses except the retail trade census includes transfers of goods out to other establishments of the same enterprise. (Any transfers between retail establishments are provided for by having purchases reported inclusive of transfers in, and net of transfers out.) Similarly transfers in from other establishments of the same enterprise are included among the items of purchases, etc., deducted in deriving value added. Transfers, both in and out, are confined to transfers of goods. Services provided by one establishment to another in the same enterprise, in general, are not included among transfers (or sales) even if a charge is made. (However, in certain cases described below a commission is imputed to establishments selling or doing manufacturing work, on behalf of other establishments of the enterprise.)

In particular, transport services provided by one establishment to another within the same enterprise are not treated as transfers. Any charges made by the establishment are not to be treated as income, or as freight and cartage by the other establishment. An exception is made only for shipping services within an enterprise, and rail services above a certain minimum ton-mileage, where the transport services are treated as separate establishments of the enterprise (outside the scope of the censuses) but charging the other establishments freight and cartage.

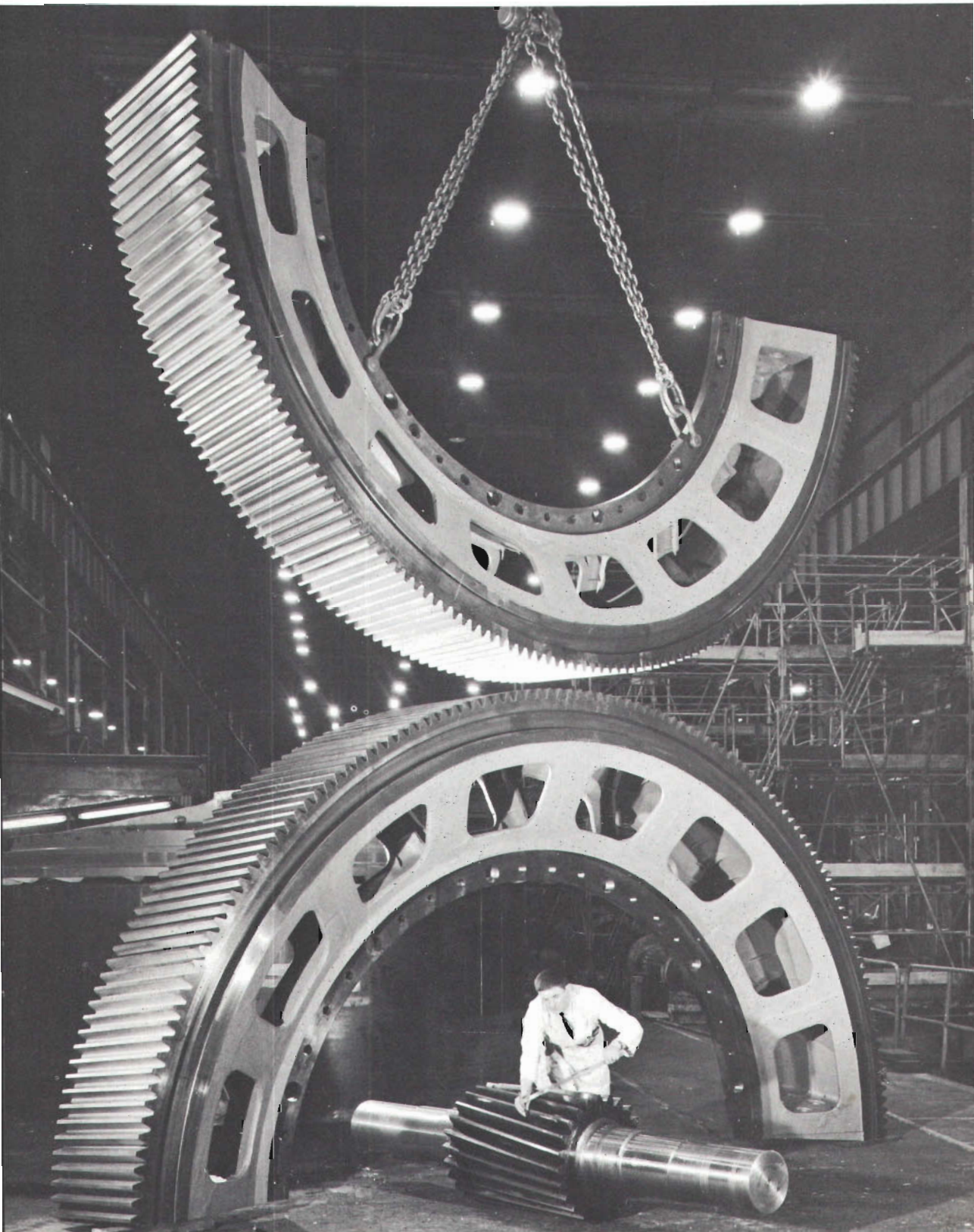
The integrated censuses adopt a new approach to the valuation of transfers. In the previous censuses of manufacturing and mining, transfers out were to be included by implication in the value of output, and valued at selling value excluding delivery costs in the same way as goods sold independently. Transfers in were included in the value of materials used, with no special instruction about valuation. In the integrated censuses, the transfer value sought is the value for which the goods would have been sold to the establishment to which they were transferred if it had been under separate ownership, i.e., commercial value. However, if such a transfer value cannot be given or estimated, alternatives are provided.

In large important cases where the goods cross State or industry boundaries, estimates of commercial transfer values are worked out in

Victoria Today

This 19 foot diameter single helical steel girth gear, weighing 33 tons, was manufactured in Melbourne for an Adelaide cement mill. The matching pinion weighs 4.2 tons.

Vickers Ruwolt Pty Ltd



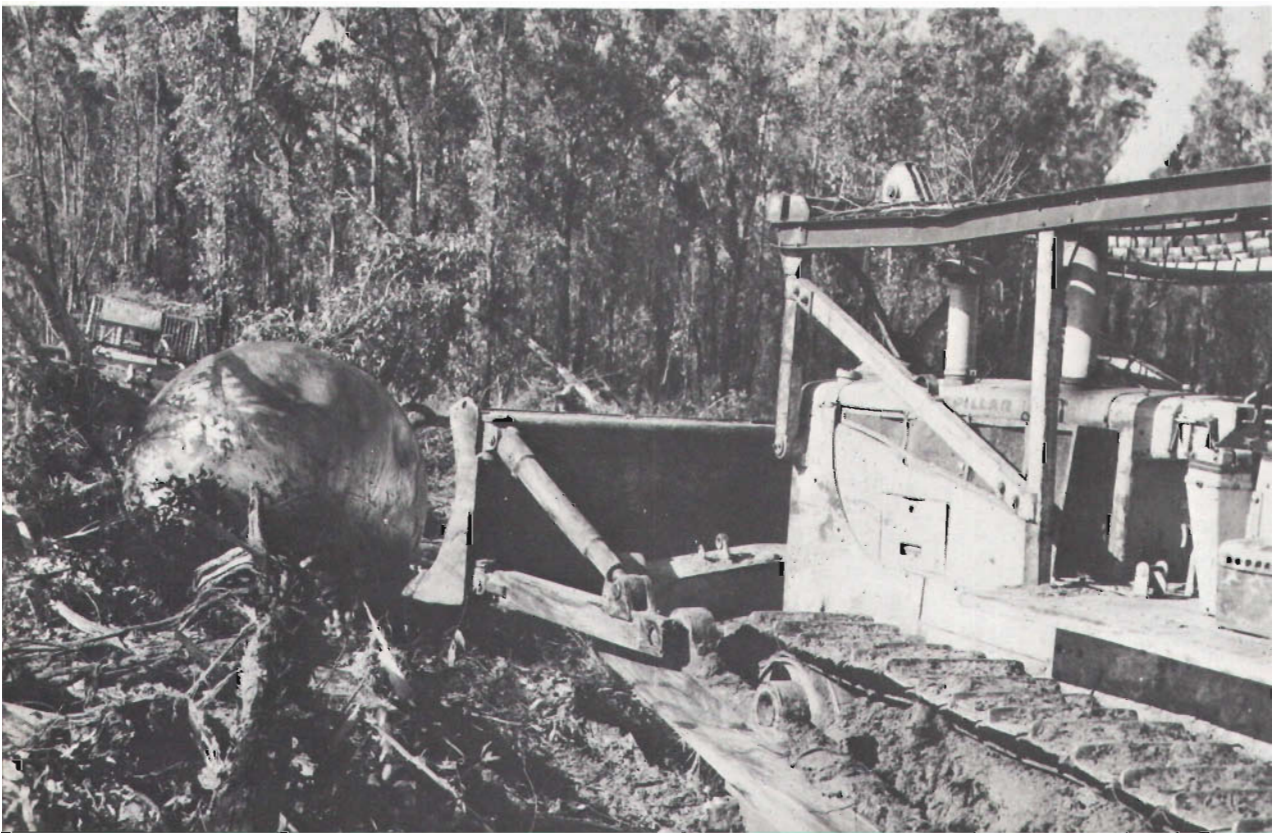


Lamb marking and weighing as part of a Department of Agriculture experiment on a grazing property in western Victoria.

Department of Agriculture

Clearing operations at Heytesbury showing a ball and chain.

Rural Finance and Settlement Commission





The Arthur Rylah Institute for Environmental Research in Heidelberg, opened by Her Majesty the Queen in April 1970.

Fisheries and Wildlife Department

The interior of the bulk wheat storage at Dunolly, in the Wimmera, which has a capacity of 10.5 million bushels. The roof is supported by 1,320 imported timber poles.

The Herald and Weekly Times Ltd





A flock of sheep on a grazing property near Hamilton in the Western District.

Ernest Cameron

The original part of this homestead, Murndal, was a stone cottage built in the 1840s which was panelled in 1891 to become the library. Extensive additions and alterations were made in the 1850s, 1870s, and 1890s until the homestead reached its present form in 1906.

Ernest Cameron



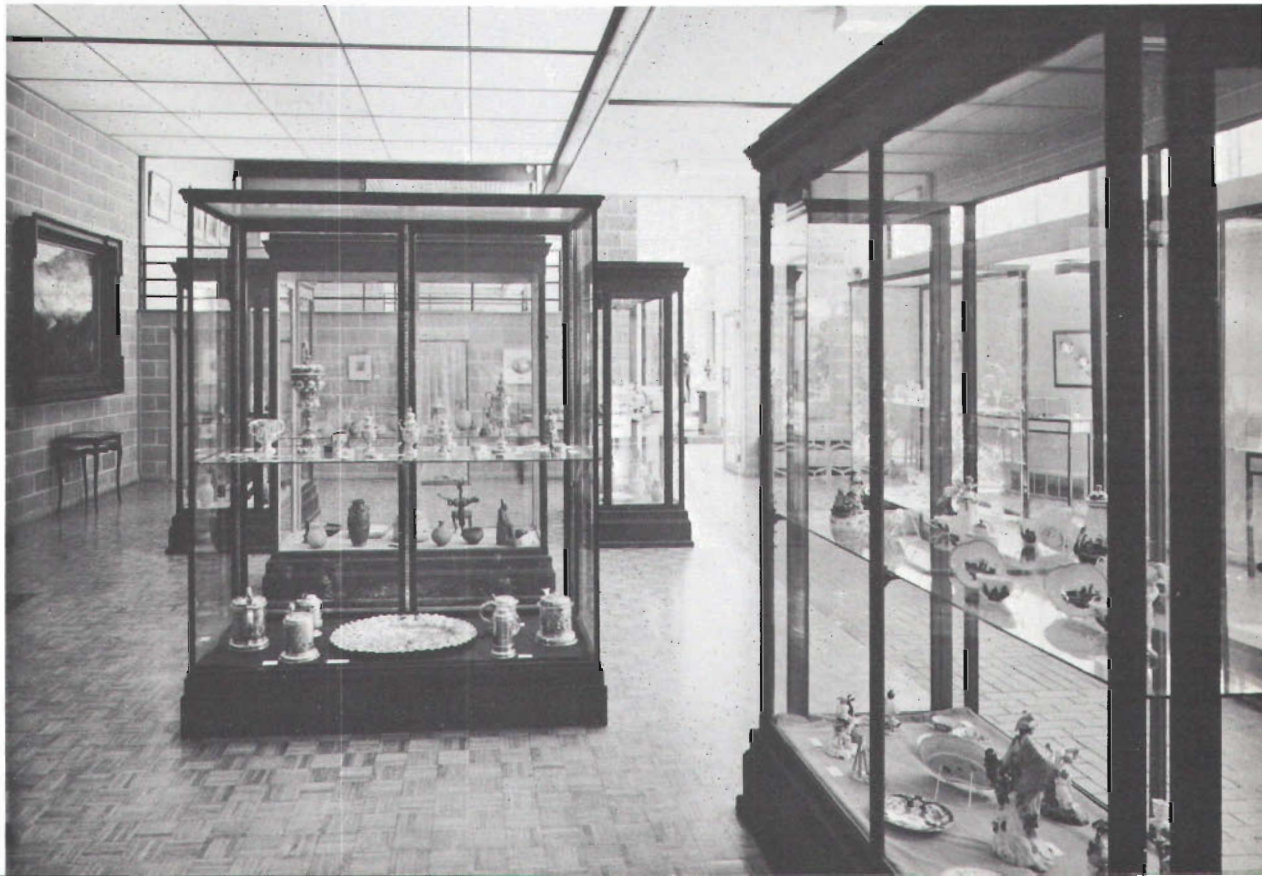


The civic centre of the City of Hamilton incorporates a library, art gallery, administrative offices, and the Town Hall.

Ernest Cameron

The Shaw collection of decorative arts in the Hamilton Art Gallery.

Ernest Cameron





The second stage of Melbourne's South Eastern Freeway shown under construction in October 1969.

Herald and Weekly Times Ltd



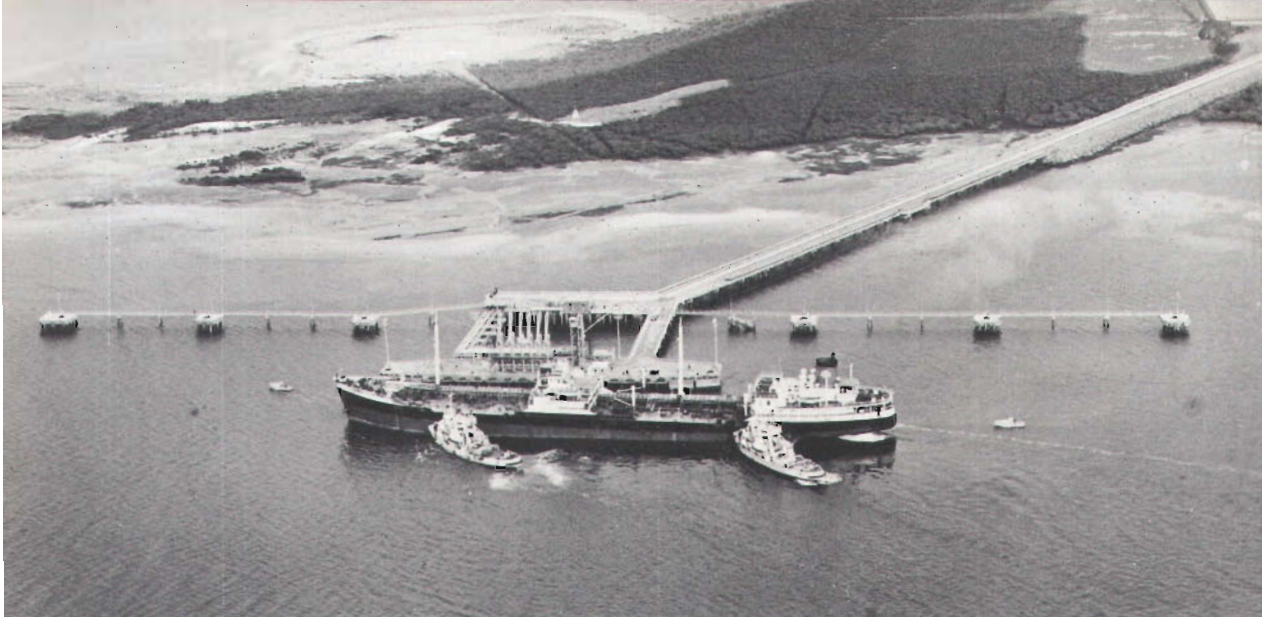
Laying the Gas and Fuel Corporation's 30 inch Dandenong to West Melbourne natural gas pipeline along Dandenong Road, Clayton in October 1969.

M. A. Stratton

(Below) Laying the 7 mile long 42 inch Esso-B.H.P. crude oil pipeline connecting the Long Island Point and Crib Point liquids piers and supplying the B.P. Refinery, Crib Point, in January 1970.

M. A. Stratton





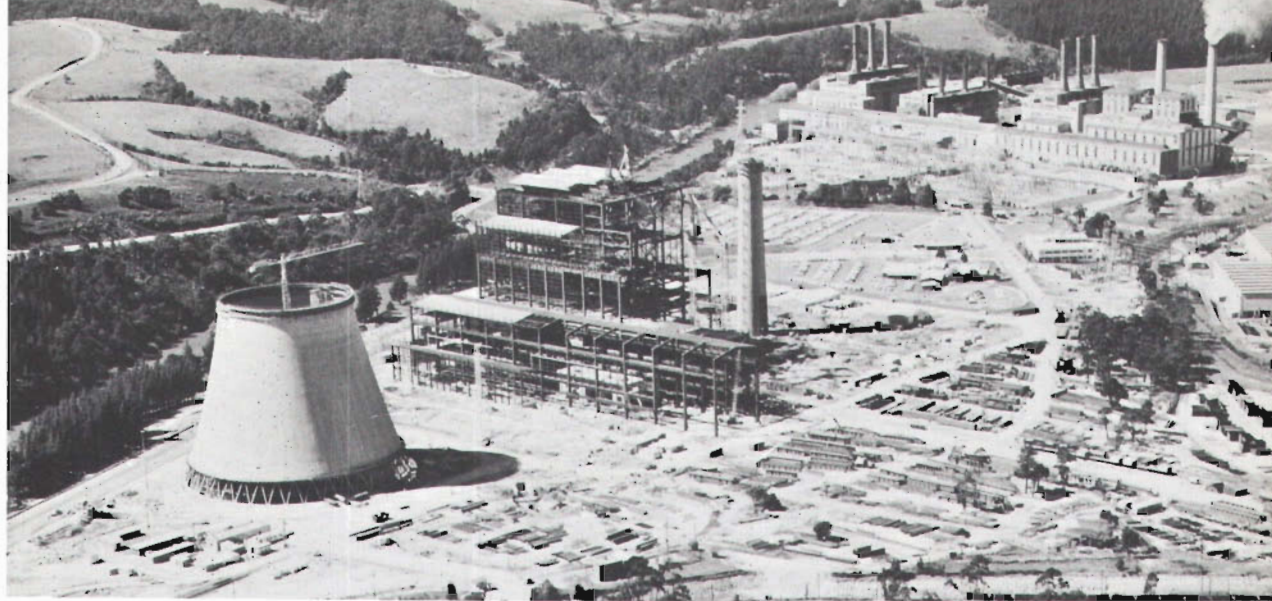
The tanker *Hemiglypta* being positioned into its berth at Long Island Point Liquids Pier, Western Port, in March 1970. This tanker carried the first consignment of Bass Strait oil to Australian refineries.

Val Foreman

The nearly completed earthworks for Lysaght's \$92m cold reduction plant at its steelworks project just north of Hastings, Western Port, in October 1970. Part of the Esso-B.H.P. tank farm is shown in the foreground.

John Lysaght (Aust.) Ltd



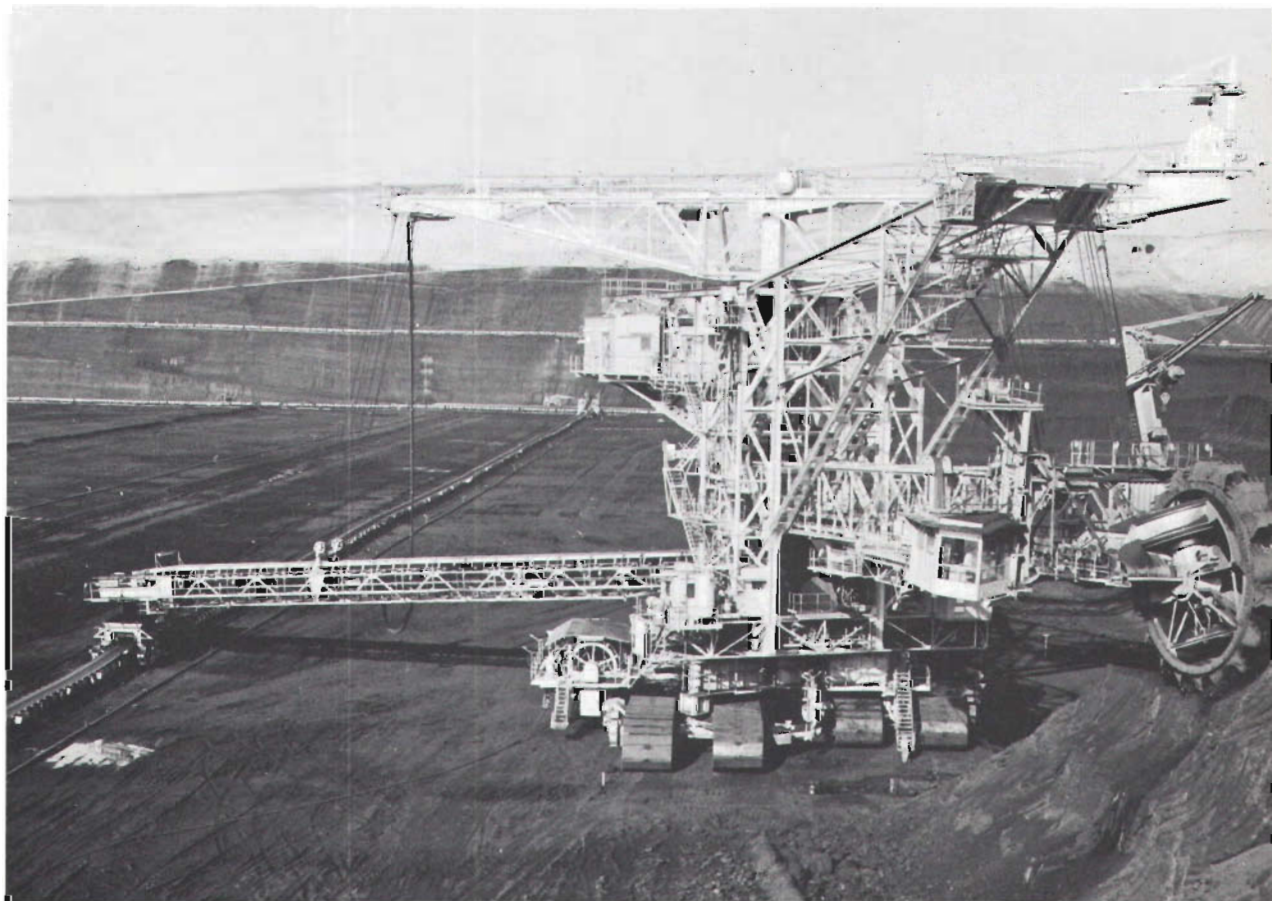


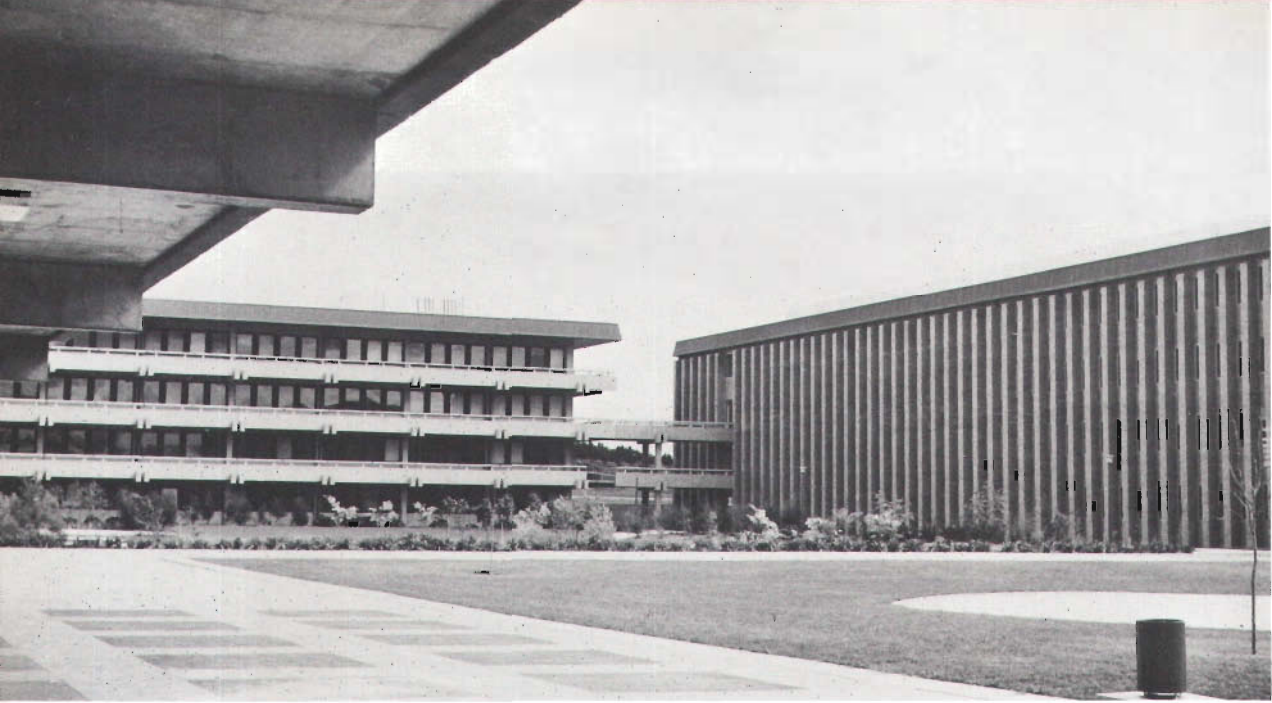
The Yallourn "W" power station under construction, showing in the foreground the base of the first of two 375 foot high natural draft cooling towers.

State Electricity Commission

The buckets on the revolving wheel of this brown coal excavator cut into the coal face and load coal directly onto belt conveyors to the Hazelwood and Morwell power stations, and the Morwell briquette works.

State Electricity Commission



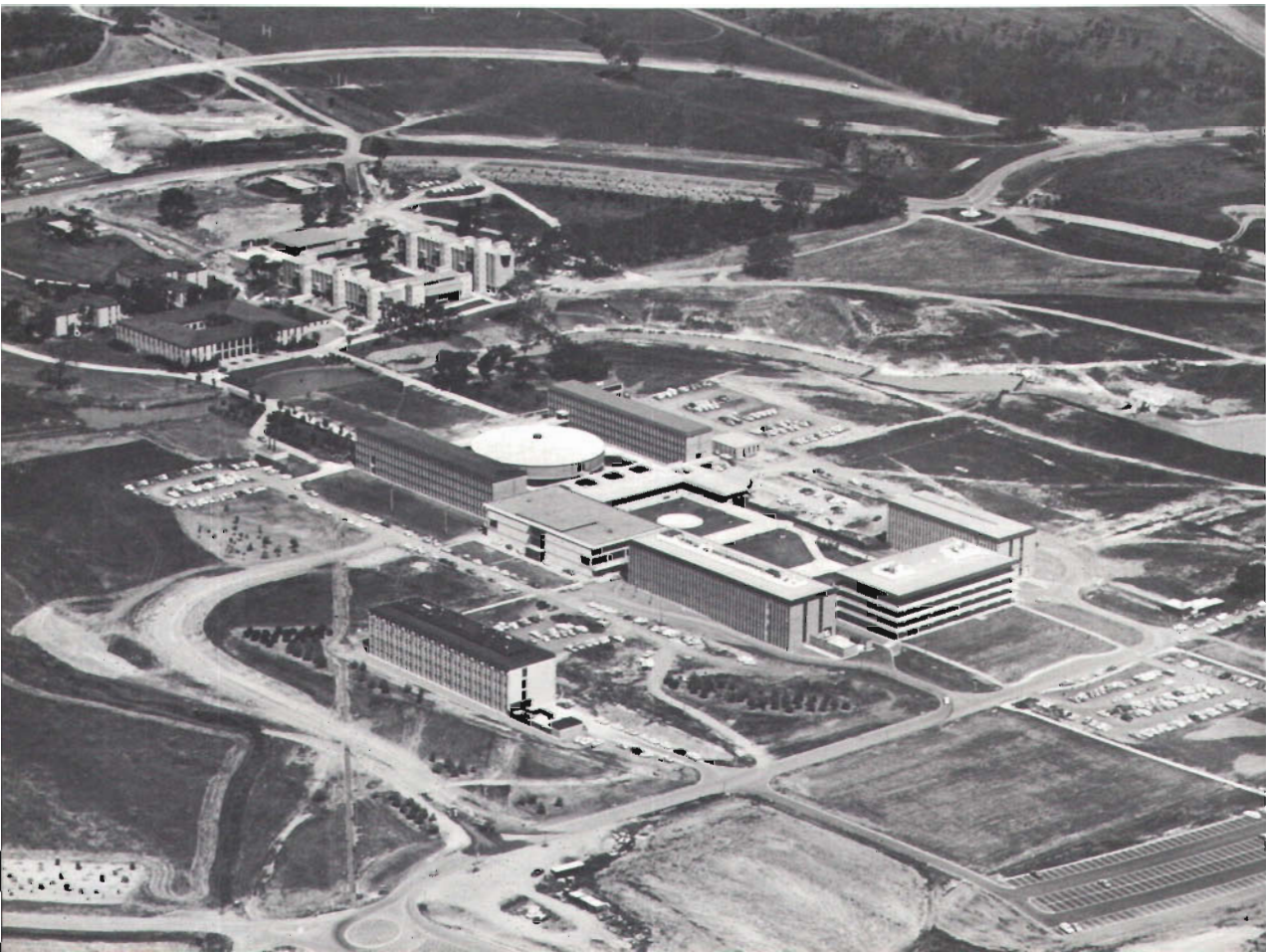


The Thomas Cherry building (left) and the chemistry building (right) at La Trobe University.

La Trobe University

An aerial view of the campus in November 1969.

La Trobe University





The applied mechanics laboratory in the McPherson School of Engineering at the Swinburne College of Technology.

Victoria Institute of Colleges

Children learning to make close observations in kindergarten.

Mark Strizic



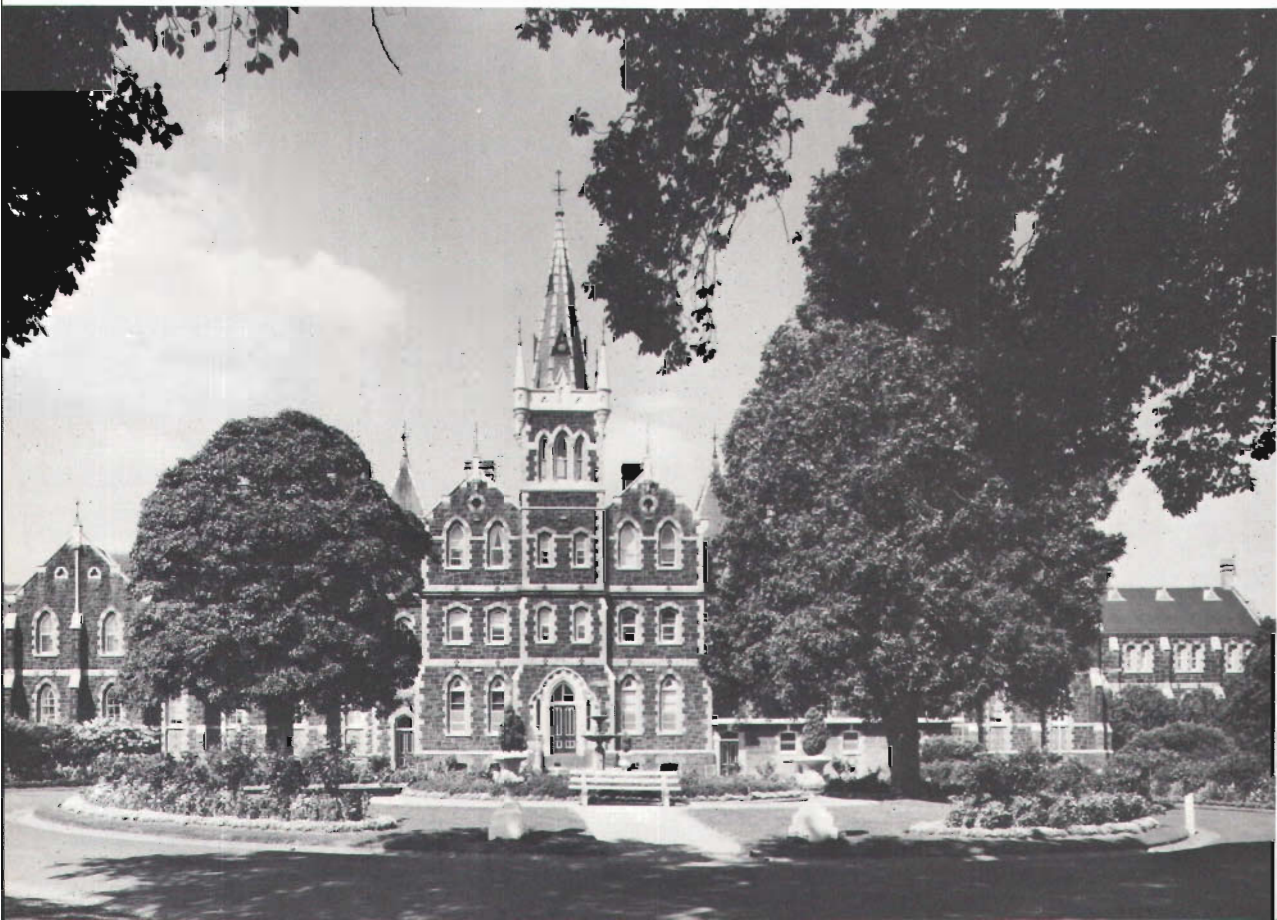


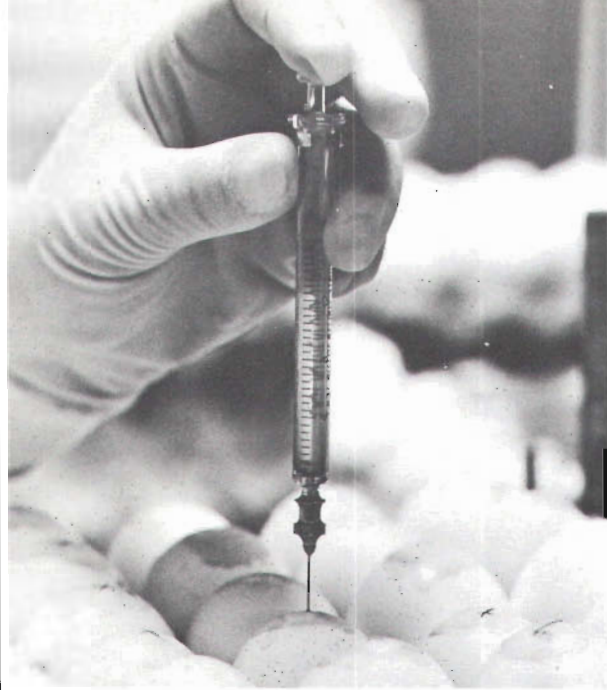
Teaching the sound "F" in the auditory training room at the Victorian School for Deaf Children.

Victorian School for Deaf Children

The School's bluestone building in St Kilda Road, Melbourne.

Victorian School for Deaf Children





Live influenza virus, injected into embryonated hen eggs, is the first stage in the production of influenza vaccine.

Commonwealth Serum Laboratories

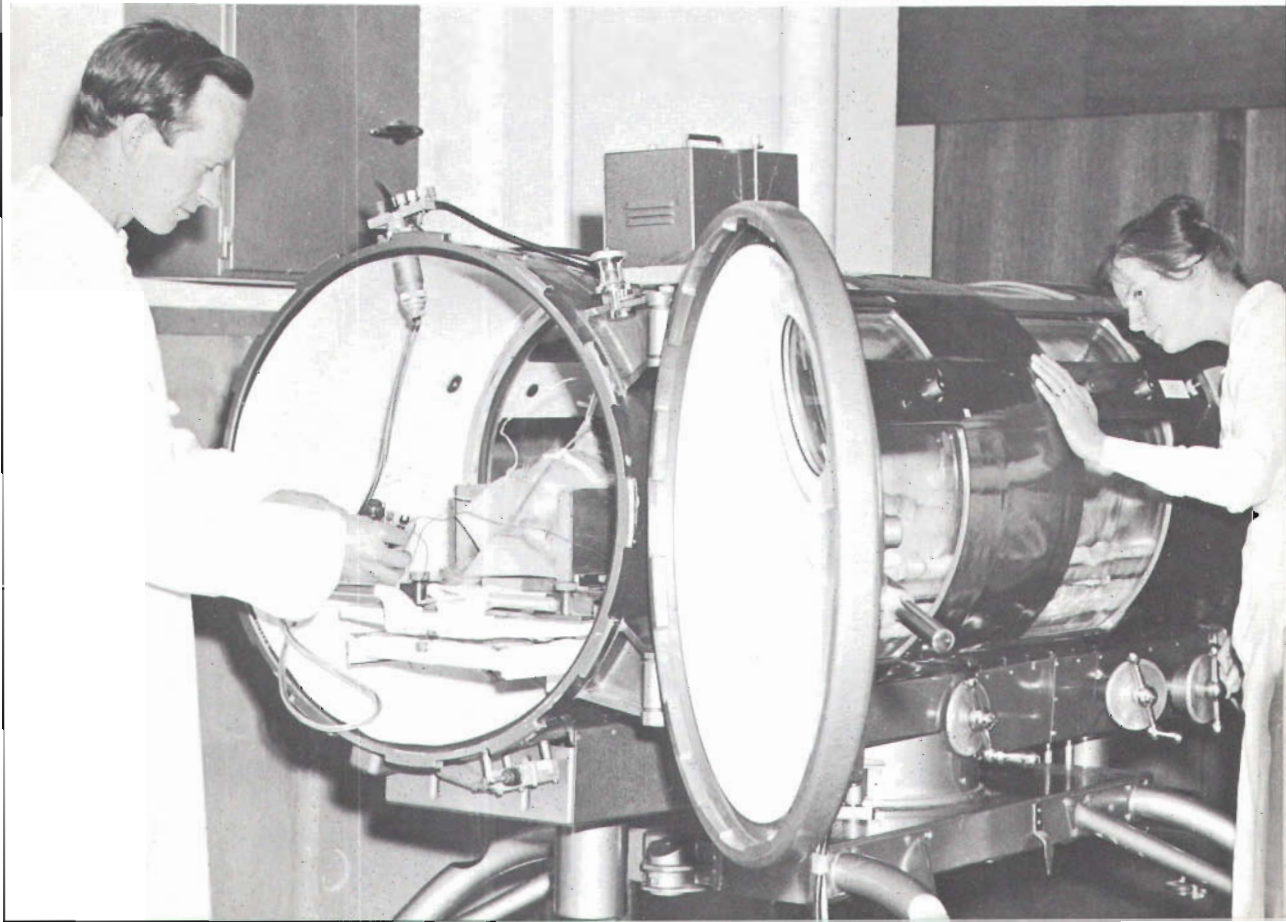


A tiger snake being "milked" to provide venom for antivenene production.

Commonwealth Serum Laboratories

This oxygen tank at the Cancer Institute helps in efficient treatment for patients.

Hospitals and Charities Commission





Como, in South Yarra, a gracious Victorian dwelling set in spacious grounds, has been maintained by the National Trust in period style.

National Trust of Australia (Victoria)

The market at Castlemaine, currently being restored by the National Trust.

National Trust of Australia (Victoria)





La Trobe's Cottage, the prefabricated timber residence of Victoria's first Lieutenant-Governor, has been re-erected on the Domain, Melbourne, and contains most of its original furnishings.

National Trust of Australia (Victoria)

Beechworth Powder Magazine, a relic of Victoria's gold mining era, has been restored by the National Trust with the assistance of the local community.

National Trust of Australia (Victoria)





This modern manually operated trunk exchange at Wangaratta serves telephone subscribers over an extensive area of north-eastern Victoria.

Postmaster-General's Department

The first train tops the 25 foot high crest of the single track hump section—the focal point of the Melbourne Yard Rearrangement Scheme.

Victorian Railways



consultation with the enterprises concerned. But otherwise actual book values are asked for, with the basis to be indicated (factory cost, cost plus a margin, wholesale selling value, etc.) If no commercial transfer values can be estimated, either by the enterprise or the Bureau, from market information, these book values are adjusted within the Bureau by a conventional method which gives all the establishments concerned a share of any surplus earned by the enterprise, and which provides values consistent for transfers out and the corresponding transfers in.

Some factories keep no book value for transfers (for example, a factory distributing its products through sales branches but keeping only one set of sales and stocks accounts, or a clothing factory supplying cut-out materials to be made up by outlying branch factories). In these cases no transfer value is estimated; the work done by the receiving establishment (whether sales branch or factory) is treated as done on commission for the supplying establishment, and a commission is imputed to it, while the sales and the stocks remain on the supplying establishment's return, which is charged with the amount of imputed commission.

Transfers are restricted to physical transfers of goods, and do not include transfers existing in books of account only. This is consistent with the distinction made between manufacturers' sales branches handling stocks, which are treated as wholesale establishments, and manufacturers' sales branches not handling stocks (such as order-taking offices, or sales representatives' offices), which are treated as ancillary units. Sales between enterprises of an enterprise group are not treated as transfers, even though they may not be at commercial value.

Employment, salaries, and wages

The main changes made in the employment and wages and salaries part of the factory form for 1968-69 were in the direction of simplification. With the new concept of the establishment, for example, it is not necessary for manufacturers to deduct any "non-manufacturing" employees (such as sales and delivery employees) or their earnings. All employees are to be included, and this includes employment at any ancillary units or administrative offices serving the establishment only—employees likely to be included in the payroll of the establishment in any case. As mentioned earlier, separate geographical details will be published for units of this type, including those reported on enterprise returns.

Rent and leasing expenses

Annual rent paid has been included in the censuses of manufacturing and mining in the past, but the figures were used to estimate the capital value of rented assets, for inclusion in the statistics of the value of fixed assets, and were not published themselves.

In the 1968-69 censuses rent and leasing expenses have been included in the establishment forms for all censuses, and in the enterprise form. It is intended to publish the results, which will be of particular interest in retail and wholesale trade and in some manufacturing industries. The extension to include leasing expenses reflects interest in the growth of leasing activity.

Fixed capital expenditure

Fixed capital expenditure has not appeared on retail trade census forms in the past, and in manufacturing and mining censuses has appeared in the form of "additions and replacements", an item used in the year to year reconciliation of the value of fixed assets. In the design of the integrated census forms the opportunity was taken to ask for fixed capital expenditure in the detail needed for national expenditure estimates and survey benchmarks, and most likely to be of general use as well. It has been impossible in the past, in estimating fixed capital expenditure for national accounts, to reconcile manufacturing censuses with business surveys, or with the statistics obtained from tax sources. Differences in scope, definitions, etc., meant that the estimates could be fitted into the national accounts framework only with a great deal of uncertainty. The integration of the censuses and the surveys should do much to improve the quality of the estimates in future.

The integration of establishment and enterprise returns will make it possible to combine the industry and geographical detail yielded by establishment returns with the desired conceptual basis of "ownership of assets" which only enterprise returns permit. In other words, the forms have been designed to provide statistics of fixed capital expenditure by enterprises on assets owned by them and located at their establishments.

The general basis of the fixed capital expenditure figures is: purchases of new and secondhand assets *less* sales of secondhand assets. (For establishments of multi-establishment enterprises, purchases include acquisitions by transfer from other establishments of the enterprise and sales include disposal by transfer to such establishments.) On this basis the capital expenditure of an industry will include net acquisition of secondhand assets acquired from other industries. However, it is possible to get a total for fixed capital expenditure on new assets for each industry, as the type-of-transaction breakdown provides for this.

The traditional type-of-asset breakdown was extended to show motor vehicles as a separate class as well as land and buildings, and plant and machinery. In addition, "land" was included with secondhand assets in the type-of-transaction breakdown, to make sure that it was not included by some in new assets.

An additional dissection of fixed capital expenditure is possible: by type of unit, that is, distinguishing between establishments, on the one hand, and administrative offices and ancillary units on the other.

Value of fixed assets

The manufacturing and mining censuses previously included a section on the book value of land and buildings, plant and machinery. This was dropped from the census forms for establishments in 1968-69, but included in the returns for enterprises, including those in retail and wholesale trade, as well as manufacturing and mining (and electricity and gas).

Gross margin in retail and wholesale trade

Besides publishing value added in retail and wholesale trade, it is proposed to publish derived statistics of *gross margin* for these censuses, both as an absolute figure and as a percentage of sales. These would make use of specific items of sales and purchases relating to trading transactions,

as distinct from manufacturing and other activities secondary to these industries.

Gross margin in retail and wholesale trade would be derived as follows : sales, transfers out* and withdrawals from stock for own use (*less* any sales or transfers out* of goods manufactured by the establishment) † *plus* increase in stocks *less* purchases of goods for resale and transfers in *equal* gross margin.

There is some approximation in the resulting figure, as the value of stocks in retail and wholesale trade censuses includes stocks held for any manufacturing or other non-trading activity carried on, as well as those held for retail or wholesale trading. Purchases of goods for resale, also, may include some materials purchased for use in repair work. However, this is considered unlikely to distort the figures significantly in the industry classes for which they are published, and certainly will not prevent them from being put to good use by those interested in analysing distribution statistics. It should be noted that gross margins relate only to transactions in "owned goods", not in goods sold on commission. (As already pointed out, the commodity detail in wholesale trade returns also relates only to owned goods.) To supplement the tables showing gross margins, there will be tables showing average rates of commission earned by establishments in various wholesale trade industries and types of operation.

Standardisation of data concepts : enterprise statistics

The statistics derived for enterprises from the integrated censuses are standardised because a common enterprise form is used for multi-establishment enterprises, whatever the industry in which their establishments operate, and for single-establishment enterprises the special "enterprise" items were common to all forms.

Gross product statistics

Earlier it was said that the new integrated censuses will provide valuable data directly applicable to national accounts estimates. One of the most important items of data of this kind is gross product (measured at market prices), and gross product at factor cost.

These concepts are related very closely to value added :

Gross product at factor cost *equals* value added *plus* rent and leasing revenue *minus* rent and leasing charges *minus* all other expenses *minus* land tax, rates, and pay-roll tax. (This concept differs from that at present employed in the Bureau's national accounts publications, in that it includes net rent and leasing revenue. It accords with the new SNA‡ concept, and will in due course be adopted in the Australian national accounts.)

Thus, to derive gross product at factor cost the enterprise income item rent and leasing revenue is needed. Rent and leasing expenses are in establishment forms as well as enterprise forms ; the reason why they appear there, but not rent and leasing revenue, is that the expenses are directly associated with the establishment itself, while the revenue is frequently a

* Transfers out in wholesale census only.

† Owned goods only.

‡ *A System of National Accounts*, United Nations Statistical Office, *ibid.*

form of investment or property income associated with the whole enterprise rather than any particular establishment. This is not true of revenue derived from the hiring-out of consumer goods by establishments, and the forms provide for this to be reported in "other income" in the retail establishment returns. Some special action will also be taken about some types of wholesale establishment whose main source of income is leasing revenue.

The additional enterprise *expense* items needed are "other expenses", and land tax, rates, and pay-roll tax. These appear on the enterprise forms used in the integrated censuses.

The item "other expenses" will probably be of some value to users of the enterprise statistics, quite apart from its purpose in the derivation of gross product. It represents an aggregate of overhead "non-operating" expenses, all payable outside the enterprise, and each enterprise in a particular industry could usefully compare its own figure for this with the total for the industry.

Gross product at market prices can be derived from gross product at factor cost, but not without some estimation of components not directly provided by the integrated economic censuses :

Gross product at market price *equals* gross product at factor cost *plus* land tax, rates, and pay-roll tax, *plus* sales tax and estimates for other indirect taxes not included in the census forms, *less* subsidies (from establishment returns).

The indirect taxes not included in the census forms are taxes such as stamp duties and motor registration fees.

Gross product estimates for establishments

For national accounting purposes it is desirable to have statistics of gross product at factor cost with establishments as the unit of tabulation, as well as the series based on enterprises. This is because the industrial and geographical detail required go beyond what is likely to be possible at the enterprise level. (Gross product by States, for example, is not available without splitting enterprises into smaller units.) To derive statistics of gross product for establishment units it is necessary to adopt conventional rules for spreading the overhead expenses of enterprises not collected on establishment returns.

Other enterprise statistics

Statistics which it is expected could be published for enterprises, in suitable tabulations by industry, will include :

- Number of enterprises
- Number of establishments (operated by enterprises in the industry)
- Turnover
- Stocks, opening and closing
- Purchases and selected expenses
- Value added
- All other expenses
- Land tax, rates, and pay-roll tax
- Gross product at factor cost
- Rent and leasing expenses paid
- Rent and leasing revenue

Wages and salaries
Employer contributions to superannuation schemes
Gross operating surplus
Interest paid
Royalties paid
Interest received
Royalties received
Depreciation
Fixed capital expenditure
Value of fixed tangible assets
Employment

Statistics for enterprise groups

The choice of statistics to be published for enterprise groups is being examined. By the nature of the censuses, it will not be possible to derive consolidated statistics of such items as turnover, interest, or rent. However, it should be possible to publish a useful body of statistics for enterprise groups, in suitable broad industry groupings, by aggregation of statistics of the enterprises within the scope of the censuses.

MANUFACTURING ACTIVITY

Introduction

Information on the subjects dealt with in this section of the *Year Book* is contained in the annual printed bulletins *Manufacturing Industry* and *Manufacturing Commodities* issued by the Central Office of the Bureau. Information is also published, principally at the Australian (as distinct from State) level of aggregation, as soon as the data can be prepared, in a series of thirty-five annual mimeographed bulletins, *Manufacturing Industries*, each relating to a particular industry or group of industries. Advance annual information at the Australian level of aggregation is published in mimeographed form in *A Summary of Principal Statistics of Factories* and in *Principal Factory Products*, and for Victoria in the mimeographed bulletin *Factory Statistics: Preliminary*. Current information on factory products is available in the *Victorian Monthly Statistical Review* and the monthly Victorian bulletin *Production Statistics*.

In addition to the above-mentioned publications there is also a series of fifty-two *Monthly Production Summaries*, each relating to the production of a particular commodity or group of commodities at the Australian level of aggregation.

In respect of the year 1968-69 the Commonwealth Bureau of Census and Statistics has conducted the annual census of manufacturing industry as part of a programme of fully integrated economic censuses covering manufacturing and mining industries, and retail and wholesale trade. For a detailed description of the purposes served by this project, and of the new concepts and methods adopted, the reader is referred to the special article on these censuses on pages 368 to 389. A more detailed version of this article appears as Chapter 31 of the *Commonwealth Year Book* 1970.

The integrated economic censuses have been a major undertaking involving the development of new concepts, definitions, and procedures. Inevitably there has been a considerable delay in finalising the results of the censuses and, for this chapter on manufacturing industry, it has not been possible to provide more up-to-date statistics than those for 1967-68 which were included in the previous issue. In view of this, the detailed tables showing statistics for individual industries, included in the *Victorian Year Book* 1970 on pages 421-454, have not been repeated. Results of the 1968-69 censuses will be available in a set of special bulletins, extracts from which will be published in future issues of the *Victorian Year Book*.

Industrial development during 1969

An important step in the development of Victoria's natural gas and oil industry was taken during October 1969, when crude oil flowed by pipeline from the Barracouta oil rig in Bass Strait to the shore based processing plant. The \$36m plant at Longford will process the crude oil. "Wet gas" is already being processed in one section of the Longford plant and fed into the Victorian Pipelines Commission system. It is transferred by pipeline to the Melbourne metropolitan area, where the process of conversion from town gas to natural gas was completed in December 1970.

The light ends of the Bass Strait crudes were piped to the \$24m Long Island Point fractionation plant in March 1970. This plant, completed during 1969, will undertake further processing to produce liquefied petroleum gas (L.P.G.). Heavier crudes will go to the Altona petrochemical complex for further processing. Refinery additions costing some \$26m have been completed giving the refinery the capacity to handle up to 40,000 barrels of Bass Strait crude daily. Processing began in March 1970.

Significant developments in the textile and apparel industries were concentrated mainly in outer metropolitan and country areas. A \$6m plant to produce mattress ticking was nearing completion at Lyndhurst. The plant was being constructed on a 40 acre site and \$2.5m was spent on automatic and semi-automatic machinery. At Breakwater, Geelong, a 5 acre site has been purchased by a men's and boys' apparel manufacturer. Initial plant installations will cost \$200,000 and it is anticipated that factory employment will eventually reach 750 persons. A further development in the textiles industries has been the modernisation of a Bendigo spinning mill and extensions to a tyre cord plant totalling \$1.25m. A shoe manufacturer has expanded its North Melbourne factory capacity involving an expenditure of \$550,000 and has erected a \$200,000 factory at Norlane, Geelong.

Steady expansion in the automotive industry has continued, with manufacturers and assemblers of motor vehicles increasing their capacity to meet the demands of a rising and highly competitive market. A new plant to manufacture V8 automotive engine units opened during the year at Fishermens Bend. The plant was established at a cost of \$23m. Another major project has been the installation of manufacturing facilities for automatic transmissions involving expenditure in excess of \$16m.

Land has been purchased at Mount Waverley as the first step in a project to manufacture micro-wave and telecommunications equipment. Production commenced late in 1970. A manufacturer of fasteners and fastening tools erected a new factory building at North Croydon planned to consolidate all the firm's activities. The factory, which was built on a 17 acre site, became operational in January 1971 and involves an investment on buildings and plant of at least \$1m. Further developments involved the completion of a 140,000 sq ft factory in November 1969 at Richmond to produce oil heaters and the completion of a \$2.5m communications equipment factory at Burwood in August 1969.

A project costing about \$4m in the field of fibreglass manufacture at Dandenong was completed during the year. The three-stage project included extensions to existing facilities, the construction of a factory to manufacture resins, sizes, and plastisols, and most importantly, the installation of a plant to produce fibreglass textile yarns using local raw materials.

Dairy products processing featured prominently among the food industries undertaking expansion programmes. A \$1m processed cheddar plant was completed at South Melbourne during the year. The entire processing area of the plant can be held at controlled temperature and humidity levels. Another manufacturer of dairy products is completing construction of a new processing, warehousing, and administration complex on a 20 acre site at Dandenong. A \$40,000 development laboratory has been included, and the project to date has involved an investment in excess of \$500,000.

A manufacturer and exporter of canned fruits carried out a \$3m rebuilding programme during 1969. The project, at Shepparton in the Goulburn Valley, included controlled atmosphere cool stores, new warehouse areas, and a new fruit intake inspection area.

Another food industry development during 1969 was the completion of new tea and coffee processing, warehouse, and administration premises at Notting Hill at a cost of approximately \$3m.

Expansion of the capacity of the aluminium plant at Point Henry to 90,000 tons per annum was completed during the year.

Government activities

Industrial legislation

The *Labour and Industry Act* 1958 represents the development and consolidation of industrial legislation which had its beginnings in 1873. Among other matters, the Act deals with the registration and inspection of factories, guarding of machinery, and conditions of employment. It also provides for the appointment of Wages Boards and of the Industrial Appeals Court. Further information on these matters may be found on pages 166 to 197.

Decentralisation of manufacturing industries :

Division of State Development

Since the early stages of the Second World War successive State Governments have encouraged the development of existing manufacturing facilities and the establishment of new industries in country areas.

Concentration of Victoria's population in the metropolitan area of Melbourne is of increasing concern to both the people and Government

alike. The inroads of mechanisation into primary industry and the subsequent lessening of employment opportunities have emphasised the need to develop other avenues for the employment of labour in the non-metropolitan parts of the State. In order to encourage establishment or expansion of secondary industry in country areas the Government offers a variety of incentives.

Crown land may be provided to industry with or without consideration. This facilitates the acquisition of a site adequate to meet all likely needs of future expansion and at the same time provide for a range of staff amenities.

Crown land, where available, may also be provided for housing purposes. Priority for houses built by the State Housing Commission may be given for "imported" key personnel. Funds can also be made available to co-operative building societies for the express use of personnel nominated by a sponsored industry. As a further inducement to set up or expand manufacturing industry in non-metropolitan areas, loans at a moderate rate of interest are available through the Rural Finance and Settlement Commission.

To offset any locational disadvantages as compared with Melbourne, rail freight rates on raw materials and finished products are reduced to a nominal figure (as low as 10 per cent); charges for power, gas, and water can be subsidised, if necessary, to bring them in line with Melbourne rates; and, in respect of an approved decentralised industry, restriction on the use of road transport by company vehicles is eliminated.

There are also several other concessions which in themselves are minor, but which when applied in conjunction with the above, make country operations more attractive to many industries. The main drawback to decentralised industry is the shortage of skilled labour and small markets in these areas.

In an effort to promote the development of several important provincial centres, the Victorian Government recently agreed in principle with certain recommendations made by a Decentralisation Advisory Committee which was headed by the Minister of State Development. It suggested that five particular areas in Victoria (Ballarat, Bendigo, the Latrobe Valley, Portland, and Wodonga) appeared to be the most suitable for extra promotion and development. Such development could help to check the imbalance of population in the State.

Development committees have been set up in each of these centres, membership of which includes representatives of local government and leaders of commerce and industry.

These committees work towards the general development of their areas with emphasis on the development and diversification of secondary industry, and the promotion of commercial services and other opportunities. In addition to these centres, the Government has pledged its interest and support for all other areas wishing to pursue a policy of industrial development.

Further reference, 1968

Commonwealth Department of Trade and Industry

The functions of this Department relate chiefly to the policy aspects of Australian overseas trade, both imports and exports, and the encourage-

ment and development of Australian manufacturing industry.

It deals, among other things, with the development and diversification of Australian exports (including exports of manufactures) and, through the Office of Secondary Industry, with questions of protection to local industry against import competition, the special problems of small industries, the location of industry (decentralisation, etc.), and the efficiency of industry. It maintains liaison with such bodies as the Manufacturing Industries Advisory Council, the Export Development Council, and the Export Payments Insurance Corporation, and controls the Australian Trade Commissioner Service.

Protection of industry

The established policy of the Australian Government is to accord adequate and reasonable protection against import competition to economic and efficient industry. The Government seeks the advice of the Tariff Board on questions of protection for individual industries. The Board holds public inquiries into and reports on questions referred to it by the Minister. In cases of urgency, temporary protection may be accorded on the recommendation of a special advisory authority pending review by the Tariff Board.

The Customs Tariff is the accepted and normal instrument of protection to Australian industry. However, for some industries in special circumstances, assistance is accorded by means of bounties on local production. As a last resort, when other methods are inadequate, quantitative restrictions on imports are applied.

The Department of Customs and Excise administers the Customs Tariff and also operates the By-law system, under which plant and materials normally subject to protective duty may be admitted at concessional rates if no suitably equivalent products are reasonably available from local sources.

Scientific research and standardisation

Commonwealth Scientific and Industrial Research Organization

The functions of the Organization, as described in the Science and Industry Research Act, are to initiate and conduct research in connection with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardisation of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.

Standards Association of Australia

This Association is the national standardising organisation of Australia and issues standard specifications for materials and codes of practice. Specifications and codes are prepared and revised periodically in accordance with the needs of industry and standards are evolved and accepted by general consent. It is the Australian member body of the International Organisation of Standardisation and of the International Electrotechnical Commission.

National Association of Testing Authorities

This is the Australian organisation for approval of testing laboratories. The Association registers laboratories of governmental and industrial testing authorities, thereby organising a national testing service. Registration of laboratories is voluntary. Owners of registered laboratories are members of the Association. They have the right to endorse their test documents in the name of the Association, to indicate their technical and managerial competence.

Definitions in factory statistics

Factory statistics compiled for 1967-68 were the last of the old series. The first bulletin of statistics from the 1968-69 Economic Censuses (see pages 368 to 389 for details), *Manufacturing Establishments and Electricity and Gas Establishments: Preliminary Statement*, was issued in January 1971 and contained information in respect of ten industry subdivisions which permitted comparisons to be made between States, but did not permit comparisons to be made between 1968-69 and previous years because of the changes in the definition of the establishment, bases of classification, and forms. Accordingly, information in respect of factories for 1967-68 and previous years has been repeated in this *Year Book* to record the nature and location of secondary industry in Victoria, which changes little from year to year.

The statistics relating to factories have been compiled from returns supplied annually by manufacturers under the authority of the Commonwealth Census and Statistics Act. A return must be supplied for every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process.

If a manufacturing business is conducted in conjunction with any other activity, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry, if practicable.

Manufacturers are requested to state in their returns particulars about the number, age, wages, etc., of their employees, the value of premises and equipment and of factory stocks, the horsepower of machinery, the value, and, in many cases, the quantities of raw materials and fuel used, and quantities and values of principal articles produced. These returns are not intended to show a complete record of the income and expenditure of factories, nor to show the profits or losses of factories collectively or individually.

The *average number of persons employed* is quoted on two different bases: the average during the period of operation and the average over the whole year. Of these, the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). This average is used only for details dealing with the classification according to the number of persons employed. The latter, which is used in all other instances, is calculated by reducing the average number working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

Working proprietors are included in all employment figures other than

those dealing with monthly employment and age dissections, but salaries and wages paid in all cases exclude drawings by working proprietors.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture and includes the amount received for repair work, work done on commission, and receipts for other factory work. The basis of valuation of the output is the selling value of the goods at the factory, exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer of the finished article.

The *value of production* is the value added to raw materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of those items of cost specified on the factory statistical collection form, namely, materials used, containers and packing, power, fuel and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges); the remainder constitutes the value added to raw materials in the process of manufacture, and represents the fund available for the payment of wages, taxation, rent, interest, insurance, etc., and profit.

It is considered that, because of the duplication of materials used (which means that the finished product of one process of manufacture often forms the raw material for another), an inaccurate impression would be obtained by using the total value of output of manufacturing industries in year to year comparisons. Woollen manufactures might be cited as an example. Greasy wool forms the raw material for the woolscouring industry, the product of which is scoured wool. This is afterwards combed into wool tops which are used in the spinning mills for the manufacture of yarn. In due course the yarn is woven into cloth, the raw material for the clothing industry. If these processes are carried out separately in different factories, it is evident that the value of the wool would be counted five times by using value of output as the basis for the annual comparisons of manufacturing production.

The concept of value added prevents this double counting and gives a truer picture of the relative economic importance of industries.

Classification of factories

In the compilation of statistical data dealing with factories in Australia, a standard classification of manufacturing industries, formulated at a conference of Australian statisticians in 1902 and revised from time to time, was used until 1929–30. A new classification based on that used in Great Britain for census purposes was introduced in 1930–31, and this, revised and extended to a minor degree in regard to sub-classes of industry in accordance with decisions of the Statisticians' Conference, 1945, was used until 1967–68. The construction of a new Australian Standard Industrial Classification, compatible with the United Nations International Standard Industrial Classification, has been undertaken and is being introduced for the 1968–69 census of manufacturing establishments (see pages 378 to 379).

It should be noted that a factory engaged in activities that would entitle it to classification in more than one type of industry is classified to its predominant activity.

The classes and sub-classes in the classification of factories used in the 1967-68 factory census were as follows:

CLASSIFICATION OF FACTORIES

CLASS 1. TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS.

1. Coke works
2. Briquetting and pulverised coal
3. Carbide
4. Lime, plaster of paris, and asphalt
5. Fibrous plaster and products
6. Marble, slate, etc.
7. Cement, Portland
8. Asbestos cement sheets and mouldings
9. Other cement goods
10. Other

CLASS 2. BRICKS, POTTERY, GLASS, ETC.

1. Bricks and tiles
2. Earthenware, china, porcelain, and terracotta
3. Glass (other than bottles)
4. Glass bottles
5. Other

CLASS 3. CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE

1. Industrial and heavy chemicals and acids
2. Pharmaceutical and toilet preparations
3. Explosives (including fireworks)
4. White lead, paints, and varnish
5. Oils, vegetable
6. Oils, mineral
7. Oils, animal
8. Boiling-down, tallow-refining
9. Soap and candles
10. Chemical fertilisers
11. Inks, polishes, etc.
12. Matches
13. Other

CLASS 4. INDUSTRIAL METALS, MACHINES, CONVEYANCES

1. Smelting, converting, refining, rolling of iron and steel
2. Foundries (ferrous)
3. Plant, equipment, and machinery, etc.
4. Other engineering
5. Extracting and refining of other metals; alloys
6. Electrical machinery, cables, and apparatus
- 7-16. Construction and repair of vehicles (10 groups)
- 17-18. Ship and boat building and repairing, marine engineering (Government and other)
19. Cutlery and small hand tools
20. Agricultural machines and implements
21. Non-ferrous rolling and extrusion.
22. Non-ferrous founding, casting, etc.

CLASS 4. INDUSTRIAL METALS, MACHINES, CONVEYANCES—*continued*

24. Sheet metal working, pressing and stamping
25. Pipes, tubes, and fittings—ferrous
26. Wire and wire netting (including nails)
27. Stoves, ovens, and ranges
28. Gas fittings and meters
29. Lead mills
30. Sewing machines
31. Arms and ammunition (excluding explosives)
32. Wireless and amplifying apparatus
33. Other metal works

CLASS 5. PRECIOUS METALS, JEWELLERY, PLATE

1. Jewellery
2. Watches and clocks (including repairs)
3. Electroplating (gold, silver, chromium, etc.)

CLASS 6. TEXTILES AND TEXTILE GOODS (NOT DRESS)

1. Cotton ginning
2. Cotton spinning and weaving
3. Wool—carding, spinning, weaving
4. Hosiery and other knitted goods
5. Silk, natural
6. Rayon, nylon, and other synthetic fibres
7. Flax mills
8. Rope and cordage
9. Canvas goods, tents, tarpaulins, etc.
10. Bags and sacks
11. Textile dyeing, printing and finishing
12. Other

CLASS 7. SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR)

1. Furriers and fur-dressing
2. Woolscouring and fellmongery
3. Tanning, currying, and leather-dressing
4. Saddlery, harness, and whips
5. Machine belting (leather or other)
6. Bags, trunks, etc.

CLASS 8. CLOTHING (EXCEPT KNITTED)

1. Tailoring and ready-made clothing
2. Waterproof and oilskin clothing
3. Dressmaking, hemstitching
4. Millinery
5. Shirts, collars, and underclothing
6. Foundation garments
7. Handkerchiefs, ties, and scarves
8. Hats and caps
9. Gloves
10. Boots and shoes (not rubber)
11. Boot and shoe repairing
12. Boot and shoe accessories
13. Umbrellas and walking sticks
14. Dyeworks and cleaning, etc.
15. Other

CLASS 9. FOOD, DRINK, AND TOBACCO

1. Flour milling
2. Cereal foods and starch
3. Animal and bird foods
4. Chaffcutting and corncrushing
5. Bakeries (including cakes and pastry)
6. Biscuits
7. Sugar mills
8. Sugar refining
9. Confectionery (including chocolate and icing sugar)
10. Jam, fruit, and vegetable canning
11. Pickles, sauces, and vinegar
12. Bacon curing
13. Butter factories
14. Cheese factories
15. Condensed and dried milk factories
16. Margarine
17. Meat and fish preserving
18. Condiments, coffee, and spices
19. Ice and refrigerating
20. Salt
21. Aerated waters, cordials, etc.
22. Breweries
23. Distilleries
24. Wine making
25. Cider and perry
26. Malting
27. Bottling
28. Tobacco, cigars, cigarettes, and snuff
29. Dehydrated fruit and vegetables
30. Ice cream
31. Sausage casings
32. Arrowroot
33. Other

CLASS 10. SAWMILLS, JOINERY, BOXES, ETC., WOOD TURNING AND CARVING

1. Sawmills
2. Plywood mills (including veneers)
3. Bark mills
4. Joinery
5. Cooperage
6. Boxes and cases
7. Woodturning, woodcarving, etc.
8. Basketware and wickerware (including sea-grass and bamboo furniture)
9. Perambulators (including pushers and strollers)
10. Wall or ceiling board (not plaster or cement)
11. Other

CLASS 11. FURNITURE OF WOOD, BEDDING, ETC.

1. Cabinet and furniture making (including billiard tables and upholstery)
2. Bedding and mattresses (not wire)
3. Furnishing drapery
4. Picture frames
5. Blinds

CLASS 12. PAPER, STATIONERY, PRINTING, BOOKBINDING, ETC.

1. Newspapers and periodicals
- 2-3. Printing (Government and other)
4. Manufactured stationery
5. Stereotyping, electrotyping
6. Process and photo engraving
7. Cardboard boxes, cartons, and containers
8. Paper bags
9. Paper making
10. Pencils, penholders, chalks, and crayons
11. Other

CLASS 13. RUBBER

1. Rubber goods (including tyres made)
2. Tyre retreading and repairing

CLASS 14. MUSICAL INSTRUMENTS

1. Gramophones and gramophone records
2. Pianos, piano-players, and organs
3. Other

CLASS 15. MISCELLANEOUS PRODUCTS

1. Linoleum, leather-cloth, oil-cloth, etc.
2. Bone, horn, ivory, and shell
3. Plastic moulding and products
4. Brooms and brushes
5. Optical instruments and appliances
6. Surgical and other scientific instruments and appliances
7. Photographic material (including developing and printing)
8. Toys, games, and sports requisites
9. Artificial flowers
10. Other

CLASS 16. HEAT, LIGHT, AND POWER

- 1-3. Electric light and power
- 4-6. Gas works

Summary of factories

The following table shows, at intervals between 1901 and 1967-68, the development of manufacturing industry in Victoria :

VICTORIA—SUMMARY OF FACTORY DEVELOPMENT

Year	Factories	Employment (a)	Salaries and wages paid (b)	Value of—			
				Materials and fuel used	Production (c)	Output	Land, buildings, plant and machinery
	number	number	\$'000	\$'000	\$'000	\$'000	\$'000
1901	3,249	66,529	(d)	(d)	(d)	(d)	24,596
1911	5,126	111,948	17,822	51,334	32,162	83,496	27,516
1920-21	6,532	140,743	42,754	135,171	76,846	212,017	70,985
1932-33	8,612	144,428	42,437	122,070	81,900	203,970	135,655
1940-41	9,121	237,636	104,590	240,696	178,002	418,698	184,100
1946-47	10,949	265,757	155,988	367,883	262,992	630,875	243,755
1953-54	15,533	331,277	472,073	1,154,381	816,629	1,971,010	678,535
1960-61	17,173	388,050	775,998	1,913,978	1,417,546	3,331,524	1,641,886
1963-64	17,597	413,120	912,424	2,305,046	1,749,776	4,054,822	2,061,518
1964-65	17,925	432,389	1,028,492	2,551,121	1,949,665	4,500,786	2,233,660
1965-66	17,980	439,149	1,077,234	2,597,230	2,027,685	4,624,915	2,385,957
1966-67	18,054	445,557	1,167,872	2,814,145	2,236,370	5,050,515	2,616,977
1967-68	18,030	449,945	1,244,216	2,956,509	2,394,801	5,351,311	2,685,255

NOTE. See also definitions on pages 394-5.

(a) Average employment over whole year, including working proprietors.

(b) Excludes drawings of working proprietors.

(c) Value of output less value of materials, etc.

(d) Not available.

A graph showing the distribution of the components of value of output of the years 1958-59 to 1967-68 is shown on page 403.

A comparison of Victorian factory activity with that in other States is shown in the following table :

AUSTRALIA—FACTORIES, 1967-68

State	Factories	Employment (a)	Salaries and wages paid (b)	Value of—			
				Materials and fuel used	Production (c)	Output	Land, buildings, plant and machinery
	number	number	\$m	\$m	\$m	\$m	\$m
New South Wales	24,884	531,185	1,498.1	3,965.5	3,131.0	7,096.5	3,828.2
Victoria	18,030	449,945	1,244.2	2,956.5	2,394.8	5,351.3	2,685.3
Queensland	6,154	120,852	306.0	1,124.4	657.9	1,782.3	946.7
South Australia	6,255	121,417	330.1	844.2	631.9	1,476.1	813.6
Western Australia	5,404	67,335	175.1	499.2	388.3	887.4	495.3
Tasmania	1,797	35,178	96.2	247.1	198.0	445.1	448.1
Northern Territory	188	1,519	5.0	9.2	9.7	18.8	14.9
Australian Capital Territory	241	3,710	11.3	16.9	19.3	36.2	33.4
Total	62,953	1,331,141	3,665.9	9,662.9	7,430.7	17,093.7	9,265.3

See footnotes to table above.

Industrial metals, machines, and conveyances with 192,073 persons or 42.7 per cent of the total employment in factories during 1967-68, employed considerably more persons than any other class of industry. Next in order of employment was Clothing with 49,027 or 10.9 per cent, followed by Food, drink, and tobacco, and Textiles and textile goods with 44,143 and 43,077, respectively, or 9.8 per cent and 9.6 per cent of the total.

The total value of production (added value) in 1967-68 was \$2,394,801,000. Of this amount the Metals group contributed \$921,834,000 which represented 38.5 per cent of the total. The Food group followed with \$293,980,000 or 12.3 per cent, and the next in order were Chemicals, dyes,

etc., \$208,658,000, 8·7 per cent, Paper with \$186,698,000, 7·8 per cent, Textiles \$180,486,000, 7·5 per cent, and Clothing \$157,932,000, 6·6 per cent.

Factories classified according to class of industry

The following table contains a summary of factories by class of industry in Victoria during the year 1967-68 :

VICTORIA—FACTORIES BY CLASSES, 1967-68

Class of industry	Fac-tories	Employ-ment (a)	Salaries and wages paid (b)	Value of—			
				Materials and fuel used	Pro-duction (c)	Output	Land, buildings, plant and machinery
	number	number	\$'000	\$'000	\$'000	\$'000	\$'000
1. Treatment of non-metalliferous mine and quarry products	478	7,560	23,989	70,331	53,794	124,125	83,622
2. Bricks, pottery, glass, etc.	172	7,692	23,275	31,760	46,678	78,438	57,054
3. Chemicals, dyes, explosives, paints, oils, grease	404	17,892	59,759	342,020	208,658	550,678	270,673
4. Industrial metals, machines, conveyances	7,683	192,073	570,717	981,344	921,834	1,903,178	906,140
5. Precious metals, jewellery, plate	255	2,218	5,493	6,282	10,080	16,362	6,686
6. Textiles and textile goods (not dress)	742	43,077	99,945	246,150	180,486	426,636	162,665
7. Skins and leather (not clothing or footwear)	213	3,715	9,070	20,112	15,655	35,767	13,979
8. Clothing (except knitted)	2,331	49,027	96,531	142,504	157,932	300,436	100,337
9. Food, drink, and tobacco	1,834	44,143	118,363	613,419	293,980	907,400	354,650
10. Sawmills, joinery, boxes, etc., wood turning and carving	1,371	15,724	40,307	82,363	67,173	149,536	56,187
11. Furniture of wood, bedding, etc.	641	7,167	16,809	35,037	30,251	65,287	24,849
12. Paper, stationery, printing, book-binding, etc.	1,120	30,991	92,314	194,988	186,698	381,686	202,064
13. Rubber	166	8,503	26,085	57,506	50,626	108,131	55,431
14. Musical instruments	16	216	581	721	841	1,562	822
15. Miscellaneous products	559	15,060	43,390	91,431	80,234	171,665	81,936
Total, Classes 1 to 15	17,985	445,058	1,226,628	2,915,969	2,304,919	5,220,888	2,377,093
16. Heat, light, and power	45	4,887	17,588	40,540	89,882	130,422	308,161
GRAND TOTAL	18,030	449,945	1,244,216	2,956,509	2,394,801	5,351,311	2,685,255

For footnotes see page 398.

The next table shows the number of factories in Victoria during the years 1963-64 to 1967-68 classified according to industry :

VICTORIA—NUMBER OF FACTORIES IN INDUSTRIAL CLASSES

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	480	484	488	485	478
2. Bricks, pottery, glass, etc.	189	182	176	178	172
3. Chemicals, dyes, explosives, paints, oils, grease	395	393	391	402	404
4. Industrial metals, machines, conveyances	7,041	7,332	7,470	7,582	7,683
5. Precious metals, jewellery, plate	251	263	252	253	255
6. Textiles and textile goods (not dress)	773	793	775	742	742
7. Skins and leather (not clothing or footwear)	246	235	224	222	213
8. Clothing (except knitted)	2,506	2,471	2,439	2,384	2,331
9. Food, drink, and tobacco	1,957	1,944	1,918	1,864	1,834
10. Sawmills, joinery, boxes, etc., wood turning and carving	1,323	1,341	1,361	1,394	1,371
11. Furniture of wood, bedding, etc.	644	636	621	641	641
12. Paper, stationery, printing, bookbinding, etc.	1,038	1,069	1,071	1,106	1,120
13. Rubber	183	187	188	176	166
14. Musical instruments	21	17	16	16	16
15. Miscellaneous products	494	519	538	562	559
Total, Classes 1 to 15	17,541	17,866	17,928	18,007	17,985
16. Heat, light, and power	56	59	52	47	45
GRAND TOTAL	17,597	17,925	17,980	18,054	18,030

The size classification of factories is based on the average number of persons employed during the period of operation (including working

proprietors). The following tables show the number of factories classified on this basis for each of the years 1963-64 to 1967-68 :

VICTORIA—FACTORIES CLASSIFIED ACCORDING TO
NUMBER OF PERSONS EMPLOYED DURING PERIOD OF OPERATION

Year	Number of factories employing, on the average, persons numbering—							Total
	Under 4	4	5 to 10	11 to 20	21 to 50	51 to 100	Over 100	
1963-64	6,256	1,361	4,154	2,437	1,919	735	735	17,597
1964-65	6,251	1,418	4,244	2,499	1,970	758	785	17,925
1965-66	5,935	1,497	4,393	2,553	2,006	807	789	17,980
1966-67	5,920	1,523	4,371	2,604	2,011	808	817	18,054
1967-68	5,896	1,535	4,384	2,564	1,994	825	832	18,030

VICTORIA—AVERAGE NUMBER OF PERSONS EMPLOYED
DURING PERIOD OF OPERATION

Year	Average number employed, (including working proprietors) in factories employing, on the average, persons numbering—							Total
	Under 4	4	5 to 10	11 to 20	21 to 50	51 to 100	Over 100	
1963-64	12,217	5,444	29,181	35,854	61,022	51,945	219,246	414,909
1964-65	12,108	5,672	29,769	36,796	62,028	53,156	234,897	434,426
1965-66	11,591	5,988	30,627	37,581	63,066	57,050	236,430	442,333
1966-67	11,705	6,092	30,431	38,076	63,176	56,970	241,755	448,205
1967-68	11,624	6,140	30,744	37,579	62,871	57,913	245,990	452,861

NOTE. Average employment during the period of operations includes working proprietors. The use of averages during period of operation has the arithmetic effect of increasing the average number of persons working in factories over the 1967-68 year—449,945 in total by 2,916 persons to total of 452,861 persons.

The relative importance of large and small factories is illustrated in the above tables. In 1967-68, 5,896 factories employing less than four employees had a total employment of 11,624 persons. Expressed in terms of percentages, 32.7 per cent of factories—those employing less than four persons—employed 2.6 per cent of the persons engaged in factories. The most numerous of the factories with less than four persons were Motor repair workshops, Bakeries, General engineering workshops, and Boot and shoe repairing.

The relative and absolute increases in the number of small factories using power other than manual, i.e., those employing less than four persons, is shown in the table which follows. In 1902 factories employing less than four persons numbered 525 and constituted 13.1 per cent of the total. By 1967-68 this figure had increased to 5,896, i.e., 32.7 per cent of the total. This increase is believed to be due not so much to an increase in the number of small factories, but to a greater use over the years of fractional horsepower electric motors in small factories, with the result that such establishments came within the statistical definition of a factory. The table also shows that in 1967-68 factories employing less than four persons accounted for only 1.8 per cent of the total value of production, and the value of production per person employed is lowest in the smallest factories and, in general, rises as size increases.

A graph showing number of factories and value of production by size groups in 1967-68 is shown on page 403.

VICTORIA—NUMBER OF FACTORIES : PERSONS EMPLOYED AND VALUE OF PRODUCTION ACCORDING TO NUMBER OF PERSONS EMPLOYED DURING PERIOD OF OPERATION, 1902 AND 1967-68

Average number of persons employed during period of operation	1902				1967-68							
	Factories		Persons employed (a)		Factories		Persons employed (a)		Value of production (b)			
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	\$'000	Per cent	Per person employed (\$)	
Under 4	525	13.1	1,636	2.2	5,896	32.70	11,624	2.57	42,718	1.78	3,742	
4	398	9.9	1,603	2.2	1,535	8.51	6,140	1.35	23,701	0.99	3,991	
5-10	1,629	40.7	11,303	15.5	4,384	24.32	30,744	6.79	132,833	5.55	4,406	
11-20	726	18.1	10,562	14.5	2,564	14.22	37,579	8.30	169,122	7.06	4,568	
21-50	467	11.7	14,361	19.6	1,994	11.06	62,871	13.88	303,540	12.67	4,878	
51-100	148	3.7	10,238	14.0	825	4.58	57,913	12.79	295,452	12.34	5,137	
101-200	} 110	2.8	23,360	32.0	462	2.56	65,227	14.40	377,316	15.76	5,794	
201-500					273	1.51	83,307	18.40	465,484	19.44	5,601	
Over 500					97	0.54	97,456	21.52	584,635	24.41	5,999	
Total	4,003	100.0	73,063	100.0	18,030	100.00	452,861	100.00	2,394,801	100.00	5,322	

For footnotes see page 398.

A general indication of the geographical distribution of factories in the State is shown in the next table where secondary industry in Victoria for 1967-68 is classified according to Statistical Divisions :

VICTORIA—FACTORIES IN STATISTICAL DIVISIONS, 1967-68

Statistical Division	Factories	Employment (a)	Salaries and wages paid (b)	Value of—			
				Materials and fuel used	Production (c)	Output	Land, buildings, plant and machinery
	number	number	\$'000	\$'000	\$'000	\$'000	\$'000
Melbourne	13,108	370,728	1,035,768	2,327,610	1,934,482	4,262,092	1,946,491
West Central	651	20,075	58,271	191,016	124,002	315,018	192,878
North Central	376	4,774	10,989	18,794	20,907	39,701	19,113
Western	1,028	15,809	37,792	100,325	65,487	165,813	68,844
Wimmera	384	2,426	4,835	11,826	9,421	21,247	7,587
Mallee	315	2,584	5,222	9,963	9,316	19,279	11,412
Northern	854	12,229	31,241	126,963	64,950	191,913	80,207
North Eastern	453	5,457	13,668	36,120	29,399	65,519	78,800
Gippsland	655	13,630	41,292	116,481	127,913	244,395	269,988
East Central	206	2,233	5,139	17,410	8,924	26,334	9,935
Total	18,030	449,945	1,244,216	2,956,509	2,394,801	5,351,311	2,685,255

For footnotes see page 398.

Factories in the Melbourne Statistical Division constituted 72.7 per cent of the total number in Victoria in 1967-68, 83.0 per cent of the persons employed, and 80.9 per cent of the value of production.

For information regarding the actual location of the Statistical Divisions named in the table, reference should be made to the maps folded inside the back cover of this book.

The number of factories and persons employed therein in each Statistical Division is shown in the following table :

VICTORIA—NUMBER OF FACTORIES AND PERSONS EMPLOYED (a)
IN EACH STATISTICAL DIVISION: CLASSIFIED ACCORDING TO
SIZE OF FACTORY, 1967-68

Size of factory (persons)	Statistical Division										Total
	Mel- bourne	West Central	North Central	West- ern	Wim- mera	Mallee	North- ern	North East- ern	Gipps- land	East Central	
NUMBER OF FACTORIES											
Under 5	4,786	319	221	536	248	180	484	256	293	108	7,431
5-10	3,165	163	91	284	95	84	192	92	163	55	4,384
11-20	2,031	70	31	93	22	25	92	67	106	27	2,564
21-50	1,717	53	13	64	14	15	37	24	52	5	1,994
51-100	693	18	13	23	3	10	32	7	19	7	825
101-500	641	21	5	25	2	1	14	6	16	4	735
Over 500	75	7	2	3	..	..	3	1	6	..	97
Total	13,108	651	376	1,028	384	315	854	453	655	206	18,030
AVERAGE NUMBER OF PERSONS EMPLOYED DURING PERIOD OF OPERATION											
Under 5	11,518	(b)	(b)	1,305	538	495	1,124	(b)	684	254	17,764
5-10	22,443	1,084	623	1,949	628	655	1,303	630	1,061	368	30,744
11-20	29,870	1,049	432	1,307	335	478	1,337	956	1,448	367	37,579
21-50	54,347	1,652	393	1,984	385	634	1,129	715	1,468	164	62,871
51-100	48,653	1,287	854	1,782	(b)	(b)	2,216	460	1,238	(b)	57,913
101-500	127,446	5,798	1,002	5,614	(b)	(b)	(b)	1,284	(b)	(b)	148,534
Over 500	78,682	(b)	(b)	2,002	..	..	(b)	(b)	(b)	..	97,456
Total	372,959	20,200	4,800	15,943	2,479	3,090	12,327	5,546	13,259	2,258	452,861

(a) See footnote, page 398.

(b) Not available for publication.

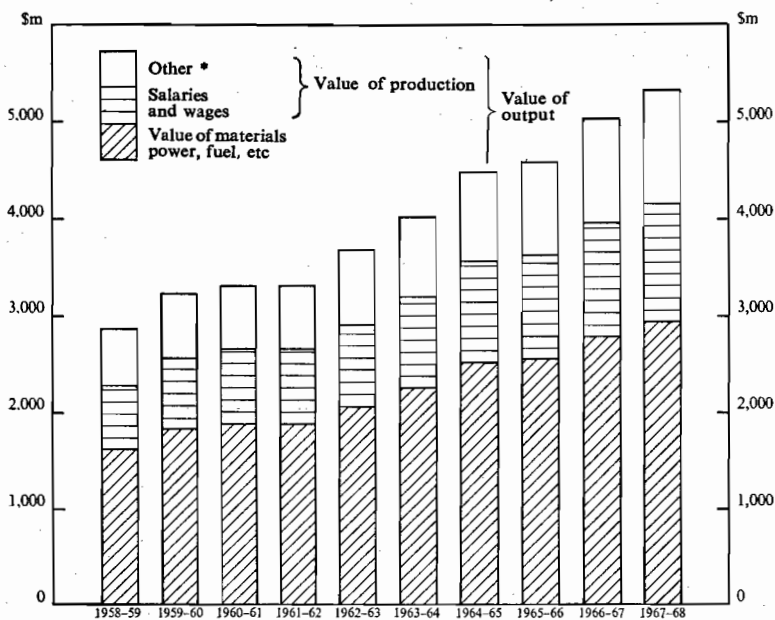
The above table shows that in 1967-68 there were 832 factories each employing more than 100 persons with a total employment of 245,990 persons in Victoria. Of the 18,030 factories (452,861 persons) in Victoria, 13,108 (372,959 persons) were located in the Melbourne Statistical Division and 651 (20,200 persons) in the West Central Statistical Division which includes Geelong. The balance, 4,271 factories (59,702 persons) were distributed over the remainder of the State principally in the Western (1,028 factories), Northern (854 factories), and Gippsland (655 factories) Statistical Divisions.

It should be noted that Geelong is located in the West Central Statistical Division, Castlemaine and Maryborough in the North Central Statistical Division; Ballarat and Warrnambool in the Western Statistical Division; Bendigo and Shepparton in the Northern Statistical Division; Wangaratta in the North Eastern Statistical Division; and Morwell and Yallourn in the Gippsland Statistical Division.

Employment in factories

All persons employed in the manufacturing activities of a factory, including proprietors working in their own businesses and persons working regularly at home are included as persons employed in factories while those engaged in selling and distributing, such as salesmen, travellers, and carters employed on outward delivery of manufactured goods, are excluded. The grouping of occupations comprises (i) working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draftsmen, and other laboratory and research staff; (iv) workers in factories (skilled and unskilled); foremen and

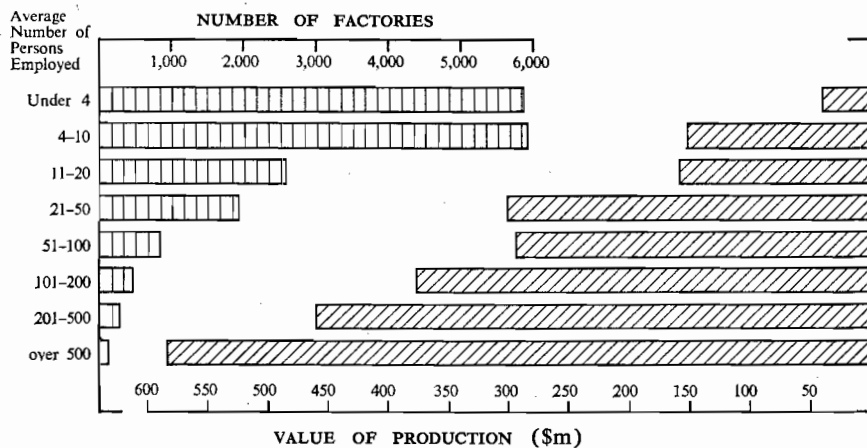
VICTORIA—FACTORIES : VALUES OF OUTPUT, 1958-59 TO 1967-68



* The fund available for the payment of taxation, rent, interest, insurance, etc., depreciation, drawings of working proprietors, and profits.

FIGURE 9

VICTORIA—NUMBER OF FACTORIES AND VALUE OF PRODUCTION CLASSIFIED ACCORDING TO NUMBER OF PERSONS EMPLOYED, 1967-68



(The left hand bars show the number of factories in each employment size group. The right hand bars show the value of production in each of these size groups.)

FIGURE 10

overseers; carters (excluding delivery only), messengers, and persons working regularly at home as outworkers.

The figures showing average employment in factories represent the equivalent average number of persons employed, including working proprietors, over a full year of twelve months. This method is used for all purposes except in the tables shown on pages 400 to 402, where the average number of persons employed is the average during period of operation.

The following table shows the average number of persons employed in factories in each industrial class in Victoria for the years 1963-64 to 1967-68 :

VICTORIA—PERSONS EMPLOYED IN FACTORIES (a)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68		
					Males	Females	Persons
1. Treatment of non-metalliferous mine and quarry products	7,496	7,610	7,689	7,641	7,101	4,59	7,560
2. Bricks, pottery, glass, etc.	7,299	7,509	7,710	7,773	6,537	1,155	7,692
3. Chemicals, dyes, explosives, paints, oils, grease	16,396	17,329	17,648	18,154	13,762	4,130	17,892
4. Industrial metals, machines, conveyances	171,748	183,696	186,000	189,176	162,487	29,586	192,073
5. Precious metals, jewellery, plate	2,113	2,270	2,180	2,180	1,745	473	2,218
6. Textiles and textile goods (not dress)	42,674	43,798	43,343	43,316	17,696	25,381	43,077
7. Skins and leather (not clothing or footwear)	3,969	3,832	3,830	3,740	2,431	1,284	3,715
8. Clothing (except knitted)	47,168	47,622	48,432	48,636	12,731	36,296	49,027
9. Food, drink, and tobacco	40,832	42,049	43,583	44,130	28,826	15,317	44,143
10. Sawmills, joinery, boxes, etc., wood turning and carving	14,521	14,896	15,219	15,430	14,405	1,319	15,724
11. Furniture of wood, bedding, etc.	6,605	6,706	6,724	7,094	5,107	2,060	7,167
12. Paper, stationery, printing, bookbinding, etc.	27,075	28,294	29,634	30,354	22,408	8,583	30,991
13. Rubber	8,506	8,591	8,230	8,092	6,572	1,931	8,503
14. Musical instruments	192	194	199	211	172	44	216
15. Miscellaneous products	11,791	12,972	13,516	14,353	9,292	5,768	15,060
Total, Classes 1 to 15	408,385	427,368	433,937	440,280	311,272	133,786	445,058
16. Heat, light, and power	4,735	5,021	5,212	5,277	4,836	51	4,887
GRAND TOTAL	413,120	432,389	439,149	445,557	316,108	133,837	449,945

(a) For footnote see page 398.

The dominance of four classes, namely, Class 4. Industrial metals, machines, and conveyances; Class 6. Textiles and textile goods (not dress); Class 8. Clothing (except knitted); and Class 9. Food, drink, and tobacco with a total of 72.9 per cent of factory employment should be noted.

Female factory workers in 1967-68 were 29.8 per cent of the total. Females exceeded males in two classes: in Class 6. Textiles and textile goods (not dress) they accounted for 58.9 per cent and in Class 8. Clothing (except knitted) for 74.0 per cent of the Class total.

Of the total females employed 27.1 per cent were in Class 8; 22.1 per cent in Class 4; 19.0 per cent in Class 6; and 11.4 per cent in Class 9.

In the following table, the average number of persons employed in factories in Victoria is classified according to the nature of their employment for the years 1963-64 to 1967-68 :

VICTORIA—NATURE OF EMPLOYMENT IN FACTORIES

Year	Working proprietors	Managerial and clerical staff	Chemists, draftsmen, etc.	Workers in factories (skilled and unskilled), foremen and overseers, carters (excluding delivery only), and messengers, etc.	Total
1963-64	12,641	53,637	8,291	338,551	413,120
1964-65	12,655	57,067	8,755	353,912	432,389
1965-66	12,586	60,273	9,515	356,775	439,149
1966-67	12,210	61,866	9,957	361,524	445,557
1967-68	12,025	63,164	10,189	364,567	449,945

The following table shows the nature of employment in factories in 1967-68 according to the class of industry :

VICTORIA—NATURE OF EMPLOYMENT IN FACTORIES BY CLASSES OF INDUSTRY, 1967-68

Class of industry	Working proprietors	Managerial and clerical staff	Chemists, draftsmen, etc.	All other workers	Total
1. Treatment of non-metalliferous mine and quarry products	220	1,070	194	6,076	7,560
2. Bricks, pottery, glass, etc.	67	979	91	6,555	7,692
3. Chemicals, dyes, explosives, paints, oils, grease	103	3,351	1,471	12,967	17,892
4. Industrial metals, machines, conveyances	5,071	30,611	5,840	150,551	192,073
5. Precious metals, jewellery, plate	217	291	6	1,704	2,218
6. Textiles and textile goods (not dress)	368	4,248	407	38,054	43,077
7. Skins and leather (not clothing or footwear)	182	348	28	3,157	3,715
8. Clothing (except knitted)	1,998	3,675	81	43,273	49,027
9. Food, drink, and tobacco	1,543	6,077	842	35,681	44,143
10. Sawmills, joinery, boxes, etc., wood turning and carving	852	2,128	46	12,698	15,724
11. Furniture of wood, bedding, etc.	506	989	11	5,661	7,167
12. Paper, stationery, printing, bookbinding, etc.	613	5,077	254	25,047	30,991
13. Rubber	31	1,350	255	6,867	8,503
14. Musical instruments	7	29	..	180	216
15. Miscellaneous products	247	2,599	536	11,678	15,060
Total, Classes 1 to 15	12,025	62,822	10,062	360,149	445,058
16. Heat, light, and power	..	342	127	4,418	4,887
GRAND TOTAL	12,025	63,164	10,189	364,567	449,945

Although "all other workers" constitute 81.0 per cent of the total numbers employed in factories, the percentage varies from 72.5 per cent in Class 3 to 88.3 per cent in Class 6. Class 3 also has the highest percentage of managerial, clerical, and professional staff, 26.9 per cent, compared with the Victorian average of 16.3 per cent.

Where small factories predominate, there is usually a higher proportion of working proprietors than on the average and a smaller than average managerial and clerical staff. This is particularly evident in Class 5. Precious metals and jewellery, where working proprietors comprise 9.8 per cent of the total number employed; Class 11. Furniture of wood, bedding, etc., 7.1 per cent; and Class 10. Sawmills, joinery, etc., 5.4 per cent. The average for Victoria is 2.7 per cent.

The following table shows the age distribution of male and female factory employees on the last pay day in June of each of the years 1964 to 1968 :

VICTORIA—DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE
(Excluding working proprietors)

Last pay day in June—	Males				Females			
	Under 16 years	16 and under 21 years	21 years and over	Total	Under 16 years	16 and under 21 years	21 years and over	Total
1964	2,072	27,740	260,246	290,058	2,207	17,931	96,898	117,036
1965	1,690	28,609	268,840	299,139	1,614	18,458	104,012	124,084
1966	1,525	28,886	268,965	299,376	1,488	18,122	105,882	125,492
1967	1,333	29,308	274,563	305,204	1,392	17,698	110,378	129,468
1968	1,150	28,658	275,921	305,729	1,097	16,627	113,224	130,948

The numbers of females employed in each industrial class and in certain significant sub-classes, and the percentage that such female employment bears to total class or sub-class employment, are shown in the following table :

VICTORIA—FEMALE EMPLOYMENT IN FACTORIES

Class of industry	Females employed					
	Number			Percentage of total employment in each class of industry		
	1965-66	1966-67	1967-68	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	447	448	459	5.8	5.9	6.1
2. Bricks, pottery, glass, etc.	1,037	1,109	1,155	13.5	14.3	15.0
3. Chemicals, dyes, explosives, paints, oils, grease	3,972	4,101	4,130	22.5	22.6	23.1
4. Industrial metals, machines, conveyances—	27,317	28,452	29,586	14.7	15.0	15.4
Plant, equipment and machinery	4,247	4,199	4,473	12.0	11.8	12.4
Electrical machinery, cables, and apparatus	6,050	6,575	6,899	30.5	31.6	32.0
Sheet metal working	2,472	2,469	2,472	20.6	20.3	20.4
Wireless and amplifying apparatus	1,350	1,401	1,505	37.7	36.7	38.6
5. Precious metals, jewellery, plate	434	435	473	19.9	20.0	21.3
6. Textiles and textile goods (not dress)—	25,800	25,845	25,381	59.5	59.7	58.9
Cotton spinning and weaving	2,159	2,062	1,932	53.7	53.5	51.0
Wool-carding, spinning, weaving	4,945	4,697	4,571	53.6	53.3	52.9
Hosiery and other knitted goods	14,496	14,580	14,247	75.9	76.3	75.5
7. Skins and leather (not clothing or footwear)	1,267	1,297	1,284	33.1	34.7	34.6
8. Clothing (except knitted)—	35,320	35,655	36,296	72.9	73.3	74.0
Tailoring and ready-made clothing	8,319	6,733	6,540	75.4	73.5	73.2
Dressmaking and hemstitching	8,610	10,548	11,147	87.3	87.1	87.4
Boots and shoes (not rubber)	7,016	7,045	7,059	59.5	60.2	61.4
Dyeworks and cleaning, etc.	1,469	1,430	1,407	51.3	50.7	51.3
9. Food, drink, and tobacco—	15,032	15,135	15,317	34.5	34.3	34.7
Bakeries (including cakes and pastry)	1,956	1,955	1,926	29.8	30.0	29.9
Confectionery (including chocolate and icing sugar)	2,051	2,046	1,994	57.3	57.1	57.0
Jam, fruit, and vegetable canning	2,500	2,416	2,315	43.0	41.2	40.1
Tobacco, cigars, cigarettes	1,234	1,303	1,342	54.0	54.1	54.2
10. Sawmills, joinery, boxes, etc., wood turning and carving	1,116	1,183	1,319	7.3	7.7	8.4
11. Furniture of wood, bedding, etc.	1,716	1,992	2,060	25.5	28.1	28.7
12. Paper, stationery, printing, bookbinding, etc.	8,260	8,421	8,583	27.9	27.7	27.7
13. Rubber	1,833	1,821	1,931	22.3	22.5	22.7
14. Musical instruments	33	39	44	16.6	18.5	20.4
15. Miscellaneous products	5,212	5,479	5,768	38.6	38.2	38.3
16. Heat, light, and power	50	75	51	1.0	1.4	1.0
Total Classes only	128,846	131,487	133,837	29.3	29.5	29.7

In Class 16. Heat, light, and power, the percentage of females to total persons employed is at its lowest, 1.0 per cent. In Class 8. Clothing (except knitted), females predominate and comprise 74.0 per cent of the total number of persons employed. Within Class 8, in the Dressmaking sub-class, 87.4 per cent of the total employed are females. In Class 4.

Industrial metals, machines, and conveyances, females constitute 15·4 per cent of the persons employed. In 1938–39 only 6 per cent of the persons employed in Class 4 were females.

The numbers of males and females employed in factories, and the proportions of the average male and female population working in factories in 1967–68 and earlier years are shown in the following table :

VICTORIA—EMPLOYMENT OF MALES AND FEMALES IN FACTORIES

Year	Males		Females		Total	
	Number	Average per 10,000 of male population	Number	Average per 10,000 of female population	Number	Average per 10,000 of total population
1901	47,059	778	19,470	325	66,529	553
1911	73,573	1,118	38,375	579	111,948	848
1920–21	96,379	1,283	44,364	574	140,743	923
1932–33	91,899	1,020	52,529	575	144,428	796
1940–41	161,880	1,708	75,756	782	237,636	1,240
1946–47	188,758	1,876	76,999	745	265,757	1,303
1953–54	240,698	1,979	90,579	751	331,277	1,367
1960–61	280,207	1,903	107,843	742	388,050	1,326
1963–64	295,440	1,896	117,680	761	413,120	1,330
1964–65	306,983	1,933	125,406	795	432,389	1,366
1965–66	310,303	1,921	128,846	802	439,149	1,363
1966–67	314,070	1,912	131,487	805	445,557	1,360
1967–68	316,108	1,894	133,837	807	449,945	1,352

Child labour in factories

The Labour and Industry Act of Victoria debar employment in factories of children under the age of fifteen years, and the Victorian Education Act makes daily attendance at school compulsory between the ages of six and fifteen years.

Some children under fifteen may work in a shop or office if they are exempted under the Education Act, but the general effect of the two statutes contributes to the very low incidence of child labour in this State.

Salaries, wages, and other costs

Salaries and wages

The next table gives details of wages paid in the various classes of industry in Victoria in 1967–68. Amounts paid to managers, clerical staff, chemists, and draftsmen, etc., are shown separately from those paid to foremen, overseers, workers in the factory, etc. There is also a dissection within these categories of the amounts paid to male and female employees.

It should be noted that in all tables of salaries and wages paid the amounts drawn by working proprietors are excluded.

Of the total amount of salaries and wages paid in Victoria in 1967–68—\$1,244,216,000—the Industrial metals, etc., group was responsible for \$570,717,000 or 45·9 per cent, Food, drink, etc., \$118,363,000 or 9·5 per cent, Textiles, etc., \$99,945,000 or 8·0 per cent, and Clothing, etc., \$96,531,000 or 7·7 per cent.

The total amount of salaries and wages paid in industry in Victoria in each of the years of 1963–64 to 1967–68 and the average per employee are also shown.

VICTORIA—SALARIES AND WAGES PAID IN FACTORIES, 1967-68
(Excludes drawings of working proprietors)
(\$'000)

Class of industry	Managers, clerical staff, chemists, draftsmen, etc.		All other employees		Total		
	Males	Females	Males	Females	Males	Females	Persons
1. Treatment of non-metalliferous mine and quarry products	4,095	626	19,080	188	23,175	814	23,989
2. Bricks, pottery, glass, etc.	3,183	634	18,171	1,287	21,354	1,921	23,275
3. Chemicals, dyes, explosives, paints, oils, grease	16,089	3,164	36,436	4,070	52,524	7,234	59,759
4. Industrial metals, machines, conveyances	114,666	20,383	403,626	32,043	518,291	52,426	570,717
5. Precious metals, jewellery, plate	763	230	4,017	483	4,780	713	5,493
6. Textiles and textile goods (not dress)	11,380	4,193	44,538	39,834	55,918	44,027	99,945
7. Skins and leather (not clothing or footwear)	1,124	281	5,796	1,869	6,920	2,150	9,070
8. Clothing (except knitted)	8,576	4,034	25,742	58,179	34,318	62,213	96,531
9. Food, drink, and tobacco	18,092	5,854	73,123	21,294	91,215	27,148	118,363
10. Sawmills, joinery, boxes, etc., wood turning and carving	6,076	1,254	32,239	738	38,315	1,992	40,307
11. Furniture of wood, bedding, etc.	2,353	866	11,166	2,425	13,518	3,290	16,809
12. Paper, stationery, printing, bookbinding, etc.	14,831	4,309	62,975	10,200	77,805	14,509	92,314
13. Rubber	4,651	1,067	17,838	2,528	22,490	3,595	26,085
14. Musical instruments	68	22	421	70	489	92	581
15. Miscellaneous products	9,090	2,627	23,564	8,109	32,654	10,736	43,390
Total, Classes 1 to 15	215,035	49,545	778,732	183,316	993,767	232,861	1,226,628
16. Heat, light, and power	2,221	71	15,272	24	17,493	95	17,588
GRAND TOTAL	217,257	49,616	794,004	183,340	1,011,261	232,956	1,244,216

VICTORIA—SALARIES AND WAGES PAID IN FACTORIES
(Excludes drawings of working proprietors)

Year	Salaries and wages paid to—				Total salaries and wages paid to—		
	Managers, clerical staff, chemists, draftsmen, etc.		All other employees				
	Males	Females	Males	Females	Males	Females	Persons
TOTAL AMOUNT PAID (\$'000)							
1963-64	148,006	33,514	599,172	131,732	747,178	165,246	912,424
1964-65	165,551	37,227	675,153	150,561	840,704	187,788	1,028,492
1965-66	183,714	41,200	693,542	158,778	877,256	199,977	1,077,234
1966-67	201,731	45,681	748,173	172,288	949,903	217,969	1,167,872
1967-68	217,257	49,616	794,004	183,340	1,011,261	232,956	1,244,216
AVERAGE PER EMPLOYEE (\$)							
1963-64	3,622	1,591	2,454	1,396	2,621	1,432	2,209
1964-65	3,804	1,669	2,667	1,495	2,834	1,526	2,450
1965-66	3,977	1,746	2,729	1,547	2,921	1,584	2,525
1966-67	4,255	1,871	2,911	1,649	3,120	1,691	2,695
1967-68	4,499	1,979	3,074	1,725	3,299	1,773	2,841

Power, fuel, and light used

The following table shows the cost of power, fuel, light, water, and lubricating oil used during the five years 1963-64 to 1967-68 :

VICTORIA—COST OF POWER, FUEL, LIGHT, ETC., USED IN FACTORIES
(\$'000)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	6,100	6,762	6,662	6,802	6,628
2. Bricks, pottery, glass, etc.	5,902	6,101	6,079	6,220	6,622
3. Chemicals, dyes, explosives, paints, oils, grease	15,170	16,782	16,919	18,419	21,313
4. Industrial metals, machines, conveyances	25,828	30,218	30,644	32,787	34,950
5. Precious metals, jewellery, plate	348	397	387	430	467
6. Textiles and textile goods (not dress)	5,934	6,310	6,502	6,895	7,268
7. Skins and leather (not clothing or footwear)	878	894	892	909	942
8. Clothing (except knitted)	2,094	2,265	2,373	2,480	2,578
9. Food, drink, and tobacco	13,640	14,619	15,384	15,907	16,624
10. Sawmills, joinery, boxes, etc., wood turning and carving	1,872	2,024	2,095	2,172	2,280
11. Furniture of wood, bedding, etc.	302	341	357	391	421
12. Paper, stationery, printing, bookbinding, etc.	5,406	5,943	6,431	7,063	8,174
13. Rubber	2,984	2,999	2,932	3,163	3,370
14. Musical instruments	20	21	21	28	27
15. Miscellaneous products	2,464	2,860	3,092	3,433	4,142
Total, Classes 1 to 15	88,942	98,536	100,770	107,099	115,808
16. Heat, light, and power	25,706	26,623	27,087	27,319	27,278
GRAND TOTAL	114,648	125,159	127,857	134,418	143,086

VICTORIA—COST OF ITEMS OF POWER, FUEL, LIGHT, ETC.,
USED IN FACTORIES

Commodity	1963-64	1964-65	1965-66	1966-67	1967-68	
					Cost	Percentage of total
	\$'000	\$'000	\$'000	\$'000	\$'000	
Coal—						
Black	3,338	3,623	3,066	2,724	2,444	1.8
Brown	14,736	15,497	17,073	18,215	19,760	14.9
Brown coal briquettes	12,542	12,612	11,891	11,340	9,937	7.5
Coke	1,500	1,384	1,163	1,124	1,106	0.8
Wood	820	741	725	675	542	0.4
Fuel oil (a)	22,662	23,784	22,903	23,709	27,480	20.7
Tar fuel	196	187	161	156	163	0.1
Electricity	45,454	52,447	55,136	59,400	63,558	47.9
Gas	4,058	4,763	3,912	4,398	4,710	3.5
Other (charcoal, etc.)	1,506	1,379	2,694	2,732	3,122	2.4
Total power and fuel	106,812	116,417	118,724	124,473	132,823	100.0
Water	5,426	6,034	6,528	7,198	7,249	..
Lubricating oil	2,410	2,709	2,606	2,747	3,014	..
GRAND TOTAL	114,648	125,159	127,857	134,418	143,086	..

(a) Includes fuel oil equivalent of petroleum fractions used as fuel in petroleum refineries.

Combustible products consumed as raw materials, e.g., brown coal used in the manufacture of briquettes, have been excluded from the above table.

VICTORIA—QUANTITIES OF FUELS USED IN FACTORIES

Commodity	Unit of quantity	1963-64	1964-65	1965-66	1966-67	1967-68
Coal—						
Black	'000 tons	316	329	277	256	241
Brown	'000 tons	13,461	14,243	16,277	17,403	18,190
Brown coal briquettes	'000 tons	1,095	1,062	1,027	978	855
Coke	'000 tons	60	58	49	47	45
Wood	'000 tons	232	192	189	169	133
Fuel oil (a)	mill. gals	292	320	313	341	376
Tar fuel	'000 tons	9	9	8	8	8

(a) Includes fuel oil equivalent of petroleum fractions used as fuel in petroleum refineries.

Cost of materials used

The cost of materials used in factories is shown by classes for each of the last five years in the next table. "Materials used" includes the value of containers, etc., the cost of tools replaced, and repairs to plant.

VICTORIA—COST OF MATERIALS USED IN FACTORIES
(\$'000)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	50,008	56,696	59,165	62,465	63,703
2. Bricks, pottery, glass, etc.	17,244	21,399	21,911	23,735	25,138
3. Chemicals, dyes, explosives, paints, oils, grease	254,174	272,007	272,855	310,835	320,707
4. Industrial metals, machines, conveyances	694,788	806,468	814,925	891,831	946,395
5. Precious metals, jewellery, plate	4,692	5,437	5,178	5,535	5,815
6. Textiles and textile goods (not dress)	211,476	224,520	221,628	238,690	238,882
7. Skins and leather (not clothing or footwear)	22,018	20,351	21,434	22,280	19,170
8. Clothing (except knitted)	120,078	126,842	126,171	134,435	139,926
9. Food, drink, and tobacco	473,308	513,541	537,976	569,962	596,795
10. Sawmills, joinery, boxes, etc., wood turning and carving	65,474	71,628	72,681	76,968	80,082
11. Furniture of wood, bedding, etc.	26,988	29,579	30,012	31,582	34,615
12. Paper, stationery, printing, bookbinding, etc.	139,992	153,673	160,910	173,517	186,814
13. Rubber	46,544	51,117	48,086	49,003	54,136
14. Musical instruments	436	486	505	579	694
15. Miscellaneous products	52,666	61,679	63,221	74,674	87,290
Total, Classes 1 to 15	2,179,886	2,415,423	2,456,658	2,666,091	2,800,162
16. Heat, light, and power	10,512	10,538	12,714	13,637	13,262
GRAND TOTAL	2,190,398	2,425,961	2,469,372	2,679,727	2,813,424

Value of output and production

Value of factory output by classes of industry in each of the years 1963-64 to 1967-68 is shown in the following table :

VICTORIA—VALUE OF FACTORY OUTPUT
(\$'000)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	100,244	112,597	114,331	121,060	124,125
2. Bricks, pottery, glass, etc.	56,654	65,706	69,038	73,898	78,438
3. Chemicals, dyes, explosives, paints, oils, grease	421,160	453,964	460,136	522,377	550,678
4. Industrial metals, machines, conveyances	1,375,608	1,583,854	1,620,395	1,783,781	1,903,178
5. Precious metals, jewellery, plate	12,614	14,775	14,326	15,547	16,362
6. Textiles and textile goods (not dress)	362,874	388,457	386,925	417,558	426,636
7. Skins and leather (not clothing or footwear)	35,770	35,142	36,866	38,285	35,767
8. Clothing (except knitted)	249,190	263,965	268,577	286,311	300,436
9. Food, drink, and tobacco	703,268	767,695	811,891	870,056	907,400
10. Sawmills, joinery, boxes, etc., wood turning and carving	121,306	132,632	134,771	144,392	149,536
11. Furniture of wood, bedding, etc.	49,826	54,508	56,210	60,289	65,287
12. Paper, stationery, printing, bookbinding, etc.	276,944	305,280	323,571	351,382	381,686
13. Rubber	87,646	91,944	87,545	91,955	108,131
14. Musical instruments	1,062	1,373	1,294	1,389	1,562
15. Miscellaneous products	105,126	120,501	123,031	149,826	171,665
Total, Classes 1 to 15	3,959,292	4,392,393	4,508,907	4,928,106	5,220,888
16. Heat, light, and power	95,530	108,393	116,009	122,408	130,422
GRAND TOTAL	4,054,822	4,500,786	4,624,915	5,050,515	5,351,311

Value of production—the value added to raw materials by the process of manufacture—and not the value of output, is used in measuring the relative importance of various industries or the value of the manufacturing industries as a whole. A definition of "value of production" will be found on page 395.

In the next table the value of production in Victoria is given according to the various classes of industry for each of the years 1963-64 to 1967-68 :

VICTORIA—VALUE OF PRODUCTION OF FACTORIES
(\$'000)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	44,138	49,139	48,503	51,792	53,794
2. Bricks, pottery, glass, etc.	33,508	38,206	41,049	43,943	46,678
3. Chemicals, dyes, explosives, paints, oils, grease	151,814	165,175	170,362	193,123	208,658
4. Industrial metals, machines, conveyances	654,992	747,168	774,826	859,163	921,834
5. Precious metals, jewellery, plate	7,574	8,941	8,761	9,582	10,080
6. Textiles and textile goods (not dress)	144,574	157,627	158,795	171,973	180,486
7. Skins and leather (not clothing or footwear)	13,764	13,897	14,540	15,096	15,655
8. Clothing (except knitted)	127,018	134,857	140,033	149,396	157,932
9. Food, drink, and tobacco	216,320	239,535	258,530	284,187	293,980
10. Sawmills, joinery, boxes, etc., wood turning and carving	53,960	58,980	59,995	65,252	67,173
11. Furniture of wood, bedding, etc.	22,536	24,588	25,841	28,317	30,251
12. Paper, stationery, printing, bookbinding, etc.	131,546	145,665	156,230	170,802	186,698
13. Rubber	38,118	37,828	36,526	39,789	50,626
14. Musical instruments	606	866	768	782	841
15. Miscellaneous products	49,996	55,962	56,718	71,719	80,234
Total, Classes 1 to 15	1,690,464	1,878,434	1,951,477	2,154,916	2,304,919
16. Heat, light, and power	59,312	71,232	76,208	81,452	89,882
GRAND TOTAL	1,749,776	1,949,665	2,027,685	2,236,370	2,394,801

Relation of costs to output and production

Certain costs of production, the value of output, and the balance available for profit, interest, rent, taxation, and depreciation, etc., in each class of manufacturing industry during the year 1967-68 are given in the following tables :

VICTORIA—FACTORY COSTS AND OUTPUT, 1967-68
(\$'000)

Class of industry	Costs of—			Balance between value of output and specified costs (c)	Value of output
	Materials used (a)	Fuel, light, and power used (b)	Salaries output and wages paid		
1. Treatment of non-metalliferous mine and quarry products	63,703	6,628	23,989	29,805	124,125
2. Bricks, pottery, glass, etc.	25,138	6,622	23,275	23,403	78,438
3. Chemicals, dyes, explosives, paints, oils, grease	320,707	21,313	59,759	148,899	550,678
4. Industrial metals, machines, conveyances	946,395	34,950	570,717	351,116	1,903,178
5. Precious metals, jewellery, plate	5,815	467	5,493	4,587	16,362
6. Textiles and textile goods (not dress)	238,882	7,268	99,945	80,541	426,636
7. Skins and leather (not clothing or footwear)	19,170	942	9,070	6,585	35,767
8. Clothing (except knitted)	139,926	2,578	96,531	61,401	300,436
9. Food, drink, and tobacco	596,795	16,624	118,363	175,618	907,400
10. Sawmills, joinery, boxes, etc., wood turning and carving	80,082	2,280	40,307	26,867	149,536
11. Furniture of wood, bedding, etc.	34,615	421	16,809	13,442	65,287
12. Paper, stationery, printing, bookbinding, etc.	186,814	8,174	92,314	94,384	381,686
13. Rubber	54,136	3,370	26,085	24,540	108,131
14. Musical instruments	694	27	581	260	1,562
15. Miscellaneous products	87,290	4,142	43,390	36,844	171,665
Total, Classes 1 to 15	2,800,162	115,808	1,226,628	1,078,291	5,220,888
16. Heat, light, and power	13,262	27,278	17,588	72,294	130,422
GRAND TOTAL	2,813,424	143,086	1,244,216	1,150,585	5,351,311

(a) Includes containers, tools replaced, and repairs to plant.

(b) Includes cost of lubricants and water.

(c) Balance available to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit.

VICTORIA—PERCENTAGE OF SPECIFIED COSTS OF PRODUCTION,
ETC., TO VALUE OF OUTPUT OF FACTORIES, 1967-68
(Per cent)

Class of industry	Specified costs of production			Balance between value of output and specified costs (c)
	Materials used (a)	Fuel, light, and power used (b)	Salaries and wages paid	
1. Treatment of non-metalliferous mine and quarry products	51·3	5·4	19·3	24·0
2. Bricks, pottery, glass, etc.	32·1	8·4	29·7	29·8
3. Chemicals, dyes, explosives, paints, oils, grease	58·2	3·9	10·9	27·0
4. Industrial metals, machines, conveyances	49·7	1·8	30·0	18·5
5. Precious metals, jewellery, plate	35·5	2·9	33·6	28·0
6. Textiles and textile goods (not dress)	56·0	1·7	23·4	18·9
7. Skins and leather (not clothing or footwear)	53·6	2·6	25·4	18·4
8. Clothing (except knitted)	46·6	0·9	32·1	20·4
9. Food, drink, and tobacco	65·8	1·8	13·0	19·4
10. Sawmills, joinery, boxes, etc., wood turning and carving	53·6	1·5	26·9	18·0
11. Furniture of wood, bedding, etc.	53·0	0·7	25·7	20·6
12. Paper, stationery, printing, bookbinding, etc.	49·0	2·1	24·2	24·7
13. Rubber	50·1	3·1	24·1	22·7
14. Musical instruments	44·5	1·7	37·2	16·6
15. Miscellaneous products	50·8	2·4	25·3	21·5
Total, Classes 1 to 15	53·6	2·2	23·5	20·7
16. Heat, light, and power	10·2	20·9	13·5	55·4
GRAND TOTAL	52·6	2·7	23·2	21·5

For footnotes see page 411.

There are considerable variations in the proportions which the cost of materials and the expenditure on wages bear to the value of the output in the different classes of industries. These are, of course, due to the difference in the treatment required to convert the materials to their final form. Thus, in Class 2, the sum paid in wages represents 29·7 per cent and the cost of raw materials 32·1 per cent of the values of the finished articles, while, in Class 9, the expenditure on wages amounts to 13·0 per cent and that on raw materials to 65·8 per cent of the value of the output.

In the next table, specified costs of production, the value of the output of factories, and the balance available for profit and miscellaneous expenses are compared for each of the years 1963-64 to 1967-68:

VICTORIA—SPECIFIED COSTS OF PRODUCTION, ETC., AND
VALUE OF OUTPUT OF FACTORIES
(\$'000)

Year	Specified costs of production			Balance between value of output and specified costs (c)	Total value of output
	Materials used (a)	Fuel, light, and power used (b)	Salaries and wages		
1963-64	2,190,398	114,648	912,424	837,352	4,054,822
1964-65	2,425,961	125,161	1,028,492	921,172	4,500,786
1965-66	2,469,372	127,858	1,077,234	950,451	4,624,915
1966-67	2,679,726	134,418	1,167,872	1,068,499	5,050,515
1967-68	2,813,424	143,085	1,244,216	1,150,585	5,351,311

For footnotes see page 411.

In the following table these figures are converted to their respective percentages of the value of output :

VICTORIA—PERCENTAGE OF SPECIFIED COSTS OF PRODUCTION,
ETC., TO VALUE OF OUTPUT OF FACTORIES
(Per cent)

Year	Specified costs of production			Balance between value of output and specified costs (c)	Total
	Materials used (a)	Fuel, light, and power used (b)	Salaries and wages		
1963-64	54.0	2.8	22.5	20.7	100.0
1964-65	53.9	2.8	22.8	20.5	100.0
1965-66	53.4	2.8	23.3	20.5	100.0
1966-67	53.1	2.7	23.1	21.1	100.0
1967-68	52.6	2.7	23.2	21.5	100.0

For footnotes see page 411.

Land, buildings, plant, and machinery

The following statement shows the value of land and buildings used in the various classes of manufacturing industries for the years 1963-64 to 1967-68 :

VICTORIA—FACTORIES : VALUE OF LAND AND BUILDINGS
(\$'000)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	28,122	28,176	29,968	29,804	29,637
2. Bricks, pottery, glass, etc.	21,952	22,310	23,192	24,490	26,472
3. Chemicals, dyes, explosives, paints, oils, grease	75,812	78,235	81,160	87,612	84,898
4. Industrial metals, machines, conveyances	393,476	442,743	470,730	495,854	528,358
5. Precious metals, jewellery, plate	4,350	5,067	4,810	4,877	5,168
6. Textiles and textile goods (not dress)	77,674	78,596	80,751	87,303	90,487
7. Skins and leather (not clothing or footwear)	9,382	9,310	9,780	9,642	10,163
8. Clothing (except knitted)	58,300	62,152	66,737	69,599	72,832
9. Food, drink, and tobacco	138,268	149,037	159,823	173,363	187,945
10. Sawmills, joinery, boxes, etc., wood turning and carving	29,102	32,047	34,467	36,541	37,893
11. Furniture of wood, bedding, etc.	14,104	16,154	17,375	19,582	21,084
12. Paper, stationery, printing, bookbinding, etc.	64,062	70,608	82,825	89,569	101,056
13. Rubber	20,150	20,475	22,443	27,173	26,880
14. Musical instruments	332	433	452	513	573
15. Miscellaneous products	32,078	32,869	36,184	41,297	43,190
Total, Classes 1 to 15	967,164	1,048,212	1,120,697	1,197,219	1,266,636
16. Heat, light, and power	53,630	57,500	56,244	57,536	51,368
GRAND TOTAL	1,020,794	1,105,712	1,176,941	1,254,755	1,318,004

The values recorded in the above table and in the table which follows are, generally, the values shown in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. Consequently, the totals shown in the tables do not represent the actual amount of capital invested in industry.

Where land and buildings, etc., and plant and machinery, etc., are rented by the occupiers of factories, the capital value of these items has been computed by capitalising the rent paid at fifteen years' and ten years' purchase, respectively.

In the following table the depreciated book values of machinery and plant used in the various classes of manufacturing industries are shown for each of the years 1963-64 to 1967-68 :

VICTORIA—FACTORIES : VALUE OF PLANT AND MACHINERY
(\$'000)

Class of industry	1963-64	1964-65	1965-66	1966-67	1967-68
1. Treatment of non-metalliferous mine and quarry products	50,682	54,293	57,540	58,136	53,985
2. Bricks, pottery, glass, etc.	23,766	22,450	23,173	27,111	30,582
3. Chemicals, dyes, explosives, paints, oils, grease	146,856	143,637	149,872	192,686	185,775
4. Industrial metals, machines, conveyances	282,304	322,331	344,775	363,346	377,782
5. Precious metals, jewellery, plate	1,350	1,551	1,448	1,491	1,517
6. Textiles and textile goods (not dress)	59,224	61,847	65,544	70,456	72,178
7. Skins and leather (not clothing or footwear)	3,172	3,346	3,584	3,495	3,816
8. Clothing (except knitted)	20,134	22,197	23,186	25,298	27,504
9. Food, drink, and tobacco	123,086	126,623	135,500	152,184	166,705
10. Sawmills, joinery, boxes, etc., wood turning and carving	17,064	17,826	19,230	19,219	18,294
11. Furniture of wood, bedding, etc.	3,096	3,186	3,335	3,531	3,765
12. Paper, stationery, printing, bookbinding, etc.	62,370	69,009	74,818	86,258	101,008
13. Rubber	15,850	16,196	18,498	26,759	28,551
14. Musical instruments	118	124	144	183	249
15. Miscellaneous products	25,032	30,011	32,566	34,664	38,746
Total, Classes 1 to 15	834,104	894,627	953,213	1,064,817	1,110,457
16. Heat, light, and power	206,620	233,321	255,800	297,404	256,793
GRAND TOTAL	1,040,724	1,127,948	1,209,013	1,362,221	1,367,250

Motive power classified in the tables which follow relates to the rated horsepower of engines used. Engines in reserve or idle are the subject of a separate table, but obsolete engines are completely excluded from any information shown.

VICTORIA—TOTAL RATED HORSEPOWER OF ENGINES AND
ELECTRIC MOTORS ORDINARILY IN USE IN FACTORIES (a), 1967-68

Class of industry	Steam		Internal combustion	Water	Motors driven by electricity		Total without duplication
	Re-ciprocating	Turbine			Purchased	Own generation	
1. Treatment of non-metalliferous mine and quarry products	1,221	16,750	1,280	..	95,808	6,820	115,059
2. Bricks, pottery, glass, etc.	125	..	3,887	..	56,031	12	60,043
3. Chemicals, dyes, explosives, paints, oils, grease	2,229	69,029	5,425	..	188,750	40,453	265,433
4. Industrial metals, machines, conveyances	1,351	..	10,754	..	745,548	2,543	757,653
5. Precious metals, jewellery, plate	150	..	75	..	3,879	25	4,104
6. Textiles and textile goods (not dress)	205	..	1,095	..	124,808	280	126,108
7. Skins and leather (not clothing or footwear)	690	..	173	..	18,954	460	19,817
8. Clothing (except knitted)	575	..	151	..	34,241	..	34,967
9. Food, drink, and tobacco	1,624	2,636	3,447	830	267,348	2,029	275,885
10. Sawmills, joinery, boxes, etc., wood turning and carving	3,920	200	23,235	..	112,664	6,809	140,019
11. Furniture of wood, bedding, etc.	..	..	..	..	17,072	..	17,072
12. Paper, stationery, printing, bookbinding, etc.	250	23,850	657	..	123,464	51,534	148,221
13. Rubber	..	..	144	..	99,886	..	100,030
14. Musical instruments	..	..	..	..	297	..	297
15. Miscellaneous products	..	2,000	127	..	56,197	120	58,324
Total, Classes 1 to 15	12,340	114,465	50,450	830	1,944,947	111,085	2,123,032
16. Gas works	2,711	1,213	3,594	..	20,213	..	27,731
GRAND TOTAL	15,051	115,678	54,044	830	1,965,160	111,085	2,150,763

(a) Includes gas works, but excludes central electric stations.

The total rated horsepower in reserve or idle during 1967-68 and not included above was 251,367.

Motors driven by purchased electricity comprised approximately 91.4 per cent of the total horsepower used in factories other than central electric stations in 1967-68, while steam turbines were next in demand with 5.4 per cent.

A comparison over the five year period 1963-64 to 1967-68 of the total rated horsepower used to drive engines and electric motors ordinarily in use in factories is given in the table which follows :

VICTORIA—TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE IN FACTORIES (a)

Year	Steam		Internal combustion	Water	Motors driven by electricity		Total without duplication
	Reciprocating	Turbine			Purchased	Own generation	
1963-64	17,081	98,724	53,296	890	1,616,591	60,992	1,786,582
1964-65	16,149	89,148	54,815	890	1,727,537	60,978	1,888,539
1965-66	16,294	95,919	55,283	890	1,824,907	68,823	1,993,293
1966-67	15,712	106,715	55,853	880	1,907,935	88,502	2,087,095
1967-68	15,051	115,678	54,044	830	1,965,160	111,085	2,150,763

(a) Includes gas works, but excludes central electric stations.

The following table shows the total rated horsepower for each year from 1963-64 to 1967-68 for engines and electric motors in reserve or idle. It includes engines which are only used occasionally, or, for example, during periods of breakdown to power supply.

VICTORIA—TOTAL RATED HORSEPOWER OF ENGINES AND ELECTRIC MOTORS IN RESERVE OR IDLE IN FACTORIES (a)

Year	Rated horsepower of engines, etc., in reserve or idle		
	Purchased electricity	All other types	Total
1963-64	161,471	60,501	221,972
1964-65	173,182	55,420	228,602
1965-66	181,057	54,520	235,577
1966-67	188,763	57,280	246,043
1967-68	191,527	59,840	251,367

(a) Without duplication; includes gas works, but excludes central electric stations.

Particulars of the type and capacity of engines and generators installed in central electric stations in Victoria during 1967-68 are shown in the following table :

VICTORIA—POWER EQUIPMENT INSTALLED IN CENTRAL ELECTRIC STATIONS, 1967-68

Particulars		Capacity of engines and generators			
		Steam turbine	Internal combustion	Water	Total
Engines installed	rated hp	3,070,300	27,279	445,574	3,543,153
Generators installed—					
Kilowatt capacity—					
Total installed	kW	2,291,500	19,545	332,515	2,643,560
Effective capacity	kW	2,282,500	17,545	331,500	2,631,545
Horsepower—					
Total installed	hp	3,070,610	26,190	445,570	3,542,370
Effective capacity	hp	3,058,550	23,510	444,210	3,526,270

Similar information to that shown in the preceding table, but giving a comparison over the years 1963-64 to 1967-68 is shown below :

VICTORIA—POWER EQUIPMENT INSTALLED IN CENTRAL ELECTRIC STATIONS

Particulars		1963-64	1964-65	1965-66	1966-67	1967-68
		Central electric stations Engines installed	number rated hp	29	29	22	18	16
Generators installed— Kilowatt capacity— Total installed	kW	2,213,474	2,520,744	2,903,307	3,354,145	3,543,153
Effective capacity	kW	1,660,828	1,885,831	2,081,834	2,453,782	2,643,560
Horsepower equivalent— Total installed	hp	1,640,697	1,831,925	1,973,961	2,337,369	2,631,545
Effective capacity	hp	2,226,311	2,527,924	2,789,658	3,288,068	3,542,370
		2,199,326	2,455,664	2,645,108	3,132,074	3,526,270

Principal factory products

Annual quantity and value

The next table shows the quantities and values of the principal articles manufactured in Victoria, and corresponding figures for Australia during 1967-68. Owing to the limited number of producers, it is not permissible under statute to publish particulars regarding some articles of manufacture which would otherwise appear in the following table :

VICTORIA AND AUSTRALIA—PRINCIPAL ARTICLES MANUFACTURED, 1967-68

Commodity Code No.	Article	Unit of quantity	Victoria		Australia	
			Quantity	Value	Quantity	Value
				\$'000		\$'000
023. 10, 14, 17	Bacon and ham (c)	mill lb	20.6	13,430	67.6	49,887
027. 02-29	Meat—canned	mill lb	24.5	6,200	42.7	12,933
051. 21-27	Milk—condensed	mill lb	97.5	13,494	135.3	15,658
051. 31	Butter	mill lb	231.9	79,491	420.9	143,067
051. 35	Cheese	mill lb	73.6	17,686	155.4	36,657
051. 61	Ice cream	mill gals	11.2	10,746	37.4	36,543
051. 72-73	Milk—powdered : full cream	mill lb	21.8	6,134	47.3	13,197
062. 01	Flour, plain—wheaten (including sharps)	'000 short ton	403	30,775	1,351.5	110,346
063. 11	Malt—barley	mill bush	9.2	19,911	13.5	29,383
064. 03-13	Bread—2 lb loaves equivalent	mill	211.8	34,536	806	146,945
064. 21	Biscuits	mill lb	82.0	18,521	233.4	63,560
064. 43-45	Cakes, pastry, pies, etc. (including canned puddings)	..	(b)	28,879	(b)	96,717
	Fruit : preserved—					
076. 15	Peaches	mill lb	149.4	17,223	253.6	30,149
076. 22	Pears	mill lb	139.9	18,146	152.8	19,802
076. 60	Jams, fruit spreads, fruit butters, etc.	mill lb	37.4	6,661	83.9	14,937
094. 02-49	Vegetables canned or bottled (including pickled)	mill lb	46.5	8,008	182.0	28,560
	Confectionery—					
104. 06-18	Chocolate base	mill lb	42.8	21,402	98.9	48,757
104. 21-29	Other without chocolate	mill lb	45.5	15,138	112.8	38,111
122. 02	Soup—tomato	mill imp pint	17.6	2,719	23.4	3,568
123. 18	Sauce—tomato	mill imp pint	21.3	5,013	32.2	7,723
139. 14	Sausage casings—sheep and lamb	'000 bundles	2,949	5,410	4,646	8,290
152. 06	Pollard	'000 short ton	84.3	3,342	305.5	12,305
171. 03-05	Aerated and carbonated waters	mill imp gals	34.9	23,930	126.9	88,201
183. 02, 11, 21-28	Tobacco, cigars, and cigarettes (d)	mill lb	34.6	94,205	59.0	158,674
242. 07-11	Wool—scoured or carbonised	mill lb	56.6	4,459	157.8	17,966
242. 32	Wool tops	mill lb	15.4	15,206	42.4	35,582
261. 41	Briquettes—brown coal	'000 ton	1,745	12,276	1,745	12,276
281. 04	Ice	'000 ton	48.2	784	187.3	2,612
	Leather (dressed)—					
301. 31-37	Vegetable tanned : sole	'000 lb	3,969	1,600	10,399	4,540
301. 43-65	Chrome tanned	mill sq ft	22.4	8,201	72.2	28,025
331. 01-19	Timber produced from logs—Australian	mill sup ft	317.5	(a)	1,447	(a)
369. 11	Ropes and cables (excluding wire)	'000 cwt	63.3	2,360	117.7	4,374

MANUFACTURING ACTIVITY

417

VICTORIA AND AUSTRALIA—PRINCIPAL ARTICLES MANUFACTURED,
1967-68—continued

Commodity Code No.	Article	Unit of quantity	Victoria		Australia	
			Quantity	Value	Quantity	Value
				\$'000		\$'000
372.02-20	Cloth piece goods woven—					
372.22-36,48,50	Worsted or predominantly worsted	'000 sq yd	3,557	9,340	9,530	21,006
372.52-62; 374.51-55	Woollen or predominantly woollen	'000 sq yd	7,107	9,204	14,852	18,563
401.57	Blankets, bed (e)	'000 pair	771	5,006	1,594	10,994
403.02, 18,20, 52-92, 96; 404.02-98	Acid—sulphuric	'000 ton	468	1,814	1,892	14,647
412.02, 04, 08, 10	Plastics and synthetic resins	'000 cwt	1,525	31,196	3,349	72,327
412.42-46	Paints (not water) and enamels ready mixed (excluding bituminous and marine)	'000 imp gals	4,773	18,113	15,624	62,416
434.09	Paints, water (excluding powder form)	'000 imp gals	1,299	4,827	4,358	17,313
447.81	Gas, town	mill therms	119	(a)	312	(a)
461.20	Pipe fittings, ferrous	..	(b)	3,090	(b)	13,320
461.30	Steel, constructional—fabricated	'000 ton	132.0	33,334	584.8	165,538
465.04	Window frames—metal	..	(b)	15,022	(b)	50,077
472.01, 03	Bolts and nuts—for sale as such	..	(b)	14,823	(b)	25,594
472.12	Bricks—clay	mill	412	19,652	1,440	68,173
475.30	Tiles, roofing—	mill	13.9	1,704	47.5	5,236
475.46	Terracotta	mill	33.5	2,582	96.8	10,024
479.32, 33	Concrete	'000 long ton	232.1	6,954	701.6	21,418
499.42	Pipes—concrete (excluding agricultural)	mill sq yd	12.8	8,744	32.8	20,701
503.21-32	Plaster sheets	'000 mill kWh	11.0	(a)	43.4	(a)
507.51	Electricity generated	'000	659	(a)	2,911	(a)
511.01	Electric motors	..	(b)	20,080	(b)	36,746
512.01, 11; 589.31	Machinery: industrial—	..	(b)	12,090	(b)	23,972
521.01	Pumping (including pumps)	..	(b)	12,100	(b)	26,346
523.01, 02, 05	Conveyors (and appliances)	..	(b)	9,892	(b)	21,327
528.17	Hoists, cranes, lifting	..	(b)	10,174	(b)	25,343
581.02-08	Mining and drilling	..	(b)	8,772	(b)	9,813
581.10-16; 582.04-28	Metal working	..	(b)	10,174	(b)	25,343
584.11-49	Food processing and canning	..	(b)	8,772	(b)	9,813
626.01	Finished motor vehicles (f)—	number	117,990	199,670	270,963	447,654
643.01-37	Cars	number	40,811	73,838	106,485	185,907
649.51, 55; 683.03-61	Other	number	4,177	6,905	20,710	16,817
651.11-17	Trailers and semi-trailers	'000	1,153.2	(a)	4,012.4	(a)
661.21-23	Tyres retreaded and recapped	'000	158.3	4,631	522.4	22,146
671.14	Radios and radiograms (domestic)	'000	2,826	(a)	9,848	(a)
672.01	Transformers, chokes, etc.	'000	595.5	4,652	624.0	5,240
693.02, 06, 12	Radiators and electric fires (domestic)	'000	199.0	1,132	331.7	2,243
741.01	Toasters (domestic)	'000	83.2	1,750	212.8	4,214
744.01	Sinks—stainless steel	..	(b)	22,821	(b)	48,378
773.01-31	Steam, gas and water fittings, valves, etc. (non-ferrous)	'000	22.5	4,240	191.5	27,668
774.01-18	Clothes washing machines (domestic)	..	(b)	34,843	(b)	126,916
774.41-47, 60-67	Furniture and office equipment—	..	(b)	19,558	(b)	58,314
775.01-19	Wooden	'000 doz	1,024	19,522	2,226	37,595
775.51-776.22	Metal	'000 doz	1,033	7,436	2,373	16,514
791.01, 03, 09, 15, 17, 20, 25, 27	Shirts (men's and boys')	'000 doz pair	4,451	20,486	3,952	33,684
791.31, 33, 39, 45, 47, 50, 55, 57	Underwear—	'000 doz pair	2,618	14,577	2,824	15,708
791.61, 62, 66, 70, 71, 72, 76, 79, 81, 82, 87, 88, 92, 93, 97, 99	Men's and boys'	'000 pair	4,488	21,702	9,619	46,677
791.05, 07, 10, 23, 35, 37, 40, 53, 63, 64, 69, 75, 83, 85, 86, 91, 95	Women's and girls'	'000 pair	10,074	40,466	16,079	63,719
	Stockings—women's (g)	'000 pair	2,840	4,909	5,541	11,191
	Socks and stockings—men's and children's	'000 pair	9,477	10,726	11,039	13,877
	Footwear—					
	Boots, shoes, and sandals (h)—					
	Men's and youths'					
	Women's and maids'					
	Children's (including infants')					
	Slippers					

VICTORIA AND AUSTRALIA—PRINCIPAL ARTICLES MANUFACTURED,
1967-68—continued

Commodity Code No.	Article	Unit of quantity	Victoria		Australia	
			Quantity	Value \$'000	Quantity	Value \$'000
805.01-13 ; 806.02-06	Soaps and detergents— Personal toilet use	'000 cwt	133	3,197	553	22,668
	Other purposes	'000 cwt	597	8,497	3,349	61,032
805.22-60 ; 806.10-44	Mattresses—all types	'000	459	7,013	1,704	23,260
844.01-61	Pharmaceutical products for human use	..	(b)	30,379	(b)	112,675
871.01	Cans, canisters, containers—metal	..	(b)	46,747	(b)	106,538
941.11	Containers—paperboard (f)	..	(b)	56,374	(b)	149,616
943.02-08	Boxes and cases—wooden	..	(b)	4,849	(b)	23,483
944.11,21,31, 41	Cans, canisters, containers—plastic	..	(b)	8,340	(b)	18,965
945.21						

(a) Quantity only available.

(b) Value only available.

(c) Cured bone-in weight of smoked, cooked, and canned bacon and ham.

(d) Source : Department of Customs and Excise.

(e) Double, three quarter, single ; wool, wool mixture, and other fibre.

(f) Excludes vehicles finished by specialist body building works outside the motor vehicle manufacturers' organisation.

(g) Includes panty hose.

(h) Excluding wholly of rubber.

(i) Includes composite wood and paperboard butter boxes.

Monthly production statistics

The Bureau collects monthly production returns and makes available printed tables of Australian production statistics within a few weeks of the

AUSTRALIA—PRODUCTION SUMMARIES

Ref. No.	Subject	Ref. No.	Subject
1	Automotive Spark Plugs and Shock Absorbers	29	Biscuits, Ice Cream, Cocoa, Confectionery
2	Chemicals, etc.	30	Storage Batteries—Wet Cell
3	Plastics and Synthetic Resins and Plasticisers	32	Perambulators, Pushers and Strollers
4	Paints and Other Surface Coatings	33	Motor Vehicles
5	Electricity and Gas	34	Television, Radios, Other Sound Equipment, Transistors
6	Soaps, Detergents, Glycerine and Fatty Acids	35	Bed Bases and Mattresses
7	Internal Combustion Engines	36	Processed Milk Products
8	Lawn Mowers	38	Fish Preserving
9	Electrical Appliances	39	Jams and Preserved Fruit and Vegetables
10	Motor Bodies, Trailed Vehicles, Lift-on Freight Containers, etc.	40	Cereal Products
11	Pedal Cycles	41	Vegetable Oils: Margarine and other Edible Processed Fats
12	Meters	42	Malt and Beer
13	Building Fittings	43	Stock and Poultry Foods including Bran and Pollard
14	Cotton Goods	45	Phonograph Records
15	Woolscouring, Carbonising, and Fellingmongering	47	Aerated and Carbonated Waters, Cordials and Syrups
16	Wool Top Making and Yarn Produced	48	Sports Goods
17	Wool Woven Fabric, etc.	49	Building Materials
18	Hosiery	50	Electrodes for Manual Welding
19	Women's, Maids' and Girls' Clothing	51	Hides and Skins Used for Tanning
20	Cellulosic and Synthetic Fibre Tops, Yarns and Woven Fabrics	52	Electric Power Frequencies, Transformers, Chokes and Ballasts
21	Paper, Wood Pulp and Adhesive Tapes	53	Plastics Film, Sheeting and Coated Materials
22	Floor Coverings and Felts	55	Butter and Cheese
23	Electric Motors	56	Canned Meat
24	Men's, Youths' and Boys' Clothing	58	Steel Wire and Wire Products
25	Foundation Garments	59	Non-ferrous Rolled, Extruded and Drawn Products
27	Gloves and Slide Fasteners		
28	Footwear		

month to which they relate. A list of the subjects included in these Production Summaries is given above.

In addition, Statistical Bulletins for the Meat, Gold Mining, and Dairying Industries, and Minerals and Mineral Products are issued each month. Australian totals for a greater range of commodities are published in these Bulletins and Production Summaries than are published in the *Monthly Bulletin of Production Statistics*. Victorian figures are published in the Victorian monthly bulletin *Production Statistics*.

INDIVIDUAL INDUSTRIES

Details of most individual industries published in previous *Victorian Year Books* have been deleted in this edition. However, publication will be resumed when the results of the integrated censuses are known.

History of Manufacturing, 1961; Motor Vehicle Industry, 1962; Chemical Industry, 1963; Petrochemical Industry, 1964; Glass Industry, 1965; Agricultural Machinery Industry, 1966; Aluminium Industry, 1967; Textile Industry, 1968; Canning of Foodstuffs, 1969; Butter, Cheese, and Processed Milk Products, 1970

Heavy engineering

Introduction

Victoria is relatively poor in iron ore and the coking coals necessary for the production of pig iron, the basic constituent in the making of steel in large quantities. However, the availability of rolled steel products and pig iron produced mainly in New South Wales and South Australia has enabled Victoria to develop a significant heavy engineering industry.

The heavy engineer's function is to produce machinery and massive structures in metal. Foundries and rolling mills produce basic shapes which are then forged, machined, fabricated, and assembled. Heavy engineering products are such items as locomotives, railway and tramway rolling stock, and agricultural, industrial, and mining machinery, bridges, cranes, boilers, pumps, steam engines, condensing and feed heating plant, and other similar items.

Early history

Equipment and machinery manufactured in the early days of the State was, of course, less massive and more limited in application than the machines of today. In some instances activities classified as heavy engineering in the past have changed to an extent that they would not now be so classified. An example of such an industry is the manufacture of motor vehicles.

The heavy engineering industry in Victoria had its beginning in the early 1850s when a number of companies began to manufacture equipment for alluvial mining. A typical example of such an establishment was Thompsons (Castlemaine) Ltd. In 1852 the brothers David and James Thompson migrated from Ireland and engaged in the erection of quartz crushing batteries, engines, and pumps and winding equipment, mostly in the Castlemaine district. One of the earliest contracts obtained was for the supply of points and crossings for the Victorian Railways. These are still being supplied. In 1864 the company erected a flour mill in Castlemaine on the site of the present offices.

The growth of the industry was rather slow. However, for an industry that was in its infancy in a new country, the projects that were then completed were regarded as great achievements in the light of existing knowledge and industrial capacity.

Development after 1900

Towards the end of the nineteenth and during the early years of the twentieth century, industrial activity in Victoria became more diversified and the demand for heavy engineering products increased to such an extent that a number of companies entered the field. For example, by 1911 the demand for iron and steel castings resulted in the formation of Charles Ruwolt Pty Ltd (later Vickers Ruwolt Pty Ltd) which built an iron foundry, and the expansion of the steel casting plant of The Steel Company of Australia Pty Ltd.

At the beginning of the century significant advancement took place in alluvial mining when hydraulic sluicing was introduced. At this time dredges incorporating gravel pumps, nozzle pumps, sluice boxes and efficient boilers were also becoming popular, while air compressors and steam and electric winders were being used in all principal mining fields in Australia.

In 1908 the manufacture of water tube boilers and high speed forced lubrication engines was introduced to Australia and, coupled with centrifugal pumps, were supplied for irrigation purposes along the Murray River.

By 1919 complete dredges—large, complex, and cumbersome pieces of equipment—weighing up to 1,500 tons were being produced. They represented the most advanced application of mechanisation to hydraulic mining operations.

About this time, demand for such items as hydraulic lifts and hydraulic appliances increased and was stimulated by the provision of a general supply of hydraulic power in Melbourne, which prompted many new developments. Johns and Waygood Ltd derive their origin from this type of operation. At about the same time some new town gas plants were being built and this again opened up wider fields for the heavy engineer.

During the First World War engineering methods advanced rapidly partly as a result of demand for D class locomotives and marine engines. Ship building and maintenance activities increased during this period and had to rely on the abilities of local heavy engineers. Many overseas supplies were cut and the engineering industry initiated many processes and made many new types of equipment. As an example, railway and tramway tyres which until the war were imported were now made in Victoria. During this period Thompsons (Castlemaine) Ltd installed a plant which included a 500 ton forging press for the making of solid rolled tyres.

After the First World War the increasing demand for electric power generating plants resulted in further calls being made on the heavy engineering industry. Steam turbines, condensing and feed heating plants were manufactured and installed in power stations throughout Australia. At this time manufacture of lifts was also carried out on a much larger scale in Victoria.

As demand for dredges for gold mining came to an end—the last dredge being manufactured in 1927—companies in this field looked to new markets and products. Some manufactured rock crushing, mining and cement making equipment. As an indication of advances made in design and manufacture, the first rock crushers weighed a mere four tons compared with some crushers made today that weigh up to 400 tons.

Progress through the 1930s was not as rapid as in the preceding ten years; however, some companies operating in this period commenced to use research techniques and testing of products. Examples include Vickers Ruwolt Pty Ltd, Thompsons (Castlemaine) Ltd, and The Steel Company of Australia Pty Ltd, all of which developed laboratory methods of testing their products before use.

In the early 1940s Australia was again at war and production turned to defence, including the manufacture of artillery, such as 25 pounder guns and 6 pounder tank-attack guns. In addition tanks and mobile units were made. The Government ordnance factories, aircraft and shipbuilding industries expanded rapidly.

The demand on the heavy engineer through this period was so great that many existing plants had to be enlarged. Following the war years, production methods slowly changed with the advent of more sophisticated machinery; machines became larger and tended more towards automatic and semi-automatic operations. This was particularly noticeable in the automotive industry, where by the late 1940s the introduction of automatic machinery was gathering momentum. New machines also included X-ray machines for checking the depth of penetration of welds.

Present position

In some areas the Victorian heavy engineering industry is among the leaders of development. Examples are metallurgical research and development and the setting up by The Steel Company of Australia Pty Ltd, of one of five plants in the world using the vacuum refining and degassing process in steelmaking.

A typical example of how the industry has grown over the years is the plant of Thompson's (Castlemaine) Ltd. Its principal products are centrifugal pumps of all types, vacuum pumps and air compressors, welded pressure vessels, condensing, feed heating, evaporating and de-aerating plant, points and crossings, railway and tramway tyres, and heavy forgings. The company has facilities for testing of materials in accordance with British, Australian, and American standards. The company can roll mild steel plate up to 3 inches (cold) and 5 inches (hot), it can pour bronze castings up to 5 tons and iron castings up to 30 tons, and handle ingots up to 20 tons on the forge. The maximum flow that can be measured in the hydraulic test laboratory is 150,000 gals per minute. The laboratory is suitable for electric motor drives up to 2,000 hp on voltages of 2,200, 3,300, and 6,600. The maximum power on 415 volts is 1,000 hp. This particular company is only one of many in the field of heavy engineering. Others include the following :

Products	Company
Road rollers and machinery	A. H. McDonald and Co. Pty Ltd Moore Road Machinery (Vic.) Pty Ltd
Hydraulic lifts	Johns and Waygood Ltd Otis Elevator Co. Pty Ltd
Earthmoving equipment	International Harvester Co. of Aust. Pty Ltd William Adams Tractors Pty Ltd
Quarrying and mining machinery	Vickers Ruwolt Pty Ltd John Thompson (Aust.) Pty Ltd
Locomotives and railway rolling stock	Thompson's (Castlemaine) Ltd Victorian Railways

Products	Company
Structural engineers	Johns and Waygood Ltd Australian Iron and Steel Pty Ltd
Cranes	Harnishchfaeger of Aust. Pty Ltd Cranes and Shovels Pty Ltd
Boilers	Babcock and Wilcox Aust. Ltd Vickers Ruwolt Pty Ltd
Agricultural machinery	International Harvester Co. of Aust. Pty Ltd William Adams Tractors Pty Ltd
Shipbuilders and repairers	Fleet Forge Pty Ltd Hobson's Bay Dock and Engineering Co. Pty Ltd
Aircraft	Commonwealth Aircraft Corp. Pty Ltd Government Aircraft Factory
Engines and turbines	Hawker Siddeley Brush Pty Ltd Amalgamated Power Engineering (Aust.) Ltd
Motor vehicles	General Motors-Holden's Pty Ltd Ford Motor Co. of Aust. Ltd
Trams	Melbourne and Metropolitan Tramways Board Victorian Railways

Conclusion

Heavy engineering is in many ways the heart of industry ; most industries rely on the heavy engineer in some way or another. The industry is virtually self-sufficient through the availability of local materials. Knowledge and techniques, frequently adapted to local conditions from overseas research and industrial experience, are readily available in Victoria.

Ministry of Fuel and Power

Following the discovery of natural gas off the East Gippsland coast early in 1965, and anticipating the discovery of oil, the Government passed the *Fuel and Power Act 1965*, establishing the Ministry of Fuel and Power, to determine the means by which the present and future supplies could be developed and utilised. Private oil and gas companies may refer legislative and other problems concerned with the production and marketing of energy to the Ministry, which has authority to examine proposals and give decisions.

The Ministry co-ordinates the activities of the State Electricity Commission of Victoria, the Gas and Fuel Corporation of Victoria, and the Victorian Pipelines Commission, as well as any future bodies which may be established to utilise sources of primary and secondary energy.

Further reference, 1969

State Electricity Commission of Victoria

The State Electricity Commission, which was constituted by the *Electricity Commissioners Act 1918*, is a semi-governmental authority administered since 1921 by a full-time chairman and three part-time commissioners. The principal duty of the Commission is to co-ordinate and extend on an economic basis the supply of electricity throughout Victoria.

For this purpose, it is vested with power to erect, own, and operate power stations and other electrical plant and installations, supply electricity retail to individual consumers or in bulk to any corporation or public institution, acquire and operate electricity undertakings, develop, own, and operate brown coal open cuts and briquetting works, develop the State's hydro-electric resources, and form or acquire interests in any company for the purpose of selling char, coal, and briquettes.

From its own revenues, which it controls, the Commission must meet all expenditure in the operation of its power, fuel, and subsidiary undertakings, and all interest and other charges incurred in the service of its loans and other capital commitments.

The Commission is the controlling authority for all electrical undertakings in Victoria. It is responsible for the registration of electrical contractors, the licensing of electrical mechanics, the control of installation methods and material, and the testing and approval of electrical equipment and appliances.

Electricity generation

Since it began operating in 1919, the State Electricity Commission has expanded and co-ordinated the production and supply of electricity on a State-wide basis to the point where its system now generates almost all the electricity produced in Victoria and serves virtually all of the population.

Development of Victoria's electricity system is based on the utilisation for both power and fuel of Victoria's extensive brown coal resources in the Latrobe Valley in eastern Gippsland, with supplementary development of the hydro-electric potential of north-eastern Victoria. Victoria is entitled to one third of the electricity from the Snowy Mountains Hydro-electric Scheme, after the Commonwealth has taken the power it needs. Victoria also shares with New South Wales in the electricity generated at Hume Hydro Station on the River Murray.

By far the greater part of the State's electricity is generated from brown coal, either used in its raw state or manufactured into higher quality fuel in the form of brown coal briquettes. All the brown coal and briquette fuel is supplied by undertakings which the Commission itself owns and operates. Output of brown coal in 1969-70 from the three open cuts at Yallourn, Yallourn North, and Morwell totalled 22,788,946 tons, of which 18,210,187 tons were used in the Commission's own power stations, and 4,181,941 tons were manufactured into 1,540,717 tons of brown coal briquettes, 16 per cent of the briquette output then being used for electricity production in metropolitan and other steam power stations. The two functions, generation of electricity and production of fuel, are closely integrated. Apart from the large proportion of brown coal and briquette fuel consumed in the power stations, the process of briquette manufacture results also in the generation of electricity, since the steam needed for processing the raw coal for briquetting is first used to operate turbo-generators.

Electricity supply

At 30 June 1970, the number of ultimate consumers in Victoria was 1,250,540. Of these, 1,250,359 were served by the State system and 181 by local country undertakings. The State system supplies all the Melbourne metropolitan area and 2,362 other centres of population.

By 30 June 1970, almost all of the dwellings in the State, and 73,401 of Victoria's 75,600 farms were supplied with electricity.

Electricity supply has been extended almost throughout the State and there are now only a few remote areas not served by the State distribution system.

The Commission sells electricity retail in all areas except part of the metropolitan area, where it sells in bulk to eleven municipal undertakings which operate as local retail supply authorities under franchises granted before the Commission was established. Bulk supply is also being provided at present to several New South Wales municipalities and irrigation settlements bordering the River Murray. The number of consumers served by the State system outside the Melbourne metropolitan area is 602,861. Of the new consumers connected to supply by the Commission each year, almost two thirds are outside the metropolitan area.

The Commission's retail consumers numbered 1,014,572 at 30 June 1970. Retail supply is administered through the Metropolitan Branch and ten extra-metropolitan branches (Barwon, Eastern Metropolitan, Gippsland, Mallee, Midland, Mid-Western, North-Eastern, Northern, South-Western, and Wimmera). A 30 June 1970 there were branch and district supply offices in Melbourne and 95 other cities and towns in Victoria.

Electricity production, transmission, and distribution

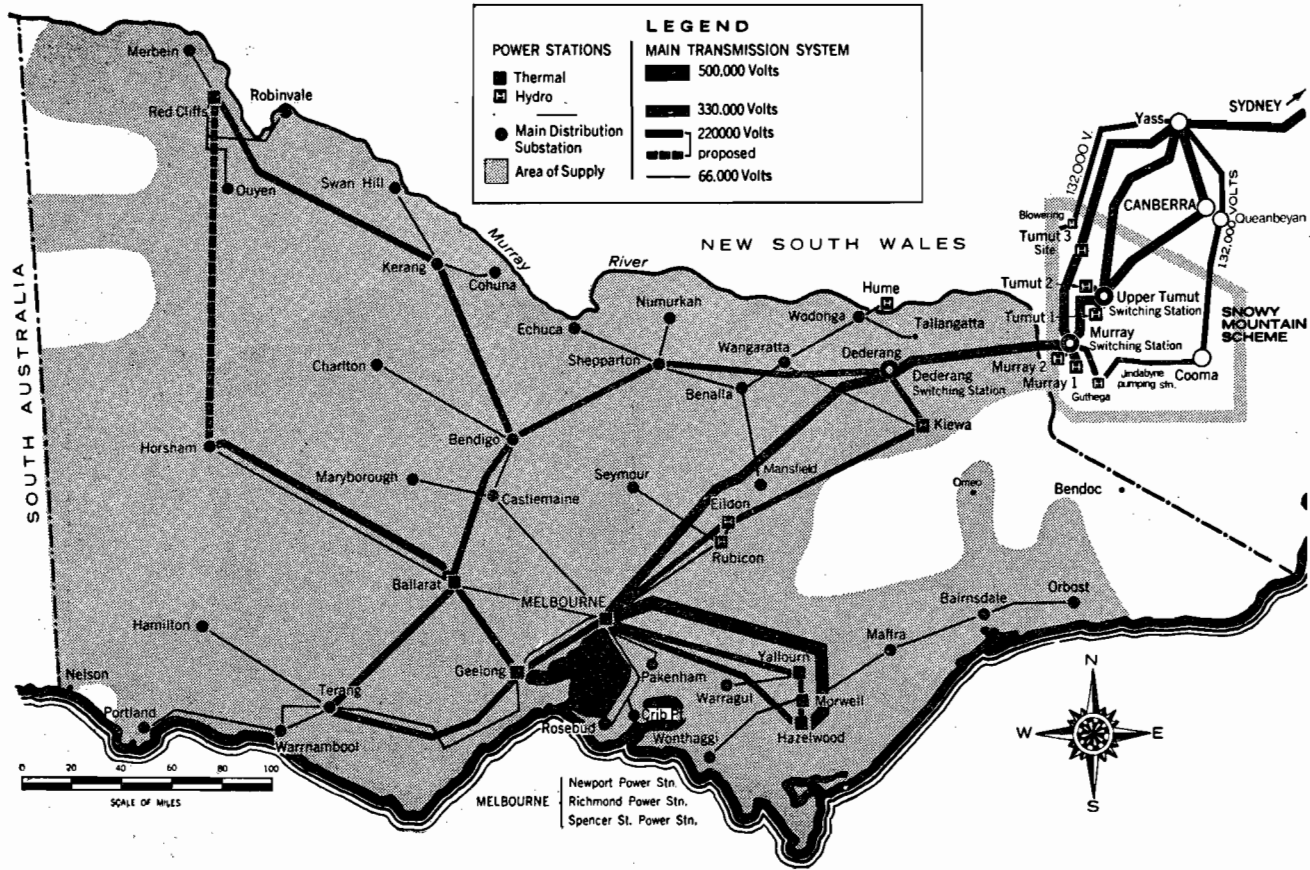
Electricity generated in the State system or purchased by it totalled 13,454 mill. kWh in 1969-70, or more than 99 per cent of all Victoria's electricity for public supply. The system comprises a series of thermal and hydro-electric power stations. Inclusive of generator capacity both within the State and available to the Victorian system from outside the State, the total installed generator capacity at 30 June 1970, was 3,546,000 kW. Power stations are interconnected and feed electricity into a common pool for general supply.

The major power station in this interconnected system is the brown coal burning power station at Hazelwood, which alone generates 55 per cent of Victoria's electricity. It became fully operational with eight 200MW generating sets in service in 1970. Other power stations in the interconnected system comprise two further base-load power stations—Yallourn (which contributes 23 per cent) and Morwell; steam stations in Melbourne (Newport, Richmond, and Spencer Street), Geelong, and Ballarat, and also at Red Cliffs, which has, in addition, some internal combustion plant; and hydro-electric stations at Kiewa, at Eildon, on the Rubicon and Royston Rivers near Eildon, and at Cairn Curran, on Eppalock Reservoir on the Campaspe River near Bendigo. All major power stations within Victoria are Commission owned, except Spencer Street Power Station, which remains the property of the Melbourne City Council, although operated as a unit in the interconnected system.

A 330 kV transmission line links the Victorian system with the Snowy Mountains undertaking, and also provides facilities for interconnection between the Victorian and New South Wales State generating systems. Also linked with the Victorian interconnected system is the hydro station at Hume Reservoir on the River Murray. This power station is operated by the Electricity Commission of New South Wales. Output and operating costs are shared by Victoria and New South Wales.

In meeting the total demand on the system, which fluctuates throughout the day and from month to month, each group of stations in the interconnected system is assigned a pre-determined function dependent upon

FIGURE 11. Victoria's main power transmission system.



the availability of power from each group and the economics of generation. The various stations are utilised in the combination that will meet the system load most economically at a given time.

The electrical transmission and distribution system in the State supply network at 30 June 1970, comprised 61,306 miles of power lines, four auto-transformation stations, 25 terminal receiving stations, 158 zone substations, and over 62,000 distribution substations. Main transmission is by 500 kV, 330 kV, 220 kV, and 66 kV power lines which supply the principal distribution centres and also provide interconnection between the power stations. The 500 kV, 330 kV and 220 kV systems total 1,943 route miles.

The transmission of energy from Hazelwood at 500 kV is at the highest voltage for electricity transmission in the southern hemisphere. A second 500 kV transmission line from the Latrobe Valley is expected to be in service in 1971.

The following table shows the predominant part taken by the State Electricity Commission in the generation of public supply electric power in Victoria, the amount of power generated by water power and other sources, and the relative importance of the main power stations :

VICTORIA—PUBLIC SUPPLY ELECTRICITY GENERATED, POWER STATIONS, AND SOURCES OF POWER, 1968-69

Station or origin of power	Source T = Thermal (a) H = Hydro.	Quantity	Percentage of production
		mill. kWh	
State Electricity Commission—			
Own generation—			
Hazelwood Power Station	T	5,838·1	47·8
Yallourn Power Station and Briquette Factory	T	3,896·0	31·9
Morwell Power Station	T	1,175·0	9·6
Newport Power Station	T	324·8	2·7
Spencer Street Power Station (b)	T	55·6	0·4
Richmond Power Station	T	17·7	0·1
Provincial thermal power stations	T	12·5	0·1
Total S.E.C. thermal generation	T	11,319·7	92·6
Eildon	H	226·0	1·9
Kiewa	H	396·7	3·2
Total S.E.C. hydro generation	H	622·7	5·1
Other public supply generation	T	13·9	0·1
Total generation by public supply undertakings	T and H	11,956·3	97·8
Net interstate purchases	T and H	265·4	2·2
Total	T and H	12,221·7	100·0

(a) Includes internal combustion.

(b) Melbourne, City Council.

Future development

Hazelwood Power Station, the largest project undertaken by the State Electricity Commission, provides 1,600 MW of base-load capacity. The

station operates on raw brown coal supplied by belt conveyors from the Morwell open cut.

A new power station, Yallourn 'W', being built half a mile west of Yallourn Power Station, will meet base load growth after the completion of Hazelwood. Yallourn 'W' will have two 350 MW turbo-generators operating on brown coal supplied by conveyors from the Yallourn open cut. The station's first unit is expected in service in 1972 and the second in 1973.

Local country electricity undertakings

The operation of independent undertakings is governed by the *Electric Light and Power Act 1958*, which is administered by the State Electricity Commission. Under the Commission's rural electrification programme, the Mallacoota undertaking, the only remaining independent electricity undertaking in Victoria, is shortly to be acquired and absorbed into the State system.

The only other Victorian public supply not provided by the Commission is in the Bendoc area, which is served by the Monaro County Council in New South Wales. The number of consumers in the Mallacoota and Bendoc areas was 181 at 30 June 1970.

Gas industry

The gas industry in Victoria provides a reticulated gas supply to the Melbourne metropolitan area and to twenty-six country centres throughout the State. The Melbourne metropolitan area accounts for approximately 89 per cent of all gas sales. Gas is supplied by the Gas and Fuel Corporation of Victoria, a public authority of the State, and two privately-owned public companies, The Colonial Gas Association Ltd and The Geelong Gas Company. A fourth company, The Gas Supply Company Ltd, sold its assets in Victoria to the Gas and Fuel Corporation late in 1970. Consumer and sales statistics for the individual undertakings for the year ended 30 June 1970 are set out in the following table :

VICTORIA—CONSUMER AND GAS SALES

Undertaking	Consumers at 30 June 1970	Sales 1969-70 million therms
Gas and Fuel Corporation of Victoria	447,652	130.0
The Colonial Gas Association Ltd	87,456	23.1
The Geelong Gas Company	24,000	5.0
The Gas Supply Company Ltd	15,200	6.9
Total	574,308	165.0

Gas and Fuel Corporation of Victoria

The Gas and Fuel Corporation of Victoria came into being by Act of Parliament in 1950. It was formed by the merger of the Metropolitan and Brighton Gas Companies which supplied gas to adjoining areas. The privately held shares in the two companies were exchanged for fully paid up preference shares in the Gas and Fuel Corporation and the State Government of Victoria invested \$8m which was held as ordinary shares in the Corpora-

tion. Three directors are appointed by the preference shareholders and the chairman and three other directors are appointed by the Government. The Corporation's operations are governed by the *Gas and Fuel Corporation Act 1958*.

The Corporation was originally formed to utilise the large resources of brown coal in the Latrobe Valley for town gas production. Its responsibilities include, among other things, encouraging and promoting the use of gas and advising the Government how to secure a safe, economical, and effective supply of gas in Victoria.

The Lurgi high pressure gasification plant was erected at Morwell between 1951 and 1956 and came into operation in 1956. This plant, which produced town gas from brown coal briquettes, continued to make a significant contribution to the Corporation's total gas issues until 26 November 1969, when it was shut down as part of the programme of progressive phasing out of manufacturing plant following the introduction of natural gas.

Changes in raw material availability and parallel development of new gas making processes have led to considerable diversification in the methods of gas production over the years. The Corporation has progressively introduced new gasification processes making use of new feedstocks to achieve minimum production costs. This diversification is illustrated in the following table :

VICTORIA—GAS AND FUEL CORPORATION OF VICTORIA :
GAS MADE AND PURCHASED

Type of gas	1959-60		1968-69		1969-70	
	Million therms	Per cent of total	Million therms	Per cent of total	Million therms	Per cent of total
Brown coal gas (Lurgi)	20.4	27.5	36.7	31.3	14.1	10.0
Black coal gas	24.8	33.5	6.6	5.6	3.2	2.3
Water gas	8.0	10.8	2.4	2.1	0.5	0.3
Oil gas	..	..	20.8	17.8	21.2	14.9
Refinery gases	20.9	28.2	45.4	38.7	32.5	23.0
Natural gas	..	..	5.2	4.5	69.9	49.5
Total gas issued	74.1	100.0	117.1	100.0	141.4	100.0

The Corporation's metropolitan distribution system, which includes supply to the Mornington Peninsula, now covers an area of approximately 262 sq miles. Gas is also supplied to the country centres of Bendigo, Castlemaine, Kyneton, Maffra, Morwell, Sale, Traralgon, Traralgon, and Warragul. The Sale undertaking was purchased from the Gas Supply Company Ltd in May 1969. At 30 June 1970 the Corporation was supplying gas to 441,879 consumers through systems involving approximately 4,919 miles of main.

Natural gas

Victoria's natural gas supplies are coming from the Esso and B.H.P. Barracouta and Marlin gas fields off-shore in east Gippsland. Transmission of natural gas from the outlet of the Esso/B.H.P. treatment plant at

Longford to the Corporation's city gate at Dandenong is undertaken by the Victorian Pipelines Commission. The Corporation was appointed consultant to the Commission for the design and construction of the Longford-Dandenong natural gas transmission pipeline, and associated ancillary facilities.

Construction of the 108 miles long, 30 inch diameter, 1,000 psig transmission pipeline commenced in February 1968 and was completed in January 1969. Natural gas was turned into the Corporation's metropolitan distribution system on 31 March 1969 and the task of converting gas appliances owned by the Corporation's customers began on 14 April 1969.

The Corporation transports gas from the city gate at Dandenong through its high pressure trunk distribution system, a major feature of which is a ring main operating at pressures up to 400 psig. This ring main consists of a 51 mile long, 18 inch diameter northern loop running between Dandenong, Doncaster, Keilor, North Melbourne, and West Melbourne, where it joins the 22.5 miles long, 30 inch diameter loop between Dandenong and West Melbourne. The northern loop was constructed and commissioned in sections, laying commenced in October 1966 and was completed in October 1969. Construction of the 30 inch diameter section began in December 1968 and was completed in May 1970. The Corporation's conversion operation took place in two stages. The first or pre-work stage, commenced on 8 April 1968 and continued ahead of the second or final conversion stage. The final conversion operation commenced on 14 April 1969, and was completed on 22 December 1970.

International Gas and Power Engineers Pty Ltd were responsible for the conversion operation on behalf of the Corporation and worked closely with the Corporation's conversion division which undertook the task of planning and administering the conversion of consumers' appliances to natural gas.

Before natural gas was introduced the Corporation's entire metropolitan distribution system was divided into sections, each containing approximately 3,000 consumers. Valves were inserted in the existing mains to allow each section to be isolated from its neighbours and fed with natural gas at the time of conversion. Over the conversion period the contractor converted approximately one million domestic, industrial, and commercial appliances on the premises of the Corporation's consumers. Two sections of approximately 3,000 consumers were converted each week and the operation was designed to minimise consumer inconvenience. At 7 October 1970, 895,124 appliances owned by 363,672 of the Corporation's customers had been converted to burn natural gas.

The introduction of natural gas is expected to result in significant growth in domestic and commercial gas usage. However, forward estimates indicate that the greater part of the potential market for this fuel lies in the industrial sphere.

The Colonial Gas Association Ltd

The Colonial Gas Association Ltd was incorporated in 1888. It supplies gas in the Footscray and Box Hill areas of Melbourne and in the country centres of Benalla, Horsham, Seymour, Shepparton, and Wangaratta. Until

1959 the Association's gas works operated using conventional carbonisation methods to produce gas from black coal imported from New South Wales. Between 1959 and 1963 its country undertakings were modified to operate on tempered liquefied petroleum gas and, at the same time, liquefied petroleum gas became a significant feedstock in its metropolitan gas undertakings. At 30 June 1970 the Association was supplying gas to 87,456 consumers in Victoria, of which about 79,000 are located in Melbourne's eastern and western suburbs, through approximately 1,400 miles of main.

The Association purchased its first supplies of natural gas on 5 May 1969 and immediately commenced the conversion of consumers' appliances in its area of supply in the eastern suburbs of Melbourne. Carried out by the conversion contractor, Stone and Webster Service Pty Ltd, the entire operation in both the eastern and western supply areas was completed early in March 1970.

The Geelong Gas Company

The Geelong Gas Company was incorporated by Act of the Victorian Parliament in 1858; it has an exclusive franchise for the supply of reticulated gas throughout the Geelong area and the Bellarine Peninsula. On 1 July 1969 it purchased the Queenscliffe Gas and Coke Company Ltd from the Gas Supply Company Ltd. At 30 June 1970 gas was supplied to 24,000 customers through about 370 miles of mains.

During the year the Company initiated a programme of installing propane gas satellite plants to supply localised communities some distance from the reticulated supply and is planning to expand this type of operation.

The Victorian Pipelines Commission commenced, in September 1970, the construction of a 32 miles long, 14 inch diameter transmission pipeline to convey natural gas to the Geelong area in March 1971. The Geelong Gas Company has several miles of new high pressure pipelines to distribute the gas and has commenced preparatory work on the conversion of appliances.

The Gas Supply Company Ltd

The Gas Supply Company Ltd was incorporated in Victoria in 1926 and operates gas undertakings in Victoria, New South Wales, and Queensland. At the present time the company provides a reticulated gas service in the Victorian towns of Ararat, Bacchus Marsh, Ballarat, Colac, Hamilton, Portland, Stawell, Warrnambool, and Wodonga. Originally, all the gas supplied in these areas was manufactured from coal. In 1962, however, the Company constructed the first tempered liquefied petroleum gas satellite plant in Australia to supply industry with gas produced in local refineries, and has now completely rebuilt all plants to supply either reformed or tempered liquefied petroleum gas.

Some 51 per cent of the Company's customers are supplied by its Ballarat undertaking which in 1969-70 accounted for over 76 per cent of the Company's total gas sales in Victoria.

The Company's assets in Victoria were sold to the Gas and Fuel Corporation for \$3.3m late in 1970.

Victorian Pipelines Commission

Formation

The Victorian Pipelines Commission, consisting of a full-time Chairman and four part-time Commissioners, came into existence on 1 March 1967 under the provisions of the *Victorian Pipelines Commission Act 1966*. The Commission is responsible for the construction, operation, and maintenance of natural gas transmission pipelines in Victoria. It acts as a common carrier of natural gas, and may also buy and sell natural gas, although it may not retail gas in any area served by the Gas and Fuel Corporation of Victoria, or any other gas utility, without the prior consent of the relevant utility.

Operations

The Commission's initial activity was the construction of the pipeline from the gas producers' treatment plant at Longford to Dandenong where it connects with the metropolitan gas distribution network. This pipeline is 108 miles long, 30 inches in diameter and is designed for an operating pressure of 1,000 lb per square inch. It was laid underground with a minimum cover of 4 ft. Laying commenced in February 1968 and the line began operating on 16 March 1970. The metering and testing station has been constructed at Longford, and constant checks of the specific gravity, calorific value, moisture content, and other properties of the gas are made before it enters the transmission pipeline. Metering and regulating stations have been constructed at Dandenong, Ringwood, and Footscray where the gas passes through filtering equipment, meters, and pressure regulators before it is delivered to the metropolitan systems of the Gas and Fuel Corporation and The Colonial Gas Association Ltd. A branch of the Longford-Dandenong pipeline supplies the provincial centres of Sale and Maffra.

The Commission's first major extension of the transmission pipeline will be the 14 inch diameter pipeline from Melbourne to Geelong. To be laid by Australian Pipelines Construction, the line will be 32 miles long with a maximum operating pressure of 1,000 psig. To be completed in 1971, it is estimated to cost \$2.5m.

At 30 June 1969 the loan liability of the Commission was \$17,750,000.

8

SOCIAL CONDITIONS

CULTURAL AND RECREATIONAL

National Gallery of Victoria

The National Gallery of Victoria was founded in May 1861 when the Governor, Sir Henry Barkly, declared open a small room in which were a number of plaster casts of classical sculpture and other objects which had been purchased a few years earlier in London. Thus, unlike most public galleries, this institution did not start with a collection of paintings, and it was not until 1864 that the first picture gallery was opened.

The richness of the collections is in great part a tribute to a long tradition of public benefaction. Such names as McAllan, Kent, Templeton, Connell, Felton, and Everard Studley Miller are among many who, by gifts of money and objects, have, to a large extent, created the Gallery. The most distinguished name in any such list is, of course, that of Alfred Felton, and the bequest which bears his name is indivisibly connected with the Gallery.

Arts Centre

The Victorian Arts Centre is a major State project to provide a focal point for cultural activities in Victoria. The first unit of the Centre, the new building for the National Gallery of Victoria situated in St Kilda Road and designed by Sir Roy Grounds, cost \$14m and was opened on 20 August 1968. The new building provides space for the display of collections in each department and incorporates a concept of considerable value, both to scholars and the general public, in the provision of "study storage". This comprises reserve areas to which inquirers can gain access and where every object not on display is available for inspection.

The Gallery is provided with a hall of about 10,000 sq ft for temporary exhibitions of all kinds, a full-scale education department with areas for lectures, demonstrations and practical work, and the Great Hall, an area designed for banquets, receptions and State occasions, and with fine acoustic qualities for the performance of music. The Hall has a ceiling of carved, coloured glass designed by Leonard French.

Work commenced on the second stage of the project at the north end of the site in 1969. This area will provide accommodation for the arts of music, ballet, opera, and drama and is visualised as consisting of a concert hall to seat 2,500, a music-dance theatre for 1,800, a drama theatre for 750, and an auditorium and experimental theatre with seating for 1,000. In addition to these performing areas, there will be rehearsal stages,

recording studios, and administrative areas. The Centre will be completed with the construction of the spire rising over the main theatre complex to a height of 415 ft. This will not only mark the site of the complex but will contain restaurant, cafeteria, and administration services, including the headquarters of the National Gallery Society.

Bequests

The National Gallery of Victoria is unique in Australia in the number and range of its private benefactions. The most important of these has been the Felton Bequest which, since 1905, has made it possible for works of art of all kinds and all periods to a value of more than \$4.5m to be added to the collections. The departments of Painting, Sculpture, and Prints have been greatly enhanced by the Everard Studley Miller Bequest which is restricted to the acquisition of portraiture before 1800. Recently the Gallery's collection of glass was considerably enriched by the presentation, through the William and Margaret Morgan Endowment, of two hundred outstanding examples of English glass.

Recent acquisitions

Despite the ever increasing cost of works of art a number of important acquisitions were made to the National Gallery collections during 1969. Eight prints by Picasso, four of them from the famous Vollard suite, were purchased for the Print Room. The representation of the work of one of the greatest of contemporary Japanese printmakers, Shiko Munakata, was strengthened by the purchase, through the Felton Bequest, of *The Ten Disciples of Buddha*, perhaps Munakata's best known woodcut series.

Paintings by Sydney Ball, James Doolin, Michael Johnson, Nigel Lendon, Tony McGillick, Guy Stuart, and Dick Watkins were added to the collections of the Department of Australian Painting thus strengthening the holdings of hard-edge and minimal painting. *The Coast Near St Kilda* by Thomas Clark (1814–1883) was purchased in 1969 and this, besides being a charming picture in its own right, is also a valuable historical record of the local coastline during the latter half of the last century.

Through the Felton Bequest two fine examples of eighteenth century furniture have come to the gallery. Although close in date they are completely contrasted; one an Italian console-table of c. 1730 is exuberant in style whilst the other, a bureau-plat signed by the French ébéniste, Bernard II van Risenburgh, dated c. 1740 is of great simplicity and elegance. Other important additions to the Department of Decorative Arts were in the fields of Spanish glass, Greek and South Italian pottery, and Romano-Egyptian jewellery.

The Department of Sculpture purchased *The Column of the Traveller* by Arnaldo Pomodoro (b. 1926) and *Piano* by the outstanding English sculptor Anthony Caro (b. 1924).

Exhibitions

Major exhibitions held during the latter part of 1968 and 1969 included the large and comprehensive *Design in Scandinavia* exhibition, the Alcorso-Sekers *Travelling Scholarship Award for Sculpture*, and *Three Trends in Contemporary French Art*. In addition the Gallery's policy of presenting the work of important Australian artists was pursued in the

Retrospective Exhibition of pottery by Victorian potter H. R. Hughan. A rare opportunity for the public to see paintings and prints from a private collection was given when a selection from *The Aubrey Gibson Collection* was put on view during July and September.

Galleries throughout the world commemorated, in 1969, the three hundredth anniversary of Rembrandt's death and, in Melbourne, the occasion was marked by an exhibition of the entire holdings of paintings, prints and drawings by this artist. The Gallery also organised several smaller exhibitions as part of its policy of presenting to the public a wide range of materials and artists.

National Gallery Society

The National Gallery Society which has functioned since 1947 now has a membership of 6,500. It offers a continuing programme of lectures, films, and other monthly activities and this year has seen the introduction of a special series of classes for the children of members. The Society has now entered fully into a programme of acquisitions on behalf of the Gallery and, at the end of 1969, an exhibition was held in which recent purchases were formally handed over to the Council of Trustees of the National Gallery.

National Gallery Education Programme

The Education Section of the National Gallery of Victoria occupies 7,900 sq ft of floor space, 3.4 per cent of the total area of the building, and contains flexible teaching areas with audio-visual equipment. These are used for the lectures, discussions, and other forms of communication which provide introductory stimulus before students view the original works of art in the Gallery collection.

The section is staffed by the Chief Education Officer who is a member of the Gallery staff and by five full-time and six part-time education officers. These teachers have specialist art training and are seconded by the Education Department of Victoria. They cater for individual requests by teachers for study of particular areas of the collection as well as offering sessions especially planned to meet the needs and interests of varying age levels.

Each term an information folder is sent from the Education Section to the principal of every school in Victoria. Through it teachers are informed of arrangements for booking visits to the Gallery, of temporary exhibitions, and of special features of the education programme.

Primary, technical, and high schools as well as registered schools use these services and many of the students come from country centres throughout Victoria. Tertiary institutions such as teachers colleges and art schools are visiting the building much more frequently than in the past and business colleges and organisations training youth leaders, occupational therapists, etc., appreciate visits which cater for their general cultural interests. There has been a steady demand for sessions from teacher groups and educational organisations.

The Education Programme is available to teachers of all subjects, the Gallery collection providing many starting points for students of, for example, history, literature, social studies, biblical studies, home economics, and Asian studies, as well as of art and craft. Schools which are now

developing individual courses for the first years of the secondary syllabus are making use of the Gallery in imaginative and experimental sessions.

Free admission is given for all school visits booked with the Education Office at least 48 hours in advance. At present education officers attend to between 1,200 and 1,500 students a week. A further 400 to 800 students come into the Gallery weekly to study with their own teachers. Groups staffed by education officers are divided so that one education officer works with no more than 25 to 30 children at a time.

In addition to the daily programme of school visits the Education Section is responsible for planning and staffing a travelling exhibition of works of art which visits country centres throughout the year. It also arranges vacation programmes, revision lectures for Higher School Certificate students, and exhibitions of special educational interest.

The wide range of students (from primary to tertiary) and the variety of sessions offered call for considerable versatility on the part of the education staff whose overall aim is to evoke the maximum response from a direct encounter with original works of art.

Further references, 1963 to 1970

Swan Hill Folk Museum

The Museum situated on the Marraboor River, Swan Hill, is a folk museum which incorporates many aspects of pioneering in Victoria. Swan Hill is a fitting site because of the district's association with early explorers and surveyors, and the settlers who fanned out along the river systems from southern Queensland to South Australia. The inland river system provided a vital means of communication and Swan Hill, because of its position near the confluence of the Murray-Darling river systems, participated in many developments in the nineteenth century.

The aim of the Museum is to depict the era of inland development and to provide, through planned educational and research programmes, an understanding of Australian history by showing the inter-relationship of man and the environment and the institutions developed by the pioneer settlers.

The idea of Folk Museum at Swan Hill was first discussed in 1961 and two years later the City Council provided the land at Horseshoe Bend and the Paddle Steamer *Gem* was purchased to be the central attraction of the proposed Museum. In that year Sir Roy Grounds also agreed to be the architect and several other experts helped in the planning of the project. The Victorian Government has provided \$250,000 of grant funds on a 2:1 basis towards capital works. The Committee of Management had raised approximately \$150,000 as its proportion of cost of works to the end of 1969.

Under a Master Plan devised in 1963 the construction was programmed in stages. However, attendances exceeding 100,000 persons a year have influenced several aspects of Museum development—particularly those designed to serve visitors. The Paddle Steamer *Gem* has been restored and now houses the administration offices, the art gallery, and a restaurant.

A pioneer town is being developed with buildings representing important facets of early community life in Australia—the Cobb and Co. coach house, a post office, a saddler's shop, a bank, a blacksmith and wheelwright, a printer, a garage, and a fire station. Other buildings to be erected will include

a pharmacy, a court house, a general store, a police station and lock-up, and a mechanics institute. These buildings are being appropriately furnished and will house social and technological information of early Australia. There is also a pioneer homestead complex showing the station homestead and its many outbuildings—each with its distinctive design or material content.

It is hoped to establish an Australian environment park across the Marraboor River where the various habitats of the Australian inland are to be reinstated. Future generations will then be able to appreciate the effects of man on the original condition of the environment and the efforts being made to re-create the balance of nature. Further developments include the construction of a theatre for stage productions and educational programmes and development of five acres of park land adjacent to the Museum.

Planned expansion of research and documentation will ensure that the information services can meet the demand for well documented material.

Library services

Library services in Victoria are provided by the State Library of Victoria, and by free municipal or public libraries in some 150 municipalities in the State.

State Library of Victoria

In the early 1850s, some influential citizens, pressing the Government to provide for the literary and educational needs of the community, found Governor La Trobe both sympathetic and helpful. An area of two acres was reserved for the library, and a sum of £6,500 placed on the Estimates for the erection of a building and for the purchase of books. This amount was passed in the Appropriation Act signed on 20 January 1853. On 20 July in the same year, five trustees were appointed, with Mr Justice (later Sir Redmond) Barry as chairman. The foundation stone was laid on 3 July 1854 and the Library opened on 11 February 1856.

By 1900 it was evident that a larger building was necessary, and in March 1905, the Librarian recommended that the most fitting way to celebrate the jubilee of the institution would be to erect a new building. On 14 November 1913 the great central octagonal reading room, with its associated book stacks, was opened. A further step was taken in March 1965, when the La Trobe wing, which holds the State's Australiana collection, was opened to the public.

The Library was first known as the Melbourne Public Library, later as the Public Library of Victoria, and from 1960 as the State Library of Victoria. It is a branch of the Chief Secretary's Department.

The Reference Library is the basic research library for the State. For the first hundred years of its existence it built up strong collections in a wide range of subjects but recently it has been necessary to limit the areas in which collecting is done in depth. Among fields of continuing interest are historical bibliography, with early printed books and private presses of the nineteenth and twentieth centuries; fine arts, including painting, sculpture, and the decorative arts with emphasis on Oriental art; music, both literature and scores; history and typography especially British; military history including the First World War; and biography, together with genealogy and parish registers.

The principal fields which were formerly developed but not maintained extensively, and in which the Library has outstanding 19th century collections, are religion, engineering, and pure science. Files of newspapers and government publications from Australia, the United Kingdom, the United States of America, New Zealand, and Canada are maintained. Representative international organisations such as the United Nations Organization deposit all important papers in the Library.

The Lending Branch was opened to the public in 1892. In 1920 the regulations were amended to allow the dispatch of books to persons living in country areas.

With the expansion of libraries through Victoria consequent upon the passing of the Free Library Service Board Act in 1946, it was realised that the provision of more trained staff was essential. In 1948, therefore, the trustees established a Library School. Students are prepared in the School for the Registration Examination of the Library Association of Australia.

State Archives

The Archives Division of the State Library is responsible for Government departmental and semi-government records of the State, many of which are housed in the La Trobe Library. From 1893, when the office books of the Melbourne agency of the Derwent Bank were deposited at the State Library, until 1910, there were desultory collections of source material. In 1910 the Premier received a deputation from the Historical Society of Victoria and firm plans began to be made for the preservation of State documents.

The idea of an Archives Department together with the historical collection was mooted in 1914, and in 1917 a Royal Commission on the public services called attention to the "great space occupied in storage rooms of the Public Offices by obsolete documents". Two years later a deputation to the Chief Secretary from the trustees of the Public Library and the Historical Society of Victoria requested that certain records be handed over to trustees pending the establishment of a public records office; but with the exception of the Chief Secretary's records from 1836 to 1870, no large allocation was made. In 1927 a Board of Inquiry into methods in the Public Service drew attention to the keeping of official records by the department, and made recommendations relating to uniform methods of registration of records and correspondence.

In 1928, as a result of agitation against the destruction of records, a Premier's instruction was issued that no records be destroyed before first being offered to the trustees of the Public Library for inclusion in the Archives. This instruction was repeated several times after that date. Indiscriminate war-time pulping of historically valuable documents led to a request in 1941 by the History School of the University of Melbourne, the Historical Society of Victoria, and the Library Trustees for the appointment of a full-time Archivist. This appointment was made in 1948, and in 1955 the Archives Division was created.

Municipal library services

The modern movement in municipal library service dates from the inception of the Free Library Service Board in 1947. Under the *Library Council of Victoria Act 1965*, the control of the Board passed to the Library

Council of Victoria, and in 1966 its office was re-designated the Library Services Division of the Library Council.

In 1970, 157 councils, representing 2,917,000 Victorians, shared government library grants amounting to \$1.4m. Of this amount, \$1.3m was direct municipal library subsidy. With the addition of expenditure from these councils' own funds, expenditure on municipal library services for 1969-70 was over \$3.9m, an average expenditure of approximately \$1.35 per head of the population served. In 1968-69, 705,000 borrowers used the services, totalling 2,538,000 books, to the extent of 13,641,000 issues.

Regional libraries of which there are twenty-five at present, comprising a total of 108 councils, consist of groups of councils which pool their resources, book-stocks, and trained staff. Since 1962, six metropolitan regional library services have been formed. The Victorian government provides a Rural Library Establishment and Regional Library Development Grant of \$54,250 per annum. There are thirteen bookmobile services operating in Victoria, ten in country regions and three in the metropolitan area.

Library Council of Victoria

In 1963 the Governor in Council appointed a Board of Inquiry to assess the library situation in Victoria, and to make recommendations for future development. In August 1964 the Board of Inquiry presented a comprehensive report on all phases of library work in the State with a list of recommendations for improvement and development of libraries. One in particular was that the State Library Trustees and the Free Library Service Board should be replaced by a single authority.

In 1965 Parliament enacted the Library Council of Victoria Act, the principal object of which was to constitute the Library Council of Victoria consisting of a president and eight members, appointed by the Governor in Council. The Act provided that the first president of the Council should be the Chief Justice of Victoria. The Act also stated that of the eight other members, six should meet certain qualifications, namely, one should be a person holding a senior academic position in a university in Victoria; one should be a person distinguished in the field of commercial or industrial administration; one should be a person distinguished in the field of education; one member would represent municipalities within the metropolis defined under the Act; another the municipalities outside the metropolis; and one of the members should be a professional librarian appointed from a panel of names submitted by the Victorian Branch of the Library Association of Australia.

The principal functions of the Council are to manage and control the State Library; to assist in the promotion, organisation and supervision of the Free Library Services (including children's libraries); to advise on matters of general policy relating to free libraries; to make recommendations to the Minister on the allocation of monies made available by Parliament to assist free libraries; to provide advisory services to free libraries and to associated institutions; and to manage and control the preservation of public records.

The Council was duly constituted on 13 April 1966, and since that date

has managed the State Library of Victoria and has advised the State Government on the promotion of public library service throughout the State.

Victorian Book Resources Committee

When the Melbourne Public Library was founded, its Trustees attempted to collect material in depth in all fields of knowledge, and to establish as far as possible a complete record of human thought and action. This policy was followed with considerable success well into the twentieth century.

Because of the rapid increase in the number of books and periodicals published in this century, it is no longer possible for any library to pursue such all-embracing objectives, and no library can any longer be self-sufficient in its resources. It becomes expedient, therefore, for libraries to share their resources with each other, and this has led to the development in the mid-twentieth century of new co-operative patterns of acquisition, recording, and use of books.

In 1956 through the action of the National and State Librarians, a planning body called the Australian Advisory Committee on Bibliographical Services (AACOBS) was set up to consider measures for the co-operative development of the book resources of Australia. In 1965 Book Resources Committees were set up in each State to co-ordinate acquisition in their areas, to organise and improve existing resources by co-operative projects, and generally to promote co-operation amongst libraries of all types.

The Book Resources Committee for Victoria consists of the State Librarian, the librarians of the university libraries, the C.S.I.R.O. network of libraries, the Parliamentary Library, and representatives of tertiary college libraries, local public libraries, and special libraries.

Through regular meetings of this Committee and of groups responsible to it, weaknesses in existing book provision are being identified and the economical use of library money is being promoted through the avoidance of unnecessary duplication of resources. Libraries are thus being enabled to develop special strengths in their collections in co-ordination with other libraries but without loss of autonomy.

Further references, 1961-70; National Museum of Victoria, 1969; Royal Society of Victoria, 1963; Drama, 1963; Special and Research Libraries, 1964; Painting in Victoria, 1964; Sculpture in Victoria, 1964; State Film Centre, 1964; Regional Libraries, 1965; Book Publishing, 1965; Music, 1965; La Trobe Library, 1966; Board of Inquiry into Library Services, 1966; Manuscript Collection in La Trobe Library, 1967; Public Records in Victoria, 1968; Drama, Opera, and Ballet, 1968; Art Library, 1969; Victoriana in the State Library, 1970

Institute of Applied Science of Victoria

The Institute of Applied Science of Victoria (Victoria's science museum), which commenced operations on 8 September 1870 as the Industrial and Technological Museum, entered a new phase of its history following the formal separation of the National Gallery of Victoria from the group of four branches housed on the Swanston Street block. The consequent availability of some 58,000 sq ft for allocation to the State Library, National Museum, and Institute of Applied Science made possible some easing of the acute problems of accommodation which had beset all branches for many years.

After an examination of the relative needs of the three remaining branches, the Institute was allocated all the old National Gallery area except the Stawell, La Trobe, and McAllan Galleries, and its existing main areas (Queen's Hall and North West Wing) were allocated to the State Library. These decisions involve the transfer of virtually all displays, preparation facilities, and offices to new locations. This transfer will take some years to complete. As the display area will be more than doubled, a large number of new displays will be created, and the opportunity to modernise old displays before re-establishing them is being fully exploited. In the meantime, temporary displays in the new areas are available to visitors.

The Institute presents displays on applied aspects of all the sciences, including engineering, physics, chemistry, geology, and biology (the latter including public health). Exhibits are continuously reviewed as scientific knowledge progresses, and an endeavour is made to include the historical background in any subject. The H. V. McKay Planetarium continues as a soundly established and popular service. Aids are provided specifically for school parties by the Institute and the Education Department. Four teachers are currently seconded for this service. Plans are being developed for a comprehensive education centre in the George Swinburne gallery basement.

Other important services include a radiocarbon dating laboratory and the observatory. The latter is used for telescope viewing by visitors with the assistance of demonstrators from the Astronomical Society of Victoria. This service has now been running continuously for 22 years, and some 32,300 persons have been given the experience of direct viewing of the night sky through high performance instruments. Combining this service with the planetarium, the Institute is filling a role in meeting the demand for education in astronomy, a demand which grows with the progress of space research.

The professional staff is always available to deal with inquiries by visitors and correspondents. These inquiries range over a multitude of subjects, and information not always readily available from other sources is supplied to many persons each year.

Further reference, 1970

National Trust of Australia (Victoria)

The objective of the Trust is to preserve buildings, objects and sites of historic importance or beauty. The Trust does not seek to preserve everything that is old and accordingly has devised a classification system graded from A to D. The sixty-one buildings in the State classified A are "to be preserved at all costs". Another 1,500 buildings, etc., have been classified and most of them are illustrated in the Trust's publication *Historic Buildings of Victoria*.

"Como", a fine colonial homestead in South Yarra, serves as the Trust's headquarters and attracted nearly 70,000 visitors in 1968-69. La Trobe Cottage, the State's first Government House, has also been restored and furnished and now attracts 30,000 visitors annually. Gate receipts from such properties provide some of the Trust's income. Funds

are also derived from donations, members' fund raising activities, and an administrative grant from the State Government. In addition, furniture and other goods are often donated.

From its beginning in September 1956 the Trust's membership has grown to over 6,000 in 1970. At present there are branches in central Gippsland, the north-east, central Victoria, Ballarat, and Hamilton.

Throughout Victoria the Trust owns fourteen buildings and five other properties, some of them open to the public, while the restoration of others continues or is planned. They include "Lake View", Chiltern, the childhood home of authoress Henry Handel Richardson, which was opened in January 1970. Increasingly, private preservation projects are being conducted in consultation with the Trust. One example is Tanswell's Commercial Hotel in the historic gold town of Beechworth.

The Trust has no jurisdiction over the buildings it classifies and this was illustrated by the demolition of eleven classified buildings during 1969, including the "House in Jolimont Square", an imported prefabricated structure 110 years old.

Further reference, 1970 ; Sidney Myer Music Bowl, 1970

Metropolitan press

During 1969 the average daily sale of Melbourne's three established daily newspapers (*The Age*, *The Sun News-Pictorial*, *The Herald*) increased slightly to more than 1,320,000 copies. *The Herald* celebrated its centenary as an evening newspaper in 1969.

The biggest news event of the year was the American astronauts' landing on the moon in July. Newspaper sales rose over this period, with *The Herald* achieving a record average daily sale of 528,571 for the week covering the "Men on the Moon".

The Sun News-Pictorial's retail price increased from 4c to 5c a copy on 27 January 1969. *The Sun's* contemporary, *The Age*, had increased its price to 5c the previous year.

On Tuesday, 30 September 1969, *The Age* publishers, David Syme and Co. Limited, introduced a new evening newspaper, *Newsday*. The publishers claimed an average daily sale of 110,536 in *Newsday's* first three weeks. Publication of *Newsday* ceased on Saturday, 2 May 1970.

Total advertising volume in Melbourne's daily newspapers increased over the previous year by 8 per cent. There were sizeable increases in advertising for food products and electrical goods and a noticeable increase in the promotion of beverages. The market remained very competitive, particularly with the introduction of more discount stores. Further land development in and around Melbourne showed increases in advertising from real estate agencies and developers. Advertising for used cars also expanded.

The use of colour in Melbourne's daily newspapers increased in both pre-print colourgravure and in spot colour.

The national daily newspapers, *The Australian* and *The Australian Financial Review*, printed in Melbourne for the first time late in 1969, also circulate in Victoria.

Further references, 1961-70 ; Country Press, 1967 ; Suburban Newspapers, 1969

Broadcasting

Australian Broadcasting Control Board

The Board is responsible for the planning of broadcasting and television services. It is constituted under the *Broadcasting and Television Act 1942-1969*, and operates under the Ministerial jurisdiction of the Postmaster-General.

The Board consists of five members, including two part-time members. Its functions are generally as described on pages 177-8 of the *Victorian Year Book 1964*, except that its powers to regulate the establishment and operation of networks of stations have been withdrawn.

The Act requires the Board to consult representatives of commercial broadcasting stations and commercial television stations in exercising its powers and functions in relation to those stations.

Australian Broadcasting Commission

The Australian Broadcasting Commission in Victoria broadcasts from 3LO and 3AR Melbourne, 3GI Sale, 3WL Warrnambool, and 3WV Horsham. There are three domestic short wave stations, VLG, VLH, and VLR, operating from Lyndhurst and covering northern Australia, and seven short wave transmitters operating from Shepparton for Radio Australia, the A.B.C.'s overseas service. Station VLG is also used for the overseas service.

The A.B.C. radio service operates under the *Broadcasting and Television Act 1942-1969*. A.B.C. programmes cover a wide range, such as news, drama and features, current affairs, rural programmes, plays, operas, and music, including concerts by overseas artists, and orchestral music. Programmes also cater for children, variety entertainment, religion, and sport.

Commercial broadcasting

Commercial broadcasting stations are operated by companies or individuals under licences granted by the Postmaster-General. They rely for their income on the broadcasting of advertisements.

The fee for a licence for a commercial broadcasting station is \$50 plus an amount based on the gross earnings from advertising receipts during the preceding financial year, assessed on a sliding scale varying from 1 per cent for amounts up to \$1m to 4 per cent on amounts over \$4m. In 1969-70 Australian licencees paid \$346,356 in licence fees, the fees for Victoria being \$95,881 of which \$70,102 was on behalf of metropolitan stations.

At 30 June 1970 there were 114 commercial broadcasting stations in operation in Australia. Twenty of these were in Victoria, six in Melbourne, and fourteen in country districts; the call signs and locations of these are shown in the following table :

VICTORIA—COMMERCIAL BROADCASTING STATIONS IN OPERATION
AT 30 JUNE 1970

Call sign	Location	Call sign	Location	Call sign	Location	Call sign	Location
3AK	} Melbourne	3UZ	Melbourne	3GL	Geelong	3SH	Swan Hill
3XY		3BA	Ballarat	3HA	Hamilton	3SR	Shepparton
3AW		3BO	Bendigo	3LK	Lubeck	3TR	Sale
3KZ		3CS	Colac	3MA	Mildura	3UL	Warragul
3DB		3CV	Maryborough	3NE	Wangaratta	3YB	Warrnambool

At 30 June 1970, the average weekly hours of operation of Victorian commercial broadcasting stations were : Melbourne, 168 and country, 134.

History of Broadcasting, 1961 ; Radio Australia, 1966 ; Educational Broadcasts to Schools, 1968 ; Development of ABC Radio Programmes, 1969

Television

Australian Broadcasting Control Board

The responsibilities and functions of the Australian Broadcasting Control Board with regard to television are similar to those of broadcasting.

Under the provisions of the *Broadcasting and Television Act 1942-1969*, the Australian Broadcasting Control Board is responsible for the determination of the sites, operating powers, and frequencies of all television stations, both national and commercial. The Board is also responsible for ensuring that the technical equipment of television stations is in accordance with standards and practices considered by the Board to be appropriate. The Australian Post Office is responsible for the provision and operation of the transmitters for the national broadcasting service, while the Australian Broadcasting Commission is responsible for the provision and operation of the studios. The establishment of the commercial television stations is the responsibility of the respective commercial licensees, subject to the general requirements of the Board.

At 30 June 1970 television services were provided in Australia by 41 national stations and 45 commercial stations, of which one national station and three commercial stations were in Melbourne, and seven national stations and six commercial stations were in Victorian country areas. A service is now available to over 95 per cent of the population.

Television translator stations

A television translator station is normally a low-powered device designed to receive the signals of a parent station and re-transmit them on a different frequency. It does not originate programmes. The principal use of a translator is to improve service to fringe areas and to areas which, for reasons of topography, do not receive an adequate service from stations in their area.

Details of translator stations in operation in Victoria are as follows :

Area served	Parent station	Channel	Date of commencement
COMMERCIAL STATIONS			
Swan Hill	BCV8 Bendigo	11	May 1967
Warrnambool-Port Fairy	BTV6 Ballarat	9	June 1966
Portland	BTV6 Ballarat	11	July 1968
Alexandra	GMV6 Goulburn Valley	10	October 1968
Eildon	GMV6 Goulburn Valley	3	August 1969
Myrtleford	AMV4 Upper Murray	9	December 1969
NATIONAL STATIONS			
Warrnambool-Port Fairy	ABRV3 Ballarat	2	October 1966
Portland	ABRV3 Ballarat	4	May 1968
Alexandra	ABGV3 Goulburn Valley	5	September 1968
Orbost	ABLV4 Latrobe Valley	2	April 1969
Eildon	ABGV3 Goulburn Valley	1	August 1969

Commercial television

The commercial television stations are operated by companies under licences granted by the Postmaster-General. They rely for their income on the televising of advertisements. The fee for a licence for a commercial television station is \$200 plus an amount based on the gross earnings from advertising receipts during the preceding financial year, assessed on a sliding scale varying from 1 per cent for amounts up to \$1m to 4 per cent on amounts over \$4m. In 1969-70 Australian licencees paid \$1,490,144 in licence fees, the fees for Victoria being \$548,416.

At 30 June 1970 the average weekly hours operated by commercial stations in Victoria were Melbourne, 114 and country, 59.

The following table shows the composition of television programmes on commercial stations in Victoria :

VICTORIA—COMPOSITION OF COMMERCIAL
TELEVISION PROGRAMMES, 1969-70
(Percentage of total transmission time devoted to each category)

Programme category	Melbourne commercial stations	Country commercial stations
Drama	47.7	46.8
Light entertainment	22.1	22.8
Sport	7.9	6.8
News	8.1	13.9
Family	6.3	3.8
Information	1.2	1.5
Current affairs	2.2	2.1
The arts	..	0.2
Education	4.5	2.1
Total	100.0	100.0

Details of commercial television stations in Victoria were as follows :

VICTORIA—COMMERCIAL TELEVISION STATIONS IN
OPERATION AT 30 JUNE 1970

Location	Call sign	Date of establishment
Melbourne	HSV7	November 1956
Melbourne	GTV9	January 1957
Melbourne	ATV0	August 1964
Bendigo	BCV8	December 1961
Ballarat	BTV6	April 1962
Latrobe Valley (Traralgon)	GLV10	December 1961
Goulburn Valley (Shepparton)	GMV6	December 1961
Upper Murray (Albury)	AMV4	September 1964
Mildura	STV8	November 1965

National television

The A.B.C.'s television service in Victoria includes ABV Channel 2, Melbourne, and seven country stations. Programme material for the Victorian country national television stations is prepared at ABV Channel 2, Melbourne, and transmitted to the country centres by a series of broad-band radio-telephone relay systems.

Details of national television stations in Victoria are as follows :

VICTORIA—NATIONAL TELEVISION STATIONS

Location	Call sign	Date of establishment
Melbourne	ABV2	November 1956
Bendigo	ABEV1	April 1963
Ballarat	ABRV3	May 1963
Traralgon (Latrobe Valley)	ABLV4	September 1963
Shepparton (Goulburn Valley)	ABGV3	November 1963
Albury (Upper Murray)	ABAV1	December 1964
Swan Hill (Murray Valley)	ABSV2	July 1965
Mildura	ABMV4	November 1965

All national television transmitter and relay facilities are provided and maintained by the Postmaster-General's Department.

The following table, an analysis of the programmes of Sydney station ABN, exemplifies programme allocation on the Commission's television stations in Australia :

COMPOSITION OF NATIONAL TELEVISION PROGRAMMES, 1969-70
(Percentage of total transmission time devoted to each category)

Programme category	No. of hours	Percentage of total transmission hours	Australian origin percentage in each category	Programme category	No. of hours	Percentage of total transmission hours	Australian origin percentage in each category
Drama	1,260	28.58	9.34	Musical performances	42	0.95	84.53
Variety and acts	318	7.21	50.08	Religious	63	1.43	86.57
Sport	408	9.25	77.40	Rural	44	0.99	100.00
News	287	6.52	100.00	Arts and aesthetics	265	6.00	25.59
Public interest	701	15.90	64.40	Miscellaneous	216	4.89	99.60
Education	806	18.28	70.23				
				Total	4,410	100.00	52.48

Music in radio and television

The Australian Broadcasting Commission is the largest concert-giving organisation in Australia. Its involvement in the musical life of Australia is, for a national broadcasting service, probably unique. Students, choirs, chamber music groups, auditioning and examining bodies, entrepreneurs, composers, all look to it for support.

In the financial year ended 30 June 1969, the A.B.C. gave 783 concerts which were attended by 886,277 people. Included in this total were 355 orchestral concerts, 143 recitals, 191 free school concerts, and 75 other free orchestral concerts. One hundred and forty-six concerts were given in Victoria, with attendances of 207,908 people.

Appearances by overseas artists have been a feature of A.B.C. concert presentation since the 1930s. Some artists, such as Victoria de Los Angeles and Elisabeth Schwarzkopf, appear only in the main concert centres, making ten or twelve appearances on a tour. More often the visiting artist gives between twenty-five and thirty concerts in tours ranging from Cairns, in the north of Australia, to Hobart, in Tasmania, and Perth in Western Australia. Celebrated artists who have toured for the A.B.C. include names of world fame—conductors as well as soloists—and most of them have performed in Melbourne during their tours.

In Melbourne, as in every other capital city of Australia, a permanent symphony orchestra—the Melbourne Symphony Orchestra—has been established by the Commission. The Melbourne Symphony Orchestra has been a professional orchestra for 21 years and now numbers eighty-five players.

In Melbourne the orchestra has a basic season of ten concerts in four parallel series—twenty different programmes each. There is also an annual series of Youth Concerts, a variable number of Special Orchestral Concerts, free Sunday matinees, concerts for schoolchildren, and open air concerts in the Sidney Myer Music Bowl. The orchestra plays also for the choral concerts with the Royal Melbourne Philharmonic Society, and has played for the seasons of the Opera Company of the Australian Elizabethan Theatre Trust. The balance of the working year is spent in rehearsal, studio concerts for broadcast, and tours of Victorian inland cities such as Horsham, Wangaratta, and Shepparton.

The Commission's concert activities are closely related to its main function as Australia's national radio and television network. The *Broadcasting and Television Act 1942-1969* defines this approach, authorising the Commission to make arrangements for the holding of public concerts, provided the whole or part of each concert is televised or broadcast, or the concert is held in co-operation with "an educational, religious or other non-commercial institution and no charge for admission is made by the Commission." Thus, the concerts become programme material used either through direct live transmission or by taped replays.

On radio, the Commission broadcast through its two Melbourne metropolitan stations 3AR and 3LO more than 3,000 hours of serious music in 1969-70—about a quarter of the programme output in that year.

Its policy in serious musical radio programmes is to maintain a balance between music of all periods, but with a particular emphasis on contemporary works. Liaison with overseas broadcasting organisations brings listeners recordings from the leading European festivals and makes possible the transmission of works never before broadcast in Australia.

During 1969-70 light music, such as light orchestral, military and brass bands, and operetta, accounted for about 340 hours of broadcasting time on 3AR and 3LO. In the entertainment field the Commission broadcast about 740 hours of modern popular music, 16 hours of musical comedy, and 140 hours of orchestral/vocal music.

Music filled approximately 65 hours of transmission time over the Commission's Melbourne station ABV2 in the year ended 30 June 1970, and as new and effective ways of preserving music in this medium are devised, so transmission time will increase. Much attention in the musical sphere for television is devoted to the production of opera. Operas produced by the Commission for television have ranged from the traditional to the modern and have included "The Dialogues of the Carmelites," (Poulenc), "Duke Bluebeard's Castle" (Bartok), "Carmen" (Bizet), "Madame Butterfly" and "Tosca" (Puccini), and "Peter Grimes" (Britten). Other presentations have ranged from video-tape replays of public concerts such as in a series called "Concerto" to special studio presentations as, for example, in "Gala Performance".

Interest in broadcast music is stimulated by the publication of special quarterly brochures which give details of forthcoming programmes. At the beginning of 1970, 50,000 of these brochures were being distributed each quarter.

Broadcasting and Television Programme Standards, 1965; Television Programme Research, 1966; Television Technical Planning, 1967; Television Programmes, 1970

Melbourne Zoological Gardens

The Melbourne Zoological Gardens were the first to be established in Australia. At a meeting held on 6 October 1857 in St Patrick's Hall, Melbourne, a Society was formed called the "Zoological Society of Victoria". In 1861 the title was changed to "Acclimatisation Society of Victoria" and in 1870 to "Zoological and Acclimatisation Society of Victoria". The prefix "Royal" was added in 1910 after the granting of a Royal Charter. The Royal Zoological and Acclimatisation Society of Victoria controlled the Zoological Gardens until 1937, when financial difficulties were encountered. The Zoological Board of Victoria was then established as a statutory authority; it consisted, and still does, of eleven members who give honorary service. Many prominent citizens were associated with the Society during the early years of its existence. Sir Henry Barkly, then Governor of Victoria, was the first Patron and created the precedent of Vice-Regal patronage of the Society by the State Governor.

The original site for the Zoological Gardens consisted of 33 acres known as Richmond Paddock, situated opposite the Botanic Gardens. The animals were transferred to the present site of 55 acres in Royal Park in 1862. Although acclimatisation was one of the objects during the first decade at Royal Park, the efforts of the Society were gradually directed towards developing the Gardens and acquiring animals for exhibition purposes.

The Annual Report for 1862 records thirty-six species of mammals (including nine Australian species), three species of reptiles, and sixty-three species of birds (including twenty Australian species) housed at Royal Park. The Annual Report for the year ended 30 June 1969, listed 113 species of mammals (including thirty-two Australian species), 162 species of birds (including 125 Australian species), and sixty-seven species of reptiles (including forty-five Australian species).

The Melbourne Zoo has recently undergone considerable redevelopment. Additions and improvements carried out between 1964 and 1969 have many new features. In 1964 breeding aviaries were completed in which parrots, finches, quail, and doves are breeding successfully. The following year the fauna park was opened as a "free contact" area where visitors walk among kangaroos, emus, and deer in a bushland setting. The hippopotamus enclosure was built in 1966 to replace the original austere enclosure, and accommodates the animals in three units divided by rock walls on which shrubs and vegetation have been planted. The lion park also opened in the same year provides a spacious grassy area where lions can roam at will. The elephant enclosure was reconstructed in 1967 and designed to allow visitors an unobstructed view of the whole area. The animal nursery has its indoor temperature controlled thermostatically and consists of a row of glass-fronted units allowing visitors to watch the occupants such as kangaroos, wallabies, wombats, possums and rabbits, most of which have been brought to the Zoo after losing their mothers. The gibbon ape and capuchin monkey islands were converted in 1968, by the addition of trees and vegetation and installation of trapeze ropes, into ideal homes for these animals and in the following year the reptile house was completed. It is a heated walk-through building with glass-fronted display units which simulate the habitat of the reptiles displayed therein.

In 1969 an education officer was appointed and the Zoo School opened. The Zoo School is a classroom in which a projector and screen and other equipment have been installed. By prior arrangement with the education officer, groups of children and teachers are given talks on animals, including information such as classification, behaviour, husbandry, conservation, etc.

National Parks

Victoria's national parks have mostly been established through a number of land "reservations" declared at irregular intervals since 1882. In broad terms, the purposes for which national parks were created are to preserve in their original form interesting aspects of the natural environment ranging from the botanical and zoological to the historical, geological, and scenic, and to provide for the enjoyment and edification of present and future generations as well as for scientific examination.

The original National Parks Act of 1956, in setting up the National Parks Authority, provided for a chairman, a full-time director, and nine other members. There are five ex-officio members, namely, the Secretary for Lands, the Chairman of the Forests Commission, the Secretary for Public Works, the Chairman of the Soil Conservation Authority, and the Director of Fisheries and Wildlife. Of the remaining four members, two represent groups or organisations interested in national parks, the other two being nominees of the Victorian Ski Association and the Victorian Government Tourist Bureau.

Section 8 of the *National Parks Act* 1958 provides that unless inconsistent with any special purpose for which a particular national park has been proclaimed, the Authority is to maintain every national park in its natural condition, conserving in it ecological associations and species of native plants and animals while protecting special features, at the same time endeavouring to exterminate exotic plants and animals. The Authority is also required "to encourage and regulate the use of national parks by the public" and to provide for its enjoyment of the parks ensuring, nevertheless, that they will be left unimpaired for the benefit of posterity. This includes the duty of fire protection. The Authority has experts to help with the various problems of national parks control. Several sub-committees deal with such basic matters as fire protection, works programmes policy, and fauna protection. The staff of the Authority grew from twelve in 1959 to seventy-three in 1970. Financial grants for expenditure in the Parks grew from \$44,999 in 1958-59 to \$314,781 in 1968-69 while, in the same period, revenue from all Parks increased from \$32,255 to \$142,031.

At 30 September 1969, there were twenty-one national parks in Victoria covering an area of 374,930 acres, 0.7 per cent of the total land area of the State. A table detailing the first nineteen national parks established, showing the areas and principal features, is given on page 181 of the *Victorian Year Book* 1966. A description of the twentieth national park, Morwell, which was opened in 1967 appears on page 473 of the *Victorian Year Book* 1969.

The Little Desert National Park was created in 1968. Extending over 2,870 acres, it is located in north-western Victoria, five miles south of the township of Kiata. The park includes the Kiata Lowan (Mallee Fowl)

Sanctuary and comprises extensive open country with relatively high rainfall and rather sandy soil. It is noted for its wide variety of flora and bird life.

Wilson's Promontory National Park

Wilson's Promontory, with an area of 102,379 acres, is the second largest of Victoria's national parks. It is situated 150 miles south-east of Melbourne and is the southern-most landmass of the Australian continent. Geologically, it can be described as a granitic island connected to the mainland by a dunal isthmus.

Wilson's Promontory was discovered by George Bass on 2 January 1798 during his whaleboat voyage from Port Jackson to Western Port. It was originally named Furneaux Land and later renamed by Governor Hunter on the recommendation of Bass and Matthew Flinders to honour Thomas Wilson, a London friend.

Following his trek in 1884 to the lighthouse built at South-East Cape in 1859, J. B. Gregory reported enthusiastically on the peninsula's suitability for perpetual reservation, thereby stimulating the formation of scientific and other interested groups pledged to work to this end. Their efforts led to the first permanent reservation in 1905 which followed a temporary reservation in 1898. An additional 26,000 acres was permanently reserved in 1908. In that year, also, a Committee was established to manage the Park under the control of the Lands Department. This control was relinquished in favour of the National Parks Authority after its creation by the *National Parks Act* 1956. The Committee of Management continues to exercise its day to day supervisory function.

There are many interesting features within the Park. Along the 80 mile coast are many places which are scenically spectacular such as Tongue Point, Sealers Cove, and South-East Cape.

Successive botanical surveys, the first in 1853 by Baron Sir Ferdinand von Mueller, the first Government Botanist, have identified over 700 species of plants. In addition, a current ornithological survey has so far revealed the presence of more than 200 species of birds.

Feral cats and dogs left by the early settlers, coupled with the advent of foxes around 1880, combined to ravage the native animals. One of the Committee's first projects was to re-stock the area with such animals as well as to bring in some native birds and reptiles. Faunal habitat was also improved by the Committee's decision in 1909 to suspend cattle agistment. Accurate assessment of animal numbers in the Park awaits a systematic faunal survey.

Consistent with its charter to preserve natural features, the Authority seeks to encourage visitors to Wilson's Promontory where they may enjoy extended hiking trips along established tracks, swim at any of a number of safe and pleasant beaches, examine geological and botanical highlights, or paint landscapes.

Earliest accommodation for bush-walkers, naturalists, and others was provided at Darby River Chalet from 1923-42. The present village at Tidal River has grown from the small nucleus of buildings erected as a training station for Army commandos during the Second World War. Tourist units can now house 148 persons and the camping area has grown to 620 sites.

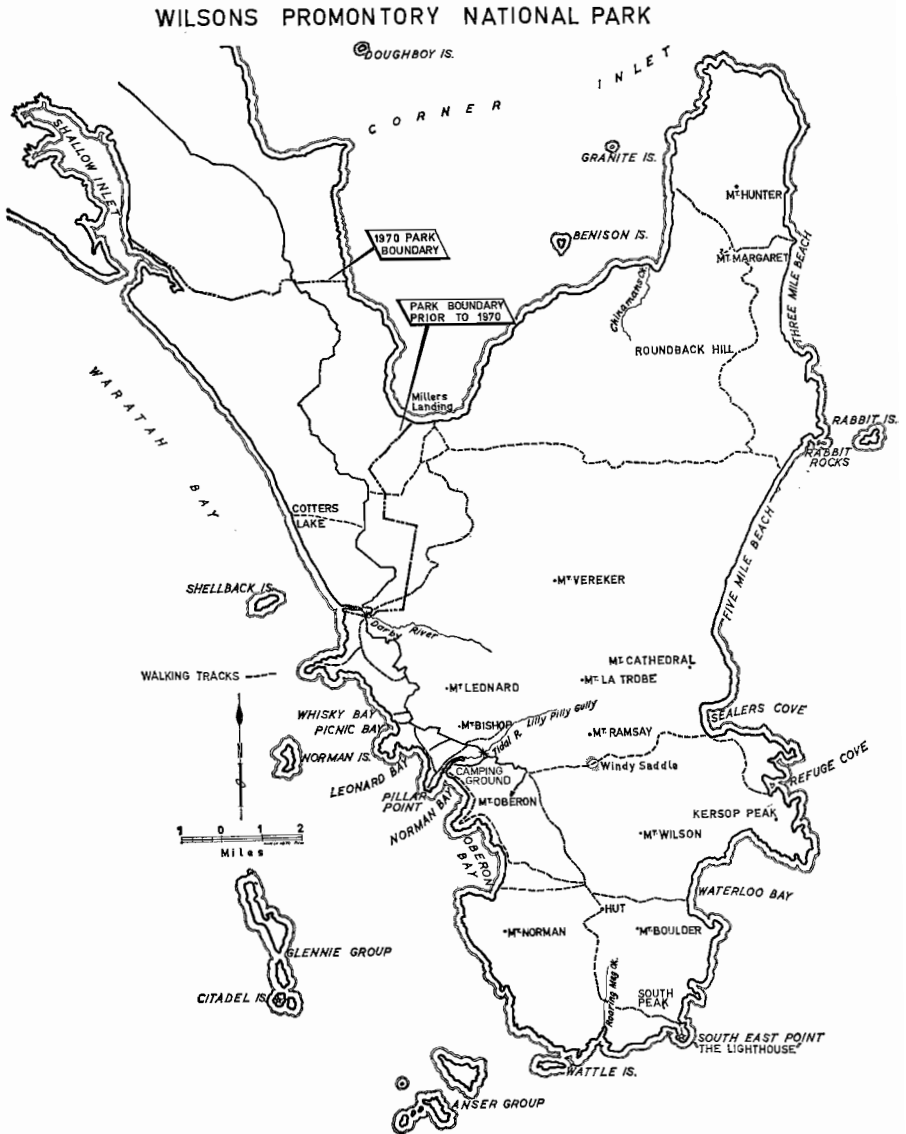


FIGURE 12

Visitors over the ten year period ended 30 June 1969 grew from 29,500 to 33,000 with a corresponding increase in park revenue from \$23,772 to \$101,800.

Expenditure

Since the formation of the National Parks Authority in 1957, amounts totalling \$2,785,071 have been expended on Victoria's national parks, including Government allocations and revenue from services provided for park visitors. Details of the expenditure from 1965 to 1969 are as follows :

VICTORIA—NATIONAL PARKS EXPENDITURE
(\$)

National Park	1964-65	1965-66	1966-67	1967-68	1968-69
Wyperfeld	7,094	15,453	4,731	7,947	6,568
Kinglake	15,036	12,469	9,469	17,610	31,102
Ferntree Gully	19,144	12,784	25,271	34,997	24,113
Wilsons Promontory	121,812	84,214	105,291	212,580	237,842
Mount Buffalo	21,916	46,482	37,987	29,445	93,221
Churchill	20,896	12,271	4,856	5,860	13,071
Fraser	29,886	38,628	19,749	23,326	33,248
Tarra Valley and Bulga	3,338	8,015	4,408	4,642	4,936
Hattah Lakes	15,596	6,619	11,256	19,902	9,302
Mount Eccles	2,200	1,351	1,689	1,817	4,123
Mount Richmond	182	18	626	1,067	5,964
The Lakes	3,742	4,106	2,864	4,040	3,429
Glenaladale	1,280	1,289	1,444	1,658	1,442
Port Campbell	3,574	14,451	29,752	16,681	10,924
Little Desert	..	..	..	3,658	3,983
East Gippsland (Alfred, Lind, Mallacoota Inlet, Wingan Inlet)	3,684	10,263	8,804	6,983	19,226
	4,024	5,318	6,298	10,266	9,312
Total	273,404	273,731	274,495	402,479	511,806

Special government grants have been made to the Country Roads Board for roads in or near national parks, \$74,044 being expended in 1964-65, \$73,999 in 1965-66, \$91,636 in 1966-67, \$190,202 in 1967-68, and \$107,430 in 1968-69.

Further references, 1961-70 ; Tourist Development Authority, 1962 ; Boy Scout Movement, 1964 ; Sport, 1964 ; Tourist Attractions in Victoria, 1966 ; Classification of National Parks, 1968 ; Royal Botanic Gardens of Melbourne, 1969 ; Morwell National Park, 1969 ; Mt Buffalo National Park, 1970

EDUCATION

Education system

The Education Act of 1872 marked the beginning of a new era in the history of education in Victoria. Henceforth, every child of school age in the Colony became entitled to a secular, compulsory, and free education. For administrative purposes, the Act was little more than an outline, power being granted to make regulations that would serve to provide the machinery for giving practical effect to its objects, but the principles laid down were most significant and far-reaching in their results.

Within Victoria, primary, secondary, and tertiary education are provided by a series of State and non-State schools and institutions. Fifteen years is the legal school leaving age. Control of State education is vested in the hands of the Minister of Education, assisted since 1964 by the Assistant Minister of Education.

Registration and supervision of non-State primary and secondary schools and the teachers in these schools are provided through the Council of Public Education presided over by the Director-General of Education. These are described in more detail on pages 466 to 472.

Higher education is available through the universities, institutes of advanced education, technical and agricultural colleges, and the Council of Adult Education. The Education Department is represented on the

controlling council of each of these institutions whose activities are described in greater detail elsewhere in this book.

Although there are many and varied types of schools, they are all directed by the overriding principle that within the resources of schools and teachers available there should be an opportunity for every child to receive to the age of fifteen years at least an education suitable for his age, ability and aptitudes, and that no child should be debarred by mental or physical handicap, or distance from school, from receiving an appropriate education. To make this possible, particularly in remote areas, and to facilitate consolidation, it has been necessary to develop a comprehensive set of bus services throughout the State, and in some cases, to pay conveyance allowances.

The link between the administration and the teacher in the field is the inspector. All schools are visited regularly by inspectors who report to the administration on the schools visited. During these visits, the inspectors also assess the work of the teachers whose promotion partly depends on the assessment given, and advise teachers on their work and problems.

Types of schools

Primary

The normal primary school provides seven years of education from Grades I–VI (most pupils spend two years in Grade I) and admits children from the age of 4½ years and upwards, many of whom would have previously attended kindergarten classes. These schools range in size from small one teacher schools to very large schools with as many as 1,000 and more pupils in attendance.

Primary school courses include work in written and spoken English, arithmetic, social studies, elementary science, music, physical education, health, art, and craft.

In certain country districts, consolidated schools have replaced the small scattered schools and they provide the normal Grades I–VI with special four year post-primary courses added in rural areas.

Secondary

These schools aim, by providing a sound general education, to develop in pupils right social attitudes, and to develop their intellectual powers so that they may cope successfully with the adult world. The general education is also a preparation for any form of tertiary education, professional or technical (including apprenticeship), or for direct entry into clerical positions, or positions in the business world. The most numerous of the post-primary schools are the high schools which are well distributed throughout the State and which offer six years of secondary education.

The emergence of the principle of secondary education for all has led to modifications of the normal professional course to provide for pupils whose interests and abilities are beginning to develop along other lines. These modifications, usually beginning after the completion of the second year, include commercial, domestic, and practical subjects. Further subject specialisation according to the future career of the pupil occurs in the fifth and sixth years.

In smaller country towns, higher elementary schools provide four or more years of post-primary education, while central schools in the

metropolitan area and central classes in rural areas offer two years of post-primary education.

A most significant experiment currently being planned in the organisation of secondary education is the establishment of a senior high school in the Broadmeadows area to take all the fifth and sixth year students from a group of five high schools which will revert to junior high schools. A building of radical design has been planned and a wide variety of courses will be offered. Special committees to examine staffing, school organisation, parent-school relations, and a number of other fields have been established, and it is hoped that the school will open in 1972.

Technical

The aim of technical schools is to continue a general education for at least five years beyond primary school, to assist pupils through experience in the subjects of the course of study to choose the types of professional, technical, industrial, or commercial work for which they are best suited, and to prepare them for higher study in a technical college.

The junior technical schools for both boys and girls provide a study of English, social studies, music, mathematics, science, art, practical subjects, and physical education. Provision is made for specialisation in the third, fourth, and fifth years before pupils move on to a technical college to study for a diploma of certificate course. Certain of the technical colleges have now been raised to degree granting status.

A technical school education leads to wide employment opportunities in the technical and related professions, and in commerce, industry, and skilled trades, while the successful completion of the third year of the course is the minimum entry standard for most apprenticeships.

Special services and schools

Specialised schools and services to meet the demands of modern education are maintained and extended through officers and staffs in such fields as library services, visual aids, music and speech, physical education, art and crafts, forestry, publications, survey and statistics, curriculum and research, teachers' welfare and accommodation, psychology and guidance, speech therapy, domestic arts (primary), and Australian Broadcasting Commission liaison. The State Schools' Nursery provides valuable instruction in horticulture for teachers and pupils, and supplies plants to schools. The School Medical Service and the School Dental Service, both controlled by the Department of Health, provide inspection and guidance to pupils throughout the State, while special schools and classes are provided for handicapped children, children in institutions, and children requiring remedial work in certain subjects.

The Correspondence School provides correspondence tuition to certain adults and all children who for geographical or medical reasons are unable to attend normal centres of instruction, or who attend a school whose facilities do not provide the subjects desired. Tuition is available in almost every subject of the primary school course, in a very wide range of subjects at all levels in secondary schools, and in the First or Second Class standard of the Infant Teacher's Certificate, but there is no provision for tuition in technical subjects many of which, however, are available through the

Department of External Studies of the Royal Melbourne Institute of Technology. In addition to regular school broadcasts to its pupils over the national radio stations, the Correspondence School conducts its own short-wave broadcasting programme for primary and secondary pupils.

Examinations

Although in certain countries there are not the formal examinations such as are accepted in Victoria, it is generally agreed that there must be some form of assessment, subjective or objective, as a measure of the pupil's progress and the efficiency of the school, and also as visible evidence to the outside world of a standard of attainment.

In the primary schools and in the early years of secondary and technical schools, examinations are conducted internally. An increasing number of secondary schools is being approved to hold internal examinations for the Leaving examinations now controlled by the Victorian Universities and Schools Examinations Board. In addition, the Education Department provides its own Leaving examination for technical and girls' secondary schools. The Higher School Certificate examination (known as the Matriculation examination prior to 1970), controlled by the Victorian Universities and Schools Examination Board, is an external examination.

The abolition of the Intermediate Examination, formerly controlled by the Victorian Universities and Schools Examinations Board, has left secondary schools free to experiment with methods of testing and assessing, as well as methods of reporting on students during the first four years of their secondary education. At the same time definite steps have been taken to review the curriculum not only for these years but for the fifth and sixth years as well, and for primary and technical schools in addition to secondary schools. Curriculum committees in which the Curriculum and Research Branch has played a prominent part have discussed curricula in detail. In addition, an exercise involving all secondary teachers in school, area, and regional meetings culminating in a residential seminar has produced a significant statement of general principles which are now being considered by each individual school as it prepares its own educational specifications and curriculum. This experiment in curriculum planning is creating great interest among teachers. The Curriculum Review Committee established by the Victorian Universities and Schools Examinations Board to consider the fifth and sixth years of secondary education has also attempted to involve schools and teachers in its work.

Teaching service

Officers of the Recruitment Branch visit most schools annually to interview prospective applicants for teaching bursaries and to give information concerning the profession. Age and prerequisites for entry to training vary considerably according to the type and purpose of the course. The majority of successful applicants are admitted to training direct from school where they attained their prerequisite academic qualifications. They are paid an allowance during training and, in return, enter into an agreement with the Department to teach for a period of three years after completing their course of training, except in the case of women when the period is reduced to one year in the event of marriage after training. An expanding scheme of in-service training makes it possible for teachers to gain further

qualifications and to keep abreast of modern thought and development. The establishment of an experimental course in educational administration in 1966 marks a further significant development in this field. In the secondary and technical divisions where the shortage of staff is most severe, part-time courses of training for teachers have been provided for those who have the necessary academic background but lack the teacher training required for permanency. These courses have been expanded to meet the increasing numbers of applicants.

Staffing requirements at any particular school are determined by enrolment, with necessary adjustment for specialist and senior work. Upon these annually reviewed bases, the Committee of Classifiers in each of the Divisions (Primary, Secondary, and Technical), the Teachers' Tribunal, and the administration are responsible for the staffing of schools, and teachers may secure a permanent or temporary position in a school. Promotion within the Service depends on qualifications, efficiency, and years of service, and is gained by applying for advertised and consequential vacancies. When teachers retire at 60 or 65 years of age, they receive fortnightly payments from a superannuation fund to which they and the Government have contributed.

Teachers' rights concerning retention of service, promotion, and transfer are safeguarded by the right of appeal to the Teachers' Tribunal, an independent statutory authority to which is also given the power to determine teachers' salaries. Teachers' interests are also protected by professional organisations, such as the Victorian Teachers' Union and the Victorian Secondary Teachers' Association.

The Education Department conducts a set of examinations through in-service training courses for practising teachers to qualify them for further promotion.

Further reference, 1969 ; Victorian Education Department, 1961 ; State Secondary Education, 1962 ; State Primary Education, 1963 ; Educational Administration, 1964 ; Audio-Visual Education, 1964 ; Technical Education, 1965 ; Teacher Training, 1967 ; Development of Curricula, 1969 ; Recent Developments, 1970

Pre-school education

Pre-school education is well established in Victoria, which has the highest enrolment in pre-school centres in Australia. In February 1970 there were 665 subsidised kindergartens catering for 33,638 children between the ages of 3 to 5 years. Of these kindergartens 273 are in country areas and 392 in inner and outer suburbs.

The pattern of pre-school education in Victoria is complicated ; the original voluntary organisations which established kindergartens in the early 1900s still play a leading part, but work with the Pre-School Division of the Maternal and Child Welfare Branch of the Department of Health.

However, except in a few municipal and inner suburban church kindergartens, teachers are employed by the voluntary committee responsible for the management of the kindergarten, and the Pre-School Division of the Department of Health through its qualified supervisors acts as an advisor to teachers and committees. This Department is also responsible for administering capital grants on a two-to-one basis up to a maximum of \$6,000. These grants are available to committees setting up kindergartens, and once established and approved, a subsidy is paid for the teacher's salary,

either directly to the committee (in the case of independent kindergartens) or to a voluntary organisation for distribution to its affiliated kindergartens.

Some of the voluntary organisations employ their own supervisors and though their work is recognised by the Department, no subsidy to cover their salaries is available. Voluntary kindergarten committees as well as voluntary organisations must, therefore, raise considerable sums of money, the former for building, maintenance, equipment, and the salary of the untrained helper or aide, and the latter for supervisory salaries and general administration of the services of the kindergarten.

The initiative for setting up a kindergarten comes from the community or from a voluntary organisation, as the Department of Health has no policy for actually establishing kindergartens. Approval to build a kindergarten must, however, be given by this Department, whose officers need to be satisfied that there are sufficient pre-school children in the area to be served to warrant the establishment of the centre.

The programme in a subsidised kindergarten is introduced by the trained teacher through play and other activities. The teacher knows that basic concepts are being formed at this stage of the child's development which have a bearing on a child's language development and his understanding of science, mathematics, social studies, health and safety, music, and art. The programme is also planned in awareness of the fact that confident and secure relationships with adults and peers make an important contribution to learning, and to the child's whole attitude about self, others, and life in general.

Fully qualified kindergarten teachers have completed a three year course of teacher education at a college which specialises in or has a department specialising in, early childhood education. In Victoria the only training for kindergarten teachers is the Melbourne Kindergarten Teachers' College. (See pages 494 to 496.)

The Kindergarten Teachers' Association of Victoria is the professional organisation to which pre-school teachers belong. This association works for the maintenance of good standards in pre-school teaching, and in 1958 established a salary scale for kindergarten teachers.

All the voluntary organisations administering pre-school kindergartens and some other bodies concerned with pre-school education, including the Lady Gowrie Child Centre (a child study and research centre established by the Australian Pre-School Association and maintained first by the Commonwealth Department of Health but now by the Department of Education and Science) are members of the Australian Pre-School Association (Victorian Branch), which has its national headquarters in Canberra. The A.P.A. has a co-ordinating function, but no administrative responsibilities within Australian pre-school education. However, its professional officers are responsible for the oversight of the educational programme at each of the six Lady Gowrie Child Centres.

Information about pre-school play centres, day nurseries, and crèches is to be found on pages 500 to 502.

At 31 December 1969 the salient statistics about kindergartens were as follows: independent kindergartens (451); Free Kindergarten Union of Victoria and its affiliated kindergartens (83); the Church of England Kindergarten Council (49); the Presbyterian Kindergarten Council

(44); the Baptist Association of Pre-School Centres (10); the Catholic Education Office (14); the Melbourne City Council (7); the Kew City Council (6); and finally the Lady Gowrie Child Centre, a total of 665.

State primary and secondary schools

Particulars of State schools, teachers, and pupils for the years 1965 to 1969 are shown in the following tables. In the tables, which include particulars of the Correspondence School and Special schools, "primary" pupils have been considered as those up to and including the sixth grade, and "secondary" pupils as those above the sixth grade. Numbers of pupils refer to census date (1 August or the Monday nearest each year) and ages of pupils refer to age last birthday at census date.

VICTORIA—STATE PRIMARY AND SECONDARY SCHOOLS :
NUMBER OF SCHOOLS, TEACHERS, AND PUPILS

Particulars	1965	1966	1967	1968	1969
Primary schools—					
Schools	1,856	1,855	1,849	1,847	1,813
Teachers	10,772	10,984	11,414	11,971	12,725
Pupils	307,893	320,009	331,299	338,722	346,160
Primary-secondary schools—					
Schools	48	46	41	38	53
Teachers	885	858	773	787	829
Pupils—Primary grades	14,046	14,103	12,300	12,038	12,014
Secondary grades	4,929	4,359	3,987	3,604	3,595
Secondary schools—					
Schools	300	311	320	330	334
Teachers	9,940	10,900	11,845	12,978	13,983
Pupils	175,083	183,067	190,335	199,062	207,648
Special schools—					
Schools	28	30	31	32	35
Teachers	302	321	341	367	420
Pupils	2,169	2,248	2,360	2,412	2,708
All schools—					
Schools	2,232	2,242	2,241	2,247	2,235
Teachers	21,899	23,063	24,373	26,103	27,957
Pupils	504,120	523,786	540,281	555,838	572,125

NOTE. In this table a primary school is considered to be one which has primary pupils only, a secondary school one which has secondary pupils only, and those which have both primary and secondary pupils are classified as primary-secondary schools.

VICTORIA—STATE PRIMARY AND SECONDARY SCHOOLS :
AGES OF PUPILS

Age last birthday (years)	At 1 August—				
	1965	1966	1967	1968	1969
Under 6	44,436	47,605	48,693	48,992	48,691
6	47,733	48,699	51,022	51,777	51,959
7	46,230	48,305	48,714	51,196	52,158
8	45,359	46,849	48,844	48,817	51,677
9	44,932	46,049	47,186	49,075	49,529
10	43,883	45,519	46,620	47,576	49,471
11	42,560	44,653	46,024	46,916	48,155
12	42,801	42,671	44,516	45,853	46,467
13	43,113	44,744	44,432	45,737	47,587
14	41,802	42,749	44,181	44,403	46,339
15	31,974	33,614	34,799	36,932	37,445
16	18,218	20,647	22,179	23,809	25,973
17	8,337	8,781	10,119	11,218	12,491
18	2,366	2,324	2,456	2,979	3,485
19 and over	376	577	496	558	698
Total	504,120	523,786	540,281	555,838	572,125

The following table shows the census enrolment of pupils attending each class of State primary and secondary schools in Victoria in 1969 :

VICTORIA—STATE PRIMARY AND SECONDARY SCHOOLS :
CLASS OF SCHOOL : CENSUS ENROLMENT :
SEX OF PUPILS, 1969

Class of school	Number of schools	Number of pupils		
		Male	Female	Total
Primary schools	1,808	176,120	163,217	339,337
Central schools, classes, and post-primary	18	4,883	4,194	9,077
Consolidated and group	31	5,569	5,188	10,757
Higher elementary	8	892	866	1,758
Girls secondary	1	.	231	231
Junior technical	92	47,054	9,060	56,114
High schools	241	65,044	86,259	151,303
Correspondence	1	362	478	840
Special schools	35	1,698	1,010	2,708
Total	2,235	301,622	270,503	572,125

NOTE. The classification of the schools is in accordance with that used by the Education Department and differs from that used in the first table in this section.

The following tables show the age and grade of all pupils at the primary and secondary levels of education in State primary and secondary schools for the year 1969 :

VICTORIA—STATE PRIMARY EDUCATION : AGE AND
GRADE OF PUPILS, 1969

Age last birthday (years) at 1 August 1969	Grade						Un- graded pupils	Total
	1	2	3	4	5	6		
Under 6	48,568	..	..	..	..	..	123	48,691
6	50,604	1,239	1	..	..	..	115	51,959
7	7,572	42,931	1,484	2	..	..	169	52,158
8	311	8,200	41,183	1,813	2	..	168	51,677
9	17	414	8,484	38,319	2,085	1	209	49,529
10	8	15	502	8,695	37,397	2,558	283	49,458
11	2	8	43	621	8,848	35,507	296	45,325
12	2	5	12	47	709	8,860	297	9,932
13 and over	5	11	7	9	65	1,008	1,048	2,153
Total	107,089	52,823	51,716	49,506	49,106	47,934	2,708	360,882

VICTORIA—STATE SECONDARY EDUCATION : AGE AND
GRADE OF PUPILS, 1969

Age last birthday (years) at 1 August 1969	Form						Total
	I (or Grade 7)	II (or Grade 8)	III	IV	V	VI	
Under 12	2,827	16	..	..	..	..	2,843
12	33,492	3,030	13	..	..	..	36,535
13	10,863	32,383	2,994	29	..	..	46,269
14	1,431	10,797	30,643	2,988	8	..	45,867
15	102	1,330	9,309	24,022	2,435	9	37,207
16	7	75	1,183	7,628	15,806	1,197	25,896
17	1	2	69	875	5,678	5,841	12,466
18	..	..	2	45	850	2,582	3,479
19 and over	..	..	..	7	94	580	681
Total	48,723	47,633	44,213	35,594	24,871	10,209	211,243

Scholarships and bursaries

Many scholarships are available to make it possible for pupils to remain at school, and particularly in the junior secondary and technical forms there is an increasing tendency to award scholarships without a specific examination. Most of these scholarships are financed from State Government funds which provide scholarships for one third of all pupils but in most schools there are also locally and privately endowed scholarships.

Victorian Government scholarships and bursaries

The Education Department makes available Junior Scholarships at Form II level. In 1969, their value was \$78, to be spread over four years, plus \$50 a year for fees at registered schools. There are also teaching bursaries of \$100 each to be taken at Leaving or Higher School Certificate (or the equivalent technical) standard.

Senior scholarships for university or senior technical education, varying in value from \$20 to \$80 per annum, and tenable for up to six years, and sixty university free places covering fees for lectures and examinations, together with a living allowance (subject to a means test) of up to \$559 per annum, are also available.

Commonwealth University Scholarship Scheme

The Commonwealth University Scholarship Scheme provides for the award of scholarships tenable at universities. There are 7,500 Open Entrance and 250 Mature Age scholarships awarded each year of which about 2,700 are for students in Victoria. Open Entrance scholarships are awarded to students under 30 years of age on the results of examinations qualifying for University matriculation. Mature Age scholarships are awarded on the basis of their whole academic record to persons over 30 but under 40 years of age. Additional scholarships, Later Year scholarships, are offered to students under 30 years of age who have completed one or more years of an approved course. Open Entrance, Later Year, and Mature Age scholarships may be used for approved full-time or part-time courses.

Commonwealth Advanced Education Scholarship Scheme

As from the beginning of 1966 the Commonwealth Advanced Education Scholarship Scheme provided for the award of scholarships tenable at approved non-university institutions.

In 1969 one thousand five hundred awards were offered ; about 500 of these were for students in Victoria. Open Entrance and Later Year scholarships were awarded in 1969 under conditions similar to those in the Commonwealth University Scholarship Scheme. Students over 25 years of age were considered as special cases. There was no provision for Mature Age awards.

The scholarships cover all compulsory fees payable by the holder. A means test applies only in relation to the granting of living allowances which in 1969 provided up to \$559 per annum for students living with parents, or up to \$904.80 for those living away from home. All aspects of the Commonwealth Advanced Education Scholarship Scheme are regularly reviewed.

Commonwealth Secondary Scholarship Scheme

The Commonwealth Secondary Scholarship Scheme provides assistance to students during the final two years of secondary schooling. Approximately 2,800 awards are made in Victoria each year on the result of a competitive examination set by the Australian Council for Educational Research together with ratings given by the schools.

Benefits comprise a maintenance allowance of \$200, a text book allowance of \$50, and a fees reimbursement of up to \$150 per year for compulsory school service fees.

The Commonwealth Technical Scholarship Scheme provides assistance for students during the Leaving Technical year and the first year of an approved Diploma course. Approximately 700 awards are made in Victoria each year on the basis of results gained in the Intermediate Technical examination. Benefits are the same as for Secondary Scholarship holders. Commonwealth Secondary Scholarships and Commonwealth Technical Scholarships are interchangeable.

The following table shows the number of scholarships awarded by both the Victorian Education Department and the Commonwealth Scholarships Board in each year from 1965 to 1969 :

VICTORIA—NUMBER OF GOVERNMENT SCHOLARSHIPS,
FREE PLACES, AND BURSARIES GRANTED (a)

Particulars	Year of commencement				
	1965	1966	1967	1968	1969
State Government scholarships—					
Secondary education—					
Junior scholarships	18,360	19,255	19,788	19,641	20,440
Senior technical scholarships	285	268	218	251	240
Teaching bursaries	1,752	2,009	2,113	2,128	2,123
University education—					
Senior scholarships	43	42	43	43	43
Free places	78	77	79	78	86
Commonwealth scholarships—					
Secondary education—					
Secondary scholarships—					
One year tenure (b)	2,786	2,825	2,795	2,791	2,696
Two year tenure	2,863	703	710	696	691
Technical education	695	703	710	696	691
Tertiary education—					
Open entry	1,236	1,541	2,032	1,921	2,343
Later years	398	438	965	730	775
Mature age (c)	34	29	124	31	58

(a) Figures are for students who accepted scholarships and bursaries and were in training.

(b) These were granted only in the initial year of the scheme to enable students taking the final year of secondary education in 1965 to participate in the scheme.

(c) Higher figures in 1967 are due to change of policy.

Commonwealth Scholarships, 1964

Technical education

Introduction

The discovery of gold in the mid-nineteenth century led to the establishment in many areas of Australia of schools of mines and technical colleges for the purpose of providing training in the mechanical skills associated with the industries growing up to cater for this boom. The first of these was the School of Mines and Industries, Ballarat, founded in October 1870, and by 1900 there were eighteen such schools. In the following decade it became clear that secondary level courses were required to bridge the gap between primary schooling and the specialised courses of the technical colleges.

In 1912 the first junior technical school was opened for boys in West Melbourne in association with the Working Men's College. A similar school for girls was established in 1916 at the Swinburne Technical College. In 1970, one hundred years after the formation of the School of Mines at Ballarat, there were 107 technical schools and institutes throughout Victoria offering courses of secondary, vocational, and tertiary education. The following table gives a summary of senior technical education in Victoria for the years 1963 to 1969. The 1969 figures exclude tertiary students in colleges affiliated with the Victoria Institute of Colleges.

**VICTORIA—TECHNICAL EDUCATION : NUMBER OF SENIOR
TECHNICAL SCHOOLS AND STUDENTS**

Particulars	1963	1964	1965	1966	1967	1968 (b)	1969 (c)
Number of schools	73	73	79	82	83	87	90
Number of students (a)							
Full-time	8,811	7,403	7,894	8,740	9,243	10,014	4,245
Part-time	54,970	58,027	58,549	58,026	59,654	60,188	47,028
Total	63,781	65,430	66,443	66,766	68,897	70,202	51,273

(a) Excludes students studying single subjects.

(b) Revised figures.

(c) Excludes tertiary students in colleges affiliated with the Victoria Institute of Colleges.

The following table gives details of students attending technical schools in 1969 showing the type of course taken and whether taken as a full-time or part-time student :

**VICTORIA—TECHNICAL EDUCATION :
COURSES AND STUDENTS, 1969**

Courses	Number of enrolments		
	Full-time	Part-time	Total
Diploma (a)	2,963	2,402	5,365
Certificate	614	5,044	5,658
Technician	287	2,879	3,166
Trade	..	31,830	31,830
Other courses	381	4,873	5,254
Single subjects	..	23,675	23,675
Total	4,245	70,703	74,948

(a) Students enrolled in first year Diploma studies (Form VI) or in colleges not affiliated with the Victoria Institute of Colleges.

Facilities

Technical education is available for secondary students commencing at Form I after primary school and leading to the Leaving Technical examination at Form V. From Forms I to III a balanced education is given with emphasis on the development of the ability to communicate, the understanding of the physical and social environment, and the aesthetic and physical development of the individual. These objectives are accomplished by providing studies in both theoretical and practical subjects closely associated with the needs and abilities of students. After Form III more specialised studies are available which can lead to positions in industry, or to further vocational training in applied science, art, commerce, technician or craft apprenticeships, and home economics.

Successful completion of Form V is the current entrance requirement for most diploma courses in the colleges of advanced education. Altogether, fourteen colleges are offering full diploma courses and nineteen are teaching part diploma courses. Since the establishment of the Victoria Institute of Colleges (see page 487), eleven of the older colleges have become affiliated with the Institute. These colleges are now controlled by their own independently constituted councils and are responsible to the Institute for the development and operation of tertiary courses and to the Education Department for the conduct of non-tertiary courses. Entry to apprenticeship

COURSES AND CAREERS IN ENGINEERING 1970

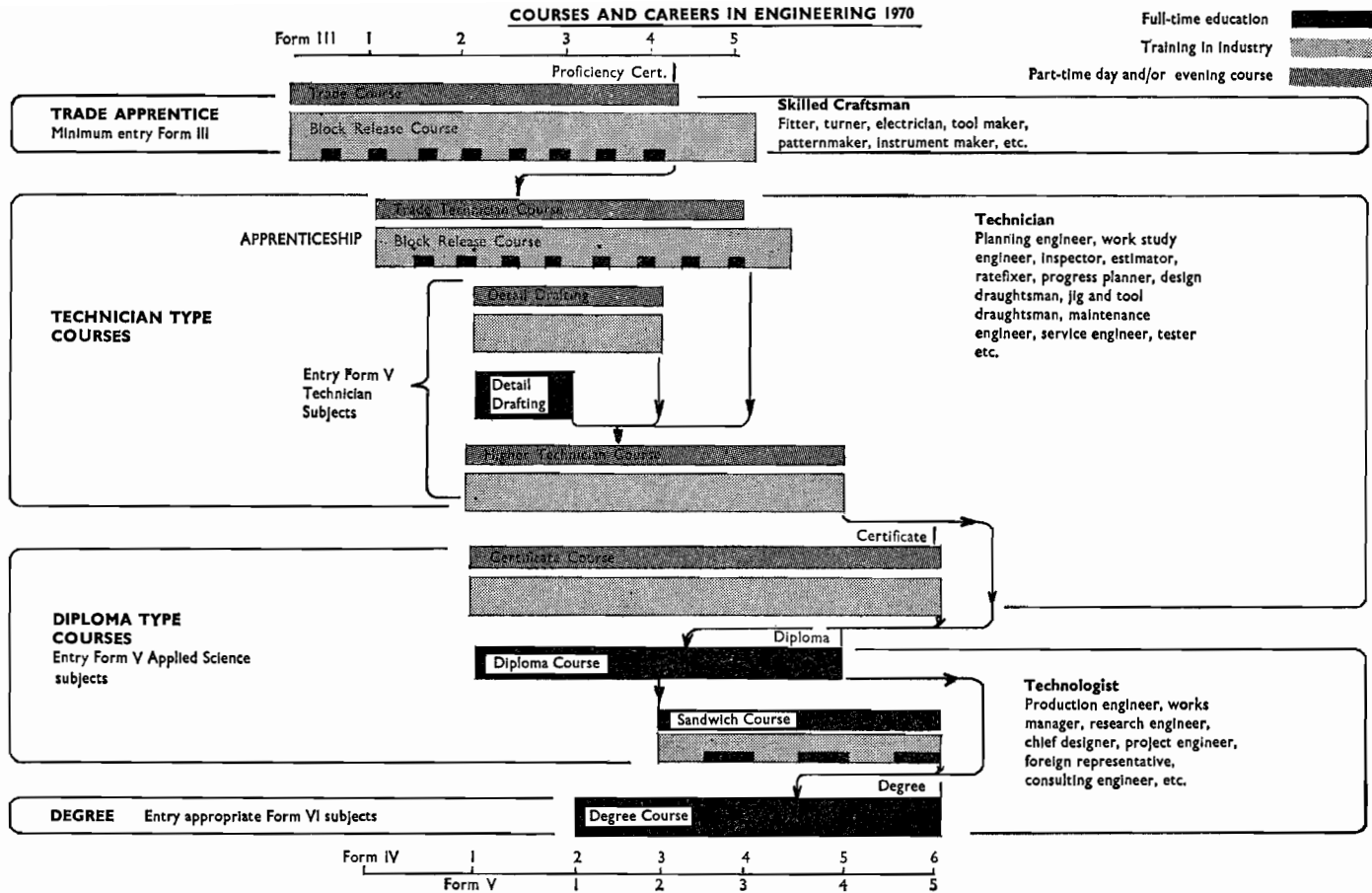


FIGURE 13

is based on the minimum completion of Form III studies. However, there are rising standards for most trades and in 1969, 57 per cent of entrants had completed Intermediate Technical studies and 14 per cent Leaving Technical studies. Remissions, up to one year, of the length of apprenticeships were granted to nearly one third of apprentices because of additional full-time schooling completed.

The courses of study provided for apprentices are conducted for four years in most trades on a compulsory day release basis. In some trades, however, block release training is now becoming important (see also pages 197-9). The more common trade courses are available in the building and metal trades in many technical schools in metropolitan and country areas. Specialised trade schools are available for courses in food trades, hairdressing, painting and decorating, printing and graphic arts, and textiles. In recent years the rising standard of diploma courses has indicated a need for the development of a wide range of courses to fill the gap between professional courses and craft training. Technician courses have now been instituted, after extensive consultation with industry, at the following levels:

1. More able tradesmen are given a sound training in mathematics, science, and communicating skills (Form V Technician level) and other manipulative skills are developed, or the original skills are developed to a higher degree. These Trade Technician Courses will be used to train the more highly skilled tradesmen, junior production planners, detail draughtsmen, marine engineers (Part B second Class level), and diagnosticians who can operate in one or in some instances two major areas.

2. Courses at a higher level, with mathematics, physics and communicating skills are taken to Form VI Technician level. These Higher Technician Courses will train power station operators, design draftsmen, marine engineers (first Class level), laboratory and field test officers, senior production planners and work study personnel, electrical testers, and diagnosticians for the more complex control systems who can operate in two or three major areas.

In this way, courses are now available in specialities associated with automotive, electrical, mechanical, production, and civil technologies, metal fabrication, aircraft mechanics, detail and design drafting, naval architecture, and building construction.

Relations with industry and society

Technical schools have always tried to meet, with varying degrees of success, the changing needs of students and the demands of industry. They have given increasing attention to individual differences in secondary stage education and to a widening range of vocational courses thereafter. These schools are now being asked to solve various educational problems arising from changes in the accumulation of knowledge, the developments in technology, the transformation of social attitudes, and the rising level of human aspiration.

These problems are being solved, first, by ensuring an adequate flow of information between parents, schools, industry, students, and the community through the use of appropriate consultative bodies; second, by providing an educational structure which will give a foundation on which students can develop to the utmost their personal and vocational interests; and third, by providing in industry a range of qualification levels which will

promote the most efficient employment of the work force, and offer courses sufficiently flexible that appropriate mobility of the labour force can be achieved in accordance with changing requirements.

Further reference, 1965

State expenditure on education

During 1968-69, \$273,504,000 was spent by and on behalf of the Education Department of Victoria. This amount covered expenditure from both revenue and loan and included payments made by the Treasury to the universities, except for an amount paid for Bacteriological Laboratory Services. The expenditure shown in the following table differs from the figures on education expenditure shown on pages 627 and 644 of the *Year Book*, in that the amounts shown in the Finance Section exclude payments for superannuation and pensions and workers compensation.

The following tables show details of expenditure by and on behalf of the Education Department for 1968-69. They have been revised to comply with a new format agreed upon at a conference of representatives of the various State Education Departments in February 1969 and are not comparable with tables shown in this section of previous *Year Books*.

VICTORIA—EDUCATION DEPARTMENT:
EDUCATIONAL EXPENDITURE, 1968-69
(\$'000)

Expenditure on—	1968-69
STATE SCHOOLS	
Primary—	
Recurring	84,124
Capital	9,671
Total	93,795
Secondary (a)—	
Recurring	88,735
Capital	13,678
Total	102,413
Technical (b)—	
Recurring	7,959
Capital	1,901
Total	9,860
Total State schools	206,068
TERTIARY EDUCATION	
University—	
Recurring	18,383
Capital	6,658
Total	25,041
Colleges of Advanced Education—	
Recurring	5,502
Capital	2,329
Total	7,831
Scholarships, fees, allowances for students at universities or Colleges of Advanced Education	28
Total tertiary	32,900

SOCIAL CONDITIONS

VICTORIA—EDUCATION DEPARTMENT :
 EDUCATIONAL EXPENDITURE, 1968-69—*continued*
 (\$'000)

Expenditure on—	1968-69
TEACHER EDUCATION	22,176
OTHER EXPENDITURE	
Pre-school education	2,918
Public library	2,064
Adult education	193
Non-Government schools grants, subsidies, scholarships and bursaries, and pupil conveyance	5,580
Agricultural education (c)	1,583
Miscellaneous	22
Total other expenditure	12,360
Total expenditure on education	273,504

(a) Includes secondary technical.

(b) Excludes Colleges of Advanced Education.

(c) Excludes agricultural Colleges of Advanced Education.

The preceding table excludes tuition fees, material fees, analysis fees, donations received, sales of class material and school notes, and other such receipts which were retained and expended by the various technical school councils.

VICTORIA—EXPENDITURE ON EDUCATION IN STATE SCHOOLS AND ON
 TEACHER EDUCATION, 1968-69
 (\$'000)

Classification	Primary education	Secondary education (a)	Technical education (b)	Total expenditure in State schools	Teacher education
Cost of administration	3,151	2,708	261	6,120	403
Cost of instruction	63,052	69,734	5,314	138,100	19,748
Building operation and main- tenance (c)	7,062	5,869	1,098	14,029	489
Fixed charges (d)	10,860	10,423	1,286	22,569	893
Capital expenditure	9,671	13,678	1,901	25,250	644
Total	93,796	102,412	9,860	206,068	22,176

(a) Including secondary technical education.

(b) Excludes expenditure on Colleges of Advanced Education.

(c) Includes wages of caretakers, cost of cleaning, fuel, water, repair of buildings, upkeep of grounds, repair and replacement of furniture, etc.

(d) Includes pensions and superannuation, rent of buildings, pay-roll tax, and interest on loans.

The above expenditure excludes expenditure for school medical and dental services which amounted to \$1,098,000 in 1968-69.

Council of Public Education

Constitution

The *Registration of Teachers and Schools Act* 1905 came into operation on 1 January 1906, and provided for the registration of schools other than State schools, and of those teaching in them. It continued until the *Education Act* 1910, which, *inter alia*, established the Council of Public Education to exercise these functions.

Registration of teachers

Non-Government schools in Victoria are not permitted to employ teachers who are not registered with the Council of Public Education, and to secure registration a teacher must have some form of recognised training or hold a Diploma of Education from a university. Each person applying for registration has to give sufficient information to permit the Registration Committee to determine at what level he should be registered, namely, whether he should be registered as a sub-primary, primary, junior secondary, or secondary teacher, or as a teacher of special subjects.

Teacher education

Although persons with appropriate qualifications may be recruited as teachers from other States or from overseas, or may previously have qualified in Government teachers colleges, there are facilities in Victoria at six non-Government institutes for the training of teachers for the non-Government schools. Of these, five colleges form part of the Catholic system; the remaining college, Mercer House, Armadale, trains teachers for the other non-Government schools.

Finance for these colleges comes from fees of the students, and from payments by sponsoring bodies or schools. Students in these colleges are eligible for Commonwealth Tertiary Scholarships.

Courses for primary teacher education are conducted at all of these institutes and about 300 students complete their courses each year. In addition, Mercer House conducts junior secondary and arts and crafts courses for full-time and part-time students, as well as in-service courses.

Registration of schools

All non-Government schools must be approved, before registration, by the Council of Public Education as having adequate buildings and trained staff. They are also subject to inspection by inspectors of the Education Department. Each school is registered either as a sub-primary, primary, junior secondary, or secondary school, or as a school of any two or more such descriptions.

Provision is also made in the *Education Act* 1958 for the registration of technical schools and special schools. In addition, the Council can refuse to register any school if it considers that its premises or the instruction to be given in it will not be of a satisfactory standard.

Registered schools

Non-Government schools derive their working income from fees charged, very few having any endowments. About 20 per cent of the schools have accommodation for boarders; the remainder function as day schools only. Scholarships are offered by many schools, a full scholarship generally giving a remission of all tuition fees. Many of the schools encourage students to return to school for a second year of Fifth or Sixth Form study, and by providing a wide choice of subjects and cultural pursuits lying outside a set examination syllabus aim to provide a suitable preparation for more advanced studies. Teaching methods within these schools are similar to those employed in State schools but, in the denominational schools, more emphasis is given to religion. Several schools are conducting internal experiments on curriculum reform.

Of the non-Government schools most are associated with the Catholic church, a large number of these being co-educational primary schools. The remaining non-Government schools, associated with other denominations or being under non-denominational control, are generally not co-educational. At the secondary level they include schools whose headmasters are members of the Headmasters Conference of the Independent Schools of Australia or whose headmistresses are members of the Association of Headmistresses of Independent Schools of Australia.

The ultimate control of each of the non-Government schools is independent of the State; the controlling body may be a council of representatives of a church or of interested men and women, or if under control of a religious order, as are many Catholic schools, the controlling body in Victoria of the order.

A major change in non-Government schools has occurred since the provision of science grants for schools, in the first instance by the Industrial Fund for the Advancement of Scientific Education in Schools, and later by the Commonwealth Government in 1964. In 1964 Commonwealth legislation provided for \$10m to be spent annually (on a per capita basis) to provide adequate science laboratories and equipment in Government and non-Government schools throughout Australia. Previous to those grants relatively few non-Government schools could afford the provision of expensive laboratories and equipment. In 1965 the State Government legislated to provide an interest subsidy on capital loans raised by non-Government schools for new buildings and in 1967 gave annual grants to schools on a per capita basis. In 1970 the grants were \$20 per pupil at primary level and \$40 per pupil at secondary level. At the end of 1969 the Commonwealth Government legislated to provide annual grants to non-Government schools at the rate of \$35 per pupil at primary level and \$50 per pupil at secondary level. These grants must be used by a school for recurrent expenses, and are not available for capital undertakings.

Catholic education

Administration

The general administration and organisation of Catholic education is primarily on a diocesan basis, the four dioceses of the State being Melbourne, Ballarat, Sale, and Sandhurst, under direction of the Bishop who appoints his own administrative officers. A new administrative pattern came into operation in Melbourne in May 1969, which is likely to be established in the other dioceses.

The Archbishop of Melbourne now exercises his authority in education through the Melbourne Catholic Education Board. This is a representative board of fifty-one members with an episcopal vicar for education as chairman, an executive of seven, twelve priest and twelve parent members elected on behalf of a regional division of the diocese, and twenty representatives of religious teachers, lay teachers, and catechists. The function of the Board is to serve as a channel of communication between all parties involved in Catholic primary and secondary education and to participate in decision making in all matters relating to the Christian education of the Catholic children of the diocese. The Catholic Education Office acts as the secretariat of the Board, its director being secretary to the

Board. It administers the policies of the Board in the Melbourne Archdiocese and serves as a channel of communication in educational matters for the remainder of the State.

In conjunction with the re-organisation outlined above, all parishes, regional colleges and diocesan schools have established their own boards which shape and administer educational policy at the local level. These boards have been nominated as the proper authority to receive and account for government educational grants. All other schools remain the responsibility of religious orders. They operate in co-operation with the Melbourne Catholic Education Board while maintaining their independent status.

Relationship with State authorities

All Catholic schools and their staffs are required to be registered by the Council of Public Education and are subject to inspection by officers of the Education Department who act on behalf of the Council. When teachers are ineligible for registration they may teach only with permission from the Council and on condition that no registered teacher is available. This permission is granted for one year only.

Although the Government takes no direct responsibility for the staffing and organisation of Catholic schools beyond the above regulations it assists them in matters of finance. Per capita grants towards operational costs are made by Federal and State Governments for all pupils in Catholic schools. These amount to \$55 per annum for primary school pupils and \$90 per annum for those pupils in secondary schools.

Further aid is available in the form of science and library grants, transport allowances, interest subsidies, scholarships and subsidies for teacher training institutions. Dental and medical services are also provided for Catholic schools by the Government. Despite these grants the financing of Catholic schools depends substantially on support from the Catholic community at primary school level and on school fees at the secondary school level.

Staffing

In the early days of Catholic education in Victoria schools were staffed by lay teachers. The first religious orders came in the 1850s. From the Education Act of 1872 until the end of the Second World War, teaching was almost entirely in the hands of religious. The expansion of the system following the Second World War saw the introduction of lay staff in increasing numbers. At the present time the majority of teachers are lay. For the most part these teachers are trained in Catholic teachers colleges, although a considerable number are recruited from outside the system. There is no provision for the training of male lay teachers in Catholic teachers colleges.

Activities

Catholic education in Victoria falls into the following main divisions :

Pre-school. At the end of 1970 there were sixteen kindergartens conducted under the auspices of the Catholic church in Victoria. They are open by law to all applicants independent of their religious affiliations. These kindergartens are subsidised by the Department of Health and are subject to the regulations of the department.

Primary. Virtually every parish in the State conducts at least one primary school. With a few exceptions these schools provide for children from beginners through to Grade 6. In addition to parish primary schools there are primary grade children in special schools, e.g., for the deaf, the blind, and the severely retarded, and in private preparatory schools.

Secondary. For the most part, Catholic secondary schools are owned and maintained by religious orders which finance their schools by charging fees. They cater for boarders as well as day students in many cases. A recent development has been the establishment of Regional Secondary Colleges of which there are now eighteen. In these cases several parishes co-operate to build and finance a school on a convenient site, and engage a religious teaching congregation to conduct the school on their behalf.

Tertiary. The main emphasis is on primary teacher training. The three major colleges at Ballarat, Oakleigh, and Ascot Vale cater for more than 500 female students and several smaller colleges cater for the training of members of religious congregations. In addition several theological colleges provide for the education of students for the priesthood. There are university colleges and halls of residence at Melbourne and Monash universities.

Catechetical. Until recently Catholic schools catered for almost all Catholic children, but during the 1960s the number of Catholic children in State schools rose sharply to more than 70,000 in 1969. The religious education of these pupils is undertaken by a team of religious who are assisted on a part-time basis by priests and voluntary catechists.

Courses of study

A limited number of schools provide experimental courses. For the most part, however, schools follow the courses of study recommended by the Victorian Education Department and the Victorian Universities and Schools Examination Board.

Further references, 1962-70

Particulars of Victorian Registered schools (excluding business and coaching colleges) are shown in the following tables. In these tables census enrolments are those at 1 August in the year concerned.

VICTORIA—NUMBER OF REGISTERED SCHOOLS AND TEACHERS

Particulars	Number of schools					Number of teachers				
	1965	1966	1967	1968	1969	1965	1966	1967	1968	1969
Denominational—										
Roman Catholic	485	483	482	483	479	4,215	4,482	4,696	4,950	5,126
Church of England	33	33	35	35	35	1,039	1,063	1,114	1,188	1,209
Presbyterian	14	14	14	14	11	519	577	623	648	578
Methodist	4	4	4	4	4	239	259	285	303	290
Other	27	27	27	27	27	389	409	437	498	507
Undenominational	19	18	16	16	16	299	291	283	310	297
Total	582	579	578	579	572	6,700	7,081	7,438	7,897	8,007

VICTORIA—REGISTERED SCHOOLS : CENSUS ENROLMENTS BY SCHOOL DENOMINATION

At 1 August—	Denomination					Total denominational	Un-denominational	Total enrolments
	Roman Catholic	Church of England	Presbyterian	Methodist	Other			
1965	145,952	15,467	8,008	3,885	5,575	178,887	3,719	182,606
1966	145,237	15,522	8,296	4,146	5,913	179,114	3,741	182,855
1967	146,844	16,195	8,441	4,153	6,197	181,830	3,692	185,522
1968	149,286	16,328	8,515	4,206	6,483	184,818	3,755	188,573
1969	149,796	16,618	8,379	4,258	6,652	185,703	3,749	189,452

VICTORIA—REGISTERED SCHOOLS : SCHOOL DENOMINATION : CENSUS ENROLMENTS BY AGES, 1969

Age last birthday at 1 August 1969 (years)	Denomination					Total denominational	Un-denominational	Total enrolments
	Roman Catholic	Church of England	Presbyterian	Methodist	Other			
Under 6	11,230	570	195	81	378	12,454	277	12,731
6	13,918	530	253	55	420	15,176	228	15,404
7	14,634	613	283	74	390	15,994	226	16,220
8	14,886	685	328	72	434	16,405	225	16,630
9	14,641	766	342	141	448	16,338	235	16,573
10	14,569	918	393	169	468	16,517	272	16,789
11	14,217	1,169	534	253	518	16,691	288	16,979
12	12,101	1,838	919	477	633	15,968	315	16,283
13	10,821	1,959	1,037	516	659	14,992	343	15,335
14	10,041	1,924	1,076	590	666	14,297	339	14,636
15	8,312	1,988	1,041	627	620	12,588	354	12,942
16	6,105	1,846	1,023	628	519	10,121	351	10,472
17	3,251	1,350	745	434	377	6,157	250	6,407
18	908	402	188	107	107	1,712	45	1,757
19 and over	162	60	22	34	15	293	1	294
Total	149,796	16,618	8,379	4,258	6,652	185,703	3,749	189,452

VICTORIA—REGISTERED SCHOOLS : CENSUS ENROLMENTS : AGES OF PUPILS

Age last birthday (years)	At 1 August—				
	1965	1966	1967	1968	1969
Under 6	14,072	13,544	13,467	13,222	12,731
6	16,601	15,777	15,809	15,596	15,404
7	16,570	16,741	16,387	16,276	16,220
8	16,673	16,372	16,815	16,779	16,630
9	16,254	16,337	16,493	16,732	16,573
10	16,297	16,125	16,328	16,708	16,789
11	16,218	16,344	16,392	16,840	16,979
12	15,999	15,596	15,994	16,296	16,283
13	14,360	14,901	14,849	15,109	15,335
14	13,680	13,765	14,343	14,300	14,636
15	11,388	11,760	12,148	12,968	12,942
16	8,247	8,973	9,385	9,987	10,472
17	4,764	4,952	5,500	5,963	6,407
18	1,301	1,455	1,362	1,551	1,757
19 and over	182	213	250	246	294
Total	182,606	182,855	185,522	188,573	189,452

A comparison between census enrolments in State schools (excluding senior technical) and Registered schools for the five years 1965 to 1969 is shown in the following table :

VICTORIA—STATE AND REGISTERED
SCHOOLS : CENSUS ENROLMENTS

At 1 August—	State schools	Registered schools	Total enrolments
1965	504,120	182,606	686,726
1966	523,786	182,855	706,641
1967	540,281	185,522	725,803
1968	555,838	188,573	744,411
1969	572,125	189,452	761,577

The census enrolments and ages of pupils in State schools (excluding senior technical) and Registered schools for the five years 1965 to 1969 are shown in the following table :

VICTORIA—STATE AND REGISTERED SCHOOLS :
CENSUS ENROLMENTS : AGES OF PUPILS

Age last birthday (years)	At 1 August—				
	1965	1966	1967	1968	1969
Under 6	58,508	61,149	62,160	62,214	61,422
6	64,334	64,476	66,831	67,373	67,363
7	62,800	65,046	65,101	67,472	68,378
8	62,032	63,221	65,659	65,596	68,307
9	61,186	62,386	63,679	65,807	66,102
10	60,180	61,644	62,948	64,284	66,260
11	58,778	60,997	62,416	63,756	65,134
12	58,800	58,267	60,510	62,149	62,750
13	57,473	59,645	59,281	60,846	62,922
14	55,482	56,514	58,524	58,703	60,975
15	43,362	45,374	46,947	49,900	50,387
16	26,465	29,620	31,564	33,796	36,445
17	13,101	13,733	15,619	17,181	18,898
18	3,667	3,779	3,818	4,530	5,242
19 and over	558	790	746	804	992
Total	686,726	706,641	725,803	744,411	761,577

The Victorian Universities and Schools Examinations Board

The Joint Matriculation Advisory Committee, appointed by the University of Melbourne and Monash University in July 1960, recommended the establishment of an independent examinations board which would determine and administer university entrance requirements. Subsequently the Victorian Universities and Schools Examinations Board was set up in 1964 for the purpose of establishing uniform university entrance requirements for the two universities and since 1967 for La Trobe University as well.

The Board, which is appointed annually, consists of thirty-nine members and includes representatives of the constituent universities, the Department of Education, Registered secondary schools, and commercial and industrial interests. Standing Committees for the various subjects are appointed by the Board in July each year. Courses of study and details of subjects are sub-

mitted to the Board by the Standing Committees which report to the Board, through their examiners, on the examinations, and advise the Board on matters relating to the curriculum.

Whilst the passing of the Board's examinations is one of the conditions of university entrance, each university has reserved the right to prescribe particular faculty requirements and to admit to its courses, as it sees fit, students who have not fulfilled the normal requirements.

Fifth and sixth form examinations

As the Intermediate Examination, previously conducted at the end of the fourth year of secondary education has not been held since 1967, much more attention has been drawn to the fifth and sixth form examinations. The Board instructed its Curriculum Review Committee to investigate the School Leaving and the Higher School Certificate Examination and the relationship between them. An invitation was issued to all interested individuals and organisations to make submissions to the Committee in writing or in person. There was a large number of responses and all submissions were being analysed towards the end of 1969 in order to prepare a report and make recommendations to the Board.

Higher School Certificate

Because of the greater number of boys and girls remaining at school to undertake sixth form studies, the results of the Matriculation examination are being used for many purposes other than for entrance to a university. The title "Matriculation" had therefore become misleading and from 1970 has been changed to the "Higher School Certificate Examination of Victoria". This choice of name was determined upon because it is being used in the other States of Australia for the examination for the final year of secondary school. In 1969 the results of the (then) Matriculation Examination were published in the form of eight grades (A to H) for each subject. Previously candidates had received certificates showing only those subjects in which they had passed or gained honours. With the introduction of grades they now receive some recognition for all subjects which they have seriously attempted. While there is no official grade of pass or fail, the university entrance requirements of the Board are now defined as the obtaining of grade D or higher in four subjects of the Higher School Certificate Examination. Unless as a result of its investigation into the examinations the Board determines otherwise, the prerequisite for entry to the Higher School Certificate Examination is the passing in the prescribed manner of certain subjects at the School Leaving Examination.

Research

With the appointment of a full-time research officer a continuous programme of research into the form, content, and effect of examinations is being carried out. A special committee of educationalists directs the research and the procedures for the setting of question papers and the marking processes.

Further reference, 1969-70

Matriculation examination

Statistics of Matriculation examinations for the years 1965 to 1969 are as follows :

VICTORIA—MATRICULATION EXAMINATIONS

Candidates	1965	1966	1967	1968	1969
Total entries	19,511	21,446	22,869	24,989	28,135
Number who attempted to pass fully	11,474	12,296	12,898	14,617	16,932
Number who passed fully	7,435	8,096	8,628	9,701	10,987
Percentage who passed fully	64·8	65·8	66·9	66·4	64·9

University of Melbourne

The University of Melbourne was incorporated and endowed by an Act of the Governor and the Legislative Council of Victoria on 22 January 1853. The University consists of and is governed by a Council of thirty-three members and a Convocation consisting of all graduates. The University buildings, together with those of the affiliated residential colleges, are situated on 100 acres of land in Parkville.

Chairs

Chairs maintained at the University either out of general revenue or from endowments include the following: Accounting (G. L. Wood Professor), Agriculture, Anatomy, Applied Mathematics, Architecture (*The Age* Professor), Bacteriology, Biochemistry, Botany and Plant Physiology, Chemistry, Child Health, Civil Engineering, Classical Studies, Commerce (Sidney Myer Professor), Commercial Law, Conservative Dentistry, Dental Medicine and Surgery, Dental Prosthetics, Economics (Truby Williams Professor), Economic History, Education, Electrical Engineering, English Language and Literature, Experimental Neurology, Fine Arts (*The Herald* Professor), French, Geography, Geology and Mineralogy, Germanic Languages, History, History (Ernest Scott Professor), Jurisprudence, Mechanical Engineering, Medicine (James Stewart Professor), Medicine, Metallurgy, Music (Ormond Professor), Obstetrics and Gynæcology, Ophthalmology, Organic Chemistry, Oriental Studies, Pathology, Pharmacology, Philosophy, Physics (Chamber of Manufactures Professor), Physiology, Political Science, Psychiatry, Psychology, Public Law, Pure Mathematics, Semitic Studies, Statistics, Surgery (James Stewart Professor), Veterinary Science, and Zoology. Research chairs have been established in Economics (Ritchie Professor), Experimental Medicine, and Metallurgy.

In addition, other departments (under the charge of an Associate-Professor, senior lecturer-in-charge, or other officer) include Anthropology, Criminology, Forestry, History and Philosophy of Science, Indian, Indonesian and Malayan Studies, Industrial Relations, Journalism, Languages (Science Course), Medical Jurisprudence, Meteorology, Microscopy, Mining, Physical Education, Russian, Social Studies, Surveying, and Town and Regional Planning.

Fees

The annual fees payable to the University by a student in any course do not, in general, exceed \$300.

Fees include a Union fee payable by all students who are thereby entitled to share in the corporate and social activities centred around the University Union. The students, through their Students' Representative Council, have a large measure of self-government in all matters concerning the University Union.

Students may obtain financial assistance in many ways. Scholarship schemes based on academic merit are provided by the Commonwealth and State Governments and there is a great variety of scholarships provided by private foundations. In addition, the University makes loans in approved cases out of the Students' Loan Fund. In 1969, 69 per cent of all students were receiving some form of financial assistance. The largest group was that of Commonwealth Scholarship holders (5,184); another 2,100 students held Victorian Education Department Studentships which are granted to students who undertake to enter the teaching service on completion of their courses and to teach for a period of at least three years.

Student enrolment

The following tables show the number of full-time, part-time, and external students and enrolments in the various faculties for the five years 1966 to 1970.

VICTORIA—UNIVERSITY OF MELBOURNE: STUDENTS ENROLLED,
CLASSIFIED BY SEX AND TYPE OF COURSE^(a)

Year	Full-time		Part-time		External		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
1966	6,488	2,897	2,861	1,114	384	159	9,733	4,170
1967	6,760	2,947	2,803	1,220	300	121	9,863	4,288
1968	6,970	2,764	2,774	1,187	216	81	9,960	4,032
1969	6,686	3,116	3,219	1,276	150	51	10,055	4,443
1970	6,800	3,282	3,220	1,260	127	37	10,147	4,579

(a) 1966 and 1967 figures refer to enrolments up to 31 July, 1968 and 1969 to enrolments up to 30 June, and 1970 to enrolments up to 30 April.

VICTORIA—UNIVERSITY OF MELBOURNE: ENROLMENTS
CLASSIFIED BY FACULTIES^(a)

Faculty	1966	1967	1968	1969	1970
Agricultural science	240	268	264	284	306
Applied science	129	153	165	200	142
Architecture	632	646	625	628	584
Arts	3,754	3,693	3,714	3,731	3,666
Commerce	1,624	1,643	1,738	1,818	1,843
Dental science	265	261	246	274	274
Education	746	697	639	660	707
Engineering	914	958	1,002	1,012	1,089
Journalism	45	53	62	65	58
Law	1,251	1,226	1,298	1,288	1,287
Medicine	1,008	1,114	1,141	1,203	1,244
Music	243	253	269	283	284
Physical education	194	180	188	198	199
Science	2,285	2,341	2,386	2,633	2,798
Social studies	280	299	336	313	340
Town and regional planning	100	132	160	176	210
Veterinary science	193	234	232	257	252
Student total	13,903	14,151	(b)13,992	(b)14,498	(b)14,726

(a) 1966 and 1967 figures refer to enrolments up to 31 July, 1968 and 1969 to enrolments up to 30 June, and 1970 to enrolments up to 30 April.

(b) In 1968 and succeeding years, students taking combined courses are counted in each faculty, and accordingly the sum of faculty enrolments exceeds the student total shown at the foot of the table.

Since the war many Asian students have been admitted to Australian educational institutions. Enrolments of Asian students at the University of Melbourne have increased from 100 in 1949 to 404 in 1970 of whom 42 were studying on Colombo Plan Scholarships. All south-east Asian countries are represented as well as India, Ceylon, Hong Kong, the Philippine Islands, and Fiji.

The following table shows the number of degrees conferred in faculties of the University of Melbourne from 1965 to 1969. In addition to degrees shown below, some faculties grant diplomas for certain subgraduate and postgraduate courses.

VICTORIA—UNIVERSITY OF MELBOURNE : DEGREES
CONFERRED IN FACULTIES

Faculty	1965	1966	1967	1968 (a)	1969 (a)
Agricultural science	37	38	37	46	60
Architecture	69	86	80	73	91
Arts	466	551	648	646	714
Commerce	220	258	271	263	324
Dental science	27	32	40	47	47
Education	67	74	68	89	74
Engineering	145	178	200	167	201
Law	171	183	192	201	208
Medicine	157	173	169	170	162
Music	23	27	30	29	34
Science	331	441	441	458	471
Veterinary science	1	1	1	40	41
Total	1,714	2,042	2,177	2,229	2,427
Bachelors' degrees	1,540	1,852	1,986	1,993	2,187
Higher degrees	174	190	191	236	240

(a) Before 1968, figures relate to year ended 31 July. Figures for 1968 are for eleven months ended 30 June. Figures for 1969 are for twelve months ended 30 June.

Finance

Income and expenditure for the years 1964 to 1968 are shown in the following table :

VICTORIA—UNIVERSITY OF MELBOURNE : INCOME AND EXPENDITURE
(\$'000)

Particulars	1964	1965	1966	1967	1968
SOURCE OF INCOME					
Commonwealth Government	5,668	7,005	8,279	9,297	9,389
State Government	6,030	6,511	10,097	7,630	9,396
Total Government grant	11,698	13,516	18,376	16,927	18,785
Other sources—					
Donations and special grants	1,272	1,070	1,269	1,190	1,201
Student fees	2,312	3,141	3,187	3,752	3,729
Public examination fees	578	45	52	54	54
Other fees	70	61	73	88	107
Endowment income	353	365	291	412	418
Charges for services	252	297	402	301	375
Halls of residence	119	127	139	204	218
Other income	255	296	455	459	546
Total other sources	5,212	5,403	5,868	6,460	6,647
Total income	16,911	18,918	24,244	23,387	25,431

VICTORIA—UNIVERSITY OF MELBOURNE : INCOME AND EXPENDITURE—*continued*
(\$'000)

Particulars	1964	1965	1966	1967	1968
NATURE OF EXPENDITURE					
Teaching and research—					
Salaries and superannuation	6,924	9,555	9,460	10,221	11,425
Equipment and maintenance	1,606	1,580	1,871	2,120	2,068
Research scholarships, fellowships, and study leave	647	755	925	1,026	1,021
Other teaching and research expenditure	585	689	937	921	1,065
Total teaching and research	9,762	12,579	13,193	14,288	15,579
Administration and general overhead—					
Salaries and superannuation	613	760	983	1,156	1,347
Other administration expenditure	297	410	480	528	559
Libraries—					
Salaries and superannuation	284	362	415	435	471
Other expenditure on libraries	296	400	418	367	438
Buildings, premises and grounds—					
New buildings	2,910	1,737	2,871	4,529	3,381
Repairs and maintenance, including salaries and superannuation	1,006	1,273	1,233	1,311	1,557
Rents, rates, power, lighting, and heating	238	269	318	371	442
Other expenditure on buildings, etc.	218	170	391	537	141
Sundry auxiliary expenditure—					
Public examinations	444	35	43	50	50
Other expenditure	840	981	1,086	1,217	1,451
Total expenditure	16,908	18,975	21,431	24,789	25,416

University of Melbourne Veterinary School

First Veterinary School

Australia's first veterinary school, a private one, opened in 1888. In 1908 the school became part of the University of Melbourne but because of a decline of interest in veterinary work, the number of students dropped to such a low level that the school was forced to close in 1928. In both stages of the original school a diagnostic laboratory and research institute had been maintained and this was continued after the teaching function of the school had ceased. It has continued to operate as an autonomous unit—the Veterinary Research Institute—up to the present.

Second Veterinary School

During the 1950s the demand for veterinarians to provide professional services, both as private practitioners and Government veterinary officers, caused the veterinary profession and animal industry organisations to make representations to the State Government and the University of Melbourne to re-open the Veterinary School. A public appeal for funds was launched and \$400,000 was raised. The Premier pledged the State Government's support and with the co-operation of the Australian Universities Commission the necessary financial support for the development of the Veterinary School was provided.

Planning and building commenced in 1961 and the first students enrolled in March 1963. For the first two years teaching took place in temporary

accommodation but in May 1965 the first stage of building, the Veterinary Pre-Clinical Centre, was opened at Parkville. The second building, the Veterinary Clinical Centre, was built in several stages during the next three years and was officially opened in November 1967, one month before the first final year class graduated as Bachelors of Veterinary Science.

Two objectives were thought to be paramount in the organisation of the School. First, there was the need to incorporate the School physically within the University's main campus so that students and staff could contribute to its academic life, and also benefit from it. The second was to provide access to a suitable population of as many animal species as possible so that an adequate supply of animal patients would be available for clinical teaching, and in view of the national need for veterinarians to work with agricultural animals it was necessary to have at least part of the School situated in a rural environment. To satisfy both aims the School was divided into two parts: the Pre-Clinical Centre beside the main campus of the University, and the Clinical Centre beside the State Research Farm at Werribee.

Veterinary course

In the first year of the course students in the Veterinary School study general science subjects and one subject which introduces them to their later studies in Veterinary Science. In the second and third years of the course the preclinical subjects of anatomy, physiology, pharmacology, biochemistry, microbiology, parasitology, and pathology are taught and instruction is also provided in the care of normal animals by the staff of the Department of Animal Husbandry in the Faculty of Agriculture.

In the fourth and fifth years of the course attention is directed to the clinical subjects of medicine, preventive medicine, jurisprudence, surgery, radiology, obstetrics, animal reproduction, and the clinical aspects of pathology. To supply suitable material for practical instruction in these subjects a veterinary hospital is conducted at the Clinical Centre. A full veterinary service is provided to all animals within a 25 mile radius of the Centre and other cases are referred to the hospital by veterinarians from Victoria and neighbouring States. All animal species are catered for and there is a suitable balance between agricultural and recreational animals of about 60 per cent to 40 per cent.

Research and postgraduate training

The School encourages the development of research and postgraduate training. The original donations to the Veterinary School Appeal Fund were divided equally into a building fund and a research fund. The interest from the capital invested in the research fund provides a significant contribution to research, and large donations are also received annually from organisations interested in financing research work in the diseases of horses, cattle, sheep, and poultry. As a result all departments conduct research programmes and have postgraduate students. Veterinary research into basic problems and applied problems indigenous to Victoria has been greatly strengthened and it has been possible to provide veterinary knowledge to many organisations requiring collaboration in problems of mutual interest. The State Departments of Agriculture, and of Fisheries and

Wildlife, C.S.I.R.O., university departments, research units in human hospitals and the Commonwealth Serum Laboratories are all organisations with which the Veterinary School has developed strong associations.

In its role of providing veterinary scientists suitable for admission to professional licensing boards the Melbourne Veterinary School has been officially accredited by all Australian States, New Zealand, South Africa, Canada, Britain, and the United States of America.

Enrolment Problems, 1962; University of Melbourne Medical School 1862 to 1962, 1963; Department of Child Health, 1963; Postgraduate Education, 1964; University of Melbourne Library, 1964; Affiliated Residential Colleges, 1966; Employment of Graduates, 1967; Research in Victorian Universities, 1968; University of Melbourne Medical School, 1970

Monash University

Monash University, established in April 1958 and named after Sir John Monash, a distinguished Victorian, is situated at Clayton, 12 miles from the centre of Melbourne and near the main arterial highway linking Melbourne with eastern Victoria. This hitherto undeveloped site provided the opportunity of adopting a master plan for the whole of the physical development of the University. Within a surrounding belt of trees securing its privacy, the University is served by a perimeter road. Areas between the buildings are being developed with paving, lawns, rocks and ponds. Trees which were already growing on the site were retained as far as possible. A comprehensive scheme of planting, largely of native plants, closely follows the completion of each group of buildings, and a thicket of native vegetation in a gully to the north-east has been preserved as a wild life reserve. Parking facilities for some 3,000 cars have been planned. The whole conception is of buildings arranged around three sides of the campus and partly enclosing a pedestrian precinct open to the east.

The University was opened on 11 March 1961, three years earlier than originally envisaged, and teaching began with an enrolment of 363 undergraduates and graduates in the Faculties of Arts, Economics and Politics, Engineering, Medicine, and Science. Enrolments rose to 10,384 in 1970, and it is intended that the University should reach a total of 12,000 students and that as many full-time students as possible will be housed in halls of residence, the first of which was opened in 1962. The University offers the degrees of Bachelor, Master, Doctor of Philosophy, and higher Doctorates, and conferred its first Bachelor degrees at the beginning of the 1964 academic year.

Buildings and accommodation

Building work has proceeded with growing momentum and by the end of 1969, major projects in the University to the value of more than \$29.6m were either completed or under construction. The following building projects now in progress will be completed by the end of 1971: main library (second stage); education building; science north building (computer centre, mathematics, and information science); science south building and extension to medical school (botany, psychology, physiology, histology); science lecture theatres; engineering extensions; the Great Hall; alterations to physics building; union extensions; sports building extensions; fourth hall of residence; Prince Henry's Hospital clinical

school (stage 1), and Prince Henry's Hospital alterations. Clinical and para-clinical facilities in teaching hospitals affiliated with Monash are expected to cost \$4.5m in addition to grants made by the Hospitals and Charities Commission. The major project, the medical school building at the Alfred Hospital, has been completed at a total cost of \$2.3m. In order to provide teaching facilities for Monash medical students, buildings have also been completed at the Queen Victoria and Prince Henry's Hospitals. Clinical teaching is given at these hospitals and at the Royal Children's Hospital, Royal Park Psychiatric Hospital, and Fairfield Hospital. Plans for the proposed Monash Medical Centre began in 1966 and are proceeding.

The Alexander Theatre, a public lecture theatre commemorating Samuel Alexander, the Australian philosopher, has a capacity for over 700 persons. It has been designed to allow for many different uses and is one of the most flexible auditoria in the State.

At the Jock Marshall Zoology Reserve which contains dense native vegetation and covers an area of eight and a half acres, including an artificial lake of four acres, research projects are carried out on the behaviour and physiology of Australian wildlife, in some cases using telemetry techniques. There are numerous species of birds to be found in the reserve including the brush turkey and the rare Cape Barren goose, both of which breed there, the bower bird, bell bird, wagtail, and various species of water birds. Other animals in the reserve include the koala, echidna, wombat, bandicoot, pademelon, blacktailed wallaby, red kangaroo, grey kangaroo, and marsupial rat. The Jock Marshall reserve is being used as a centre for the propagation of the white-throated or Parmar wallaby which has become extinct in Australia although a few introduced animals still survive in New Zealand.

The Religious Centre, with a seating capacity of 420, is a gift to the University by the Christian churches and the Jewish community, and provides a place of worship for members of many faiths. The unity of thought behind the whole conception is emphasised by the circular plan of the Centre with its radial vestries and meeting places.

Monash University Library

The Monash University Library has approximately 360,000 volumes, and subscribes to some 7,500 periodicals. These are housed in four main locations: the Main Library, catering largely for arts, economics, politics, and education; the Hargrave Library, for the physical sciences and engineering; the bio-medical library, which serves the Faculty of Medicine and the departments of zoology and botany; and the law library.

Halls of residence

The University has three halls of residence, known as the North-East Halls, each taking both men and women. The halls are non-denominational, and accommodate 525 students. The central building of the complex provides facilities for dining halls, serveries, a kitchen, an administrative centre and a limited number of staff quarters. The total cost of the project was \$2.2m. A fourth hall of residence will be completed in 1971.

Faculties

At present there are seven faculties each with a full-time Dean : Arts, Economics and Politics, Education, Engineering, Medicine, Science, and Law. At a later date a Faculty of Architecture will be established.

Chairs

Appointments have been made to the following chairs :

Faculty of Arts. Anthropology and Sociology (2) ; Classical Studies ; English (2) ; French ; Geography ; German ; History (3) ; Indonesian and Malay ; Japanese ; Linguistics ; Music ; Philosophy (2) ; Russian.

Faculty of Economics and Politics. Accounting ; Agricultural Economics ; Economics (4) ; Economic History ; Econometrics ; Politics (2).

Faculty of Education. The K. S. Cunningham Chair of Education (Experimental Education) ; the Ian Clunies Ross Chair of Education (Science Education) ; Education (4).

Faculty of Engineering. Chemical Engineering ; Civil Engineering (2) (Structural Engineering and Materials Science) ; Electrical Engineering ; Mechanical Engineering (2) (Fluid Mechanics and Engineering Dynamics).

Faculty of Law. The Sir Isaac Isaacs Chair of Law ; the Sir John Latham Chair of Law ; the Sir Leo Cussen Chair of Law ; the Sir Haydn Starke Chair of Law.

Faculty of Medicine. Anatomy ; Biochemistry (2) ; Medicine (2) ; Microbiology ; Obstetrics and Gynæcology ; Pædiatrics ; Pathology ; Physiology (2) ; Social and Preventive Medicine ; Surgery (2) ; Psychological Medicine.

Faculty of Science. Applied Mathematics (2) ; Botany ; Chemistry ; Genetics ; Information Science ; Inorganic Chemistry ; Organic Chemistry ; Mathematical Statistics ; Physics ; Psychology ; Pure Mathematics (3) ; Theoretical Physics ; and Zoology.

University entrance

The normal entrance requirement for a student is to satisfy the matriculation requirements prescribed by the Victorian Universities and Schools Examinations Board. Except in the case of the Faculty of Arts and the Faculty of Medicine, there are no special faculty prerequisites, but in certain subjects it is assumed that Higher School Certificate standard has been reached.

Student enrolment

The following table shows full-time and part-time students at Monash University from 1966 to 1970 :

VICTORIA—MONASH UNIVERSITY : STUDENTS ENROLLED(a)

Year	Full-time		Part-time		Total	
	Males	Females	Males	Females	Males	Females
1966	3,389	1,462	719	364	4,108	1,826
1967	4,051	1,750	897	419	4,948	2,169
1968	4,761	2,039	1,104	562	5,865	2,601
1969	5,161	2,312	1,425	644	6,586	2,956
1970	5,437	2,574	1,614	759	7,051	3,333

(a) 1966 and 1967 figures refer to enrolments up to 31 July, 1968 and 1969 to enrolments up to 30 June, and 1970 to enrolments up to 30 April.

The following table shows undergraduate and postgraduate enrolments in the various faculties in 1969 and 1970 :

VICTORIA—MONASH UNIVERSITY: ENROLMENTS BY FACULTIES

Faculty (a)	Up to 30 June 1969				Up to 30 April 1970			
	Undergraduate		Postgraduate		Undergraduate		Postgraduate	
	Males	Females	Males	Females	Males	Females	Males	Females
Arts	1,269	1,714	95	59	1,247	1,841	151	89
Economics and politics	1,355	239	133	15	1,356	289	187	12
Education	427	276	38	12	495	340	53	15
Engineering	737	6	102	..	841	9	111	2
Law	758	112	6	6	790	121	8	5
Medicine	720	154	54	24	748	161	27	6
Science	939	345	188	23	1,010	429	277	44
Total	6,205	2,846	616	139	6,487	3,190	814	173

(a) Some students are enrolled in more than one faculty. There were 264 taking combined courses in 1969, and 280 in 1970.

The following table shows the number of degrees conferred in the faculties of Monash University from 1965 to 1969. In addition to degrees shown below some diplomas are granted.

VICTORIA—MONASH UNIVERSITY: DEGREES
CONFERRED IN FACULTIES

Faculty	1965	1966	1967	1968 (a)	1969 (a)
Arts	117	185	285	398	490
Economics and politics	31	62	92	144	254
Education	..	..	3	11	26
Engineering	4	19	41	64	93
Law	..	..	34	60	130
Medicine	3	5	32	66	115
Science	25	45	67	182	247
Bachelors' degrees	175	299	530	887	1,268
Higher degrees	5	17	24	38	87
Total	180	316	554	925	1,355

(a) Before 1968, figures relate to year ended 31 July. Figures for 1968 are for eleven months ended 30 June. From 1969 figures are for year ended 30 June.

Finance

The University's funds are derived largely from the State and Commonwealth Governments, and from the academic fees paid by students. The State Government contributes equally with the Commonwealth to the cost of buildings and major items of equipment. With respect to recurrent expenditure, the Commonwealth contributes \$1 for every \$1.85 received through State grants and students' fees.

All full-time undergraduate students pay the same annual fee, irrespective of faculty. Fees payable by part-time students are based on the number of subjects taken in a year, whilst fees for postgraduate work are set at a level designed to encourage students to enrol for higher degrees.

From the incorporation of the University on 30 May 1958 until 31 December 1970 it is anticipated that recurrent expenditure will have totalled approximately \$84m.

Income and expenditure for the years 1964 to 1968 are shown in the following table :

VICTORIA—MONASH UNIVERSITY : INCOME AND EXPENDITURE
(\$'000)

Particulars	1964	1965	1966	1967	1968
SOURCES OF INCOME					
Commonwealth Government	4,606	5,071	4,852	5,495	6,245
State Government	5,733	6,528	6,342	6,846	7,798
Total Government grants	10,339	11,599	11,194	12,341	14,043
Other sources—					
Donations and special grants	230	756	695	663	810
Student fees	509	1,025	1,371	1,880	2,209
Other fees	..	..	10	5	11
Charges for services	160	41	38	117	259
Halls of residence	71	145	276	435	402
Other income	26	46	59	84	103
Total other sources	996	2,012	2,448	3,183	3,794
Total income	11,335	13,612	13,642	15,524	17,836
NATURE OF EXPENDITURE					
Teaching and research—					
Salaries and superannuation	2,297	4,093	4,869	6,078	7,223
Equipment and maintenance	1,571	1,426	2,077	1,986	1,978
Research scholarships, fellowships, and study leave	188	251	428	608	779
Other teaching and research expenditure	186	238	266	423	458
Total teaching and research	4,242	6,008	7,640	9,093	10,439
Administration and general overhead—					
Salaries and superannuation	294	568	726	876	960
Other administration expenditure	220	357	377	446	472
Libraries—					
Salaries and superannuation	181	278	324	401	470
Other expenditure on libraries	434	295	370	485	542
Buildings, premises, and grounds—					
New buildings	4,430	3,946	1,822	2,364	3,857
Repairs and maintenance, including salaries and superannuation	572	700	684	642	803
Rents, rates, power, lighting, heating	170	177	213	238	291
Other expenditure on buildings, etc.	53	44	93	89	199
Sundry auxiliary expenditure	104	321	502	790	876
Total expenditure	10,701	12,693	12,752	15,424	18,908

Centre of Southeast Asian Studies

The Centre of Southeast Asian Studies was created to promote post-graduate and staff research on the various countries of that region. Its students enrol in the department appropriate to their discipline and pursue the courses prescribed by the department for M.A. or Ph.D. but also participate in various centre seminars and activities which supplement their work on the "area study" side. The departments currently associated with the Centre are the Department of Indonesian and Malay, History, Politics, Economics, Sociology and Anthropology, Geography, and Education. Language

instruction in other Southeast Asian languages is not yet provided, although it is hoped that Thai and Vietnamese will be available in due course.

The need for an arrangement such as the Centre arises from the fact that graduates embarking on research on these countries generally face a number of difficulties that do not arise for those working on more familiar areas. These difficulties include the need for language study, field work, and an understanding of a very different cultural and social system. People beginning work on Southeast Asia have rarely been able to prepare themselves in these respects during their undergraduate courses; yet there is a substantial and rapidly growing literature on nearly all the countries of the region. Research on these countries often entails a crossing of disciplinary boundaries between, for example, history, sociology, politics and economics, etc.—much more than experienced in most research on western civilisations. Hence the need for training to be provided on a cross-disciplinary or “area” basis, as well as in the normal tools of specific disciplines.

The Centre does not itself provide courses, nor does it have staff of its own, apart from a Research Director who is also a part-time member of the Politics and History Departments. Graduate students enrolled under the auspices of the Centre may be encouraged or required to take some of the various courses offered by the participating departments. It is hoped that special courses or seminars designed for the needs of graduate students will eventually be provided, along similar lines to those of American “area studies” programmes.

The Centre has organised a series of work-in-progress seminars by research students, interspersed with general seminars by staff and visiting scholars. Recent seminars have ranged from the position of the Chinese in Indonesia to problems of Vietnamese nationalist historiography, the structure of Philippines’ foreign trade, and the categorisation of traditional Malay literature.

The Centre also helps in two ways to overcome the difficulties of ensuring adequate supervision by specialists on a particular country. There is frequent co-operation between members of staff of different departments on this matter, and by helping to attract scholars with specialised knowledge of the region, it ensures that adequate supervision can be given over a wide range of topics and countries. Moreover, by building up library resources on these countries, particularly Indonesia and Malaysia, the Centre is able to offer facilities for research; its own travel fund can assist graduate students carrying out field work in Southeast Asia.

Further references, 1966–70; Medical School, Monash University, 1970

La Trobe University

La Trobe University was established by an Act of the Victorian Parliament in 1964 and is named after the first Lieutenant-Governor of the State, Charles Joseph La Trobe. The University, which opened in March 1967, is being built on a 484 acre site at Bundoora, 9 miles north of the City of Melbourne. This land was made available by the State Government on the recommendation of the university planning committee established in July 1964. One of the first acts of the Interim Council which took over the responsibilities of the planning committee in December

1964 was to commission a firm of architects to prepare a master plan for the development of the site. This resulted in the adoption by the Interim Council of a concentric plan with a central 'heart' consisting of the Library and a social-commercial centre known as the Agora containing a bookshop, post office, coffee shop, banks, and other amenities. The academic buildings are being constructed around this central area and the colleges of the university will form an arc to the east of the academic area. Working to this plan, buildings catering for the principal activities of the students and staff are being placed within a radius of a maximum of five minutes walking distance. There is no vehicular traffic inside this area, which is surrounded by a ring road separating it from car parks and sports fields.

In planning the overall development of the university, the Interim Council made a number of important decisions designed to lead to the emergence of a distinctive pattern of academic and social life suited to the needs of students and staff alike. At La Trobe all academic staff, senior administrative and library officers, and all postgraduate and undergraduate students belong to a college, either as resident or as non-resident members. The master plan provides for the progressive construction of colleges to a maximum of ten, each having a membership of about 1,250, of whom at least 20 per cent are in residence. In addition to providing such residential accommodation, each college offers academic, social, dining, cultural, and recreational facilities for use by resident and non-resident members alike.

The academic organisation of the University is not based on the conventional faculties but on smaller units known as Schools, each responsible for the conduct of teaching and research in its own area. This more flexible arrangement is designed to encourage staff and students to engage in interdisciplinary studies. The first four Schools established in 1967 were Biological Sciences, Humanities, Physical Sciences, and Social Sciences. Since then the academic scope of the University has been widened by the establishment of a School of Agriculture in 1968 and a School of Education in 1970. By the beginning of the 1970 academic year the following foundation professors had been appointed: *School of Agriculture*—Agriculture; *School of Biological Sciences*—Botany, Genetics, Zoology; *School of Education*—Education; *School of Humanities*—English, French, History (3), Philosophy (2), Spanish; *School of Physical Sciences*—Chemistry (3), Mathematics (3), Physics (2); *School of Social Sciences*—Economics (2), Politics (2), Sociology.

The following table shows enrolments at La Trobe University :

VICTORIA—LA TROBE UNIVERSITY : ENROLMENTS(a)

Particulars	1968			1969			1970		
	Full-time	Part-time	Total	Full-time	Part-time	Total	Full-time	Part-time	Total
Higher degree courses	30	23	53	71	57	128	102	82	184
Bachelor degree courses	864	186	1,050	1,531	319	1,850	1,773	381	2,154
Diploma courses	..	..	..	..	..	..	124	5	129
Miscellaneous courses	11	42	53	17	57	74	6	46	52
Total	905	251	1,156	1,619	433	2,052	2,005	514	2,519

(a) 1968 and 1969 figures refer to enrolments up to 30 June, and 1970 to enrolments up to 30 April.

The following table shows enrolments of students for bachelor degrees in the various Schools of the University for 1968, 1969, and 1970 :

VICTORIA—LA TROBE UNIVERSITY : BACHELOR DEGREE ENROLMENTS

School	Degree course pursued								
	1968			1969			1970		
	Arts	Eco- nomics	Science	Arts	Eco- nomics	Science	Arts	Eco- nomics	Science
Humanities	404	..	..	666	..	..	822	..	..
Social sciences	203	201	..	354	317	..	375	304	..
Physical sciences	..	..	140	..	..	273	..	..	347
Biological sciences	..	..	80	..	..	177	..	..	201
Agriculture	..	..	22	..	..	63	..	..	105
Total	607	201	242	1,020	317	513	1,197	304	653

The first ceremony for the conferring of degrees awarded by the University took place in December 1969. The following table shows the number of degrees conferred for the year ended June 1970 :

VICTORIA—LA TROBE UNIVERSITY :
DEGREES CONFERRED BY SCHOOLS, 1970

School	Number of degrees conferred
Humanities	70
Social sciences	56
Physical sciences	46
Biological sciences	14
Agriculture	..
Education	..
Total	186
Bachelor degrees	172
Higher degrees	14

By the end of 1970 the Library contained over 120,000 bound volumes and had subscriptions to nearly 2,000 serial titles. The first stage of the library building opened in 1967 ; additions built in 1970 provided a total of 1,200 reader's places.

In the first five years of its existence to December 1969 the University received Government grants totalling \$16.5m for capital purposes. The only buildings available in 1967 when the first students enrolled were the first stage of the Library and one college. By the beginning of 1970 a second college had been opened, together with a lecture theatre block and six major teaching buildings for general science, biological sciences, chemistry, humanities, physics, and social sciences. For the three year period ending in 1972 a further \$13.7m was made available. New facilities likely to be occupied in 1971 include, in addition to the second stage of the Library, a third college, a lecture theatre to seat 500, and a large multi-purpose building to accommodate a number of academic and adminis-

trative activities. With the aid of other funds derived from non-government sources, the University was enabled during 1969 to build on the campus a block of 24 three-roomed flats for lease to students and staff and thus to supplement and provide an alternative to accommodation available in the colleges.

The University's income and expenditure for the years 1965 to 1968 are shown in the following table :

VICTORIA—LA TROBE UNIVERSITY : INCOME AND EXPENDITURE
(\$'000)

Particulars	1965	1966	1967	1968
SOURCE OF INCOME				
Commonwealth Government	482	1,720	1,558	3,713
State Government	375	2,099	3,122	3,796
Total Government grants	857	3,819	4,680	7,509
Other sources—				
Donations and special grants	..	18	38	57
Other income	..	19	231	483
Total other sources	..	37	269	540
Total income	857	3,855	4,950	8,050
NATURE OF EXPENDITURE				
Teaching and research—				
Salaries and superannuation	..	141	692	1,149
Equipment and maintenance	..	56	58	39
Research scholarships, fellowships, and study leave	..	2	22	55
Other teaching and research expenditure	..	67	126	182
Total teaching and research	..	265	899	1,423
Administration and general overhead—				
Salaries and superannuation	27	161	238	415
Other administration expenditure	60	117	95	163
Libraries—				
Salaries and superannuation	33	85	163	242
Other expenditure on libraries	173	214	176	177
Buildings, premises, and grounds—				
New buildings	78	1,832	3,072	4,508
Repairs and maintenance, including salaries and superannuation	..	3	69	35
Rents, rates, power, lighting, heating	..	24	62	75
Other expenditure on buildings, etc.	164	759	950	861
Sundry auxiliary expenditure	..	4	96	240
Total expenditure	536	3,466	5,819	8,141

Further references 1966-70 ; University Development in Victoria, 1966 ; Research in Victorian Universities, 1968

Victoria Institute of Colleges

The decisions by the Victorian and Commonwealth Governments in 1965 to undertake a large-scale programme of development of the colleges of advanced education were accompanied by new policies concerning the system by which the colleges should be administered. Because a large number of institutions other than the universities in Victoria offer various forms of tertiary education, the Government of Victoria saw the need for the establishment of a body to co-ordinate and rationalise the projected developments in these institutions. In so doing, the Government endorsed

the concept of an "institute of colleges" which had been proposed in 1965 in the recommendations of the Committee on the Future of Tertiary Education in Australia.

The Victoria Institute of Colleges was incorporated under State legislation in 1965. The role of the Institute, more specifically developed in later amending legislation, is to foster the development and improvement of institutions, other than the universities, offering tertiary education in Victoria. The most important of the Institute's responsibilities include :

1. making recommendations to the Government on the financial requirements of the colleges ;
2. determining the staff establishments for the colleges ;
3. stimulating the improvement of academic standards in the colleges ;
4. awarding degrees, diplomas, and other awards to students of the colleges attaining appropriate standards in approved courses ; and
5. making recommendations to the Government on salary scales for college staffs.

VICTORIA—TERTIARY ENROLMENTS IN COLLEGES AFFILIATED WITH THE VICTORIA INSTITUTE OF COLLEGES (a)

College	1969			1970		
	Full-time	Part-time	Total	Full-time	Part-time	Total
Metropolitan colleges—						
Caulfield Institute of Technology	1,195	1,672	2,867	1,362	1,802	3,164
Footscray Institute of Technology	687	1,023	1,710	804	949	1,753
Prahran College of Technology	362	392	754	439	265	704
Preston Institute of Technology	595	608	1,203	648	867	1,515
Royal Melbourne Institute of Technology	2,736	6,808	9,544	2,875	6,078	8,953
Swinburne College of Technology	1,511	2,944	4,455	1,876	2,575	4,451
Total metropolitan	7,086	13,447	20,533	8,004	12,536	20,540
Para-medical colleges—						
Occupational Therapy School of Victoria	116	..	116	130	..	130
Physiotherapy School of Victoria	165	..	165	168	..	168
Victorian School of Speech Therapy	75	..	75	80	..	80
Victorian College of Pharmacy	410	15	425	377	6	383
College of Nursing, Australia (b)	..	..	..	67	..	67
Total para-medical	766	15	781	822	6	828
Country colleges—						
Ballarat Institute of Advanced Education	348	108	456	397	101	498
Bendigo Institute of Technology	374	196	570	439	209	648
Gippsland Institute of Advanced Education	209	127	336	222	129	351
Gordon Institute of Technology	683	391	1,074	768	353	1,121
Warrnambool Institute of Advanced Education	145	21	166	169	25	194
Total country	1,759	843	2,602	1,995	817	2,812
Total	9,611	14,305	23,916	10,821	13,359	24,180

(a) Enrolments include diploma, degree, and (in the technological institutes) certain tertiary certificate students.
 (b) Affiliated July 1970.

The V.I.C. is not itself a teaching institution, but a co-ordinating agency with which individual autonomous colleges may become affiliated. It is governed by a council of thirty members, drawn from the affiliated colleges, the universities, Parliamentary representatives, the Education Department, commerce, and industry. Academic assessments are made by a Board of Studies, which is, in turn, advised by a series of Schools Boards and Course Development Committees in particular fields of study.

All colleges affiliated with the V.I.C. are governed by their own autonomous councils. Many of these are long-standing corporate bodies which have had responsibility for their institutions from their inception. Other councils have been recently incorporated to manage the tertiary operations of those affiliated colleges which were formerly under the control of the Education Department. (These are the colleges at Caulfield, Footscray, Preston, Gippsland, and Warrnambool.) The affiliated colleges at present award diplomas and will continue to do so; the award of degrees is the prerogative of the V.I.C.

Ballarat Institute of Advanced Education

The Ballarat Institute of Advanced Education, the first institute of technical education to be established in Australia (as the Ballarat School of Mines in 1870), has a long and distinguished educational record. It awarded the first diploma in Victoria (metallurgy in 1896) and the first engineering diploma (mining engineering in 1897). Because the district concerned itself principally with goldmining in the early years, the college's original object was to impart instruction in the various branches of mining technology. It provided training for mining engineers, surveyors and assayers; but it soon became necessary to broaden its scope to cater for additional technical professions such as the various other branches of engineering, applied science, and geology. Progressively these courses became broader and more advanced, until the present diploma courses evolved.

Ballarat Institute of Advanced Education now offers students diploma courses in art, business studies, applied chemistry, applied geology, metallurgy, applied physics, and mechanical, electrical, electronic, civil, and mining engineering.

A new tertiary section for the Institute is being erected on a 240 acre site at Mount Helen. Construction of the first teaching buildings has been completed. Buildings for other departments and a residential college will be erected during the 1970-72 triennium.

Bendigo Institute of Technology

The Bendigo Institute of Technology (formerly the Bendigo School of Mines) was established in 1873 to meet the scientific and technical needs of the mining industry on the local goldfields. Mining, chemistry, geology, metallurgy, and art were taught. From these beginnings, tertiary education extended to other parts of central and northern Victoria. The Institute awarded its first diplomas (electrical and mechanical engineering) in 1902.

At Flora Hill, the new 85 acre site for the tertiary work of the Institute, a modern campus is under construction. This includes the Institute's first hall of residence, which provides accommodation for 75 students. Bendigo Institute of Technology offers diploma courses in the

fields of applied science, art, business studies, engineering, information processing, mathematics, and general studies.

Caulfield Institute of Technology

The Caulfield Institute of Technology, established in 1921, serves the extensive south-eastern metropolitan region of Melbourne. Its tertiary educational activities commenced in 1944, when electrical and mechanical engineering diplomas were introduced.

A rebuilding programme at Caulfield to provide more effectively for the academic and social needs of the students is in progress. The Institute has a substantial computer installation which it is proposed to develop as the centre of an inter-college network.

Diploma courses offered by Caulfield Institute of Technology are : art and design ; business studies (accounting, data processing) ; applied chemistry ; civil engineering, electrical engineering, electronic engineering, and mechanical engineering ; electronic computation and information processing.

Footscray Institute of Technology

The Footscray Institute of Technology, established in 1915, is the regional college for the western suburbs of Melbourne. A new five storey diploma block, part of an extensive building programme, has now been erected to house a number of diploma departments and the library and administration centre. The Institute offers students diploma courses in business studies (accounting and data processing), applied chemistry, and electrical, mechanical, civil, electronic, and production engineering.

Gordon Institute of Technology

The Gordon Institute of Technology opened in 1887 (as the Gordon Technical College) with one general classroom and a syllabus comprising dressmaking, and commercial and other vocational training. Later the curriculum was widened to include science subjects, and additional buildings, laboratories, and workshops were progressively erected to meet the demands of the growing classes. Departments were established to conduct courses in engineering, architecture, art, wool, technology, and commerce. The college was re-named the Gordon Institute of Technology in 1921.

Perhaps the most notable development in the history of the Gordon Institute was the establishment of its Textile College in 1946 in recognition of the importance of Geelong as one of the world's leading centres of textile education and research. It meets the requirements of students from overseas as well as full and part-time students within Australia.

In 1969, one hundred and ninety acres of land were purchased at Waurn Ponds, on the south-western side of Geelong, for the re-development of the tertiary section of the Institute, and construction of buildings is now in progress.

The Institute offers diploma courses in applied chemistry, applied physics, architecture, art and design, business studies, general studies (vocational writing), electronic computation (postgraduate diploma), civil, electrical, and mechanical engineering, fashion design and production, information and data processing, mathematics, nutrition and food service,

science, textile chemistry, textile technology, and postgraduate work in textile studies.

In 1971 degree courses in architecture, applied science (chemistry, textile), and engineering (electrical) were introduced.

Prahran College of Technology

The Prahran College of Technology, established in 1915, attracts students from a wide area south-east of Melbourne. Traditionally the school has been an institute for instruction in art and the artistic trades, but in 1962 a business studies division was established to qualify students for the diploma of commerce and in 1965 a general studies division was added. The College has a modern art school which was completed in 1967 as part of a rebuilding programme. It consists of design workshops, printing workshops, photographic studios, and design and graphics studios.

Preston Institute of Technology

The Preston Institute of Technology, established in 1937, is the regional centre for the provision of advanced technical education in the northern suburbs of Melbourne. To meet the predicted increase in future enrolments, due to the rapid growth of the northern metropolitan area, plans have been made to move the tertiary activities of the college to a new 100 acre site north of Melbourne. The first building on the new campus is planned for occupation in 1972.

Diploma courses at present available at the Preston Institute of Technology are : engineering (electrical, electronic, mechanical, civil) ; business studies (accounting, data processing) ; applied science (chemistry) ; and art (fine art, graphic design).

Royal Melbourne Institute of Technology

The Royal Melbourne Institute of Technology, established in 1887, is the largest technological teaching organisation in Australia. Its graduates provide a high proportion of Victoria's professional work force in industry and commerce. Since its inception, the Institute's enrolments have grown from 600 to 34,000 (including correspondence students), and its accommodation has increased from eleven classrooms to 17.2 acres of studios, laboratories, workshops, and lecture rooms. The Institute is currently undergoing a major rebuilding programme on its present site to provide improved tertiary facilities, both academic and social, in an appropriate environment.

It provides a wide range of associateship and fellowship diploma courses, including architecture, art and design, fine art, industrial design, graphic design, biology, building construction, business studies (accounting, data processing, local government, secretarial practice), applied chemistry, chemical process technology, computer science, engineering (aeronautical, automotive, chemical, civil, communication, electrical, electronic, mechanical, mining, production, refrigeration), fashion design and production, food technology, geology, information and data processing, instrument technology, interior design, librarianship, mathematics, management, metallurgy, applied physics, meteorology, photography, public administration, surveying, and valuations.

In 1971 degree courses were introduced in business studies (accountancy), applied science (applied chemistry, mathematics), and engineering (civil, chemical, electrical, communications).

Swinburne College of Technology

The Swinburne College of Technology, established in 1908, is the regional technical college for the eastern suburbs of Melbourne. Classes in a limited number of subjects began in 1909 with a student enrolment of eighty. The range of subjects gradually increased; in 1915 day diploma courses in engineering started and other professional courses were added as the need arose. A three story art building, a chemistry school and central library were erected, and, in recent years, the Ethel Swinburne Centre for student amenities, the R. G. Parson Building for applied science, and the McPherson School of Engineering were opened. Academic and student facilities at the College are being improved and expanded further as part of a development programme.

The College offers diploma courses in applied chemistry, art (advertising, television, and film), biochemistry, business studies (accountancy, administration, electronic data processing, secretarial); engineering (chemical, civil, electrical, electronic, mechanical, production, heating, ventilation and air conditioning); and general studies (languages).

In 1971 degree courses were introduced in business studies (accountancy), applied science (applied chemistry), and engineering (civil, mechanical).

Warrnambool Institute of Advanced Education

From the junior technical courses which were introduced in 1922, Warrnambool has now progressed to the stage where it offers complete diploma courses in a number of disciplines, while providing the first year or two in others. Plans are presently being studied for developing the college into a regional institute to accommodate an anticipated student population of over 1,000 by 1978. These plans follow a two year investigation of the potential for such a tertiary college to service the needs of the south-western region of Victoria and take into consideration the possibility of the re-location of the present college on a new campus site.

At present, Warrnambool provides full diploma courses in electrical, civil and mechanical engineering, applied chemistry, business studies, and art.

Gippsland Institute of Advanced Education

The Gippsland Institute of Advanced Education, established in 1928 as the Yallourn Technical College, is the major centre of tertiary education serving eastern Victoria. The college has played a significant educational role in training students for professional employment in the industrial complex of the La Trobe Valley and elsewhere. It started by teaching trade courses and part-time diploma courses, the first diplomas being awarded in applied chemistry and civil engineering. A diploma of business studies course was commenced in 1968. Because of the regional importance of the college its tertiary section is being re-located on a new campus at Churchill, near Morwell. This provides academic facilities and courses diverse enough to cope with the requirements of an ultimate enrolment of 1,500 students. Plans for the college also envisage residential accommodation for students.

The Institute at present awards diplomas in applied chemistry, business studies (accounting), civil, electrical, and mechanical engineering, art, and general studies.

Victorian College of Pharmacy

The Victorian College of Pharmacy is owned and operated by the Pharmaceutical Society of Victoria. Since 1884 it has prepared students for examinations which are recognised by the Pharmacy Board of Victoria and which lead to registration as a pharmacist in Victoria.

In 1966 the Victorian College of Pharmacy became affiliated with the Victoria Institute of Colleges, and the first Bachelor of Pharmacy degrees were granted by the V.I.C. in June 1968. A three year full-time course of instruction is given to all students seeking registration as pharmaceutical chemists. In addition, students undertake approximately 18 months of practical training in a pharmacy or laboratory approved by the Pharmacy Board of Victoria. At least 12 months of this practical training must be served after completion of the three year academic course.

In 1970 the first stage of a new teaching block was completed to provide accommodation for the departments of physics and pharmaceuticals and for the library. The second stage of this project was started in the same year.

Therapy schools

Occupational Therapy School of Victoria

This school, established in 1948, had its origins in the need for post-war rehabilitation services in Australia. After several intermediate stages of development, the school finally moved to Lincoln House in 1966. It is under the control of a Board of Management and conducts a three year full-time course leading to the Diploma of Occupational Therapy.

Physiotherapy School of Victoria

Although the first teaching in physiotherapy in Victoria commenced at the University of Melbourne and the Royal Melbourne Hospital in 1905, there was no established school until 1960, when space was made available at Fairfield Hospital. The move to Lincoln House was made in 1966. The school, which is administered by the Masseurs Registration Board, Victoria, offers a three year course leading to the Diploma of Physiotherapy.

Victorian School of Speech Therapy

A training centre for speech therapists was first established in Melbourne in 1945 at the Royal Children's Hospital. The centre developed through successive stages of growth until its ultimate move to Lincoln House in 1966. The school is conducted by the Victorian Council of Speech Therapy. The course extends over three years (full-time) and successful students are awarded the Diploma of Licentiatehip of the Australian College of Speech Therapists, which is the Federal examining and registering body for the profession in Australia.

Lincoln House

Lincoln House—the premises jointly occupied by the three therapy schools since 1966—is located near the University of Melbourne, the Royal Melbourne Institute of Technology, and several leading hospitals. The

building has been specially re-designed and equipped as a centre of para-medical education. Although the three schools are autonomously conducted, they enjoy a close liaison and share many educational and administrative services.

College of Nursing, Australia

Established in 1950, the College of Nursing, Australia, offers full-time and part-time diploma courses to nurses who have completed their basic general nursing training.

Conducted by an autonomous council, the College has its headquarters in Melbourne and branches in Western Australia and Queensland.

The aims of the College are to cultivate and maintain the highest principles of nursing practice and ethics ; to raise the status and standing of the nursing profession by making provision for trained teachers and administrators in the profession ; to make adequate provision for the postgraduate training of nurses ; and to bring together members of the nursing profession, both in and out of Australia, for the purpose of scientific discussion and practical demonstration of nursing subjects.

The College of Nursing, Australia, at present offers courses leading to diplomas in nursing administration, nursing education, nursing education (midwifery), hospital nursing and ward management, operating theatre nursing and management, intensive care nursing and management, public health nursing, and public health nursing (occupational health).

Further references, 1969-70 ; Swinburne Technical College, 1963 ; Commonwealth Scholarships, 1964 ; Science and Technology Careers Bureau, 1965

Kindergarten teacher training

The training for kindergarten teachers in Victoria was initiated by the Free Kindergarten Union of Victoria in 1916. In 1918 the Union was formally granted registration as an approved teacher training institution by the Council of Public Education which registers kindergarten teachers in the sub-primary division. In 1922 the College was established on the present site in Kew. Three years later the two year course of training was extended to three years, thus making the College the pioneer of a three year diploma course for teachers in Australia. In 1965 the Free Kindergarten Union granted the College autonomy and it is now an independent College with an autonomous governing council.

The College receives an annual grant for recurrent expenditure from the Education Department and this is supplemented by student fees and public donations. To assist students to undertake the course a small number of bursaries is provided each year by the Department of Health, and both the diploma and post diploma courses are approved for Commonwealth Advanced Education Scholarships.

In 1962 a re-building programme was commenced, and in March 1965 the first section of the new college was completed. In November 1969 the second section was opened and the rebuilt college can now accommodate some 500 students. A capital grant from the State Government of just over \$0.5m made the erection of the new college possible and a grant of \$24,000 from the Commonwealth Government has been used to add equipment and library holdings. A further amount of \$186,000

is available from the Commonwealth Government to complete the building programme.

Courses

Three year diploma course

The course of training assumes that a teacher must be a broadly educated person able to guide young children intelligently and with sensitivity in the exploration and interpretation of the world around them. The general education courses in the curriculum are planned with this objective in view and the inclusion of elective studies in this area gives students the opportunity of concentrating during the two years of the course on a subject of particular interest. Professional education courses include the study of psychology, child development, and of the content of education for children in the age range from 3 to 8 years. Students undertake teaching practice in pre-school kindergartens and in State and Registered schools with children in the same age range.

Post diploma course

The College also offers a one year full-time course of advanced studies, open to experienced kindergarten teachers, leading to the Diploma of Advanced Studies in Education. Teachers from other States in Australia and from overseas have enrolled in this post diploma course.

In-service courses

The College Council has set up an In-Service Advisory Committee consisting mainly of kindergarten teachers representing most regions of Victoria. It is responsible for advising the principal on the courses teachers want to undertake; most of the courses deal with professional skills and current trends in education and are usually of 8 to 15 weeks duration. Each year several hundred teachers enrol.

A special in-service course is also offered to enable infant and primary trained teachers, currently teaching in pre-school kindergartens, to gain a K.T.C. Diploma.

In addition short in-service courses of approximately 10 to 15 weeks duration are offered to qualified teachers after school hours.

VICTORIA—MELBOURNE KINDERGARTEN
TEACHERS' COLLEGE: ENROLMENTS

Year	Three year diploma course	Special in-service diploma course (a)	Post diploma course	Total
1965	188	..	3	191
1966	195	..	9	204
1967	194	23	6	223
1968	203	38	6	247
1969	248	15	7	270
1970	315	25	(b)	340

(a) A special part-time in-service course to enable primary and infant teachers teaching in a kindergarten to gain the K.T.C. Diploma.

(b) Course discontinued for one year.

VICTORIA—MELBOURNE KINDERGARTEN TEACHERS' COLLEGE :
SOURCES OF INCOME FOR RECURRENT EXPENDITURE
(\$)

Year	State Government grant	Student fees	Other income	Total income
1965	81,500	31,556	1,368	114,424
1966	88,000	44,435	1,187	133,622
1967	91,500	47,867	2,104	141,471
1968	100,000	50,254	7,250	157,504
1969	112,500	78,669	4,854	196,023

Council of Adult Education

The Council of Adult Education is a statutory body charged with the broad functions of advising, reporting, planning, and administering adult education. Through the Minister of Education, the Council is responsible directly to the State Parliament, to which it reports annually.

Activities

The Council of Adult Education comprises twenty-three members, seven *ex officio* and the others appointed for three year terms by the Governor in Council. *Ex officio* representation is from the University of Melbourne, Monash University, La Trobe University, the Victoria Institute of Colleges, the Australian Broadcasting Commission, the Education Department, and the Council itself through its Director appointed by Cabinet. Eight of the appointed members are nominated by interested bodies named in the Act, and four by voluntary and other associations. Of the remaining four, two are Governor in Council nominees and two are co-opted on the recommendation of the Council.

Under the Director, four professional adult education officers, a librarian, and two executive officers, assisted by full-time clerical officers, administer different sections of the Council's work.

The following tables show details of the Council's activities from 1967 to 1970 :

VICTORIA—ADULT EDUCATION : LECTURE CLASSES AND ENROLMENTS

Lecture classes	1967-68		1968-69		1969-70	
	Spring term	Autumn term	Spring term	Autumn term	Spring term	Autumn term
Courses offered	138	383	132	411	147	383
Students enrolled	4,144	12,129	4,310	12,256	4,141	10,625

VICTORIA—ADULT EDUCATION : GROUP ACTIVITIES

Particulars	1967	1968	1969	1970
Discussion groups—				
Number of groups	500	505	520	534
Students enrolled	5,511	5,611	5,763	6,053
Art exhibitions	25	21	11	5

Finance

The following table shows the income and expenditure of the Council for the years 1965-66 to 1969-70 :

VICTORIA—COUNCIL OF ADULT EDUCATION: INCOME AND EXPENDITURE (\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
INCOME					
Government grant	160	166	176	188	200
Lecture fees, etc.	100	122	154	164	199
Conferences	21	33	34	34	24
Miscellaneous	13	4	4	6	4
Total income	293	325	368	393	427
EXPENDITURE					
Salaries	100	107	116	119	135
Classes, library, and discussion groups	93	111	139	156	166
Administration	59	66	71	63	74
Miscellaneous	40	42	42	54	52
Total expenditure	292	325	368	393	427

Further references, 1963 ; State Film Centre, 1969 ; Education for Management, 1970

HEALTH AND MEDICAL RESEARCH

Health Department

Under the *Health Act* 1958, responsibility for the health of the community is vested in the Minister of Health and in exercising control of various aspects of health work he is supported by such bodies as the Commission of Public Health, the Mental Health Authority, the Hospitals and Charities Commission, and various bodies exercising oversight of special services and of groups of persons engaged in particular professions or industries.

The principal advisers of the Minister on matters which come within their respective fields of responsibility are the Permanent Head of the Department, the Chief Health Officer, the Chairman of the Mental Health Authority, and the Chairman of the Hospitals and Charities Commission. Under the Health Act the Minister may also appoint, from time to time, consultative councils of experts to advise him on special problems such as poliomyelitis, maternal and infant mortality, and any other matters concerned with public health. The Minister is assisted by a central administrative branch containing a secretariat with its various service sections. The Department is divided into the General Health, Mental Hygiene, Maternal and Child Welfare, and Tuberculosis Branches. The Mental Health Authority is responsible for the Mental Hygiene Branch while the remaining three branches are each under the control of a medical specialist and an administrator, all of whom are responsible to the Chief Health Officer for the purposes of co-ordination.

The Commission of Public Health, with the Chief Health Officer as its Chairman and with six other members, is constituted under the *Health Act* 1958, and is responsible for all aspects of environmental health including such matters as the prevention of pollution of the air and of sources of water

supply, control of food standards and purity, and regulation of the use and transport of radio-active substances. The policies of the Commission are carried out either directly by officers of the General Health Branch acting under the direction of the Chief Health Officer or by the exercise of oversight by those officers over the work of municipal councils. The General Health Branch supervises community services which help to care for older persons in their own homes, thereby considerably reducing the demands upon hospitals for the aged.

Under the direction of the Mental Health Authority a comprehensive service for the mentally ill has been developed in recent years, emphasis being given to outpatient services throughout the State.

Intensive treatment for early cases requiring hospital treatment is provided in special psychiatric hospitals, while mental hospitals provide care, treatment, and rehabilitation for patients requiring long term care. Residential special schools for intellectually handicapped children are operated by the Authority which also subsidises the operation of large numbers of day training centres throughout the State. Research into the causes of mental and emotional illness and investigations of new and improved methods of treatment are being carried out, while community education programmes increase the understanding of the problems of mental ill-health. A personal emergency service provides a continuous service for persons with urgent emotional problems. Concerning treatment of alcoholics and drug dependent persons, legislation dating back 90 years has been brought up to date and suitable institutions developed for the diagnosis, treatment, and rehabilitation of persons suffering from alcoholism or drug addiction. In the development of this service early diagnosis and voluntary treatment of patients are emphasised.

The Hospitals and Charities Commission, operating under the Hospitals and Charities Act, exercises general supervision over all public institutions subsidised by the Government and thereby contributes to the maintenance of a high standard of community health. The Commission recommends allocations of money from the Hospitals and Charities Fund to these bodies, and registers and supervises the operation of private hospitals, ambulance services, and other bodies established for charitable purposes. In a community in which the proportion of older persons is increasing, the Commission helps to deal with a problem which faces health administrators by recommending financial assistance to institutions providing care for the aged. It also conducts a placement service in private hospitals for older persons awaiting admission to hospitals for the aged.

The Minister of Health, through the Department, is responsible to Parliament for the activities of a number of other important bodies such as the Anti-Cancer Council, the Cancer Institute Board, the National Fitness Council, and the Fairfield Hospital Board, together with a number of registering authorities associated with practice by doctors, dentists, pharmaceutical chemists, dietitians, opticians, nurses, masseurs, psychologists, etc.

Further references, 1964-70; Industrial Hygiene, 1964; Poliomyelitis and Allied Diseases, 1964; Food Standards and Pure Food Control, 1964; Communicable Diseases, 1964; Control of Poisons and Deleterious Substances, 1965; Inter-departmental Committee on Pesticides, 1965; School Dental Service, 1966; Epidemics, 1967; School Medical Service, 1968; Poisons Information Centre, 1969; Public Health Engineering, 1969; Drug and Poison Control, 1970

Maternal, infant, and pre-school services

The Maternal, Infant, and Pre-School Welfare Division of the Maternal and Child Welfare Branch of the Department of Health is responsible for administering the pre-natal, infant welfare, and pre-school services in Victoria.

Infant welfare services

Development has been on a decentralised pattern with infant welfare centres being established in municipalities throughout Victoria as a responsibility of the local authorities. The buildings are the property of municipal councils, although the State Government pays capital grants, up to a maximum of \$6,000, towards their erection. The councils employ the infant welfare sisters, but the State Government pays a maintenance grant of \$1,900 per annum for each sister employed.

The infant welfare services provided for a community depend upon its population, composition, and density, and more specifically its number of births per year. A town with a population of 8,000, with approximately 200 birth notifications per year, needs a full-time infant welfare sister and requires at least one infant welfare centre building. Smaller towns may not require a full-time sister and a municipality may employ one sister to provide infant welfare services to four or five townships. In this case the sister requires a car and the State Government pays a subsidy of \$1,400 to the Council towards the cost of purchasing the car, and also a transport subsidy based on the mileage travelled.

As well as supervising the health of the children under five years of age and advising mothers, the sister may take part in immunising the children, and may give mothercraft demonstrations and arrange other health education activities for the parents, such as discussion groups, film nights, and talks from visiting specialists in health, education, and welfare.

Every municipality in the State shares in the infant welfare service, although one municipality relies on the service of an Infant Welfare Sister employed by a hospital and does not contribute towards its cost.

The Department of Health provides the infant welfare sisters for the service in the migrant hostels and the Commonwealth defence stations in Victoria, since these cannot be considered the responsibility of municipal councils.

The Department of Health also provides Mobile Infant Welfare Services for some of the sparsely populated country areas where most mothers would have to travel long distances to reach a centrally placed service. The Department provides the infant welfare sisters for this service and supplies each with a station wagon fitted with the equipment needed for her work. Several municipalities may be served on one circuit by such a service and each contributes towards the cost in proportion to the amount of time spent in its Shire.

Some mothers in the remote parts of the State cannot be reached by the Mobile Service and for them the Department of Health provides the Infant Welfare Correspondence Service. This is conducted by a sister in the Department who corresponds regularly with the mothers and sends progress letters throughout the early years of the child's life.

Health education is an important part of the Maternal and Child Welfare Service. In addition to the teaching given to mothers in infant

welfare centres, mothercraft teaching is given to girls in secondary schools by infant welfare sisters. The aim is to reach all girls at some stage before they leave school.

Particulars of infant welfare services in Victoria for the years 1967 to 1969 are listed below :

VICTORIA—INFANT WELFARE SERVICES

Particulars	1967	1968	1969
Municipal centres	676	689	695
Centres on mobile circuits	17	11	11
Centres in non-ratepaying areas—			
Migrant hostels	9	8	8
Commonwealth defence stations	1	1	1
Total all types	703	709	715
Number of infant welfare sisters in centres	360	371	387
Number of birth notifications received	65,387	69,903	71,090
Number of children attending centres	186,395	251,039	307,575
Number of attendances of children at centres	1,432,815	1,452,457	1,537,963
Number of expectant mothers attending centres	9,375	9,335	9,874
Number of attendances of expectant mothers	17,453	18,931	19,426
Number of post-natal visits to mothers in hospital	25,929	27,049	26,335
Number of home visits after birth of baby	159,468	151,139	157,753
Infant Welfare Correspondence Scheme—			
Number of children enrolled	68	74	79
Expectant mothers enrolled	8	6	6
Mothercraft teaching in schools—			
Number of schools	166	152	153
Number of special groups	8	5	7
Total schools and groups	174	157	160
Number of courses	386	358	355
Number of lectures	4,060	3,708	3,399
Number of students	10,848	9,660	9,252
Certificates issued	9,637	8,293	8,190

Pre-natal service

In all infant welfare centres advice is given by the Infant Welfare Sister on health education, pre-natal care, and mothercraft. At twenty-eight selected infant welfare centres, a pre-natal clinic is conducted by a medical officer employed by the Maternal and Child Welfare Branch, Department of Health. These clinics are run in conjunction with public maternity hospitals serving these areas. The extent of the service rendered is outlined below :

VICTORIA—PRE-NATAL CLINICS AND ATTENDANCES

Particulars	1967	1968	1969
Total number	30	28	28
Patients attending	6,718	8,350	7,183
Number of attendances at clinics	29,940	32,763	30,396

Pre-school services

The building of pre-school centres has been aided in Victoria in a similar way to that of infant welfare centres. In this case, however, the building may be owned by the municipal council, a church body, or a

voluntary kindergarten organisation. If the building is owned by an independent committee, the municipal council must be willing to sponsor the project and receive the subsidy.

A building grant on a two-to-one basis up to a maximum of \$6,000 for a single unit centre, or \$10,000 for a double unit, is paid towards the erection of a pre-school centre, which, like the infant welfare centre, has to be approved in the planning stage. These buildings vary in size and complexity according to the needs of the municipality. In general, the unit is a single one providing for twenty-five to thirty children; but in bigger areas a double unit accommodating up to fifty to sixty children at one time may be provided. To give as many children as possible the benefit of attending these centres different groups may be taken in the morning and afternoon.

Even though the pre-school centre may not adjoin the infant welfare centre, the functions of these two centres are closely linked and give continuity in the health supervision of the child in the first five years of life.

The most general type of pre-school centre required by a community is the kindergarten, but in some areas a pre-school play centre may be all that can be established at first. This type of pre-school centre may be conducted by a pre-school play leader, who has less training than a kindergarten teacher. Only fifteen children may be cared for by a pre-school play leader and she is not qualified for parent education work, which is an important part of the pre-school kindergarten programme.

In urban areas a third type of pre-school centre is required for the all-day care of children whose mothers go to work. There are fifteen day nurseries and one crèche, which provides occasional care, subsidised by the Government of Victoria. They may take children from infancy to five years of age and then the person in charge must be a State registered nurse with experience in the care of infants and young children. She has mothercraft nurses on her staff. In addition to the subsidised day nurseries, the Department of Health supervises private child minding centres to ensure that the minimum standard of service required for registration is being maintained.

Children attending pre-school centres may have a free medical examination conducted by a medical officer of the Department of Health or the municipal council or, in a few cases, by a private doctor. Of the 795 subsidised pre-school centres existing in 1969, 595 were visited by Department of Health medical officers, 36 by municipal maternal and child welfare medical officers, and 19 by private doctors.

Pre-school maintenance subsidy

The subsidy paid to a pre-school kindergarten is equal to the salary entitlement of the kindergarten teacher and at December 1969 ranged from \$2,270 to \$3,257 a year. In the case of a pre-school play centre the subsidy is \$1,500 for a full-time centre. The subsidy paid to a day nursery is \$250 per child per year.

The number of subsidised pre-school centres during the years 1967 to 1969 and their particulars are as follows :

VICTORIA—SUBSIDISED PRE-SCHOOL CENTRES : TYPE AND ENROLMENTS

Pre-school centres	1967		1968		1969	
	Number	Enrolment	Number	Enrolment	Number	Enrolment
Kindergartens	605	30,617	641	32,393	665	33,638
Play centres	112	3,285	110	3,264	114	3,508
Day nurseries	14	716	14	716	15	741
Crèche (occasional care)	1	100	1	100	1	100
Total	732	34,718	766	36,473	795	37,987

NOTE. Enrolment figures for day nurseries and the crèche show capacity only.

Training programmes

Infant welfare sisters. Approximately seventy infant welfare sisters are trained each year. Three training schools, subsidised by the Department of Health, conduct the four month infant welfare training course which can only be taken by double-certificated nurses. Twelve bursaries are awarded by the Department of Health for this training each year.

Mothercraft nurses. Nine Mothercraft Training Schools, subsidised by the Department of Health, conduct fifteen month courses for girls training to become mothercraft nurses. Each year about 150 mothercraft nurses are trained.

Pre-school mothercraft nurses. This six month training course for registered mothercraft nurses is conducted by the Maternal and Child Welfare Branch of the Department of Health. Six bursaries are awarded by the Department for this training each year.

Pre-school kindergarten teachers. The Melbourne Kindergarten Teachers' College at Kew conducts a three year Diploma course for girls training to become kindergarten teachers. The Department of Health awarded thirty bursaries for this training during 1969—fifteen to metropolitan students and fifteen to country students.

Pre-school play leaders. The Maternal, Infant, and Pre-school Division of the Department of Health conducts a one year course for students training to become pre-school play leaders. Eight bursaries were awarded in 1969.

Building grants

The following table shows the number and amounts of capital grants made to infant welfare centres, pre-school centres, and day nurseries from 1967 to 1969 :

VICTORIA—INFANT WELFARE CENTRES, PRE-SCHOOL CENTRES, AND DAY NURSERIES

Buildings subsidised	1967		1968		1969	
	No.	Amount	No.	Amount	No.	Amount
Infant welfare centres	15	\$'000	18	\$'000	23	\$'000
Pre-school centres	32	90	45	101	41	134
Day nurseries	1	190	..	241	1	224
Supplementary grants	..	20	..	..	..	20
		100		23		23
Total	48	400	63	365	65	401

Expenditure

Expenditure of the Maternal and Child Welfare Branch in the years 1966-67 to 1968-69 is shown in the following table :

VICTORIA—EXPENDITURE ON MATERNAL, INFANT,
AND PRE-SCHOOL WELFARE
(\$'000)

Particulars	1966-67	1967-68	1968-69
Salaries	311	317	323
Subsidies to municipalities, etc., towards cost of maintaining infant welfare centres	544	670	702
Subsidies to organisations towards cost of maintaining pre-school centres	1,588	1,847	2,255
Subsidies to organisations towards cost of maintaining day nurseries and crèches	164	182	192
Subsidies to infant welfare and mothercraft training schools	34	60	72
Scholarships for infant welfare and pre-school training	78	94	97
Other expenditure	73	74	86
Total	2,792	3,244	3,727

School Medical Service

The School Medical Service was founded in 1909 as a branch of the Victorian Education Department and was incorporated in the Department of Health in 1944. Before 1967 the service examined school children three times during their schooling—in Grades 2 and 5 and in Form 3. Teachers also referred for examination any children they suspected were in ill health or were medically handicapped : those who had previously shown signs of illness were reviewed at a later date.

In 1967 the plan was changed to the routine examination of most children in Grade 1, with follow-up examinations and examinations as the result of teacher referrals in higher grades. Screening procedures to check vision and hearing were instituted in later grades. When any illness is discovered the child is referred to the source of medical care the parents nominate—usually the family doctor.

The assessment of children who are unable to cope at school takes most of the school doctor's time. Mentally defective children become the specific responsibility of the Mental Hygiene Branch of the Department of Health, which maintains institutions and day centres where social and handicraft skills are taught. Emotionally disturbed children may be referred to a consultant psychiatrist. Children with impaired hearing or defects of speech, the blind and partially sighted, and children who are physically handicapped, are helped to receive the necessary medical treatment and any special educational help needed. In addition to this work, the medical officers and nursing sisters work in liaison with private medical practitioners, parents, and teachers.

Familiarity with welfare services and community facilities greatly helps in the management of children and families in need of aid. The school medical officer and the sister who works with him have special skills and knowledge gained from their experience in the school situation. Though they play no part in conventional treatment they can contribute to the better management at school of the child whose health is impaired. This

is particularly so in cases of chronic or recurrent illness or where the child is handicapped by disease. Teachers are often the first to notice illness in a child because of its effect on general behaviour and classroom performance.

Close liaison is maintained with the Mental Health Authority and the Psychology Branch of the Education Department, and survey work is carried out to help in assessment of health standards and problems in school children. This work is done in co-operation with the Commonwealth Bureau of Census and Statistics.

During 1969, there were 207,286 examinations in schools; 1,049 special examinations, including referrals to specialists; and approximately 14,000 medical examinations of teachers and student teachers.

School Dental Service

In co-operation with the Education Department, the School Dental Service began in 1921 with the opening of a dental clinic at South Melbourne. State school children visited the clinic for treatment and returned each year for a dental check-up. As children in country districts also needed dental care the service was extended to country areas, using portable equipment carried in dental vans. At this time there was a staff of only nine dentists. The dental service was limited to schools in the inner industrial suburbs of Melbourne, orphanages, and certain country districts. Emphasis was placed on the treatment of children aged up to twelve years; this covers the period when first teeth are replaced by the permanent teeth. In 1944 the dental service was transferred to the Health Department. The Department bought new vans and twin semi-trailer units in 1951 and the service extended into more country areas. The clinic at South Melbourne had moved to larger premises by 1951, and centres were opened at North Fitzroy in 1953 and Footscray in 1959. These small inner suburban centres serve only schools in their own locality. In country districts the emphasis is on the provision of dental treatment in the more remote areas.

The rapid increase in the number of school children, the inclusion of Catholic schools, and the acute shortage of dentists are factors that limit the extension of the service to additional schools. Treatment is currently available to 60,000 children, including those attending primary school, and children at various institutions in metropolitan and country areas.

Health promotion

In Victoria, health education of children is mainly carried out by parents and teachers. The School Medical Service seeks to promote child health through school teachers because of their special relationship with children.

The Service advises the Education Department on the health standards of schools and school teachers, and the medical suitability of all applicants for teaching service is assessed.

Some school medical officers work in the teachers' colleges to promote the health of school children through the teachers of the future. This is done by individual and group health education and counselling of students. Also, the doctors help prepare future teachers to present health as a curriculum subject in the schools.

Tuberculosis Branch

There has been no change to the broad policy of tuberculosis control over the past years. Mortality rates in Victoria have been so low for many years that they do not give any accurate gauge of progress; the last official figure available was 2.03 per 100,000 in 1968. The result of tuberculin testing amongst children probably reflects the current amount of spread of infection in the community, but variables can interfere to make comparison from year to year unreliable. In 1969 the percentage of natural positive reactors to tuberculin amongst school children aged 14 years was 2.6.

Morbidity figures are probably the most reliable indicator at present. The following table provides a comparison of figures for new active cases, reactivation of previously reported cases, and those suffering from chronic active disease for the years 1964 to 1969.

VICTORIA—TUBERCULOSIS CASES

Year	Active cases			
	New cases	Reactivated cases	Chronic cases	Total cases
1964	820	72	86	978
1965	790	84	66	940
1966	649	78	59	786
1967	599	80	49	728
1968	535	57	38	630
1969	497	44	38	579

Good social and economic conditions have contributed towards the improved situation. However, major credit must be given to current methods of case finding, medical supervision, and the availability of more effective chemotherapy. The use of appropriate chemotherapy guided by bacteriological control and sensitivity testing has resulted in almost 100 per cent bacteriological "conversion" of cases of pulmonary tuberculosis presenting for initial treatment.

Retreatment cases have presented more problems although the introduction of Ethambutol and, more recently, Rifampicin, offer further help in converting even patients who have been positive for many years, to a negative bacteriological state. Increasing use of the so-called "second-line" drugs has led to a need for increased laboratory investigations in the fields of biochemistry and haematology. The major problem in drug therapy remains, however, the persuading of patients to accept the long-term administration of these drugs.

Since 1964 there has been a decrease each year in the rate of active tuberculosis cases discovered by mass X-ray surveys—from 0.66 per 1,000 in 1964 to 0.28 per 1,000 in 1969. However, mass X-ray surveys still locate appreciably more cases of active tuberculosis than any of the other sources in Victoria. The second compulsory chest X-ray survey commenced in Victoria in October 1967 and was completed by August 1970. The third compulsory survey is now proceeding and at the end of this survey the future roll of mass chest X-ray surveys will be reviewed.

The following tables show particulars of the operation of the Tuberculosis Service :

VICTORIA—TUBERCULOSIS SANATORIA :
ACCOMMODATION, ETC.

Sanatoria	1965	1966	1967	1968	1969
ACCOMMODATION					
Metropolitan	517	518	518	499	499
Country	198	187	187	187	173
Total	715	705	705	686	672
ADMISSIONS					
Metropolitan	1,005	1,032	1,039	831	781
Country	234	178	224	212	157
Total	1,239	1,210	1,263	1,043	938
DISCHARGES					
Metropolitan	970	919	1,031	815	780
Country	211	170	195	180	145
Total	1,181	1,089	1,226	995	925
DEATHS					
Metropolitan	62	88	71	67	51
Country	21	29	12	15	13
Total	83	117	83	82	64

VICTORIA—TUBERCULOSIS BUREAUX ACTIVITIES

Particulars	1965	1966	1967	1968	1969
New cases referred for investigation	12,665	11,944	13,483	13,690	12,622
Re-attendances (old cases and new)	54,391	57,149	53,007	54,700	56,519
Visits to patients' homes by nurses	20,372	22,271	24,870	23,808	22,803
X-ray examination—Films (a)—					
Large	37,943	39,555	41,122	37,484	35,462
Micro	12,741	15,673	13,732	17,847	21,378
Tuberculin tests	10,579	11,756	10,884	12,626	11,406
B.C.G. vaccinations	3,861	4,829	4,326	4,550	3,128
X-rays taken—Chest X-ray surveys	596,994	662,576	641,974	663,707	672,925
School tuberculin surveys—Mantoux tests	78,945	90,643	72,636	90,116	89,541

(a) Excludes mass X-ray surveys with mobile units.

Compulsory Chest X-rays, 1965 ; Tuberculosis and Mass X-ray Surveys, 1967 ; Drug and Poison Control, 1970

Mental Health Authority

The functions of the Mental Health Authority, defined in the *Mental Health Act* 1959, are to formulate, control, and direct general policy and administration in regard to the treatment and prevention of mental illness and intellectual defectiveness.

In the planning of mental health services in Victoria, six country regions were selected (with about equal populations in each). The Authority aims to provide a community mental health service in each region with early treatment centres, residential hospitals, day hospitals, outpatient

clinics, and residential hostels. Early treatment units are now established at Larundel, Royal Park, Ballarat, Dandenong, Malvern, Shepparton, and Traralgon; further early treatment centres will be established at Geelong, Benalla, and Sunshine.

Training centres and schools for intellectually defective patients are functioning at Kew, Sunbury, Ararat, Stawell, Bendigo, Janefield, Beechworth, Travancore, and St Nicholas Hospital, Carlton.

A State-wide service of outpatient clinics has now been established. These centres are subsidised by the Authority for their maintenance. They provide a service for the prevention and treatment of mental illness and the assistance to discharged hospital patients.

Alexandra Parade Clinic, Melbourne, provides a personal emergency service and deals with alcoholism as well as the problems of forensic psychiatry. Some clinics serve many purposes, being concerned with sheltered workshops, children and family problems, counselling services, therapeutic social clubs, services for discharged patients, and hostel supervision.

For intellectually handicapped persons there are thirty-six day training centres functioning throughout the metropolitan and country areas. These centres are subsidised by the Authority for their maintenance and capital costs, while their management is under private committees supervised by the Authority's officers.

A specific function of the Authority is research and investigation into the causation and treatment of mental illness. For this purpose a statistical and research unit, which is now recognised as a training centre within the framework of the Department of Psychiatry, University of Melbourne, has been established at Royal Park.

VICTORIA—MENTAL HEALTH: PERSONS UNDER CARE OF THE MENTAL HEALTH AUTHORITY

Particulars	At 31 December—				
	1965	1966	1967	1968 (a)	1969 (a)
RESIDENT PATIENTS—					
Recommended patients—					
In State mental hospitals	4,594	3,682	3,529	3,316	3,050
In Repatriation Mental Hospital	310	299	291	277	245
In psychiatric hospitals	141	153	160	177	167
Approved patients—					
In intellectual deficiency training centres	958	1,047	999	942	850
Voluntary patients—					
In State mental hospitals	1,455	1,937	1,910	1,828	1,767
In Repatriation Mental Hospital	2	7	14	20	34
In psychiatric hospitals	381	374	374	355	277
In intellectual deficiency training centres	874	1,095	1,186	1,883	2,301
Informal patients—					
In informal hospitals	94	112	115	105	133
In training schools	533	521	557	184	..
Total resident patients	9,342	9,227	9,135	9,087	8,824
NON-RESIDENT PATIENTS—					
On trial leave, boarded out, etc.	1,905	1,537	1,362	1,239	1,534
Total under care	11,247	10,764	10,497	10,326	10,358

(a) In 1968 various areas previously designated as mental hospitals and training schools were gazetted as training centres and in 1969 the remaining training schools were gazetted as training centres and informal hospitals.

The following table gives details of the numbers of patients under care of the Mental Health Authority during 1969 :

VICTORIA—MENTAL HEALTH : PERSONS UNDER THE CARE OF THE MENTAL HEALTH AUTHORITY, 1969

Type of institution	Under care at 1 January			Admitted, transferred in, etc.	Discharged, transferred out, etc.	Died	Under care at 31 December		
	Resident	Non-resident (a)	Total				Resident	Non-resident (a)	Total
State mental hospitals	5,144	852	5,996	3,220	2,757	726	4,817	916	5,733
Repatriation Mental Hospital	297	94	391	210	198	31	279	93	372
Psychiatric hospitals	532	175	707	6,653	6,532	56	444	328	772
Informal hospitals	105	..	105	1,576	1,546	2	133	..	133
Intellectual deficiency training centres	2,825	118	2,943	1,362	878	79	3,151	197	3,348
Training schools (b)	184	..	184	..	184	..	..	..	..
Total	9,087	1,239	10,326	13,021	12,095	894	8,824	1,534	10,358

(a) Non-resident patients are those on trial leave, boarded out, etc.

(b) Institutions formerly classified as training schools were classified as informal hospitals or intellectual deficiency training centres in 1969.

Further reference, 1966 ; Mental Hygiene Authority, 1963 ; History of Hospitals in Victoria, 1964 ; Mental Health Research Institute, 1969

Hospitals and Charities Commission

The *Hospitals and Charities Act* 1948 set up a Hospitals and Charities Commission, consisting of three full-time commissioners, a secretary, and administrative staff . It is directly responsible to the Minister of Health.

Functions

The Commission is the authority under the Minister for the payment of maintenance and capital subsidies to registered hospitals and institutions. It exercises a close scrutiny over hospital budgets and expenditure for capital and maintenance purposes.

One of its most important functions is to co-ordinate hospital activities. It is the authority responsible for determining the site and extent of new hospital construction, and for co-ordinating hospital and institutional activities after these are established. As part of its general administrative responsibility, the Commission may inquire into the administration of institutions and societies. The Commission determines, in consultation with the Victorian Nursing Council, those hospitals which should be used for nurse training, and the standards required of nurses in hospitals. It conducts a continuous recruiting campaign for nurses, provides bursaries to encourage girls to enter the nursing profession, and generally assists hospitals in nursing matters.

The Commission promotes collective buying of standard equipment, furnishings, and supplies. The Victorian Hospitals' Association, which acts as a central purchasing organisation for Victorian hospitals, is a non-profit company of which the hospitals themselves are the shareholders. By way of encouragement to purchase, the Commission originally offered an inducement of a 33 per cent subsidy upon collective purchases made by hospitals from the Association ; the amount of this subsidy has now been decreased to 15 per cent, and the Association operates as an active purchasing

organisation handling all types of equipment, drugs, and commodities generally used by hospitals. Total sales by the Victorian Hospitals' Association in the year 1969-70 amounted to \$6.4m.

In the year 1968-69 the Commission distributed a gross amount of \$12.7m from loan funds for new buildings, additions or remodelling projects, and for furnishings and equipment for hospitals, institutions, and ambulance services. It distributed \$49.7m for maintenance purposes.

The Commission exercises control over State funds :

1. For capital works. Commission approval is required at all stages of the building project from the original narrative through the preliminary sketches to documentation, tendering, and supervision of the project.
2. For maintenance purposes. Each institution is required to submit for Commission approval a budget covering the succeeding year's operation.

At 30 June 1969 the Commission had on its register 1,716 institutions and societies, which, besides public and private hospitals, included benevolent homes and hostels, organisations for the welfare of boys and girls, crèches, relief organisations, and other institutions or societies.

Public hospitals

Since their inception in 1846 Victorian public hospitals have maintained a distinctive pattern. First, they are managed by autonomous committees elected by contributors, following closely the practice applying in Britain before the introduction of the National Health Service. Second, they have received financial assistance by way of Government subsidies. With rising costs, this has steadily increased in amount and proportion. At present hospitals in Victoria derive some 65 per cent of their income from government sources. Third, medical staffing has followed the former traditional British pattern of honorary service. In recent years this has been necessarily supplemented by salaried doctors employed either in university teaching departments or in diagnostic and technical therapeutic fields.

Patients are broadly separated into two groups, according to an income test. Those earning below a determined level of income are eligible for public hospital care at a fee of approximately half the actual cost ; medical care is free through the honorary system. Those patients whose incomes are above the level prescribed are required to pay intermediate or private hospital accommodation charges at higher rates, but only rarely does the charge cover cost ; they must, in addition, meet medical fees, against which they may insure.

For a moderate premium a public patient can cover himself and his family against the public hospital accommodation charges of \$10 a day. The insurance benefit includes an amount of \$2 a day derived from Commonwealth hospital benefits. Private and intermediate patients may insure against their higher hospital charges and may, in addition, take a medical benefits cover to help meet the doctor's bill.

Improved medical methods and more effective drugs have shortened the average patient stay in hospital, with an important effect upon the community need for acute hospital beds. In Victoria the present acute hospital bed need is assessed at fewer than 4 beds per 1,000 of population as compared with 7.5 beds in 1948. The fall is significant, not only in its

effect on hospital building costs to provide for an expanding population, but in terms of cost to the patient.

Improved medical and hospital care have shortened bed stay, but they have also increased the length of life expectancy, with a corresponding increase in the number of older people in the community, and State instrumentalities, in collaboration with the hospitals and religious and charitable organisations, are endeavouring to meet the changing needs.

Private hospitals

The Hospitals and Charities Commission registers and controls the standards of private (or non-public) hospitals through regular inspections.

Bush nursing hospitals are registered with the Commission as private hospitals. (See page 515.)

In recent years total bed capacity has increased with the registration of more private hospitals and additional wards in existing private hospitals. Private hospitals therefore constitute an important aspect of the hospital facilities available in Victoria. At 30 June 1969 there were, in the metropolitan area, 216 registered private hospitals with 5,663 beds, whilst in country areas there were eighty-nine registered private hospitals with a total of 1,692 beds.

Regional planning

The Regional Hospital Service was instituted in 1954, when eleven regions were formed, each centred on a base hospital. Regional councils were appointed and these meet regularly to co-ordinate activities. Medical, administrative, nursing, engineering, and catering advisory committees also meet at regular intervals to discuss problems and make recommendations to the regional councils.

Services which are being set up in each region as personnel become available will include pathology, radiology, blood banks, physiotherapy, speech therapy, and occupational therapy.

Reference libraries for doctors, managers, and nurses have been set up at each base hospital, and reserve equipment is held at these locations for use in emergencies. Group laundries are being established at strategic centres, and each hospital now has access to the services of a regional engineer. The Regional Plan has been the means of patients receiving a higher standard of medical and ancillary care throughout the State.

Nursing

The Commission has various responsibilities for nursing in Victoria. It decides in consultation with the Victorian Nursing Council whether any particular hospital will be made available for use as a training school in any branch of nursing ; it determines the establishment of nursing staffs for hospitals ; through the provision of bursaries it encourages prospective nurses to improve their general education prior to commencing training ; it maintains a continuous nurse recruitment programme throughout Victoria ; it produces publicity material including films on nursing ; it directs a staff of nurses to relieve matrons in country hospitals for their leave and assists when urgent shortages of nursing staff occur ; and it assists generally in nursing matters in hospitals.

Ambulance services

Under the *Hospitals and Charities Act 1958* the Commission is charged with the responsibility of ambulance services in this State.

For adequate and efficient provision of ambulance services, Victoria has been divided into sixteen regions, each with regional committees elected by contributors, each committee being autonomous and responsible for the provision of service under its own constitution and by-laws. Each regional committee appoints a full-time superintendent/secretary as executive officer.

Strategically placed throughout the regions are branch stations, most of which are manned by full-time officers, the remainder operated by qualified volunteers. The headquarters station is based in the largest town in the region (generally a base hospital town) and provides maintenance facilities for its fleet of vehicles, backing up of service, and co-ordination of ambulance transport.

Common two-way radio communication is established in all the regional services and ensures direct communication throughout the State on all matters relating to persons in need of prompt medical attention.

Funds are provided by the Commission for both maintenance and capital purposes.

Particulars of the ambulance services from 1966-67 to 1968-69 are shown in the following table :

VICTORIA—AMBULANCE SERVICES

Particulars	1966-67	1967-68	1968-69
Ambulances	282	283	290
Other vehicles	46	46	47
Staff	558	574	614
Contributors	361,095	345,462	333,333
Patients carried	280,695	273,475	270,372
Mileage travelled by ambulances	4,077,881	4,216,386	4,447,015
Maintenance grants	\$641,054	\$759,000	\$830,000
Capital grants	\$235,799	\$240,218	\$310,250

Rationalised medical services

Rationalisation in hospitals means the provision of efficient services without unnecessary duplication. Every hospital board has a natural desire to see its hospital providing all services for its patients. Hospitals formerly found this practicable; it is now impossible because of the increasing complexity of diagnostic and therapeutic services, and their mounting cost. Hospital services must be co-ordinated and rationalised if they are to provide the best services with the income available.

This is not a new concept in Victoria. In 1949 the Cancer Institute was established in Melbourne. Its purpose was to permit centralisation of high voltage radio-therapy in one location and in doing so, to operate in close association with all other hospitals. Experience over twenty-one years has justified the move. By pooling its resources the State has been able to provide efficient high voltage radio-therapy at much less cost than would have been involved had hospitals pursued individual programmes. The Institute is now widely recognised for its work in therapy, teaching and research; it operates in harmony with all hospitals.

The lesson has been applied in other fields. The first Victorian group laundry and central linen service for hospitals was established at the Royal Melbourne Hospital in 1953. Its function was to provide a linen service including provision, maintenance, and laundering of linen to a group of hospitals; seventy-six hospitals are now serviced by the Royal Melbourne Hospital linen service. The second metropolitan group laundry and central linen service was established at the Austin Hospital, and ten group linen services have been established at hospitals throughout country areas.

Wherever possible and desirable, Victorian hospitals pool their resources to provide services for the regions. Three regional engineers, strategically located in the State, advise smaller hospitals and help on engineering problems. Other such services are radiology, pathology, physiotherapy, occupational therapy, and speech therapy.

The steady growth of new medical services demanded further rationalisation. To this end, in 1965, the Hospitals and Charities Commission convened a meeting of representatives of general teaching hospitals in Melbourne. There, the Commission presented the case for rationalisation and invited the hospitals to participate. The Commission received support from the hospitals, including agreement that expert committees be established to investigate, and report upon, the prospects for rationalisation in three areas, namely, cardiology for cardiac surgery, neurology for neuro-surgery, and orthopaedics for the treatment of casualties and rehabilitation. Another committee was established in January 1968 to consider the establishment of renal units.

The first report was received by the Commission in September 1966 and subsequently adopted and implemented. It recommended that while Departments of Cardiology should be maintained in all teaching hospitals, Departments of Open Heart Surgery should be established at the Alfred Hospital and at St Vincent's Hospital, under certain conditions. Both units are now functioning. As a result of the report by the Renal Unit Expert Committee and a report by the National Health and Medical Research Council, a major renal unit has been established at the Royal Melbourne Hospital.

The rationalisation of hospital services has resulted in greater efficiency and economy. However, in developing rationalisation programmes, authorities are mindful that no patient attending any hospital should be denied a vital service. To achieve this involves close co-operation from all hospitals.

Nurse Training, 1962; Nursing Recruitment, 1964; Care of the Aged, 1965; Hospital Architecture, 1966; Hospitals in Medical Education, 1967; Charities in Victoria, 1968; Care of the Elderly, 1969

Public hospitals and charitable institutions

Information dealing with the receipts, expenditure, accommodation, and inmates of public hospitals and subsidised charitable institutions in Victoria during the years 1964-65 to 1968-69 is contained in the following tables. The numbers of patients refer to the "cases" treated and not to persons. It is considered probable that some persons obtained relief from or became inmates at more than one establishment, but there is no information upon which an estimate of the number of these duplications can be based.

VICTORIA—NUMBER OF PUBLIC HOSPITALS AND CHARITABLE
INSTITUTIONS(a)

Institution	1964-65	1965-66	1966-67	1967-68	1968-69
Hospitals—					
Special hospitals (b)	12	12	12	12	12
General hospitals—					
Metropolitan	22	22	22	22	23
Country	111	112	112	112	112
Auxiliary hospitals	1	1	1	1	1
Convalescent hospitals	1	1	1	1	1
Hospitals for the aged	5	6	7	7	7
Sanatoria	2	2	2	2	2
Mental health institutions—					
Mental hospitals	10	10	10	10	10
Psychiatric and informal hospitals	8	9	9	9	10
Intellectual deficiency training centres	9	10	10	10	9
Total hospitals	181	185	186	186	187
Other institutions and societies—					
Infants' homes	8	8	8	8	8
Children's homes	36	36	35	35	35
Maternity homes	4	4	4	4	4
Institutions for maternal and infant welfare	3	3	4	4	4
Rescue homes	4	4	4	4	4
Benevolent homes	6	5	4	4	4
Institutions for the deaf, dumb, and blind	6	6	6	6	6
Hostels for the aged	12	11	12	11	11
Medical dispensaries	2	2	2	2	2
Total other institutions (c)	81	79	79	78	78

(a) Excluding infant welfare centres and bush nursing hospitals and centres.

(b) Special hospitals are those that have accommodation for specific cases only or for women and/or children exclusively and in this table include the Cancer Institute.

(c) In addition to the institutions shown above, which were under the control of one or other of the State's health authorities, there were, in 1969, 1,483 other institutions registered with the Hospitals and Charities Commission.

VICTORIA—PUBLIC HOSPITALS AND CHARITABLE INSTITUTIONS(a) :
DETAILS OF SOURCES OF INCOME AND ITEMS OF EXPENDITURE
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
INCOME					
Government aid	73,687	78,335	85,787	91,590	101,328
Charitable contributions	4,931	4,968	4,784	4,788	5,545
Fees—					
Outpatients	2,922	3,734	3,464	3,177	3,397
Inpatients—					
Public	16,456	17,593	20,973	24,086	25,924
Private and intermediate	10,081	11,922	14,975	16,156	17,063
Other	7,799	9,640	9,128	12,114	11,729
Total	115,876	126,192	139,111	151,911	164,986
EXPENDITURE					
Salaries and wages	64,501	71,432	80,946	88,162	98,763
Other operating expenses	31,854	34,833	36,146	38,737	42,396
Non-operating expenses	2,448	1,401	1,855	1,734	1,918
Capital	16,103	18,161	21,384	22,169	19,881
Total	114,906	125,826	140,331	150,801	162,958

(a) Including infant welfare centres and bush nursing hospitals and centres.

**VICTORIA—PUBLIC HOSPITALS AND CHARITABLE INSTITUTIONS :
RECEIPTS AND EXPENDITURE
(\$'000)**

Institutions	1964-65	1965-66	1966-67	1967-68	1968-69
Hospitals (a)					
Receipts—					
Government	47,034	48,966	54,481	58,650	65,860
Patients (b)	25,982	28,929	36,103	39,850	42,199
Other	6,291	8,203	6,852	9,842	9,332
Total receipts	79,307	86,098	97,436	108,342	117,391
Expenditure—					
Salaries and wages	45,559	50,635	58,379	63,938	70,168
Capital	11,327	12,713	16,073	16,936	14,919
Other	21,080	22,169	23,988	25,959	29,679
Total expenditure	77,965	85,518	98,440	106,834	114,766
Sanatoria—					
Receipts (c)	1,255	1,330	1,394	1,399	1,414
Expenditure—					
Salaries and wages	786	808	864	903	925
Other	469	522	530	496	489
Total expenditure	1,255	1,330	1,394	1,399	1,414
Mental health institutions (d)—					
Receipts (c)	20,428	22,624	24,162	25,662	27,062
Expenditure—					
Salaries and wages	11,748	13,074	14,160	15,329	16,614
Capital	2,300	3,337	3,423	3,495	3,335
Other	6,380	6,212	6,579	6,839	7,113
Total expenditure	20,428	22,624	24,162	25,662	27,062
Other charitable institutions (e)—					
Receipts—					
Government	5,906	6,424	6,724	6,688	7,856
Patients (b)	3,161	3,976	3,115	3,315	3,810
Other	5,818	5,740	6,280	6,507	7,453
Total receipts	14,885	16,140	16,119	16,509	19,119
Expenditure—					
Salaries and wages	6,408	6,916	7,544	7,992	11,056
Capital	2,476	2,110	1,888	1,738	1,627
Other	6,374	7,330	6,903	7,177	7,034
Total expenditure	15,258	16,355	16,335	16,907	19,717
Total all receipts	115,876	126,192	139,111	151,911	164,986
Total all expenditure	114,907	125,826	140,331	150,801	162,958

(a) Hospitals include hospitals for the aged.

(b) Commonwealth Hospital Benefits payments are included in patients' fees.

(c) Sanatoria and mental health institutions are financed almost exclusively by Government contributions.

(d) Includes mental hospitals, psychiatric and informal hospitals, and intellectual deficiency training centres.

(e) Infant welfare centres and bush nursing hospitals and centres are included under this heading.

VICTORIA—PUBLIC HOSPITALS : ACCOMMODATION AND INMATES, 1969

Institution	Number of beds in—		Daily average of occupied beds in—		Total cases treated in—		Outpatients (including casualties)
	Public section	Inter-mediate and private section	Public section	Inter-mediate and private section	Public section	Inter-mediate and private section	Cases treated
Special hospitals (a)	1,696	355	1,308	255	51,606	11,143	173,906
General hospitals—							
Metropolitan	3,359	1,351	2,743	1,033	82,581	55,064	359,543
Country	2,931	3,380	2,031	2,087	43,879	110,273	343,788
Auxiliary hospitals	419	10	387	1	2,657	13	120
Hospitals for the aged	3,506	..	3,229	..	6,544	..	..
Convalescent hospitals	32	12	30	10	69	27	..
Sanatoria	359	..	174	..	606	..	..
Total	12,302	5,108	9,902	3,386	187,942	176,520	877,357

NOTE. This table excludes mental hospitals, psychiatric and informal hospitals, and intellectual deficiency training centres.

(a) Special hospitals include the Cancer Institute.

Hospital benefits

Information about the various types of benefits is set out on pages 532-3 and in Appendix C.

Victorian Bush Nursing Association

The Victorian Bush Nursing Association provides hospital and nursing facilities in country towns and districts throughout the State. A central council in Melbourne, comprising representatives of medical, nursing, and welfare bodies, country members, the Hospitals and Charities Commission, and business and professional men and women, administers the Association.

At 31 March 1969 there were forty hospitals with a total of 490 beds, and eighteen nursing centres, the latter being established at places unable to support a hospital, but able to maintain a trained nurse for consultation or visiting the sick.

During the year ended March 1969, 11,768 inpatients were treated in hospital—maternity 2,245, surgical and medical 9,523, and there were 10,667 outpatient treatments. There were no maternal deaths, and perinatal mortality was 24.4 per 1,000 live births. The total number of centre treatments was 30,237: 18,032 visits by patients to the nursing centres and 12,205 visits by nurses to patients' homes.

VICTORIA—BUSH NURSING HOSPITALS AND CENTRES :
RECEIPTS AND EXPENDITURE
(\$'000)

Particulars	Year ended 31 March—				
	1965	1966	1967	1968	1969
RECEIPTS					
Government grants (a)	575	566	789	616	782
Collections, donations, etc.	89	69	82	112	96
Proceeds from entertainments	18	18	18	18	18
Patients' fees	611	665	828	932	1,049
Members' fees	49	49	55	56	55
Interest and rent	7	10	14	15	19
Miscellaneous	11	24	32	27	20
Total receipts	1,360	1,401	1,818	1,778	2,039
EXPENDITURE					
Salaries—					
Nurses (paid to central council)	433	506	675	760	778
Other	276	269	295	303	347
Provisions, fuel, lighting, etc.	159	148	177	188	204
Surgery and medicine	38	47	57	54	63
Repairs and maintenance	38	53	42	46	63
Furniture and equipment	28	72	23	27	28
Printing, stationery, etc.	18	19	23	23	29
Interest, rent, bank charges, etc.	3	4	6	6	6
Miscellaneous	56	61	78	105	94
Loan and interest repayments	19	19	17	15	20
Land and buildings	201	46	215	81	65
Alterations and additions	88	25	70	128	98
Total expenditure	1,358	1,269	1,680	1,736	1,797

(a) Includes \$35,000 received under the Hospital Benefits Scheme for 1965, \$34,000 for 1966, \$39,000 for 1967 \$36,000 for 1968, and \$31,000 for 1969.

The hospitals are registered by the Hospitals and Charities Commission as private hospitals. They are supported locally by patients' fees, membership fees, donations, and proceeds of auxiliaries. Through the Association, hospitals receive Government maintenance grants, amounting to \$400,000 in 1968-69. The money for approved capital works, such as buildings and new equipment, is initially raised locally, then subsidised by the State Government on a three for one basis. The Government subsidy for capital works during the year 1968-69 was \$300,000.

Each bush nursing hospital elects its own committee of management at an annual meeting of members. Members pay a small annual fee, giving them the right to stand or vote for the committee of management and entitling them also to a rebate on fees should they become patients. The nursing centres are also controlled by a local committee of management and members receive free treatment. The nursing centres receive financial assistance from the State Government through the Hospitals and Charities Commission, and from the Commonwealth Government through a Home Nursing Subsidy Grant.

Royal District Nursing Service

The Royal District Nursing Service was established in Melbourne in 1885 as the Melbourne District Nursing Society. At the time of its inception, the need for such a service was extensive, not only because of limited hospital accommodation but because of sub-standard housing, long work hours, and low incomes.

The Service is incorporated under the Hospitals and Charities Act as a philanthropic society and is subsidised by the State and Federal Governments. Administration is from Melbourne, with centres at Camberwell, Essendon, Footscray, Frankston, Ferntree Gully, Melbourne, Moorabbin, and Preston. The work has expanded and almost 200 personnel are now employed.

Originally the Society's aim was to nurse the sick poor in their own homes, but owing to social changes and the introduction of more complicated and expensive forms of hospital, medical, and surgical treatment, the services of the district nurse have come to be made generally available. The Service now aims to provide comprehensive nursing service on a daily visiting basis. This includes active bedside nursing care, health teaching, rehabilitation nursing, provision of aids to nursing, linen service as deemed necessary, a limited chiropody service, and some degree of social assistance. Close liaison has been established with several of the major metropolitan hospitals to ensure continuity of nursing care according to medical orders. Patients are admitted to the care of the Royal District Nursing Service by direct referral from hospitals or general practitioners.

There have been great changes in the type of nursing service provided during the past decade for the care of the physically disabled and elderly. Every effort is now being made to encourage them to maximum independence and rehabilitation. There has been a noticeable increase in requests for service for the young physically handicapped, largely as a result of the high incidence of road accidents. This type of nursing is exacting and time consuming.

Over the years the mode of transport has graduated to motor vehicles, and each day 125 cars transport district nurses to their patients. At the present time there are 2,800 patients receiving visits, the total number of patients visited for the year ended 30 June 1969 being 16,358 with a total of 367,616 visits.

Cancer Institute

The objects of the Institute, which are fully enumerated in Part II of the Cancer Act, can be summarised under three main headings :

- (1) research into the causation, prevention, diagnosis and treatment of cancer ;
- (2) treatment to provide outpatient and inpatient hospital treatment within the Institute ; and
- (3) teaching, to provide for the teaching of undergraduate and post-graduate medical students, medical practitioners, nurses, technicians, and physicists.

The Institute, with its treatment and research divisions in a single unit, seeks to provide facilities for, and undertake treatment and research into, the causation, prevention, and diagnosis of cancer and allied conditions. The basic objectives of the Institute have been progressively implemented, and initial planning to provide for a 400-450 bed hospital and associated services has now commenced.

The State Government has recently made available part of the adjacent site, formerly occupied by the Royal Mint. This will ultimately result in a new hospital complex. The Planning Committee of the Board is now working out the implementation of its medical functions and supportive services. It will also seek to determine the saturation point for an institution of this nature.

Treatment

The clinical care of patients includes radiotherapy, chemotherapy, surgery, and research relating to cancer. The present inpatient capacity is 120 beds with ancillary services. The number of new patients being referred annually, including private and intermediate, now approximates 8,000. Patient treatment, and in particular the development of various techniques applicable to treatment, has been developed rapidly because of increasing patient demand.

The Institute, which is a Clinical School of the University of Melbourne, provides undergraduate training in various medical and scientific disciplines and postgraduate study in treatment techniques, research, and investigation into cancer problems. Combined consultative tumour clinics are held in the various branches of medicine.

The Institute operates four megavoltage units and two further units are operating in Tasmania. It occupied new premises at the Royal Hobart Hospital in late 1969. This brings the accommodation and treatment facilities in that city in line with contemporary standards in Melbourne.

Research

All scientific departments participate in a research programme depending upon the particular interest of the department. These include medical physics, pathology, radiology, biological research, and endocrine research.

The increasing use of isotopes has resulted in the development of improved methods of diagnosis. The radioisotope scanner, which was installed earlier, has added considerably to diagnostic capability; play-back systems have been designed which allow isotope scans to be examined in greater detail and thus often make it possible to assess abnormalities with greater confidence.

The Biological Research Unit is currently investigating the healing processes in chromosomes and chemical methods for the study of nucleoproteins. In addition, Visiting Fellows undertake investigation of sulphur-linked compounds in relation to cell division.

The basic programme of the Endocrine Research Unit has been to study former observations and to improve the usefulness of urinary steroid measurements to an extent where they would be a reliable indicator of pre-operative response to adrenalectomy or hypophysectomy.

On the clinical side, the Institute's hæmatologist is making a study of a unique inflammatory steroid in the assessment of bone marrow function in various hæmatological disorders. Within the department of diagnostic X-ray, an investigation on lymphangiography and mamography is being carried out. Studies are also being undertaken to improve barotherapy techniques.

The following statistical information indicates the growth that has taken place between 1959 and 1969 :

VICTORIA—CANCER INSTITUTE		
Particulars	1959	1968-69
Medical—		
Beds available including hostel	66	122
Inpatient admissions	1,342	3,165
New outpatients	4,731	5,022
Outpatient attendances	32,840	42,149
Therapy treatments	80,716	96,891
Visiting nursing service—visits	20,557	33,225
Outpatient transport service—mileage	151,322	151,395
Finance—		
Expenditure	\$1,095,154	\$2,660,629
Income	\$100,786	\$666,767
State Government grant	\$960,000	\$1,970,000
Personnel—		
Medical staff	38	72
Nursing staff	86	163
Scientific and technical staff	106	170
Other staff	212	323
Salaries and wages	\$763,836	\$1,969,832
Tasmania—		
Expenditure	\$34,276	\$177,058
Staff	9	17

Anti-Cancer Council of Victoria

The Anti-Cancer Council of Victoria was established in 1936 by Act of Parliament which entrusted the Council with the responsibility of co-ordinating all research in Victoria into the causation, prevention, and treatment of cancer; with the promotion and financial support of such

research; and with the encouragement of measures designed to improve and facilitate treatment of persons suffering from cancer.

The Council conducts an active educational programme, with the co-operation of the State Departments of Health and of Education. Through this programme the Council aims to encourage patients with symptoms suggestive of possible cancer to present for treatment at the earliest and most curable stage. A continuous campaign is conducted to inform school children of smoking hazards and of the relationship between cigarette smoking and lung cancer.

Since 1967 the Council has conducted a campaign to encourage smokers to change to brands which yield lower quantities of tar and nicotine. A testing system has been established at Monash University and the Council regularly publishes the tar content of popular brands of cigarettes.

The Council provides advice and assistance for patients suffering from cancer who need help, financial or otherwise. Some 500 cancer patients are so assisted each year, involving an annual expenditure of \$30,000 to \$50,000.

The following table gives details of expenditure by the Anti-Cancer Council during the years 1964-65 to 1968-69 :

VICTORIA—ANTI-CANCER COUNCIL: EXPENDITURE
(\$)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Research	230,432	162,977	151,843	174,104	176,682
Education	47,534	41,247	44,120	44,596	43,297
Patient aid	55,332	41,858	48,492	30,239	31,187
Other	52,286	44,845	43,782	46,142	52,750
Total expenditure	(a) 385,584	290,927	(a) 288,237	295,081	303,916

(a) Revised figures.

Paramedical Services, 1969

Commonwealth Serum Laboratories

History

Difficulties in obtaining supplies of biologicals, chiefly antitoxins, during the First World War led to the establishment of the Commonwealth Serum Laboratories in 1916 as an institute within the Quarantine Division of the Department of Trade and Customs. In 1921 its control was transferred to the newly formed Commonwealth Department of Health, where it remained until 1961 when it was transferred by the *Commonwealth Serum Laboratories Act 1961* to the Commonwealth Serum Laboratories Commission. This Commission functions independently of the Commonwealth Department of Health but is still responsible to the Commonwealth Minister of Health.

The primary function of the Laboratories was to produce and supply Australia's needs of vaccines and antisera for use in the prevention and treatment of human disease in Australia, but many secondary functions and research activities were added in the interest of public health.

Extension into veterinary fields was a logical and early step—the first veterinary products becoming available in the early 1920s.

In 1919 the new Laboratories were called on to produce a very large quantity of polyvalent bacterial vaccine to be used against secondary invaders then causing havoc in victims of the most severe influenza epidemic yet recorded. The Laboratories, by concentrated effort with a normal staff of thirty temporarily augmented to ninety, produced and issued in a few weeks over 3 million doses of this vaccine, an achievement which illustrated, for the first time, the value to Australia of the institute and provided early justification of its establishment.

Exactly 50 years later Australia, threatened with another influenza epidemic, this time of “Hong Kong” influenza, was in great need of a potent virus vaccine that would be effective against the new strain. By working two shifts a day, seven days a week, more than 5 million doses of the necessary vaccine were produced at the Laboratories in time to immunise the susceptible population before the epidemic season. Cases of influenza due to the “Hong Kong” virus did occur in several States but in contrast to Europe and U.S.A. no major epidemic developed in Australia.

The growth of the Laboratories has been steady with several intermittent periods of greatly accelerated development. Some of the highlights which caused rapid expansion have been the production of insulin in 1923 soon after its discovery; the processing of human blood products for the Defence Forces and the Australian Red Cross Society from 1939; the production of penicillin in 1943 for the Services and for civilian use; the widespread use of the Laboratories’ Triple Antigen in children over the years which has contributed to the virtual elimination of diphtheria, a disease which in the first quarter of this century claimed many thousands of victims each year; and the production of poliomyelitis vaccine in 1956. Since then the incidence of poliomyelitis has steadily diminished and the disease has now all but disappeared from Australia.

Among the diversified products of the Laboratories are antitoxins and other antisera, human and veterinary vaccines, both bacterial and viral, human blood products, antibiotics, especially penicillins, diagnostic products, allergen extracts, and bacteriological and tissue culture media. There are over 600 regular products and many others are made for restricted use or to special prescription.

For the year ended 30 June 1969 sales of products exceeded \$10m for the first time.

Active research in various scientific areas has always been a function of the Laboratories but in 1935 a Research Division was established which has been a steadily developing section ever since. Its activities cover basic and applied research in the fields of bacteriology, virology, immunology, serology, biochemistry, and biophysics, all of which are directed towards improving the knowledge of human and animal health. Over 500 papers have been published in scientific journals in Australia and overseas.

There is close collaboration with the Red Cross Blood Transfusion Service, which is currently illustrated by the provision of potent Anti-D Gamma Globulin needed to prevent Rh sensitisation of Rh negative women

at childbirth and thus prevent hæmolytic disease in later children. This serum which is processed, purified, and tested at the Laboratories is available free to all mothers at risk in Australia.

In addition to the 24 acres at Royal Park, the Laboratories also conduct a field station of 1,527 acres at Woodend for breeding horses, cattle and sheep, production of various antisera, and for veterinary research including field trials of prospective and existing products.

Three World Health Organization Reference Centres are located at and are part of the Laboratories. The W.H.O. Blood Group Reference Centre provides assistance on cross-matching problems to hospitals, pathologists, and Red Cross Blood Transfusion Centres throughout Australia; conducts research in blood group genetics; and gives assistance to courts in disputed paternity cases.

The W.H.O. Influenza Centre isolates and identifies strains of influenza virus in outbreaks in Australia and New Guinea; the serious outbreak in central New Guinea in 1969 was identified as A₂ "Hong Kong" virus. The W.H.O. Brucellosis Centre collaborates in the establishment of International Standards for anti-brucella abortus sera and assists veterinarians and laboratories throughout Australia in the diagnosis of brucella infection and biotyping of cultures.

The professional staff of the Laboratories participate as members in thirty to forty learned associations and societies in Australia, Papua-New Guinea, Great Britain, and U.S.A., and also in international learned bodies. Laboratories officers are members of over thirty expert committees constituted in Australia or internationally. The scientific staff is thus well-placed to participate in the interchange of ideas emanating from these associations and so keep the Laboratories scientifically well informed.

National Heart Foundation of Australia (Victorian Division), 1964; Medical Research at the Royal Women's Hospital, 1965; St Vincent's School of Medical Research, 1965; Mental Health Research Institute, 1966; Melbourne Medical Postgraduate Committee, 1967; Epidemiological Research Unit, Fairfield Hospital, 1969; Asthma Foundation of Victoria, 1969; Baker Medical Research Institute, 1970; Walter and Eliza Hall Institute of Medical Research, 1970; Royal Children's Hospital Research Foundation, 1970

Lord Mayor's Fund

The Lord Mayor's Fund was inaugurated by the Lord Mayor of Melbourne in 1923. The object of the founder was to rationalise and regularise the collection and distribution of voluntary contributions to support the hospitals and charities of Melbourne. There are two methods of operation: the Hospitals and Charities Sunday Committee and the Lord Mayor's Fund. The Hospitals and Charities Sunday Committee raises its funds from an annual "one day" appeal to parishioners (4th Sunday in October) by means of specially printed offertory envelopes supplemented, latterly, by grants from church budgets.

The Lord Mayor's Fund does not employ collectors nor does it pay commissions. Its appeal is presented to the public as directly as possible by advertising, personal correspondence, or by voluntary speakers addressing groups.

The total annual receipts of the appeal and the fund during the period 1964-65 to 1968-69 were as follows:

**VICTORIA—LORD MAYOR'S FUND AND HOSPITALS
AND CHARITIES SUNDAY APPEAL: RECEIPTS**
(\$'000)

Year	Lord Mayor's Fund	Hospitals and Charities Sunday Appeal	Total
1964-65	515	60	575
1965-66	513	57	570
1966-67	483	57	540
1967-68	493	55	547
1968-69	484	49	534

SOCIAL WELFARE

Commonwealth social services

The principal social welfare benefits in Australia are provided by the Commonwealth Government under the Social Services Act which is administered by the Department of Social Services. Finance for the scheme is provided from the National Welfare Fund to which the Commonwealth Government appropriates from general revenue an amount equal to the expenditure from the Fund.

Expenditure in Victoria from the National Welfare Fund for the years 1964-65 to 1968-69 is shown on the following table.

VICTORIA—NATIONAL WELFARE FUND: EXPENDITURE
(\$'000)

Service	1964-65	1965-66	1966-67	1967-68	1968-69
Funeral benefits	224	282	358	362	407
Age and invalid pensions (a)	107,408	111,019	120,930	129,334	140,538
Widows' pensions	11,764	12,692	14,387	15,807	18,090
Maternity allowances	2,058	2,040	2,104	2,102	2,281
Child endowment (b)	48,018	49,235	56,232	52,675	54,133
Unemployment and sickness benefits	3,351	3,434	4,238	4,734	4,557
Commonwealth rehabilitation service	432	427	461	493	590
Medical benefits	8,961	11,156	11,776	12,301	13,188
Medical benefits for pensioners	2,413	3,404	3,746	4,242	4,277
Hospital benefits (c)	13,267	13,349	15,208	16,672	18,947
Pharmaceutical benefits	18,556	18,951	21,138	20,031	22,385
Pharmaceutical benefits for pensioners	5,165	5,674	6,933	7,505	8,712
Nutrition of children	2,066	2,382	2,391	2,623	2,636
Handicapped children's benefits	..	..	..	..	7
Miscellaneous health services	162	104	474	391	362
Tuberculosis benefits	2,997	3,310	3,556	3,557	3,487
Home savings grants (d)	3,536	4,184	3,891	4,470	4,379
Other social services	..	..	..	..	241
Total	230,379	241,645	267,823	277,301	299,216

(a) Includes allowances for wives and children of invalid pensioners.

(b) In 1966-67 there were five twelve-weekly payments instead of the usual four.

(c) Including Nursing Home Benefits.

(d) Under the Home Savings Grant Act 1964.

Social security benefits

The benefits now provided under the Social Services Act, with the date of introduction of each in brackets, are: age pensions (1909), invalid pensions (1910), widows' pensions (1942), unemployment, sickness and special benefits (1945), and sheltered employment allowances (1967), all

of which are subject to a means test; maternity allowances (1912) and child endowment (1941) which are not subject to a means test. The Act also authorises the operation of the Commonwealth Rehabilitation Service (1948) and the payment of funeral benefits (1943).

In addition to satisfying the means test, a claimant for pension is required to complete a qualifying period of residence in Australia. This varies from ten years' continuous residence to qualify for the age pension to one year's residence immediately preceding her claim for a widow's pension where the woman and her husband were living permanently in Australia when he died. Widows' pensions are also paid to other categories of women who, for various reasons, no longer have a bread-winner. The section of the Social Services Act which disqualified an alien from receiving a pension was repealed in 1965.

The former separate means tests on income and property for age, invalid, and widows' pensions were merged in 1961 into a single means test which allows for interchangeability between a pensioner's income and the value of his property. In applying the means test to sheltered employment allowances, earnings from approved sheltered employment are treated more liberally than other forms of income.

A funeral benefit is paid to the person liable for the funeral expenses of an age or invalid pensioner. Where a pensioner (including a widow pensioner) is liable for the funeral expenses of another pensioner, a spouse or a child, a higher amount is paid.

Unemployment and sickness benefits are subject to a means test on income only. The one year's residence qualification is waived where the Department is satisfied that the claimant intends to remain in Australia permanently.

Maternity allowance is paid on the birth of her child to each mother residing in Australia. The one year's residence qualification is waived if the mother intends to remain permanently in Australia; in other cases, payment may be made when the mother has completed one year's residence. The amount of the allowance depends upon the number of other children under sixteen years of age in the mother's custody, care, and control.

Child endowment is a continuing payment made to each person (usually the mother) who has the care of one or more children under sixteen years of age, or one or more qualified full-time students sixteen to twenty-one years of age. The rate of endowment for each child under sixteen depends upon the child's position in the family in relation to the other children under sixteen; a flat rate is paid for each qualified full-time student sixteen to twenty-one years of age. One year's residence in Australia is required if the mother and the child were not born here but this qualification is waived if the Department is satisfied that they intend to remain permanently in Australia.

The Commonwealth Rehabilitation Service is provided free for certain handicapped people receiving social service benefits and for children fourteen to fifteen years of age who, without treatment or training, would be likely to qualify for invalid pension at sixteen. Qualified people receive treatment and training and are provided with books or tools of trade and surgical aids and appliances. They may also receive these aids and appliances to assist in their rehabilitation at home or at work.

People ineligible for the free service may obtain treatment or training on payment of the cost. The Department of Social Services also provides a social case-work service to assist its clients with their social and other problems.

History of Social Services, 1962

Age pensions

Age pensions, or old-age pensions as they were called from 1909 to 1947, were the first of the income security benefits to be introduced on a Commonwealth-wide basis. The rates of pension and the qualifying conditions have changed over the years and additional benefits have become payable but, fundamentally, the provisions have not altered greatly. The main essentials are, and have been, that pensions are granted subject to age and residence requirements, to a means test on income and property and, until 1965, to a nationality requirement.

Allowances which may be paid for one child and the non-pensioner wife of an age pensioner were introduced in 1943; additional pension for each other child was introduced in 1956; and, in 1965, a guardian's allowance became payable to a widower or other unmarried age pensioner with the care of at least one child. In 1958, supplementary assistance was introduced for "single" pensioners who pay rent. This assistance is payable subject to a means test differing from that applicable to the pension itself.

On 30 June 1969 there were 705,311 age pensioners in Australia, of whom over 70 per cent were women. The main reasons for the preponderance of women are that they may be granted age pensions five years earlier than men and that they generally live longer than men.

Notwithstanding the means test, less than 10 per cent of all age pensioners were receiving pensions at less than the maximum "single" or married rate, as appropriate. The proportion of age pensioners in the population of pensionable age has shown a long-term increase. At the 1911 Census the percentage was 32.0, and at the 1966 Census the percentage was 48.0.

Some people of pensionable age are receiving invalid or widows' pensions, or service pensions from the Repatriation Department.

Invalid pensions

The original Commonwealth pensions legislation contained provisions for invalid as well as age pensions and, though some of the qualifying conditions necessarily differ, the two schemes have many common characteristics. This applies more particularly to the means test provisions. As with age pensions, the conditions have changed over the years, but there have always been the fundamental requirements connected with age, incapacity, residence, income and property and, until 1965, nationality. Allowances for one child and a non-pensioner wife, additional pension for each child in excess of one, guardian's allowance and supplementary assistance as for age pensions are applicable also to invalid pensions.

On 30 June 1969 there were 121,744 people in Australia receiving invalid pensions of whom 67,922 were men. Over 96 per cent of all invalid pensioners were receiving the maximum rate applicable according to whether they were single or married. The percentage of invalid pensions in the population on 30 June 1969 was 0.99.

The following table giving data for Victoria illustrates the growth in numbers of and expenditure on age and invalid pensioners between 1964-65 and 1968-69 :

VICTORIA—AGE AND INVALID PENSIONS

Year	Pensioners			Total payments (a)
	Age	Invalid	Total	
1964-65	162,108	26,794	188,902	\$'000 107,408
1965-66 (b)	163,156	25,187	188,343	111,019
1966-67 (c)	166,138	26,779	192,917	120,930
1967-68	174,777	26,718	201,495	129,334
1968-69	183,776	26,625	210,401	140,538

(a) Includes allowances for wives and children of invalid pensioners.

(b) By statistical adjustment pensions were corrected from invalid to age pension in 1965-66.

(c) There was a means test liberalisation in April 1967 resulting in a higher number of grants of age pensions.

Sheltered employment allowances

These allowances were introduced in 1967 and are payable, in lieu of invalid pensions, to qualified disabled people engaged in approved sheltered employment. The means test is the same as for invalid pensions except that, in the computation of income, more lenient treatment is given to earnings from sheltered employment. The additional payment associated with invalid pensions is also payable.

Widows' pensions

For widows' pensions purposes the term "widow" may include, in certain cases, a deserted wife, a divorcee, a woman whose husband has been imprisoned for at least six months, and a woman whose husband is in a mental hospital. Certain "dependent females" may also qualify. As with age and invalid pensions, there have been some changes in conditions but widows' pensions have always been subject to residence qualifications, to a means test on income and property, and, until 1965, nationality requirements.

On 30 June 1969 there were 77,897 widow pensioners in Australia.

Numbers and expenditure in Victoria between 1964-65 and 1968-69 are shown in the table below:

VICTORIA—WIDOWS' PENSIONS

Year	Number of widow pensioners	Total payments
		\$'000
1964-65	16,426	11,764
1965-66	17,251	12,692
1966-67	18,481	14,387
1967-68	19,372	15,807
1968-69	20,349	18,090

Maternity allowances

Except between July 1931 and June 1943, when a means test applied, maternity allowances have, since their introduction in 1912, been paid to all mothers on the birth of a child. The maternity allowance is additional to any Commonwealth health benefits.

The number of allowances paid annually increased steadily in the post-war years, reflecting the influence of the immigration programme and the increased number of births, until the peak number of 240,841 was reached in the year ended 30 June 1962. During the next four years the number fell away gradually to 224,311 for 1966. However, during the year ended 30 June 1969, the number of maternity allowances paid had increased to 251,287, involving expenditure of \$7,959,515. The increased number of grants was confined to those paid for first births and where the mother had one or two other children.

VICTORIA—MATERNITY ALLOWANCES

Year	Number granted	Total payments
		\$'000
1964-65	64,424	2,058
1965-66	63,934	2,040
1966-67	66,098	2,104
1967-68	66,083	2,102
1968-69	72,304	2,281

Child endowment

When it was introduced in 1941 the Commonwealth scheme provided for child endowment to be paid at the rate of \$0.50 a week for each child under sixteen years, other than the first, in a family. The rate was increased on two occasions and, in 1950, the first child was included at \$0.50 a week. In January 1964 the rate for the third and subsequent children under sixteen in a family was increased to \$1.50 a week and a provision was made for endowment to be paid for each student over sixteen but under twenty-one years who is receiving full-time education at a school, college, or university, and who is not in employment or engaged in work on his own account.

In October 1967 a cumulative increase was made for the fourth and subsequent children under sixteen years in families, so that for each such child the rate is \$0.25 a week more than for the next immediate older child.

In relation to children under the age of sixteen years the total number of endowed families in the Commonwealth on 30 June 1969 was 1,701,914, and the number of endowed children in families was 3,764,421. There were also 25,699 endowed children under sixteen years and 714 students aged sixteen but less than twenty-one years in institutions. Expenditure for all endowed children for the year 1968-69 was \$193m.

VICTORIA—CHILD ENDOWMENT

Year	Number of endowed families	Number of endowed children in families (a)	Number of endowed children in institutions (a)	Number of endowed student children	Total payments
1964-65	436,359	968,879	4,909	49,806	\$'000 48,018
1965-66	443,753	982,651	5,027	51,366	49,235
1966-67	453,872	1,000,722	5,231	54,199	(b) 56,232
1967-68	462,300	1,015,234	5,303	54,934	52,675
1968-69	472,693	1,041,713	5,462	69,563	54,132

(a) Excludes endowed student children.

(b) There were five twelve-weekly payments made to the credit of bank accounts instead of the usual four during this year.

Unemployment, sickness, and special benefits

Legislation for these benefits was enacted in 1944, and the programme came into operation the following year. Rates of benefit were increased in 1952, 1957, 1961, and 1962, and permissible income was raised in 1957. In March 1962 the additional benefit for one dependent child was extended to all dependent children under the age of sixteen years in the family of the beneficiary.

Unemployment and sickness benefits are essentially short-term benefits. They are available to persons who are unemployed or who are temporarily incapacitated for work and thereby suffer loss of income. There is a means test on income, but none on property. Both benefits are payable subject to a waiting period of seven days. Though qualifying conditions differ to some extent between unemployment and sickness benefits, both benefits have many common characteristics.

The number of unemployment benefits granted varies from one year to another according to the general employment situation and to dislocations in industry caused by industrial stoppages. During 1968-69 a total of 132,914 unemployment benefits were granted in Australia, and on 30 June 1969 there were 15,910 persons receiving benefit. Comparable figures for Victoria were 27,172 and 3,608.

The number of sickness benefits shows little variation from year to year. Altogether 63,024 grants of sickness benefits were made in Australia during 1968-69 (13,798 in Victoria), and there were 8,185 persons on benefit at the end of the year (2,199 in Victoria). Total expenditure in the Commonwealth on unemployment, sickness, and special benefits in 1968-69 was \$16,830,000, expenditure in Victoria during the same period being \$4,557,000.

VICTORIA—SOCIAL SERVICES : UNEMPLOYMENT, SICKNESS, AND
SPECIAL BENEFITS

Year	Number admitted to benefit during year			Number receiving benefit at end of year			Amount paid in benefits during year		
	Un-employment	Sickness	Special (a)	Un-employment	Sickness	Special (a)	Un-employment	Sickness	Special (b)
							\$'000	\$'000	\$'000
1964-65	11,394	15,682	4,119	1,960	2,677	1,137	1,160	1,645	546
1965-66	15,833	15,908	4,740	3,450	2,478	1,156	1,216	1,667	551
1966-67	23,373	16,716	6,245	4,159	2,612	1,203	1,882	1,753	603
1967-68	32,653	16,731	7,317	6,141	2,309	r 1,915	2,425	1,646	664
1968-69	27,172	13,798	7,856	3,608	2,199	1,763	2,246	1,473	838

(a) Includes migrants in reception and training centres.

(b) Includes amounts paid to migrants in reception and training centres.

r: Revised.

Rehabilitation

Rehabilitation is provided free to (1) those receiving or eligible for an invalid or widow's pension; (2) those receiving or eligible for a sickness, unemployment, or special benefit; (3) those receiving a tuberculosis allowance; and (4) boys and girls of fourteen or fifteen years who, without treatment or training, would be likely to qualify for an invalid pension at sixteen.

Persons are chosen from these groups if the disability is a substantial handicap for employment but is remedial (except in the case of the blind),

and if there are reasonable prospects of the person going to work within three years of starting treatment or training.

Training and living-away-from-home allowances may be paid, and artificial aids and appliances are supplied free.

During 1968-69, 1,435 persons were accepted for rehabilitation, 244 of them being in Victoria; 1,104 were placed in employment, 190 of them being in Victoria. Expenditure on rehabilitation in Victoria during the year was \$568,845.

Reciprocal agreements

The Social Services Act provides for the Commonwealth to enter into reciprocal agreements with the government of any other country in matters concerning pensions and benefits under the Act. Arrangements of this kind have been made with New Zealand and with Britain.

The general basis of these agreements is that residence in New Zealand or Britain may be treated as residence in Australia. In return, Australians who go to those countries for permanent residence receive concessions enabling them to qualify for equivalent benefits there.

Aged Persons Homes Act

The Aged Persons Homes Act was introduced in 1954 and allows for Commonwealth grants to eligible charitable and benevolent organisations, or organisations of a similar nature, towards the capital cost of approved homes for aged people, including the cost of the land. The grants were originally on a \$1 for \$1 basis but were increased to \$2 for \$1 in 1957. In 1967 local governing bodies were included as eligible organisations and grants became available for nursing accommodation providing up to half the total number of residential beds was supplied by the particular organisation in the same city or town. An important requirement for a grant of subsidy is that the conditions of the home approach as nearly as possible ordinary domestic life for the aged residents.

Since the commencement of the Act, 1,851 grants amounting to \$92m had been approved to 30 June 1969. The projects gave accommodation to 32,617 aged persons. In Victoria, 494 grants had been approved amounting to \$25m. These grants involved subsidised accommodation for 8,616 aged persons.

Repatriation Department

The Repatriation Department is responsible, subject to the control of the Minister for Repatriation, for the administration of the Repatriation Act and associated legislation designed for the care and welfare of ex-servicemen and women, and the dependants of those who have died as a result of their war service. The main responsibilities of the Department concern pensions and medical treatment; other functions include the education and training of children of certain ex-servicemen, the provision of gift cars for some severely disabled ex-servicemen, the payment of funeral grants for specified classes of ex-servicemen and their dependants, and various other forms of assistance.

War pensions

War pensions, introduced under the *War Pensions Act* 1914, are intended to provide compensation for ex-servicemen and women who have suffered incapacity as a result of their war service, for their eligible dependants,

and also for the dependants of those who have died as a result of war service.

War pensions for incapacity are paid in accordance with the assessed degree of disablement suffered by the ex-serviceman; they are not subject to any means test or to income tax. The term "disablement" includes such factors as physical or mental incapacity, pain and discomfort, a lowered standard of health, and inability to participate in normal recreations.

Pensions are payable to the wife of a disabled war pensioner and to his children under sixteen years of age at appropriate rates according to the ex-serviceman's assessed degree of incapacity.

If an ex-serviceman's death is accepted as being due to his war service, or if, at the time of his death, he was receiving the special rate of war pension, or the equivalent rate payable to certain double amputees, a war widow's pension is paid to his widow, and pensioners are also paid for each of his children who are under sixteen years of age. Eligible war widows also receive an additional payment known as a domestic allowance. Excluding 666 pensions paid to miscellaneous personnel, there were 600,313 war pensions payable to ex-servicemen and their dependants at 30 June 1969, and the annual expenditure on both types of pension was \$182,849,989. Of these pensions, 164,693 war pensions and 152 miscellaneous pensions were payable in Victoria and the annual expenditure was \$51,653,739.

Service pensions

In addition to compensatory payments for war caused incapacity and death, the Repatriation Department introduced service pensions in 1936. This type of pension is paid, subject to a means test, to an ex-serviceman who has served in a theatre of war, and who either has attained the age of 60 years (55 years in the case of an ex-servicewoman) or who is permanently unemployable. A service pension may also be paid to an ex-serviceman suffering from pulmonary tuberculosis, irrespective of the area in which he served, and to a veteran of the Boer War. The same means test is applied to service pensions as to Social Services age or invalid pensions. Service pensioners are also eligible to receive a wide range of medical benefits for disabilities not related to their war service.

VICTORIA—WAR AND SERVICE PENSIONS

Year	Members of forces	Dependants—		Total	Amount paid during year
		Of incapacitated members	Of deceased members		
					\$'000
WAR PENSIONS					
1964-65	63,084	106,936	16,543	186,563	45,064
1965-66	62,626	102,125	16,718	181,469	49,526
1966-67	61,949	97,117	16,884	175,950	46,953
1967-68	61,323	92,107	16,939	170,369	47,216
1968-69	60,247	87,422	17,024	164,693	51,654
SERVICE PENSIONS					
1964-65	12,412	3,008	591	16,011	5,974
1965-66	12,565	3,065	562	16,192	6,626
1966-67	12,729	3,152	531	16,412	6,720
1967-68	12,961	3,414	556	16,931	7,420
1968-69	12,880	3,086	584	16,550	8,070

Medical care

An extensive range of treatment is provided through general practitioners under the Department's Local Medical Officer Scheme at the Repatriation outpatient clinics, and by specialists in the various branches of medicine who have been appointed to departmental panels. There are some 5,900 doctors participating in the Local Medical Officer Scheme, of whom 1,579 are practising in Victoria.

Treatment for inpatients is available at Repatriation General Hospitals in all States except Tasmania. Inpatient treatment may also be provided, under certain conditions, in country hospitals at departmental expense. For patients requiring long term treatment an Anzac Hostel is maintained in Victoria.

In each State of the Commonwealth there is a Repatriation Artificial Limb and Appliance Centre, where artificial limbs and surgical aids are provided for those eligible. The services of these centres are also extended to other Commonwealth Government departments and agencies, and, to the extent that production can be made available, to State Government departments and philanthropic organisations, and to private persons who cannot be fitted satisfactorily elsewhere.

The Department maintains its own pharmacies at Repatriation hospitals and outpatient clinics, and arranges for the dispensing of prescriptions of Local Medical Officers through local chemists. Through its Local Dental Officer Scheme, comprising some 2,800 dentists throughout Australia, and dental units located at its institutions, a full range of dental services is provided for those eligible. A comprehensive rehabilitation and social worker service, under which programmes for the rehabilitation and social care of departmental patients are carried out, is also available.

Under agreements with State Governments, psychiatric patients requiring custodial care are admitted at departmental expense to separate Repatriation psychiatric wards administered by State authorities. In addition, the Department provides a full range of ancillary services including physiotherapy, chiropody, speech therapy, rehabilitation, and social worker services.

Medical treatment is provided for all disabilities which have been accepted as due to war service. In addition, and subject to certain conditions, treatment is provided for disabilities not due to war service.

Institutions

The largest of the Department's institutions in Victoria is the Repatriation General Hospital at Heidelberg. This institution is a recognised postgraduate training centre and teaching seminars are held weekly. Training facilities at the hospital include schools for student nurses and nursing aides. Training is also given in pathology, radiography, pharmacy, and social work. At 30 June 1969 the number of staff employed full-time at the hospital was 1,391 and during 1968-69, 11,423 patients were treated at the hospital with an average stay of twenty-three days per patient.

The other institutions conducted by the Department in Victoria are the Outpatient Clinic, St Kilda Road, Melbourne; Anzac Hostel, North Road, Brighton; Repatriation Artificial Limb and Appliance Centre, South Melbourne; and Macleod Hospital, Mont Park.

*Education and training**Soldiers' Children Education Scheme*

With the assistance of a voluntary Education Board in each State, the Department administers the Soldiers' Children Education Scheme introduced in 1921. The object of this scheme is to encourage and assist eligible children to acquire standards of education compatible with their aptitudes and abilities and to prepare them for suitable vocations in life. Assistance is provided under the scheme for the children of ex-servicemen whose deaths have been accepted as due to war service, or who, as a result of war service, are blinded or totally and permanently incapacitated.

Disabled Members' and Widows' Training Scheme

Ex-servicemen who are substantially handicapped through war-caused disabilities, and for whom vocational training is necessary for their satisfactory re-establishment, may be assisted under the Disabled Members' and Widows' Training Scheme, introduced in 1953. Training is also provided for the widow of an ex-serviceman whose death is due to war service, where it is necessary to enable her to follow a suitable occupation.

Korea and Malaya Training Scheme

Under this scheme, eligible ex-servicemen who served in the Korea and Malaya operations could train for professional, industrial, or rural occupations. The time limit for lodging applications for training under this scheme has now expired but trainees who are still undertaking courses are eligible to have their fees paid at training institutions for an allowance towards the cost of essential books, equipment, and fares. A weekly training allowance is payable for full-time trainees.

Re-establishment benefits for National Servicemen

Subject to prescribed conditions, special re-establishment benefits are provided for National Servicemen under the Defence (Re-establishment) Act. These benefits apply to all National Servicemen whether they have served on "Special Service" or on any other service, and ensure that servicemen will not be at a disadvantage on their return to civil life. The scheme includes appropriate full or part-time training as a supplement to skills acquired in the Army, refresher training for specialists, and training for those who, for various reasons, may not be able to return to their former employment. The assistance includes payment of tuition fees, other associated fees and fares, and provision of appropriate books and equipment. A training allowance is also provided for trainees undertaking full-time studies.

Re-establishment loans may be granted, subject to certain conditions, to those National Servicemen who prior to call-up were engaged in business, practice, or agricultural occupations, or who, because of their call-up, were prevented from engaging in these occupations, and who need financial assistance for their re-establishment in civil life. The maximum amounts of the loans are : business and professional \$3,000, and agricultural \$6,000.

General assistance

The Department also provides various other forms of assistance for certain classes of ex-servicemen and their eligible dependants. These benefits include : gift cars and driving devices for some seriously disabled ex-servicemen ; funeral benefits ; immediate assistance ; business re-establishment loans and allowances ; and recreation transport allowance.

National health benefits *

Before the entry of the Commonwealth into the field of hospital and medical benefits in 1946, the main, if not the only agencies for these services were the friendly societies which had provided medical and pharmaceutical benefits for their members for over a century. The societies also introduced hospital benefits in the early 1930s. In addition a number of non-profit organisations came into being at about this time, catering mainly for industrial groups. There were also several commercial organisations registered under the Victorian Companies Act. These operated on a similar basis but their activities were brought to an end by the enactment of the Victorian *Benefit Associations Act* 1951.

The major organisations in Victoria registered under the National Health Act provide both hospital and medical benefits, and in most cases certain ancillary benefits in the form of a rebate on operating theatre fees, spectacles, ambulance fees, etc. Several smaller organisations provide hospital benefits only, and a few commercial establishments provide a fund membership restricted to their own employees.

Registered organisations in Victoria set up a council comprised of representatives of some twenty-three major organisations in 1954. Similar councils were also formed in each of the other States. An executive committee, appointed to deal with the problems commonly encountered by member organisations, made any representations deemed necessary on behalf of the constituent members. Subsequently the Commonwealth established the Commonwealth Health Insurance Council, composed of representatives of the Health Department, and, as appointees, certain leading officials of the various State Councils, plus one representative appointed directly by each State Council. This Commonwealth Council, under the chairmanship of the Director-General of Health, conducts a periodical review of the operations of the National Health Plan, together with consideration of proposals and representations upon various aspects of the plan put forward by the State Councils. Any decisions made by the Commonwealth Council go to the Minister for Health in the form of recommendations for his consideration and determination, and also for submission to Federal Parliament, if an amendment of the Act is involved.

In Victoria some 86 per cent of the community is covered under the plan for varying rates of hospital benefits. A slightly lower percentage is covered for medical benefits. These percentages exclude pensioners of various types, persons covered by repatriation provisions, the indigent, and others of a non-insurable nature.

Commonwealth expenditure on hospital and nursing home benefits, medical benefits, pharmaceutical benefits, and the Pensioner Medical Service is authorised by the *National Health Act* 1953-1966.

Hospital and nursing home benefits

Hospital benefits introduced in 1946 are available to patients receiving treatment in public and private hospitals approved under the National Health Act.

Insured patients, who are those fulfilling the conditions of eligibility regarding contributing to a hospital benefit fund registered under the National

* See also Appendix C on pages 785-6.

Health Act, or a dependant of any such person, are entitled to a Commonwealth hospital benefit of \$2 a day. The benefit is paid through the contributor's registered benefit organisation. Generally, the Commonwealth hospital benefit is paid to the contributor together with the fund benefit to which he is entitled.

The Commonwealth benefit of \$2 a day is paid direct to hospitals who make no charge (for instance, infectious disease hospitals). Where a public hospital does not charge any fees for an eligible pensioner or a dependant of such a person who is a public ward patient, the Commonwealth pays the hospital a benefit of \$5 a day. Eligible pensioners are those who are in possession of a Pensioner Medical Service entitlement card.

For uninsured patients a Commonwealth benefit of \$0.80 a day is paid direct to the hospitals, the same amount being deducted from the patients' accounts.

A Commonwealth nursing home benefit of \$2 a day is paid for a qualified patient who receives nursing home care in a convalescent home, rest home, or similar institution which is approved under the National Health Act. The benefit is paid whether or not the patient is insured. It is paid direct to the hospitals and the same amount is deducted from the patient's account.

The following table shows details of registered organisations, members, and benefits for the years 1964-65 to 1968-69 :

VICTORIA—HOSPITAL AND NURSING HOME BENEFITS

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Number of registered organisations	44	44	43	42	40
Number of members	1,006,780	1,024,209	1,063,335	1,092,123	1,191,306
Benefits paid during year—	\$'000	\$'000	\$'000	\$'000	\$'000
From registered organisations' funds	10,049	13,777	17,870	21,353	26,800
Commonwealth benefits	12,353	12,895	14,393	15,670	17,548
Total benefits	22,402	26,672	32,263	37,023	44,348

Medical benefits

Commonwealth Medical Benefits, which were introduced in 1953, are paid for medical expenses incurred by persons who are contributors to registered medical benefits organisations, or by the dependants of such contributors. The benefits are usually paid on a fee-for-service basis for the medical services specified in the National Health Act. However, some registered organisations provide medical services for their members under contract arrangements with doctors.

Payments of Commonwealth medical benefits on a fee-for-service basis are made only to financial contributors to registered medical benefits organisations, which, subject to their rules, also pay a fund benefit equal to or greater than the amount of Commonwealth benefit. Where medical services are provided by contract, the Commonwealth benefit is provided by way of cash reimbursement to the organisation of a proportion not exceeding one half of the payments made to the doctors for services covered by the contract.

VICTORIA—MEDICAL BENEFITS

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Number of registered organisations	20	20	19	19	19
Number of members	916,189	929,693	969,018	1,009,926	1,104,212
Number of services received	6,977,006	8,000,119	8,086,044	8,601,743	9,210,127
Benefits paid during year—	\$'000	\$'000	\$'000	\$'000	\$'000
From registered organisations' funds (a)	8,525	10,539	11,788	12,794	14,282
Commonwealth benefits	8,850	11,030	11,644	12,183	13,052
Total benefits	17,375	21,569	23,432	24,977	27,334

(a) Excluding ancillary benefits.

Pharmaceutical benefits

Under the Pharmaceutical Benefits Scheme which was introduced in 1948, all prescriptions written in accordance with the regulations are available to the general public for the payment of a fee of 50 cents. Pensioners who are enrolled in the Pensioner Medical Service, and their eligible dependants, receive these prescriptions free of charge. Pharmaceutical benefits are supplied by approved pharmaceutical chemists on prescriptions of medical practitioners, but in areas where there is no approved chemist, a medical practitioner may be approved to supply pharmaceutical benefits.

Provision is made to approve hospitals for supplying pharmaceutical benefits and most public hospitals are thus approved. A few of the larger private hospitals having diagnostic facilities are similarly approved.

The drugs and medicinal preparations available as pharmaceutical benefits are determined by the Commonwealth Minister of Health on the advice of the Pharmaceutical Benefits Advisory Committee. Within the list of benefits so determined, a doctor may prescribe, subject to any restriction on its use as a benefit, the drug of his choice in the treatment of his patient.

The following table gives details of pharmaceutical benefits granted in Victoria during the years 1964-65 to 1968-69 :

VICTORIA—PHARMACEUTICAL BENEFITS

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
	'000	'000	'000	'000	'000
Number of prescriptions	12,520	12,947	14,136	14,296	15,885
Cost of prescriptions—	\$'000	\$'000	\$'000	\$'000	\$'000
Commonwealth contribution—					
Pensioners	5,165	5,674	6,933	7,505	8,712
Other population	14,101	14,872	16,040	15,821	18,112
Payments to hospitals and miscellaneous services	4,455	4,000	5,000	4,103	4,160
Patients' contributions	4,652	4,767	5,087	5,045	5,587

Pensioner Medical Service

The Pensioner Medical Service, which commenced in 1951, is a general practitioner medical service provided free of charge to eligible pensioners and their dependants. Under this service the participating doctors provide medical attention of a general practitioner nature, such as ordinarily rendered by a general practitioner in his surgery or at the patient's home, to enrolled pensioners and their dependants. In addition to the general practitioner service given to enrolled pensioners, the full range of medicines of the Pharmaceutical Benefits Scheme is available free of cost from a chemist on presentation of a

doctor's prescription. Persons eligible for the Pensioner Medical Service are persons receiving an age, invalid, or widow's pension under the Commonwealth Social Services Act, or a service pension under the Repatriation Act, subject to a means test, and persons receiving a tuberculosis allowance under the Tuberculosis Act. Wives, children under sixteen years of age, and children who have attained the age of sixteen years but who are under the age of twenty-one years and are receiving full-time education at a school, college, or university, who are dependants of persons who are eligible, may also receive the benefits of the Pensioner Medical Service.

VICTORIA—PENSIONER MEDICAL SERVICE

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Number of pensioners and dependants enrolled	220,315	252,258	260,009	282,276	294,308
Number of participating doctors	1,640	1,661	1,733	1,767	1,768
Number of services—					
Surgery	1,015,942	1,074,055	1,231,859	1,379,392	1,448,865
Domiciliary	836,007	817,463	877,609	870,231	831,893
Payments to participating doctors for medical services (\$'000)	2,384	3,379	3,721	4,218	4,251

History of Social Services, 1962; Sheltered Employment Assistance, 1969

Social Welfare Department

The *Social Welfare Act* 1960 provides for the establishment of a new branch of the Chief Secretary's Department under a Director-General of Social Welfare. All the functions previously exercised by the Children's Welfare Department and the Penal Department were absorbed by the new branch (the Social Welfare Department) and a number of significant additional functions have been introduced. These have since been re-aligned and re-grouped into divisions*.

In addition to a central administration which is primarily responsible for the whole Department there are the following divisions: Family Welfare, Youth Welfare, Prisons, Probation and Parole, Training, and Research and Statistics.

Family Welfare Division

This Division is administered by the Director of Family Welfare. It is responsible for providing family welfare, child care and associated services. These services include preventive services and family counselling.

The Family Counselling Section provides an advisory service for the benefit of persons with family problems. Its prime aim is to prevent the disruption of the family unit and to lessen the effects of any breakdown that may take place. During 1969-70, 5,258 approaches were made to the Section; at 30 June 1970, 637 cases were active.

A parent or other person who has the custody of a child under fifteen years of age can apply for family assistance payments and associated benefits. The age limit can be extended if the child continues at school full-time. Those who are eligible for a pension from the Commonwealth Social Service Department, or who have readily realisable assets exceeding \$500 plus \$100 for each dependent child, are not eligible to apply. At 1 October 1970 the following categories of persons were eligible for assistance.

* In December 1970 the branch became a separate Ministry of Social Welfare under the newly created Minister of Social Welfare.

Deserted wives and the wives of prisoners are eligible for a widows' pension from the Commonwealth Social Services Department after they have been deserted for six months or if their husbands have been in prison for six months. In the meantime, if eligible, they receive assistance through the Family Welfare Division. A mother with one child receives \$22.00 a week plus \$2.00 if she pays rent or board. For each additional child she receives \$3.50 a week. If any of the children is under six years of age or is an invalid another \$2.00 is paid.

Unmarried mothers, deserted *de facto* wives, and the *de facto* wives of prisoners—irrespective of age—receive the same assistance. The difference is that this group is not taken over by the Commonwealth.

Where a mother receives a Commonwealth pension for herself and the children of her marriage but does not receive assistance for children not of her marriage, she is eligible to receive an allowance for each of the latter.

In the above cases the Commonwealth Government reimburses the State for half of the expenditure. The entire cost of assistance in the following cases is borne by the State.

When the bread-winner of a family with dependent children receives Commonwealth unemployment benefit, or workers compensation, supplementary assistance is provided. The amount depends on the size of the family, its income and commitments.

Where a child without sufficient means of support is being cared for by a person other than a parent, a \$6.50 a week family assistance payment is made.

Emergency grants, not exceeding \$30 per family in one year, can be made to those eligible for family assistance. These grants are primarily intended to provide food during the period between lodging an application for family assistance and the first payment.

All children for whom family assistance is being paid are eligible to receive medical, dental, pharmaceutical, and optical services free of cost from the Health Department. An allowance is also made for school books up to a set scale determined by the Education Department. The cost of the secondary school books is borne by the Department of Social Welfare.

The following table gives details of family assistance rendered by the Family Welfare Division of the Social Welfare Department during the years 1965-66 to 1969-70. From 2 April 1970 the family assistance system was altered and statistics for 1969-70 are not comparable with previous years.

VICTORIA—FAMILY ASSISTANCE

Year	Number of applications		Number of children involved at end of period	Cost of assistance (a)
	Received	Approved		
1965-66	3,035	1,662	6,209	\$'000 573
1966-67	3,104	1,686	4,979	559
1967-68	3,638	2,054	6,638	635
1968-69	3,795	2,291	6,489	829
1969-70	4,724	3,162	7,337	1,070

(a) Excludes medical, dental, pharmaceutical, and optical benefits, and school book payments.

The following table provides an analysis of families receiving assistance at 30 June 1970 :

VICTORIA—FAMILY ASSISTANCE : ANALYSIS OF FAMILIES RECEIVING ASSISTANCE AT 30 JUNE 1970

Type of case	Families receiving assistance	Children involved
Cases where the Commonwealth Government reimburses half of the expenditure—		
Deserted wives	262	1,091
Wives of prisoners	89	383
Unmarried mothers	746	820
Deserted <i>de facto</i> wives	360	1,195
<i>De facto</i> wives of prisoners	103	444
Mother with child (or children) not of marriage	20	35
	1,580	3,968
Cases not subject to reimbursement by Commonwealth Government—		
Supplementary assistance to parents—		
On widows, age, and invalid pensions	730	2,405
Father incapacitated	147	363
On unemployment benefits	66	198
Assistance to people who care for children whose parents—		
Are deceased	171	230
Have deserted the child	53	93
Are in gaol	32	80
	1,199	3,369
Total (a)	2,779	7,337

(a) In 1,185 cases families received emergency grants to assist them during the period between lodging the application for assistance and the first payment.

Wards of the Social Welfare Department are children and young persons placed under the legal guardianship of the Director-General to the exclusion of their parents. They may remain wards until they are eighteen years of age, and in exceptional cases even longer, but generally they are discharged earlier.

The control, supervision and after-care of those who are admitted as wards before they reach their fifteenth birthday is the responsibility of the Family Welfare Division. Those who are older when they are admitted as wards become the responsibility of the Youth Welfare Division. Those in the first group are referred to as "children" and those in the second group as "young persons".

There are two ways by which a child, or young person, is made a ward of the Department. One is by an order from the Children's Court. It may be either because a police officer has successfully applied to the Court that the child be deemed in "need of care and protection", or because the child has committed an offence, or because a person who has the care and custody of the child has successfully applied to the Court that the child be deemed "uncontrollable". The other way is by application to the Department on the grounds that the child is without sufficient means of support and there are no available legal proceedings to obtain this support.

Apart from caring for wards in its own reception centres and children's homes, the Division arranges their placement in approved children's homes conducted by churches and other charitable agencies, with foster parents, in adoptive placements, and with relatives.

The Division pays private foster parents \$6.50 a week for the care of wards, and pays approved children's homes, of which there are about seventy, \$13.00 a week for the care of children younger than five years and \$9.50 for older children. In addition, medical, dental and hospital services are available without charge, and allowances are made towards school books and school uniforms. It endeavours to recover from parents the cost of maintaining the wards, but usually it is possible to recover only a portion of this cost.

The Division operates four reception centres for the initial reception of children newly admitted to its care. It also operates six children's homes, each for about thirty children, and fourteen family group homes, twelve each for eight children and two each for four children. The reception centres are for short-term care whilst the Division is planning for the children's future, whereas children's homes are for longer-term care.

The following tables show details of wards of the State during the years 1968-69 and 1969-70.

VICTORIA—REASONS FOR CHILDREN BEING ADMITTED AS WARDS OF STATE

Reason for admission to Family Welfare Division	1968-69			1969-70		
	Males	Females	Total	Males	Females	Total
Children's Court orders—						
Care and protection application—						
Found wandering or abandoned	8	15	23	15	17	32
No means of support, or no settled place of abode	177	174	351	184	158	342
Not provided with proper nursing, clothing, or medical aid	87	84	171	72	83	155
Unfit guardianship	81	92	173	115	110	225
Lapsing or likely to lapse into a career of vice or crime	66	10	76	82	16	98
Exposed to moral danger	..	22	22	2	30	32
Truancy	10	1	11	13	7	20
Total	429	398	827	483	421	904
Offences—						
Assault	2	..	2	2	..	2
Robbery with violence	1	..	1	..	..	..
Breaking	50	1	51	65	1	66
Larceny	28	4	32	27	..	27
Motor vehicles	6	..	6	7	..	7
Other offences	7	2	9	9	1	10
Total	94	7	101	110	2	112
Uncontrollable applications	36	6	42	32	9	41
Total made wards by Children's Court	559	411	970	625	432	1,057
Admission on application to Department	65	48	113	52	52	104
Total	624	459	1,083	677	484	1,161

DISCHARGES OF WARDS FROM FAMILY WELFARE DIVISION (a)
DURING 1968-69 AND 1969-70

Type of discharge	1968-69			1969-70		
	Males	Females	Total	Males	Females	Total
Legal adoption	25	39	64	40	38	78
By direction of Minister	284	176	460	394	287	681
Death	7	1	8	2	4	6
Time expired at 18 years	67	47	114	60	54	114
Discharge after time extended beyond 18 years (b)	4	1	5	5	7	12
Total	387	264	651	501	390	891

(a) See also tables on young persons—that is, those fifteen years and over—made wards and admitted to and discharged from, the Youth Welfare Division.

(b) Time cannot be extended beyond the twenty-first birthday.

The following table shows the location of wards placed with the Family Welfare Division at 30 June 1966 to 1970 :

VICTORIA—LOCATION OF WARDS PLACED WITH THE FAMILY
WELFARE DIVISION

Details	At 30 June—				
	1966	1967	1968	1969	1970
On home release with parents or relatives	1,401	1,600	1,693	1,847	1,794
In approved children's homes	2,317	2,335	2,370	2,322	2,487
In foster homes	694	656	626	609	608
Placed pending adoption	134	139	86	95	90
Social Welfare Department institutions—					
In reception centres	273	257	270	306	363
In children's homes	127	138	176	178	169
In family group homes	91	88	95	93	101
Total	491	483	541	577	633
In Mental Health Authority institutions	167	166	178	166	172
Abducted or absconders	14	13	8	11	12
Other	10	4	..	..	..
Total	5,228	5,396	5,502	5,627	5,796

Adoption service

When a parent or guardian signs a consent to adoption, he has the right to nominate either one of the twenty-one approved private adoption agencies or the Director-General to arrange the adoption. If no agency is nominated, or if a nominated agency declines to act, the adoption arrangements are made by the Director-General. The Director-General also arranges the adoption of wards who are available and suitable for adoption.

During the year ended 30 June 1970, 1,954 adoptions were legally finalised in Victoria. Of these, 368 were arranged by the Division—78 were

wards and 290 non-wards. The Division also furnished reports to the Court in 327 cases where close relatives adopted children.

Other services

The Division, through the Infant Life Protection Provisions of the Childrens Welfare Act, safeguards the welfare of children under five years of age who are placed for payment away from their parents.

The following is a statement of operations under these provisions for the years 1965-66 to 1969-70 :

VICTORIA—CHILDREN UNDER INFANT LIFE PROTECTION PROVISIONS

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Children under supervision at beginning of period	217	211	179	169	196
Children placed during period	398	318	247	403	518
Children under supervision at end of period	211	179	169	196	174

The Division also regulates street trading and employment of children under fifteen years in the entertainment field and is the legal guardian of children and young persons under twenty-one years who come from abroad without parents or relatives to live in Victoria. It maintains offices in many parts of the State and in the suburbs of Melbourne to make its services available locally to those in need of them. The regional offices are in Bairnsdale, Ballarat, Bendigo, Geelong, Hamilton, Mildura, Morwell and Shepparton, and the suburban offices are in Dandenong, Footscray, Frankston, Glenroy, North Melbourne, Preston, and Ringwood. It is departmental policy to increase the number of regional and suburban offices as necessary.

Family Welfare Advisory Council

The Family Welfare Advisory Council is a body appointed by the Minister. Its twelve members, appointed for terms not exceeding three years, are predominantly representatives of family welfare and child welfare agencies. The functions of the Council are :

1. to advise the Minister on any alterations in practice and procedure considered desirable from time to time for the welfare, protection and care of children and young persons ;
2. to report on any matter referred to it by the Minister ;
3. to report to the Minister on rates to be paid for wards boarded out in private homes or placed in approved children's homes or other institutions ; and
4. to examine and comment on all plans submitted to the Hospitals and Charities Commission for new children's homes and alterations to existing homes.

Youth Welfare Division

The Youth Welfare Division is administered by the Director of Youth Welfare. Its function is to promote the welfare of young people between fifteen and twenty-one years of age. To fulfil this function the Division controls, treats and provides after-care for young persons who are either made wards of the Department or are sentenced to detention in a Youth Training Centre ; is involved in preventive work among juveniles ; and assists the Youth Advisory Council in establishing and developing youth activities.

Remand facilities for young people on remand from the Children's Court—that is, for those who have committed an offence before they were seventeen years of age—are provided for boys in Turana at Royal Park, and for girls at the Winbirra Remand Centre which is adjacent to the Winlton Youth Training Centre located at Nunawading.

Relatively few young persons in Victoria under seventeen years of age are remanded for trial. The average numbers held on remand are twenty boys and fifteen girls.

Notwithstanding that remand periods from the Children's Court nowadays tend to be less than one week, remand still represents a major crisis in the lives of the young persons concerned. The centres endeavour to be helpful during the hours of waiting, to reflect interest in their welfare, and to provide adequately for their physical well-being.

After sentence or after admission into guardianship the young person is designated a trainee and transferred to a classification centre for a short period of assessment pending a decision on placement. For males a classification centre has been established within the Turana complex at Royal Park and this is planned so that Children's Court trainees may be segregated from the adult court trainees. Females are accommodated in the Remand Centre at Nunawading for classification purposes pending the building of a classification wing.

The classification process is similar for males and females. It involves a teamwork approach comprising superintendents, social workers, psychiatrists, psychologists, education officers, medical officers, chaplains, and youth officers.

The reasons for discharge from and admission to the Youth Welfare Division are shown in the following tables.

VICTORIA—DISCHARGES OF WARDS FROM YOUTH WELFARE DIVISION (a)

Type of discharge	1968-69			1969-70		
	Males	Females	Total	Males	Females	Total
By direction of Minister	35	63	98	50	53	103
Court appeals	6	8	14	4	9	13
Death	2	..	2	1	..	1
Time expired at 18 years	268	129	397	325	189	514
Discharge after time extended beyond 18 years (b)	7	19	26	4	11	15
Total	318	219	537	384	262	646

(a) See also tables on children—that is, those under fifteen years of age—made wards and admitted to, and discharged from, the Family Welfare Division.

(b) Time cannot be extended beyond the twenty-first birthday.

VICTORIA—REASONS FOR YOUNG PERSONS BEING ADMITTED AS
WARDS OF STATE

Reason for admission to Youth Welfare Division	1968-69			1969-70		
	Males	Females	Total	Males	Females	Total
Children's Court orders—						
Care and protection application—						
Found wandering or abandoned	3	7	10	8	26	34
No means of support, or no settled place of abode	8	6	14	14	16	30
In a brothel, association with known thieves, etc.	..	..	..	..	1	1
Not provided with proper food, nursing, clothing, or medical aid	1	..	1	1	1	2
Unfit guardianship	..	4	4	1	4	5
Lapsing or likely to lapse into a career of vice or crime	56	16	72	86	27	113
Exposed to moral danger	1	51	52	1	87	88
Truancy	2	1	3	4	..	4
Total	71	85	156	115	162	277
Offences—						
Assault	4	..	4	3	..	3
Robbery with violence	2	..	2	..	..	..
Sex offences	6	..	6	4	..	4
Breaking	35	2	37	39	1	40
Larceny	29	1	30	28	1	29
Motor vehicles	25	1	26	21	..	21
Other offences	7	1	8	5	..	5
Total	108	5	113	100	2	102
Uncontrollable applications	8	3	11	13	..	13
Total	187	93	280	228	164	392

The following tables show the offences for which sentences were imposed and the length of sentences during 1968-69 and 1969-70.

VICTORIA—OFFENCES FOR WHICH SENTENCES TO YOUTH TRAINING CENTRES WERE IMPOSED

Offence	1968-69			1969-70		
	Males	Females	Total	Males	Females	Total
Homicide	3	..	3	2	..	2
Assault	51	1	52	49	..	49
Robbery with violence	27	..	27	12	..	12
Sex	54	..	54	47	..	47
Breakings	1,138	16	1,154	894	8	902
Larceny	652	16	668	570	13	583
Motor vehicles	910	1	911	888	4	892
False pretences	31	..	31	33	..	33
Other offences	216	6	222	278	2	280
Total offences for which sentences imposed	3,082	40	3,122	2,773	27	2,800
Persons sentenced	605	6	611	655	11	666

VICTORIA—LENGTH OF SENTENCES TO YOUTH TRAINING
CENTRES IMPOSED

Length of sentence	Number of sentences					
	1968-69			1969-70		
	Males	Females	Total	Males	Females	Total
Under 14 days	8	..	8	13	2	15
15 days and under 1 month	20	..	20	26	1	27
1 month and under 2 months	52	1	53	60	..	60
2 months and under 3 months	31	..	31	45	1	46
3 months and under 6 months	100	1	101	142	1	143
6 months and under 9 months	183	2	185	174	2	176
9 months and under 1 year	85	1	86	65	1	66
1 year and under 2 years	272	3	275	334	4	338
2 years and under 3 years	60	..	60	42	..	42
3 years	12	..	12	21	..	21
Total sentences	823	8	831	922	12	934
Persons sentenced	(a) 605	(a) 6	611	(b) 655	(b) 11	666

(a) Of the 605 males sentenced 501 were sentenced for the first time and of the 6 females sentenced 5 were sentenced for the first time.

(b) Of the 655 males sentenced 541 were sentenced for the first time and of the 11 females sentenced 10 were sentenced for the first time.

Youth Training Centres

In Victoria there are nine youth training centres—six for boys and three for girls. In these centres emphasis is placed on treatment rather than custody and security. There are only two maximum security units. One, Poplar House, is located within Turana and provides for twenty-six males; and the other, Goonya Section, is located within Winlaton and provides for a maximum of fifteen girls. Of about six hundred trainees in custody only an average of thirty-five are detained in what could be called maximum security, while the great majority are under minimal security conditions.

Youth training centres have educational courses, trade training, and general works activities. Some trainees attend school either at the centre or outside. Through service projects, and social and sporting activities, trainees are involved in the life of the community.

Turana Youth Training Centre treats mainly those boys unsuitable for the other centres, and those in need of specialised care such as psychiatric services. Two youth training centres—Malmsbury and Langi Kal Kal—are reserved for those sentenced by adult courts, while Morning Star (conducted by the Franciscan Order) and Bayswater (conducted by the Salvation Army) Training Centres are reserved for those sentenced by the children's courts.

The Sisters of the Good Shepherd conduct Youth Training Centres for girls in their Abbotsford and Oakleigh Convents. These centres take the majority of Catholic girls. All the other girls are placed in the Division's Winlaton Youth Training Centre.

Within each of the nine youth training centres the trend is towards dividing the institution into small treatment units thus allowing for diverse treatment programmes and a greater degree of individualised care.

One of the aims of the Divisions is the re-integration of the family. Special efforts are made to ensure visits by parents and relatives. After an initial period of eight weeks, male trainees receive weekend leave at intervals of six weeks and female trainees at intervals of one month. In addition special leave is granted at Easter and Christmas.

All sentences to fixed terms of detention in Youth Training Centres are reviewed by the Youth Parole Board. The Board has the power to release a trainee on parole at any time—irrespective of the sentence.

Wards in the care of the Division are subject to regular review by the Review Committee which has wide powers of recommendation to the Director.

Youth Welfare Service

Victoria's first community treatment programme for young offenders began operating in April 1970 in premises at 614 Glenferrie Road, Hawthorn. It is called the Youth Welfare Service.

The Youth Welfare Service is restricted to male youths between fourteen and seventeen years of age. These youths must appear on police charges before a Magistrate in the Children's Court. They must also have a history of not responding satisfactorily to case work probation and other non-institutional court sanctions such as fines or bonds of good behaviour, and, consequently, the alternative to the Youth Welfare Service would, as a rule, be a sentence to detention in a youth training centre. Those youths whom the Magistrate regards as potentially responsive to the treatment provided by the Service have their cases adjourned for twenty-one days. This allows for an assessment by the Youth Welfare Service.

To prove suitable a youth must be of at least average intelligence to understand the treatment programme; he must live at home or with close relatives who are willing to respond to advice from the Welfare Service; and he must have committed offence(s) primarily as a result of his allegiance to friends or the gang of which he is a member.

Those who satisfy the Youth Welfare Service selection criteria are then placed by the Magistrate on probation for a period of six months. The main condition of the Probation Order is that the probationer shall report to the Youth Welfare Service and carry out all instructions given by the Service.

The present facilities at Hawthorn allow thirty youths to attend the Centre at one time. To develop proper group interaction ten youths are admitted each month and they then form a group. This group replaces another group of ten who have just completed a three months programme. The programme of the new group runs independently from that of the other two groups which are at the Centre at the same time.

The youths are required to attend the Centre three evenings during the week, starting from 5.30 p.m., and on Saturdays from 9 a.m. On each of the four days they leave the Centre at 9 p.m. and must be home not later than 10 p.m. While at the Centre they are involved in projects of value to the community. They repair kindergarten furniture, make toys for children in institutions, and so on. On Saturdays they work on outside projects such as construction work for the National Parks Authority, renovation and painting work for welfare organisations, or chopping and stacking wood for the aged.

However, the focal point of the programme is the group discussion known as "guided group interaction" which takes place four times a week and lasts for about one hour. In these discussions a trained therapist has the task of generating positive peer group pressures to counter the negative pressures that were the cause of the youths being in trouble with the law. The programme is based on the premise that, since group pressure can cause a youth to commit an offence it can also—with the help of skilled guidance—bring about a law-abiding pattern of behaviour.

An important feature of the programme is the involvement of parents or, in the absence of parents, of close relatives. The superintendent and staff maintain close contact with the youths' families. Family problems that are revealed in the group discussions, and are regarded as being relevant to a youth's anti-social behaviour, are followed up with the family if the youth assents.

On completion of the three months programme at the Centre a detailed report is forwarded to the Children's Court. This is for the information of the Magistrate and does not imply that the youth is required to appear again before the court. For the remaining part of the probation period arrangements are made for the youth to report back to the Service at regular intervals for individual counselling.

Due to limited facilities, the Youth Welfare Service is at present restricted to male youths between fourteen and seventeen years of age who appear to commit offences because they are members of a group and conform to group activities. However, the treatment can be extended to cater for girls and young women, and there is no reason why selected adults could not benefit from similar treatment. The programme could also be structured to help non-group offenders.

Wards after-care

At 30 June 1970, the Division was responsible for 1,190 wards not under sentence. Most were made wards by Children's Court orders, but about 250 a year are transferred from the Family Welfare Division. They are wards who have reached the end of their compulsory education and are entering employment. All wards remain under guardianship of the Director-General until their eighteenth birthday, unless they are released earlier by direction of the Minister, or their time is extended as far as their twenty-first birthday if circumstances warrant it.

Of the 1,190 wards, 236 were retained for treatment in the Youth Training Centres, while the greatest number (835) were placed either on home release or were residing with their employer, in youth hostels, or in private board. This group is under the after-care supervision of the Division. A team of social workers gives them guidance and support.

The youth hostel scheme is a combined effort by government and private agencies. It plays an essential part in the rehabilitation of youths who have been made the responsibility of this Division. Hostels can be divided into three types. The first type cares for the homeless and dependent young persons, the second type is for those who are in conflict with the law and who have some underlying emotional disturbance, while the third type takes in intellectually retarded youths. The government subsidises the private

hostels. The Division controls three hostels which care for the more difficult ex-institutional wards.

The table on page 554 shows the location of all the young persons, wards, and trainees who were under the supervision of the Youth Welfare Division at 30 June 1969 and 1970.

Youth Advisory Council

The Youth Advisory Council has ten members appointed by the Minister for a term of three years. They are persons who have had experience either in youth training and management or in the conduct of some youth organisation. The Director of Youth Welfare is a member of the Council and the Division provides the services of a full-time secretary, a trained advisor, a stenographer, administrative offices and a meeting room.

The functions of the Council are :

1. to recommend to the Chief Secretary measures for the promotion, establishment and assistance of youth clubs and organisations and for the furtherance of the moral, intellectual and physical welfare and development of youth ;
2. to recommend to the Minister the making of payments out of the Youth Organisations Assistance Fund for or towards the establishment, maintenance and assistance of youth clubs and organisations and other bodies concerned with the welfare of youth and in particular for or towards the training of youth leaders for such bodies, organisations or clubs ; and
3. generally to promote, assist and co-ordinate the activities of such bodies, organisations and clubs and other activities which the Council considers to be for the welfare of youth.

Since the establishment of the Youth Organisation Assistance Fund in 1956-57, \$3,090,000 has been allocated by the Treasury for distribution on the Council's recommendation. The annual allotment in 1969-70 was \$300,000. Grants are made to a wide range of youth groups and organisations to assist them in the erection of buildings, supply of equipment, maintenance of their premises, youth leadership training, and establishment and conduct of camps. Parent organisations, individual clubs and all kinds of youth groups use the advisory services of the Council.

Prisons Division

This Division is administered by the Director of Prisons. It is responsible for the custody of all persons in prisons and is required to assist in the rehabilitation of prisoners and their subsequent readjustment in the community. The Prisons Division maintains twelve prisons for males and one prison for females.

Pentridge, the main central prison, holds about half of all the prisoners in Victoria, and is the site of the Classification Centre. Prisoners serving sentences of at least one year (or of at least six months if they are under twenty-one years of age) and those who are eligible for parole, after having been put through a selection and testing procedure, appear before the Classification Committee which endeavours to place them in the most appropriate institution to assist their rehabilitation.

Pentridge has nine divisions—each accommodating a different type of prisoner. One division is for trial and remand cases, the second is for short-term and vagrant prisoners, the third is a psychiatric and medical

clinic. In what is known as Pentridge proper there are four divisions for longer-term prisoners, one being for youths under twenty-one years of age and, finally, there is one division with accommodation for thirty-nine holding prisoners who are either regarded as security risks or who have been sent from other divisions or prisons for disciplinary purposes. Pentridge also has an industrial complex. There are fourteen kinds of industries producing goods valued at over \$0.25m annually.

In the Training Prisons technical instruction is provided in a number of industries. The Dhurringile Rehabilitation Centre is intended for alcoholics and provides employment in the farm and orchard. McLeod Prison Farm on French Island concentrates on general farming. At Cooriemungle the prisoners undertake farming, large-scale land clearing, and timber-milling. Prisoners in the reforestation prisons at Morwell River and Won Wron are engaged in forestry work. At Ararat there is forestry work, mat-making, and tubular steel furniture manufacture. Sale Prison is a local reception prison where prisoners are occupied in forestry work, mat-making, or gardening. Castlemaine Prison is used as a semi-hospital prison. It has a large vegetable garden and a mat-making industry. At Fairlea—Victoria's only female prison—instruction is given in arts and crafts, domestic economy, sewing, and by volunteer instructors, in academic work.

The Victorian penal system is based on the principle that denial of freedom is the only intention of the court when it sentences a person to imprisonment. No additional penalties and humiliation should be heaped on a convicted man. Discipline, while being necessary for the functioning of an institution, need not be inhumane.

VICTORIA: PRISON ACCOMMODATION AND PRISONERS
(Exclusive of police lock-ups)

Institution	Accommodation available at 30 June		Prisoners			
	1969	1970	Daily average		In custody at 30 June—	
			1968-69	1969-70	1969 (a)	1970 (b)
Pentridge Prison	1,325	1,420	1,183	1,175	1,200	1,194
Ararat Prison	200	200	165	180	183	171
Beechworth Training Prison	115	115	102	101	99	96
Bendigo Training Prison	120	120	115	114	113	115
Castlemaine Prison	112	112	100	90	96	88
Cooriemungle Prison	60	60	53	52	52	51
Dhurringile Rehabilitation Centre	75	75	68	66	71	65
Geelong Training Prison	130	130	133	134	135	145
McLeod Prison Farm (French Island)	133	127	127	128	127	131
Morwell River Reforestation Prison	80	80	73	67	66	71
Sale Prison	75	75	68	61	75	76
Won Wron Reforestation Prison	85	85	74	68	64	69
Total males	2,510	2,599	2,261	2,236	2,281	2,272
Fairlea Female Prison	100	70	54	47	49	55
Total	2,610	2,669	2,315	2,283	2,330	2,327

(a) Including 120 males and 11 females awaiting trial.

(b) Including 134 males and 15 females awaiting trial.

In all the prisons correspondence courses are encouraged and facilitated. The Education Department provides teachers for six registered schools within prisons. The main one is at Pentridge with four teachers; the other schools are at Ararat, Beechworth, Bendigo, Geelong, and McLeod. They provide general education up to the Higher School Certificate level.

In their leisure hours prisoners can pursue hobbies, watch television, or play sports. There are opportunities to take part in cultural activities.

Prisoners earn up to 50 cents a day. They are allowed to spend about \$1 a week on cigarettes, chocolate, hobby materials, and so on. The rest is saved and handed to them when they leave prison. Each convicted prisoner is allowed two visits each month but the governor may grant extra visits. Temporary leave may be given by the Director-General when appropriate. Often prisoners are allowed out unescorted. Chaplains are nominated by the major denominations and appointed by the government to the various prisons, either on a full-time or a part-time basis. Voluntary organisations also assist prisoners.

Where a minimum term is set by the court the Parole Board has the power to release the prisoner on parole at any time after the minimum term has expired. The prisoner may earn up to three days remission for good behaviour for each month served, which is deducted from the minimum term. Where no minimum term is set by the court the prisoner may earn remission for good conduct amounting to one quarter of his sentence. Moreover, all prisoners may be granted an additional three days special merit remission for each month served on grounds of special application to the task allotted to them. On the other hand, the governor of a prison may postpone discharge or release on parole by up to seven days for each breach of prison regulations.

The following table shows the offences for which prisoners were sentenced in Victoria during 1969-70:

VICTORIA—OFFENCES FOR WHICH PRISONERS WERE SENTENCED,
1969-70 (a)

Offence	Males	Females	Total	Percentage
Homicide	20	1	21	0·1
Assault	779	..	779	5·1
Robbery with violence	27	..	27	0·2
Sex—Natural	231	100	331	2·2
Unnatural	74	..	74	0·5
Breakings	1,057	..	1,057	7·0
Larceny	2,186	92	2,278	15·0
Motor vehicle	756	6	762	5·0
False pretences	756	63	819	5·4
Drunk and disorderly	3,258	127	3,385	22·3
Vagrancy	373	1	374	2·5
Other	5,081	185	5,266	34·7
Total offences	14,598	575	15,173	100·0
Individual persons sentenced	4,984	385	5,369	

(a) Many individuals are convicted for more than one offence and are received in prison more than once during a year.

The number of prisoners received at and discharged from gaols (excluding police lock-ups) in Victoria is given in the following table for the years 1965-66 to 1969-70 :

VICTORIA—PRISONERS RECEIVED AT AND DISCHARGED FROM GAOLS
(Exclusive of police lock-ups)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Number in confinement at beginning of period—					
Convicted	1,879	1,872	1,994	2,103	2,199
Awaiting trial	120	122	141	179	131
Total	1,999	1,994	2,135	2,282	2,330
Received during period—					
Convicted of felony, misdemeanour, etc.	7,971	8,209	8,889	8,745	8,003
Transfer from—					
Other gaols and youth training centres	1,574	1,811	2,303	2,462	2,261
Hospitals, asylums, etc.	96	120	143	159	155
For trial, not subsequently returned to prison	2,891	3,282	3,268	3,290	3,327
On parole board warrants	..	..	39	42	57
Awaiting deportation by Commonwealth Immigration Department	29	16	16	16	27
Returned on order	292	357	376	371	331
Total	12,853	13,795	15,034	15,085	14,161
Discharged during period	12,858	13,654	14,887	15,037	14,164
Number in confinement at end of period—					
Convicted	1,872	1,994	2,103	2,199	2,178
Awaiting trial	122	141	179	131	149
Total	1,994	2,135	2,282	2,330	2,327

Probation and Parole Division

This Division is administered by the Chief Probation and Parole Officer. It supervises and provides case work services for persons released on probation from Victorian courts ; assists in the rehabilitation into the community of persons released on parole from youth training centres or prisons ; and provides, when requested by a court, reports and information on any person who has been found guilty—whether convicted or not.

To fulfil its functions the Division is divided into four sections : Adult Probation and Parole (Male) Section, Probation and Parole (Female) Section, Youth Parole (Male) Section, and Children's Court Probation (Male) Section.

The officers of the Adult Probation and Parole (Male) Section are responsible for the supervision of all males admitted to probation from adult courts—that is, of those who have committed the offence after their seventeenth birthday, and of all males paroled by the Adult Parole Board. They are also responsible for submitting pre-sentence reports to adult courts and various types of reports to the Adult Parole Board. The latter include reports on all persons being detained at the Governor's pleasure.

The officers of the Probation and Parole (Female) Section supervise all female probation and parole cases irrespective of age. They also prepare reports on females for courts or parole boards.

The officers of the Youth Parole (Male) Section are responsible for the supervision of male trainees paroled from a youth training centre—that is, of young persons who were between their fifteenth and twenty-first birthday at the time of the offence. They prepare case histories and other reports for the Youth Parole Boards.

The Children's Court Probation (Male) Section is located in the Children's Court Building, Batman Avenue, Melbourne. The officers of this Section supervise all male offenders placed on probation by Children's Courts—that is, those who have committed the offence before their seventeenth birthday. They provide reports on most children and young persons who are required to appear before the Children's Court.

While officers of each Section serve their own particular range of clients, they are not excluded from supervising persons not falling into their particular category. For instance, Children's Court probation officers can supervise any adult male parolee or probationer, or a youth parolee.

In addition to the above-mentioned locations, probation and parole officers are located in various regional and suburban offices.

The Division employs the services of male and female stipendiary and honorary officers. All stipendiary probation and parole officers are required to be qualified social workers, while some 800 honorary probation officers are selected citizens who supervise less difficult cases (usually first offenders) who live in their neighbourhood. Honorary probation officers discuss problems and treatment methods with stipendiary officers and are encouraged to attend a course of training at the Institute of Social Welfare.

Probation

Probation in Victoria is an alternative to custodial care. When an offender is admitted to probation—which may be for a period of between one and five years—he consents to comply with certain conditions: to abstain from violation of the law, to report to the Chief Probation Officer within forty-eight hours, to carry out the lawful instructions of the Probation Officer, to report and receive visits as directed by the Probation Officer, and to notify the Probation Officer within forty-eight hours of any change of address or change of employment during the period of probation. Special conditions may be added by the court requiring abstinence from liquor, attendance at a medical or psychiatric clinic, avoidance of specified company or place, and so on.

The probation order states that the probationer will be "supervised" by a probation officer and it is the first responsibility of the officer to see that the conditions of the order are adhered to. At the same time, however, every attempt is made to assist the offender in developing his personal relationships and abilities to be able to live constructively within the framework of society. Contact between the probationer and the probation officer varies in intensity. Initially it tends to be more frequent and then gradually decreases. It depends on the seriousness of the offence committed, the individual's adjustment and progress, and the length of the probation period.

A breach of the conditions of probation is reported by the supervising probation officer to the Chief Probation Officer who decides whether any action to instigate breach proceedings will be taken. Court action may result in adjournment, fine, bond, admission to a new period of probation,

or sentence to detention in either youth training centres or prisons. On the other hand, the Court may also decide to take no action.

The following tables provide information on various aspects of probation.

VICTORIA—PERSONS ON PROBATION

Year	Placed on probation during year		Children on probation at end of year	Adults on probation at end of year
	By children's courts	By adult courts		
1965-66	1,598	1,642	1,899	3,465
1966-67	1,748	1,522	2,022	3,029
1967-68	2,047	1,533	2,499	2,693
1968-69	2,148	1,381	2,735	2,263
1969-70	2,375	1,514	3,049	2,153

VICTORIA—AGES OF PERSONS PLACED ON PROBATION

Age of probationers	1968-69			1969-70		
	Males	Females	Total	Males	Females	Total
By Children's Courts—						
Under 8 years	22	26	48	8	24	32
8 years and under 9 years	11	7	18	9	..	9
9 years and under 10 years	22	8	30	20	2	22
10 years and under 11 years	35	8	43	43	5	48
11 years and under 12 years	71	14	85	57	12	69
12 years and under 13 years	128	22	150	121	34	155
13 years and under 14 years	240	61	301	211	78	289
14 years and under 15 years	378	98	476	405	121	526
15 years and under 16 years	384	111	495	419	145	564
16 years and under 17 years	347	91	438	454	109	563
17 years and over (a)	50	14	64	88	10	98
Total	1,688	460	2,148	1,835	540	2,375
By adult courts—						
17 years and under 21 years	809	65	874	829	87	916
21 years and under 25 years	190	33	223	231	21	252
25 years and under 30 years	112	13	125	111	16	127
30 years and under 35 years	71	8	79	50	6	56
35 years and under 40 years	20	5	25	31	11	42
40 years and over	29	12	41	53	11	64
Not known	..	14	14	45	12	57
Total	1,231	150	1,381	1,350	164	1,514
Total probationers	2,919	610	3,529	3,185	704	3,889

(a) Those 17 years and over admitted to probation by Children's Courts committed the offence before their seventeenth birthday.

VICTORIA—PERSONS ON PROBATION

Particulars	On Children's Courts probation orders			On adult courts probation orders			Total
	Males	Females	Total	Males	Females	Total	
1968-69							
On probation at beginning of year	1,944	555	2,499	2,419	274	2,693	5,192
Placed on probation during year	1,688	460	2,148	1,231	150	1,381	3,529
Completed probation during year	1,346	375	1,721	1,448	80	1,528	3,249
Probation cancelled due to—							
further conviction	135	23	158	235	11	246	404
breach of other conditions	22	11	33	31	6	37	70
1969-70							
On probation at beginning of year	2,129	606	2,735	1,936	327	2,263	4,998
Placed on probation during year	1,835	540	2,375	1,350	164	1,514	3,889
Completed probation during year	1,564	372	1,936	1,118	110	1,228	3,164
Probation cancelled due to—							
further conviction	9	68	77	313	17	330	407
breach of other conditions	27	21	48	62	4	66	114
On probation at end of year	2,364	685	3,049	1,793	360	2,153	5,202

Parole

In Victoria there are two Youth Parole Boards and two Adult Parole Boards. They have power to release on parole those who have been sentenced to detention but are eligible to be released on parole before the full sentence is served. The Youth Parole Boards can release on parole young persons sentenced to detention in a youth training centre at any time during the currency of the sentence, while the Adult Parole Boards are required to consider every adult case in which what is known as a 'minimum term' prison sentence is set by the court.

When a Parole Board considers a case its main concern is whether the person is a good risk on parole. It bases its decision on the report it receives from the parole service and the prison authorities. Medical and psychological reports are also submitted when necessary. The person's criminal history is a major consideration. The Board can either grant parole, defer consideration to a later date, or deny parole.

Youth Parole Boards consider each case soon after the admission of the young person to a youth training centre, and generally set a review date. Those trainees who are sentenced to detention for six months or less are, as a rule, not regarded as suitable for parole. The earliest date an Adult Parole Board can release a prisoner on parole depends not only on the minimum term set by the court but also on the remissions the prisoner has earned while in prison for good conduct and for special application to the task allotted to him. On the other hand, release may be postponed either because the Governor of the prison, or a Visiting Justice, has imposed punishment following a breach of prison regulations or because the prisoner is required to serve time in lieu of unpaid fines.

By and large parole procedures are similar to probation procedures. On the day of release the parolee is handed a Parole Order which contains conditions similar to those on Probation Orders. The Parole Officer helps the parolee to carry out these conditions and also assists with some of his problems such as finding employment.

If the parolee is sentenced to another term of imprisonment his parole is automatically cancelled. In addition the Boards can cancel parole at any time should the parolee breach a condition or should his behavior be unsatisfactory. However, most parolees complete parole successfully. The date of completion is when the full sentence set by the court expires.

ANALYSIS OF PERSONS ON PAROLE

Corrigendum

Page 553

The column headings "Adult parole" and "Youth parole" should be reversed.

On parole at beginning of year	1968-69	174	2	176	650	10	660	836
	1969-70	176	1	177	652	18	670	847
Released on parole during year	1968-69	346	6	352	616	14	630	982
	1969-70	358	7	365	688	16	704	1,069
Completed parole during year	1968-69	241	5	246	396	5	401	647
	1969-70	252	2	254	405	8	413	667
Parole cancelled due to—								
Further conviction	1968-69	85	1	86	151	1	152	238
	1969-70	80	..	80	119	1	120	200
Breach of other conditions	1968-69	18	1	19	67	..	67	86
	1969-70	20	1	21	92	1	93	114
On parole at end of year	1968-69	176	1	177	652	18	670	847
	1969-70	182	5	187	724	24	748	935

The probation service prepares "pre-court" reports in the case of Children's Courts and, when requested, "pre-sentence" reports in the case of adult courts. The following table gives the number of pre-sentence reports required by the various adult courts during the years 1965-66 to 1969-70:

VICTORIA—ADULT PRE-SENTENCE REPORTS

Year	Supreme Court		County Court		Magistrates' Courts		Total
	Males	Females	Males	Females	Males	Females	
1965-66	11	..	112	2	249	21	395
1966-67	11	..	140	4	305	41	501
1967-68	14	..	138	4	260	29	445
1968-69	4	2	101	5	298	37	447
1969-70	12	..	155	9	267	28	471

The parole service prepares reports for the Youth Parole Boards on most youths admitted to youth training centres. In the case of adult prisoners eligible for parole, a parole officer interviews the prisoner about three to four weeks before the date on which he will be eligible. He investigates the prisoner's background, prospects for work and lodging, and other matters. In the case of female prisoners, of whom there are relatively few, relatives and friends are nearly always interviewed. A report is then submitted to the Adult Parole Board.

The following table shows the location of young persons under the control of the Youth Welfare Division at 30 June 1969 and at 30 June 1970:

VICTORIA—LOCATION OF YOUNG PERSONS UNDER THE CONTROL OF
THE YOUTH WELFARE DIVISION

Location	Wards not under sentence		Young persons under sentence			
			Wards		Non-wards	
	Males	Females	Males	Females	Males	Females
AT 30 JUNE 1969						
Youth Training Centres—						
Government	119	50	36	2	200	1
Non-government	..	40	40	..	54	..
On home release	285	129	..	..	..	..
Residing with employer, in hostel, or in private board	233	160	..	..	..	..
On parole	..	..	(a) 9	..	174	1
In prison (b)	4	..	8	..	6	..
Other institutions	13	17	..	..	..	..
Escapees	51	43	3	..	18	1
Appeal bail	2	..	..	..	8	..
Total	707	439	96	2	460	3
AT 30 JUNE 1970						
Youth Training Centres—						
Government	126	76	6	1	258	2
Non-government	4	30	34	..	49	..
On home release	316	118	..	..	..	..
Residing with employer, in hostel, or in private board	250	151	..	..	..	..
On parole	..	..	(a) 18	..	164	5
In prison (b)	8	..	..	..	4	..
Other institutions	28	1	..	..	..	..
Escapees	38	44	..	..	10	1
Appeal bail	..	..	..	..	3	..
Total	770	420	58	1	488	8

(a) Wards on parole, although under the control of the Youth Parole Board, are still under the legal guardianship of the Director-General of Social Welfare.

(b) Wards and youth trainees in prison are either on remand or serving short term sentences.

Training Division, Institute of Social Welfare

This Division—located at 12 Lisson Grove, Hawthorn—is administered by the Superintendent of Training. Its main function is to provide training courses covering the major aspects of welfare work undertaken by government and non-government agencies.

In addition, the Division is responsible for the educational and trade training programmes in all Social Welfare Department institutions. It administers tests to determine the suitability for training of those sentenced to detention in a youth training centre or prison, and is represented on their respective classification committees. It is the liaison authority between the Department and the Education Department which provides teachers for school programmes within the various institutions, as well as arranging technical correspondence courses for inmates in the government and non-government institutions. It also supervises Social Studies Cadets of the Department of Social Welfare who attend the University of Melbourne. Finally, it selects male junior staff for departmental institutions.

Social Welfare Training Council

The Social Welfare Training Council has twelve members who include the Superintendent of Training and the Directors of the Family Welfare, Youth Welfare, and Prisons Divisions. The other members are appointed by the Minister for terms not exceeding three years. The functions of the Council are:

1. to exercise a general supervision over theoretical and practical training prescribed by the Council ;
2. to prescribe courses of instruction and training in social welfare ;
3. to conduct written practical and oral examinations ;
4. to issue certificates of qualification to persons who have passed examinations at the prescribed standards of proficiency ; and
5. to maintain a register of persons who have passed examinations at the prescribed standards of proficiency.

Training courses

Tuition for all courses at the Institute of Social Welfare is free. Each year the State Government makes available six bursaries for the Youth Leadership Diploma Course and six for the full-time Child Care Workers Course. The value of these bursaries is \$1,000 and students are not required to enter into an agreement to work for the State Government after graduating. It is also possible for students on the Youth Leadership Diploma Course to obtain a Commonwealth Technical Scholarship. For full-time study the scholarship amounts to \$200 living allowance, and a \$50 text book and equipment allowance.

Courses offered by the Institute include the following:

(a) Child Care Workers Course

This course provides basic training for persons employed or interested in being employed in the residential care of children separated from their parents. Applicants must be at least eighteen years of age and should have attained Form 2 standard or its equivalent.

(b) Youth Workers Course

This course is designed to train persons employed or interested in employment in the care of young people who are committed to youth training centres. The qualifications required are the same as those for the Child Care Workers Course.

(c) Prison Officers Course

Part I provides training for newly recruited prison officers before they take up their position in prison. It involves twelve weeks theoretical and twelve weeks practical training. Part II and Part III are conducted by correspondence. Part II is required for promotion to Senior Prison Officer, and Part III is required for promotion to Chief Prison Officer and all higher prison positions.

(d) Youth Leadership Diploma Course

This is a three year full-time course designed to train adult men and women to work with young people. Applicants must be eighteen years of age and have attained Leaving Certificate standard or its equivalent. Preference is given to applicants who have an additional year of study or some work experience.

(e) Welfare Officers Course

This is a full-time one year course designed to equip adults to assist people who have special problems. Students learn about the structure of society, and the various methods of helping people and the community resources available for the purpose. They also gain skills in interviewing. This course is not an alternative to the university course for social workers. It is expected that welfare officers will work in welfare organisations and hospitals under the direction of social workers or in conjunction with a committee. Applicants must have four leaving subjects, including English.

(f) Honorary Probation Officers Course

This course provides training, as well as an opportunity for discussion, for honorary probation officers and those who intend to volunteer for probation work. The course involves two evenings a week for a period of ten weeks.

(g) Supervisors Course

This course is for those who have the task of supervising students from this Institute while they are on practical work placements.

(h) Adoption Workers Course

This course is for staff from adoption agencies. They gain an understanding of the *Adoption of Children Act 1964* and have an opportunity to discuss the various aspects of adoption work. One aim of this course is to encourage uniform standards of work in adoption agencies.

Research and Statistics Division

This Division conducts research into social welfare problems. It co-operates in non-governmental research projects and supervises any investigations made in relation to such projects within the departmental organisation or institutions. It also supervises the preparation of statistics for all Divisions and the collation of all material for issue from the Branch.

Finance

The following table shows the financial operations of the Social Welfare Department from 1965-66 to 1969-70:

VICTORIA—SOCIAL WELFARE DEPARTMENT: REVENUE
AND EXPENDITURE
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Revenue—					
Sale of goods produced in—					
Prisons	271	276	408	333	358
Youth training centres	45	34	24	21	27
Child endowment	57	62	39	25	64
Maintenance collection	108	96	79	79	82
Quarters, rations, and rents	43	48	34	58	68
Other revenue	6	8	25	23	16
Total revenue	531	524	609	540	615

VICTORIA—SOCIAL WELFARE DEPARTMENT: REVENUE AND EXPENDITURE—*continued*
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Expenditure—					
Central Administration and Research and Statistics Division—					
Salaries and general expenses	200	230	276	286	358
Family Welfare Division—					
Salaries and general expenses	347	409	457	475	565
Maintenance of reception centres and departmental children's homes	885	990	1,107	1,277	1,542
Payments for wards in—					
Approved children's homes	1,091	1,112	1,208	1,286	1,316
Foster homes	204	224	274	297	286
Family assistance	588	572	649	829	1,081
Other expenditure	28	37	36	50	46
Youth Welfare Division—					
Salaries and general expenses	100	115	127	150	177
Maintenance of remand and departmental youth training centres	1,027	1,168	1,306	1,453	1,660
Payments to non-departmental youth training centres	153	207	218	197	207
Other expenditure	84	114	117	130	133
Grants to youth organisations	290	286	291	304	310
Prison Division—					
Salaries and general expenses	2,504	2,842	3,157	3,463	3,884
Probation and Parole Division—					
Salaries and general expenses	246	273	298	340	398
Parole boards' expenses	9	8	9	8	9
Training Division—					
Salaries and general expenses	95	96	115	124	159
Total expenditure	7,852	8,684	9,645	10,670	12,131
Net expenditure	7,321	8,160	9,036	10,130	11,516

Victorian School for Deaf Children

Education for deaf children in Victoria dates back to 12 November 1860, when a deaf immigrant from London, Mr F. J. Rose, rented a small cottage in Peel Street, Prahran, and opened a School for the Deaf and Dumb. The school was based on English experience in this field of education.

Within two years Mr Rose had the support of a strong voluntary public charitable organisation and the Victorian Deaf and Dumb Institution was officially inaugurated on 28 August 1862. By 1866 the Committee occupied a building in St Kilda Road, Melbourne, and forty-four pupils were being educated, housed, and prepared for life.

In the intervening years thousands of deaf children have come under the care of the same organisation which changed its name in 1949 to the Victorian School for Deaf Children. The institution was incorporated in 1891 and has received a government grant ever since its inception. In 1913 the Education Department took over the training and payment of the teachers, leaving the Committee the tasks of child care, welfare, religious training, out-of-school activities, and the provision and maintenance of the property and buildings. In 1927 the Government built schoolrooms within the existing grounds and has provided further additions during the past forty years. In 1950 the Committee opened the Princess Elizabeth Kindergarten

for the Deaf in Elgar Road, Burwood, as a day and residential pre-school and eight years later the Education Department agreed to provide the teaching staff, in the same way as it had accepted responsibility for the St Kilda Road School in 1913.

The number of deaf children has increased greatly since the Second World War. In 1945 there were 102 children at the only deaf school in Victoria. In 1969 the number at school had increased to 1,000. One of the main causes for the increase has been repeated outbreaks of rubella epidemics. In a recent survey of causes of deafness in children it was found that the approximate percentages were : heredity, 10 per cent ; illness or accident during pregnancy of mother, or illness in child shortly after, or at birth, 40 per cent ; and unknown, 50 per cent.

In 1969, 500 severely or partially deaf children attended normal State primary, technical, high, or private schools. These children received regular visits for speech and other training from a group of qualified teachers of the deaf from the Education Department's Visiting Teacher Service. The other 500 children attended the following schools : the Princess Elizabeth Kindergarten for the Deaf, the Victorian School for Deaf Children, the Glendonald School for the Deaf, "Ewing House", Ballarat, McDonald House, Bendigo, and St Mary's School for the Deaf, Portsea.

The children leave the kindergarten at 6 years of age. During the final year at Burwood each child is seen by the Education Department's Ascertainment Committee to establish whether the child has sufficient hearing and ability to cope in a hearing school, or which deaf school will be most suitable from an educational and geographical point of view.

The Committee of Management of the Victorian School for Deaf Children provides modern care for the pupils who require boarding facilities at the St Kilda Road and Burwood properties. Although the main St Kilda Road building is 104 years old, the bedrooms and other areas have been modernised. The Princess Elizabeth Kindergarten for the Deaf was built on the "cottage system"—there are three resident cottages surrounding the school and administration blocks. Each cottage is in the care of two cottage mothers who look after the needs of ten children in a close-to-home environment.

Voluntary Social Services, 1965 ; Old People's Welfare Council, 1966 ; Voluntary Child Welfare, 1967 ; Voluntary Social Welfare Work for the Physically Handicapped, 1968 ; Care of the Elderly, 1969 ; Rehabilitation, 1970 ; Employment of the Handicapped, 1970 ; Royal Victorian Institute for the Blind, 1970

Red Cross Society

The Victorian Division of the Australian Red Cross Society is responsible for all the activities of the Society in Victoria.

Red Cross is a voluntary organisation and is maintained by donations and subscriptions. Its primary responsibility is the care of ex-service personnel and dependants, but since the Second World War its civilian activities have been extended to meet various needs of the community. The principal activities carried out by the Division are listed in the following table which gives some indication of the nature and scope of the work of the Victorian Red Cross Society :

VICTORIA—RED CROSS SOCIETY

Particulars		1964-65	1965-66	1966-67	1967-68	1968-69
Income	\$'000	1,118	1,197	1,337	1,341	1,502
Expenditure	\$'000	1,159	1,247	1,398	1,480	1,602
Accumulation account	\$'000	1,372	1,391	1,380	1,394	1,375
Expenditure on—						
Blood transfusion service	\$'000	490	520	568	623	691
Convalescent homes and hostels	\$'000	190	214	224	229	240
Handcraft and curative training	\$'000	48	52	60	52	55
Social service and welfare	\$'000	64	68	80	90	100
Service and repatriation hospitals, including recreation centres Civilian hospital and civilian relief	\$'000	143	120	133	153	157
Red Cross branches and companies	No.	555	569	572	581	587
Junior Red Cross Circles	No.	416	433	477	523	510
Blood donations	No.	106,075	103,164	106,152	112,247	109,488
Blood distributed	half litres	71,395	70,171	71,691	77,347	78,051
Serum distributed	litres	..	166	243	318	414
Transport mileage	'000 miles	712	749	808	890	975

Blood Transfusion Service

The Red Cross Blood Transfusion Service in Victoria began in 1929 when a panel of blood donors was organised. These persons were available to donate blood in hospitals when required but their blood had to be used immediately. By 1937 technical developments had made the storage of blood practicable and blood-banking began in Victoria during that year. During the war years, a National Blood Transfusion Committee was formed to co-ordinate the work of the transfusion services in the various States and to maintain a liaison with the Armed Forces.

Ever since the beginning of blood-banking, the need for blood has progressively increased. This increase was partly self-generating, for the ready availability of blood led to its increased use and the increased use led to further demands. Throughout the world the efficient organisation of blood transfusion services to provide plentiful supplies of blood, as well as progress in other fields, has enabled surgeons to embark on new operations and other procedures that require large quantities of blood. Open heart surgery is one recent development. Operations on the heart are no longer experimental procedures but are performed as a regular routine and large quantities of blood have to be allotted to them. The provision of blood for renal dialysis (artificial kidney) in the treatment of kidney failure is also important.

Another recent development has been the blood fractionation programme carried out in association with the Commonwealth Serum Laboratories. From an early stage blood, plasma, or serum was used for the emergency treatment of shock and burns. This enabled treatment to be carried out in an emergency without the delays inseparable from blood typing and cross-matching. Later a programme of fractionating blood into its various components was undertaken, thus enabling the specific fractions to be used for their appropriate indications. Among those fractions are albumin and Stable Plasma Protein Solution used for the treatment of shock, fibrinogen for the treatment of certain forms of hæmorrhage, and gamma globulin for the prevention of several infectious diseases including rubella

and infectious hepatitis. Some specialised products for the treatment of bleeding states are also produced. Among these are the antihæmophilic factor for use in hæmophilia and concentrates for treating defects in a number of other clotting factors.

Over the years the rather simple concept of blood groups that existed when the Service was founded has been replaced by a realisation of their complexity. With the increasing use of blood transfusion further problems of blood group incompatibility have been encountered and special panels of donors have been found to supply blood to patients with unusual blood group antibodies. Recently the transfusion services throughout Australia in association with the Commonwealth Serum Laboratories have embarked on large scale production of a special globulin for the prevention of hæmolytic disease of the newborn.

The Service has always considered the transfusion needs of country areas as well as those of the city and some years ago a system of regional and district blood banks was established throughout Victoria. There are now few areas which lack ready access to supplies of stored blood. In the city, blood collection takes place at the central blood bank, at several large hospitals, and at mobile units in the suburbs.

The running costs of the Service are borne by the Red Cross (10 per cent), the State Government (60 per cent), and the Commonwealth Government (30 per cent). No payment is made to blood donors and the Service makes no charge for supplying blood or blood products to hospitals, doctors, or patients.

Red Cross Service Corps

The Red Cross Service Corps comprises voluntary personnel who, after training, carry out a wide range of services. In Victoria there are 108 service companies and thirty-three trained groups with a membership of 4,836. Members are trained in first aid and home nursing; lectures and demonstrations are given in resuscitation; and seminar and training sessions held for special assignments such as work in hospitals and disaster relief. Five major activities of the Service Corps are as follows:

Transport. Voluntary drivers, many driving their own cars, take out-patients to and from hospitals and clinics, deliver blood to hospitals and clinics, take handicapped children to special centres and elderly folk on outings, and deliver meals to pensioners.

First aid. An important and traditional part of Red Cross work has always been to give first aid services. Members man first aid posts at disaster areas, at sporting and other similar functions, and at holiday resorts.

Community services. Assistance is given to local authorities, other organisations, and people in their own homes. This includes assistance to baby health centres with immunisation campaigns and to centres for the handicapped. In recent years much more has been done for the welfare of the sick and elderly in their own homes.

Hospital services. Various extra services are provided for patients including visiting, shopping, letter writing, distributing library books, and arranging flowers. Aides also work in casualty and outpatient departments, special clinics, or in wards and canteens.

Disaster relief. Members of specially trained teams staff Red Cross Centres during bushfires to assist with the care and feeding of fire-fighters and evacuees. They are also called on during searches for lost people, major accidents, and similar emergencies.

Lord Mayor's Children's Camp, Portsea

The Lord Mayor's Children's Camp is situated on the Nepean Highway, Portsea, 59 miles from Melbourne, on high ground overlooking the entrance to Port Phillip Bay. Its object is to give selected children from country and metropolitan areas a holiday, to have each child medically and dentally examined, and to provide the services of qualified optometrists, physiotherapists, audiometrists, and radiographers. Ten camps are held annually, each camp accommodating 150 girls and 150 boys.

Friendly societies

The *Friendly Societies Act* 1958 regulates the operations of friendly societies in Victoria. The societies eligible for registration are those which provide one or more of the benefits set out in Section 5 of the Act, and those which provide such other benefits as a law officer of the Crown certifies to be of mutual benefit to members and to which the facilities afforded by the Act should be extended. The latter are known as Specially Authorised Societies. Those societies which periodically close their funds, discharge their liabilities, and divide their assets, are known as Dividing Societies.

The benefits referred to include periodical payments during sickness, old age, and infirmity, as well as lump sum payments on death or on the attainment of a specified age (endowment benefits). They also include payments for hospital, medical, medicinal, and dental expenses.

The following tables give details of Friendly Society activities in Victoria (excluding Specially Authorised Societies) for the years 1966-67 to 1968-69 :

VICTORIA—FRIENDLY SOCIETIES : MEMBERSHIP, ETC.

Particulars	1966-67	1967-68	1968-69
ORDINARY FRIENDLY SOCIETIES (a)			
Number of societies	20	20	20
Number of branches	1,120	1,112	1,091
Number of members contributing for—			
Sick and funeral benefits (b)	104,455	103,077	102,250
Medical services (b)	249,373	252,679	260,344
Hospital benefits (b)	263,552	268,090	276,241
Number of widows registered for funeral benefits	7,970	8,643	8,688
Number of whole of life and endowment assurance benefits in force	17,254	20,148	22,924
DIVIDING AND OTHER SOCIETIES			
Number of societies	109	106	104
Number of members	47,310	50,906	51,341
ALL SOCIETIES			
Number of members who received sick pay	24,871	23,625	24,183
Number of weeks for which sick pay was allowed	409,005	396,635	388,113
Number of deaths of sick and funeral benefit members	2,589	2,481	2,586
Number of deaths of wives and widows	608	783	615

(a) Societies which provide the customary benefits, namely, sick pay, funeral, medicinal, medical, and hospital benefits.

A member may contribute for any number or all of these benefits and is entered in the table in each benefit for which he contributes.

VICTORIA—FRIENDLY SOCIETIES: RECEIPTS AND EXPENDITURE
(\$'000)

Particulars	1966-67	1967-68	1968-69
RECEIPTS			
Ordinary societies (a)—			
Sick, funeral and non-contributory endowment funds	1,324	1,416	1,405
Whole of life, endowment and other assurance funds	837	1,256	1,859
Medical services funds	7,477	7,786	8,253
Hospital benefit funds	7,018	8,207	9,427
Medicine, management, and other funds	1,351	1,324	1,531
Dividing and other societies	570	614	695
Less inter-fund transfers	206	254	238
Total receipts	18,371	20,349	22,932
EXPENDITURE			
Ordinary societies (a)—			
Sick, funeral and non-contributory endowment funds	879	816	899
Whole of life, endowment and other assurance funds	222	373	601
Medical services funds	6,814	7,141	7,664
Hospital benefit funds	6,080	7,259	8,480
Medicine, management, and other funds	1,119	1,310	1,256
Dividing and other societies	450	474	570
Less inter-fund transfers	206	254	238
Total expenditure	15,358	17,119	19,232
Excess of receipts over expenditure	3,013	3,230	3,700

(a) Societies which provide the customary benefits, namely, sick pay, funeral, medicinal, medical, and hospital benefits.

VICTORIA—FRIENDLY SOCIETIES: FUNDS
(\$'000)

Particulars	1966-67	1967-68	1968-69
Ordinary societies (a)—			
Sick, funeral and non-contributory endowment funds	17,582	18,182	18,689
Whole of life, endowment and other assurance funds	3,166	4,049	5,306
Medical services funds	2,816	3,461	4,049
Hospital benefit funds	4,495	5,442	6,388
Medicine, management and other funds	5,651	5,666	5,941
Dividing and other societies	1,215	1,355	1,480
Total funds	34,925	38,155	41,853

(a) Societies which provide the customary benefits, namely, sick pay, funeral, medicinal, medical, and hospital benefits.

The following table shows the amounts disbursed by societies (excluding Specially Authorised Societies) in sick pay, funeral and mortuary benefits, endowments, medical services, medicinal, and hospital benefits during the years 1966-67 to 1968-69 :

VICTORIA—FRIENDLY SOCIETIES: AMOUNTS DISBURSED IN BENEFITS
(\$'000)

Nature of benefit	1966-67	1967-68	1968-69
Sick pay	549	544	570
Funeral benefits	247	248	266
Non-contributory endowment benefits	84	93	83
Whole of life, endowment and other assurance benefits (a)	153	238	394
Medical services—			
Society benefit	3,127	3,355	3,658
Government subsidy	2,909	3,041	3,229
Hospital benefits—			
Society benefit	4,207	5,249	6,259
Government subsidy	1,064	1,070	1,126
Medicine	242	215	229

(a) During the period since 1966-67 several new types of assurance benefit have been developed.

Dispensaries

At the end of 1968-69, 34 United Friendly Societies' Dispensaries were registered under the Friendly Societies Act as separate friendly societies. The chief object for which the dispensaries are established is to provide the societies with a supply of medicine and medical and surgical appliances for members and for persons claiming through members. The number of members connected with dispensaries at the end of 1968-69 was 82,005. As the receipts and expenditure of the dispensaries are to some extent interwoven with those of the medicine and management funds of ordinary societies, they are not given here. The assets and liabilities of dispensaries at the end of 1968-69 amounted to \$3,193,039 and \$663,473, respectively.

Specially authorised societies

At the end of 1968-69, there were four societies registered under the Friendly Societies Act which did not provide any of the customary benefits of friendly societies. Their registration was specially authorised under Section 6 of the Friendly Societies Act. These four societies are known as Total Abstinence Societies. Their membership at the end of 1968-69 was 69 and their assets amounted to \$245,308.

Co-operative societies

In December 1953 the Victorian Parliament passed the Co-operation Act, now the *Co-operation Act* 1958. The Act provides for the formation, registration, and management of co-operative societies which are classified into various kinds according to their objects.

The Act permits the Treasurer of Victoria to guarantee the repayment of any loan raised by a society for the implementation of its object. At 30 June 1969, 412 guarantees were in force, the amount involved being \$7,436,240.

Under the direction of the Treasurer, the Act is administered by the Registrar of Co-operative Societies, who is also Registrar of Co-operative Housing Societies. He is assisted by an advisory council constituted under the Act.

The numbers and types of co-operative societies registered under the Co-operation Act at 30 June 1965 to 1969 are shown in the following table:

VICTORIA—REGISTERED CO-OPERATIVE SOCIETIES(a)

Type	At 30 June—				
	1965	1966	1967	1968	1969
Producer	60	65	68	69	70
Trading	41	45	51	54	57
Community settlement	6	6	6	6	6
Community advancement	245	316	370	423	498
Credit	127	144	152	156	164
Associations	1	1	1	1	2
Total	480	577	648	709	797

(a) Further information regarding co-operative organisations is given on pages 675-7 of this *Year Book*.

Details of co-operative societies which submitted returns for the year ended 30 June 1969 are given in the following table :

VICTORIA—SUMMARY OF OPERATIONS OF SOCIETIES WHICH SUBMITTED RETURNS (a), 1968-69

Type	Number of societies	Number of members	Liabilities		Assets
			Members' funds	External	
			\$'000	\$'000		$'000
Producer	66	45,694	2,524	5,769	8,293
Trading	47	26,720	2,527	2,298	4,825
Community settlement	5	433	85	130	215
Community advancement	449	37,108	1,277	3,392	4,669
Credit	158	34,146	496	9,589	10,085
Associations	2	126	..	201	201
Total	727	144,227	6,909	21,379	28,288

(a) Further information regarding co-operative organisations is given on pages 675-7 of this *Year Book*.

JUSTICE AND THE ADMINISTRATION OF LAW

Law in Victoria

Historical

Law is the body of rules, whether proceeding from formal enactment or from custom, which a particular state or community recognises as binding on its members or subjects, and enforceable by judicial means. It has been said that "substantially speaking, the modern world acknowledges only two great original systems of law, the Roman and the English".

English law came to Australia with Governor Phillip in 1788, though for many years in a severely attenuated and autocratic form. Immediately prior to Federation, the law operative in Victoria consisted of the laws enacted by its legislature up to that time; the law of England applicable to the Colony up to 1828; the laws of New South Wales up to 1851; and certain Imperial statutes since 1828 applicable as of paramount force, or adopted by the local legislature since. In addition the common law applied.

In 1901 the Commonwealth of Australia was established by an Imperial Act under which certain powers were conferred upon the newly created Commonwealth Parliament, and the remaining powers were left to the Parliaments of the six States. Subject to that proviso, State law in Victoria continues as it did prior to Federation, and Victoria, like the other States, retains some sovereign powers.

Legal profession

Prior to 1891 the legal profession in Victoria was divided into two separate branches, barristers and solicitors—as it still is in England and in New South Wales. Solicitors prepared wills, contracts, mortgages, and transfers of land, and instituted legal proceedings generally. Barristers appeared for litigants and accused persons in court and wrote opinions on legal questions in chambers. A litigant or accused person could not approach a barrister directly, but only through a solicitor who “instructed” the barrister for him.

In 1891 Parliament amalgamated the two branches, and since then every Victorian lawyer has been admitted to practice as a barrister *and* solicitor, and is entitled to do the work of both. Despite this compulsory legal fusion most lawyers voluntarily continued the segregation of the profession into two separate branches as before, though a few practitioners took advantage of their legal rights. These latter have their successors today, although most Victorian lawyers, on admission to practice, still choose to make their career in one or other of the two branches—not in both.

Legal Departments and officers

The political head of the Law Department is the Attorney-General, under whose direction and control the Department functions. The Solicitor-General, who advises the Government and appears for the Crown in important constitutional, criminal, and civil cases, is a practising barrister, appointed, under the provisions of the Solicitor-General Act, by the Governor in Council, from among Queen’s Counsel.

The administrative problems of the Law Department are the responsibility of the Secretary, who is a public servant. Included in the Department is the Crown Solicitor, who gives legal advice to government departments, and acts as solicitor for the Crown in all its cases, both criminal and civil. In the former, he is the instructing solicitor to the Prosecutors for the Queen, who appear for the Crown in criminal matters in the Supreme and General Sessions Courts. There are eight such Prosecutors who, like the Solicitor-General, are not public servants, but barristers.

Public Solicitor

The Office of the Public Solicitor is controlled by the Attorney-General’s Department through the Public Solicitor, who is appointed under the Poor Persons’ Legal Assistance Act. The Act requires that the Public Solicitor shall be a barrister and solicitor of the Supreme Court of Victoria and he is the person assigned to act for those persons eligible under the Act. Assistance is available in criminal and civil proceedings. A person who is admitted to sue under this Act does so *in forma pauperis*. The effect of this is that he or she has the services of the Public Solicitor without charge both as to disbursements and professional charges. Where required a

barrister is employed at Government expense. In the event of an assisted person succeeding in his or her action the opposing party may be ordered to pay costs at a lower scale than provided by the Rules.

Set out below is a summary of the cases dealt with by the Public Solicitor's Office during the years 1965 to 1969 :

VICTORIA—PUBLIC SOLICITOR'S OFFICE : CASES DEALT WITH

Type of case	Number of cases dealt with				
	1965	1966	1967	1968	1969
Divorces	436	472	507	594	476
Custody applications	55	70	127	96	72
Other matrimonial causes	85	124	119	139	119
Motor accident claims	80	91	86	105	185
Workers compensation claims	35	42	45	40	70
Other claims for damages	41	35	32	36	107
Criminal matters	537	560	590	612	647
Miscellaneous	966	915	876	791	934
Total	2,235	2,309	2,382	2,413	2,610

High Court of Australia

The High Court of Australia was created by the Commonwealth of Australia Constitution which provided for the vesting of the judicial power of the Commonwealth in a "federal Supreme Court, to be called the High Court of Australia and in such other Courts as the Parliament creates and in such other Courts as it invests with Federal jurisdiction". The Constitution also provided that the High Court should consist of a Chief Justice and so many other Justices, not less than two, as the Parliament prescribes.

In 1903 the High Court was first constituted by the appointment of Sir Samuel Griffith (Chief Justice) and Justices Barton and O'Connor who held the first sittings of the High Court in Melbourne in October 1903 and sat shortly afterwards in Sydney in the same year.

The number of Justices was increased from three to five in 1906 and was again increased in 1912 to seven. In 1933 the number was reduced to six and in 1946 the number of Justices was restored to seven. The Justices are all appointed for life as is required by the Constitution as it has been interpreted by the Court.

The Constitution provided for the High Court to have jurisdiction to hear and determine appeals from all judgments, decrees, orders and sentences of Justices of the High Court exercising original jurisdiction of that Court, or of any other Federal Court. It also provided that the Court have the like jurisdiction to hear appeals from the Supreme Court of a State. The High Court thus became part of the hierarchy in the judicial system of each State. The Constitution provided also for the High Court to exercise original jurisdiction in matters arising under any treaty ; affecting consuls or other representatives of other countries ; in which the Commonwealth or a person being sued on behalf of the Commonwealth is a party ; between residents of different States or between a State and a resident of another State, or in which a writ of mandamus* or prohibition

* A form of writ to compel a person or body to carry out the duty which they are required to perform by law.

or injunction is sought against an officer of the Commonwealth.

The jurisdiction of the High Court has been exercised over the years to a considerable degree in particular by the use of prerogative writs of prohibition and mandamus in relation to Commonwealth officers and to control the jurisdiction of tribunals constituted under Commonwealth legislation, e.g., Commonwealth Court of Conciliation and Arbitration (prior to 1956), Commonwealth Conciliation and Arbitration Commission, and other bodies.

In addition the Constitution provided that the Parliament may make laws conferring jurisdiction on the High Court in any matter arising under the Constitution or involving its interpretation, arising under any laws made by the Parliament, and in admiralty or in maritime matters. Pursuant to the last named provision the Parliament of the Commonwealth has conferred exclusive jurisdiction upon the High Court in:

- “(a) matters arising directly under any treaty ;
 (b) suits between States, or between persons suing or being sued on behalf of different States, or between a State and a person suing or being sued on behalf of another State ;
 (c) suits by the Commonwealth, or any person suing on behalf of the Commonwealth, against a State, or any person being sued on behalf of a State ;
 (d) suits by a State, or any person suing on behalf of a State, against the Commonwealth, or any person being sued on behalf of the Commonwealth ;
 (e) matters in which a writ of mandamus or prohibition is sought against an officer of the Commonwealth or a federal Court.”

(Section 38 of the *Judiciary Act* 1903–1969.)

As yet it has not conferred jurisdiction on the High Court in matters arising under any laws made by the Parliament but has done so in relation to a number of particular statutes such as the Income Tax Assessment Act, the Patents Act, the Trade Marks Act and the Life Insurance Act. In addition, jurisdiction has been conferred on the High Court under the Commonwealth Electoral Act whereby a Justice of the High Court sits as a Court of Disputed Returns.

However, although original jurisdiction has been exercised to a considerable extent over the years, the primary functions of the High Court had been, first, interpreting the Constitution of the Commonwealth, and second, hearing and deciding appeals from judgments of the Courts of the States and of the Courts of Territories.

The Constitution provided also that no appeals should be taken to the Privy Council from a decision of the High Court upon any question howsoever arising as to the limits *inter se* of the Constitutional powers of the Commonwealth or those of any State or States or as to the limits *inter se* of the Constitutional powers of any two or more States unless the High Court decides that the question is one that should be determined by Her Majesty in Council. Under this particular section over the years a number of applications have been made to the High Court for such a certificate but in only one instance has a certificate been granted.

In 1968 the *Privy Council (Limitation of Appeals) Act* 1968 enacted that special leave to appeal to Her Majesty in Council from a decision

of the High Court may be asked only in a matter where the decision of the High Court was given on appeal from the Supreme Court of a State otherwise than in the exercise of Federal jurisdiction and did not involve the application or interpretation of the Constitution, or of a law made by the Parliament, or of an instrument made under a law made by the Parliament. The provisions of this Act do not apply in respect of a decision given in a proceeding commenced before the commencement of the Act, namely, 1 September 1968. Matters commenced after that date which involve Federal jurisdiction may not be taken on appeal to the Privy Council.

Section 10 of the *Judiciary Act* 1903 provided that the principal seat of the High Court should be at the seat of Government and that until such time as the seat of Government was established the principal seat of the Court should be at such place as the Governor-General from time to time appointed.

By minute dated 2 October 1903, the Governor-General ordered and declared that until the seat of Government should be established or until otherwise ordered the principal seat of the High Court should be at Melbourne. In 1926 section 10 of the *Judiciary Act* was amended to provide that on and after a date to be fixed by proclamation the principal seat of the High Court should be at the seat of Government and that until the date so fixed the principal seat of the High Court should be at such place as the Governor-General from time to time appointed.

Industrial law in Victoria

Sources of industrial law

The legal basis of industrial relations in Victoria, at least nominally, is still the private contract of employment. The common law rules imported from England still apply, modified by both Commonwealth and Victorian legislation. In fact most of the terms in contracts of employment are directly affected by decisions of industrial tribunals set up under Commonwealth and Victorian legislation.

The most important statutes are now :

Commonwealth : *Commonwealth Employees' Compensation Act* 1930–1970, *Commonwealth Seamen's Compensation Act* 1911–1970, *Conciliation and Arbitration Act* 1904–1970, *Public Service Arbitration Act* 1920–1969, *Stevedoring Industry Act* 1956–1966, and *Stevedoring Industry (Temporary Provisions) Act* 1967–1970.

Victoria : *Apprenticeship Act* 1958, *Employers and Employés Act* 1958, *Essential Services Act* 1958, *Industrial Safety Advisory Council Act* 1960, *Labour and Industry Act* 1958, *Lifts and Cranes Act* 1967, *Master and Apprentice Act* 1958, *Trade Unions Act* 1958, and *Workers Compensation Act* 1958.

Commonwealth industrial tribunals

The Commonwealth derives its power to legislate for industrial relations mainly from section 51 (xxxv) of the Constitution, which grants power to make laws with respect to "conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State". It has exercised this power by passing the *Conciliation and Arbitration Act* 1904–1970.

This Act sets up a compulsory arbitration system for the settlement of industrial disputes. The system is now implemented through four main tribunals, namely, the Commonwealth Conciliation and Arbitration Commission, a number of Conciliators, the Industrial Registrar, and the Commonwealth Industrial Court. The Constitution does not permit the Commonwealth to regulate industrial relations directly by passing general legislation applicable over the whole field of employment. Similarly, the jurisdiction of the Commonwealth industrial tribunals is circumscribed by the terms of the Constitution. It is possible for the High Court to prohibit a Federal tribunal from proceeding further with a case if it oversteps the mark, for example, by assuming jurisdiction in a matter which is not "industrial" (as defined by the Act.) Federal tribunals also have no jurisdiction unless they are dealing with an industrial dispute which extends "beyond the limits of any one State".

At first sight these requirements seem to impose quite severe restrictions on the area of operation of Commonwealth tribunals, leaving plenty of scope for State legislation. Liberal interpretations of the constitutional limitations by the High Court, however, have vastly expanded the powers of these tribunals so that their awards are of primary importance in industrial relations in all States, including Victoria.

The pervasive influence of Commonwealth awards is shown by the table of incidence of awards (page 169). This highlights the fact that a higher percentage of workers are covered by Commonwealth awards than are covered by State awards and shows that a substantial majority of workers are covered by awards under one or the other system. State awards frequently incorporate Federal decisions on minimum employment conditions; thus the great influence of the Commonwealth tribunals can be appreciated.

The influence of the Commonwealth system is particularly strong in the field of wage fixing. National Wage cases are decided at intervals by the Conciliation and Arbitration Commission. Any increases in wages which are granted on economic grounds to metal trades workers in these test cases are subsequently incorporated in other Federal awards. In Victoria these increases also generally "flow on" to workers under State awards, because the Labour and Industry Act requires Wages Boards to take relevant Federal awards into consideration when determining wages.

In 1967 the Commission introduced total wages into Federal awards. Previously wages had consisted of two parts—the basic wage and a margin for skill (where appropriate). It is still too early to assess the exact significance of this change. It is not clear whether it will effect a substantive change or whether its effect is merely procedural.

State industrial tribunals

In Victoria a number of Wages Boards have been set up under the Labour and Industry Act to determine industrial matters in various trades. They consist of a chairman sitting with equal numbers of representatives of employers and employees.

Wages Boards have power to make determinations which operate as common rules prescribing minimum standards for all concerns within the trade and area covered by each Board. They may be contrasted with the

Federal tribunals which do not have power to make common rules although, as explained above, many of their decisions "flow on" to large sections of industry. Wages Boards now have power to deal with "any industrial matter whatsoever" with certain exceptions. The most important of these is that they cannot deal with any matter relating to the preferential employment of unionists.

Determinations of Wages Boards are enforced by inspectors of the Department of Labour and Industry, who may initiate prosecutions for breach. Other tribunals established under the Labour and Industry Act are Boards of Reference, the Industrial Appeals Court, and the Metropolitan Industrial Court. These deal, respectively, with disputes of fact concerning determinations, appeals, and offences under the Act.

Relationship between Commonwealth and State industrial law

Section 109 of the Commonwealth Constitution provides that where a law of a State and a law of the Commonwealth conflict, the Commonwealth law prevails. A Federal award thus overrides any State statute or Wages Board determination on the same subject. If a Federal award provides for long service leave, for example, any worker who is covered by the Federal award will have his rights to leave regulated by the award and will have no rights under the long service leave provisions of the Labour and Industry Act. However, this is one topic on which most Federal awards are silent, so that most workers are covered by the State legislation.

Trade unions

The Commonwealth Conciliation and Arbitration Act provides for registration of trade unions, which may then represent their members in disputes before the tribunals. Many unions have become registered organisations under the Act, with branches in the States. The Victorian Trade Unions Act also provides for registration but very few unions have availed themselves of these facilities for registration. However, the Act offers limited protection even for unregistered unions, by removing some legal disabilities imposed on unions by the early English common law.

Legal restraints on trade union activity

In practice the most important restraints on strikes and other industrial action by unions are the "penal clauses" of the Commonwealth Conciliation and Arbitration Act. "Bans clauses" are often included in Federal awards. These prohibit unions from being concerned, directly or indirectly, in any ban or limitation on the performance of work in accordance with the award.

If a union takes strike or other action, contrary to a bans clause, a presidential member of the Commonwealth Conciliation and Arbitration Commission may try to settle the dispute by conciliation and arbitration. If, following these proceedings, the presidential member is satisfied that the union remains in breach of the award, he may issue a certificate to that effect. The Industrial Court may then impose a penalty under section 119 of the Commonwealth Conciliation and Arbitration Act for such conduct. Victorian legislation imposing restraints on strike action may be found in the Essential Services Act and section 41 of the Labour and Industry Act.

In addition several common law remedies are available against striking employees. These derive from English decisions applicable in Victoria. The common law has been modified by the Employers and Employees Act which adopted an English statute of 1875. Later English Acts have not been adopted in Victoria so that the Victorian position is now more restrictive than the English. The available remedies are little used in practice.

Employers' associations

Employers' associations, like trade unions, register as organisations under the Commonwealth Conciliation and Arbitration Act and nominate representatives to the State Wages Boards. For further information on employers' associations see pages 474 to 476 of the *Victorian Year Book* 1964.

Industrial safety

The Victorian Labour and Industry Act contains detailed provisions aimed at making employment safer and preventing accidents. The legislation is administered by the Department of Labour and Industry (see page 183).

Industrial injuries

An injured worker or his dependants may bring an action for damages against his employer if he can prove that he was not provided with a safe system of work or that there was negligence on the part of a fellow employee.

In the absence of negligence by his employer or a fellow worker, he is entitled to claim compensation under the *Workers Compensation Act* 1958 for any work-connected injury. Even if there is negligence he may choose to claim compensation. The Act provides that an employer is liable to pay compensation when "personal injury arising out of or in the course of the employment is caused to a worker". Liberal definitions of "injury" and "the course of the employment" formerly made this Act very wide in its coverage. An important amending Act of 1965 narrowed its scope to a certain extent. It covers industrial diseases as well as injuries.

Lump sums are payable in case of death and to injured workers for specified "table injuries". Otherwise the injured worker is entitled to weekly payments during incapacity and medical expenses. He has no right to a lump sum payment but the Workers Compensation Board may, in its absolute discretion, award a lump sum in redemption of the employer's liability for future weekly payments. Commonwealth employees are covered by the Commonwealth Employees' Compensation Act.

For further information on industrial conditions see Part 4 of this *Year Book*.

Legal education

The admission of barristers and solicitors of the Supreme Court of Victoria is governed by the *Legal Profession Practice Act* 1958, which establishes a Council of Legal Education consisting of the seventeen Supreme Court Judges, the Attorney-General, the Solicitor-General, and representatives of the University of Melbourne, Monash University, the Law Institute of Victoria, and the Victorian Bar. The Council has power to make rules

relating to qualifications and for admission of candidates to practise as barristers and solicitors.

Candidates for admission must produce to the Court a certificate of the Board of Examiners, established by the Rules, that the candidate has complied with all the Rules. The Rules provide the qualifications for admission of three classes of local candidates.

1. *Candidates obtaining the degree of Bachelor of Laws.* A candidate may obtain the degree of Bachelor of Laws from the University of Melbourne, Monash University, the Australian National University, and (if the candidate qualified for matriculation in Victoria) the University of Tasmania. He must pass, before or after graduating, Evidence, Procedure, Taxation, Accounts, and Professional Conduct. After qualifying for his degree, he must serve one year under articles with an experienced barrister and solicitor.

There are no prerequisite Higher School Certificate subjects for enrolment in the Faculties of Law at either the University of Melbourne or Monash University. Both degree courses provide for a limited number of non-law subjects and compulsory and optional law subjects accepted by the Council as adequate bases for qualification.

The University of Melbourne degree requires a four year course. Monash University offers a three year first degree of Bachelor of Jurisprudence leading to a further two year course for a full degree, although in certain limited cases, candidates may enrol for a four year degree course without the first degree.

2. *Candidates taking the course for articulated clerks.* These candidates must have qualified to matriculate and passed certain basic prescribed law subjects. In addition, after passing the first four subjects, the candidate must serve for four years under articles. Articled clerks may enrol at either the University of Melbourne or Monash University but do not qualify for a degree. The Council conducts a school for articulated clerk candidates who were prevented by a quota system from enrolling as degree or articulated clerk students at either university. The school is administered by the Royal Melbourne Institute of Technology under the direction of the Council which appoints all lecturers, tutors, and examiners.

3. *Managing clerks.* The Rules provide for admission to practise as barristers and solicitors for persons who have not qualified for matriculation but have passed the same law subjects as prescribed for four year articulated clerks. They must have completed in the office of a Victorian barrister and solicitor a period of clerkship of not less than 12 years of which the last 5 years must have been served as a managing clerk.

The Rules provide for dispensation of service under articles for both degree and articulated clerk candidates who have completed 8 years service in one or more prescribed Government departments. Dispensation of the requirement of qualification for matriculation is provided for candidates who have been engaged on war service and partial dispensation of service under articles or of clerkship in the case of managing clerks and officials is provided for candidates who have been engaged on war service and have suffered hardship by reason of such service.

The Victorian Bar will not permit a duly admitted barrister and solicitor to sign the Bar Roll until he undertakes to read in the Chambers

of an experienced junior counsel for six months. No such post-admission training is required by the Law Institute of Victoria for those intending to practise as solicitors.

Courts in Victoria

The courts of justice are the base upon which administration of the legal system is built. They are graduated in status, according to the gravity of the matters which may be brought before them, and may be conveniently classified into three divisions: the Supreme Court, the County Court (the criminal section of which was formerly called General Sessions), and the Magistrates' Courts.

Supreme Court

The Supreme Court, as its name implies, and by virtue of the Supreme Court Act, is the supreme court of the State, having jurisdiction over all matters, criminal and civil (including probate and divorce) which have not been excluded by statute. It is the counterpart of the English Courts of Queen's Bench, Chancery, and Probate, Divorce, and Admiralty. The Court consists of a Chief justice and sixteen puisne judges, appointed from the ranks of practising barristers of not less than eight years standing, and retiring at the age of 72. (Judges of the Supreme Court other than the Chief Justice are called puisne judges.)

The Full Court (usually three, and sometimes five, judges) hears and determines appeals from single judges of the Supreme Court and from the County Court, and criminal appeals from the Supreme Court and County Court.

The main activities of the Supreme Court are at Melbourne, but judges go "on circuit" to Ballarat, Bendigo, Geelong, Hamilton, Horsham, Mildura, Sale, Shepparton, Wangaratta, and Warrnambool.

The officers of the Court are the Masters (three at present), the Taxing Master, the Prothonotary, the Sheriff, and the Registrar of Probates. The Masters deal with various matters entrusted to them by Rules of Court made by the judges; are responsible for the investment of moneys ordered to be paid into court; and are Registrars in divorce. The Taxing Master fixes and settles bills of costs. The Masters and the Taxing Master must be barristers and solicitors of five years standing, or, in the case of the Taxing Master, of equivalent experience. The Prothonotary is virtually the secretary of the Court. Writs are issued from his office, and he has the custody of documents filed therein. The Sheriff who, like the Prothonotary, is a public servant—the Masters and Taxing Master are not under the Public Service Act—is responsible for the execution of writs, the summoning of juries, and the enforcement of judgments. There is a Deputy Prothonotary and a Deputy Sheriff at all Supreme Court circuit towns. The Clerk of Courts acts as such in each instance. The Registrar of Probates and the Assistant Registrar of Probates deal with grants of probate and administration of the estates of deceased persons in accordance with section 12 of the *Administration and Probate Act 1958*.

Civil proceedings in the Supreme Court are commenced by the plaintiff issuing, through the Prothonotary's Office, a writ (properly called a writ of summons) against the defendant from whom he claims damages or

other remedy. The writ is a formal document by which the Queen commands the defendant, if he wishes to dispute the plaintiff's claim, to "enter an appearance" within a specified time; otherwise judgment may be given in his absence. A defendant who desires to defend an action files a "memorandum of appearance" in the Prothonotary's office.

When the matter comes before the Court, it is desirable that the controversial questions between the two parties should be clearly defined. This clarification is obtained by each side in turn filing documents, stating its own case, and answering that of its opponent. Such statements and answers are called "pleadings", and this method of clarifying the issues has been practised in England from the earliest times, and is as ancient as any part of English procedural law.

Ultimately the action comes to trial, before a judge alone, or a judge and jury. When a judge sits alone he decides questions of both law and fact. If there is a jury, the judge directs them on the law; the jury decides the facts. The judgment of the Court usually provides for payment by the loser of his opponent's legal costs. Normally these are assessed by the Taxing Master. The disappointed party in the action has a right of appeal to the Full Court. If a successful plaintiff fails to obtain from the defendant money which the latter has been ordered to pay, he may issue a writ of *feri facias*, addressed to the Sheriff and directing him to sell sufficient of the defendant's real and personal property to satisfy the judgment.

There is no general right of appeal in civil matters, *on the facts*, from a decision of a Magistrates' Court. Nevertheless, a dissatisfied party may apply to a Supreme Court judge to review the case, *on the law*.

An appeal lies as of right from decisions of the Supreme Court to the High Court of Australia. An appeal from the Supreme Court or the High Court to the Judicial Committee of the Privy Council lies as of right in certain cases, and at the discretion of the Court in other cases. (See page 567.)

The following table gives particulars of Supreme Court civil business during the five years 1965 to 1969 :

VICTORIA—SUPREME COURT CIVIL BUSINESS

Particulars	1965	1966	1967	1968	1969
Number of places at which sittings were held	11	11	11	11	11
Causes entered—					
For assessment of damages	26	28	30	28	10
For trial	1,722	1,533	1,822	1,702	1,496
Number of cases listed for trial—					
By juries of six	1,314	1,155	951	1,292	1,224
By a judge	509	606	598	517	532
Verdicts returned for—					
Plaintiff	122	123	122	76	115
Defendant	14	6	9	1	15
Amount awarded	\$'000 1,705	795	723	892	1,108
Writs of summons issued	5,816	5,804	4,020	4,640	5,028
Other original proceedings	347	300	133	165	166
Appellate proceedings (other than criminal appeals) heard and determined—					
By Full Court	57	53	61	62	61
By a judge	66	77	86	85	142

NOTE. Changes in the civil jurisdiction of the courts and in the number of cases being settled out of court have resulted in fluctuations in court business.

County Court

The County Court has jurisdiction in civil matters where the amount claimed does not exceed \$4,000 in ordinary cases and \$8,000 in motor vehicle accident cases, and in criminal cases all indictable criminal offences (i.e., broadly, those in respect of which the accused will be tried by a jury) are triable save treason, murder, attempted murder, and certain other statutory exceptions. The County Court also sits, without a jury, as an Appeals Court to hear appeals from Magistrates' Courts. In theory, justices of the peace may sit with the judge of the County Court, but in fact they never do. County Court judges must be practising barristers of seven years standing and retire at the age of 72. No judge, either of the Supreme Court or County Court, is, of course, under the Public Service Act. All are appointed by the Governor, on the advice of the Government, and once appointed become independent of the executive. In 1969 there were twenty-two County Court judges.

The County Court sits continuously at Melbourne, and visits eight circuit towns throughout the State as well as the ten towns also visited by the Supreme Court. The principal officer of the court is the Clerk of the Peace and Registrar of the County Court at Melbourne, who occupies a position parallel to that of the Prothonotary of the Supreme Court. He is a public servant, appointed from among senior clerks of courts. The clerk of courts at each circuit town is also Clerk of the Peace and Registrar of the County Court for his particular bailiwick.

Particulars of County Court civil cases for the years 1965 to 1969 are shown in the following table :

VICTORIA—COUNTY COURT CIVIL CASES

Year	Number of cases tried	Amount sued for	Amount awarded (a)
1965	1,916	\$'000 2,944	\$'000 1,967
1966	1,966	8,323	992
1967	2,139	8,914	1,117
1968	2,266	9,772	1,330
1969	3,249	42,025	6,416

NOTE. See footnote to previous table.
 (a) These figures do not include instances where judgment was entered by consent or default.

The table below shows the number of writs received by the Sheriff in the five years 1965 to 1969 :

VICTORIA—WRITS RECEIVED BY THE SHERIFF

Year	Sovereign's writs against person and property	Subjects' writs against—		Total
		The person	Property	
1965	1	3	807	811
1966	..	8	832	840
1967	3	9	786	798
1968	9	11	847	867
1969	10	7	827	844

Magistrates' Courts

Magistrates' Courts, which sit at Melbourne and suburbs, and at approximately 200 other towns throughout Victoria, are presided over by stipendiary magistrates and justices of the peace, the administrative work being done by a clerk of courts. Stipendiary magistrates are public servants, appointed under the Public Service Act, but independent in the exercise of their judicial functions. They retire at the age of 65. Justices of the peace are citizens of standing in the community—both men and women—who have been granted a Commission of the Peace, and who serve in an honorary capacity, being retired from judicial functions at the age of 72. As well as having practical experience in Magistrates' Courts, a clerk of courts must pass an examination conducted by the Department. Stipendiary magistrates are, ordinarily, clerks of courts of ten years' standing, who have passed an additional examination, and they attain the Bench as vacancies occur.

Magistrates' Courts deal summarily with the less serious criminal cases; hold preliminary inquiries in indictable criminal offences; and have a civil jurisdiction where the amount involved does not exceed \$200 in ordinary debt cases, \$600 in cases of contract and, subject to certain exemptions, in cases of tort, and \$1,000 in any action in tort arising out of any accident in which a vehicle is involved. (A tort is a wrong or injury committed by one person against another, or an infringement by one person of another person's right.) Children's Courts deal with juveniles under seventeen years of age, and Coroners' Courts conduct inquiries where the cause of death appears to be violent or unusual.

When an accused person is charged with an indictable criminal offence, a Magistrate's Court holds a preliminary inquiry to decide, not his guilt or innocence, but whether there is sufficient evidence to justify him being tried at all. If the evidence warrants it, the magistrates transmit the matter to the appropriate court—Supreme Court or County Court. There the accused stands trial before a judge and jury, the prosecution case being conducted by a prosecutor for the Queen. The judge directs the jury on the law, and sentences the prisoner if he is convicted. The jury are the sole judges, on the facts, of the guilt or otherwise of the accused, who is

VICTORIA—MAGISTRATES' COURTS: CASES OF A CIVIL NATURE

Particulars	1965	1966	1967	1968	1969
Civil cases—					
Number heard	201,095	207,727	204,336	208,682	200,801
Debts or damages—					
Claimed	\$'000 8,849	20,146	20,340	20,800	21,025
Awarded	\$'000 7,345	15,540	17,050	16,927	17,246
Other cases—					
Eviction cases (a)	3,254	3,551	3,233	3,250	3,349
Fraud summonses	11,389	9,099	10,079	10,978	11,270
Garnishee cases	20,684	20,047	20,851	20,272	19,680
Maintenance cases	4,852	5,460	6,001	6,732	7,264
Show cause summonses	35,569	32,501	31,162	37,596	37,440
Applications under Landlord and Tenant Acts	25	5	47	22	84
Miscellaneous	61,200	53,703	61,154	66,979	61,925
Licences and certificates issued	21,425	22,088	24,252	26,910	26,564

NOTE. See footnote to table on page 574.

(a) Figures shown represent cases listed before Courts.

presumed to be innocent until (and unless) they find him guilty. The onus is upon the prosecution to prove such guilt to the satisfaction of the jury, and to prove it beyond reasonable doubt.

Particulars of criminal cases and certain other misdemeanours heard in Magistrates' Courts are shown on pages 582-3.

Consolidation of the Statutes, 1961

Bankruptcies

A Bankruptcy Act passed by the Commonwealth Parliament in October 1924, and amended in 1927, was brought into operation on 1 August 1928. It superseded the Bankruptcy and Insolvency Acts of the States, with the exception of any provisions relating to matters not dealt with in the Commonwealth Act. On 4 March 1968 the *Bankruptcy Act 1924-1965* was repealed and the *Bankruptcy Act 1966* came into operation.

The number of bankruptcies, etc., in Victoria during the five years 1965 to 1969 and the amount of liabilities and assets relating to them were as follows :

VICTORIA—BANKRUPTCIES			
Year	Bankruptcies and orders for administration of deceased debtors' estates	Arrangements with creditors without sequestrations	Total
NUMBER			
1964-65	541	72	613
1965-66	522	72	594
1966-67	496	63	559
1967-68	524	59	583
1968-69	520	82	602
LIABILITIES (\$'000)			
1964-65	4,690	1,653	6,343
1965-66	4,450	2,773	7,223
1966-67	7,106	2,051	9,157
1967-68	4,611	1,857	6,468
1968-69	3,644	1,786	5,430
ASSETS (\$'000)			
1964-65	1,043	1,045	2,088
1965-66	1,591	2,534	4,125
1966-67	2,713	1,172	3,885
1967-68	1,339	1,173	2,512
1968-69	1,703	1,023	2,726

Children's Court

The Children's Court, which began in Victoria in 1906, is held wherever a Magistrate's Court sits in the Melbourne metropolitan area and in various provincial towns and cities. Beyond the metropolitan area the Court is usually held on the same day as the Magistrate's Court and presided over by the same Stipendiary Magistrate, but honorary Special Magistrates are appointed for some Courts.

In the metropolitan area, two Special Stipendiary Magistrates are appointed and they visit about thirty Courts at regular intervals; all metropolitan Children's Courts are administered from the Melbourne Children's Court.

Jurisdiction

The Court's jurisdiction is normally restricted to children under seventeen years of age. A child may be brought before the Court for an offence committed before his seventeenth birthday provided the appearance takes place before his nineteenth birthday.

Two types of cases come before the Court, namely, offences and applications under the Children's Welfare Act.

Offences

The Court has no jurisdiction in civil matters, adoption, or civil maintenance.

In dealing with offences the Court follows the practice and procedure of Magistrates' Courts. However, it has considerably wider powers than Magistrates' Courts and may deal with any offence except homicide. The child (or the parent if the child is under fifteen years of age) must always consent to the Court dealing with an indictable offence in a summary manner, otherwise the matter would be tried by a jury in a higher court. Consent is given in almost all cases.

Applications

The police and certain others may apply to the Court for an order declaring a child "in need of care and protection". The Children's Welfare Act lists the categories which make such an application possible.

Order of the Court

The primary aim of the Children's Court is reformation and rehabilitation of the offender. Punishment is considered for consistent offenders and where attempts at reformation have failed. Indeed, the Court is bound by the *Children's Court Act 1958* to give primary consideration to reformation. "The Court shall firstly have regard to the welfare of the child."

The most important method of dealing with a child is by releasing him on probation for a period not exceeding three years. Most terms of probation are for twelve months. A Probation Officer is expected to assist and guide the child during that period with reformation and rehabilitation as the goal.

Probation Officers also assist the Court by furnishing reports on children's backgrounds. More Stipendiary Probation Officers are now being appointed to supplement the large number of Honorary Probation Officers throughout the State. Some Honorary Probation Officers are employed by the churches.

As a last resort children under fifteen years may be admitted to the care of the Social Welfare Branch and those fifteen or over may be ordered detention in a Youth Training Centre for periods up to two years.

The *Social Welfare Act 1960* has vested in the Youth Parole Board the authority to parole children who are serving periods of detention.

Allied to the Children's Court is the Children's Court Clinic which is staffed by a team of psychiatrists, psychologists, and social workers. The Clinic undertakes detailed investigations of problem cases referred to it by the Court and makes recommendations on its findings. In some

cases the Clinic will offer counsel to parents and children after a court appearance.

Court proceedings are closed to the press and general public.

The number of cases prosecuted by the Victoria Police, excluding cases of neglected children and drunkenness, and summarily disposed of by the Children's Courts for the years 1967 and 1968 are given in the following tables :

VICTORIA—CHILDREN'S COURTS: CASES SUMMARILY DISPOSED OF:
NUMBER OF CHARGES AND NATURE OF OFFENCE

Nature of offence	1967			1968		
	Males	Females	Total	Males	Females	Total
Against the person	507	7	514	487	11	498
Against property	7,634	298	7,932	7,354	315	7,669
Fraud, forgery and false pretences	128	7	135	70	12	82
Against good order	583	33	616	652	28	680
Driving offences	465	6	471	469	6	475
Miscellaneous offences (a)	142	12	154	225	21	246
Total	9,459	363	9,822	9,257	393	9,650

(a) Breaches of Acts of Parliament and by-laws of statutory bodies, escaping from legal custody, breach of bond or probation, etc.

VICTORIA—CHILDREN'S COURTS: CASES SUMMARILY DISPOSED OF:
NUMBER OF CHARGES AND RESULT OF HEARING

Result of hearing	1967			1968		
	Males	Females	Total	Males	Females	Total
Fined	838	30	868	619	19	638
Placed on probation	3,306	156	3,462	3,515	204	3,719
Admitted to Social Welfare Department	1,272	44	1,316	1,342	43	1,385
Sentenced to youth training centre	1,358	6	1,364	1,236	5	1,241
Adjourned without probation	1,990	100	2,090	1,870	95	1,965
Other	163	7	170	157	8	165
Total convictions	8,927	343	9,270	8,739	374	9,113
Dismissed, withdrawn, struck out	532	20	552	518	19	537
Total	9,459	363	9,822	9,257	393	9,650

VICTORIA—CHILDREN'S COURTS: CASES SUMMARILY DISPOSED OF:
NUMBER OF CHARGES: NATURE OF OFFENCE AND RESULT OF
HEARING, 1968

Nature of offence	Result of hearing					
	Dis- missed, with- drawn, etc.	Otherwise dealt with				
		Fined	Placed on probation	Social Welfare Branch (a)	Ad- journed without probation	Other
Against the person—						
Assault and grievous bodily harm	49	34	51	47	47	9
Sex offences	24	4	104	40	85	4
Total	73	38	155	87	132	13
Against property—						
Robbery	4	1	13	19	1	1
Breaking and entering	75	23	1,155	1,059	384	35
Larceny (excluding motor vehicles)	125	111	1,225	528	662	51
Motor vehicles (larceny and illegal use)	78	84	651	604	304	19
Wilful damage	17	44	79	23	72	4
Other offences against property	33	9	85	32	53	6
Total	332	272	3,208	2,265	1,476	116
Fraud, forgery and false pretences	2	3	32	29	13	3
Against good order—						
Indecent behaviour, etc.	7	2	50	9	26	1
Other offensive behaviour	18	47	24	4	31	2
Obscene and insulting language	8	53	6	4	24	3
Firearms	10	51	17	3	42	7
Other offences against good order	43	31	60	23	65	9
Total	86	184	157	43	188	22
Driving offences	27	106	120	77	135	10
Miscellaneous offences (b)	17	35	47	125	21	1
GRAND TOTAL	537	638	3,719	2,626	1,965	165

(a) Includes "admitted to care" and "placed in custody" of the Social Welfare Branch of the Chief Secretary's Department.

(b) Breaches of Acts of Parliament and by-laws of statutory bodies, escaping from legal custody, breach of bond or probation, etc.

Warning juvenile first offenders

A system for warning juvenile first offenders operates in Victoria to prevent many children from having to make an appearance in a juvenile court. Police are instructed not to proceed against children who have committed minor offences, if an alternative course of action is available. Warnings are given in the presence of parents or a guardian, who are told of the probable underlying reason for the offence, and both the offender and his parents or guardian are expected to ensure the avoidance of a repetition.

Offenders are not normally given a second chance and divisional officers believe that only a very small proportion of those warned offend again. The reporting member continues to take an interest in the child until his future is assured, and in most cases co-operation is received from both the offender and his parents or guardian.

The following tables give details of police warnings during the years specified :

VICTORIA—POLICE WARNINGS

Offence group (a)	1965		1966		1967		1968	
	Males	Females	Males	Females	Males	Females	Males	Females
Assault (b)	9	..	10	..	12	..	8	..
Robbery and violence	..	..	3	..	..	..	..	..
Sex	24	..	34	..	46	1	24	1
Breaking and larceny (c)	886	216	908	253	896	254	945	299
Other offences	214	12	264	11	224	18	226	12
Total	1,133	228	1,219	264	1,178	273	1,203	312

(a) Based on Major Crime Index as prepared by the Victoria Police.
 (b) Includes grievous bodily harm.
 (c) Includes larceny and/or illegal use of a motor vehicle.

VICTORIA—POLICE WARNINGS: AGE OF OFFENDER, 1968

Offence group (a)		Age last birthday (years)					Total
		10 and under	11, 12	13, 14	15, 16	17 and over	
Assault (b)	M	..	2	2	3	1	8
	F	..	..	..	..	..	..
Robbery with violence	M	..	..	..	..	..	..
	F	..	..	..	..	..	..
Sex	M	2	1	4	13	4	24
	F	..	..	1	..	..	1
Breaking and larceny (c)	M	110	221	340	240	34	945
	F	9	27	109	125	29	299
Other offences	M	15	34	78	82	17	226
	F	1	4	3	3	1	12
Total		137	289	537	466	86	1,515

For footnotes, see previous table.

Criminal Law and its Administration in Victoria, 1963

Crime statistics

Magistrates' Courts

In the following tables details are given of the number of cases dealt with in Magistrates' Courts (known as Courts of Petty Sessions prior to 1970), excluding Children's Courts (details of which have been shown under that heading) and cases of a civil nature which are shown on page 576.

If one wishes to compare the figures in these tables with those relating to other States or countries, it is necessary that consideration be given to several points. The first is that the criminal law in the places compared be substantially the same ; the second, that it be administered with equal strictness ; and the third, that proper allowances be made for differences in the age and sex composition of the population.

Comparison with Victorian figures for earlier years may be affected by changes in the population structure in regard to sex and age, or by changes in the law. An amendment to the Justices Act, operative since February 1963, enables Magistrates' Courts to deal summarily with certain

offences nominated in the amendment and previously dealt with by the higher courts. Also, improved methods of statistical collection were commenced in 1963. Accordingly, figures for Magistrates' Courts since 1964 are not comparable with those of previous years.

The following tables give details of the number of cases summarily disposed of in Magistrates' Courts for the years 1967 and 1968 :

VICTORIA—MAGISTRATES' COURTS: ARREST CASES SUMMARILY
DISPOSED OF : NUMBER OF CHARGES AND NATURE OF OFFENCE

Nature of offence	1967				1968			
	Convicted		Dismissed, withdrawn, or struck out		Convicted		Dismissed, withdrawn, or struck out	
	Males	Females	Males	Females	Males	Females	Males	Females
Against the person	2,201	68	955	31	2,144	44	1,072	16
Against property	9,581	1,279	980	67	8,764	1,254	907	87
Fraud, forgery, and false pretences	1,176	204	104	6	1,221	169	113	13
Against good order (a)	5,830	657	1,194	91	4,950	538	1,020	80
Driving offences	3,036	25	1,962	18	3,319	28	2,137	17
Miscellaneous (b)	922	59	94	4	967	102	117	12
Total	22,746	2,292	5,289	217	21,365	2,135	5,366	225

(a) This table excludes arrests for drunkenness. In 1967, 24,342 persons were charged with drunkenness; the corresponding figure for 1968 was 24,835. In most cases the result of hearing was a fine, with the alternative of imprisonment for default.

(b) Includes escaping from legal custody, offences concerning drugs, bribery, conspiracy, breach of bond or probation, etc.

VICTORIA—MAGISTRATES' COURTS: ARREST CASES SUMMARILY
CONVICTED : NUMBER OF CHARGES AND RESULT OF HEARING

Result of hearing	1967		1968	
	Males	Females	Males	Females
Fined	10,089	1,046	9,333	948
Imprisoned for—				
Under 1 month	1,195	59	1,200	125
1 month and under 6 months	4,375	150	4,011	101
6 months and under 12 months	900	36	904	18
1 year and over	269	5	273	2
Released on probation	1,735	281	1,626	222
Adjourned for a period without probation	944	185	956	145
Released on bond or recognisance	2,411	503	2,320	538
Other	828	27	742	36
Total	22,746	2,292	21,365	2,135

See footnotes to preceding table.

VICTORIA—MAGISTRATES COURTS: SUMMONS CASES SUMMARILY
DISPOSED OF : NUMBER OF CHARGES AND NATURE OF OFFENCE

Nature of offence	1967		1968	
	Convicted	Dismissed, with- drawn, struck out	Convicted	Dismissed, with- drawn, struck out
Against the person	1,074	991	1,170	995
Against property	3,157	1,250	3,279	1,249
Against good order	1,783	358	1,788	405
Driving offences	166,900	9,740	175,151	12,028
Miscellaneous (a)	55,239	7,317	53,482	7,130
Total	228,153	19,656	234,870	21,807

(a) Miscellaneous offences are generally breaches of State and Commonwealth Acts of Parliament.

NOTE. Details of the sex of offenders are not available for Courts of Petty Sessions summons cases.

Inquests

A coroner has jurisdiction to hold an inquest concerning the manner of death of any person who is slain or drowned or who dies suddenly or in prison or while detained in any mental hospital and whose body is lying dead within the district in which such coroner has jurisdiction.

His duties in relation to this are regulated by the Coroners' Acts and there are special provisions relating to inquests in other Acts, such as the Mines Act, Children's Welfare Act, and Registration of Births, Deaths, and Marriages Act. Coroners and deputy-coroners are appointed by the Governor in Council, every stipendiary magistrate being appointed a coroner for the State or Victoria. Deputy-coroners have jurisdiction in the districts for which they have been appointed. In addition, a justice of the peace has jurisdiction, within his bailiwick, to hold an inquest, but only if requested to do so by a police officer in charge of a station, or by a coroner.

In the majority of cases the coroner acts alone in holding an inquest, but in certain cases a jury is empanelled. This is done (a) when the coroner considers it desirable; (b) when in any specified case a law officer so directs; and (c) when it is expressly provided in any Act (as is the case under the Mines Act) that an inquest shall be taken with jurors. Amending legislation in 1953 provided that the viewing of the body is not essential and is necessary only when the coroner or jury deem it advisable.

When a person is arrested and charged before a justice or court with murder or manslaughter, those proceedings are adjourned from time to time pending the holding of the inquest. If the inquest results in a finding against that person of murder or manslaughter, the coroner issues a warrant committing him for trial, the other proceedings being then withdrawn.

The following table shows the number of inquest cases in Victoria of persons whose deaths were registered during the years 1965 to 1969, and the number of persons subsequently committed for trial:

VICTORIA—INQUEST CASES

Year	Inquests into deaths of—			Persons committed for trial		
	Males	Females	Persons	Males	Females	Persons
1965	1,565	830	2,395	33	3	36
1966	1,510	833	2,343	44	3	47
1967	1,775	906	2,681	47	2	49
1968	1,635	766	2,401	31	5	36
1969	1,667	823	2,490	47	3	50

The table below shows the charges on which persons were committed for trial by coroners during the years 1965 to 1969 :

VICTORIA—COMMITTALS BY CORONERS

Year	Murder			Manslaughter		
	Males	Females	Persons	Males	Females	Persons
1965	13	3	16	20	..	20
1966	22	1	23	22	2	24
1967	30	2	32	17	..	17
1968	22	4	26	9	1	10
1969	17	2	19	30	1	31

Higher courts

The tables which follow relate to distinct persons who have been convicted in the Supreme Court and Courts of General Sessions (now the County Courts) in Victoria in the years shown. In cases where a person was charged with more than one offence, the principal offence only has been counted.

VICTORIA—HIGHER COURTS : AGES OF PERSONS CONVICTED

Age group (years)	1967			1968		
	Males	Females	Persons	Males	Females	Persons
Under 19	359	14	373	369	12	381
20-24	593	20	613	591	22	613
25-29	221	10	231	242	12	254
30-34	149	12	161	145	7	152
35-39	124	5	129	116	14	130
40-44	119	3	122	81	5	86
45-49	58	4	62	72	5	77
50-54	53	..	53	47	1	48
55-59	25	1	26	25	2	27
60 and over	16	..	16	21	1	22
Total	1,717	69	1,786	1,709	81	1,790

VICTORIA—HIGHER COURTS: NUMBER OF PERSONS CONVICTED OF
SPECIFIC OFFENCES

Offence (a)	1967			1968		
	Males	Females	Persons	Males	Females	Persons
Against the person—						
Murder	7	1	8	5	..	5
Attempted murder	1	..	1	2	1	3
Manslaughter	14	2	16	6	2	8
Manslaughter with motor vehicle	6	..	6	1	..	1
Assault with grievous bodily harm	45	1	46	59	2	61
Assault	21	1	22	22	1	23
Carnal knowledge (under 16 yrs)	201	..	201	206	..	206
Carnal knowledge (16 and under 18 yrs)	5	..	5	5	..	5
Incest	15	1	16	17	1	18
Rape	17	..	17	34	..	34
Indecent assault on female	32	..	32	41	..	41
Indecent assault on male	29	..	29	23	..	23
Unnatural offences	22	..	22	32	..	32
Bigamy	2	..	2	3	..	3
Other offences against the person	7	..	7	12	2	14
Total	424	6	430	468	9	477
Against property—						
Robbery	103	4	107	87	2	89
Breaking and entering—						
Houses	225	16	241	238	9	247
Shops	56	1	57	72	..	72
Other	72	2	74	62	..	62
Larceny (excluding motor vehicles and cattle and sheep)	151	7	158	114	12	126
Illegal use and larceny of motor vehicles	74	1	75	86	1	87
Cattle and sheep stealing	14	..	14	27	2	29
Other offences against property	87	5	92	75	6	81
Total	782	36	818	761	32	793
Fraud, forgery, and false pretences	108	14	122	115	28	143
Other offences—						
Driving under the influence	54	..	54	24	..	24
Dangerous, etc., driving	108	1	109	66	1	67
Miscellaneous offences (b)	241	12	253	275	11	286
Total	403	13	416	365	12	377
GRAND TOTAL	1,717	69	1,786	1,709	81	1,790

(a) With the exception of murder, for which separate figures of attempted murder are shown, all offences include attempts.

(b) Includes breach of bond, probation, etc.

VICTORIA—HIGHER COURTS: PERSONS CONVICTED OF SPECIFIC OFFENCES: RESULT OF HEARING, 1968

Offence (a)	Result of hearing							Total
	Fined	Im- prison- ed twelve months and under	Im- prison- ed over twelve months	Death sen- tence	Sen- tence sus- pended on enter- ing a bond	Placed on pro- bation	Other	
Against the person—								
Murder	..	..	..	5	..	..	..	5
Attempted murder	..	..	1	..	1	..	1	3
Manslaughter	..	..	7	..	1	..	..	8
Manslaughter with motor vehicle	..	1	..	..	..	..	..	1
Assault with grievous bodily harm	4	11	27	..	11	6	2	61
Assault	2	10	..	..	11	..	9	23
Carnal knowledge (under 16 years)	..	27	9	..	121	40	2	206
Carnal knowledge (16 and under 18 years)	..	..	..	..	4	1	..	5
Incest	..	1	13	..	4	..	..	18
Rape	..	..	31	..	2	..	1	34
Indecent assault on female	3	8	17	..	7	3	3	41
Indecent assault on male	..	4	6	..	10	3	..	23
Unnatural offences	..	2	8	..	16	5	..	32
Bigamy	..	..	..	..	3	..	..	3
Other offences against the person	..	1	2	..	9	1	1	14
Total	9	65	121	5	200	59	18	477
Against property—								
Robbery	..	10	54	..	1	8	16	89
Breaking and entering—								
Houses	1	67	51	..	57	40	31	247
Shops	..	23	21	..	13	7	8	72
Other	..	21	18	..	13	8	2	62
Larceny (excluding motor vehicles and cattle and sheep)	5	39	17	..	37	27	1	126
Illegal use and larceny of motor vehicles	6	18	17	..	10	22	14	87
Cattle and sheep stealing	2	2	..	..	24	1	..	29
Other offences against property	6	22	7	..	39	5	2	81
Total	20	202	185	..	194	118	74	793
Fraud, forgery and false pretences	8	36	19	..	55	22	3	143
Other offences—								
Driving under the influence	19	3	..	..	2	..	..	24
Dangerous, etc., driving	49	5	..	..	11	2	..	67
Miscellaneous offences (b)	15	88	39	..	72	43	29	286
Total	83	96	39	..	85	45	29	377
GRAND TOTAL	120	399	364	5	534	244	124	1,790

(a) With the exception of murder, for which separate figures of attempted murder are shown, all offences include attempts

(b) Includes breach of bond, probation, etc.

VICTORIA—HIGHER COURTS: AGES OF PERSONS CONVICTED OF SPECIFIC OFFENCES, 1968

Offence (a)	Persons convicted—Age group (years)							Total
	17 and under	18-19	20-24	25-29	30-34	35-39	40 and over	
Against the person—								
Murder	1	1	1	..	2	5
Attempted murder	1	1	..	1	3
Manslaughter	3	..	..	2	3	8
Manslaughter with motor vehicle	1	..	..	..	..	1
Assault with grievous bodily harm	..	7	23	8	8	5	10	61
Assault	..	2	14	4	..	..	3	23
Carnal knowledge (under 16 years)	4	92	82	10	7	3	8	206
Carnal knowledge (16 and under 18 years)	3	2	..	..	..	5
Incest	..	7	15	4	3	3	9	41
Rape	..	7	20	5	1	1	..	34
Indecent assault on female	..	1	3	4	4	4	7	23
Indecent assault on male	..	4	6	2	4	7	9	32
Unnatural offences	1	2	..	3
Bigamy	3	..	1	..	4
Other offences against the person	..	3	6	..	..	1	1	14
Total	4	123	177	45	32	28	68	477

VICTORIA—HIGHER COURTS: AGES OF PERSONS CONVICTED OF SPECIFIC OFFENCES, 1968—continued

Offence (a)	Persons convicted—Age group (years)							Total
	17 and under	18-19	20-24	25-29	30-34	35-39	40 and over	
Against property—								
Robbery	2	24	39	12	7	3	2	89
Breaking and entering—								
Houses	9	72	84	22	22	13	25	247
Shops	2	13	30	11	8	5	3	72
Other	1	8	30	9	5	9	..	62
Larceny (excluding motor vehicles and cattle and sheep)	9	15	38	29	12	6	17	126
Illegal use and larceny of motor vehicles	3	36	27	11	2	5	3	87
Cattle and sheep stealing	..	1	9	8	4	3	4	29
Other offences against property	2	3	26	22	8	6	14	81
Total	28	172	283	124	68	50	68	793
Fraud, forgery, and false pretences	..	8	28	27	21	20	39	143
Other offences—								
Driving under the influence	..	..	2	4	2	2	14	24
Dangerous, etc., driving	..	3	12	10	5	7	29	67
Miscellaneous offences (b)	5	37	111	44	24	23	42	286
Total	6	40	125	58	31	32	85	377
GRAND TOTAL	38	343	613	254	152	130	260	1,790

(a) With the exception of murder, for which separate figures of attempted murder are shown, all offences include attempts.

(b) Includes breach of bond, probation, etc.

VICTORIA—HIGHER COURTS: NUMBER OF PERSONS CONVICTED: RESULT OF HEARING

Result of hearing	1967			1968		
	Males	Females	Persons	Males	Females	Persons
Fined	141	1	142	117	3	120
Imprisoned—						
Under 3 months	76	6	82	54	4	58
3 months and under 6	73	3	76	85	1	86
6 months and under 12	190	4	194	150	4	154
12 months	141	..	141	98	3	101
Over 12 months and under 2 years	88	1	89	115	..	115
2 years and over	209	6	215	244	5	249
Death sentence	4	..	4	5	..	5
Placed on probation	317	30	347	230	14	244
Released on recognisance or bond	368	16	384	489	45	534
Other	110	2	112	122	2	124
Total	1,717	69	1,786	1,709	81	1,790

Licensing legislation

General

After nearly one hundred years operation of the system of Licensing Magistrates or of the Licensing Court, the Licensing Act was repealed and the Licensing Court abolished by the *Liquor Control Act* 1968, which came into force on 1 July 1968. This Act incorporated a number of recommendations of the Royal Commission of Inquiry on Liquor in Victoria.

The Licensing Court of three members was replaced by the Liquor Control Commission of four members, the Chairman being a County Court Judge. Numerous alterations were made in the licensing law and practice of the State, the new Act completely re-writing the law. All fees taken under the new Act and all fines, penalties, forfeitures, and moneys incurred or accruing under it are paid into the Licensing Fund into which was also paid the amount standing to the credit of the Licensing Fund established under the *Licensing Act* 1958. A completely new code of compensation payable to owners and occupiers of licensed premises deprived of licences is set out in the Act, and provision is made for all payment of compensation out of the Licensing Fund, as well as all costs incurred in connection with the administration of the Act. Where the moneys remaining in the Licensing Fund on 30 June in any financial year are greater than the moneys therein on 1 July in that financial year, the surplus is to be transferred into the consolidated revenue.

VICTORIA—LICENSING FUND: REVENUE AND EXPENDITURE
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
REVENUE					
Licences, certificates, and permits	7,525	8,031	8,960	9,710	10,595
Interest on investments	20	20	20	20	20
Fees and fines	65	67	66	77	67
Total	7,610	8,118	9,046	9,807	10,682
EXPENDITURE					
Annual payments to municipalities	112	111	111	111	(a)
Compensation	4	5	3	12	19
Transfer to Police Super-annuation Fund	46	46	46	46	(a)
Salaries, office expenses, etc.	308	308	322	363	388
Transfer to revenue	7,139	7,648	8,563	9,276	10,275
Total	7,610	8,118	9,046	9,807	10,682

(a) Under the Liquor Control Act, which came into force on 1 July 1968, annual payments to municipalities and to the Police Superannuation Fund are no longer made from the Licensing Fund.

VICTORIA—NUMBER OF LIQUOR LICENCES

Type of licence	At 30 June—				
	1965	1966	1967	1968	1969
Hotel	1,552	1,548	1,539	1,541	1,517
Registered club	275	293	301	309	325
Retailed bottled liquor	494	511	531	552	587
Wholesale liquor merchant	64	65	65	67	71
Australian wine	31	28	25	18	20
Railway refreshment room	20	17	17	15	15
Vignerons	11	10	9	9	9
Brewer	6	6	7	7	7
Restaurant	79	90	94	105	136
Cabaret	..	..	..	2	7
Ship	..	..	..	..	1
Total	2,532	2,568	2,588	2,625	2,695

Racing legislation

The *Racing Act* 1958 regulates horse and pony racing and trotting, and dog racing. Under the Act the control of trotting and dog racing is vested in the Trotting Control Board and the Dog Racing Control Board, respectively.

Additional legislation, relating to totalisators and the Totalizator Agency Board, is found in the *Racing (Totalizators Extension) Act* 1960. Also, the *Stamps Act* 1958 contains provisions relating to the registration fees of bookmakers and bookmakers' clerks, and to the duty payable on betting tickets.

The following table gives details of horse racing and trotting meetings conducted during the years ended 31 July 1965 to 1969 :

VICTORIA—RACING AND TROTTING MEETINGS

Particulars	Year ended 31 July—				
	1965	1966	1967	1968	1969
RACING					
Number of meetings—					
Metropolitan courses	65	65	65	66	70
Other courses	322	342	358	356	361
Number of events—					
Metropolitan courses	500	494	490	507	533
Other courses	2,215	2,334	2,443	2,481	2,499
Amount of stakes—					
Metropolitan courses (\$'000)	1,951	1,967	1,957	2,023	2,226
Other courses (\$'000)	956	1,089	1,158	1,228	1,257
TROTTING					
Number of meetings—					
Metropolitan courses	36	37	37	37	36
Other courses	183	189	188	187	200
Number of events—					
Metropolitan courses	252	259	272	259	252
Other courses	1,241	1,427	1,419	1,423	1,568
Amount of stakes—					
Metropolitan courses	382	440	482	468	461
Other courses (\$'000)	322	438	463	516	562

Victoria Police

The functions of the Victoria Police Force can be broadly set out as the preservation of the Queen's Peace, the protection of life and property, and the prevention and detection of crime.

Recruitment

The Force is endeavouring to maintain a ratio of one policeman to every 700 population, although the figure in 1969 was 1:714. To maintain recruitment, cadetships are offered to youths between the ages of 16 and 18½ years, who are sworn in as constables with others who are recruited between the ages of 18½ and 35 years. All recruits serve a probationary period of one year before their appointments to the Force are confirmed.

Traffic

About 70 per cent of the work of the Police Force is concerned with the supervision of traffic. Registration of motor cars, testing drivers for licences, enforcing the Traffic Regulations and the Motor Car Act, and

checking of vehicle road-worthiness are all performed by the police. During the 12 months ending 31 December 1969, 34,919 accidents came under the notice of the police, 1,036 persons were killed in traffic accidents, and there were 25,481 casualties.

Traffic offences detected totalled 332,314, and the patrolling and checking of motorists by police resulted in the detection of persons wanted for other types of offences on many occasions. The average annual increase of over 6 per cent in accidents occurred again in 1968-69.

During 1969, 330 Mobile Traffic section members using 110 motor cars and 101 motor cycles checked 132,494 vehicles, made 13,238 amphotometer bookings for speed infringements, and travelled 3,837,878 miles for an average of 230 days duty on the road and 10.3 days in courts. They operated throughout the State, many from country centres.

Breath Analysis Section

The twenty members of this Section interviewed 3,850 drivers suspected of being under the influence of intoxicating liquor or drugs in 1969, and as a result, charged 721 with driving under the influence, and 2,528 with driving while having a blood alcohol content over 0.05 per cent.

Criminal Investigation Branch

Representing about 10 per cent of the Force, the Criminal Investigation Branch is composed of detectives drawn from the uniformed force. They must, currently, have at least six years police service, and have passed the examination for promotion to the rank of First Constable, before being eligible to join the Branch. They are then trained at the Detective Training School.

Certain detectives specialise in inquiries for which special squads have been formed. These include homicide, drug, company, and arson squads, manned by men who have special aptitude in the respective fields. Detectives are used on interchange duty between other States in Australia and in New Zealand.

Communications

Police received just under 0.75 million calls from the public during 1969, all handled by the control centre called D.24. This section recovered over 2,288 stolen vehicles, made 17,134 arrests, and questioned over 69,000 suspects.

The control room staff is being increased regularly and all directing personnel are now sub-officers. Telex messages were exchanged regularly with all State capitals and overseas countries. The Victoria Police is also the Australian headquarters for Interpol. Forty larger country police stations are now connected with D.24 by two-way radios, all of which are usable for communication direct to police cars.

As part of the State Disaster Organisation, police co-ordinate fire, ambulance, and airport resources in times of flood, bushfire, or other large scale emergencies.

Training

Primary training of Victoria Police recruits (as distinct from cadets) consists of twenty weeks at the Police Depot learning law, English, social studies, physical training, combat, drill, firearms, first aid, and swimming. Secondary classes are in detective training at the Detective Training School.

where members are given ten weeks' instruction in the latest scientific methods, and at the Sub-Officers' Training School, where law, prosecutions, and personnel management are taught. Other spheres for secondary training are at the Motor Cycle Riders School, Traffic School, Motor Driving School, and individual specialist training is also provided for fingerprint experts and for members of the Forensic Science Laboratory.

The Victoria Police Detective Training School and the Airlie Officers College attract police officers from South East Asian countries and Africa.

The Airlie Officers College teaches administration, social studies, and human relations to those about to be promoted to officer rank with a view to fitting them for administrative posts.

Motor Registration Branch

Motor Registration Branch business continued to increase in 1969-70. Transactions dealt with by the Branch were 4,482,519 in 1969-70 and collections amounted to \$95m in the same period.

The following statement shows the authorised and actual strengths of the Victoria Police, and the actual strength of certain sections of the Force on the dates shown :

VICTORIA—POLICE FORCE

Particulars	At 30 June—				
	1965	1966	1967	1968	1969
Authorised strength	4,470	4,572	4,620	4,731	4,781
Actual strength (a)	4,405	4,402	4,577	4,687	4,743
C.I.B., etc. (b)	644	644	649	657	666
Police-women	58	61	61	64	70
Cadets	61	127	134	138	176
Reservists	135	119	106	84	61
No. of inhabitants per active police officer (c)	701	704	699	698	714

(a) Includes police-women, but excludes cadets and police reservists.

(b) Criminal Investigation Bureau, plain clothes police, and scientific section.

(c) Includes police-women but not police reservists.

Further references, 1961-70

HOUSING AND BUILDING

Building development in the City of Melbourne, 1969

The estimated value of building approved in the City of Melbourne during the year ended 30 June 1969 was \$38.7m. Of this total, new buildings costing over \$250,000 accounted for \$23.5m and major alterations and additions (over \$250,000) for \$2.7m.

The most notable new building to be completed was the A.M.P. Society's "St James Building" at the corner of William and Bourke Streets. Another important construction was "Two-o-One Spring Street"—seventeen floors of a combination of own-your-own and rented flats. There are three more similar developments under construction, and several more proposed, all in the eastern end of the City. This development is reflected in the rapid rise in land values in the area.

There has also been considerable flat development in Carlton and North Melbourne both by the Housing Commission and Master Builders redevelopment.

The following major buildings, listed by the Melbourne City Council, were recorded by the Council as completed during the year ended 30 September 1969 :

- Alquay Pty Ltd, 486-492 Bourke Street.
- Australian Mutual Provident Society, 111-137 William Street.
- Capital and Counties (Vic.) Pty Ltd, 455-457 Little Collins Street.
- Cinema Centre (Hoyts), 134-144 Bourke Street.
- Colonial Mutual Life Association, 363-367 Little Collins Street.
- Commonwealth Banking Corporation, N.E. Cnr Flinders and Elizabeth Streets.
- Dalgety and New Zealand Loan Ltd, 457-471 Bourke Street.
- David Syme and Co. Ltd, Cnr Lonsdale and Spencer Streets.
- Farrer House Ltd, 24-28 Collins Street.
- Freemasons Association, 300-336 Victoria Parade.
- Industrial Acceptance Corporation Pty Ltd, 57-59 Exhibition Street.
- National Bank, 16-20 Landsdowne Street.
- Regents Park Land Pty Ltd, 170-176 William Street.
- State Savings Bank, 235-243 Queen Street.
- Two-o-One Spring Street Pty Ltd, 199-207 Spring Street.
- Victoria Insurance Co. Ltd 42-52 Market Street.

The City Council has provided the following list of major buildings (of over \$1m each) under construction in the City of Melbourne at 30 September 1969 :

- Australian Netherlands Properties Pty Ltd, 468-478 Collins Street.
- B.H.P. Co. Ltd, Cnr William and Bourke Streets.
- 15 Collins Street Pty Ltd, 13-15 Collins Street.
- Commonwealth Banking Corporation, 14-26 Elizabeth Street.
- M.C.C. Capital Counties (Vic.) Pty Ltd, 562-576 Bourke Street.
- Ralton Holdings Pty Ltd, 194-200 Bourke Street.
- Treasury Gate Pty Ltd, 97-99 Spring Street.

Bridges in Victoria

The early settlers in Victoria were quick to establish centres of agriculture and industry throughout the State and their efforts were accelerated by the discoveries of gold. It was not long before roads, railways, and harbours were built to service the growing economy. Places where rivers and streams could be crossed relatively easily became the sites for fords and punts, and the construction of bridges to replace them very soon became an urgent undertaking. The State had ample supplies of bridge-building materials—high strength timbers and excellent stone—and where the first bridges were often temporary structures in timber, they were soon replaced by fine stone constructions. Reference to early prints of Melbourne shows the first Princes Bridge to have been a handsome structure crossing the Yarra in a single stone span. A large number of the early stone bridges, built in the 1850s, are still in use. For example the fine bluestone bridge at Batesford, near Geelong, and many bluestone bridges still to be seen in the Western District, are almost all still in

excellent condition. The designs were straightforward, almost invariably symmetrical, well proportioned, and sparsely and discreetly ornamented. The north and north-east regions also offer fine examples; amongst them must be counted the Hughes Creek Bridge at Avenel on the Hume Highway and the beautiful granite single span Newtown Bridge at Beechworth.

The coming of the railways to Victoria gave the bridge builders great opportunities to show their art and ingenuity. Of the early trunk routes, the Bendigo railway is endowed with some of the noblest early bridges. The superb Malmsbury Viaduct stands unchallenged both in size and execution as the finest bluestone bridge in the State. It is situated some sixty miles from Melbourne and crosses the Coliban River. There are five graceful bluestone arches each spanning some 60 ft—the largest stone structure in the Cornish and Bruce contracts on this line which were all built about 1860. The Rupertswood Bridge of five arches in bluestone and the three arch granite bridge over Barkers Creek at Harcourt, both on the Bendigo line, are also noteworthy.

Wrought iron came to be used to an increasing extent in bridge engineering and girders of this material began to replace stone arches for bridge spans. In many instances cast iron was used for the supporting piers, although stone remained popular for piers and abutments as well as brickwork until the general acceptance of concrete. The spectacular Taradale Viaduct, again on the Bendigo line, near Malmsbury, was an outstanding example of the use of wrought iron girders and bluestone piers until comparatively recently when it was modified by the addition of lattice steel piers at the girder mid-spans to cope with the heavier trains. Many early wrought iron railway bridge sections were imported from England where I. K. Brunel supervised arrangements there on behalf of the Victorian Railways.

The use of timber for both road and railway bridges in Victoria was also important. The timber trestle bridges, though now mostly replaced by steel structures with concrete piers (many since the 1950s), were some of the finest timber structures in the State. They were often built on the narrow gauge lines and a fine example of one still stands between Belgrave and Selby on the Gembrook line, some 30 miles east of Melbourne.

Following the turn of the century, concrete, both in mass form and reinforced, and steel became the principal materials for bridge building. Reinforced concrete road bridges designed on systems developed by Sir John Monash and others, replaced older timber structures. An outstanding example of one such bridge is the Morell Bridge at Anderson Street, South Yarra. The Marshall sewerage aqueduct over the Barwon, near Geelong, built in 1913 is of world importance as a concrete structure built as a series of reinforced concrete cantilevers supporting the sewer main. The railway engineers in Victoria have always preferred steel girders for spans, though their work has led to considerable developments in mass concrete techniques for piers and abutments. The present pressing needs for increasing the capacity of the railway system have led to large scale rearrangements and duplications of trackwork with the consequent renewals of bridges. The firm policy of eliminating the level crossings especially on trunk routes has produced a number of road overpasses. These consist invariably of steel spans where the tracks are crossed and

their design is straightforward with no detracting superfluous detail. The Separation Street overpass at North Geelong and the Craigeburn overpass on the Hume Highway are good examples. The recently completed Heyington railway bridge over the deviated course of the River Yarra close to the South Eastern Freeway and the bridge over the Nepean Highway at Mordialloc are fine representatives of the recent work of the Railway Construction Board and their consultants.

The new freeways have produced a number of handsome bridges both in steel and concrete. The South Eastern Freeway Extension at Heyington crosses the Yarra by an elegant reinforced concrete bridge. Of the recent steel roadway bridges, the Williamstown Road bridge over the Geelong Road is a fine example. A number of small footbridges in concrete are particularly elegant and of these the Blackwood Mineral Springs bridge set in a beautiful river glade, heavily wooded, is a good representative. Children's footbridges over the highways are being built in increasing numbers and one such at Moorabbin is noteworthy as is the new cable stayed concrete sewer and footbridge over the Barwon at Geelong.

The West Gate Bridge over the Lower Yarra between Fishermens Bend and Yarraville has been designed to form the cardinal link of the new West Gate Expressway which for the first time in the history of Melbourne will provide a direct link between Geelong in the west and Dandenong in the south-east, two rapidly developing cities near Melbourne. This bridge of an aggregate length, including the concrete approach spans, of 8,500 ft, has been designed to have five major steel spans symmetrically disposed. It is intended that the river span of some 1,100 ft, together with the adjacent spans each of about 470 ft, will combine to form a cable stayed steel girder system with two 150 ft high towers, one at each end of the river span. This bridge has been designed to provide eight lanes of traffic and two additional service lanes and to give a clearance for ships of 176 ft above low water level.

Further references 1961-70 ; Development of Architecture in Victoria, 1962 ; Building Trends since 1945, 1963 ; Developments in Building Methods since 1945, 1964 ; Building Materials, 1966 ; Redevelopment of the Inner Residential Areas, 1967 ; Early Building in Victoria, 1968 ; Housing For Aged Persons, 1969 ; Building Trends in Melbourne since 1961, 1970

Supervision and control of building

The *Town and Country Planning Act* 1961 and the *Local Government Act* 1958 provide regulations for the preparation of planning schemes and the uniform control of building operations throughout Victoria. In general, the administration of the provisions of these Acts is carried out by councils of the local government authorities in the areas to which they apply.

Town and country planning

General

Statutory town and country planning was first introduced into Victoria in 1944 by the passing of the *Town and Country Planning Act* 1944. A major consolidation and amendment of the legislation occurred in 1961. This principal Act was substantially amended early in 1968 to include the following main objectives :

1. to increase the membership of the Town and Country Planning Board ;
2. to increase the Board's responsibilities, including the preparation of statements of planning policies ;
3. to set up a State Planning Council ;
4. to provide for the establishment of regional planning authorities ;
5. to provide for a tribunal to hear and determine town planning appeals ;
6. to extend the metropolitan planning area and define more satisfactorily the relationship for planning between the Melbourne and Metropolitan Board of Works, as the metropolitan planning authority, and metropolitan councils ; and
7. to improve the provisions of the 1961 Act in the light of experience gained since its inception.

The concept of a statement of planning policy will provide physical planning authorities with a co-ordinated outline of government policy as the basis for the formulation of detailed planning proposals.

The Act prescribes that one of the two functions of the State Planning Council shall be to co-ordinate planning, by State instrumentalities and semi-government authorities, of future works and developments for which they are individually responsible. The other function of the Council is to act as consultant and advisor to the Town and Country Planning Board in any statement of planning policy prepared by the Board, and in any other matter involving the interests of the State when regional or other planning schemes are prepared. Every responsible authority, including regional authorities, in preparing or amending a planning scheme, is to have due regard to any approved statement of planning policy which affects its planning area.

In addition to the Melbourne and Metropolitan Board of Works, which is the planning authority for the newly enlarged metropolitan planning area of 1,942 square miles, regional planning authorities have now been constituted at Western Port and Geelong, thus securing the whole of the Port Phillip District for the introduction and implementation of regional planning methods. The two new regional planning authorities have identities quite distinct from each other and from the Board of Works, although some interchange of data for comparison and information purposes is likely to take place ; each will nevertheless operate quite independently.

The Mornington Peninsula and Western Port Regional Planning Authority was established on 25 February 1969 and includes the whole of the municipal districts of Flinders, Hastings, Mornington, and Phillip Island and parts of the municipalities of Bass and Cranbourne. The Authority was renamed the Western Port Regional Planning Authority in August 1970. The Authority's area of responsibility is some 648 square miles.

The Geelong Regional Planning Authority comprises the whole of the municipalities of Geelong, Geelong West, Newtown, Queenscliffe, Bannockburn, Barrabool, Bellarine, Corio, and South Barwon. The Authority was established on 22 April 1969. Its area of responsibility is 973 square miles.

The Town Planning Appeals Tribunal has been created to hear and determine all appeals against decisions of responsible authorities with

respect to applications for permits under interim development orders and planning schemes. The Tribunal consists of three members appointed by the Governor in Council, one of whom shall be a barrister and solicitor of the Supreme Court of Victoria who shall be the chairman. One of the two remaining members shall be a person having experience in town and country planning, and the other shall have a knowledge of and experience in public administration, commerce, or industry.

Appeals were formerly heard by delegates appointed for this purpose by the Minister for Local Government and the determination was made by the Minister following a recommendation to him by the delegates. As the procedure had been very demanding on the Minister's time, the Government decided that it would be appropriate to have an independent administrative tribunal capable of gaining the confidence of the parties who will appear before it and who must abide by its decision.

The procedure in relation to appeals and hearings is generally the same as previously, but some matters of detail have been improved. The Tribunal is required to give reasons for its decisions and will have published for the information of authorities and persons concerned with town planning important or typical determinations together with reasons.

Planning control of foreshores and inland waterways

Following an examination of the need for the protection and proper development of the State's coastline, the Government decided in 1964 that planning schemes should be prepared for the 300 miles of the coastline not then under planning control. In 1965 schemes for the coastal areas from Lake Tyers to Cape Howe in the east (130 miles) and from Apollo Bay to the South Australian border in the western part of the State (170 miles) were commenced by the Board. Thus the whole of the 1,000 miles of Victoria's coastline is now subject to planning control.

It has also been found that tourism from the increasing mobility of the public has not been confined to the coastal areas but that it has spread to inland areas and particularly those which have natural lakes or man-made lakes, the result of water conservation schemes. While the protection of natural lakes and their surroundings generally comes within the scope of planning schemes prepared by local councils, the preparation of planning schemes in connection with the State's major reservoirs has been a task which has been undertaken by the Board.

Further references, 1968, 1970

Local Government Act

Under the *Local Government Act* 1958, Uniform Building Regulations provide for the uniform control of building operations in Victoria. Particulars relating to some of the powers and controls provided by these regulations may be found on page 327 of the *Victorian Year Book* 1961.

Building statistics

General

The statistics in succeeding pages deal only with the construction of buildings, as distinct from other construction such as railways, bridges, earthworks, water storage, etc. From 1 July 1966 there has been a slight break in the continuity of some of the series in several of the following

tables but this should not materially affect comparability. The break is caused by a variation in the treatment of alterations and additions to buildings. In the following tables, for periods before 1 July 1966, the figures *include* particulars of major additions (valued at \$10,000 and over) to buildings other than houses and *exclude* all alterations and all additions to houses, and all minor additions to other buildings. From 1 July 1966, however, the figures include all alterations and additions valued at \$10,000 and over. With the exception of the table relating to building approvals, particulars of minor alterations and additions are excluded, and in all tables particulars of renovations and repairs to buildings are excluded, because of the difficulty in obtaining complete lists of persons who undertake such operations. Figures for houses exclude converted military huts, temporary dwellings, flats, and dwellings attached to other new buildings.

Since the September quarter 1945 a quarterly collection of statistics of building operations has been undertaken, comprising the activities of all private contractors and government authorities engaged in the erection of new buildings, and owner-builders who erect buildings without the services of a contractor responsible for the whole job.

The bases of the collection are building permits issued by local government authorities, and contracts let or day labour work authorised by Commonwealth, State, semi-governmental, and local government authorities. As a complete list of government authorities and building contractors is maintained, details shown in succeeding tables embrace all local government areas. However, details for building approvals and owner-builders cover only those areas subject to building control by local government authorities, and exclude some rural areas not subject to permit issues.

The following definitions of terms used in the succeeding tables are necessary for an understanding of the data presented :

Building approvals : These comprise private permits issued by local government authorities together with contracts let or day labour work authorised by Commonwealth, State, semi-governmental, or local government authorities.

Private or government: Building is classified as private or government according to ownership at the time of commencement. Thus, building carried out directly by day labour or for government instrumentalities by private contractors, even though for subsequent purchase, is classed as government. Building carried out by private contractors for private ownership or which is financed or supervised by government instrumentalities but erected for a specified person is classed as private.

Owner-built : A building actually erected or being erected by the owner or under the owner's direction, without the services of a contractor who is responsible for the whole job.

Commenced : A building is regarded as having been commenced when work on foundations has begun. Owing to the difficulty of defining the exact point that this represents in building

operations, interpretations made by informants may not be entirely uniform.

Completed: A building is regarded as having been completed when the building contractor has fulfilled the terms of the contract or, in the case of owner-built houses, when the house is either completed or substantially completed and occupied (the value shown in this case is that of the owner-built house as a finished project). As with commencements, the interpretation placed on this definition by informants may not be entirely uniform.

Under construction (i.e., unfinished): Irrespective of when commenced, and regardless of whether or not work has actually proceeded at all times, *once* a building has been commenced it continues to be shown in the tables as under construction (i.e., unfinished) until completed. Buildings on which work has been permanently abandoned are *excluded*.

Numbers: The numbers of houses, flats, and shops with dwellings attached, represent the number of separate dwelling units. Each flat in a block of flats is counted as a separate dwelling unit.

Values: All values shown exclude the value of the land and represent the estimated value of the buildings on completion.

Building approvals

The following table shows the value of private and government building approved in Victoria for the years 1965-66 to 1969-70:

VICTORIA—VALUE OF PRIVATE AND GOVERNMENT
BUILDING APPROVED
(\$'000)

Year	Houses and flats	Other new buildings	Alterations and additions to buildings	Total all buildings
1965-66	225,170	233,438	47,922	506,530
1966-67	273,358	220,692	41,586	535,636
1967-68	309,080	207,259	41,469	557,808
1968-69	339,110	221,561	44,913	605,584
1969-70	364,916	319,218	47,788	731,922

In normal circumstances, information concerning building approvals is a primary indicator of building trends and gives some indication of the effect of varying economic conditions on the building industry. However, a complete comparison of buildings approved cannot be made against buildings commenced, as the relationship is affected by the fact that (a) some intended buildings are never begun, and new building plans may be re-submitted later, (b) estimated values recorded for building approvals may be affected by rising costs owing to delays in the commencement of buildings, and (c) as previously mentioned, building permits do not embrace the whole of the State.

Value of new buildings commenced

The following table shows the value of all new buildings commenced in Victoria, according to the type of building, for the years 1965-66

to 1969-70. It should be noted that before 1 July 1966 the figures include particulars of major additions (valued at \$10,000 and over) to buildings other than houses and exclude all alterations and all additions to houses and all minor additions to other buildings. From 1 July 1966, however, the figures include all alterations and additions valued at \$10,000 and over. Renovations and repairs are excluded.

VICTORIA—VALUE (WHEN COMPLETED) OF TOTAL NEW BUILDINGS
COMMENCED: CLASSIFIED BY TYPE
(\$'000)

Type of building	1965-66	1966-67	1967-68	1968-69	1969-70
Houses	183,625	195,968	212,545	241,646	263,536
Flats	45,090	71,220	90,644	96,935	92,886
Shops	18,248	23,010	13,627	24,329	19,540
Hotels, guest houses, etc.	4,993	6,916	8,285	20,708	21,556
Factories	68,112	52,601	54,654	54,419	65,830
Offices	36,100	56,312	28,984	34,699	87,279
Other business premises	18,500	16,832	31,858	21,855	26,265
Educational	30,839	35,604	35,419	44,905	46,671
Religious	3,536	3,554	2,484	2,916	3,929
Health	18,703	15,646	9,538	14,660	29,210
Entertainment and recreation	5,643	7,714	7,501	7,205	8,453
Miscellaneous	17,348	24,515	9,325	11,728	9,434
Total	450,737	509,892	504,864	576,005	674,588

As with building approvals, increases in the value of buildings commenced are not wholly attributable to increased building activity, but are partly the result of an almost continuous rise in the cost of building. It should also be realised that, in any period, where there are appreciable increases in the value of buildings commenced for industrial, commercial, business, health, etc., purposes, this movement could be misinterpreted to some extent, as these buildings may include the commencement of large scale projects, the completion of which may spread over several years.

Value of new buildings completed

The following table shows the value of all new buildings completed in Victoria, according to the type of building, for the years 1965-66 to

VICTORIA—VALUE OF TOTAL NEW BUILDINGS COMPLETED:
CLASSIFIED BY TYPE
(\$'000)

Type of building	1965-66	1966-67	1967-68	1968-69	1969-70
Houses	184,060	203,556	208,097	230,420	261,899
Flats	52,663	55,958	80,541	90,085	101,953
Shops	14,629	21,810	16,701	21,284	23,808
Hotels, guest houses, etc.	5,982	5,103	7,965	6,490	16,283
Factories	58,876	66,199	55,096	56,137	67,104
Offices	24,590	46,420	48,716	53,390	35,638
Other business premises	13,176	16,198	13,493	21,370	33,186
Educational	29,127	26,968	37,140	42,029	39,781
Religious	3,492	3,262	3,518	3,188	3,108
Health	11,149	10,631	10,751	10,352	21,367
Entertainment and recreation	4,668	4,691	4,778	9,714	9,807
Miscellaneous	12,963	11,147	10,574	33,667	15,176
Total	415,375	471,943	497,370	578,126	629,109

1969-70. As with commencements, from 1 July 1966 the figures include particulars of alterations and additions with a value of \$10,000 or over but prior to that date additions only of \$10,000 and over to existing buildings (other than houses) are included. Renovations, repairs, and minor alterations and additions are excluded.

The text to the previous table, regarding the reasons for movements in the value of new buildings over a period of time, also applies to the table above.

Value of new buildings under construction (i.e., unfinished)

The value of all new building work remaining unfinished increased from \$451,906,000 at 30 June 1969 to \$514,808,000 at 30 June 1970.

Value of work done during period

The following table shows the estimated value of work actually carried out during each year 1965-66 to 1969-70. For any building the sum of these values obtained during its construction equals the value of the building on completion. The figures include estimates for the value of work done on owner-built houses. The increases in value of work done over the periods are not necessarily wholly attributable to increased building activity, but are partly the result of increases in the cost of building.

VICTORIA—VALUE OF WORK DONE ON NEW BUILDINGS:
CLASSIFIED BY TYPE
(\$'000)

Type of building	1965-66	1966-67	1967-68	1968-69	1969-70
Houses	183,444	202,166	211,611	233,502	265,058
Flats	49,964	63,752	81,592	99,709	99,721
Shops	19,676	19,387	18,764	18,917	22,536
Hotels, guest houses, etc.	5,566	5,413	7,869	10,137	21,493
Factories	65,875	58,953	59,446	55,157	66,137
Offices	44,122	48,343	41,849	48,879	45,903
Other business premises	14,956	15,216	21,108	30,879	34,402
Educational	26,735	29,053	40,202	42,040	43,172
Religious	3,837	3,674	3,072	3,119	3,347
Health	11,834	13,693	15,844	15,437	21,331
Entertainment and recreation	4,198	5,942	7,420	8,484	9,325
Miscellaneous	12,195	21,810	16,973	14,115	12,775
Total	442,402	487,402	525,750	580,375	645,200

NOTE. The above table includes partly estimated values for owner-built constructions where actual value of work done during the period was not available.

Number of new dwellings

The following table shows the number of new houses and individual flat units (excluding conversions to flats) commenced, completed, and under construction classified by geographical distribution and ownership for the years 1965-66 to 1969-70. Due to the new concepts used at the Census of 30 June 1966 for the delimitation of the boundaries of the Melbourne Metropolitan Area (see pages 120-1), figures, other than "State total", subsequent to 30 June 1966, are not comparable with earlier years.

VICTORIA—NUMBER OF NEW HOUSES AND FLATS:
GEOGRAPHICAL DISTRIBUTION

Year	Commenced		Completed		Under construction (i.e., unfinished) at end of period	
	Houses	Flats	Houses	Flats	Houses	Flats
MELBOURNE STATISTICAL DIVISION (a)						
1965-66	12,807	7,764	13,388	8,924	5,643	4,763
1966-67	14,899	11,174	15,448	9,372	6,478	6,649
1967-68	16,003	13,587	15,545	11,798	6,925	8,416
1968-69	17,829	13,121	17,085	12,885	7,511	8,567
1969-70	18,771	12,457	18,772	12,971	7,407	7,826
REMAINDER OF THE STATE (a)						
1965-66	7,723	785	7,541	582	5,816	611
1966-67	6,191	813	6,678	766	3,945	574
1967-68	5,905	812	6,047	888	3,788	498
1968-69	5,752	996	5,646	890	3,779	591
1969-70	5,804	1,048	5,930	1,021	3,553	573
STATE TOTAL						
1965-66	20,530	8,549	20,929	9,506	11,459	5,374
1966-67	21,090	11,987	22,126	10,138	10,423	7,223
1967-68	21,908	14,399	21,592	12,686	10,713	8,914
1968-69	23,581	14,117	22,731	13,775	11,290	9,158
1969-70	24,575	13,505	24,702	13,992	10,960	8,399

(a) Figures subsequent to 30 June 1966 are not comparable with earlier years.

VICTORIA—NUMBER OF NEW HOUSES AND FLATS:
CLASSIFIED BY OWNERSHIP

Year	New houses and flats erected for—				Total houses and flats
	Government ownership (a)	Private ownership (a)			
		By contractors	By owner- builders	Total private	
COMMENCED					
1965-66	2,865	23,271	2,943	26,214	29,079
1966-67	3,180	27,137	2,760	29,897	33,077
1967-68	2,321	30,936	3,050	33,986	36,307
1968-69	2,549	31,903	3,246	35,149	37,698
1969-70	3,208	31,649	3,223	34,872	38,080
COMPLETED					
1965-66	2,935	24,233	3,267	27,500	30,435
1966-67	3,488	25,799	2,977	28,776	32,264
1967-68	2,367	28,967	2,944	31,911	34,278
1968-69	2,251	30,914	3,341	34,255	36,506
1969-70	2,975	32,005	3,714	35,719	38,694
UNDER CONSTRUCTION (i.e., UNFINISHED) AT END OF PERIOD					
1965-66	2,159	10,251	4,423	14,674	16,833
1966-67	1,851	11,589	4,206	15,795	17,646
1967-68	1,804	13,519	4,304	17,823	19,627
1968-69	2,102	14,292	4,054	18,346	20,448
1969-70	2,326	13,561	3,472	17,033	19,359

(a) See definitions on pages 597 and 598.

Number of new houses

Particulars of the number of new houses, classified by the material of outer walls, commenced, completed, and under construction for the years 1965-66 to 1969-70 are shown in the following table :

VICTORIA—NUMBER OF NEW HOUSES: CLASSIFIED BY MATERIAL OF OUTER WALLS

Year	New houses					
	Brick, concrete, and stone	Brick veneer	Wood	Asbestos-cement	Other	Total
COMMENCED						
1965-66	411	16,416	1,916	1,567	220	20,530
1966-67	380	17,166	1,646	1,551	347	21,090
1967-68	516	18,343	1,346	1,494	209	21,908
1968-69	538	20,266	1,085	1,566	126	23,581
1969-70	642	21,126	937	1,797	73	24,575
COMPLETED						
1965-66	650	16,232	2,233	1,678	136	20,929
1966-67	419	17,805	1,913	1,614	375	22,126
1967-68	444	17,934	1,522	1,433	259	21,592
1968-69	531	19,228	1,218	1,594	160	22,731
1969-70	641	21,055	1,133	1,796	77	24,702
UNDER CONSTRUCTION (i.e., UNFINISHED) AT END OF PERIOD						
1965-66	499	7,499	1,511	1,770	180	11,459
1966-67	460	6,860	1,244	1,707	152	10,423
1967-68	533	7,252	1,059	1,769	100	10,713
1968-69	519	8,108	894	1,699	70	11,290
1969-70	551	8,088	638	1,651	32	10,960

VICTORIA—NUMBER OF NEW HOUSES AND FLATS COMMENCED, 1959-60 TO 1968-69

For government instrumentalities, owner-builders, and private persons (or firms)

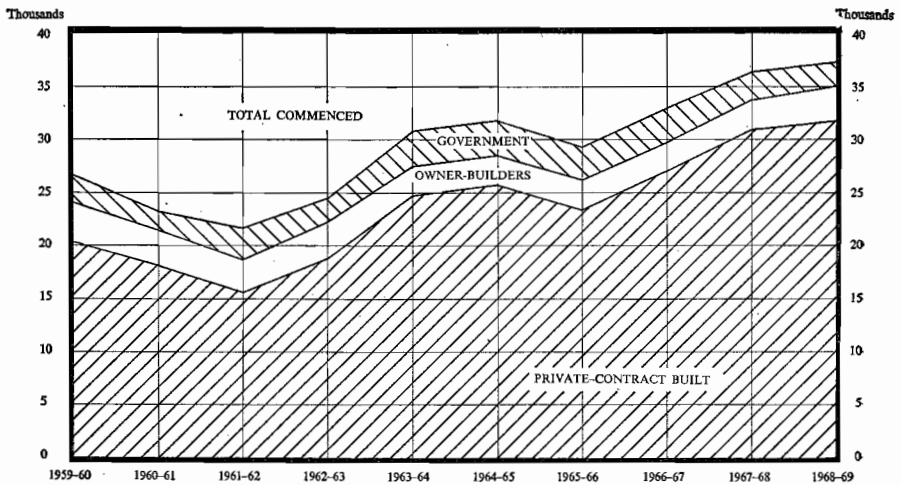


FIGURE 14. Graph showing number of new houses and flats commenced, classified according to ownership.

VICTORIA—PERCENTAGE NUMBER OF NEW HOUSES
COMMENCED BY KINDS, 1959-60 TO 1968-69

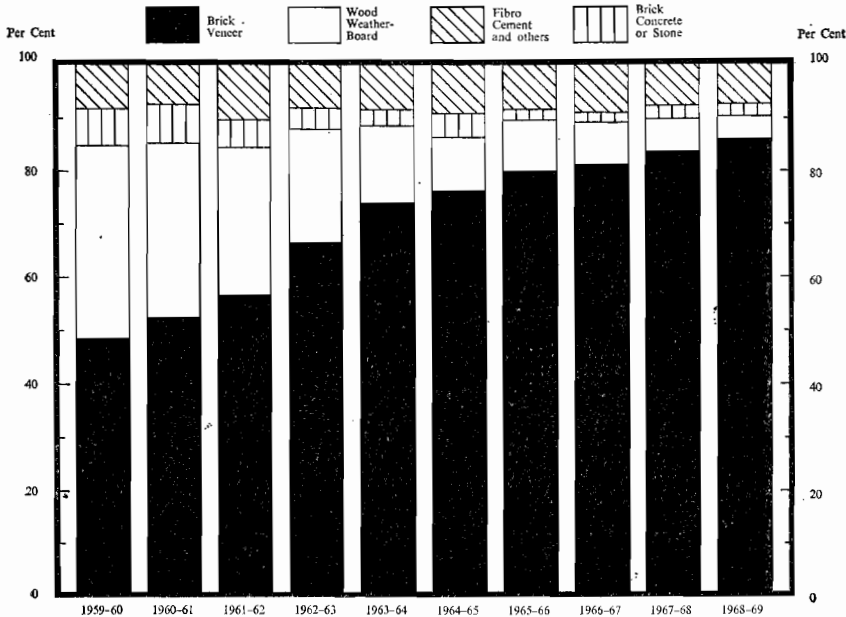


FIGURE 15. Graph showing percentage number of new houses commenced, classified according to materials of outer walls.

Government housing activities

Commonwealth authorities

Department of Housing

The principal functions of the Commonwealth Department of Housing include the administration of the Commonwealth-State Housing Agreements, the War Service Homes Act, the Home Savings Grant Act, the States Grants (Dwellings for Aged Pensioners) Act, and the Housing Loans Insurance Act under which the Housing Loans Insurance Corporation was established. It is also responsible for the provision, management, and maintenance of flats made available by the Commonwealth as transitory accommodation for migrant families.

Commonwealth-State Housing Agreements

Since 1945 the Commonwealth has entered into a series of Housing Agreements with the State of Victoria (and all other States) under which the Commonwealth advances loan funds to the State for the construction of dwellings primarily for families of low or moderate means. Advances were made under the first (1945) Agreement until 30 June 1956. A new Agreement (1956) came into effect as from 1 July 1956 and advances have continued to be made under this Agreement ever since, subject to minor amendments to its terms in 1961 and 1966.

The 1956-1966 Agreement requires the State to divide the advances of loan funds received from the Commonwealth each financial year into two parts. One part is to be used for the erection of dwellings by the

State housing authority for rental or sale. The other part, which shall be not less than 30 per cent of the advances made, is to be used to provide loans for persons wishing to build or purchase a home privately through housing societies and other approved institutions. For the purpose of these loans the State is required to maintain a Home Builders' Account. Commonwealth advances of loan funds during 1968-69 (\$34,500,000) were \$24,150,000 to the Housing Commission, Victoria, and \$10,350,000 to the Home Builders' Account.

In addition to the "new" loan moneys of \$10,350,000, an amount of \$5,916,000 became available for lending from the Home Builders' Account during 1968-69 from surpluses resulting from the revolving nature of the Home Builders' Account. Co-operative terminating housing societies in Victoria were advanced \$16,144,200 from the Home Builders' Account during 1968-69.

Under the 1956-1966 Agreement the Commonwealth may also require the State to set aside for the erection of housing for serving members of the defence forces an amount not exceeding 5 per cent of the loan funds allocated to the State Housing Commission. The Commonwealth must make supplementary advances to the State to match any amount so set aside. Supplementary advances of \$1,538,313 were made by the Commonwealth in 1968-69.

The Commonwealth advances the loan funds to the State at a concessional interest rate of 1 per cent below the long-term Commonwealth bond rate. At 10 July 1969 the long-term bond rate was 6 per cent per annum.

Operations under the Commonwealth-State Housing Agreements in Victoria to 30 June 1969 are summarised as follows :

1945 Agreement—1 July 1945 to 30 June 1956

Loan funds advanced	\$171,562,000
Number of dwellings completed by State Housing Commission	30,925

1956-1966 Agreement—1 July 1956 to 30 June 1969

	\$
Loan funds advanced	338,700,000
Loan funds allocated to State Housing Commission	241,030,000
Loan funds allocated to Home Builders' Account	97,670,000
Drawings from Home Builders' Account by co-operative terminating housing societies	130,175,566
Supplementary advances made by Commonwealth for housing for defence forces	19,777,768
	No.
Dwellings completed by State Housing Commission	31,898
Dwellings completed or purchased under Home Builders' Account	20,278

War Service Homes

Under the *War Service Homes Act* 1918-1968, the Commonwealth Government provides assistance in acquiring a home to persons who were members of the Australian Forces and Nursing Services enlisted or appointed for or employed on active service outside Australia or on a ship

of war, during the First and Second World Wars, and persons who served in the war-like operations in Korea or Malaya, or who have served on "special service" as defined in the *Repatriation (Special Overseas Service) Act 1962-1968*. Assistance may be granted also to dependent widowed mothers of unmarried eligible persons and to the widows of eligible persons.

The Director of War Service Homes is responsible for the administration of the War Service Homes Act, subject to the directions of the Minister for Housing. The Director may erect homes on land acquired for that purpose or owned by an eligible person; sell homes on a rent-purchase system; and make advances for the erection or purchase of homes and, subject to certain conditions, for the discharge of a mortgage on a home.

The maximum loan which may be made available is \$8,000 and a period of repayment may be granted up to 45 years. In the case of a widow or widowed mother of an Australian ex-serviceman the period may be extended to 50 years. The rate of interest is 3½ per cent per annum.

The following table shows the number of homes provided in Victoria under the War Service Homes Act, the total amount advanced under the Act, the instalments paid, and the number of loans repaid in each of the five years from 1964-65 to 1968-69 :

VICTORIA—WAR SERVICE HOMES SCHEME : OPERATIONS

Year	Homes provided during year				Total homes provided from inception to end of year	Annual expenditure	Instalments paid (a)	Loans repaid
	By erection	By purchase	By discharge of mortgage	Total				
1964-65	360	1,780	521	2,661	74,747	\$'000 17,642	\$'000 18,134	1,396
1965-66	373	1,956	461	2,790	77,537	18,394	18,681	1,395
1966-67	344	1,447	369	2,160	79,697	14,401	20,149	1,518
1967-68	187	1,046	321	1,554	81,251	10,511	20,298	1,532
1968-69	167	1,320	326	1,813	83,064	13,085	21,039	1,576

(a) Includes excess instalment payments.

Home Savings Grant Scheme

The purpose of the Home Savings Grant Scheme is to assist young married persons, and young widowed persons with dependent children, to purchase or build their own homes. The Scheme is also aimed at increasing the proportion of total private savings available for housing by encouraging young people to save with those institutions that provide the bulk of long-term housing finance.

The Scheme is governed by the *Home Savings Grant Act 1964-1967* which authorises the payment of the grants from the National Welfare Fund.

The Scheme provides for the payment of grants of \$1 for every \$3 saved by eligible persons under 36 years of age for the first home they own after marriage. The savings must be made in an approved form and held over a period of at least three years immediately before the date the contract to buy or build the home was made, or the building of the home began. The maximum grant to a married couple, to a husband or wife

if only one is eligible, or to a widowed person, is \$500 on savings of \$1,500 or more. Smaller grants, down to a minimum of \$10, are payable on lesser amounts saved.

The grant is payable for existing homes and homes being built. A home unit or own-your-own flat may also qualify. The value of the home, including the land, the house itself, and any other improvements, must not exceed \$15,000, if the contract to buy or build the home was made, or building of the home began, on or after 28 November 1966. Most homes are eligible, the main exception being homes purchased from the State housing authorities that have been built with money advanced by the Commonwealth under the Commonwealth-State Housing Agreement at concessional rates of interest.

The main forms of savings acceptable under the Scheme are Home Savings Accounts with savings banks, fixed deposits designated as Home Savings Accounts with trading banks, and deposits with or shares in registered building or co-operative housing societies.

The following tables prepared by the Homes Savings Grant Branch of the Department of Housing show particulars of its activities for the years 1966-67 to 1968-69.

VICTORIA—HOMES SAVINGS GRANT SCHEME : OPERATIONS

Year	Applications received	Applications approved	Grants approved	Average grant	Expenditure from National Welfare Fund
	No.	No.	\$'000	\$	\$'000
1966-67	9,902	8,929	3,928	440	3,891
1967-68	11,329	10,717	4,527	422	4,470
1968-69	11,685	9,948	4,233	426	4,379

As grants are payable only to eligible persons under the Act, details in the following tables should not be regarded as being applicable to home-owners in general.

VICTORIA—HOME SAVINGS GRANT SCHEME : APPLICATIONS APPROVED, MANNER OF ACQUISITION, AND TOTAL VALUE OF HOMES

Manner of acquisition	1967-68		1968-69	
	Applications approved	Total value	Applications approved	Total value
	No.	\$'000	No.	\$'000
Purchase of house (a)	5,992	62,550	5,743	63,983
Purchase of flat/home unit	60	638	59	639
Built under contract	4,084	47,956	3,729	46,102
Owner-built	581	(b) 6,509	417	(b) 4,717
Total all homes	10,717	117,654	9,948	115,440

(a) Includes purchase of new and previously occupied houses.

(b) Usually based on the cost of the land and the assessed value of the dwelling.

The average values of homes for which applications for grants were approved during 1967-68 and 1968-69 were \$10,978 and \$11,604, respectively.

VICTORIA—HOME SAVINGS GRANT SCHEME : APPLICATIONS APPROVED,
METHOD OF FINANCING, AND AVERAGE AMOUNT OF
MORTGAGE FINANCE

Year	First mortgage loan only	First and second mortgage loans	Other (a)	Total mortgage	Average first mortgage loan (b)	Average second mortgage loan
	No.	No.	No.	No.	\$	\$
1966-67	6,942	1,320	667	8,929	7,030	1,507
1967-68	8,341	1,544	832	10,717	7,182	1,542
1968-69	8,109	1,260	579	9,948	7,894	1,646

(a) Homes financed either from the applicant's own resources or with personal or unsecured loans or purchased under a terms contract of sale.

(b) Includes homes financed with first mortgage only and with first and second mortgage loans.

Transitory flats for migrants

In 1967 the Commonwealth Government decided to introduce, as an experiment, a scheme to provide fully furnished flats for occupation by newly arrived migrant families for maximum periods of six months. The purpose of the scheme is to improve the standard of transitory accommodation available to migrant families and to allow them to enjoy a normal family life during their settling-in period. The current programme provides for 440 flats, of which about 100 are being provided in Melbourne. The Commonwealth Department of Housing is responsible for the provision, management, and maintenance of the flats.

Dwellings for Aged Pensioners Scheme

The Scheme is governed by the *States Grants (Dwellings for Aged Pensioners) Act* 1969 which was assented to on 27 September 1969. The legislation arose from the Commonwealth Government's offer to make grants to the States for the provision of self-contained accommodation for eligible single age pensioners, upon the States undertaking not to reduce the level of their expenditure during recent years on aged persons housing from funds other than the grants.

An amount of \$25m has been allocated among the States to be made available to them over the 5 year period 1969-70 to 1973-74.

The purpose of the Scheme is to provide reasonable accommodation, at rents they can afford to pay, for single elderly pensioners living alone in private accommodation and paying too high a proportion of their pensions in rent. Accordingly, an eligible pensioner as defined by the Act is a person in receipt of an age pension, or one who qualifies for a service pension because of age, and is entitled to receive supplementary assistance under the *Social Services Act* 1947-1969 or *Repatriation Act* 1920-1969.

Building schemes are submitted by the State housing authorities to the Department for approval by the Minister. The accommodation to be provided, apart from meeting other requirements, must be single, self-contained, of an adequate size and standard, and be available at reasonable rentals. Following approval of each scheme the Department arranges payment of a grant in quarterly instalments in accordance with the progress made on construction.

The Minister has approved for the purposes of the Act all nine building schemes submitted to date by the Housing Commission, Victoria. These schemes, estimated to cost \$1,675,000 will provide 316 units of accom-

modation and the first grant sought (\$200,000) was paid on 10 April 1970.

Housing Loans Insurance Corporation

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act 1965-1966* to administer the Commonwealth Government's Housing Loans Insurance Scheme under which approved lenders may be insured against losses arising from the making of housing loans. The Corporation consists of a Chairman (who is also Managing Director) and a Deputy Chairman, who are full-time members, and three part-time members, all of whom are appointed by the Governor-General.

The main purpose of the Housing Loans Insurance Scheme is to assist people to borrow as a single loan, at a reasonable rate of interest, the money they need and can afford to re-pay to obtain a home suited to their requirements.

To encourage lenders to make high ratio loans, the Corporation may insure a loan of up to \$30,000. The maximum loan to valuation ratio is 95 per cent for loans up to \$15,000 in amount for houses. For other loans the maximum is 90 per cent. Before March 1969 the maximum amount of loan was \$20,000.

A once and for all premium of 1.5 per cent of the amount of the loan is charged by the Corporation on loans comprising 80 per cent to 95 per cent of the valuation of a home. On loans less than 80 per cent valuation, the insurance premium falls progressively down to 0.5 per cent on loans comprising 70 per cent and less of valuation. The premium is payable by the borrower but lenders may agree to add it to the amount of the loan for repayment by the borrower over the period of the loan. At March 1970 the maximum rate of interest chargeable on insured loans was $7\frac{3}{4}$ per cent per annum (increased from $7\frac{1}{2}$ per cent per annum in October 1969) and the maximum period for repayment is forty years (increased from thirty-five years in July 1968). The maximum rate of interest is kept under review and may be varied by the Corporation with the concurrence of the Commonwealth Minister for Housing.

The Corporation will insure a loan made to enable a borrower who is to occupy the dwelling to buy or build a house, to buy a home unit, or to discharge an existing mortgage. A loan for a dwelling consisting of two units of accommodation is insurable if one of the units is to be occupied by the borrower. Loans for alterations and extensions and loans to meet expenses of providing or improving lighting, sewerage, drainage, fences, roads, etc., are also insurable. An insurable loan normally must be secured by a first mortgage over the property concerned, but a second mortgage may be an acceptable security for a loan for such purposes as minor alterations or improvements to the property.

An insured loan may be made only by an approved lender. Approved lenders are appointed by the Corporation from within approved classes of lenders specified by the Commonwealth Minister for Housing. Approved classes include banks, building societies, life insurance and general insurance companies, trustee companies, friendly societies, mortgage management companies, solicitors, and trustees of superannuation funds. The last two classes were added in November 1968.



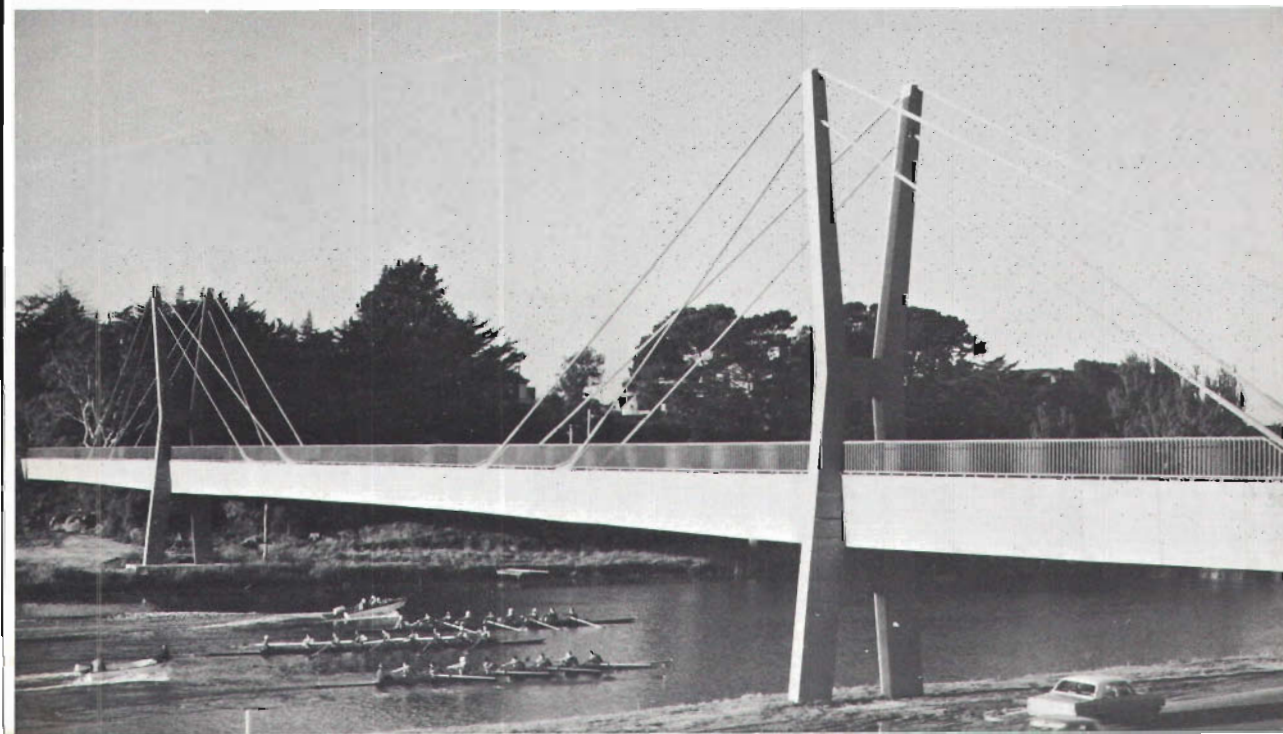
This bluestone viaduct at Malmsbury carries the Melbourne-Bendigo railway over the Coliban River. Including the approaches it is 500 feet long and has five arches, each of 60 foot span.

Victorian Railways

Bridges of Victoria

The new Barwon Grange sewer bridge and footway.

Cement and Concrete Association of Australia



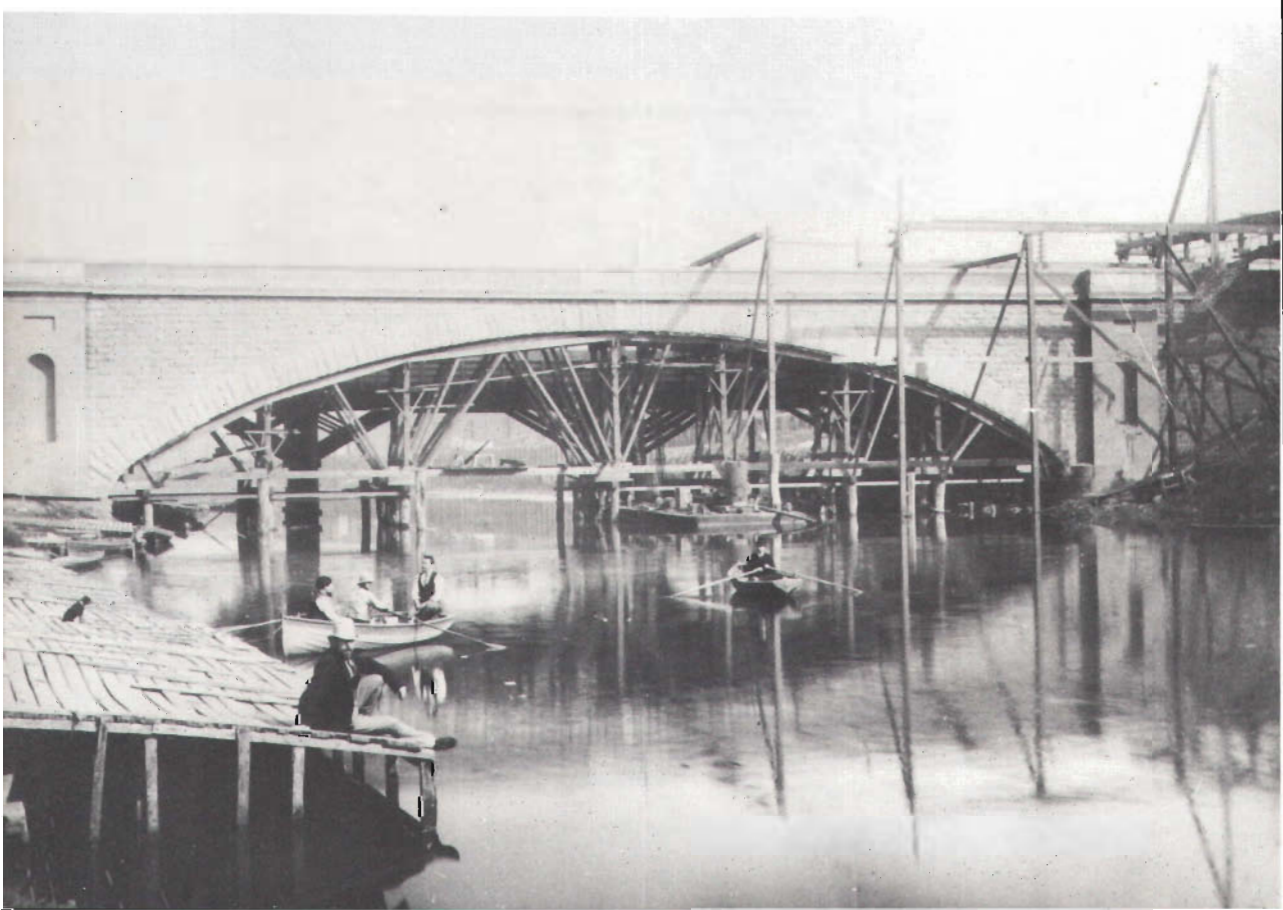


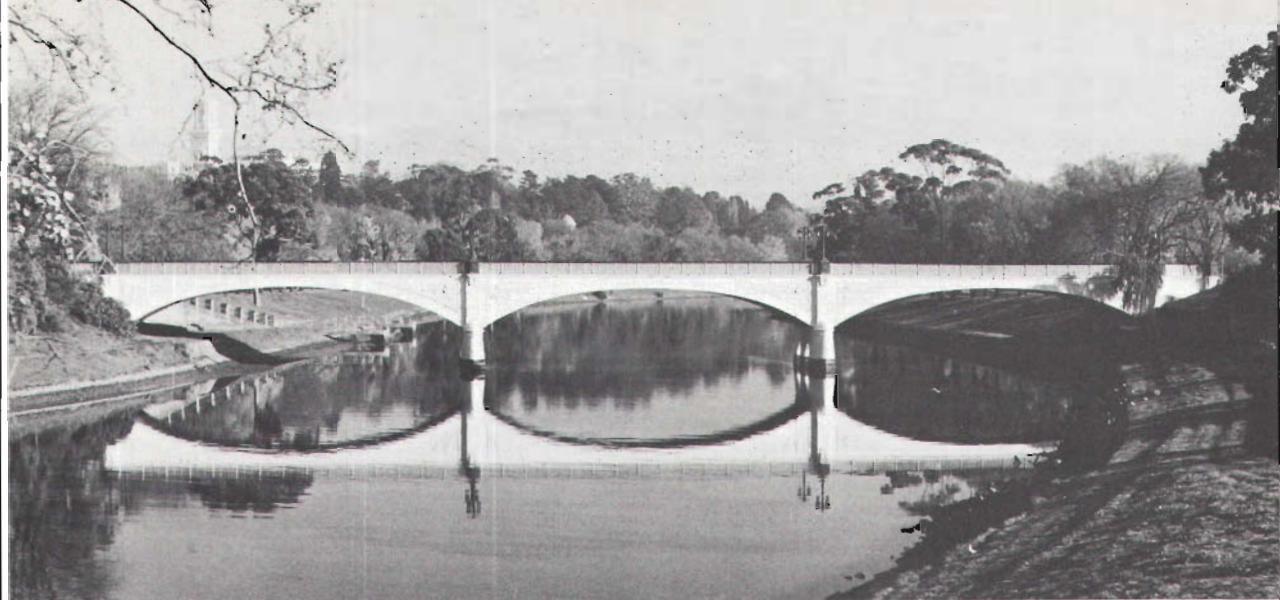
An informative early print of Melbourne seen from the south bank of the River Yarra. The earlier Princes Bridge, a stone structure of one simple and most graceful span, stands out clearly, with St Paul's Church to the right of it on the site where St Paul's Cathedral stands today. The present Princes Bridge was built in 1888, when the river was widened and deepened.

La Trobe Collection, State Library of Victoria

The earlier Princes Bridge from a photograph probably taken in the early 1850s showing the bridge nearing completion with the stone arch centering timbers awaiting removal.

La Trobe Collection, State Library of Victoria





The Morell Bridge was designed in 1899 by Sir John Monash and carries Anderson Street across the Yarra in three graceful arches built of reinforced concrete, an early use of this material in bridge construction in Victoria. The form of the bridge is reminiscent of a stone structure.

Commonwealth Bureau of Census and Statistics

A fine bluestone elliptical arch bridge of single span built in 1862 to convey the Calder Highway over the stream at Woodend. The bridge was widened and restored in later years to provide for increased traffic.

Country Roads Board



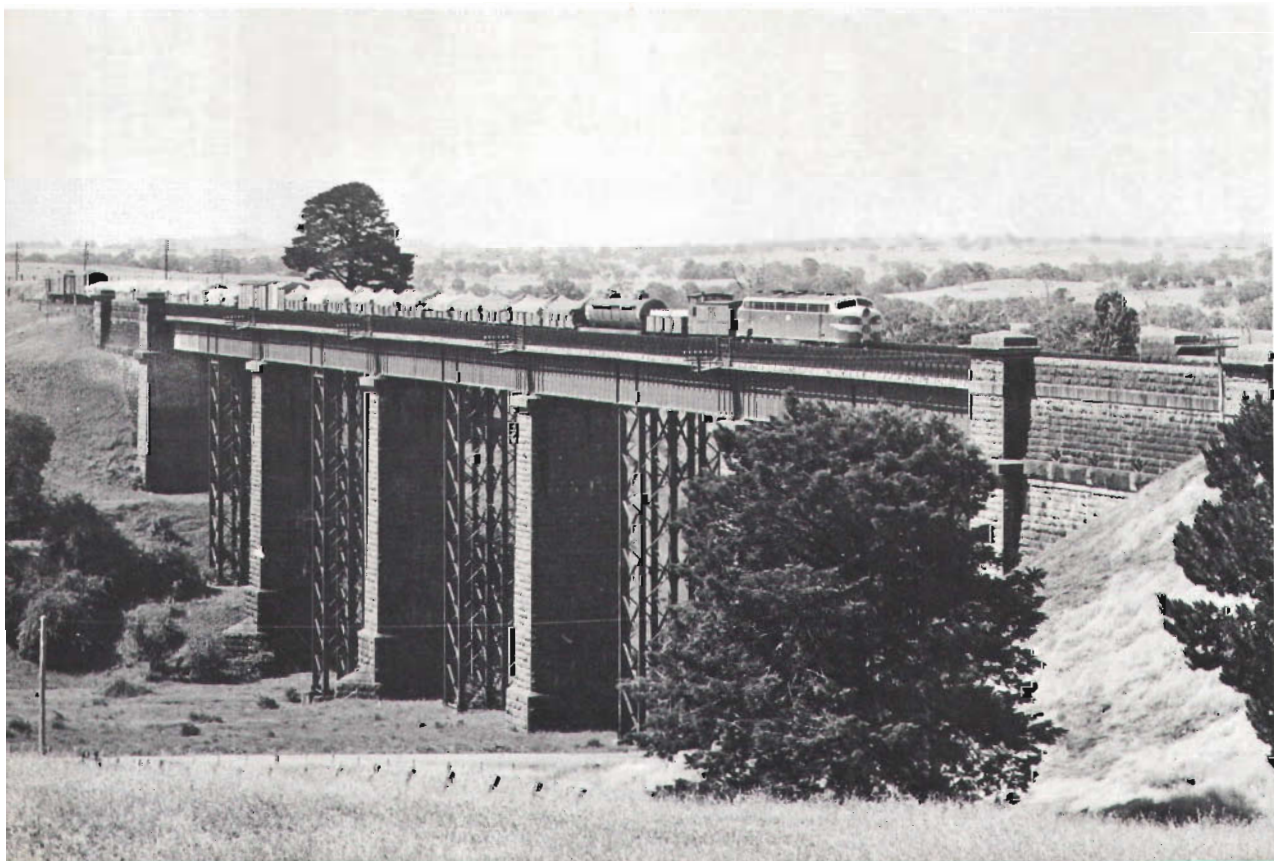


This viaduct of wrought iron plate girders supported by bluestone piers and abutments carries the Melbourne–Bendigo railway over the valley at Taradale. One of the largest single works in the Cornish and Bruce contracts for this railway, it was built about 1860. The photograph was taken shortly after construction. The increased weight of locomotives and the higher capacity of rolling stock of later years required the addition of trussed steel supports at each mid-span, a device which detracts from the appearance of the viaduct today.

Victorian Railways

The viaduct today, showing the steel supports at the mid-span of each girder.

Victorian Railways





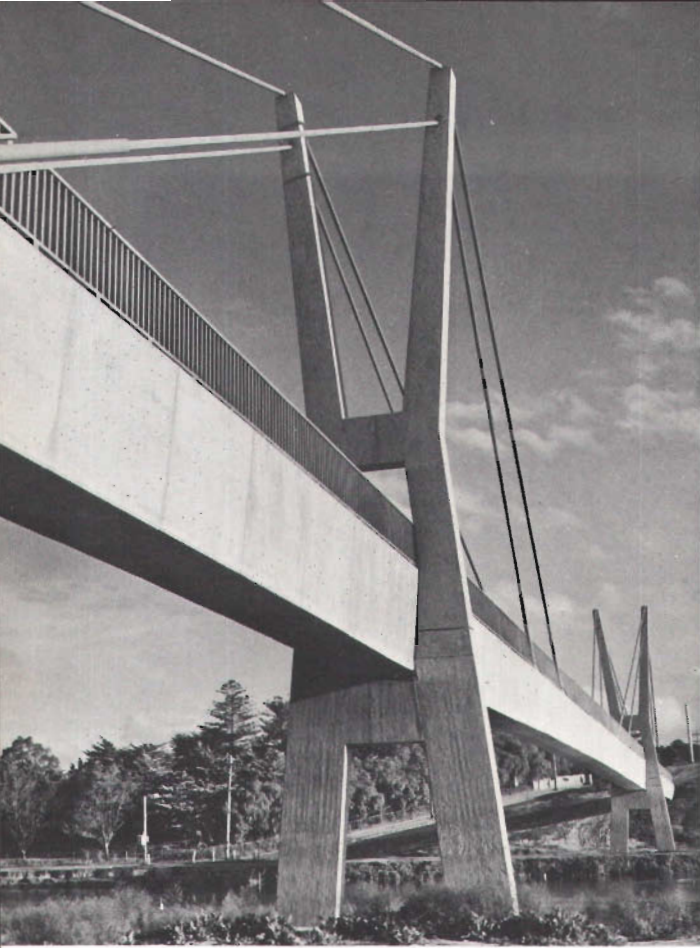
An early photograph of the old railway bridge at Heyington. Cast iron piers support the lattice girders of the river span and the two side spans. Timber structures formed the approaches.

Victorian Railways

A notable project of bridge and river diversion works at Heyington. The photograph, taken in August 1969, shows the new railway bridge built for the Victorian Railways by the Railways Construction Board; the River Yarra diversion works necessary for the extension of the South Eastern Freeway of the Melbourne and Metropolitan Board of Works; and the new work to the footings of the pylons of the grid of the State Electricity Commission of Victoria.

Victorian Railways



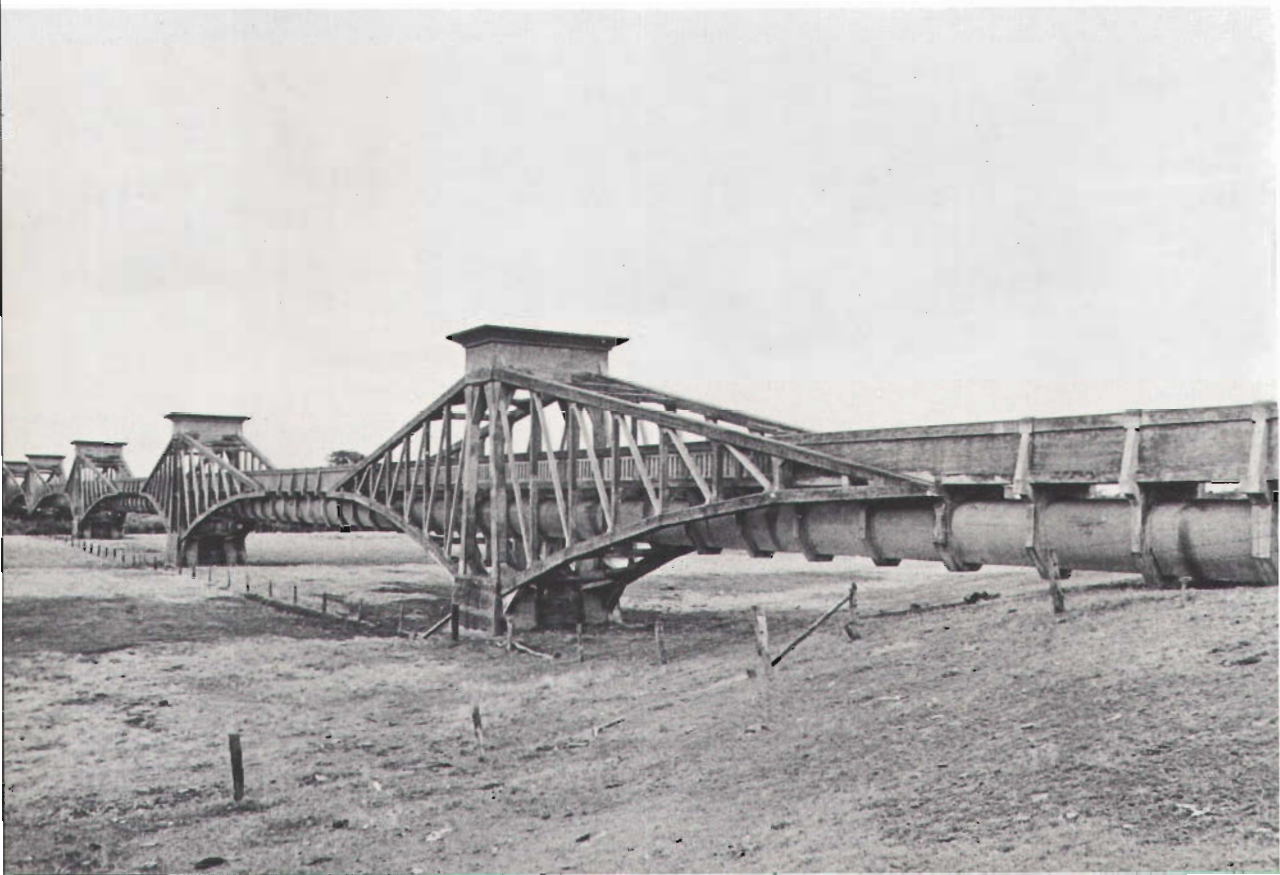


A good example of recent reinforced concrete bridgework, this bridge conveys a sewer pipe and footway across the Barwon River, between Barwon Grange and Kardinia. This close view shows clearly the cable-stayed structural system. It was designed by J. L. van der Molen of Melbourne for the Geelong Waterworks and Sewerage Trust.

Cement and Concrete Association of Australia

The Marshall Aqueduct, near Geelong, conveys a principal sewer and footway across the Barwon Valley between Breakwater and Marshall at a point where the Barwon River and a tributary form Goat Island. This structure, of total length 2,480 feet, was built in reinforced concrete by Tasmanian contractors Stone and Siddle between 1913 and 1915 for the Geelong Waterworks and Sewerage Trust. There are thirteen spans, supported by successive cantilevers as illustrated, each arm projecting 68 feet. This aqueduct stands today as a most notable example in the early development of reinforced concrete technology.

Geelong Waterworks and Sewerage Trust





A fine example of recent Country Roads Board design in school footbridges. This one crossing the Nepean Highway at Moorabbin has a main span of about 110 feet, with a footway width of 5 feet 6 inches. The bridge is built of prestressed concrete beams, transported for erection at the site.

Cement and Concrete Association of Australia

This reinforced concrete footbridge crosses the stream in a beautiful glade at Blackwood, a popular tourist venue in the mineral springs district. This elegant structure was built recently as a joint project between the Ministry of Tourism and the Shire of Ballan. The bridge is about 110 feet in length and was designed by John Koschade, engineer, and Peter Staughton, architect, both of Melbourne.

Commonwealth Bureau of Census and Statistics





This bridge crosses over the River Murray to the New South Wales side at Barmah. Constructed in seven equal spans of post-tensioned precast concrete girders, it has a total length of 550 feet. With its clean lines and advanced structural techniques, this bridge is a good representative of recent bridgework of the Country Roads Board of Victoria. The old cable hauled punt which the bridge has replaced is seen in the foreground.

Country Roads Board

The West Gate Bridge, conveying the West Gate Freeway over the lower Yarra, will be the largest road bridge in Australia with a total length of 8,352 feet. The river span of 1,102 feet 6 inches, a cable-stayed steel structure, will provide a clearance of 176 feet above low water to allow shipping to move upstream to the Swanson Container Terminal and the Victoria Dock complex. The bridge will link the Princes Highway east and west of Melbourne, avoiding the heart of the city. This illustration, a drawing of the structure, indicates the appearance of the project upon completion.

Lower Yarra Crossing Authority



The Housing Loans Insurance Corporation commenced its insurance operations in November 1965.

During 1968-69, 3,373 loans for \$27.3m were insured in Victoria. Comparable figures for 1967-68 were 2,251 loans for \$17.7m.

State authorities

Housing Commission, Victoria

The recommendation of a Board of Inquiry in 1936, which investigated housing conditions within the State, resulted in the passing of the *Housing Act 1937*, and the appointment of the Housing Commission in March 1938 to be the housing authority of the State.

The main objects of the Commission as now laid down are the improvement of existing housing conditions; the provision of adequate and suitable housing accommodation for persons displaced from slum reclamation areas or living under unsatisfactory conditions, and for persons of limited means; the sale of houses to eligible persons and the making of advances to such persons to enable them to own their homes; the development of land for housing and related purposes; and the giving of advice to the public with respect to finance for the purchase or construction of homes.

Until the 1945 Commonwealth-State Housing Agreement was executed, the construction of dwellings by the Commission had been financed by loan funds provided by the State and by three specific debenture issues raised by the Commission. Since the signing of the Agreement, finance for the construction of dwellings has been obtained from the Commonwealth Government.

Very few houses were sold by the Commission until 1954, but the added emphasis given to the construction of homes for private ownership by the amendments in the Commonwealth-State Housing Agreement in 1955-56 had the effect of substantially increasing the number of houses sold. Of the 64,151 dwelling units built up to 30 June 1969 a total of 27,892 houses have been sold (15,447 in the metropolitan area and 12,445 in the country).

The Commission is continuing to acquire and clear for redevelopment decadent areas within the inner metropolitan area.

VICTORIA—HOUSING COMMISSION: DWELLING CONSTRUCTION

Geographical distribution (a)	Houses and flat units				
	1964-65	1965-66	1966-67	1967-68	1968-69
COMPLETED					
Melbourne Statistical Division	1,674	1,530	1,685	1,349	1,228
Remainder of State	1,014	1,156	1,431	865	903
State total	2,688	2,686	3,116	2,214	2,131
UNDER CONTRACT AT END OF PERIOD (INCLUDES CONTRACTS LET, WORK NOT STARTED)					
Melbourne Statistical Division	1,419	1,168	1,276	1,483	1,964
Remainder of State	1,179	1,007	603	612	695
State total	2,598	2,175	1,879	2,095	2,659

Source: Housing Commission annual reports.

(a) Figures are according to boundaries as determined at 30 June 1966.

VICTORIA—HOUSING COMMISSION : REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
REVENUE						
Rentals	12,024	12,360	12,983	14,241	15,044	15,861
Gross surplus—house sales	2,221	2,525	2,460	1,830	1,628	1,872
Loan redemption written back less allowances to house purchasers	258	375	329	273	233	319
Interest—House sales (net)	1,672	1,756	1,762	1,806	1,826	1,831
Sundry	179	290	161	161	148	314
Miscellaneous	88	97	126	281	230	337
Total revenue	16,442	17,404	17,822	18,592	19,108	20,533
EXPENDITURE						
Interest—less amounts capitalised and applied to house sales	5,469	5,672	5,574	5,907	6,268	6,782
Loan redemption—						
Commonwealth—State Agreement	1,690	1,800	1,834	1,898	1,967	2,078
Contribution to National Debt Sinking Fund	4	4	4	3	3	3
Redemption of debentures and Debenture Loan Sinking Fund contribution	12	12	8	8	8	8
Administration—						
General	883	868	1,050	1,153	1,222	1,298
House and land sales	467	574	611	657	720	766
Rates—less amount capitalised	1,990	2,026	2,057	2,255	2,407	2,556
Provision for accrued maintenance	2,104	2,222	2,463	2,507	2,554	2,586
Provision for irrecoverable rents	15	44	21	13	27	27
House purchasers' Death Benefit Fund appropriation	482	479	485	477	469	463
Transfer to house sales Reserve Suspense Account	1,649	1,711	1,561	1,190	527	573
Transfer to House Purchasers' Interest Receivable Reserve	991	1,090	992	1,000	993	956
Appropriation of house sales profits for slum reclamation works	..	300	300	300	600	600
Other	458	498	615	737	775	1,096
Total expenditure	16,214	17,300	17,574	18,106	18,540	19,792
Surplus	228	104	247	486	568	741
Fixed assets at 30 June	216,646	231,762	243,762	262,665	275,293	294,332
Loan indebtedness at 30 June (a)—						
Government advances	288,815	313,478	335,849	357,184	379,043	402,512
Debenture issues	864	600	600	600	600	600
Death Benefit Fund advances	871	998	1,564	1,914	2,846	3,449

Source : Housing Commission annual reports.

(a) Excluding subsidies from State Loan Fund for slum reclamation.

Further reference, 1965

Ministry of Aboriginal Affairs

Under the *Aboriginal Affairs Act 1967*, the Minister is empowered to buy houses or land on which to erect houses for occupation by Aborigines. As at 30 June 1969, the Ministry had 133 houses in provincial centres, and thirty-nine houses on settlements and reserves. The decrease in the housing on reserves is the result of closing down transitional housing settlements in Robinvale and Mooropna.

Rural Finance and Settlement Commission

The Rural Finance and Settlement Commission was constituted in March 1962 by the passing of the *Rural Finance and Settlement Commission Act 1961*, which provided for the merger of the Rural Finance Corporation and the Soldier Settlement Commission.

The Commission administered the settlement of eligible discharged servicemen on the land as part of the general scheme of rehabilitation of ex-servicemen and now administers land settlement under the *Land Settlement Act 1959*. During the year 1968-69 forty houses were erected. At 30 June 1969 a total of 3,324 houses had been completed since the inception of the Soldier Settlement Commission in 1945, and thirteen were still under construction.

Home Finance Trust

The Home Finance Trust is a corporate body constituted under the *Home Finance Act 1962*. It is authorised to receive money on deposit, the repayment of which is guaranteed by the Government of Victoria, for the purpose of making housing loans on the security of first and second mortgages.

Under the terms of the Act the Trust is precluded from making loans in certain circumstances.

The number of loans granted by the Trust to 30 June 1969 and subsisting totalled 3,536 on the security of first mortgages and 2,005 on second mortgages, the amounts involved being \$23.5m and \$2.4m, respectively.

Further reference, 1967

Approved housing institutions

The *Home Finance Act 1962* empowers the Treasurer of Victoria, *inter alia*, to guarantee, in certain circumstances, the repayment of part of a housing loan made by an approved institution on the security of a first mortgage.

The Treasurer's guarantee covers that portion of a loan which exceeds the institution's loan limit, whether statutory or under the terms of a trust, or where there is no such limit, the guarantee applies to the amount of loan in excess of 60 per cent of the valuation of the security.

Guarantees are available under the Act for loans up to 95 per cent of the value of the security.

At 30 June 1969 there were twenty-one approved institutions. Guarantees given by the Treasurer and subsisting totalled 252, the amount involved being \$428,751.

Further reference, 1967

Co-operative housing societies

The *Co-operative Housing Societies Act 1958* empowers societies to raise money on loan for the purposes of making advances to their members to erect houses; to purchase houses (within certain age limits); to meet street making and sewerage installation charges; to undertake additional permanent improvements to a dwelling acquired through a society; to maintain and keep the house in proper repair; and to purchase a residential flat on the security of a stratum title.

Until 30 June 1956 co-operative housing societies were entirely dependent on institutional finance for their funds, but from 1956 they have received a portion of the State's housing loan allocation under the Commonwealth-State Housing Agreements.

The following table, compiled from annual reports published by the Registrar of Co-operative Housing Societies, provides particulars relating to the operations of societies at 30 June of each of the five years 1965 to 1969 :

VICTORIA—OPERATIONS OF CO-OPERATIVE HOUSING SOCIETIES

Particulars	Unit	At 30 June—				
		1965	1966	1967	1968	1969
Societies registered	No.	871	902	1,070	1,126	1,165
Members registered	No.	48,948	49,610	54,012	54,340	53,563
Shares subscribed	No.	2,369,745	2,529,821	2,783,681	2,888,262	2,886,738
Nominal share capita	\$m	240	253	278	289	288
Advances approved	No.	42,850	43,882	45,594	46,165	46,273
"	\$m	224	232	250	265	274
Government guarantees executed	No.	617	648	678	689	718
"	\$m	168	175	180	180	184
Indemnities given and subsisting	No.	2,260	2,190	2,353	2,679	2,793
Indemnities subsisting	\$'000	969	965	1,074	1,297	1,407
Housing loan funds paid into Home Builders' Account	\$m	59	68	77	87	98
Dwelling-houses completed to date (a)	No.	53,060	56,088	59,508	63,255	66,253
Dwelling-houses in course of erection (a)	No.	2,651	2,111	2,355	2,142	1,496

(a) Includes residential flats.

Further reference, 1967

State Savings Bank of Victoria

The State Savings Bank of Victoria grants loans to eligible persons to build, purchase, or improve homes upon such terms and subject to such covenants and conditions as are prescribed or are fixed by the Commissioners.

Loans are made from the Savings Bank and Credit Foncier Departments. Particulars for the year ended 30 June 1969 may be found on page 664.

Other State authorities

State Government authorities (other than those providing rental housing under Housing Agreements) such as the Public Works Department, State Electricity Commission, Victorian Railways, State Rivers and Water Supply Commission, etc., from time to time provide the necessary land and finance for the erection of dwellings for employees of those departments. The rentals charged are fixed according to the salaries of the officers occupying the dwellings. The dwellings erected by these authorities do not come under the control of the Housing Commission.

Other lenders

Details of all loans made to home purchasers are not available. However, particulars of the permanent finance made available by the major institutions to persons buying or building new homes in Victoria for their personal use are shown, for each of the years 1965-66 to 1969-70, in the following table. The amounts shown are actual payments during the periods indicated, as distinct from loans approved, and do not include loans made to institutions, public authorities, corporate bodies, or to persons building or buying homes for resale or for investment purposes. A new home is regarded as a house or flat not more than twelve months old and

permanent finance means finance granted for a term of three years or more.

VICTORIA—HOUSING FINANCE STATISTICS : PERMANENT FINANCE FOR
NEW HOMES ONLY : PARTICULARS OF AMOUNTS PAID BY MAJOR
INSTITUTIONS AS LOANS TO PERSONS BUYING OR BUILDING
HOMES IN VICTORIA FOR THEIR PERSONAL USE
(\$'000)

Institution	Payments during year				
	1965-66	1966-67	1967-68	1968-69	1969-70
Savings banks and co-operative housing societies	78,224	80,024	89,737	100,234	104,074
Life insurance offices	6,562	6,694	7,071	9,243	9,851
Friendly societies	814	645	763	1,049	1,650
Building societies	2,570	3,440	5,984	11,855	18,317
Government instrumentalities	20,266	20,239	16,778	15,952	21,055
Total	108,436	111,043	120,332	138,333	154,946

9

FINANCE

PUBLIC FINANCE

Economic importance of government financial activity

Financial transactions

During the last three or four decades, governments have come to accept new and wider responsibilities for economic stability and growth and for the social welfare of their peoples. They are now in a position where a large proportion of their actions is undertaken to achieve economic and social ends. This applies not only to their regulatory activities but also to their financial transactions. These transactions may be classified in the following ways :

Purchases of goods and services

Governments are important purchasers of goods and services which they require to provide current services, e.g., defence services, health and educational facilities; and capital assets such as office buildings, power installations, and railway track and rolling stock. Expenditure of this kind generates income and, consequently, rises or falls in its level affect the purchasing power of the community. In addition, governmental requirements determine the allocation of national resources and the composition of national capital assets.

Transfers of income between sections of the community

Governments are also agents for the redistribution of incomes throughout the community. Their role of tax gatherer permits them to do this by compulsorily withdrawing purchasing power from one section of the community and transferring it to another in the form, for example, of social service benefits or subsidies to producers. The receipt and payment of interest are other ways in which governments redistribute income.

Production and trading

As well as providing a considerable volume of services free (or at nominal charges), governments also engage in trading activities in which they produce and sell goods and services at prices designed substantially to cover costs. These services are usually of the public utility type, e.g., the supply of gas and electricity, transport services, and water supply and

sewerage of which governments are usually the sole providers. Their distinguishing characteristic is that they are, to a certain extent, subject to market forces.

Victorian governmental activity

Victorian governmental activity is carried out by:

1. the legislative, executive, and judicial organs of the State ;
2. semi-governmental bodies being statutory authorities created to carry out specific activities, e.g., the provision of gas, electricity, water supply, and sewerage facilities on behalf of the State Government or bodies in which the State Government has a controlling interest; and
3. local government bodies set up under the Local Government Act to carry out the functions of local government in defined areas (known as municipalities), and which are elected by the residents or property owners or both in the area. This category also includes authorities created or acquired by local government authorities.

Particulars of the activities of semi-governmental and local government authorities are to be found in Part 5 and other appropriate Parts of this *Year Book*. It is informative, however, in this Part to summarise the public authority activity in the State.

Particulars of Commonwealth and State transactions classified so as to facilitate economic analysis are included in the *Australian National Accounts, National Income and Expenditure*, published by the Commonwealth Statistician, Canberra. The following summaries of the transactions of Victorian public authorities are on the same basis as to scope and classification as tables of the Current and Capital Accounts of State and Local Government Authorities published in the *Australian National Accounts, National Income and Expenditure*, and in the annual budget paper *National Income and Expenditure*. They are a consolidation (necessarily approximate) of the activities of the major funds and authorities in the State.

Particulars in the summaries were compiled from financial statements published by the authorities concerned which in some instances did not contain all the information desired. For this reason, the figures shown must

VICTORIA—PUBLIC AUTHORITIES' CURRENT ACCOUNT
(\$m)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
RECEIPTS					
Taxation	234·7	256·4	286·7	319·8	371·5
Interest, etc., received	10·8	12·4	13·1	13·8	14·3
Public enterprises' income	102·5	102·6	110·1	110·6	122·0
Grants from Commonwealth Government authorities	187·4	209·1	229·2	262·7	286·0
Total receipts	535·4	580·4	639·1	707·0	793·8
OUTLAY					
Net current expenditure on goods and services	286·8	323·1	352·8	394·2	445·0
Subsidies	0·5	1·2	1·4	4·0	3·5
Interest, etc., paid	139·9	150·3	162·0	175·2	188·8
Overseas grants	0·3	0·3	0·2	0·3	0·3
Cash benefits to persons	3·7	4·3	4·7	5·0	6·1
Grants towards private capital expenditure	2·2	1·6	1·6	2·8	2·4
Surplus on current account	102·0	99·7	116·4	125·4	147·7
Total outlay	535·4	580·4	639·1	707·0	793·8

be regarded as estimates only and subject to revision as further investigation proceeds. A large proportion of governmental financial transactions is in the nature of transfers between funds, e.g., transfers from the Consolidated Revenue Fund to the Hospitals and Charities Trust Fund, and between authorities, such as transfers from the Loan Fund to the State Electricity Commission of Victoria. Where they could be identified, such transfers have been cancelled out. In some cases, different bases of classification from those used in succeeding sections of this Part were adopted for national income purposes.

VICTORIA—PUBLIC AUTHORITIES' CAPITAL ACCOUNT
(\$m)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
SOURCES OF FUNDS					
Depreciation allowances	37·7	47·5	49·1	56·2	58·1
Net sale of securities—					
Commonwealth securities—					
Securities other than Treasury bills—					
Australia	86·9	103·9	118·1	147·5	128·2
Overseas	-5·1	-6·1	-16·7	-24·7	-4·9
Local and semi-governmental securities	66·4	70·4	90·3	74·2	94·0
Advances from Commonwealth Government authorities	31·2	30·9	28·6	33·2	24·9
Grants from Commonwealth Government authorities	35·6	36·9	42·8	51·4	51·8
Surplus on State and local government authorities current account	102·0	99·7	116·4	125·4	147·7
Other funds available (including errors and omissions)	40·0	39·7	45·5	43·2	36·8
Reduction in cash and bank balances	4·5	12·5	-12·3	-4·5	3·7
Total sources of funds	399·3	435·4	461·8	502·0	540·3
USES OF FUNDS					
Fixed capital expenditure on new assets	371·5	408·5	439·0	471·6	520·9
Expenditure on existing assets	4·9	1·7	2·2	0·4	0·8
Increase in value of stocks	2·0	2·3	0·9	2·5	-0·4
Advances to public financial enterprises	20·9	23·0	19·8	27·4	19·0
Total uses of funds	399·3	435·4	461·8	502·0	540·3

Financial relations with the Commonwealth

General

The Federal Constitution specifies the matters regarding which the Commonwealth Parliament has power to legislate. They include defence, external affairs, trade and commerce with other countries and between the States, customs and excise, posts and telegraphs, navigation, lighthouses, quarantine, census and statistics, currency and banking, insurance, copyright and trade marks, naturalisation, immigration, invalid and age pensions, social services, industrial relations where disputes extend beyond the boundaries of a State, taxation that does not discriminate between States or parts of States, the taking over by the Commonwealth of the public debts of the States, and the borrowing of money by the Commonwealth for the States. Some of these powers are given exclusively to the Commonwealth, e.g., defence, and customs and excise, but, in the majority of matters, the Commonwealth and State Governments have concurrent powers, Commonwealth law prevailing where there is conflict. Matters other than those

specified in the Constitution remain the concern of the States. Governmental activity at the State level embraces education, health and welfare services, the development of internal resources, e.g., irrigation and water supply, land settlement, soil conservation, maintenance of law and order, and the provision of public utility services, e.g., roads, electricity and gas, public transport, water supply and sewerage. These activities are carried out by State Departments and by statutory and local governing bodies created by the State Governments. The States have direct access to a small proportion only of moneys required for revenue and capital purposes. This has come about in three ways :

1. through the surrender, under the Constitution, of the right to levy customs and excise duties ;
2. through the Financial Agreement of 1927 between the Commonwealth and State Governments, under which the Commonwealth became the borrowing agent for the States ; and
3. through the Commonwealth exercising its right to impose taxation in the field of personal and company income.

The lack of balance between the spending functions and the sources of revenue available to the Commonwealth and the States, respectively, has given rise to a system of grants from the Federal Government to the States. These grants may be unconditional or may be earmarked for specific purposes such as roads and universities. Important examples of the former are the financial assistance grants payable under the uniform tax system and special grants payable under section 96 of the Constitution, which provide assistance to those States experiencing difficulty in raising revenue or providing services on a comparable level with the other States. At present, Tasmania is the only State receiving special grants under section 96. Western Australia, which withdrew from claimancy as from the beginning of 1968-69, continued to receive for each of the years 1968-69 and 1969-70 a grant in lieu of the special grant.

However, for the year 1970-71, and for each of the four subsequent years, this grant to Western Australia will be progressively reduced. In July 1970 South Australia, which had last received a special grant in 1959-60, applied for a special grant for 1970-71.

Commonwealth fiscal superiority is supported by present day acceptance of the role of governments as agents of economic control and providers of social services on a large scale. In order to carry out these functions, the central government must have a substantial measure of control over taxation revenue and the level of public investment.

Financial Agreement between the Commonwealth and the States

The Financial Agreement of 12 December 1927 between the Commonwealth and the States came into being because it was thought desirable to adopt a co-ordinated approach to the loan market instead of independent approaches by the several governments, and because of the necessity of establishing sound sinking fund arrangements. It also provided for the sharing of State debt charges by the Commonwealth. The following is a summary of the main provisions :

1. *Consolidation of public debt*

On 1 July 1929, the Commonwealth took over the existing public debts

of the States and assumed responsibility for the payment of related interest. This interest is reimbursed by the States, less the sum of \$15,169,824 per annum which the Commonwealth agreed to contribute for a period of 58 years from 1 July 1927. Of this amount, Victoria receives \$4,254,318 annually. This payment is in compensation to the States for relinquishing, after Federation, the right to levy customs and excise duties.

2. *Regulation of Government borrowing*

The Australian Loan Council was set up to co-ordinate the public borrowings of the Commonwealth and the States. It consists of the Prime Minister (or his nominee) as Chairman, and the State Premiers (or their nominees). Each financial year, the Commonwealth and the several States submit to the Loan Council programmes setting out the amounts they desire to raise by loan during the ensuing year. Revenue deficits to be funded are included in the borrowing programmes, but borrowings for "temporary purposes" need not be included. Borrowing by the Commonwealth for defence purposes is outside the Agreement.

If the Loan Council considers that the total amount of the programmes cannot be borrowed at reasonable rates and conditions, it determines what amount shall be borrowed and may, by unanimous decision, allocate such amount between the Commonwealth and the States. In default of a unanimous decision, the allocation is determined by means of a formula written into the Agreement. Subject to the decisions of the Loan Council, the Commonwealth arranges all borrowings including those for conversions, renewals and redemptions. However, the Commonwealth may borrow from the Commonwealth, or a State within its territory, from authorities, bodies, or institutions or from the public by counter sales of securities subject to Loan Council approval. Commonwealth securities are issued for moneys borrowed in this way and amounts so borrowed are treated as part of the borrowing programme for the year. In addition the Commonwealth or a State may borrow for "temporary purposes" by way of overdraft or fixed deposit subject to limits fixed by the Loan Council.

3. *Sinking fund provisions*

The Financial Agreement also provided for the creation of sinking funds for debt existing at 30 June 1927 or incurred subsequently. Contributions to these are made jointly by the Commonwealth and the States on bases laid down. The sinking funds established under the Agreement are under the control of the National Debt Commission, an Authority constituted under Commonwealth legislation and consisting of the Treasurer of the Commonwealth, the Chief Justice of the High Court, the Secretary to the Commonwealth Treasury, the Governor of the Reserve Bank, the Secretary to the Commonwealth Attorney-General's Department, and a representative of the States.

Sinking fund moneys are used to redeem unconverted securities at maturity, and to re-purchase securities on the stock market.

4. *Borrowing by semi-governmental authorities*

Under a "gentlemen's agreement", originally entered into by the members of the Loan Council in 1936, the Loan Council approved an aggregate yearly borrowing programme for semi-governmental and local authorities proposing to raise more than \$200,000 in a year. In June 1967

the Loan Council increased this amount to \$300,000. Individual borrowings by each of these authorities are also subject to Loan Council approval.

Before 1962-63 the Loan Council had approved overall borrowing programmes for authorities with individual programmes of \$200,000 or less. Since 1962-63 the Loan Council has placed no overall limits on the programmes of these smaller authorities. In keeping with the decision of June 1967 noted above, authorities may now borrow up to \$300,000 individually without any limit being placed on their aggregate borrowings.

The terms and conditions on which the Loan Council from time to time approves loan raisings are the same for both the large and small authorities.

5. Commonwealth influence on supply of loan moneys

The Commonwealth is in a position to control the supply of local loan moneys through the influence of Commonwealth policy on the banking system, indirectly through alterations in rates of taxation (which affect personal savings), and through the money it is prepared to make available from its own trust funds. Although loan raisings for each of the years 1962-63 and 1963-64 were adequate to complete governmental expenditure programmes (including redemptions), Commonwealth support was needed in other years. From 1 July 1951 to 30 June 1970, out of loan programmes amounting to \$9,602m, the Commonwealth has provided \$2,654m from the Australian currency proceeds of overseas loans and from budget surpluses.

The need for Commonwealth assistance by way of special loans should be considerably reduced as a result of the arrangements made at the June 1970 Loan Council meeting when it was decided that the Commonwealth will in future make an interest free capital grant to finance part of the States' annual works programmes. This grant will not increase the total funds available to State Governments, but, as it will result in lower State Government debt than would otherwise have been the case, there will be a substantial saving to the States in debt charges.

The first grant made will be \$200m in 1970-71 (Victoria's share \$51m) and it will increase in future years in proportion to the increase in the total works and housing programmes. It is estimated that the resulting saving to the States in debt charges should be nearly \$150m over the five year period 1970-71 to 1974-75.

Grants to the States

The history of the principal payments to Victoria can be summarised as follows :

Financial agreements

Commonwealth contributions to interest and sinking fund charges on State debt have been described above.

Financial assistance grants

The States were supplanted by the Commonwealth as income taxing authorities during the Second World War when the Commonwealth needed to exploit this field of taxation to the full to meet its wartime obligations. Under the uniform taxation scheme, the Commonwealth became the sole authority levying taxes upon income. In return for vacating that field of taxation, the States received an annual payment from the Commonwealth as reimbursement for the loss of income tax revenue. A similar arrangement

VICTORIA—COMMONWEALTH PAYMENTS TO OR FOR THE STATE (a)
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Financial agreement—					
Interest on State debt	4,254	4,254	4,254	4,254	4,254
Sinking fund on State debt (b)	3,938	4,225	4,524	4,885	5,189
General revenue grants	171,750	191,922	208,790	233,091	253,562
Commonwealth aid roads	25,576	27,508	29,443	31,286	33,113
Tuberculosis hospitals—reimbursement of capital expenditure, etc.	308	169	110	10	175
Mental institutions—contribution to capital expenditure	711	1,567	1,192	1,382	1,200
Grants to universities	10,386	12,496	14,461	17,164	19,180
Colleges of advanced education	..	..	2,213	5,465	5,545
Teachers colleges	..	..	..	500	1,621
Research grants	..	331	607	770	675
Science laboratories	2,799	2,799	2,799	3,553	3,055
Technical training	2,826	336	3,050	5,091	1,550
School libraries	..	..	..	..	500
Dairy industry extension services	178	..	..	..	800
Extension of agricultural advisory services	132	..	508	667	225
Minor agricultural research	11	..	..	..	..
Salinity reduction—River Murray	..	..	..	..	800
Aboriginal advancement	..	..	..	600	225
Road safety practices	20	20	23	23	23
Natural disaster payments	20	40	..	5,291	6,000
Housekeeper services	8	8	8	8	8
Blood transfusion services	129	144	276	176	193
Water resources	90	80	77	131	159
King River Dam	..	..	..	..	15
Total	223,138	246,197	272,335	314,347	338,028

(a) Excludes subsidies and bounties to primary producers, payments from National Welfare Fund, and repayable loans.

(b) Paid to National Debt Sinking Fund.

(c) As from 1965-66 known as "Grants for agricultural extension services".

was made for entertainments tax, but this tax is no longer levied by the Commonwealth Government.

The validity of the uniform tax legislation was challenged in the High Court in 1942 by Victoria, South Australia, Queensland, and Western Australia. The challenge was unsuccessful, the High Court finding that the Commonwealth could enforce priority in the collection of income tax and could make grants to the States under section 96 of the Constitution on the condition that they vacated the field of income taxation.

Victoria made a further challenge to the validity of the uniform tax legislation in 1955 and was supported by New South Wales in 1956. In particular, the power of the Commonwealth to make tax reimbursement grants conditional upon the States not levying income tax and the absolute priority of payment of Commonwealth income tax over State income taxes was disputed. In 1957 the High Court ruled :

1. unanimously, that the condition attaching to the tax reimbursement grants that the States should not levy income tax was valid; and
2. by a majority of four to three, that section 221 (1) (a) of the *Income Tax and Social Services Contribution Assessment Act 1936-1956*, which prohibited a taxpayer paying State income tax until Commonwealth income tax was paid, was invalid.

Details of the *States Grants (Income Tax Reimbursement) Act 1942*, the *States Grants (Entertainments Tax Reimbursement) Act 1942* and the

States Grants (Tax Reimbursement) Act 1946–1948 are given in the *Official Year Book of the Commonwealth of Australia*, No. 37, pages 635 to 637 and No. 46, pages 837 and 838. Grants under the provisions of the 1946–1948 Act ceased after 1958–59.

The whole question of Commonwealth–State financial relations was examined in 1959 and this resulted in the enactment of the *State Grants Act* 1959 (operative until 1964–65—see *Victorian Year Book* 1965 and previous issues). These arrangements were reviewed in 1965 and 1967 when certain modifications, which applied to the period 1965–66 to 1969–70, were made. Under the new arrangements which are embodied in the *States Grants Act* 1965–1967, the grant for each State for each financial year during the period was determined by taking that State's grant for the previous year (with the addition of \$2m each year up to 1969–70 in the case of Queensland) and increasing it by the percentage change in the population of that State during the year ending 31 December of the year of payment; the amount so obtained was increased by the percentage increase in average wages for Australia as a whole for the year ended 31 March of the year of payment; and this amount was increased by a "betterment factor" of 1.2 per cent. In addition the grant so determined for Victoria in 1965–66 was increased by \$1.2m. This addition, which had the effect of reducing the difference between Victoria's grant per head and that of New South Wales, has since formed part of the base used in calculating the grant paid to Victoria under the grants formula. A further adjustment was made as a result of the February 1967 Premiers' Conference at which it was decided to distribute in 1966–67 special assistance of \$5m in the same proportions as the grants produced by the formula (Victoria's share \$1.3m). At the June 1967 Premiers' Conference it was agreed that, for the purpose of determining the formula grants for 1967–68 and future years, the special assistance grant given in 1966–67 would be treated as part of the formula grant for that year.

Commonwealth–State financial relations were again reviewed at the Premiers' Conference in June 1970 when the Commonwealth Government gave the following details of the ways it was prepared to increase revenue assistance to the States during the five year period 1970–71 to 1974–75:

1. An interest-free capital grant of \$200m would be made in 1970–71, increasing in future years in proportion to the increase in the total Loan Council works and housing programme.
2. Grants would be made to meet the debt charges on \$200m of existing State debt in 1970–71 and further grants to meet the charges on \$200m would be made in each of the subsequent four years so that, as from the commencement of 1974–75, the Commonwealth would have taken over full responsibility for the debt charges of \$1,000m of State debt. This amount of debt would be formally transferred to the Commonwealth in June 1975. Victoria's share of this grant for 1970–71 was \$2.8m.
3. An addition of \$40m would be made to the 1970–71 grants determined under the existing formula and this amount would be incorporated in the 1970–71 base for purposes of determining the formula grants for 1971–72 and later years. The amount of \$40m would be distributed between the States in the same proportions as their 1970–71 formula grants.

4. There would be an increase in the betterment factor from 1·2 to 1·8 per cent to apply from 1971–72.

The Commonwealth also made the following proposals in relation to grants to individual States :

1. There would be a continuation of the \$2m addition that had been made to the base on which Queensland's grant was calculated in each of the five years of the previous arrangements.
2. In addition to its formula financial assistance grants and in lieu of the amount of \$15·5m paid in 1968–69 and 1969–70 Western Australia would receive amounts commencing with \$12·5m in 1970–71 and reducing by \$3m per annum in each of the subsequent four years. However, in recognition of the rapid rate of population growth and economic development in Western Australia, the Commonwealth would in the Loan Council support increases in that State's share of the borrowing programmes to offset the reduction in revenue grants.

The States regarded these proposals as inadequate and suggested a minimum increase in the 1970–71 grants of \$90m and a minimum betterment factor of 3 per cent to apply from 1970–71. After considering the States' arguments and in particular the case put forward by New South Wales and Victoria that the absolute gap between their per capita grants and those of the smaller States was becoming larger year by year, the Commonwealth proposed that a grant of \$2 per capita be paid to New South Wales and Victoria in each of the next five years. This would be additional to the formula grants and would be included in the base used to determine these grants. In the event that any of the four less populous States considered that the additional per capita grants would adversely affect its ability to provide services of a standard comparable with New South Wales and Victoria, it would be open to that State to ask the Grants Commission to recommend a grant in addition to its share of the financial assistance grants.

Grants for road construction

The Commonwealth has made grants to the States for road purposes for some considerable time. Particulars of Acts (commencing with the *Main Roads Development Act 1923–1925*), under which these payments were made, are given in the publication *Commonwealth Payments to or for the States* which is issued annually with the Commonwealth Budget.

Commonwealth payments to be made to the States for roads expenditure during the five year period from 1 July 1969 were announced at a special Premiers' Conference held in March 1969.

In considering the new arrangements the Commonwealth was assisted by the information and advice furnished by the Bureau of Roads, which was set up following the 1964 review of roads arrangements to undertake a thorough survey and appraisal of the existing roads system and anticipated roads requirements. The Commonwealth accepted the Bureau's assessment that, provided funds were applied economically, expenditure considerably higher than at present could be undertaken during the next five years. On this basis provision has been made in the *Commonwealth Aid Roads Act 1969* for grants totalling \$1,252·1m to be paid to the States for roads over the five year period commencing on 1 July 1969.

An aim of the new arrangements is to bring the distribution more closely into accord with the relative needs for roads expenditure. The Commonwealth, however, recognised the problems that could be created for some States by too rapid a change from the distribution formula which had applied over the previous five years. The total grant of \$1,252.1m is thus divided into two parts. The principal grant totalling \$1,200m is distributed by giving equal weight to the distribution under the *Commonwealth Aid Roads Act 1964* and to the distribution indicated by the Bureau of Roads analysis of the relative needs for roads expenditure. Of this grant Victoria will receive \$38.2m in 1970-71 and a total of \$254.4m during the quinquennium.

Supplementary payments of \$9m to South Australia, \$40.8m to Western Australia, and \$2.3m to Tasmania will account for the balance of \$52.1m to be distributed during the five year period.

Grants to universities

Commonwealth assistance to the States in respect of the recurrent expenditure of universities dates from 1951-52; in 1957-58 assistance was first given in respect of capital expenditures. An outline of assistance before 1971 is given in previous issues of the *Victorian Year Book*.

In August 1969 the Commonwealth agreed to support recommendations contained in the Fourth Report of the Australian Universities Commission for a programme of assistance to State universities in the 1970-72 triennium.

The *States Grants (Universities) Act 1969* authorised Commonwealth grants of \$226.8m for the triennium of which \$161.2m is for recurrent expenditure and \$4m for a programme in support of research and research training.

Victoria's share of this assistance for 1969-70 was \$14.0m for recurrent expenditures and \$4.5m for capital expenditures.

Grants for colleges of advanced education

The report of the Committee on the Future of Tertiary Education in Australia recommended the establishment of a new type of educational institution to supplement universities and to be developed from, and around, segments of existing technical colleges now referred to as Colleges of Advanced Education.

The Commonwealth has provided financial assistance for these institutions since 1965-66 and in August 1969 it accepted the financial recommendations of the Commonwealth Advisory Committee on Advanced Education for the 1970-72 triennium. Commonwealth financial assistance will amount to \$93.1m made up of \$43.2m for recurrent expenditure, \$49.4m for capital expenditure and \$0.5m for library facilities. Victoria's share for 1969-70 was \$4.8m for recurrent expenditure and \$2.9m for capital expenditure.

Grants for science laboratories and equipment in secondary schools

From 1964-65 onwards, the Commonwealth has made grants to the States for the purpose of improving science teaching in secondary schools.

The *States Grants (Science Laboratories) Act 1968* extends the operation of this scheme for a further three years and provides for a total payment to the States of \$37.7m during the triennium. Of the \$12.6m provided for each of the three years, Victoria's entitlement was \$3.54m

divided between government schools \$2.04m and non-government schools \$1.50m.

Grants for technical training, buildings, and equipment

The *States Grants (Science Laboratories and Technical Training) Act* 1964 also introduced in 1964-65 grants to the States towards the building and equipment cost of technical schools or colleges conducted by the States. Continuation of these grants for the three financial years 1968-69 to 1970-71 was authorised by the *States Grants (Technical Training) Act* 1968. During 1969-70 Victoria received \$3.0m from this grant.

Grants for teachers colleges

The *States Grants (Teachers Colleges) Act* 1967 provided for the payment of unmatched grants to the States towards the construction and equipping of colleges for the training of teachers. For the triennium to 30 June 1970, a total payment of \$24m was authorised. For the year 1969-70 Victoria's share was \$3.25m.

Research grants

From 1965-66 the Commonwealth has made grants to the States for research projects, selected on the basis of relative merit, to be carried out in any academic field by individuals or research teams.

As recommended by the Australian Research Grants Committee, the Commonwealth agreed to make up to \$9m available to the States for the financing of research programmes over the three calendar years 1970 to 1972. Victoria's share for 1969-70 was \$864,000.

The Commonwealth is also making available to the States during the triennium a further \$4m for a special programme of research and research training in State universities.

Grants for school libraries

Under the *States Grants (Secondary School Libraries) Act* 1968, grants of \$27m will be made available to the States over the three years commencing on 1 January 1969 to finance buildings, etc., for libraries in government and non-government secondary schools. The Act provides that not more than one-third of this amount may be authorised for payment before 31 December 1969 and two-thirds before 31 December 1970.

Victoria's share of the basic annual grant is \$2.53m of which \$1,880,000 was for government schools and \$650,000 for non-government schools.

Natural disaster payments

When serious floods, cyclones, bushfires or other similar natural disasters occur the Commonwealth normally joins with the State concerned in financing schemes for relief of personal hardship, usually on a \$1 for \$1 basis. For many years Victoria did not find it necessary to seek substantial Commonwealth assistance for this purpose but during the three years 1967-68 to 1969-70 droughts and bushfires in Victoria resulted in the provision of Commonwealth grants totalling \$11.6m.

Grants for independent schools

The Commonwealth has agreed to contribute, as from January 1970, towards the running costs of independent schools throughout Australia. This assistance will take the form of an annual per pupil subsidy at the rates of \$35 per primary pupil and \$50 per secondary pupil. The estimated amount payable for the year 1970-71 is \$24.3m, Victoria's share being \$7.9m.

Further information about Commonwealth payments to or for the States is set out on pages 617 to 621 of the *Victorian Year Book* 1966.

Revenue and expenditure

General

The financial transactions of the State of Victoria are concerned with (a) Consolidated Revenue, (b) Trusts Funds, and (c) Loan Fund. Payments from Consolidated Revenue are made either under the authority of an annual Appropriation Act or by a permanent appropriation under a special Act.

Consolidated Revenue Fund

The following table shows, for each of the years 1964–65 to 1968–69, the Consolidated Revenue and Expenditure of Victoria, the surplus or deficit, and the accumulated deficit at the end of each year:

VICTORIA—CONSOLIDATED REVENUE FUND: REVENUE, EXPENDITURE, SURPLUS OR DEFICIT, ETC.
(\$'000)

Year	Revenue	Expenditure	Surplus (+) or deficit (-)	Accumulated deficit at end of each year (i.e., 30 June)
1964–65	480,668	480,668	..	53,269
1965–66	508,554	516,689	-8,135	53,269
1966–67	559,595	559,595	..	61,404
1967–68	601,328	604,122	-2,794	64,198
1968–69	664,183	666,644	-2,461	(a) 66,659

(a) Of this amount, \$57,372,000 was provided from the Loan Fund and \$9,287,000 from the Public Account.

Consolidated Revenue. Details of the principal sources of revenue are shown in the following table for each of the years 1964–65 to 1968–69:

VICTORIA—CONSOLIDATED REVENUE FUND: REVENUE
(\$'000)

Source of revenue	1964–65	1965–66	1966–67	1967–68	1968–69
Taxation (a)	108,377	115,678	131,971	149,535	182,603
Business undertakings—					
Railways	102,027	99,673	104,989	98,786	100,329
Harbours, rivers, and lights	2,408	2,037	3,160	3,342	3,576
Water supply, sewerage, irrigation, and drainage	11,795	13,010	13,650	14,064	14,482
Electricity supply (interest and recoups of sinking funds, etc.)	9,964	11,051	11,965	13,057	13,897
State Coal Mine	461	404	392	282	167
Other	691	505	623	338	353
Total	127,346	126,681	134,780	129,870	132,805
Lands—					
Sales	430	526	402	484	690
Rents	1,416	1,609	1,739	1,886	1,824
Forestry	5,153	5,560	5,758	5,710	5,596
Other	933	959	1,074	1,064	1,237
Total	7,933	8,654	8,973	9,144	9,347
Interest, n.e.i.	19,064	20,735	22,694	24,137	26,493

VICTORIA—CONSOLIDATED REVENUE FUND : REVENUE—*continued*
(\$'000)

Source of revenue	1964-65	1965-66	1966-67	1967-68	1968-69
Commonwealth grants—					
Financial Agreement Act	4,254	4,254	4,254	4,254	4,254
Financial assistance	171,750	191,922	208,790	228,254	250,563
Special revenue assistance	..	..	..	4,837	2,999
Colleges of advanced education	..	..	1,302	2,788	3,194
Water resources investigations	89	80	77	131	159
Total	176,094	196,256	214,424	240,264	261,170
Commonwealth national welfare fund payments—					
Tuberculosis—					
Maintenance expenditure	2,739	3,013	3,240	3,181	3,228
Pharmaceutical benefits—					
Mental institutions	237	280	110	193	301
Other	550	630	539	863	808
Total	3,526	3,923	3,889	4,237	4,337
Fees and fines	6,998	7,754	8,983	9,834	10,729
All other (b)	(c) 31,330	28,872	33,881	34,307	36,701
Grand total	480,668	508,554	559,595	601,328	664,183

(a) For details of total taxation collections see page 628.

(b) Includes repayments of advances by Housing Commission under the Commonwealth-State Housing Agreements.

(c) Includes \$3,138,000 transferred from Police Pensions Fund.

Expenditure from Consolidated Revenue. The principal items of expenditure during each of the years 1964-65 to 1968-69 are shown in the following table. Public debt charges, pensions and gratuities, and pay-roll tax have not been allotted to the respective heads of expenditure, but are shown as separate items.

VICTORIA—CONSOLIDATED REVENUE FUND : EXPENDITURE
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Public debt charges—					
Interest (including exchange)	73,259	78,994	84,942	91,690	98,993
Debt redemption	15,427	16,514	17,602	18,620	20,029
Other	371	431	456	464	491
Total	89,057	95,940	103,000	110,774	119,514
Less chargeable to railways	3,186	4,031	4,891	5,747	6,615
Total	85,872	91,909	98,109	105,027	112,899
Business undertakings—					
Railways (a)	96,377	98,909	101,937	104,219	110,937
Harbours, rivers, and lights	1,408	1,395	1,459	1,686	1,589
Water supply, sewerage, irrigation, and drainage	8,926	9,419	10,079	10,572	10,838
State Coal Mine	791	711	697	604	404
Other	449	437	339	274	289
Total	107,951	110,870	114,511	117,354	124,058

VICTORIA—CONSOLIDATED REVENUE FUND : EXPENDITURE—*continued*
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Social expenditure—					
Education—					
State schools	91,333	101,533	111,540	127,171	145,375
Technical schools	20,803	23,770	27,711	33,286	39,205
Universities	8,908	10,528	12,480	13,576	16,527
Libraries, art galleries, etc.	2,200	2,412	2,763	3,034	3,617
Agricultural education, research, etc.	1,841	1,936	1,936	1,849	2,304
Other	180	180	365	590	327
Public health and recreation	6,964	7,425	8,121	8,763	9,544
Charitable—					
Hospitals—					
General	36,865	40,650	44,800	46,305	53,354
Mental	16,914	18,506	19,819	21,254	22,732
Child welfare	4,392	4,865	5,339	5,956	6,767
Other	966	1,030	1,042	1,142	1,335
Law, order, and public safety—					
Justice	4,752	4,956	5,376	5,596	6,078
Police	20,068	21,038	23,009	25,024	26,488
Penal establishments	3,003	2,916	3,299	3,643	3,998
Public safety	62	74	62	68	83
Total	219,250	241,818	267,664	297,256	337,733
All other expenditure—					
Public works, n.e.i.	4,126	4,446	4,768	5,107	5,686
Lands and survey	3,522	3,775	4,094	4,281	4,453
Agriculture	5,398	5,702	6,318	6,729	7,248
Forestry	5,012	5,323	5,671	5,852	5,668
Legislature and general administration	14,519	14,755	17,069	17,206	19,375
Pensions and superannuation	10,338	11,294	12,184	13,248	14,509
Pay-roll tax	5,197	5,592	6,034	6,641	7,152
Miscellaneous (b)	19,483	21,206	23,174	25,419	27,863
Total	67,595	72,092	79,312	84,485	91,954
Grand total	480,668	516,689	559,595	604,122	666,644

(a) As from 1 July 1964, interest exchange and sinking fund payments on Railways loan expenditure incurred since 1 July 1960 are charged against Railways.

(b) Includes interest and repayments of advances under the Commonwealth-State Housing Agreements.

Taxation

In this section some particulars are given of the principal taxes collected in Victoria by the State Government and the Commonwealth Government.

As mentioned on page 616 the Commonwealth Government alone exercises the right to impose customs and excise duties, and taxation on personal and company incomes. It also has exclusive access to the important sales and pay-roll taxes. However, for the most part, the field now left to the States comprises motor taxation, stamp duties, liquor, land, lottery, racing, and entertainments taxes. Estate duties are shared between the two Governments.

In Victoria taxation collections by the State Government are allocated by statute either to Consolidated Revenue or to special funds. One of the principal items of Victorian taxation—motor taxation—was formerly credited entirely to special funds. Since 1958-59 however a proportion of motor taxation has been paid to Consolidated Revenue. (See page 628 for 1968-69 allocation.)

In the following table, particulars of taxation collected in Victoria by the State Government and the total amounts paid to Consolidated Revenue and to special funds are shown for each of the years 1964-65 to 1968-69 :

VICTORIA—TAXATION COLLECTIONS
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Motor—					
Registration fees and taxes	25,721	34,486	36,491	39,812	46,062
Drivers' licences and fees	1,991	3,051	2,921	3,010	3,493
Other	12,276	15,347	16,467	18,694	20,072
Total motor	39,988	52,884	55,879	61,516	69,627
Probate duty	31,614	32,003	34,997	37,642	46,801
Stamp duties, n.e.i.	34,398	36,443	40,546	52,925	73,649
Land tax	19,725	19,881	21,132	20,976	21,839
Liquor tax	7,556	8,064	8,991	9,744	10,632
Lottery duty	6,717	6,294	6,410	6,085	5,990
Racing taxes	10,608	12,415	14,337	15,929	17,373
Licences, n.e.i.	1,224	1,280	1,386	1,683	1,958
Statutory corporation payments			5,730	6,300	6,825
Other taxes	302	300	317	353	328
Grand total	152,133	169,563	189,726	213,154	255,021
Paid to Consolidated Revenue	108,377	115,678	131,971	149,535	182,603
Paid to special funds	43,756	53,885	57,755	63,619	72,418
Per head of population	\$48·51	\$53·09	\$58·38	\$64·55	\$75·99

Motor taxation

Particulars of the total amount of motor taxation collected and credited to the various funds during 1968-69 were as follows :

Consolidated Revenue—	\$'000	
Motor car third party insurance tax	2,605	
Drivers licence fees (part)	1,613	
Stamp duty—motor vehicles	5,976	
	—————	10,193
Country Roads Board Fund—		
Motor registration fees, etc.	29,300	
Drivers licence fees (part)	828	
Drivers test fees	243	
Sale of log books	11	
Additional registration fees (part)	1,849	
Road charges—Commercial Goods Vehicles Act	7,842	
	—————	40,072
Level Crossings Fund—		
Additional registration fees (part)		924
Municipalities Assistance Fund—		
Drivers licence fees (part)		809
Transport Regulation Fund—		
Motor omnibus registration fees	10	
Licences, etc.	909	
Permits	892	
	—————	1,811

	\$'000
Hospitals and Charities Fund—	
Deductions from third party insurance premiums	1,837
Roads (Special Projects) Fund—	
Increase in registration fees (Act No. 7283)	13,979
	69,627
Total motor taxation, 1968-69	69,627

Further reference, 1969*Probate duties*

The *Probate Duty Act* 1962 (a completely revised Act) fixed the rates of duty payable on the estates of deceased persons leaving property, whether real or personal, in the State of Victoria, and personal property wherever situate if the deceased was domiciled in Victoria at the date of death. The Act provides for discriminatory rates of duty in favour of estates passing to close relatives. Categories of beneficiaries are :

- A. Widow, widower, children under 21 years of age, wholly dependent adult children, or wholly dependent widowed mother.
- B. Children over the age of 21 years not being wholly dependent, or grandchildren.
- C. Brothers, sisters, parents.
- D. Other beneficiaries.

A brief summary of the rates of duty payable, as from 17 December 1962, according to the various types of beneficiaries, is shown in the following table :

VICTORIA—RATES OF PROBATE DUTY

On that part of the final balance which—			The rate of duty per \$1 shall be where the final balance passes to—			
			A	B	C	D
	\$		cents in \$			
Exceeds	1,200 but does not exceed	1,200	Nil	Nil	Nil	Nil
"	3,000 " " " "	3,000	Nil	Nil	5	7.5
"	10,000 " " " "	10,000	Nil	Nil	10	10
"	12,000 " " " "	12,000	10	10	15	17.5
"	13,000 " " " "	13,000	10	10	15	17.5
"	20,000 " " " "	20,000	10	15	15	20
"	30,000 " " " "	30,000	10	10	12.5	17.5
"	48,000 " " " "	48,000	10	12.5	17.5	20
"	50,000 " " " "	50,000	12.5	12.5	17.5	20
"	60,000 " " " "	60,000	12.5	15	20	20
"	70,000 " " " "	70,000	17.5	20	20	20
"	90,000 " " " "	90,000	20	22.5	25	25
"	110,000 " " " "	110,000	22.5	27.5	30	37.5
"	120,000 " " " "	120,000	25	30	30	37.5
"	130,000 " " " "	130,000	30	30	32.5	37.5
"	150,000 " " " "	150,000	35	35	37.5	37.5
"	170,000 " " " "	170,000	37.5	37.5	40	42.5
"	170,000 " " " "	189,334 (a)	37.5	..	..	..
"	170,000 " " " "	194,332 (b)	..	40	..	..
"	170,000 " " " "	227,680 (c)	..	..	42.5	..
"	170,000 " " " "	233,250 (d)	..	..	..	45
When the final balance exceeds (a), (b), (c), or (d), then the whole of the final balance is subject to a duty of			\$22.50 per \$100	\$25.00 per \$100	\$30.00 per \$100	\$33.00 per \$100

The amount of probate duty assessed in Victoria during each of the five years to 1968-69 was as follows : 1964-65, \$33,179,802 ; 1965-66, \$32,128,887 ; 1966-67, \$35,289,408 ; 1967-68, \$38,531,664 ; 1968-69, \$50,564,432.

Commonwealth estate duty

The Commonwealth Government also levies duties on deceased estates. The amount of duty collected throughout Australia during each of the five years to 1968-69 was : 1964-65, \$41,530,722 ; 1965-66, \$36,124,380 ; 1966-67, \$41,533,748 ; 1967-68, \$54,716,655 ; 1968-69, \$60,725,780.

Land tax

The *Land Tax Act* 1928 provided for a tax on the unimproved value of land in Victoria. For the purpose of this Act, unimproved value is the estimated selling value of the land assuming that improvements, if any, had not been made.

Under the provisions of the *Land Tax Act* 1968 which came into force on 1 January 1969, land used for primary production purposes is exempted from land tax.

As provided by the *Land Tax (Rates) Act* 1969 land not used for primary production purposes is taxed at the rate of 0.42 cents in the dollar on the unimproved value up to \$17,500 with a graduated increase in the rate to reach 3.21 cents in the dollar where the unimproved value exceeds \$170,000. However, tax is not levied on land with unimproved value up to \$6,000 while a partial exemption is allowed on land valued between \$6,000 and \$9,000.

The following table shows particulars, in specified groups of unimproved value of holdings, of land tax assessments for 1968. Tax was assessed on the basis laid down by the *Land Tax (Rates) Act* 1966.

VICTORIA—STATE LAND TAX ASSESSMENTS, 1968
(Based on unimproved value at 31 December 1967)

Unimproved value of holdings—	Number of taxpayers	Total unimproved value (a)	Tax payable
\$		\$'000	\$'000
6,001 to 7,000	19,509	116,456	129
7,001 " 8,000	12,844	87,174	231
8,001 " 9,000	7,699	65,861	236
9,001 " 10,000	5,823	55,467	220
10,001 " 12,000	12,683	138,842	395
12,001 " 14,000	7,924	101,991	302
14,001 " 16,000	6,554	97,548	319
16,001 " 17,500	3,905	65,089	236
17,501 " 20,000	5,304	96,590	384
20,001 " 30,000	11,005	266,994	1,102
30,001 " 40,000	4,333	148,278	771
40,001 " 50,000	2,141	94,925	574
50,001 " 60,000	1,168	64,102	428
60,001 " 70,000	716	46,306	384
70,001 " 80,000	527	39,446	330
80,001 " 100,000	655	58,035	550
100,001 " 150,000	730	88,582	1,073
150,001 " 170,000	152	24,548	370
170,001 " 200,000	173	31,783	522
200,001 " 300,000	263	63,984	1,232
300,001 " 400,000	110	38,203	867
400,001 " 1,000,000	193	114,450	2,932
1,000,001 and over	89	256,144	7,675
Total	104,500	2,160,795	21,261

(a) Of land not exempted from land tax.

In the following table details are shown of the assessments made during each of the years 1964 to 1968. The raising of the amount of exemption from land tax is mainly responsible for the decrease in the number of taxpayers shown for each of the years 1965 to 1968, inclusive, as compared with previous years.

VICTORIA—STATE LAND TAX ASSESSMENTS

Year	Number of taxpayers	Total tax payable	Average tax payable per taxpayer	Total unimproved value (a)
		\$'000	\$	\$'000
1964	185,694	19,836	106·82	2,280,940
1965	89,922	18,686	207·81	1,784,974
1966	98,760	20,397	206·53	1,953,974
1967	100,471	20,585	204·88	2,064,136
1968	104,500	21,261	203·45	2,160,795

(a) Of land not exempted from land tax.

Stamp duties

Under the provisions of the *Stamps Act* 1958 and subsequent amendments thereto, stamp duty is imposed in Victoria on a wide range of legal and commercial documents.

The rates of duty payable, as from July 1970, on the principal dutiable classes of documents, etc., are shown in the following table :

Dutiable class	Duty payable
RECEIPTS (a)	\$10 or part 1c
BILLS OF EXCHANGE—	
Payable on demand (cheque, etc.)	5c
Others (including promissory notes)	5c
not above \$50	10c
to \$100	15c
to \$150	20c
to \$200	10c
for extra \$100 or part	10c
SHARE TRANSFERS—On sale for full value—	
Based on consideration	Up to \$100—per \$25 or part over \$100—per \$100 or part 10c 40c
TRANSFER OF REAL PROPERTY—Based on consideration	to \$7,000—for each \$100 above \$7,000—for each \$100 \$1.25 \$1.50
LEASES AND ASSIGNMENTS OF LEASES OF REAL PROPERTY	variable scale according to nature
	\$ \$ %
GIFTS AND SETTLEMENTS	up to 2,000 2½
	over 2,000 to 10,000 3½
	" 10,000 " 20,000 4½
	" 20,000 " 30,000 5½
	" 30,000 " 40,000 6½
	" 40,000 " 50,000 7½
	" 50,000 " 60,000 8½
	" 60,000 " 70,000 9½
	" 70,000 " 80,000 10½
	" 80,000 " 100,000 11½
	" 100,000 " 150,000 14½
	" 150,000 " 200,000 19½
	" 200,000 22

(a) Under the provisions of the *Stamps (Receipt Duty Abolition) Act* 1970, receipt duty on moneys received on or after 1 October 1970 was abolished.

Dutiable class— <i>continued</i>	Duty payable— <i>continued</i>
INSURANCE COMPANIES (OTHER THAN LIFE) } —Annual licences	each \$200 (or part) of annual premium income \$10
LIFE ASSURANCE POLICIES—On the sum insured	up to \$2,000—per \$200 or part 10c over \$2,000—\$1 for first \$2,000 plus per \$200 or part of remainder 20c
MORTGAGES, BONDS, DEBENTURES AND COVENANTS—On amount secured	up to \$8,000 \$4 over \$8,000—\$4 for first \$8,000 plus per \$200 or part of remainder 50c
POWER OF ATTORNEY OR APPOINTMENT OF AGENT	\$2
INSTALMENT PURCHASE (including hire purchase)	Purchase price \$20 or more 1½%
GUARANTEES AND INDEMNITIES	50c
CREDIT AND RENTAL BUSINESS	Based on amount of credit, etc., or rental 1½%
OTHER AGREEMENTS AND INSTRUMENTS—	
Partnerships, sale of business, etc.	} \$3 each
Caveats	
Licence to use real property, etc.	
Transfer of mortgage	
Discharge of mortgage of real property	
Discharge of mortgage of personal property (other than of a life policy)	
Appointment of trustee	
Discharge of mortgage of a life policy	50c
DEEDS—not otherwise chargeable	\$3
MOTOR CAR—	
On every application for registration and every notice of acquisition of a motor car or trailer—	
For every \$200 and part of \$200 of the market value of such motor car or trailer	\$2
STATEMENT ON SALE OF CATTLE OR SWINE—	
(i) Cattle Statement	
For every \$5 and part of \$5	} 2c
(a) of the amount of the purchase money in respect of one head of cattle sold singly; or	
(b) of the total amount of the purchase money in respect of any number of cattle sold in one lot	
Provided that the stamp duty in respect of the amount of the purchase money of any one head of cattle, whether sold singly or as part of a lot, shall not exceed 20 cents.	
(ii) Swine Statement	
For every \$5 and part of \$5	} 4c
(a) of the amount of the purchase money in respect of one pig sold singly; or	
(b) of the total amount of the purchase money in respect of any number of pigs sold in one lot	
Provided that the stamp duty in respect of the amount of the purchase money of any one pig, whether sold singly or as part of a lot, shall not exceed 32 cents.	

NOTE. Exemptions from duty are allowed in certain specific cases.

Liquor tax

The Liquor Control Commission, established under the provisions of the *Liquor Control Act 1968*, controls the issue of liquor licences in Victoria. The principal sources of taxation are the fees received for liquor licences and club certificates. All receipts of the Commission are paid into the Licensing Fund. After payments have been made to municipalities and the Police Superannuation Fund, and costs for compensation, administration, etc., have been met, the excess of receipts is transferred each year from the Licensing Fund to Consolidated Revenue.

VICTORIA—LIQUOR TAX
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Licences—					
Victuallers	5,529	5,836	6,543	7,272	7,706
Spirit merchants and grocers	1,449	1,603	1,814	1,820	2,158
Others	69	83	83	88	164
Club certificates	369	387	405	400	433
Permits—extended hours, etc.	108	122	114	129	134
Fees	32	32	31	34	37
Total	7,556	8,064	8,991	9,744	10,632

Lottery (Tattersall) duty

With the object of providing additional finance for hospitals and other charitable institutions, the trustees of the will and estate of the late George Adams, founder of Tattersall's Consultations, were granted a licence to promote and conduct sweepstakes in Victoria in accordance with the provisions of the *Tattersall Consultations Act 1953*.

The Act provides that, within seven days after the drawing of each consultation, duty equivalent to 31 per cent of the total amount of subscriptions to the consultation shall be paid to Consolidated Revenue. Each year an equivalent amount is paid out of Consolidated Revenue, in such proportions as the Treasurer determines, into the Hospitals and Charities Fund and the Mental Hospitals Fund.

In the following table, the amounts subscribed to consultations, the duty paid to Consolidated Revenue, and the amounts allocated to the Hospitals and Charities Fund and the Mental Hospitals Fund, are shown for each of the years 1964-65 to 1968-69 :

VICTORIA—TATTERSALL LOTTERIES : SUBSCRIPTIONS, DUTY PAID, ETC.
(\$'000)

Year	Subscriptions to consultations	Duty paid to consolidated revenue	Allocated to—	
			Hospitals and Charities Fund	Mental Hospitals Fund
1964-65	21,675	6,717	6,427	290
1965-66	20,396	6,294	5,994	300
1966-67	20,580	6,410	6,000	410
1967-68	19,420	6,085	5,585	500
1968-69	19,440	5,990	5,375	615

Racing taxation

The principal taxes levied on racing in Victoria are the percentage deducted from investments on the totalisator, the turnover tax on bookmakers' holdings, stamp duty on betting tickets, and tax on admissions to race meetings.

A deduction of 13 per cent is made from all on-course investments on the totalisator at horse races (including trotting) and at dog races. In the case of city racing clubs, the percentage deducted is divided as follows: doubles and quinella investments, 5 per cent to revenue and 8 per cent to the club; win and place investments, 8 per cent to revenue and 5 per cent to the club. In respect of country race meetings, 3 per cent of total investments is paid to revenue and 10 per cent to the club.

Under the provisions of the *Racing (Totalizators Extension) Act 1960*, off-course betting is permitted on race-course totalisators. The Totalizator Agency Board, appointed under the Act, conducts the off-course betting scheme which came into operation on 11 March 1961.

From investments on the off-course totalisator the following commission is deducted:

(a) From any daily double investments with respect to horse races (other than trotting races and feature doubles)—14 per cent (increased from 13 per cent from 1 July 1968 by the *Racing (Amendment) Act 1968*).

(b) From all other investments—13 per cent.

The commission deducted is allocated in the following proportions:

(a) From all off-course investments—

(i) to Consolidated Revenue—4½ per cent.

(ii) to the Totalizator Agency Board Trust Account (held at State Treasury)—¼ per cent.

(iii) to the Totalizator Agency Board to be expended in terms of the *Racing Act 1958*—8 per cent.

(b) From any daily double investments on horse races (other than trotting races and feature doubles)—to the Race-courses Development Fund (held at State Treasury)—1 per cent. This Fund was instituted on 1 July 1968: by the *Racing (Amendment) Act 1968*.

VICTORIA—TOTALISATOR INVESTMENTS, INVESTMENTS WITH
LICENSED BOOKMAKERS, AND TOTAL RACING TAXATION
(\$'000)

Year	Totalisator investments		Investments with licensed book-makers (a)	Racing taxation			
	On-course	Off-course		Totalisator	Book-makers' turnover	Other (b)	Total
1964-65	34,019	108,939	159,723	6,860	2,917	831	10,608
1965-66	34,828	129,109	160,453	8,686	2,921	809	12,415
1966-67	36,627	143,984	168,381	10,447	3,058	833	14,337
1967-68	37,383	162,870	172,603	11,969	3,132	829	15,929
1968-69	39,085	185,869	172,388	13,410	3,117	845	17,373

(a) Estimated.

(b) Includes entertainments (admission) tax, stamp duty on betting tickets, and club and bookmakers licences, etc.

The *Racing (Interstate Totalizators) Act* 1964 empowered the Totalizator Agency Board, with the approval of the Minister, to enter into any agreement or arrangement for the provision of off-course totalisator facilities in any other State or Territory of the Commonwealth where such facilities may be provided.

Government receipts from the totalisator, including fractions and unclaimed dividends, are specially appropriated to the Hospitals and Charities Fund.

Entertainments tax

A tax payable on admissions to entertainments was levied by the Victorian Government up to 31 August 1943, when legislation was passed making the Commonwealth Government the sole authority for levying the tax. In 1953 the Commonwealth vacated this field of taxation and the Victorian Government reimposed a tax on entertainments as from 8 October 1953, in accordance with the *Entertainments Tax Act* 1953.

Under the provisions of the *Entertainments Tax (Amendment) Act* 1961, which came into operation as from 1 January 1962, the tax on live artist entertainments and on amateur sport was abolished, and a separate reduced scale of rates was applied to cinematograph films and dancing.

The *Entertainments (Partial Abolition) Act* 1962 abolished tax on all classes of entertainments except horse racing and trotting, as from 29 December 1962.

Entertainments tax collected in Victoria on account of admissions to horse racing and trotting during each of the five years to 1968-69 was as follows: 1964-65, \$516,226; 1965-66, \$502,000; 1966-67, \$519,685; 1967-68, \$522,796; 1968-69, \$530,139.

Commonwealth income tax

Uniform taxation on incomes throughout Australia was adopted in 1942 when the Commonwealth Government became the sole authority levying this tax.

The tax, which is imposed on both individuals and companies, was known as "Income Tax and Social Services Contribution" until December 1965, when the citation of the Act was altered. Since that date the levy has been referred to as "Income Tax".

Certain types of income are exempt from tax in Australia. These include income from gold mining and uranium mining; war, invalid, age, and widows pensions; child endowment; and unemployment and sickness benefits. The service pay of members of the defence forces engaged in war service in Borneo and Vietnam is also exempt from tax.

Expenses incurred in earning income and losses incurred in previous years are allowable deductions.

For the income year 1969-70 income tax is payable on the incomes of individuals commencing at a taxable income of \$417. However, certain limitations apply to the tax payable by aged persons, over 65 years of age in the case of a male and over 60 years in the case of a female.

Concessional deductions are allowed to taxpayers on account of dependants, certain medical and dental expenses, life insurance premiums, superannuation contributions, medical or hospital benefit fund payments, education expenses, etc., and are deductible from income to calculate

taxable income. Dependants include spouse, parents, parents-in-law, children under sixteen years of age, student children under 21 years of age, invalid child, brother or sister over sixteen years of age, or daughter-housekeeper for widow or widower. A concessional deduction may be allowed for a housekeeper having the care of children under sixteen years of age or of an invalid relative where the taxpayer did not contribute to the maintenance of a spouse or daughter-housekeeper. The amount of concessional deduction allowable in respect of each type of dependant and housekeeper is:

	\$
Spouse	312
Parent or parent-in-law	312
Child under sixteen years of age—	
One child	208
Other children	156 each dependant
Student child 16 to 21 years of age	208 each dependant
Invalid relative not less than sixteen years of age	208 each dependant
Housekeeper or daughter-housekeeper	312

AUSTRALIA—RATES OF INCOME TAX FOR INDIVIDUALS, 1969–70 (a)

Total taxable income—		Tax on amount in Column 1	Tax on each \$1 of balance of income
Column 1 exceeding—	Column 2 not exceeding—		
\$	\$	\$	cents
Nil	200	Nil	0.4
200	300	0.80	1.2
300	400	2.00	2.9
400	500	4.90	4.5
500	600	9.40	6.1
600	800	15.50	8.2
800	1,000	31.90	10.8
1,000	1,200	53.50	12.5
1,200	1,400	78.50	14.2
1,400	1,600	106.90	15.9
1,600	1,800	138.70	17.6
1,800	2,000	173.90	19.3
2,000	2,400	212.50	21.6
2,400	2,800	298.90	24.6
2,800	3,200	397.30	27.1
3,200	3,600	505.70	29.6
3,600	4,000	624.10	32.1
4,000	4,800	752.50	35.4
4,800	5,600	1,035.70	38.3
5,600	6,400	1,342.10	41.2
6,400	7,200	1,671.70	43.8
7,200	8,000	2,022.10	46.3
8,000	8,800	2,392.50	48.7
8,800	10,000	2,782.10	51.7
10,000	12,000	3,402.50	55.0
12,000	16,000	4,502.50	57.9
16,000	20,000	6,818.50	60.4
20,000	32,000	9,234.50	63.3
32,000	..	16,830.50	66.7

(a) Additional tax equal to 2½ per cent of the tax at general rates is also payable for the 1969–70 financial year.

Income tax is payable on the whole of a person's taxable income if that income exceeds \$416.

Special concessional rates apply to incomes of \$417–\$429.

A deduction is available to individuals who reside in certain remote areas of the Commonwealth or its Territories, and to members of the Defence Forces who serve in certain overseas localities.

A system is in operation to assist the majority of taxpayers in the payment of their taxes by means of regular deductions from salaries or wages. The amounts deducted are regulated so that the employee will have paid the approximate amount of his taxation by the end of the income year.

The following table shows the number of taxpayers, taxable income, and income tax assessed during the year 1968–69 (based on incomes received during the year 1967–68). The particulars are classified according to grades of actual income and relate only to individuals resident in Victoria.

VICTORIA—INCOME TAX : INDIVIDUALS, 1968–69 (a)

Grade of actual income (b)	Taxpayers	Taxable income			Net income tax assessed
		Salaries and wages	Other	Total	
\$	number	\$'000	\$'000	\$'000	\$'000
417– 599	39,055	16,055	3,150	19,205	407
600– 799	46,516	24,704	5,484	30,188	983
800– 999	49,599	33,291	7,464	40,755	1,840
1,000– 1,199	58,257	47,850	9,958	57,808	3,280
1,200– 1,399	64,472	61,753	12,832	74,585	4,945
1,400– 1,599	74,300	83,430	16,261	99,691	7,662
1,600– 1,799	75,630	96,000	18,345	114,345	9,874
1,800– 1,999	75,544	106,100	20,610	126,710	12,057
2,000– 2,199	74,321	112,417	22,424	134,841	13,848
2,200– 2,399	74,067	120,881	23,019	143,900	15,751
2,400– 2,599	73,951	128,984	24,149	153,134	17,717
2,600– 2,799	74,946	139,943	24,855	164,799	20,037
2,800– 2,999	72,357	142,680	24,751	167,431	21,257
3,000– 3,999	291,243	677,882	110,839	788,721	114,281
4,000– 5,999	202,215	590,596	146,862	737,458	135,342
6,000– 7,999	46,523	163,374	82,825	246,199	58,605
8,000– 9,999	16,159	61,574	53,604	115,178	32,933
10,000–19,999	18,354	79,035	124,082	203,117	75,187
20,000–29,999	2,431	14,891	36,700	51,591	24,850
30,000–39,999	621	4,835	14,061	18,895	10,068
40,000–59,999	356	3,626	11,529	15,155	8,699
60,000–99,999	142	1,604	7,765	9,368	5,729
100,000 and over	75	434	12,740	13,174	8,578
Total	1,431,134	2,711,938	814,311	3,526,249	603,928

(a) Includes 6,783 taxpayers, resident in Victoria, who derived income from more than one State.

(b) Actual income is defined briefly as "Gross income, including exempt income, less expenses incurred in gaining that income".

The rate of tax on dividends is 30 per cent, except for dividends paid to residents of countries with which an agreement for the relief of double taxation has been completed, i.e., the United Kingdom, Canada, New Zealand, Singapore, and the United States of America, in which case the rate is 15 per cent. The rate of tax on interest is 10 per cent for residents of all countries.

Company tax

The following table shows the rates of income tax payable by companies for the financial year 1969–70 (income year 1968–69) :

AUSTRALIA—RATES OF INCOME TAX PAYABLE
BY COMPANIES, 1969–70

Type of company	Rate per \$1 of taxable income	
	Up to \$10,000	Balance
	cents	cents
Private	(a) 30	(a) 40
Non-private—		
Co-operative	35	45
Life assurance—		
Mutual	30	40
Other life assurance—		
Resident—		
Mutual income	30	40
Other income	(b) 40	45
Non-resident—		
Mutual income	30	40
Dividend income	(b) 35	45
Other income	(c) 40	45
Non-profit (d)—		
Friendly society dispensary	35	35
Other	35	45
Other—		
Resident	40	45
Non-resident—		
Dividend income	35	45
Other income	(e) 40	45

(a) Further tax at 50c in the \$1 payable on undistributed amount.

(b) Maximum income subject to this rate is \$10,000 less mutual income.

(c) Maximum income subject to this rate is \$10,000 less the sum of mutual income and dividend income.

(d) Incomes not exceeding \$416 are not liable to tax. Where the taxable income does not exceed \$1,188, the tax payable is limited to one half of the amount by which the taxable income exceeds \$416, less any rebate or credit to which the company is entitled.

(e) Maximum income subject to this rate is \$10,000 less dividend income.

State pensions and gratuities

The following table shows details of State Government expenditure on pensions, gratuities, etc., during each of the years 1964–65 to 1968–69 :

VICTORIA—GOVERNMENT EXPENDITURE ON PENSIONS,
GRATUITIES, ETC.
(\$'000)

Particulars	1964–65	1965–66	1966–67	1967–68	1968–69
State Superannuation Fund—					
Railways	4,870	4,945	5,073	5,273	5,451
Other	5,061	5,618	6,357	7,257	8,443
Total State Superannuation Fund	9,931	10,562	11,431	12,530	13,894
Police Pensions Fund	100	380	380	380	380
Police Superannuation Fund	148	150	116	54	6
Coal Mine Workers Pensions Fund	113	136	139	105	30
Parliamentary Contributory Retirement Fund	108	104	105	103	42
Parliamentary Contributory Superannuation Fund	..	..	..	..	44
Married Women's Superannuation Fund	..	..	..	..	28
Married Women Teachers Pensions Fund	38	44	48	42	(a) 28
Other pensions, gratuities, etc.	43	63	77	85	86
Grand total	10,482	11,440	12,295	13,299	14,509

(a) Fund closed 31 January 1969. Amount due from consolidated revenue was paid to Married Women's Superannuation Fund.

State Superannuation Fund

This Fund was established under the *Superannuation Act 1925* to provide superannuation benefits, on a contributory basis, for public servants, teachers, railway employees, and employees of certain statutory bodies. The scope of the Fund was widened by amending legislation in 1963 to include, *inter alia*, members of the Police Force of Victoria (see Police Pensions Fund, page 640), and in 1966, 1967, and 1968 amending Acts considerably increased the range of benefits available.

The main provisions of the Act current at 19 December 1969 were summarised in the *Victorian Year Book 1970* (pages 664 and 665). Further amending Acts in December 1969 and in 1970 introduced a number of changes including the following :

1. Liberalisation of right to convert part of pension entitlement to a lump sum.
2. The rate of pension for a child of a deceased contributor or pensioner was raised to \$208 per annum, provided that where both parents are deceased the amount is increased to \$416.
3. A contributor over the age of 54 years who is contributing at least 12 per cent of his gross salary (other than in respect of deferred payments, for optional units, or reserve units) to the Fund may elect to contribute for units to which he becomes entitled at a reduced rate of contribution, being one quarter of the normal rate. The Fund's share of pension for each such unit will be \$6.50 per annum, i.e., one quarter of its normal share. The Government share of pension, however, will not be reduced but will remain at \$65 per unit per annum.

The following table shows cash transactions of the State Superannuation Fund and other particulars for each of the years 1964-65 to 1968-69 :

VICTORIA—STATE SUPERANNUATION FUND

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Receipts	\$'000				
Contributions—					
Officers	7,639	8,332	13,333	14,297	16,278
Consolidated Revenue (a)	9,895	10,517	11,376	12,436	13,818
Interest	4,802	5,547	6,237	6,907	7,790
Transferred from Police Pensions Fund	..	(b) 4,719	..	..	..
Other	145	204	118	94	28
Total	22,480	29,319	31,064	33,734	37,914
Disbursements—					
Pension payments	13,006	13,918	14,990	16,203	17,772
Lump sum payments	14	86	2,271	2,893	3,549
Contributions refunded	885	1,062	1,218	1,399	1,686
Transfer to Pensions Supplementation Fund	..	..	909	1,028	1,057
Other	(c)	6	2	35	13
Total	13,904	15,071	19,390	21,558	24,077
Balance in Fund at 20 June	98,749	112,584	124,258	136,435	150,272

(a) These figures do not agree with those shown on page 638, as the latter include Consolidated Revenue's share of pensions accrued at the end of each year.

(b) Includes accrued interest \$262,000.

(c) Under \$500.

VICTORIA—STATE SUPERANNUATION FUND—*continued*

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Contributors at 30 June—					
Males	43,622	(a)44,400	(a)45,200	45,911	(a)46,700
Females	8,025	(a) 8,050	(a) 8,070	8,087	(a) 8,100
Total	51,647	(a)52,450	(a)53,270	53,998	(a)54,800
Pensioners at 30 June—					
Ex-employees—					
Males	8,293	8,415	(a) 8,440	8,464	8,583
Females	1,477	1,541	(a) 1,600	1,662	1,752
Widows	6,893	7,093	(a) 7,240	7,397	7,533
Children	862	889	(a) 940	988	1,054
Total	17,525	17,938	(a)18,220	18,511	18,922

(a) Estimated.

Police Pensions Fund

This Fund was established by the *Police Pensions Act 1923* which came into operation on 1 January 1924, and applied to all members who joined the Police Force on or after 25 November 1902. This legislation was embodied in the *Police Regulation Act 1958*, consolidating the law dealing with the Police Force in Victoria. A further amending Act was passed in December 1958.

The *Superannuation Act 1963* amended the *Superannuation Act 1958* and the *Police Regulation Act 1958* and provided that all new entrants to the Police Force on and after 1 February 1964 would be required to contribute to the State Superannuation Fund, and that existing members at that date could either remain as contributors to the Police Pensions Fund or elect to transfer to the State Superannuation Fund. The 1963 Act also provided for an actuarial investigation of the Police Pensions Fund and for the transfer of any surplus disclosed to the Consolidated Revenue.

The receipts of the Police Pensions Fund during 1968-69 amounted to \$1,117,689, comprising deductions from pay, \$52,646, special appropriation from Consolidated Revenue, \$380,000, and interest on investments, \$685,044. During the year, \$1,477,681 was paid in pensions, \$47,684 in gratuities, \$16,608 was returned to contributors on resignation, and \$211 was paid to the State Superannuation Fund. The balance in the Fund at 30 June 1969 was \$13,151,368. Of this amount, \$13,115,500 was invested in government and semi-government securities.

The number of contributors to the Fund at 30 June 1969 was 439 males and four females.

Police Superannuation Fund

Pensions are payable out of this Fund on account of those who joined the Police Force prior to 25 November 1902.

The receipts of the Fund are made up of contributions from the State, damages awarded to members of the Police Force and certain penalties, and a statutory annual contribution from the Licensing Fund. Police contributions to the Fund ceased in 1940-41.

During the year 1968-69 the total receipts from all sources amounted

to \$5,560 while pension payments totalled \$17,559. The balance in the Fund at 30 June 1969 was \$20,855.

Pensions Supplementation Fund

This Fund was established pursuant to the *Pensions Supplementation Act 1966*, to meet the cost of supplementing, as from 1 April 1966, the pensions of officers who retired on or before 1 April 1966 or the widows of such officers or of those officers who died before that date.

The scheme was reviewed at the end of 1969 to provide further supplementation of pensions with increases ranging up to 24 per cent for pensions to persons retired before August 1961, and with appropriate smaller increases for those whose pensions commenced at later dates.

Total income of the Fund during 1968-69 was \$1,114,857, made up of statutory transfers from the State Superannuation Fund, \$1,054,029, interest on investments, \$56,464, and other income \$4,364, while expenditure on pensions totalled \$1,263,606. At 30 June 1969 the net assets of the Fund were \$1,117,273.

Coal Mine Workers Pensions Fund

The *Coal Mine Workers Pensions Act 1942* and subsequent legislation defined contributions and benefits in connection with the Coal Mine Workers Pensions Fund. Contributions to the Fund were payable by the State Government, the State Coal Mine, and by mine workers. With the passing of the *State Coal Mines (Winding Up) Act 1968* (operative from 1 January 1969) and the consequent closure of the State Coal Mine, contributions to the Fund by the State Coal Mine and by mine workers ceased, the State Government henceforth being the only contributor. The winding up Act allowed early retirement for certain mine workers approaching retiring age at 1 January 1969. Benefits to these and other retired mine workers and their dependants will continue to be paid from the Fund. At 30 June 1969 the net assets of the Fund amounted to \$1,001,044.

Parliamentary Contributory Superannuation Fund

This Fund was established under the authority of the *Parliamentary Salaries and Superannuation Act 1968*, which came into operation on the 1 December 1968. Under the Act the amounts standing to the credit of the Parliamentary Contributory Retirement Fund, established under *The Constitution Act Amendment Act 1958*, and the Parliamentary Superannuation Fund, established under the *Parliamentary Contributory Superannuation Act 1962*, were paid into the new Fund.

On 22 April 1969 the *Parliamentary Salaries and Superannuation (Administration) Act 1969* transferred responsibility for the administration of the Parliamentary Contributory Superannuation Fund from the Treasury to the State Superannuation Board of Victoria.

The Act provides that male members contribute to the Fund at the rate of 11½ per cent (female rate 10 per cent) of the gross amount of each salary instalment.

Every person who has ceased to be a member and has served as a member for at least fifteen years or, in certain circumstances, for at least eight years, is entitled to be paid out of the Fund a pension which is

determined in accordance with a formula set out in the Act. The formula takes into account length of service and amount of salary at date of retirement.

Provision is also made for payments of certain sums to ex-members who do not fulfil the conditions necessary for a pension. The widow of a deceased member or ex-member is also entitled to receive a pension calculated according to a formula laid down in the Act.

During 1968-69 receipts of the several Funds totalled \$208,509, made up of members' contributions, \$90,359, contribution from Consolidated Revenue, \$85,666, interest on investments, \$22,794, and other receipts, \$9,690. Pension payments totalled \$197,729 and other expenditure amounted to \$13,701.

The balance in the Parliamentary Contributory Superannuation Fund on 30 June 1969 was \$428,468 of which \$425,000 was invested.

Married Women Teachers Pensions Fund

This Fund was established under the provisions of the *Teaching Service (Married Women) Act* 1956 and operated during the period 1 July 1957 to 31 January 1969 when the Fund was closed and its assets transferred to the Married Women's Superannuation Fund.

Married Women's Superannuation Fund

The *Married Women's Superannuation Fund Act* 1968, proclaimed on 1 February 1969, established the Married Women's Superannuation Fund to which was credited the balance in the former Married Women Teachers' Pension Fund which ceased to exist as from 31 January 1969.

Teachers who were contributing to the Married Women Teachers Pension Fund automatically became contributors to the Married Women's Superannuation Fund, and a married woman employed on the permanent staff of any department or body whose officers contribute to the State Superannuation Fund may elect to become a contributor to the Fund provided she is not contributing to the State Superannuation Fund.

On retirement after attaining the age of 60 years, a contributor is entitled to receive a lump sum payment or she may convert all or part of the lump sum entitlement to an annuity payment. A contributor retiring on account of ill health is entitled only to a lump sum payment.

The balance in the Fund at 30 June 1969 was \$943,950.

Commonwealth Superannuation Fund

The Commonwealth Superannuation Scheme established under the provisions of the *Superannuation Act* 1922 provides pensions on retirement for officers and employees of the Commonwealth and certain Authorities of the Commonwealth, and for their widows or dependent widowers and children. On retirement, contributors are entitled to \$91 per annum in respect of each unit contributed for and contributions of members provide \$26 of this. Each widow is entitled to a pension equal to a minimum of one half or a maximum of five eighths of that for which her husband was contributing or (if a pensioner) receiving. A pension of \$208 per annum is paid in respect of each child under sixteen years, or up to 21 years for

children undergoing full-time education, of a married contributor or pensioner on his death. For orphan children a minimum of \$520 per annum is paid.

By an amending Act which came into operation on 4 June 1969 provision was made to enable any member under certain conditions to accept as, or convert to, non-contributory those units to which he has become entitled. On retirement (at age 65) or previous invalidity the amount payable for each unit is then only the Consolidated Revenue proportion (\$65 a year). Widows are entitled to pro rata payment in respect of non-contributory units.

In addition to the pension scheme, a Provident Account, established in 1937, provides a lump sum benefit to employees who, for various reasons, cannot become contributors for pension benefits. Contributions to the Provident Account are at the rate of 5 per cent of salary. The benefit payable is the total of the contributions actually paid plus compound interest, multiplied by three, or an amount equal to one half of annual salary, if greater.

At 30 June 1969 there were 151,500 contributors to the Superannuation Fund and 17,367 to the Provident Account, while the number of pensions in force was 25,997. At the same date, the net assets of the Fund (including those applicable to the Provident Account) were \$373.1m.

State trust funds and special accounts

Under the provisions of The Constitution Act, revenues of the State are payable to Consolidated Revenue with the exception of certain revenues which have been set aside by various Acts of Parliament for specific purposes and are payable into special funds or accounts kept at the State Treasury. Numerous funds or accounts consisting of moneys collected for, or held for expenditure on behalf of, the Commonwealth Government, moneys provided for specified purposes by outside bodies, and amounts held in trust for government departments and for other accounts are also included in trust funds. The balances of all funds or accounts are held by way of investment or on general account and the operations of many are regulated by statute.

The transactions recorded annually are numerous and of considerable magnitude. During 1968-69 the debits of all trust funds or accounts amounted to \$659.1m, while credits totalled \$669.5m.

At 30 June 1969 the liability of the State on account of all trust funds or accounts amounted to \$144.2m. Of this total, \$64.3m was invested in Commonwealth stock or other securities, and cash advanced totalled \$13.9m. The balance—\$65.9m—was at the credit of the Public Account.

Expenditure from Loan Fund

In addition to the ordinary expenditure from revenue, certain sums are disbursed annually for various purposes from the Loan Fund and on account of loan. Details of such expenditure for each of the years 1964-65 to 1968-69 are shown in the following table. The total expenditure from all sources to 30 June 1969, regardless of whether the loans have been repaid or are still in existence, was \$2,618m.

VICTORIA—EXPENDITURE FROM LOAN FUND AND ON
ACCOUNT OF LOAN
(\$'000)

Expenditure on—	1964-65	1965-66	1966-67	1967-68	1968-69
Public works—					
Railways	15,331	16,220	16,336	16,541	16,863
Roads and bridges	2,464	2,390	1,672	1,841	4,476
Harbours and rivers	4,408	3,453	2,906	1,886	4,432
Water supply	17,896	17,953	18,280	18,380	18,156
Sewerage	1,210	986	966	1,166	1,754
Electricity supply	16,000	15,000	15,500	14,500	15,750
Gas and Fuel Corporation	80	60	60	70	80
Public buildings—					
Schools, etc.	31,553	31,900	35,928	39,718	42,192
Hospitals, etc.	14,960	16,752	16,964	17,336	17,260
Other	8,092	9,834	13,049	13,297	11,440
Municipalities—loans, grants, etc.	1,850	2,005	1,806	2,361	2,235
Housing	1,845	1,883	1,899	2,758	2,705
Other public works	1,015	591	583	610	547
Primary production—					
Land settlement	2,430	2,532	2,688	2,308	1,927
Soldier settlement	78	64	13	2	..
Wire netting advances	1	(a)	1	1	2
Drought, etc., relief	161	208	208	915	4,131
Forestry	2,092	2,077	2,152	2,759	3,020
Mining, n.e.i.	132	218	145	230	254
Cool stores	194	180	184	235	80
Destruction of vermin and noxious weeds	1,993	1,864	2,065	2,084	2,143
Other primary production (b)	2,558	2,711	3,233	3,852	3,538
Other purposes	1,514	1,965	923	1,532	1,721
Total works, etc., expenditure	127,855	130,848	137,562	144,383	154,707
Funding of Consolidated Revenue deficits	..	..	4,000	4,000	..
Grand total	127,855	130,848	141,562	148,383	154,707

(a) Under \$500.

(b) Includes allocations to the Rural Finance and Settlement Commission to enable the Commission to assist industries (principally primary) in country areas.

The figures in the table above do not include discounts and flotation expenses on loans for works and redemption purposes, particulars of which are as follows: 1964-65, \$610,698; 1965-66, \$1,036,344; 1966-67, \$817,319; 1967-68, \$1,099,684; 1968-69, \$748,582. The aggregate expenditure to 30 June 1969 was \$38,920,929.

Public debt

The public debt chiefly comprises moneys raised and expended with the object of assisting the development of the resources of the State and is, to a large extent, represented by tangible assets.

Loan moneys have been used in Victoria principally for the construction of railways, roads, water supply and sewerage works, schools, hospitals, and other public buildings, improvements to harbours and rivers, electricity supply, land settlement, and forestry.

A notable feature of the public debt of the State is that approximately 95 per cent of indebtedness is now domiciled in Australia. There has been a gradual change from the situation which existed a century ago when nearly all loans were financed in London. Even at the turn of the century, only 10 per cent of State indebtedness was domiciled in Australia.

In the tables in this section relating to the public debt of Victoria, loans domiciled in overseas countries have been converted to Australian currency at rates of exchange ruling at 30 June in each respective year.

Advances made by the Commonwealth Government to Victoria, under the Commonwealth-State agreements relating to housing, soldier settlement, and drought relief are not included in the public debt statements in this *Year Book*. The total of such advances owing at 30 June 1969 was \$502.3m, of which \$483.4m was for housing, \$13.2m for soldier settlement, and \$5.7m for drought relief. These liabilities should be taken into account when considering the total debt position of Victoria.

Public debt transactions

The following table shows particulars of the loans raised and redeemed during, and the amount outstanding at the end of, each of the years 1964-65 to 1968-69. The variations from year to year in the Australian currency equivalent of overseas loans, resulting from application of the rates of exchange ruling at 30 June in each year, are shown. Separate particulars are shown for loans raised in Australia and London, while loans raised in New York, Canada, Switzerland, and the Netherlands are grouped under one heading.

VICTORIA—STATE PUBLIC DEBT : SUMMARY OF TRANSACTIONS
(\$A'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
DEBT MATURING IN AUSTRALIA					
Debt outstanding at 1 July	1,411,589	1,518,481	1,626,901	1,755,151	1,896,159
New debt incurred—					
Commonwealth Government loan flotations	256,472	313,629	300,736	317,543	277,113
Domestic raisings	4,391	2,228	1,444	3,771	1,581
Less conversion and redemption loans	139,519	191,394	163,111	161,646	131,604
Total new debt incurred	121,344	124,463	139,070	159,668	147,089
Less repurchases and redemptions from National Debt Sinking Fund	14,452	16,043	10,820	18,660	10,181
Net increase in debt	106,892	108,420	128,250	141,008	136,908
Debt outstanding at 30 June	1,518,481	1,626,901	1,755,151	1,896,159	2,033,067
DEBT MATURING IN LONDON					
Debt outstanding at 1 July	115,151	112,201	105,505	94,705	62,151
New debt incurred—					
Commonwealth Government loan flotations	..	3,876	2,500	16,408	..
Less conversion and redemption loans	..	..	..	..	..
Total new debt incurred	..	-3,876	-2,500	-16,408	..
Less repurchases and redemption from National Debt Sinking Fund	2,950	2,820	8,300	2,616	2,486
Less adjustment due to variation in rate of exchange	..	..	..	13,530	..
Net increase in debt	-2,950	-6,696	-10,800	-32,554	-2,486
Debt outstanding at 30 June	112,201	105,505	94,705	62,151	59,665
DEBT MATURING IN NEW YORK, CANADA, SWITZERLAND, AND THE NETHERLANDS					
Debt outstanding at 1 July	50,981	48,656	49,138	43,213	40,301
New debt incurred—					
Commonwealth Government loan flotations	..	3,461	..	..	..
Less conversion and redemption loans	..	..	3,285	..	..
Total new debt incurred	..	3,461	-3,285	..	..
Less repurchases and redemptions from National Debt Sinking Fund	2,325	2,980	2,639	2,912	2,739
Net increase in debt	-2,325	481	-5,924	-2,912	-2,739
Debt outstanding at 30 June	48,656	49,138	43,213	40,301	(a) 37,562

VICTORIA—STATE PUBLIC DEBT: SUMMARY OF TRANSACTIONS—*continued*
(\$A'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
TOTAL					
Debt outstanding at 1 July	1,577,721	1,679,338	1,781,543	1,893,069	1,998,611
New debt incurred—					
Commonwealth Government loan flotations	256,472	317,089	300,736	317,543	277,113
Domestic raisings	4,391	2,228	1,444	3,771	1,581
Less conversion and redemption loans	139,519	195,271	168,896	178,054	131,604
Total new debt incurred	121,344	124,047	133,284	143,260	147,089
Less repurchases and redemptions from National Debt Sinking Fund	19,727	21,842	21,759	24,188	15,406
Less adjustment due to variation in rate of exchange	..	..	..	13,530	..
Net increase in debt	101,617	102,205	111,525	105,542	131,683
Debt outstanding at 30 June	1,679,338	1,781,543	1,893,069	1,998,611	2,130,294

(a) Includes New York, \$A30,500,000; Canada, \$A2,678,000; Switzerland, \$A2,600,000; and Netherlands, \$A1,784,000.

Particulars concerning the due dates of loans outstanding at 30 June 1969 are given in the following table. Where the Government has the option of redemption during a specified period, the loans have been classified according to the latest date of maturity.

VICTORIA—DUE DATES OF LOANS AT 30 JUNE 1969
(\$A'000)

Due date (financial year)	Amount maturing—				Total
	In Australia	In London	In New York	Elsewhere overseas	
1969-70	216,989	13,050	1,363	..	231,401
1970-71	201,479	..	678	..	202,157
1971-72	111,384	..	2,609	..	113,993
1972-73	108,818	13,534	2,940	..	125,292
1973-74	71,294	..	..	..	71,294
1974-75	94,731	..	..	..	94,731
1975-76	119,072	600	..	(a) 2,600	122,272
1976-77	72,112	..	..	..	72,112
1977-78	78,117	5,269	..	..	83,386
1978-79	28,903	20,370	2,346	..	51,619
1979-80	51,291	..	2,784	..	54,075
1980-81	46,940	..	2,857	(b) 2,678	52,475
1981-82	55,939	6,199	4,599	(c) 1,784	68,522
1982-83	18,104	..	7,274	..	25,378
1983-84	88,725	643	..	..	89,368
1984-85	117,705	..	..	..	117,705
1985-86	72,179	..	3,051	..	75,230
1986-87	57,700	..	..	..	57,700
1987-88	98,790	..	..	..	98,790
1988-89	62,489	..	..	..	62,489
1989-90	107,890	..	..	..	107,890
1994-95	8,985	..	..	..	8,985
1999-2000	6,911	..	..	..	6,911
2001-02	48,305	..	..	..	48,305
2003-04	84,314	..	..	..	84,314
Not yet fixed	3,901	..	..	..	3,901
Total	2,033,067	59,665	30,500	7,062	2,130,294

(a) Maturing in Switzerland.

(b) Maturing in Canada.

(c) Maturing in The Netherlands.

The following table shows details of the amounts of loans outstanding in Australia, London, New York, Canada, Switzerland, and The Netherlands, and the amount of debt per head of population at the end of each of the years 1964-65 to 1968-69 :

VICTORIA—PUBLIC DEBT : LOANS OUTSTANDING IN AUSTRALIA, LONDON, NEW YORK, CANADA, SWITZERLAND, AND THE NETHERLANDS

At 30 June—	Amount of loans maturing in—						Total debt	
	Australia	London	New York	Canada	Switzerland	The Netherlands	Amount	Per head of population
	\$A'000	\$A'000	\$A'000	\$A'000	\$A'000	\$A'000	\$A'000	\$A
1965	1,518,481	112,201	40,729	3,269	2,600	2,059	1,679,338	530.70
1966	1,626,901	105,505	41,407	3,072	2,600	2,059	1,781,543	553.24
1967	1,755,151	94,705	35,658	2,897	2,600	2,059	1,893,069	578.14
1968	1,896,159	62,151	33,060	2,721	2,600	1,921	1,998,611	601.38
1969	2,033,067	59,665	30,500	2,678	2,600	1,784	2,130,294	629.50

The following table shows the rates of interest which were payable on the public debt at 30 June 1969, and the amounts of the debt at each rate maturing in Australia, London, New York, and elsewhere overseas, respectively:

VICTORIA—RATES OF INTEREST ON PUBLIC DEBT AT 30 JUNE 1969

Rate of interest	Amount maturing—				Total
	In Australia	In London	In New York	Elsewhere overseas	
per cent	\$A'000	\$A'000	\$A'000	\$A'000	\$A'000
6.0	..	1,243	..	..	1,243
5.75	..	..	3,051	(a) 2,678	5,729
5.5	..	45,373	11,873	..	57,246
5.4	93,925	..	..	..	93,925
5.375	67,305	..	..	..	67,305
5.3	10,186	..	..	..	10,186
5.25	474,687	..	5,641	..	480,328
5.2	19,178	..	..	..	19,178
5.0	788,588	..	4,954	(b) 1,784	795,326
4.9	40,316	..	..	..	40,316
4.8	79,688	..	..	..	79,688
4.75	142,145	..	2,940	..	145,085
4.625	14,150	..	..	..	14,150
4.6	10,579	..	..	..	10,579
4.5	181,098	..	678	(c) 2,600	184,375
4.4	10,553	..	..	..	10,553
4.25	92,340	..	..	..	92,340
3.875	106	..	..	..	106
3.75	..	..	1,363	..	1,363
3.4875	1	..	..	..	1
3.25	..	13,050	..	..	13,050
3.1	553	..	..	..	553
3.0	1,857	..	..	..	1,857
2.7125	225	..	..	..	225
2.325	1,158	..	..	..	1,158
1.0	4,429	..	..	..	4,429
Total	2,033,067	59,665	30,500	7,062	2,130,294
Average rate of interest	% 4.97	% 5.02	% 5.22	% 5.08	% 4.97

(a) Maturing in Canada. (b) Maturing in the Netherlands. (c) Maturing in Switzerland.

In the next table the annual interest liability of the State has been calculated on the basis of the debt outstanding at the end of each of the years 1964-65 to 1968-69. The liability, therefore, represents the amount of interest payable in the ensuing year without regard to new loan raisings and redemptions during that year.

The table shows particulars of the annual interest payable in Australia and in overseas countries, respectively, the total liability per head of population, and the average rate of interest liability.

VICTORIA—ANNUAL INTEREST LIABILITY

At 30 June—	Payable in Australia	Payable in overseas countries	Total	Per head of population	Average rate
	\$A'000	\$A'000	\$A'000	\$A	per cent
1965	70,341	7,310	77,650	24.54	4.63
1966	77,879	7,144	85,023	26.40	4.77
1967	85,417	6,516	91,933	28.08	4.86
1968	92,892	5,180	98,072	29.50	4.91
1969	100,963	4,948	105,911	31.29	4.97

The actual interest and expenses paid on the public debt of Victoria for each of the years 1964-65 to 1968-69 are shown in the following table :

VICTORIA—INTEREST AND EXPENSES OF PUBLIC DEBT
(\$A'000)

Year	Interest paid on loans maturing—				Total interest	Exchange on payment of interest overseas	Commission on payment of interest of overseas, expenses of conversion loans, etc.	Grand total (a)
	In Australia	In London	In New York	Elsewhere overseas				
1964-65	66,189	3,963	998	210	71,361	2,398	300	74,059
1965-66	72,058	3,877	1,007	209	77,150	2,344	353	79,847
1966-67	78,450	3,566	984	205	83,204	2,238	376	85,818
1967-68	86,369	3,163	879	199	90,611	1,579	376	92,567
1968-69 (b)	94,295	3,082	1,743	(c) 373	99,493	(b)	400	99,893

(a) Includes \$A4,254,000 contributed each year by the Commonwealth Government in accordance with the provisions of the Financial Agreement (see page 617), but excludes interest paid on advances received from the Commonwealth Government for housing and soldier settlement.

(b) For the year 1968-69, exchange on payments of interest overseas has been included with interest paid in overseas countries.

(c) Includes Canada, \$A158,000; Switzerland, \$A118,000; and The Netherlands, \$A97,000.

National Debt Sinking Fund

Under the Financial Agreement of 1927 between the Commonwealth and the States, it was arranged that the Commonwealth assume responsibility for the public debt of the States. The securities covering these debts would be redeemed or repurchased by payments from the National Debt Sinking Fund (which had been in existence from 1923) and the Commonwealth and the States were to make annual contributions to the Fund for this purpose.

Details of transactions of the National Debt Sinking Fund in respect of the Public Debt of the State of Victoria, for each of the years 1964-65 to 1968-69, are shown in the following tables. The first table shows particulars of the receipts of the Fund, and the second table shows details

of the expenditure on, and face value of, securities repurchased and redeemed.

VICTORIA—NATIONAL DEBT SINKING FUND : RECEIPTS
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Contributed under Financial Agreement—					
Victoria	15,333	16,437	17,522	18,613	20,031
Commonwealth	3,937	4,225	4,524	4,885	5,189
Total contributions under Financial Agreement	19,271	20,662	22,046	23,498	25,220
Interest on investments	Dr. 12	5	Dr. 10	5	30
Special contributions by Victoria	102	102	102	25	25
Interest accrued on securities	..	..	..	..	Dr. 109
Total	19,361	20,769	22,138	23,528	25,167
Total to date	229,295	250,064	272,202	295,730	320,897

VICTORIA—NATIONAL DEBT SINKING FUND : SECURITIES
REPURCHASED AND REDEEMED
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Australia—					
Face value	14,452	16,043	10,820	18,660	10,181
Net cost	14,447	16,027	10,807	18,652	10,180
London—					
Face value	2,950	2,820	8,300	2,616	2,486
Net cost	2,727	2,667	8,302	2,783	2,357
New York—					
Face value	2,235	2,783	2,464	2,598	2,560
Net cost	2,246	2,765	2,408	2,410	2,323
Canada—					
Face value	90	197	175	177	42
Net cost	90	197	172	160	37
Netherlands—					
Face value	..	..	..	137	137
Net cost	..	..	..	138	139
Total—					
Face value	19,727	21,842	21,759	24,188	15,406
Net cost	19,511	21,656	21,689	24,142	15,036
Total to date—					
Net cost	228,197	249,853	271,542	295,684	310,720

Further reference, 1964

PRIVATE FINANCE

Foreign exchange

Australia is a member of the International Monetary Fund. The par value of Australian currency established with the Fund is 0.995310 gram of fine gold per Australian dollar or \$A1 = \$US1.12.

The Banking (Foreign Exchange) Regulations made under the *Banking Act 1959* vest authority in the Reserve Bank of Australia to control foreign exchange transactions in Australia. Australian banks have been authorised to conduct a wide range of foreign exchange transactions without reference

to the Reserve Bank. With the exception of the exchange rate between Australian currency and sterling, which is fixed by the Reserve Bank, the banks may determine their own exchange rates for spot and forward transactions in foreign currencies.

Commonwealth banking legislation

Information about the provisions of Commonwealth banking legislation will be found on pages 648 to 650 of the *Victorian Year Book* 1966.

Banking in 1969

General

During the second half of 1968, the liquidity of the private sector of the economy rose strongly. In order to temper this growth, the Reserve Bank increased the proportion of deposits that the major trading banks were to hold in the Statutory Reserve Deposit (S.R.D.) accounts, and raised the maximum overdraft interest rate that trading banks could charge.

Rural credit advances rose sharply during the first quarter of 1969 as a result of the record wheat harvest. International reserves also increased in January and February, because of the reduced trade deficit and the sustained inflow of capital. Consequently, the liquidity of the private sector continued to expand during 1969, despite the measures to reduce spending power introduced in the previous year. It was apparent that further monetary or fiscal measures would be required to restrain the economy during 1969. The restrictive measures adopted in 1969 fall under three main headings.

First, the Federal Budget for 1969–70 provided for a surplus of government receipts over expenditure within Australia. Allowing for revenue proposals announced in the Budget Speech, total receipts were estimated to increase by 13·5 per cent in 1969–70. Expenditures were estimated to increase by only 7·2 per cent, the major reduction being expenditure for defence services (estimated to decline by 5·2 per cent). The estimates implied that the surplus within Australia would increase by a further \$300m in 1969–70, following a surplus of almost \$200m in 1968–69.

Second, the Reserve Bank announced a tightening of monetary policy in July 1969. From 1 August the maximum interest rate payable by trading banks on fixed deposits was raised to 5 per cent per annum. The maximum overdraft rate was increased by 0·25 per cent to 7·75 per cent per annum.

Third, the proportion of deposits which the major trading banks were to hold in the Statutory Reserve Deposit accounts of the Reserve Bank was raised in two one-half per cent stages, from 9 per cent to 10 per cent, in August and October.

Deposits

Total deposits of the major trading banks increased by 10·6 per cent between December 1968 and December 1969, compared with an increase of 6·9 per cent for the previous twelve months. The average level of deposits during 1969 increased by \$575m to \$6,373m. The rate of growth in fixed deposits continued to exceed that for current deposits, the former averaging 42 per cent of all deposits with the major trading banks over 1969.

The most significant development in deposit facilities during 1969 was the introduction of Certificates of Deposit. For the first time, Australian trading banks were able to issue an interest-bearing deposit certificate which was a marketable security, capable of being readily converted into cash at any time, and transferable by delivery. The terms range from three months to two years and the minimum deposit is \$50,000. Initially the maximum yield was set at 4.75 per cent per annum, but in line with other fixed deposit rates, this was raised to 5 per cent from 1 August 1969.

The first Certificates were issued during March and, by December 1969, the total outstanding was \$234m, accounting for 8.3 per cent of all major trading bank term deposits. The majority of Certificates of Deposit issued up to December 1969 were for terms ranging from three to six months.

Advances

The desired effect of a restrictive monetary policy on trading banks is to reduce the growth in total advances either by restricting the rate at which new lending commitments are undertaken by the banks, or by reducing bank customers' use of existing overdraft limits.

Raising the maximum interest rate chargeable on overdraft affects both these variables, in so far as an increase in cost reduces the demand for bank credit. Increasing the Statutory Reserve Deposit ratio, by requiring that an increased proportion of trading bank liquid assets must be held with the Reserve Bank, reduces the banks' scope to undertake new lending to the private sector. Despite the imposition of both these measures during the final quarter of 1968, and a further tightening in the third quarter of 1969, there was only a slight decline in the rate at which advances by major trading banks increased during 1969.

Reflecting an overall growth of bank liquidity and a high demand for credit from customers, total advances increased by \$421.9m between December 1968 and December 1969 to a total of \$4,139.5m. This represented an increase of 11.3 per cent for the year, compared with 12.4 per cent for the previous year. During 1969 as a whole, average advances equalled 61.4 per cent of total deposits held by the major trading banks, compared with 61.3 per cent and 58.2 per cent, respectively, during 1968 and 1967.

The average weekly rate at which new and increased lending commitments were undertaken during 1969 was \$33m, 6.2 per cent greater than in 1968. This compares with an increase of only 2.6 per cent for the year before. By way of comparison, total outstanding overdraft limits for major trading banks increased by only 6.4 per cent between June 1968 and June 1969 and by 9.6 per cent during the previous year.

The decline in the growth rate of overdraft limits, despite an increased rate of new and increased lending commitments during 1969, indicated a substantial cancellation rate and/or reduction of existing overdraft limits.

An important factor contributing to the continued growth of trading bank lending has been the establishment of the Australian Resources Development Bank. It commenced lending in March 1968, having been established by the trading banks to re-finance large, longer term loans,

especially for national resource development projects. One objective has been to assist Australian companies maintain a reasonable equity in these ventures. The initial capital was contributed by the Reserve Bank and the trading banks.

Most A.R.D.B. funds have been obtained through public issues of Transferable Deposits, which were pioneered (as far as Australia was concerned) by the A.R.D.B. in April 1968. At 30 September 1969 Transferable Deposits accounted for \$70m of the Bank's total funds of almost \$92m.

In December 1969 major trading bank advances totalled \$4,139.5m, of which \$113.7m had been re-financed by A.R.D.B. term loans.

Banking services

Victoria is provided with a comprehensive range of both trading and savings bank facilities, the most important of which are :

Accounts : Current (cheque) accounts ; savings accounts (including special purpose accounts) ; interest-bearing term deposits ; certificates of deposit ; periodical payments ; special arrangements for accounts of charitable and non-profit organisations.

Credit : Loans on overdraft ; discounting bills and promissory notes ; loans for fixed periods for special purposes (exports, development, rural, etc.) ; housing loans ; personal loans.

Remittances (within Australia) : By drafts, mail transfers, and telegrams.

International banking : Collection and negotiation of bills of exchange ; commercial letters of credit ; purchase and sale of overseas exchange ; forward exchange.

Safe custody : Deposit vaults and night safes.

Information : Banking assessment of individuals, firms and companies ; information for immigrants ; introductions ; trade, industrial, and economic inquiries. Publications on economic conditions, trade, and industry are provided by some banks.

Investment services : Nominee, registrar, and other services for investors, superannuation funds, and unit trusts.

Travel : Information ; accommodation ; currency and travel arrangements, including bookings, reservations, itinerary planning, travellers' cheques, letters of credit, baggage insurance, and passports.

History of Banking in Victoria, 1961

Reserve Bank of Australia

General

The Reserve Bank is Australia's central bank and acts as banker and financial agent of the Commonwealth. The *Reserve Bank Act* 1959-1966 preserved and continued in existence the original body corporate known as the Commonwealth Bank of Australia under the new name, Reserve Bank of Australia, and also preserved within it the special departments of Note Issue and Rural Credits.

Financial statements

The Bank's liabilities and assets, for each of the years 1964-65 to 1968-69, together with net profits and their distribution are shown in the following tables :

AUSTRALIA—RESERVE BANK :
CENTRAL BANKING BUSINESS (INCLUDING NOTE ISSUE
DEPARTMENT) : AVERAGE LIABILITIES AND ASSETS
(\$m)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Liabilities—					
Capital and reserve funds	65	70	74	72	61
Australian notes on issue	887	872	909	990	1,071
Statutory Reserve Deposit—					
Accounts of trading banks	702	608	476	480	523
Other deposits of trading banks	62	67	93	73	83
Deposits of savings banks	434	437	456	505	568
Other liabilities	284	274	278	227	225
Total	2,435	2,328	2,286	2,348	2,531
Assets—					
Gold and foreign exchange	1,491	1,208	1,174	1,042	1,090
Australian notes and coin	16	22	24	18	14
Cheques and bills of other banks	6	8	6	5	5
Australian Government securities—					
Redeemable in Australia—					
Treasury bills and Treasury notes	193	295	314	187	300
Other	534	539	440	728	713
Other securities	(a)	..	..	..	..
Bills receivable and remittances in transit	19	24	29	31	35
Loans, advances, and all other assets	176	232	300	336	374
Total	2,435	2,328	2,286	2,348	2,531

(a) Under \$500,000.

AUSTRALIA—RESERVE BANK : RURAL CREDITS
DEPARTMENT : AVERAGE LIABILITIES AND ASSETS
(\$m)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Liabilities (excluding capital and contingencies)	133.9	167.7	215.7	250.4	284.7
Assets—					
Loans, advances, etc.	159.6	195.8	245.7	283.0	319.8
Other assets	0.7	0.2	0.1	(a)	0.1
Total assets	160.4	196.0	245.8	283.1	319.9

(a) Under \$50,000.

AUSTRALIA—RESERVE BANK : NET PROFITS
(\$m)

Department	1964-65	1965-66	1966-67	1967-68	1968-69
Central banking	15.3	8.7	7.9	4.5	5.7
Note issue	30.5	31.1	34.3	23.0	23.8
Rural credits	1.0	1.2	1.3	1.5	1.6
Total	46.8	41.0	43.6	29.0	31.1

AUSTRALIA—RESERVE BANK : DISTRIBUTION OF PROFITS
(\$m)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Commonwealth of Australia	41.0	35.8	38.8	26.2	26.6
Reserve Bank reserve fund	4.8	4.0	3.5	1.3	2.9
Rural Credits Department—					
Reserve fund	0.5	0.6	0.7	0.7	0.8
Development fund	0.5	0.6	0.7	0.7	0.8
Total	46.8	41.0	43.6	29.0	31.1

Further reference, 1966

Trading banks

The following table shows the number of branches and agencies in Victoria conducted by individual trading banks at 30 June 1969 :

VICTORIA—TRADING BANKS : NUMBER
OF BRANCHES AND AGENCIES

Bank	At 30 June 1969	
	Branches	Agencies
Major trading banks—		
Commonwealth Trading Bank of Australia	136	88
Australia and New Zealand Bank Ltd	216	94
The Bank of Adelaide	2	..
Bank of New South Wales	172	13
The Commercial Bank of Australia Ltd	168	61
The Commercial Banking Co. of Sydney Ltd	139	39
The English, Scottish, and Australian Bank Ltd	158	30
The National Bank of Australasia Ltd	240	78
Total major trading banks	1,231	403
Other trading banks—		
Bank of New Zealand	1	..
Banque Nationale de Paris	1	..
Total other trading banks	2	..
Total all trading banks	1,233	403
Metropolitan area	705	195
Remainder of State	528	208

The following tables show particulars of the averages of deposits with, and advances by, trading banks in Victoria during the month of June 1969. Comparable figures for the month of June for each of the preceding four years are also shown in the second table. The monthly averages are

obtained by recording the amounts of deposits and advances at the close of business on Wednesday of each week.

VICTORIA—MAJOR TRADING BANKS : AVERAGES OF DEPOSITS
AND ADVANCES, MONTH OF JUNE 1969
(\$'000)

Bank	Deposits repayable in Australia			Loans (a), advances, and bills discounted
	Not bearing interest	Bearing interest	Total	
Commonwealth Trading Bank of Australia	111,724	151,770	263,494	168,036
Private trading banks—				
Australia and New Zealand Bank Ltd	187,883	182,945	370,827	213,497
The Bank of Adelaide	3,450	4,273	7,722	4,090
Bank of New South Wales	120,497	116,787	237,284	157,889
The Commercial Bank of Australia Ltd	121,303	118,934	240,237	158,945
The Commercial Banking Co. of Sydney Ltd	66,158	82,545	148,703	80,943
The English, Scottish, and Australian Bank Ltd	123,940	104,295	228,234	130,691
The National Bank of Australasia Ltd	171,637	216,555	388,190	189,457
Total	906,590	978,101	1,884,690	1,103,548

(a) Excludes loans to authorised dealers in the short-term money market.

VICTORIA—MAJOR TRADING BANKS : AVERAGES
OF DEPOSITS AND ADVANCES
(\$'000)

Month of June—	Deposits repayable in Australia			Loans (a), advances, and bills discounted
	Not bearing interest	Bearing interest	Total	
1965	795,002	669,750	1,464,752	719,518
1966	793,819	742,308	1,536,129	798,639
1967	839,150	789,346	1,628,495	900,943
1968	891,749	850,568	1,742,317	1,026,653
1969	906,590	978,101	1,884,690	1,103,548

(a) Excludes loans to authorised dealers in the short-term money market.

A classification of persons and authorities in receipt of trading bank advances for each of the years 1965 to 1969 is given in the following table. Business advances are classified according to the main industry of the borrower.

VICTORIA—MAJOR TRADING BANKS : CLASSIFICATION OF ADVANCES
(\$m)

Classification	At second Wednesday of July—				
	1965	1966	1967	1968	1969
Resident borrowers—					
Business advances—					
Agriculture, grazing, and dairying	110.2	119.2	150.7	193.1	207.6
Manufacturing	196.6	212.6	225.7	240.4	226.0
Transport, storage, and communication	15.4	16.6	19.3	19.1	23.4
Finance	49.1	49.4	46.3	65.1	58.5
Commerce	136.0	151.9	164.9	168.1	193.2
Building and construction	24.3	25.5	32.2	38.0	41.4
Other businesses	55.5	75.5	88.2	114.1	133.5
Unclassified	6.8	7.3	12.6	9.7	17.7
Total business advances	594.0	658.1	739.9	847.6	901.3
Advances to public authorities	10.1	14.9	12.0	15.3	17.7
Personal advances	110.0	119.4	140.3	165.6	184.4
Advances to non-profit organisations	11.0	12.9	14.2	16.9	17.4
Total advances to resident borrowers	725.1	805.4	906.4	1,045.4	1,120.8
Non-resident borrowers	0.4	0.3	0.5	1.2	1.2
Grand total	725.5	805.7	906.9	1,046.6	1,121.9

The above classification for bank deposits is available only on a Commonwealth basis, and is to be found in the *Banking and Currency* bulletin issued annually by the Commonwealth Statistician.

The following table shows, for each of the years 1959-60 to 1968-69, the average weekly amounts debited by trading banks to customers' accounts. Particulars relate to the operation of all trading banks transacting business in Victoria (as set out in the last table on page 654) and, in addition, the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank (prior to 14 January 1960, Industrial Finance and Mortgage Bank Departments of the Commonwealth Bank). Debits to Commonwealth and State Government accounts at Melbourne city branches are excluded from the table.

VICTORIA—TRADING BANKS (a) : AVERAGE
WEEKLY DEBITS TO CUSTOMERS' ACCOUNTS
(\$m)

Year	Average weekly debits	Year	Average weekly debits
1959-60	529·1	1964-65	825·3
1960-61	565·9	1965-66	847·7
1961-62	590·0	1966-67	940·0
1962-63	650·5	1967-68	1,041·8
1963-64	733·2	1968-69	1,214·1

(a) Also includes the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank.

Commonwealth Banking Corporation
General

The Commonwealth Banking Corporation, established under the *Commonwealth Banks Act* 1959, came into being on 14 January 1960, and is the controlling body for the Commonwealth Trading Bank of Australia, the Commonwealth Savings Bank of Australia, and the Commonwealth Development Bank of Australia.

The Corporation Board consists of three *ex officio* members, namely, the Managing Director and Deputy Managing Director of the Corporation and the Secretary to the Treasury, plus eight members (who include the Chairman and Deputy Chairman) appointed from private enterprise other than the private banking industry.

It is the duty of the Board, within the limits of its powers, to ensure that the policy of the Corporation and the banking policy of the Trading Bank, of the Savings Bank, and of the Development Bank are directed to the advantage of the people of Australia and have due regard to the stability and balanced development of the Australian economy.

Commonwealth Trading Bank of Australia

The Commonwealth Trading Bank is one of the three member banks comprising the Commonwealth Banking Corporation and has a history of over fifty years banking experience. It accepts interest bearing deposits, issues Certificates of Deposit, and provides cheque account facilities, a wide range of loans, and the usual trading bank services including the acceptance of safe custody lodgments.

The Commonwealth Trading Bank is now one of the largest trading banks. At June 1969 advances to customers were \$718m; customers' accounts were \$1,280m or over 20.4 per cent of the total deposits of all major Australian trading banks; customers' accounts numbered 1,054,000; and it had 1,110 branches and agencies throughout Australia.

On the international scene, the Bank has agents and correspondents throughout the world, enabling it to handle all types of international monetary transactions. It has always helped the promotion of Australia's international trade and finances a large volume of export and import business. Its officers have been members of Commonwealth Government trade missions and its Trade Service is able to provide up-to-date information on economic conditions and market prospects in overseas countries.

Facilities for the conduct of share, stock, note, and debenture registers for public companies and local and semi-governmental authorities are provided by the Bank's Stock and Share Department.

AUSTRALIA—COMMONWEALTH TRADING BANK:
DEPOSITS, ADVANCES, AND NUMBER OF ACCOUNTS

At 30 June—	Deposits repayable in Australia (Average for month of June)			Advances	Number of accounts
	Bearing interest	Not bearing interest	Total		
	\$m				'000
1965	403	443	846	440	878
1966	469	454	923	493	938
1967	517	497	1,014	561	972
1968	580	542	1,122	667	1,008
1969	683	597	1,280	718	1,054

Commonwealth Savings Bank of Australia

The Commonwealth Savings Bank of Australia was established in July 1912. It is the largest savings bank in Australia, having total assets at June 1969 of \$2,950m.

At the end of June 1969 amounts on deposit with the Savings Bank within Australia totalled \$2,817m and it was conducting 7,038,000 active accounts. The Savings Bank's depositors' balances are widely invested in the development of Australia; apart from advances (mainly for housing) of \$927m outstanding in June 1969, investments in Commonwealth and State Government securities totalled \$1,228m and in local and semi-governmental securities amounted to \$420m.

Between 1946 and June 1969 over \$1,360m has been provided for housing, assistance having been provided to more than 250,000 families.

The Commonwealth Savings Bank and the Commonwealth Trading Bank provide special services to facilitate the assimilation of newcomers to Australia through the Australian Financial and Migrant Information Service in London, the Migrant Information Service in all capital cities and other major centres, and agencies conducted on migrant vessels and at hostels.

**AUSTRALIA—COMMONWEALTH SAVINGS BANK :
NUMBER OF ACTIVE ACCOUNTS, AMOUNT AT
CREDIT OF DEPOSITORS, LOANS AND ADVANCES
OUTSTANDING, ETC.**

At 30 June—	Number of active accounts	Amount at credit of depositors	Loans and advances outstanding	Common- wealth and other securities held
	'000	\$m		
1965	6,120	2,200	546	1,442
1966	6,346	2,318	640	1,475
1967	6,582	2,493	742	1,515
1968	6,822	2,645	838	1,577
1969	7,038	2,817	927	1,648

Commonwealth Development Bank of Australia

The Commonwealth Development Bank of Australia commenced operations on 14 January 1960, taking over the assets and liabilities of the Industrial Finance and Mortgage Bank Departments of the former Commonwealth Bank of Australia.

The Development Bank is a source of development finance supplementary to the trading banks and other recognised sources of finance. It provides assistance for primary production and for the establishment or development of industrial undertakings, particularly small undertakings, where the funds sought are not otherwise available on reasonable and suitable terms and conditions, and, in the opinion of the Bank, the provision of finance is desirable.

Rural loans are made for a variety of purposes, e.g., clearing, fencing, pasture improvement, farm water conservation, erection of essential farm buildings, and the basic stocking of properties. Other aspects of assistance granted include aid to successful applicants in government sponsored rural development schemes and land ballots. Special attention is also given to providing finance to applicants opening up new areas.

Details of financial assistance approved by the Commonwealth Development Bank during the period 14 January 1960 to 18 March 1970 are set out in the following tables :

**AUSTRALIA AND VICTORIA—COMMONWEALTH DEVELOPMENT BANK :
LOANS APPROVED, 14 JANUARY 1960 TO 18 MARCH 1970**

Particulars	Rural loans		Industrial loans		Total	
	No.	Amount	No.	Amount	No.	Amount
		\$'000		\$'000		\$'000
Australia	23,308	267,548	2,522	80,398	25,830	347,946
Victoria	3,924	41,315	587	20,720	4,511	62,035

AUSTRALIA AND VICTORIA—COMMONWEALTH
DEVELOPMENT BANK : EQUIPMENT FINANCE
UNDER HIRE PURCHASE ARRANGEMENTS,
14 JANUARY 1960 TO 18 MARCH 1970

Particulars	Number of transactions	Amount financed
		\$'000
Australia	133,350	395,634
Victoria	26,401	86,680

Outstanding loans by the Commonwealth Development Bank to rural and other industries in Australia at 30 June 1969 were as follows :

AUSTRALIA—COMMONWEALTH DEVELOPMENT BANK : LOANS TO
RURAL AND OTHER INDUSTRIES OUTSTANDING
AT 30 JUNE 1969
(\$'000)

Rural industries		Non-rural industries	
Type of industry	Loans outstanding	Type of industry	Loans outstanding
Sheep	78,923	Building materials and fittings	1,481
Cattle	23,582	Chemical products	1,222
Dairying	16,787	Electrical manufacturing	540
Wheat and other grain crops	24,691	Foodstuffs and preservation	6,948
Fruit	4,943	Engineering	4,763
Poultry	3,180	Other manufacturing	7,198
Miscellaneous	9,706	Transport, storage and communication	1,825
		Miscellaneous	6,393
Total	161,812	Total	30,370

Further reference, 1966 ; Australian Resources Development Bank Limited, 1970

State Savings Bank of Victoria

General

The State Savings Bank of Victoria, which was established in 1841, is constituted under Victorian statutes and operates branches and agencies throughout Victoria. It is directed by a Government-appointed board of seven commissioners, who exercise control through the General Manager. The business of the bank is conducted in two departments, the Savings Bank Department and the Credit Foncier Department.

The Savings Bank Department accepts interest-bearing deposits through pass-book, school bank, Christmas club accounts, and fixed deposit stock, and provides cheque account, safe deposit, and a wide range of other banking services. The funds are principally invested in loans to semi-governmental, municipal, and other public authorities within Victoria ; loans on the security of first mortgage over freehold land for houses and farms either directly or through investment in the debentures of the Credit Foncier Department ; and in Commonwealth Government securities.

The Credit Foncier Department, which is wholly financed by the Savings Bank Department, makes long-term loans to finance the erection and purchase of homes and farms.

The State Savings Bank of Victoria is the largest savings bank in Victoria, having assets of \$1,199m at 30 June 1969. The deposits of its 2.7m operative accounts, held at 506 branches and 677 agencies, amounted to \$1,104m which represented approximately 49 per cent of all savings bank balances in Victoria.

Changes in savings banking

In matters of accounting procedures, range of services, and architectural style of premises, the State Savings Bank of Victoria has made major changes in the past thirteen years. Some of these changes have been evolutionary, but others have been dictated by external circumstances.

Competition among banks for savings was greatly accentuated by the Federal Government's decision in 1956 to grant licences to savings bank subsidiaries of private trading banks. In consequence there are now nine savings banks actively competing in Victoria whereas the State Savings Bank had only one competitor before 1956.

Under a 1957 amendment to the State Savings Bank Act, the bank was empowered to conduct cheque accounts which, except in the case of non-profit organisations, do not bear interest. At 30 June 1969 the bank held 200,258 cheque accounts with balances of \$51.2m.

The activities of permanent building societies grew in 1965 when the Federal Government established the Housing Loans Insurance Corporation which insures housing loans made by approved lenders. This again increased competition for savings.

The traditional pattern of savings has also been altered by a marked increase in social services which have lessened the trend towards self-provision for illness and old age, by a general increase in living standards, and by the continued development of a consumer goods market.

Among the steps taken to adapt to this changed environment have been radical changes in accounting procedures. The bank pioneered in Australia the use of punched cards and centralised accounting in connection with savings bank transactions. The installation of a computer in 1962, the first computer in any Australian bank, made it possible to centralise the transactions of large branches at the data processing centre at the bank's head office. At 30 June 1969, 194 branches and sub-branches were operating with tellers' machines, and the pass-book accounts for thirty-three offices were maintained by the computer which also processed many head office transactions. The computer made it possible for the bank to introduce a "Christmas club" in November 1964. This is a form of saving for a specific purpose, by a method not previously available in Australia, by means of a book of coupons rather than by the conventional pass-book. Members choose from books of 25 or 50 coupons in denominations of \$1 to \$10, pre-punched with account and serial numbers for computer processing. The "Christmas club" has been well received and the idea has spread. For the year ending 30 November 1969, \$13m was paid out to members.

Introduction of secured and unsecured personal loans in November

1963 was a departure from historical savings bank practice which had previously provided for loans to individuals on the security of a mortgage over freehold land only. The initial ceiling limit of \$720 for secured loans has been lifted to \$2,880 and the maximum term is five years. The bank, in special cases, grants larger loans. A wide range of securities is acceptable and the purposes include the purchase of land or property, the carrying on of farms and small businesses, the purchase of all types of motor vehicles, improvements to property, medical, education and travelling expenses, rates and taxes. Unsecured loans for a restricted range of purposes are also available up to a maximum of \$720 (including interest) for terms up to three years. At 30 June 1969, 7,322 borrowers owed \$6,372,962.

To meet other changing circumstances the State Savings Bank Act was amended in 1969 to give the bank power to lend on residence area rights and residence licences under the Land Act ; flexibility in the terms on which it can accept deposits ; and greater administrative flexibility in dealing with loans. The first amendment corrected an anomaly in the existing legislation which precluded the bank lending on area titles, and made provision for the bank to make loans on the security of liens over residence area rights and residence licences under the Land Act. This applies mainly to old mining areas. The second amendment allows the bank to accept term deposits at variable rates of interest, and to issue negotiable Certificates of Deposits in respect of term deposits of \$50,000 and upwards by multiples of \$10,000. It also permits the bank to hold funds with banks anywhere, thereby simplifying the procedures for arranging settlements for overseas remittances on behalf of depositors. The third section deals with the limit on the bank's powers to make unsecured personal loans. It removes the restrictions imposed by the present Act, so the conditions may now be varied by the Governor in Council on the recommendation of the Commissioners.

To provide banking facilities for a rapidly expanding population, and to replace agencies formerly conducted by private banks, the State Savings Bank increased the number of its branches and sub-branches from 267 in 1956 to 506 in 1969. In the same period many of the bank's older branches were re-built or modernised to provide attractive premises for clients and staff.

In the face of increased competition, the State Savings Bank has greatly expanded the volume of its advertising and other forms of publicity, in the press, and on radio and television. Advertising has been extended to the foreign language press for migrant depositors ; and to establish a personal contact with new settlers, the bank recruits staff with linguistic ability. In 1969 the bank's staff included almost 300 officers who collectively spoke over twenty foreign languages. The bank also sends promotion officers into places of employment and schools.

Depositors' balances have increased from \$528.6m at 30 June 1956, the year in which private banks entered the savings field, to \$1,104.3m at 30 June 1969.

Housing and farm loans

The State Savings Bank has been the largest single source of housing finance in Victoria since it introduced low cost long-term mortgage loans.

These were first offered in 1894 to farmers and pastoralists to rescue them from the difficulties caused by the financial excesses of the 1880s and were extended to city home buyers in 1910. Since then, the bank has helped about 210,000 Victorian families to purchase their own homes. At 30 June 1969, 68,954 housing loan borrowers owed a total debt of \$361m.

In less direct ways, the bank provides further assistance to home seekers. Overdraft accommodation has been provided to co-operative housing societies and, at 30 June 1969, \$13.7m was owed to the bank by 107 societies. The bank also provides funds to the Home Finance Trust which, at 30 June 1969, owed the bank \$9.6m.

Rural interests are well served by long-term mortgage loans or short-term personal loans. Advances to farmers totalled \$3.6m in 1968-69 and at 30 June 1969, \$18.8m was outstanding from 1,645 borrowers.

Loans for housing services

Houses require such services as water, power, and sewerage, while such amenities as made roads, nearby baby health centres, and recreation areas are also important adjuncts to family living. The bank lends considerable support to the semi-governmental and municipal authorities responsible for providing these services; the amount invested with them at 30 June 1969 was \$364m.

Loans to churches, schools, social organisations, etc.

The bank has always been a source of finance for the erection of churches, school buildings, and community halls and for the provision of associated amenities. The advances to borrowers during the year ended 30 June 1969 totalled \$1.1m.

Industrial savings facilities

The original form of banking-at-work introduced to Australia in 1927 by the State Savings Bank of Victoria enables employees to lodge deposits in strong-boxes situated conveniently at their place of work. Three allied forms of saving are National Savings Groups, Pay Roll Savings Plan, and Employees Savings Groups, all of which provide an easy and convenient method of saving.

School banking

The State Savings Bank's school bank system was introduced in 1912. At 30 June 1969 banking was provided at 2,552 schools for 463,713 depositors where balances totalled \$9.1m. An additional service for secondary schools is the student-operated bank, staffed, as the name implies, by the students themselves.

Facilities for travellers

Travellers' cheques are obtainable at any branch and can be cashed at any bank in Australia free of charge. They are available also for overseas use. Depositors travelling in Victoria may arrange withdrawals on a pass-book account at any of the bank's branches. Withdrawals interstate can be made at any branch of any bank, subject to prior arrangement with the depositor's own branch. Visitors to and migrants from the United Kingdom may use pass-book accounts at the bank's London Office.

Remittances to most countries in the world can be arranged at any branch of the Bank.

Miscellaneous facilities

Depositors may arrange for payments from government departments (child endowment, military pay, and other allotments), dividends on shares, interest on stocks and debentures, in some cases salaries, and other special credits to be made direct to their accounts. Full facilities are provided at all branches for the acceptance of cash and conversion applications for government, semi-government and public authority loans. The State Savings Bank accepts amounts due to the State Electricity Commission, and several other Victorian public utilities.

Further reference, 1970

The following table shows the number of accounts open and the amount remaining on deposit for each year from 1964-65 to 1968-69 :

VICTORIA—STATE SAVINGS BANK: ACCOUNTS AND DEPOSITS (a)

At 30 June—	Passbook and cheque accounts		Deposit stock accounts		School bank accounts	
	Number of operative accounts	Amount at credit of depositors	Number of operative accounts	Amount at credit of stockholders	Number of operative accounts	Amount at credit of depositors
	'000	\$'000	'000	\$'000	'000	\$'000
1965	1,839	740,806	25	89,516	415	7,671
1966	1,860	772,914	31	109,736	422	8,046
1967	1,912	820,102	37	133,187	438	8,471
1968	1,962	863,568	41	155,781	451	8,759
1969	2,012	911,658	54	176,429	464	9,124

(a) Excluding Christmas club accounts. At 30 June 1969 the amount at credit of 165,000 Christmas club members was \$7,042,000.

The following table shows the transactions of the bank for each year from 1964-65 to 1968-69 :

VICTORIA—STATE SAVINGS BANK TRANSACTIONS
(\$'000)

Year	Deposits	Withdrawals	Interest paid	Amount at credit of depositors
1964-65	1,170,668	1,132,970	22,008	839,575
1965-66	1,357,131	1,327,491	24,387	893,602
1966-67	1,390,326	1,343,254	25,633	966,307
1967-68	1,568,130	1,533,657	27,408	1,033,823
1968-69	1,800,632	1,767,385	30,479	1,104,253

The following table shows the amount advanced by the State Savings Bank during each of the years 1965-66 to 1968-69 and the balances outstanding at the end of each year :

**VICTORIA—STATE SAVINGS BANK : ADVANCES AND BALANCES
OUTSTANDING FOR MORTGAGE AND OTHER LOANS (a),
SAVINGS BANK AND CREDIT FONCIER DEPARTMENTS
(\$m)**

Year	Advances					Balances outstanding at end of year	
	Savings bank			Credit foncier		Savings bank	Credit foncier
	Housing (b)	Farms	Churches, etc.	Housing	Farms		
1965-66	26.9	2.8	1.8	26.1	0.3	88.8	192.8
1966-67	39.3	3.7	1.5	19.3	0.3	123.2	193.4
1967-68	52.5	3.3	1.4	11.6	0.3	166.5	184.9
1968-69	56.6	3.6	1.1	12.9	0.1	211.7	176.4

(a) Excludes personal loans and loans to finance the extension of electric power lines in rural areas.

(b) Excludes loans to co-operative housing societies and deposits with the Home Finance Trust.

The reserves of the State Savings Bank at the end of each of the five years to 1968-69 were : 1964-65, \$33.1m ; 1965-66, \$35.1m ; 1966-67, \$36.8m ; 1967-68, \$40.4m ; 1968-69, \$42.1m.

History of the State Savings Bank, 1961 ; Further references, 1970

Private savings banks

Private savings banks in Victoria are part of a nation-wide savings bank network conducted by the wholly owned subsidiaries of each of the seven major private banks operating in Australia which are themselves public companies listed on local stock exchanges. Deposits with the private savings banks are guaranteed by the parent trading bank companies.

Private savings banks have been operating in Victoria since January 1956, when two of the banks commenced operations in this field. By July 1962, seven banks were participating in this business.

The following table shows the total amount of deposits in private savings banks in Victoria at 30 June in each of the years 1965 to 1969, together with the proportion which these deposits bear to the total Victorian savings bank deposits :

**VICTORIA—PRIVATE SAVINGS BANKS :
DEPOSITS AND PROPORTION OF ALL
VICTORIAN SAVINGS BANK DEPOSITS**

At 30 June—	Deposits in Victoria	Proportion of deposits with all savings banks in Victoria
	\$'000	per cent
1965	401,458	24.8
1966	447,865	25.7
1967	517,608	26.9
1968	577,647	27.7
1969	634,767	28.3

At 30 June 1969 private savings banks had 1,095 branches and 1,127 agencies throughout Victoria.

Total deposits, etc., in savings banks

The next table shows the amount of depositors' balances in each savings bank in Victoria at the end of each of the years 1964-65 to 1968-69. The total amount of deposits per head of population is also shown.

VICTORIA—SAVINGS BANKS : DEPOSITS

Savings bank	Depositors' balances at 30 June—				
	1965	1966	1967	1968	1969
	\$'000				
State Savings Bank of Victoria (a)	839,390	893,410	966,056	1,033,644	1,104,088
Commonwealth Savings Bank of Australia	379,560	404,704	443,049	474,238	505,480
Private savings banks—					
Australia and New Zealand Savings Bank Ltd	115,634	123,859	138,241	152,339	166,107
The Bank of Adelaide Savings Bank Ltd	580	671	911	1,057	1,270
Bank of New South Wales Savings Bank Ltd	100,660	109,993	123,892	135,893	147,369
The Commercial Savings Bank of Australia Ltd	34,938	41,840	50,896	58,305	66,345
C.B.C. Savings Bank Ltd	50,102	53,743	59,669	64,504	69,463
E.S. and A. Savings Bank Ltd	43,098	49,474	59,977	68,797	76,655
The National Bank Savings Bank Ltd	56,446	68,285	84,022	96,752	107,558
Total deposits	1,620,408	1,745,979	1,926,713	2,085,529	2,244,335
	\$				
Deposits per head of population	512·08	542·19	588·42	627·37	663·07

(a) Including school bank and deposit stock accounts, but excluding balances held in London.

Life insurance

The first purely mutual life office with headquarters in Victoria was established in 1869, although branches of other Australian and overseas insurance offices were operating in the Colony before this time. In 1968 there were forty-five companies transacting life business in Victoria, compared with twenty in 1946, with assets throughout Australia of more than \$4,700m.

Section 51 (xiv) of the Commonwealth of Australia Constitution Act empowers the Commonwealth Parliament to legislate on insurance extending beyond any one State. Control of the activities of life offices in Victoria and the rest of Australia is vested in the Insurance Commissioner under the *Life Insurance Act 1945-1965*. The main categories of life insurance are ordinary, collector (industrial), and superannuation. Under a collector policy, premiums are payable to collectors at intervals of less than two months.

In general, there are five main types of life policy: whole of life, under which the amount of the policy, plus any bonuses, is payable on death; endowment insurance, which provides for payment of the sum insured, plus any bonuses, when the life insured reaches a specified age or date, or if death occurs before; "pure" endowment, under which the

amount of the policy is payable, plus any bonuses, only if the life insured reaches a specified age or date (if death occurs before, all premiums paid are generally returned, plus compound interest); temporary insurance for short terms; and annuities. There are many variations of these five basic types available. Since 1946 the number of ordinary and superannuation life policies in force in Victoria has more than doubled to 1,287,951 at the end of 1968, and the total sum insured increased during the same period from \$379m to \$5,774m.

The following table gives some indication of the growth and volume of life insurance business conducted in Victoria during the period 1964 to 1968:

**VICTORIA—LIFE INSURANCE: PREMIUM RECEIPTS AND POLICY
PAYMENTS (INCLUDING ANNUITIES)
(\$'000)**

Year	Premiums received (including single premiums)	Payments			
		Claims	Surrenders	Annuities and cash bonuses	Total
1964	112,783	37,435	15,403	1,646	54,484
1965	126,574	42,583	18,946	1,807	63,336
1966	135,758	47,899	20,215	1,937	70,051
1967	150,452	49,549	22,495	2,084	74,128
1968	165,691	54,300	26,833	2,160	83,292

The following table contains summarised information about new business written in Victoria by all life insurance companies during each of the five years 1964 to 1968:

**VICTORIA—LIFE INSURANCE: NEW POLICIES ISSUED
(EXCLUDING ANNUITIES)**

Particulars	1964	1965	1966	1967	1968
Ordinary business—					
Number of policies	90,853	91,577	90,534	99,900	109,475
Sum insured \$'000	434,089	453,798	477,124	543,700	634,683
Annual premiums "	9,292	9,867	10,180	11,807	14,952
Superannuation business—					
Number of policies	18,045	19,598	19,295	17,785	17,624
Sum insured \$'000	253,089	307,483	290,222	348,803	423,265
Annual premiums "	4,975	6,045	7,440	8,385	9,629
Industrial business—					
Number of policies	34,713	34,482	34,661	34,427	34,037
Sum insured \$'000	32,811	33,610	35,866	38,311	39,643
Annual premiums "	1,245	1,273	1,350	1,438	1,515

Sums insured under new policies issued during 1968 averaged \$5,798 in the ordinary department, \$24,016 in the superannuation department, and \$1,106 in the industrial department.

The following table gives particulars of the policies which were discontinued or reduced during each of the years 1966 to 1968:

VICTORIA—LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED
(EXCLUDING ANNUITIES)

Cause of discontinuance	1966		1967		1968	
	Number of policies	Sum insured	Number of policies	Sum insured	Number of policies	Sum insured
ORDINARY BUSINESS						
		\$'000		\$'000		\$'000
Death or disability	5,592	11,038	5,789	11,513	5,997	12,850
Maturity, expiry, etc.	21,548	32,596	19,867	44,278	20,439	44,861
Surrender	23,233	65,138	23,191	71,031	26,047	82,419
Forfeiture	15,530	72,554	14,558	66,463	14,766	72,364
Other (a)	332	2,209	—50	8,690	—355	15,999
Total	66,235	183,535	63,355	201,976	66,894	228,494
SUPERANNUATION BUSINESS						
		\$'000		\$'000		\$'000
Death or disability	565	4,357	498	4,863	510	5,024
Maturity, expiry, etc.	1,909	19,672	1,549	20,964	1,944	24,356
Surrender	6,712	67,908	9,244	76,268	8,204	99,990
Forfeiture	390	4,518	459	5,444	395	7,751
Other (a)	9,443	73,875	8,792	43,463	3,710	34,970
Total	19,019	170,331	20,542	151,003	14,763	172,092
INDUSTRIAL BUSINESS						
		\$'000		\$'000		\$'000
Death or disability	3,804	761	3,752	798	3,962	900
Maturity, expiry, etc.	47,578	6,204	22,550	3,154	21,239	3,279
Surrender	16,719	7,756	16,600	7,849	17,207	9,426
Forfeiture	7,521	8,952	6,929	9,121	7,652	10,208
Other (a)	665	328	843	325	502	454
Total	76,287	24,000	50,674	21,248	50,562	24,266

(a) Includes net loss or gain resulting from transfers, cancellations of, and alterations to, policies, etc.

NOTE. Minus sign (—) indicates an increase in existing business in the registers concerned due to an excess of transfers from other States or conversions from other classes of business over discontinuances in those registers.

The following table shows, for each of the years 1964 to 1968, particulars of life insurance business in existence in the relevant departments of the companies :

VICTORIA—LIFE INSURANCE: BUSINESS IN EXISTENCE
(EXCLUDING ANNUITIES)

Particulars		1964	1965	1966	1967	1968
Ordinary business—						
Number of policies		1,032,722	1,062,297	1,086,596	1,123,141	1,165,722
Sum insured	\$'000	2,648,718	2,936,951	3,230,539	3,572,264	3,978,453
Annual premiums	„	70,432	76,272	82,189	89,437	99,502
Superannuation business—						
Number of policies		118,939	121,849	122,125	119,368	122,229
Sum insured	\$'000	1,063,808	1,226,995	1,346,885	1,544,686	1,795,859
Annual premiums	„	23,553	26,823	33,777	38,914	44,586
Industrial business—						
Number of policies		863,683	830,578	788,952	772,705	756,180
Sum insured	\$'000	250,225	264,161	276,027	293,090	308,467
Annual premiums	„	10,601	10,979	11,261	11,085	12,325

In 1968 the average amount of policy held in the Ordinary Department was \$3,413, in the Superannuation Department, \$14,693, and in the Industrial Department, \$407.

Further references, 1962, 1964, 1967

Fire, marine, and general insurance

The insurance industry in Victoria, as in the whole of Australia, follows basic English underwriting principles and procedures which have been adapted over a century to meet local problems and conditions.

In Victoria, over 240 companies, many with overseas affiliations, now provide a range of policies and services comparable to those available in other countries. Organisation of the market may be summarised as follows :

1. tariff companies ;
2. non-tariff companies ;
3. representatives of brokers at Lloyds ;
4. State government insurance offices ;
5. brokers operating in their own right in Australia ; and
6. local representatives of overseas re-insurance companies.

Types of insurance cover provided

The types of insurance cover issued by underwriters in Victoria are many and varied, including among others :

All risks	Motor vehicle (physical damage)
Baggage	Motor vehicle—third party (compulsory)
Boiler explosion	Personal accident
Burglary	Plate glass
Cash in transit	Pluvius
Crop (fire and hail)	Public liability
Fidelity guarantee	Tourists and travellers personal accident
Fire and loss of profits	Wool ("sheep's back to store")
Houseowners and householders	Workers compensation (compulsory)
Livestock	
Marine	

Compulsory covers

The Victorian Government, as is the case with other State Governments, legislates for workers compensation and motor vehicle (third party) insurances. All employers are compelled to insure their employees against death or physical injury during employment and under certain other circumstances. Every owner of a motor vehicle is compelled to insure against any liability for death or injury to others caused by, or arising out of, the use of such vehicle.

Statistics

Selected statistics relating to all classes of fire, marine, and general insurance are collected annually from insurers licensed to operate in Victoria. They refer to all policies issued in this State on Australian risks wherever situated, but do not include data for policies issued in other States to cover Victorian risks.

Returns are for the year ended 30 June or for the immediately preceding accounting periods of the insurers concerned. Since the accounting years of many insurers end on dates other than 30 June, the figures are not for a uniform time period.

The statistics have been compiled on the following basis :

1. Premiums are the total amounts received and receivable during the year for policies issued and renewed, after deduction of returns of premium and rebates and bonuses paid or credited to policy holders.
2. Claims consist of payments during the year plus the estimated amount of claims unsettled at the end of the year, less the estimated amount of claims unsettled at the beginning of the year.
3. Contributions to fire brigades, commission and agents' charges, and expenses of management are charges paid during the year.
4. Taxation consists of payments during the year for all forms of taxation including stamp duty, licence fees, and pay-roll tax as well as income tax.

It should be noted that the figures shown for premiums are different from the premium income earned by insurers during the year, as no adjustment is made for premiums unearned at the beginning and end of the year. When, as in recent years, the premium volume is increasing, the figures in the tables are greater than the premiums earned by insurers and the amount of the difference is often substantial. For this reason, the relationship of claims and other charges to premiums should be used only as a basis of comparison with ratios calculated under similar headings in previous years.

The following tables, which show details of fire, marine, and general insurance business transacted in Victoria during each of the years 1964-65 to 1968-69 should not be construed as "profit and loss statements" or "revenue accounts" as they contain selected items of statistics only:

**VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE: TOTAL
REVENUE: CLASS OF BUSINESS
(\$'000)**

Class of business	1964-65	1965-66	1966-67	1967-68	1968-69
PREMIUMS (LESS RETURNS, REBATES, AND BONUSES)					
Fire	24,597	25,728	27,182	29,699	31,485
Householders' comprehensive	10,819	11,939	13,372	15,535	17,137
Sprinkler leakage	69	77	74	83	94
Loss of profits	3,293	3,555	4,031	5,181	5,875
Hailstone	945	820	1,011	574	1,030
Marine	7,286	7,692	8,653	9,331	11,514
Motor vehicles (other than motor cycles)	44,944	47,797	53,011	56,173	58,426
Motor cycles	43	39	47	55	78
Compulsory third party (motor vehicles)	18,214	20,848	24,654	27,492	31,615
Employers' liability and workers compensation (a)	35,744	49,064	54,315	56,766	58,566
Personal accident	5,792	6,173	7,291	8,239	8,783
Public risk third party	2,864	3,049	3,848	4,860	5,496
General property	331	295	286	358	397
Plate glass	871	927	1,000	1,102	1,146
Boiler	128	122	232	301	298
Livestock	225	249	307	397	459
Burglary	2,719	3,005	3,623	3,984	4,925
Guarantee	330	386	420	601	597
Pluvius	48	51	46	42	43
Aviation	209	231	435	499	574
All risks	1,475	1,793	1,866	2,348	2,657
Contractors' all risks	..	..	1,127	1,187	1,548
Television	94	55	37	28	27
Other	2,368	2,509	2,652	3,051	4,354
Total premiums	163,408	186,402	209,519	227,886	247,124

(a) See references pages 183 to 186.

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE : TOTAL REVENUE :
CLASS OF BUSINESS—*continued*
(\$'000)

Class of business	1964-65	1965-66	1966-67	1967-68	1968-69
OTHER REVENUE (NET OF EXPENSES)					
Interest, dividends, rents, etc.	8,635	9,511	11,482	12,654	13,666
TOTAL REVENUE					
Grand total	172,043	195,913	221,001	240,540	260,790

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE : TOTAL
EXPENDITURE : CLASS OF BUSINESS
(\$'000)

Class of business	1964-65	1965-66	1966-67	1967-68	1968-69
GROSS CLAIMS (LESS AMOUNTS RECOVERABLE)					
Fire	7,677	10,351	10,356	11,473	13,416
Householders' comprehensive	2,598	3,306	3,663	4,106	5,828
Sprinkler leakage	71	51	40	60	50
Loss of profits	716	1,292	1,034	1,523	2,885
Hailstone	701	489	1,701	615	483
Marine	4,037	4,711	4,930	5,632	7,908
Motor vehicles (other than motor cycles)	33,148	34,681	36,284	38,974	42,371
Motor cycles	33	27	27	25	48
Compulsory third party (motor vehicles)	18,721	21,497	24,192	29,920	29,321
Employers' liability and workers compensation	26,173	31,007	32,960	36,250	36,960
Personal accident	2,519	2,821	3,159	3,311	3,912
Public risk third party	1,343	1,600	2,303	2,667	2,042
General property	171	268	153	161	300
Plate glass	477	479	594	638	694
Boiler	— 12	24	58	77	56
Livestock	148	115	153	256	290
Burglary	1,742	2,096	3,103	2,625	3,079
Guarantee	50	96	119	126	87
Pluvius	21	12	21	13	16
Aviation	157	208	259	360	435
All risks	920	1,121	1,292	1,403	1,743
Contractors' all risks	..	..	568	888	1,620
Television	27	18	12	8	6
Other	1,008	960	852	1,262	1,453
Total claims	102,443	117,228	127,833	142,374	155,001
OTHER EXPENDITURE					
Contributions to fire brigades	3,680	4,168	4,842	5,542	6,078
Commission and agents' charges	16,870	18,232	20,227	22,071	24,106
Expenses of management	26,193	29,004	33,073	36,000	38,723
Taxation	3,727	4,505	5,216	7,288	7,749
Total other expenditure	50,470	55,909	63,358	70,901	76,656
TOTAL EXPENDITURE					
Grand total	152,913	173,138	191,191	213,275	231,658

NOTE. Minus sign (-) denotes a credit.

The percentage of claims to premium income for each of the years 1964-65 to 1968-69 in respect of various classes of insurance was as follows :

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE : PERCENTAGE OF CLAIMS TO PREMIUM INCOME

Class of business	1964-65	1965-66	1966-67	1967-68	1968-69
Fire	31·21	40·23	38·10	38·63	42·61
Householders' comprehensive	24·01	27·69	27·39	26·43	34·01
Sprinkler leakage	102·61	66·23	54·05	72·75	53·19
Loss of profits	21·74	36·34	25·65	29·39	49·11
Hailstone	74·12	59·63	168·25	107·05	46·89
Marine	55·40	61·25	56·97	60·36	68·68
Motor vehicles (other than motor cycles)	73·75	72·56	68·45	69·38	72·52
Motor cycles	76·44	69·23	57·45	46·17	61·54
Compulsory third party (motor vehicles)	102·79	103·11	98·13	108·83	92·74
Employers' liability and workers compensation	73·22	63·20	60·68	63·86	63·11
Personal accident	43·49	45·70	43·33	40·18	44·54
Public risk third party	46·88	52·48	59·85	54·87	37·15
General property	51·57	90·85	53·50	44·97	75·57
Plate glass	54·71	51·67	59·40	57·91	60·56
Boiler	..	19·67	25·00	25·69	18·79
Livestock	65·80	46·18	49·84	64·50	63·18
Burglary	64·08	69·75	85·65	65·88	62·52
Guarantee	15·31	24·87	28·33	20·97	14·57
Pluvius	42·95	23·53	45·65	31·47	37·21
Aviation	75·06	90·04	59·54	72·14	75·78
All risks	62·36	62·52	69·24	59·77	65·60
Contractors' all risks	..	..	50·40	74·79	104·65
Television	28·33	32·73	32·43	29·77	22·22
Other	42·56	38·26	32·13	41·37	33·37
All classes	62·69	62·89	57·84	59·18	59·44

Motor vehicle insurance (compulsory third party)

The *Motor Car (Third Party Insurance) Act 1939* (now embodied in the *Motor Car Act 1958*) which came into force on 22 January 1941, made it compulsory for the owner of a motor vehicle to insure against any liability which may be incurred by him, or any person who drives such motor vehicle, in respect of the death of, or bodily injury to, any person caused by, or arising out of, the use of such motor vehicle.

VICTORIA—MOTOR VEHICLE INSURANCE (COMPULSORY THIRD PARTY) : NUMBER OF MOTOR VEHICLES INSURED, 1968-69

Class of motor vehicle	Motor cars usually garaged—		Total
	Within a radius of 20 miles of the G.P.O., Melbourne	Outside a radius of 20 miles of the G.P.O., Melbourne	
Private and business	656,040	359,170	1,015,210
Goods carrying	90,230	123,767	213,997
Hire	4,251	2,656	6,907
Hire and drive yourself	776	72	848
Passenger transport	266	215	481
Miscellaneous	9,545	54,688	64,233
Motor cycle	8,784	7,851	16,635
Total	769,892	548,419	1,318,311

State Motor Car Insurance Office

The State Motor Car Insurance Office was established under the *Motor Car (Third Party Insurance) Act 1939* for the purpose of enabling owners of motor cars to obtain from the State policies of third party insurance required under that Act, and policies generally in relation to insurance of motor cars. Business commenced on 24 January 1941. The Office is managed and controlled by the Insurance Commissioner, and the policies issued are guaranteed by the Government of Victoria.

The proportion of total Victorian motor insurance business underwritten by the Office for the year 1968-69 represented 8.3 per cent of comprehensive and 42.0 per cent of third party premiums received in Victoria.

The following table shows the trading results for each of the five years 1964-65 to 1968-69 :

VICTORIA—STATE MOTOR CAR INSURANCE OFFICE : PREMIUMS
RECEIVED, CLAIMS PAID, ETC.
(\$'000)

Year ended 30 June—	Premiums received less reinsurances, rebates, etc.	Increase in unearned premium provision	Claims paid and outstanding	Expenses	Underwriting profit
1964-65	8,574	393	8,648	643	(a) 1,111
1965-66	11,154	1,428	10,195	771	(a) 1,240
1966-67	13,555	1,098	12,242	1,020	(a) 805
1967-68	14,665	629	15,745	1,136	(a) 2,846
1968-69	17,880	1,472	15,724	1,241	(a) 558

(a) Loss.

At 30 June 1969 accumulated losses were \$4,051,583.

State Accident Insurance Office

The State Accident Insurance Office was constituted under the *Workers Compensation Act 1914* for the purpose of enabling employers to obtain from the State policies of insurance indemnifying them against their liability under the Workers Compensation Act, or at common law, or otherwise. The Office is managed and controlled by the Insurance Commissioner, and the policies issued are guaranteed by the Government of Victoria.

The Office is conducted on a mutual basis so that all profits, exclusive of amounts transferred to reserves and to Consolidated Revenue, are refunded as bonuses to policy holders.

The Office has made steady progress during 55 years of operation and, for the year ended 30 June 1969, its premium income represented 17.7 per cent of the total premiums received by all insurance companies in Victoria on account of employers' liability and workers compensation insurance.

The following table shows the trading results for each of the five years 1964-65 to 1968-69 :

VICTORIA—STATE ACCIDENT INSURANCE OFFICE : PREMIUMS
RECEIVED, CLAIMS PAID, ETC.
(\$'000)

Year	Premiums received less reinsurances, rebates, etc.	Increase in unearned premium provision	Claims paid and outstanding	Expenses	Underwriting profit
1964-65	6,780	164	5,372	449	794
1965-66	9,200	694	6,949	558	999
1966-67	9,250	546	5,680	651	2,373
1967-68	9,155	-471	7,079	673	1,874
1968-69	9,911	- 23	8,204	691	1,040

NOTE. Minus sign (-) denotes a reduction in unearned premium provision.

The amount transferred to consolidated revenue in 1968-69 was \$1,000,000, while the accumulated funds at 30 June 1969 were: General Reserve, \$7,470,000; Bonus Equalisation Reserve, \$2,092,520; and Building and Other Reserves, \$216,490.

Export Payments Insurance Corporation

The Corporation was established under the *Export Payments Insurance Corporation Act 1956* to "promote trade with countries outside Australia by providing insurance against certain risks arising out of that trade not normally insured with commercial insurers and to give certain guarantees in connection with that trade". Its liabilities are guaranteed by the Commonwealth up to \$300m at any one time.

It commenced writing business in Sydney in the latter half of 1957, and in March 1958 its first branch was opened in Melbourne, responsible for the Corporation's business in Victoria and Tasmania. Branches have subsequently been opened in Adelaide, Perth and Brisbane. The head office of the Corporation is in Sydney. It is a corporate body which can sue or be sued and is constituted by a commissioner who may refer matters for advice to a consultative council.

The Corporation is a member of the Union D'Assureurs Des Crédit Internationaux, the international association of credit insurers, commonly known as the Berne Union. This is one of the main sources through which the Corporation obtains information on international trends in credit terms. Many problems associated with the granting of credit, including the economic outlook and payment performances of the trading nations, are discussed at regular meetings of the Union.

Among the more recent additions to the facilities provided by the Corporation have been the introduction of unconditional guarantees to banks and other lending institutions to facilitate the financing of export transactions of \$1,000 or more sold on terms in excess of 180 days, and the insurance, on behalf of the Commonwealth Government, of certain investments overseas against risks of loss due to expropriation of property, inability to transfer earnings or repatriate capital to Australia, and damage to property resulting from war, insurrection, or similar happenings.

The following table shows particulars of the business of the Corporation for each of the years 1965-66 to 1968-69:

AUSTRALIA—EXPORT PAYMENTS INSURANCE CORPORATION

Particulars	1965-66	1966-67	1967-68	1968-69
Business on Corporation's account—				
Number of policies and guarantees	559	613	692	746
	\$'000	\$'000	\$'000	\$'000
Face value of policies and guarantees				
current	180,969	238,648	271,075	298,829
Maximum contingent liability	94,070	123,966	141,108	158,966
Premium income	463	598	651	730
Operating costs	259	348	388	426
Claims paid (gross)	325	446	854	388
Recoveries	84	111	591	263
Underwriting reserve	955	1,126	1,420	1,897
Business on Government's account—				
Overseas investment insurance—				
Number of policies	..	15	29	41
	\$'000	\$'000	\$'000	\$'000
Face value of policies current	..	4,699	12,097	19,813
Maximum contingent liability	..	4,229	10,887	17,832
National interest insurance—				
Number of policies	(a) 4	(a) 4	(a) 5	1
	\$'000	\$'000	\$'000	\$'000
Face value of policies current	(a)2,660	(a)1,931	(a)2,278	1,208
Maximum contingent liability	(a)2,205	(a)1,741	(a)2,007	1,087

(a) Includes warehousing insurance.

The facilities provided by the Corporation compare favourably with those made available by the credit insurance organisations in other countries, thereby enabling Australian exporters to be competitive in matching the payment terms offered by their overseas competitors.

Further reference, 1970

Building societies

The provisions of the *Building Societies Act 1874* made it compulsory for building societies to effect registration. Current legislation regulating the activities of these societies is embodied in the *Building Societies Act 1958* and subsequent amending Acts.

Up to 30 June 1969 the number of societies that had been registered was 212 and of these, 36 societies were still operating in 1968-69.

The following table shows details of the operations of building societies in Victoria for the financial year 1968-69.

VICTORIA—PERMANENT BUILDING SOCIETIES (a), 1968-69

Particulars	Permanent societies
Number of societies	40
Number of shareholders	11,385
Number of borrowers	(b) 18,044

VICTORIA—PERMANENT BUILDING
SOCIETIES (a), 1968-69—continued

Particulars	Permanent societies
Transactions during the year—	\$'000
Income—	
Interest on mortgage loans	5,206
Other	515
Total	5,721
Expenses—	
Interest payable	2,999
Administration, etc.	743
Total	3,742
Loans and advances—	
Paid	27,545
Repaid	11,103
Deposits—	
Received	58,494
Repaid	35,115
Liabilities—	
Investing members' funds—	
Paid-up capital	19,511
Reserves, etc.	4,210
Borrowing members' funds—	
Share subscriptions	149
Other	27
Deposits	52,234
Loans (including bank overdraft)	5,821
Other	2,108
Total	84,059
Assets—	
Loans on mortgage	78,832
Land and house property	875
Other investments	2,778
Cash and deposits	1,136
Other	437
Total	84,059

(a) Excludes Starr-Bowkett Societies.

(b) Includes 720 shareholders holding borrowers' shares.

Co-operative organisations

Co-operative organisations operating in Victoria are registered under the provisions of the Companies Act, the Industrial and Provident Societies Act, the Co-operation Act, and the Co-operative Housing Societies Act. They are engaged in a number of activities chief among which are the production, marketing and distribution of goods, and in the provision of finance for home building. In recent years, a considerable number of co-operative credit societies which extend credit facilities to members to enable them to finance the purchase of household durables, or to discharge financial liabilities, etc., have also been registered.

Particulars of producer and consumer societies for the year 1968-69 are given in the following table :

VICTORIA—CO-OPERATIVE ORGANISATIONS : PRODUCER AND CONSUMER SOCIETIES, 1968-69

Particulars	Societies—			Total all societies
	Producers	Consumers	Producers and consumers	
Number of societies	94	52	9	155
Number of members	80,648	41,125	22,365	144,138
Transactions during the year—	\$'000			
Income—				
Sales	73,525	13,089	54,346	140,959
Other income	6,189	405	327	6,921
Total	79,714	13,493	54,673	147,881
Expenditure—				
Purchases	51,141	10,990	43,288	105,419
Working expenses, etc.	23,314	2,087	9,663	35,065
Interest on loans, etc.	1,180	134	402	1,716
Rebates and bonuses	1,227	132	32	1,390
Total	76,861	13,343	53,385	143,590
Dividend on share capital	888	20	507	1,415
Liabilities—				
Share capital	15,905	1,876	6,732	24,513
Loan capital	4,226	1,660	2,886	8,772
Bank overdraft	16,726	567	1,899	19,192
Accumulated profits	1,598	603	569	2,771
Reserve funds	15,430	788	4,645	20,863
Sundry creditors	13,020	967	6,290	20,278
Other	5,002	411	1,582	6,995
Total	71,907	6,874	24,603	103,384
Assets—				
Land and buildings	} 27,565	3,085	15,198	45,848
Fittings, plant, and machinery				
Stock	11,287	1,634	2,909	15,830
Sundry debtors	22,198	1,577	5,795	29,569
Cash in bank, on hand, or on deposit	1,449	262	458	2,169
Profit and loss account	3,147	84	..	3,231
Other	6,262	232	243	6,737
Total	71,907	6,874	24,603	103,384

Further reference, 1966

Co-operative credit societies

Since the passing of the *Co-operation Act 1954*, co-operative credit societies have made steady progress. The following table illustrates the growth of these societies during the period 1964-65 to 1968-69 :

VICTORIA—CO-OPERATIVE ORGANISATIONS : CREDIT SOCIETIES

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Number of societies	113	133	146	153	159
Number of members	18,890	22,496	26,641	31,363	35,905
Transactions during the year—	\$'000				
Income—					
Interest	222	318	421	541	725
Other income	9	16	20	28	44
Total	231	334	440	570	769
Expenditure—					
Interest on deposits	122	177	237	314	408
Working expenses	75	106	146	201	293
Total	197	283	383	515	701
Liabilities—					
Share capital	193	214	244	294	342
Reserves	44	61	63	85	112
Depositors	2,903	4,080	5,481	7,094	9,444
Sundry creditors	76	47	53	74	71
Other	138	188	185	213	408
Total	3,354	4,590	6,027	7,761	10,377
Assets—					
Loans to members	2,941	3,962	5,209	6,571	8,947
Cash at bank or on hand	306	378	346	384	402
Other	106	250	472	806	1,028
Total	3,354	4,590	6,027	7,761	10,377

Public Trustee

The Public Trustee was constituted and incorporated by the *Public Trustee Act 1939* (which came into operation in 1940) and became the successor in law of the Curator of the Estates of Deceased Persons, and of the Master-in-Equity with respect to the administration of mental patients' property.

He is empowered by the Public Trustee Acts, under the guarantee of the State of Victoria, to act as a trustee, executor, administrator, and attorney, and in certain other capacities, and is required to undertake the protection and management of the property of certified patients in mental hospitals and of infirm persons. An infirm person is a person certified by the Public Trustee to be incapable of managing his affairs on account of age or infirmity. Certificates in prescribed form (obtainable from the Public Trustee's Office) must be given by two medical practitioners acting independently of each other, before the Public Trustee may certify.

Any person may name the Public Trustee as his executor in his will, and may deposit such will with him for recording and safe custody. If the original will is not deposited with the Public Trustee, it is highly desirable that a copy of the will be sent to him with the name and address of the person holding the original will. A person may also obtain advice about his will at the Public Trustee's Office if he intends to appoint him his executor.

The Public Trustee Acts enable the person appointed executor of a will to authorise the Public Trustee to act as executor in his place, and the next of kin of any one dying intestate, or any other person entitled to a grant of administration, may also authorise the Public Trustee to act as administrator in his place. In cases where there is no one else entitled and ready to apply for a grant of administration, the Public Trustee is authorised to apply for a grant of administration himself.

Consequent on the passing of the *Public Trustee Act* 1948, the Public Trustee Fund at the State Treasury was abolished and the proceeds of all estates, as from 1 October 1948, were invested in a Common Fund under the control of the Public Trustee. In the following table, particulars of the Common Fund are shown for each of the years 1964-65 to 1968-69 :

VICTORIA—PUBLIC TRUSTEE : COMMON FUND
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Proceeds of realisations, rents, interest, etc.	10,392	10,558	11,792	12,181	13,064
Investments, distributions, claims, etc.	8,752	8,850	9,344	10,700	10,244
Cash variation	1,640	1,708	2,448	1,481	2,820
Balance at 1 July	14,286	15,926	17,634	20,082	21,563
Balance at 30 June	15,926	17,634	20,082	21,563	24,383

The number of applications for probate and letters of administration (including election to administer) etc., made by the Public Trustee for each of the years 1959-60 to 1968-69 are shown in the following table :

VICTORIA—APPLICATIONS BY PUBLIC TRUSTEE FOR PROBATE, LETTERS OF ADMINISTRATION, ETC.

Year	Number	Year	Number
1959-60	919	1964-65	1,098
1960-61	1,084	1965-66	1,018
1961-62	994	1966-67	1,120
1962-63	1,005	1967-68	1,058
1963-64	1,087	1968-69	1,050

The number of wills (under which the Public Trustee was appointed executor) lodged for the safe custody during each of the five years to 1968-69 was as follows : 1964-65, 2,875 ; 1965-66, 3,145 ; 1966-67, 2,555 ; 1967-68, 2,465 ; 1968-69, 2,659.

Trustee companies

A special Act of Parliament specifically authorises the seven Victorian trustee companies to act, among other things, as executor ; it also entitles them to apply for and to obtain probate of the will of a testator or, in appropriate circumstances, to obtain letters of administration, and to act as administrator of the estate of a deceased person.

The value of assets in estates committed to the care of Victorian trustee companies at 30 June 1964 and 1969 was as follows:

VICTORIA—TRUSTEE COMPANIES : VALUE OF ESTATES
ADMINISTERED
(\$m)

Particulars	Value at 30 June 1964	Value at 30 June 1969
Stock and debentures	108.2	127.0
Advances on mortgages	38.2	62.9
Property and livestock	74.6	77.5
Shares	159.2	226.5
Fixed and other deposits	12.7	20.7
Cash at bank	11.4	13.9
Other	19.6	23.1
Total	423.9	551.6

The values shown above are probate values or values of assets at the time of their being committed to the care of the trustee companies. The figures do not include the very substantial value of debentures and notes where the companies have been appointed to act as trustees for the holders.

Further reference, 1964

Probate

Under the general words of section 17 of the *Supreme Court Act* 1958, the Court has power to do everything which is necessary or desirable in connection with the grant of probate or administration.

The *Administration and Probate Act* 1958, section 6, confers jurisdiction on the Court to grant probate of the will or letters of administration of the estate of a deceased person leaving property, whether real or personal, within the State of Victoria. Grants are made to the executor of a will, the next of kin of an intestate, or the creditor of an intestate. A person receiving such a grant becomes the legal personal representative of the deceased, and is thus empowered to deal with all his assets and generally administer the estate.

Provision is made in Part III of the *Administration and Probate Act* 1958 for the sealing by the Supreme Court of probates or letters of administration which have been granted in Great Britain, Australia (other than Victoria), New Zealand, or certain British possessions, when the deceased has left real or personal estate in Victoria. The object of this provision is simply to put the executor or administrator under it in the same position as if he were an original executor or administrator.

The *Administration and Probate Act* 1958 also gives the Court jurisdiction to grant probate or administration of the estate of a person who is presumed to have died, but, in such a case, it prohibits the distribution of the estate without the leave of the Court.

The accompanying table shows the number and value of estates of deceased persons in connection with which probate or letters of administration, etc., were finally completed during each of the years 1965 to 1969. Particulars are excluded where liabilities equal or exceed the gross value of the estate.

VICTORIA—PROBATES, LETTERS OF ADMINISTRATION, ETC.

Year	Number of estates	Gross value of estates—		Liabilities	Net value of estates	Average net value per estate
		Real	Personal			
		\$'000	\$'000			
MALES						
1965	11,534	77,526	123,186	23,330	177,382	15,380
1966	10,665	71,769	109,909	20,192	161,486	15,142
1967	11,474	78,302	137,043	25,028	190,317	16,587
1968	11,721	77,742	148,078	24,969	200,851	17,136
1969	12,457	103,052	177,966	32,163	248,855	19,977
FEMALES						
1965	7,960	40,746	63,662	6,731	97,678	12,272
1966	7,613	37,175	59,482	5,397	91,260	11,987
1967	8,294	42,262	69,057	7,423	103,896	12,527
1968	8,668	44,154	82,960	8,145	118,969	13,725
1969	8,631	47,137	84,678	8,597	123,218	14,276
TOTAL						
1965	19,494	118,273	186,848	30,061	275,060	14,110
1966	18,278	108,944	169,391	25,590	252,746	13,828
1967	19,768	120,564	206,100	32,451	294,213	14,883
1968	20,389	121,896	231,038	33,114	319,820	15,686
1969	21,088	150,189	262,643	40,760	372,072	17,644

The number and value of estates dealt with in each of the years 1967 to 1969, grouped according to net value and distinguishing the estates of males from those of females, were as follows :

VICTORIA—NUMBER AND NET VALUE OF ESTATES OF DECEASED PERSONS

Group	1967		1968		1969	
	Number	Net value	Number	Net value	Number	Net value
		\$'000		\$'000		\$'000
\$						
MALES						
Under 200	428	40	418	39	364	36
200— 599	785	305	799	309	763	290
600— 999	526	417	544	427	572	453
1,000— 1,999	1,194	1,775	1,212	1,778	1,187	1,741
2,000— 3,999	1,607	4,686	1,692	4,977	1,677	4,927
4,000— 5,999	1,206	5,944	1,247	6,159	1,127	5,572
6,000— 7,999	969	6,771	959	7,048	958	6,690
8,000— 9,999	871	7,810	864	7,795	882	7,915
10,000— 19,999	1,759	24,337	1,823	25,154	2,052	28,424
20,000— 29,999	640	15,896	648	15,865	745	18,125
30,000— 49,999	657	25,304	657	25,679	723	28,043
50,000— 99,999	541	38,300	550	37,921	679	46,764
100,000—199,999	217	29,993	221	29,415	305	41,411
200,000 and over	74	28,741	87	38,284	111	36,567
Total males	11,474	190,317	11,721	200,851	12,145	226,962

VICTORIA—NUMBER AND NET VALUE OF ESTATES OF
DECEASED PERSONS—*continued*

Group	1967		1968		1969	
	Number	Net value	Number	Net value	Number	Net value
		\$'000		\$'000		\$'000
\$						
FEMALES						
Under 200	226	25	216	21	201	19
200- 599	561	218	548	215	520	205
600- 999	428	341	425	337	382	304
1,000- 1,999	868	1,277	856	1,272	871	1,284
2,000- 3,999	1,248	3,688	1,283	3,793	1,228	3,597
4,000- 5,999	904	4,442	960	4,741	946	4,664
6,000- 7,999	808	5,621	846	5,975	817	5,716
8,000- 9,999	699	6,277	727	6,529	740	6,658
10,000- 19,999	1,343	18,506	1,434	19,984	1,553	21,383
20,000- 29,999	451	11,049	526	12,806	508	12,436
30,000- 49,999	389	14,619	411	15,985	418	16,186
50,000- 99,999	262	18,129	311	21,127	301	20,676
100,000-199,999	82	10,929	88	12,458	107	13,807
200,000 and over	25	8,775	37	13,726	39	16,283
Total females	8,294	103,896	8,668	118,969	8,631	123,218
Grand total	19,768	294,213	20,389	319,820	20,776	350,179

Transfer of land

In Victoria there are two distinct types of title to land which has been alienated by the Crown. One is commonly known as a "General Law" title; the other as a "Torrens" or "Transfer of Land Act" title.

General Law Titles

The General Law system operated from the time of the first land transactions in the Port Phillip District. Although the Torrens system was introduced into Victoria in 1862 there are still 1,770,349 acres under the General Law system—mainly situated in the early settled areas. Dealings in land under this system are carried out by deeds which operate to pass the title to the land on being executed by the conveying or granting party, and delivered to the purchaser or grantee. These deeds may be registered under the Property Law Act. This legislation provides for the mere recording of deeds and not for their certification. The State does not certify to the title as it does with the Torrens system. The only purpose of registration is to govern priority. Deeds are registered by filing a memorial (an extract of the relevant particulars) of the deed in the Registrar-General's Office.

Under the General Law system the title to a particular piece of land consists of a whole bundle of documents known as a chain of title. On any transaction with General Law land it is necessary for the solicitor for the purchaser or mortgagee to make a thorough study of the deeds in the chain of title and to search in the office of the Registrar-General to make sure that there are no conflicting deeds which have priority by virtue of their registration.

Transfer of Land Act

The Torrens system was introduced in Victoria by the *Real Property Act 1862*. All land alienated in fee by the Crown after 2 October 1862 (and leasehold granted by the Crown after 9 September 1863) is under the operation of the Transfer of Land Act. Before 1862, 5,142,321 acres had been alienated by the Crown and were being dealt with under the General Law system. Since that date some 26 million acres have been alienated and all of this land automatically came under the Transfer of Land Act on the issue and registration of the relevant Crown grants and leases. Provision is made for the bringing of land alienated before 1862 under the operation of the Transfer of Land Act, by voluntary application. The present Transfer of Land Act contains provisions for the voluntary conversion of General Law titles and also provides that land may be brought under the Act by direction of the Registrar. So far little use has been made of the compulsory provisions.

The Torrens system is based on the fundamental principle that the title to land and to interests in land (such as the interest of mortgagees, annuitants, etc.) depends upon registration of written instruments signed by the parties to the respective transactions and not upon the written deeds themselves.

The document of title to land under the Transfer of Land Act consists of a certificate of title setting out a description identifying the land and a statement certifying who is the registered proprietor. This statement is conclusive evidence and is guaranteed by the Government. On the registration of each new transfer the State certifies the title anew and this certificate operates in favour of a person dealing without fraud and for value as if it were a new grant of the land from the Crown. Certificates of title and Crown grants are in duplicate, the original being retained in the Office of Titles and the duplicate being held by, or on behalf of, the registered proprietor. The title is said to be indefeasible or incapable of being challenged or upset except in certain specified events, the chief among these being actual fraud.

Certain interests in land under the Act can be created by a registered proprietor of that land and registered on the title. These include mortgages, leases, charges, easements, and restrictive covenants.

Any certificate of title can be searched at the Titles Office for a small fee, and any person intending to deal with the registered proprietor of the land is not concerned to go behind any of the entries shown on that title. The certainty and accuracy of these particulars can be assumed.

Since 1953 there has existed in Victoria a method for the subdivision of land in strata and the issue of individual titles to flats (see page 684 of the *Victorian Year Book 1966*). The *Strata Titles Act 1967* introduced into Victoria a further method for the subdivision of land in strata. Existing methods can still be used as registration of a plan under Part II of the Strata Titles Act is not compulsory. The Act (except as to Part IV) came into operation on 1 July 1967. Part IV of the Act operated as from 1 December 1967. Further information about the Strata Titles Act is set out on pages 695 and 696 of the *Victorian Year Book 1968*. During the year ended 30 June 1969, 742 plans were lodged for registration under the new Act.

Assurance Fund

Complementary to the certification of title there is an Assurance Fund. Out of this fund, persons who sustain loss or damage (whether by deprivation of land or otherwise) through the operation of the Act may be indemnified. This fund is built up by contributions levied upon applicants first bringing land under the Act and upon grantees of Crown land at the rate of 1 cent for every \$5 of the value of the land applied for or the price paid to the Crown, and by contributions levied by the Registrar on various other applications where any uncertainty or risk is involved.

During the financial year 1968-69, receipts of the fund comprised contributions of \$18,833 and interest on stock of \$6,538. Claims of \$9,455 were met from the fund during the year. The sum of \$10,189 was paid out in accordance with section 3 of the *Special Funds Act* 1920 to provide for interest on loan moneys expended on university buildings and \$20,000 was loaned to the Victoria Institute of Colleges. The balance at the credit of the Assurance Fund at 30 June 1969 was \$395,429. The total amount paid to 30 June 1969, as compensation and for judgments recovered, including costs, was \$43,474 in respect of 145 claims.

Further reference, 1968

Titles of land issued

The following table shows the number of titles of land issued during each of the years 1965 to 1969 :

VICTORIA—TITLES OF LAND ISSUED

Year	Number of—			
	Certificates of title	Crown grants	Crown leases	Total titles
1965	69,027	1,254	397	70,678
1966	53,660	1,063	315	55,038
1967	49,476	1,221	461	51,158
1968	53,422	1,223	256	54,901
1969	51,002	834	229	52,065

Land transfers, mortgages, etc.

A summary of dealings lodged at the Titles Office under the Transfer of Land Act is given in the following table for each of the years 1965 to 1969 :

VICTORIA—DEALINGS LODGED AT THE TITLES OFFICE UNDER THE TRANSFER OF LAND ACT

Year	Number of transfers	Mortgages (a)		Number of—				
		Number	Amount	Entries of executor, administrator, or survivor	Plans of subdivision	Caveats	Other dealings	Total dealings
1965	107,572	57,727	462,754	14,617	4,476	17,477	62,546	264,415
1966	107,331	58,388	451,264	14,370	4,254	17,759	67,152	269,254
1967	110,950	58,109	501,511	16,414	4,131	18,060	70,659	278,323
1968	113,358	63,891	578,989	15,682	4,370	19,184	76,561	293,046
1969	116,413	63,510	638,163	15,899	4,566	20,645	80,698	301,731

(a) Excluding certain mortgages, principally to trading banks to secure overdrafts on current accounts.

Mortgages, reconveyances, and conveyances registered at the Office of the Registrar-General under the *Property Law Act* 1958 are shown for each of the years 1965 to 1969 in the following table :

VICTORIA—DEALINGS UNDER THE PROPERTY LAW ACT

Year	Mortgages (a)		Reconveyances		Conveyances	
	No.	Amount	No.	Amount (b)	No.	Amount
		\$'000		\$'000		\$'000
1965	1,235	11,136	1,312	3,268	3,067	26,900
1966	1,113	9,786	1,359	2,167	3,060	27,880
1967	1,138	13,207	1,343	2,549	3,193	28,611
1968	1,205	14,727	1,456	3,064	2,888	28,749
1969	1,280	14,890	1,472	3,677	3,027	45,010

(a) Excluding certain mortgages, principally to trading banks to secure overdrafts on current accounts.

(b) Excluding repayments designated "Principal and Interest".

Mortgages of real estate

Details of mortgages lodged for registration under the Transfer of Land Act and the Property Law Act (mentioned in the two preceding tables) are shown in the following table.

Certain mortgages (principally to trading banks to secure overdrafts on current accounts) have not been included in the figures as only the number of such mortgages, and not the amounts involved, are available.

Particulars of mortgages not lodged for registration are not available.

The number of mortgages and the amount of consideration involved for each of the years 1967 to 1969, classified according to type of mortgagee, are as follows :

VICTORIA—MORTGAGES OF REAL ESTATE LODGED FOR REGISTRATION

Type of mortgagee	Mortgages (a)					
	1967		1968		1969	
	Number	Amount	Number	Amount	Number	Amount
		\$'000		\$'000		\$'000
Banks	19,604	140,150	23,448	174,783	22,616	179,356
Building societies	2,455	15,591	3,331	24,817	4,010	32,903
Co-operative housing societies	4,671	30,642	3,685	25,538	2,966	20,725
Insurance companies	2,327	44,537	2,615	58,181	2,675	55,427
Government institutions	3,837	29,274	5,009	31,005	4,441	33,247
Trustee institutions	367	8,098	479	10,246	534	14,962
Hire purchase and finance companies, etc.	7,811	89,142	8,814	101,646	9,655	118,949
Other mortgages	18,175	157,281	17,715	167,501	17,893	197,484
Total	59,247	514,717	65,096	593,716	64,790	653,053

(a) Excluding certain mortgages, principally to trading banks to secure overdrafts on current accounts.

Stock mortgages and liens on wool and crops

The number and amount of stock mortgages, liens on wool, and liens on crops registered at the Office of the Registrar-General during each of the years 1965 to 1969 are shown in the following table. Releases of liens are not required to be registered as, after the expiration of twelve months, the registration of all liens is automatically cancelled. Very few mortgages of stock secure themselves by a registered release.

VICTORIA—STOCK MORTGAGES AND LIENS ON WOOL AND CROPS

Security		1965	1966	1967	1968	1969
Stock mortgages—						
Number		370	301	468	494	484
Amount	\$'000	1,064	790	1,366	1,529	1,629
Liens on wool—						
Number		45	31	15	15	29
Amount	\$'000	220	116	139	178	323
Liens on crops—						
Number		97	87	71	429	429
Amount	\$'000	296	195	174	526	459
Total—						
Number		512	419	554	938	942
Amount	\$'000	1,580	1,101	1,679	2,233	2,411

Bills of sale

The following are the numbers and amounts of bills of sale which have been filed at the Office of the Registrar-General during each of the years 1965 to 1969 :

VICTORIA—BILLS OF SALE

Security		1965	1966	1967	1968	1969
Bills of sale—						
Number		6,390	9,360	17,248	22,265	26,773
Amount	\$'000	13,338	15,679	24,194	30,077	36,755

Companies*Company legislation*

In recent years the Victorian Parliament has given much attention to company legislation and, following the passage of a new Companies Act in Victoria in 1958, company legislation has been passed throughout the Commonwealth in substantially similar form. In Victoria the current legislation is the *Companies Act* 1961 and subsequent amendments.

Further references, 1967, 1969

The following table shows details of companies registered during each of the years 1965 to 1969 :

VICTORIA—COMPANIES REGISTERED, ETC.

Particulars	1965	1966	1967	1968	1969
	No.				
New companies registered—					
Victorian	3,182	3,089	3,304	4,138	4,751
Other	283	285	333	345	429
Total	3,465	3,374	3,637	4,483	5,180
	\$'000				
Nominal capital of new companies—					
Victorian	121,051	130,379	122,276	162,878	212,023
Other	276,477	201,363	205,366	307,795	450,731
Total	397,529	331,742	327,642	470,673	662,754

VICTORIA—COMPANIES REGISTERED, ETC.—*continued*

Particulars	1965	1966	1967	1968	1969
	No.				
Existing companies (at end of year)—					
Victorian	42,968	44,371	46,854	50,345	53,701
Other	3,177	3,312	3,525	3,744	4,134
Total	46,145	47,683	50,379	54,089	57,835
	\$'000				
Increase in nominal capital of Victorian companies during year	278,136	210,726	217,980	268,159	536,469

Stock Exchange of Melbourne

The Stock Exchange of Melbourne was established in 1859. Over the years, there has been continuous growth in share ownership and large amounts of capital have been raised for public works and for the expansion of industry. In these ways, the Stock Exchange has played an important role in the economic development of the Commonwealth as well as of the State.

Functions

The basic function of the Stock Exchange is to provide the means by which investment securities, stocks, bonds, shares, etc., may be conveniently bought and sold. The type of market has varied over the years from the "call-room" style of trading to the present post-trading method which is practised in most exchanges throughout the world.

Membership

The Stock Exchange of Melbourne is an association of 168 members. It is governed by a chairman and committee (twelve including the chairman) elected by the members. In April members agreed to the admission of non-member partners and so far twenty-three have been appointed.

Official list

At 30 September 1969, 3,237 separate securities (including options) with a nominal value of \$16,023m and a market value of \$30,468m were quoted on the Exchange. The market value was an all-time record, being 8 per cent higher than the previous year. The market value of \$8,926m in Commonwealth loans represented 29 per cent of all securities listed.

Seventy-one companies, including forty-eight new mining companies were added to the official list during 1969 and their combined nominal capital was a record of \$228m. In addition new capital issues made by companies already listed rose to a record of \$577m. At the end of the year, the official list comprised 903 companies—745 commercial and industrial and 158 mining companies. Because of take-overs and mergers, thirty-five companies were removed from the official list during the year.

In the following table, the number of issues (including options) and their nominal value are classified according to type of security. Particulars are shown as at 30 September for each of the years 1966 to 1969.

MELBOURNE STOCK EXCHANGE—ISSUES LISTED (a) AND
NOMINAL VALUE

Class of security	Listed at 30 September—							
	1966		1967		1968		1969	
	No. of issues	Nominal value	No. of issues	Nominal value	No. of issues	Nominal value	No. of issues	Nominal value
		\$m		\$m		\$m		\$m
Commonwealth loans	50	7,358	53	8,031	51	8,269	65	9,099
Semi-government loans	798	783	} 822	888	906	887	946	969
Foreign government loans	14	18						
Industrial company securities—								
Debentures	642	729	684	854	687	963	778	1,209
Unsecured notes	265	216	211	222	188	213	162	204
Preference shares	279	169	244	144	240	141	235	149
Ordinary shares	809	3,155	775	3,237	776	3,516	790	3,691
Mining company securities	121	363	130	445	155	527	261	702
Total	2,978	12,791	2,919	13,821	3,003	14,516	3,237	16,023

(a) Includes options.

Turnover

For the year ending 30 September 1969, the volume of turnover of all loan securities (measured in units of one dollar) was 2 per cent higher at 221.2m units, sales of Commonwealth loans increasing by 4 per cent to 187.6m. The volume of turnover of share securities increased by 24 per cent to 623.5m shares. Sales of mining shares increased by 45 per cent to 360.8m, July being the highest month for the volume of mining shares with a turnover of 52.8m shares.

The following table shows details of the volume of turnover of stocks and shares during each of the years 1964–65 to 1968–69 :

MELBOURNE STOCK EXCHANGE—VOLUME OF TURNOVER
OF STOCKS AND SHARES
(Million units)

Class of security	Year ended 30 September—				
	1965	1966	1967	1968	1969
Commonwealth loans	114.4	242.0	194.0	180.5	187.6
Semi-government loans	16.0	14.7	17.5	11.4	14.5
Company debentures, unsecured notes	14.2	10.4	17.0	24.8	19.1
Total loan securities	144.6	267.1	228.5	216.7	221.2
Preference shares	1.7	2.6	2.0	2.7	3.0
Ordinary shares, rights, and options	111.4	120.4	152.1	250.0	259.7
Mining	29.4	46.6	81.0	248.6	360.8
Total share securities	142.5	169.6	235.1	501.3	623.5

NOTE. In the above table turnover of loan securities prior to 14 February 1966 has been converted to units of one dollar.

The turnover value of share securities declined by 19 per cent to \$823.5m, the highest turnover value for both mining and industrial shares occurring in February 1969 when sales amounted to \$53m for mining shares and \$43m for industrials.

In the following table the number of transactions and value of turnover of stocks and shares are shown for each of the years 1965–66 to 1968–69 :

MELBOURNE STOCK EXCHANGE—NUMBER OF TRANSACTIONS AND
VALUE OF TURNOVER OF STOCKS AND SHARES

Class of security	Year ended 30 September—							
	1966		1967		1968		1969	
	Trans- actions	Value	Trans- actions	Value	Trans- actions	Value	Trans- actions	Value
	'000	\$m	'000	\$m	'000	\$m	'000	\$m
Commonwealth loans	16.5	241.5	14.5	195.2	11.5	181.3	12.7	188.6
Semi-government loans	4.3	14.7	4.9	17.4	4.2	11.3	4.3	14.3
Debentures, notes	8.2	9.5	8.4	16.4	6.9	14.0	7.0	18.7
Total loan securities	29.0	265.7	27.8	229.0	22.6	206.6	24.0	221.6
Preference shares	3.7	4.3	4.3	2.5	4.7	3.3	4.0	3.8
Ordinary shares, rights, options	272.2	179.1	297.8	236.5	447.3	512.1	404.4	429.8
Mining shares	99.5	45.0	179.3	128.1	559.2	510.4	445.2	389.9
Total share securities	375.4	228.4	481.4	367.1	1,011.2	1,025.8	853.6	823.5
Grand total	404.4	494.1	509.2	596.1	1,033.8	1,232.4	877.6	1,045.1

Share Price Index

The Melbourne Share Price Index, which comprises a series of indexes, was introduced in June 1963 with statistics commencing in January 1960 for fifteen industrial groups. The 50 Leaders Index dates back to 1948. In 1964 three additional groups (Preference Shares, Gold, and Oil and Gas), which are not included in the All Ordinaries Index were added, but in June 1967 the Gold Index was discontinued and merged into the Metals and Minerals Group. The Indexes measure changes in Aggregate Market Value (AMV), the base AMV being derived by multiplying the number of shares issued by their prices at the base date. The 50 Leaders Index is calculated twice daily, once in the morning and once in the afternoon.

In June 1969 the All Ordinaries Index stood at 199.64 as against 215.37 in June 1968, reaching its highest point for the year 1968-69 at 221.34 in August. The 50 Leaders Index recorded 230.41 in June 1969, compared with 242.60 in June 1968, the highest point for 1968-69 being 251.67 in January.

At 30 September 1969 the total market value of ordinary shares on the Official List was \$19,101m. At that date, the market value of ordinary shares of all companies included in the All Ordinaries and Oil and Gas Indexes was \$18,203m or 95 per cent of the total.

Computer

Planning continued during 1968-69 for the introduction of computer communications, and subscriber testing of the system commenced at the beginning of 1970. Arrangements for the installation of Quotron inquiry units and Telex machines were well advanced.

Conclusion

Recent budget decisions likely to affect the share market were the restoration of tax deductibility for interest on convertible securities (subject to new conditions) and the decision to amend the income tax law so that dealers in shares will be allowed only one deduction for capital subscribed to mining or afforestation companies. The Government also laid down certain guide lines concerning overseas investment in Australia and

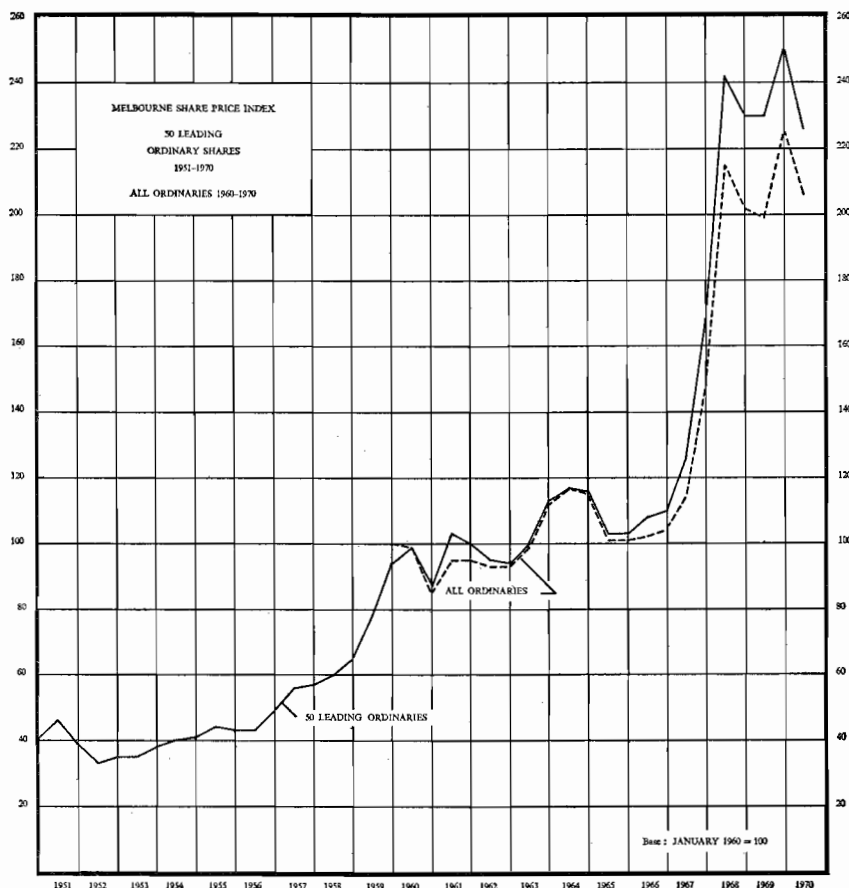


Figure 16. Melbourne Share Price Index
(To June 1963 Index calculated at end of June and December;
thereafter the monthly average for June and December.)

re-affirmed the policy aimed at encouraging Australian participation in foreign owned enterprises. During 1968-69 the greatest market interest lay in the mining sector, particularly that related to the search for nickel in Western Australia.

Short-term money market

The short-term money market in Australia consists of nine dealer companies which specialise in the business of borrowing money, investing borrowed funds in an approved range of assets, and buying and selling such assets. Five of these companies have head offices in Melbourne and four in Sydney but there are representatives in all other State capitals, Canberra, Launceston, Darwin and Port Moresby.

Known as authorised dealers, each of these dealer companies has been accredited by the Reserve Bank. Such accreditation has significance both for the dealers and for their clients, the most important aspect being that by acting as "lender of last resort" the Bank provides liquid funds to dealers, in that they can borrow from the Bank against the bulk of their

assets. The Bank does not, however, accept responsibility for the repayment of a dealer's individual loans or for solvency generally.

The Bank also trades in Commonwealth Government securities with dealers and provides a range of other facilities which contribute to the efficient operation of the market. The Bank maintains special clearing accounts for dealers, by means of which funds can be quickly transferred from one point in Australia to another, and a safe custody system for dealers' holdings of Commonwealth Government securities, which makes possible the safe and rapid movement of security for loans from one lender to another.

Each dealer company is required by the Reserve Bank to have capital paid up in cash of not less than \$400,000 and to limit the amount of loans it accepts to a specified multiple of its shareholders funds. Dealers accept loans overnight, at call, or for fixed periods, in minimum amounts of \$50,000. They must provide lenders with full security for loans, the onus being on each lender to satisfy himself that the security accepted by him is adequate. The determination of an appropriate margin of value of the security over the amount of any loan is a matter for negotiation solely between lender and dealer.

Lenders to the dealers include trading banks, savings banks, public authorities, and a wide variety of companies. The availability of funds from different groups is seasonal and highly variable, some of which is offsetting. The weekly average volume of loans accepted by the nine dealers is of the order of \$300m and such loans turn over very frequently.

· AUSTRALIA—SHORT-TERM MONEY MARKET : AUTHORISED DEALERS'
LIABILITIES CLASSIFIED BY TYPE OF CLIENT (a)
(\$m)

Clients	At 30 June—			
	1966	1967	1968	1969
All trading banks	91.1	121.5	117.6	90.0
Savings banks	35.6	56.2	26.5	36.0
Insurance offices	12.5	10.8	20.1	32.4
Superannuation, pension, and provident funds	6.2	11.7	4.6	8.9
Hire purchase and other instalment credit companies	6.3	5.9	2.8	2.4
Companies (not elsewhere included)	95.1	120.2	156.8	140.3
Commonwealth and State Governments	30.4	57.4	78.1	62.3
Local and semi-government authorities (not elsewhere included)	51.0	56.5	72.2	75.3
All other lenders (including marketing boards and trustee companies)	18.4	33.6	20.6	45.9
Total	346.5	473.7	499.3	493.4

(a) Liabilities to Reserve Bank as lender of last resort are excluded.

The rates of interest paid by dealers for funds of different maturities vary not only from dealer to dealer but also from day to day—and even during the day—depending on the general funds position and the judgment of individual dealers as to future trends in interest rates, the availability of funds, fluctuations in the value of their security portfolios, etc.

The margin between the interest outgoings on borrowed money and the income earned on investments, together with the income earned in the course of security dealing, needs to be sufficient to cover operating costs, profits, and the accumulation of reserves.

AUSTRALIA—SHORT-TERM MONEY MARKET : AUTHORISED DEALERS :
INTEREST RATES
(Per cent per annum)

Month	Interest rates on loans accepted during month				Weighted average interest rate on loans outstanding (a)
	At call		For fixed periods		
	Minimum	Maximum	Minimum	Maximum	
June 1965	1.50	6.00	2.00	5.53	4.16
June 1966	3.00	6.10	4.25	5.80	4.73
June 1967	2.00	6.50	3.00	5.50	4.46
Sept. 1967	2.00	6.75	3.75	6.10	4.22
Dec. 1967 (b)	2.00	6.50	3.30	5.75	4.16
Mar. 1968	1.00	6.50	3.25	5.75	4.10
June 1968	3.00	6.75	3.75	5.40	4.29
Sept. 1968	0.50	6.50	3.25	5.75	4.07
Dec. 1968 (b)	1.00	6.25	3.25	6.00	4.18
Mar. 1969	1.00	7.00	2.50	6.00	4.52
June 1969	2.00	7.50	4.00	6.75	4.59

(a) Weighted average of weekly figures.

(b) Excludes one Wednesday.

The Bank closely supervises the range of assets which dealers may acquire; the great bulk of each dealer's assets must comprise Commonwealth Government securities (including Treasury notes) maturing within five years. However, dealers may also deal in and hold bank-endorsed or accepted commercial bills (without formal limit as to maturity) and banks' Certificates of Deposit maturing within five years. A very small part of a dealer's funds may be held in Government securities with more than five years to maturity, non-bank bills maturing within 180 days, and such other assets as it chooses.

Dealers stand ready to buy and sell securities; aggregate figures of turnover of Commonwealth Government bonds and notes range between \$50m and \$100m per week over the year for the market as a whole.

AUSTRALIA—SHORT-TERM MONEY MARKET : AUTHORISED DEALERS :
SELECTED ASSETS (a)
(\$m)

Month	Commonwealth Government Securities (face value)			Commercial bills	Banks' Certificates of Deposit
	Treasury notes	Other	Total		
June 1965	8.4	335.0	343.4	7.6	(c)
June 1966	10.7	362.0	373.3	25.2	(c)
June 1967	13.7	454.1	467.7	32.8	(c)
Sept. 1967	58.8	408.1	466.9	23.8	(c)
Dec. 1967 (b)	148.7	326.1	474.8	22.8	(c)
Mar. 1968	257.4	278.6	536.0	18.8	(c)
June 1968	116.2	375.1	491.3	35.7	(c)
Sept. 1968	148.6	389.9	538.5	29.6	(c)
Dec. 1968 (b)	132.1	412.2	544.3	23.0	(c)
Mar. 1969	181.0	399.1	580.2	17.0	5.4
June 1969	46.4	459.2	505.6	28.9	15.0

(a) Average of weekly figures.

(b) Excludes one Wednesday.

(c) Not applicable.

Finance companies

A comprehensive account of the scope of statistics relating to the lending operations of finance companies and fuller details of the transactions of finance companies are provided in the bulletin *Finance Companies*, 1969. Finance companies, like other financial institutions, are distinguishable from non-financial institutions in that they deal mainly in financial assets as opposed to physical goods and non-financial services. However, while the various classes of financial institutions are commonly acknowledged as being different in some way or other, one from another, it is difficult to formulate precise and mutually exclusive definitions in respect of each class. For the purpose of these statistics, finance companies are defined as companies which are engaged mainly in providing to the general public (businesses as well as persons in their private capacity) credit facilities of the following types: hire purchase and other instalment credit for retail sales, wholesale hire purchase, other consumer and commercial loans, and factoring. The finance companies covered in these statistics, insofar as they provide instalment credit for retail sales, are also included in the statistics of instalment credits for retail sales (see pages 693-696). The statistics exclude those finance companies which are not subsidiaries of other finance companies and those which have total balances outstanding of less than \$100,000.

In general, companies which are engaged both in financing activities and other activities come within the scope of these statistics, provided that the major portion of their assets consists of financial assets of the types listed above or a major portion of their income is derived from such assets. Companies are excluded if the major portion of their balances outstanding consists of agreements written for the purpose of financing their own sales. Companies which are engaged mainly in financing, in any way, the operations of related companies ("related" as defined in the Companies Act) are also excluded from these statistics, as are unincorporated finance businesses. Also excluded are the following classes of financial and quasi-financial institutions: banks; life insurance companies; fire, marine, and general insurance companies; short-term money market companies; pastoral finance companies; investment companies; unit trusts, land trusts, mutual funds and management companies for the foregoing trusts and funds; pension and superannuation funds; building

VICTORIA—FINANCE COMPANIES: AMOUNTS FINANCED (a)
(\$m)

Year	Instalment credit for retail sales	Wholesale hire purchase	Other consumer and commercial loans	Factoring	Total
1964-65	155.7	105.9	134.4	46.8	442.8
1965-66	147.7	108.1	148.2	40.1	444.1
1966-67	159.7	165.9	163.3	35.8	524.6
1967-68	193.1	190.5	198.8	34.7	617.1
1968-69	224.5	210.2	242.0 (b)	30.7	707.3

(a) The actual amount of cash provided. It excludes interest, insurance, hiring and other charges and initial deposits. For purchases of existing agreements and trade debts purchased, it represents the amount of cash paid to the seller.

(b) Other consumer and commercial loans in the year ended 30 June 1969 included \$37.8m personal loans, \$71.1m mortgage loans and \$133.1m commercial loans.

and friendly societies including credit unions ; and all companies engaged in leasing and bill of exchange financing other than finance companies (as defined above) and their related companies.

Statistics are also collected on loans by finance companies to related non-finance companies ; leasing of business equipment and plant by finance companies and their related companies ; and the drawing and discounting of bills of exchange by finance companies and their related companies.

**VICTORIA—FINANCE COMPANIES: BALANCES
OUTSTANDING AT END OF PERIOD (a)
(\$m)**

At 30 June—	Instalment credit for retail sales	Wholesale hire purchase	Other consumer and commercial loans	Factoring	Total
1965	237.1	12.9	161.0	10.5	421.6
1966	237.6	17.9	179.9	8.6	443.9
1967	253.7	25.5	201.2	8.2	488.6
1968	292.4	28.0	228.5	9.7	558.6
1969	338.2	34.6	261.9	9.6	644.3

(a) Relates to amounts owing on all finance agreements as at 30 June.

**VICTORIA—FINANCE COMPANIES: COLLECTIONS AND OTHER
LIQUIDATIONS OF BALANCES (a)
(\$m)**

Year	Instalment credit for retail sales	Wholesale hire purchase	Other consumer and commercial loans	Factoring	Total
1964-65	175.7	107.3	148.4	52.5	438.8
1965-66	187.9	104.4	153.8	46.8	493.0
1966-67	200.5	159.1	174.4	39.5	573.4
1967-68	209.4	189.2	200.7	36.7	635.9
1968-69	240.3	205.5	250.9	34.4	731.0

(a) Covers cash collections of capital repayments, hiring charges, interest and insurance, and also other liquidations such as bad debts written off and rebates for early payouts.

Instalment credit for retail sales

All types of instalment credit schemes in which repayments are made by regular, predetermined instalments are included in this collection. These include hire purchase, time payment, budget accounts, and personal loan schemes which relate primarily to the financing of retail sales of goods. The statistics do not cover lay-bys, credit accounts not involving regular predetermined instalments, financing of sales of land and buildings, property improvements, services such as repair work and travel facilities, or rental and leasing schemes.

In addition to businesses which finance the retail sale of goods, but do not retail goods themselves (called non-retail finance businesses), information is also collected from retailers who provide their own finance and from retailers' subsidiary companies (called retail businesses). Retailers' subsidiary companies are businesses which have been set up by retailers, or by groups mainly engaged in retailing, primarily for the purpose of financing their retail sales.

Figures for retail subsidiary companies are included with retail businesses in order to permit compilation of figures on a comparable basis over a period of time.

The statistics are classified by type of business according to the nature of the business on whose paper the agreement was written, even if the agreement was subsequently assigned, discounted, or mortgaged with another type of business.

Particulars of total instalment credit transactions of non-retail finance businesses are collected regularly from all such businesses. However, particulars from retail businesses are derived from a sample of these businesses based on the Census of Retail Establishments for 1961-62. Because of this the figures shown below for retail businesses are subject to revision. Revision to data for non-retail finance businesses may also be necessary from time to time as problems are encountered about coverage and classification. All types of goods sold to final purchasers are included, whether producer goods (such as plant and machinery) or consumer goods.

The following table shows the amounts financed by all businesses during the year 1968-69, in Australia, classified by States and by groups of commodities financed. It also shows the balances outstanding at 30 June 1969 for each State.

AUSTRALIA—INSTALMENT CREDIT FOR RETAIL SALES, 1968-69
(Retail businesses plus non-retail finance businesses)
(\$m)

State	Amount financed (a)				Balances outstanding at 30 June 1969 (e)
	Motor vehicles, tractors, etc. (b)	Plant and machinery (c)	Household and personal goods (d)	Total all goods	
New South Wales (f)	279.3	45.4	153.8	478.5	673.1
Victoria	188.4	23.3	94.5	306.3	419.3
Queensland	108.3	20.6	49.2	178.1	265.5
South Australia (g)	74.2	7.4	28.2	109.8	153.6
Western Australia	81.9	17.3	25.4	124.6	171.0
Tasmania	22.8	4.0	9.8	36.5	52.2
Australia	754.9	118.1	360.9	1,233.9	1,734.7

- (a) Includes amounts financed on both hire purchase and other instalment credit schemes. Amount financed is cash value of goods less deposit, interest, hiring charges, and insurance.
- (b) Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, and motor parts and accessories.
- (c) Includes farm machinery and implements, earthmoving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc.
- (d) Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles, and other household and personal goods.
- (e) Includes hiring charges, interest and insurance.
- (f) Includes Australian Capital Territory.
- (g) Includes Northern Territory.

The following table shows the amounts financed during recent years in Victoria classified according to type of business and groups of commodities financed for the years 1964-65 to 1968-69 :

VICTORIA—INSTALMENT CREDIT FOR RETAIL SALES: AMOUNTS
FINANCED BY COMMODITY GROUPS (a)
(\$m)

Year	Motor vehicles, tractors, etc. (b)	Plant and machinery (c)	Household and personal goods (d)	Total all goods
RETAIL BUSINESSES				
1964-65	5.9	1.0	77.3	84.1
1965-66	4.6	1.2	69.9	75.7
1966-67	5.0	0.9	69.3	75.2
1967-68	5.3	0.5	71.3	77.1
1968-69	6.4	0.8	75.9	83.1
NON-RETAIL FINANCE BUSINESSES				
1964-65	140.9	14.9	15.3	171.1
1965-66	130.7	15.1	13.3	159.1
1966-67	131.2	17.1	14.5	162.8
1967-68	158.3	17.5	17.2	193.0
1968-69	182.0	22.5	18.6	223.2
ALL BUSINESSES				
1964-65	146.7	15.8	92.6	255.2
1965-66	135.3	16.3	83.2	234.8
1966-67	136.3	18.0	83.8	238.1
1967-68	163.6	18.0	88.5	270.1
1968-69	188.4	23.3	94.5	306.3

(a) Includes amounts financed on both hire purchase and other instalment credit schemes. Amount financed is cash value of goods less deposit, interest, hiring charges, and insurance.

(b) Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, and motor parts and accessories.

(c) Includes farm machinery and implements, earthmoving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc.

(d) Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles, and other household and personal goods.

The following table shows the balances outstanding in Victoria at 30 June 1965 to 1969, and the relationship between retail and non-retail finance businesses in this respect:

VICTORIA—INSTALMENT CREDIT FOR RETAIL SALES:
BALANCES OUTSTANDING (a)
(\$m)

At 30 June—	Retail businesses	Non-retail finance businesses	Total all businesses
1965	100.8	253.7	354.5
1966	91.4	253.3	344.7
1967	86.8	254.5	341.4
1968	82.5	291.3	373.7
1969	84.9	334.4	419.3

(a) Includes amounts owing on both hire purchase and other instalment credit combined.

At 30 June 1965, of the total balances outstanding in Victoria for all instalment credit (\$354.5m), hire purchase comprised 60.7 per cent and other instalment credit 39.3 per cent. The latter has grown since then and at 30 June 1969, totalled \$237.4m or 56.6 per cent of the total instalment credit outstanding balances of \$419.3m. This increase has continued.

Retail hire purchase operations

The following table shows the main features of hire purchase operations in Victoria for the years 1964-65 to 1968-69.

It should be noted particularly that these statistics cover hire purchase operations by all businesses.

VICTORIA—RETAIL HIRE PURCHASE OPERATIONS

Class of goods	1964-65	1965-66	1966-67	1967-68	1968-69
NUMBER OF AGREEMENTS MADE					
Motor vehicles, tractors, etc. (a)	72,357	58,254	51,685	48,865	47,606
Plant and machinery (b)	10,570	10,540	9,250	8,564	8,633
Household and personal (c)	368,772	294,300	283,290	273,271	275,632
Total agreements	451,699	363,094	344,225	330,700	331,871
VALUE OF GOODS PURCHASED (d) (\$m)					
Motor vehicles, tractors, etc. (a)	113.9	89.9	78.7	83.0	82.9
Plant and machinery (b)	21.3	21.6	23.5	23.4	28.0
Household and personal (c)	55.8	46.2	45.8	47.7	52.3
Total value	190.9	157.6	148.1	154.1	163.3
AMOUNT FINANCED UNDER AGREEMENTS (e) (\$m)					
Motor vehicles, tractors, etc. (a)	75.2	60.0	53.8	56.8	59.0
Plant and machinery (b)	14.5	14.7	16.5	16.4	20.0
Household and personal (c)	46.8	38.6	38.0	39.1	42.9
Total amount financed	136.4	113.3	108.2	112.3	121.9
BALANCES OUTSTANDING AT END OF YEAR (f) (\$m)					
All classes of goods	215.2	189.1	174.7	173.0	181.9

(a) Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, and motor parts and accessories.

(b) Includes farm machinery and implements, earthmoving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc.

(c) Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles, and other household and personal goods.

(d) Value at net cash or list price (excluding hiring charges and insurance).

(e) Excludes hiring charges and insurance.

(f) Includes hiring charges and insurance.

10

TRADE, TRANSPORT, AND COMMUNICATIONS

RETAIL TRADE

Census of Retail Establishments

Statistics of retail sales have been compiled for the years 1947-48, 1948-49, 1952-53, 1956-57, and 1961-62 from returns supplied by all retail establishments in Australia.

In general terms these Censuses have covered the trading activities of establishments which normally sell goods at retail prices to the general public from shops, rooms, kiosks, and yards. Particulars of retail sales obtained from these Censuses are designed principally to cover sales to the final consumer of new and second-hand goods generally used for household and personal purposes. For this reason, sales of building materials, farm and industrial machinery and equipment, earthmoving equipment, etc., have been excluded from the Censuses. For the same reason, and also because of difficulties in obtaining reliable and complete reporting, retail sales of builders hardware and supplies, business machines and equipment, grain, feed, fertilisers and agricultural supplies, and tractors were excluded from the 1961-62 Census. Retail sales of motor vehicles, parts, etc., are included whether for industrial, commercial, farm, or private use.

A comparison of the results of the 1961-62 Retail Census with those of the 1956-57 Retail Census, which were modified to take into account the changes in scope mentioned above, was last published in the *Victorian Year Book* 1970 on pages 725-731.

Survey of Retail Establishments

During the period between Censuses, estimates of the value of retail sales are made on the basis of returns received from a representative sample of retail establishments. Sample returns are supplied by retail businesses which account for approximately 45 per cent of all retail sales in Australia. Estimated totals are calculated by methods appropriate to a stratified sample.

The following table shows the value of retail sales of goods in Victoria in each of the commodity groups specified for the years 1964-65 to 1968-69 :

VICTORIA—VALUE OF RETAIL SALES (a)
(\$m)

Commodity group	1964-65	1965-66	1966-67	1967-68	1968-69
Groceries	283.8	302.7	324.4	349.3	374.0
Butchers meat	153.9	168.7	175.6	187.0	187.2
Other food (b)	258.7	266.0	284.7	300.2	301.4
Total food and groceries	696.4	737.4	784.7	836.5	862.6
Beer, wine, and spirits (c)	178.9	198.6	217.8	240.3	255.0
Clothing and drapery	310.4	316.6	331.7	356.2	364.2
Footwear	54.4	54.8	60.6	63.1	64.7
Domestic hardware, china, etc. (d)	46.5	47.9	51.2	54.8	61.8
Electrical goods (e)	110.8	108.9	111.9	117.1	128.0
Furniture and floor coverings	84.6	87.0	91.1	96.7	102.8
Chemists goods	90.4	95.8	102.1	109.1	123.3
Newspapers, books, and stationery	64.4	68.2	73.7	78.5	82.2
Other goods (f)	184.2	202.2	214.4	217.9	231.8
Total (excluding motor vehicles, parts, petrol, etc.)	1,821.0	1,917.4	2,039.2	2,170.2	2,276.4
Motor vehicles, parts, petrol, etc. (g)	645.7	655.2	676.8	752.3	778.8
GRAND TOTAL	2,466.7	2,572.6	2,716.0	2,922.5	3,055.2

(a) Compiled on a basis comparable with the 1961-62 Retail Census.

(b) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, fish, etc., but excludes some delivered milk and bread.

(c) Excludes sales made by licensed clubs, canteens, etc.

(d) Excludes basic building materials, builders' hardware and supplies.

(e) Includes radios, television and accessories, musical instruments, domestic refrigerators.

(f) Includes tobacco, cigarettes, sporting goods, jewellery, etc.

(g) Excludes tractors, farm machinery and implements, earthmoving equipment, etc.

Retailing in Victoria since 1957, 1969

OVERSEAS AND INTERSTATE TRADE

Overseas trade: legislation and agreements

General

Of the three components of Victoria's trade, namely, transactions within the State, those with other Australian States, and those with countries outside Australia, the first two are, in practice, free of control or restriction; trade with overseas countries is subject to the customs laws of the Commonwealth Government.

By the Commonwealth of Australia Constitution Act, the power to make laws about trade and commerce with other countries was conferred on the Federal Parliament, and by the same Act, the collection and control of customs and excise duties passed to the Executive Government of the Commonwealth on 1 January 1901.

The first Commonwealth Customs Tariff was introduced by Resolution on 8 October 1901, from which date uniform duties came into effect throughout Australia. The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries, and of granting preferential treatment to specified imports from certain Commonwealth countries. Some goods, generally those of a luxury nature, are subject to duty for revenue purposes. Customs collections are

a major source of revenue, and the protective character of the tariff has an important influence on the Australian economy.

The present tariff provides for general and preferential rates of duty, and its structure is based on the "Brussels Nomenclature" which has its origins in the Convention on Nomenclature for the Classification of Goods in Customs Tariffs, signed in Brussels on 15 December 1950. Australia has operated a "Brussels-type" tariff since 1 July 1965.

Preferential rates apply to goods the produce or manufacture of the United Kingdom, Ireland, Canada, New Zealand, Papua and New Guinea, and certain goods, the produce or manufacture of specified countries, provided that such goods comply with the laws in force at the time affecting the grant of preference.

General rates apply to goods from all countries which do not qualify for preferential rates of duty under a particular tariff classification.

Primage duty

In addition to duties imposed by the Customs Tariff 1965, *ad valorem* duties at 5 per cent or 10 per cent are charged on some goods according to the type of goods and their origin. Goods produced or manufactured by New Zealand, Norfolk Island, Fiji, Cocos (Keeling) Islands, Christmas Island (Indian Ocean), and the Territory of Papua and New Guinea are exempt from primage duty.

Tariff Board

The Tariff Board is set up under the provisions of the Tariff Board Act to advise the Commonwealth Government on matters relating to the protection and encouragement of Australian industry.

Bilateral trade agreements

Australia has numerous trade agreements with overseas countries, the principal agreements being outlined below :

Country	Main features of agreement
United Kingdom	Dated 1956. Preservation of security for Australian exports in United Kingdom markets. Lowering of obligatory margins of preference which Australia extends to the United Kingdom.
Canada	Dated 1960. Mutual accord of preferential tariff treatment with certain specified exceptions as for 1931 Agreement plus concessions granted in 1932 and 1937.
New Zealand	Dated 1966. Provides for free trade in certain scheduled goods. Provision is made for addition of items to the schedule. The 1933 Agreement continues in force as part of the 1966 Agreement except as superseded or modified by it.
Rhodesia	Dated 1955. Exchange of preferential tariff treatment over a range of items. Since the unilateral declaration of independence by the Rhodesian Government in November 1965, this Trade Agreement has been inoperative.
Malaysia	Dated 1958. Agreement negotiated with the Federation of Malaya and applies only to that part of Malaysia formerly comprising the Federation. Records exchange of preferential treatment with special protection for Australia's wheat and flour markets in Malayan States, and for Malayan rubber and tin in Australia.

Country	Main features of agreement
Indonesia	Dated 1959. Records desirability of expanding trade between Australia and Indonesia. Gives recognition to importance of flour trade from Australia to Indonesia.
Japan	Dated 1963. Mutual exchange of most-favoured-nation treatment. Japan to accord preferential treatment to Australian wool and wheat as well as expanded opportunities for imports into Japan of other Australian primary produce and motor vehicles. Australia to consult Japan on temporary protection cases affecting Japanese products.
Philippines	Dated 1965. Provides for an exchange of non-discriminatory treatment while recognising existing preferences.
South Korea	Dated 1965. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences. Both Governments undertake to endeavour to increase volume of trade with each other.
U.S.S.R.	Dated 1965. Provides for an exchange of non-discriminatory treatment and for consultation on request about any matter affecting the operation of the Agreement.
Poland and Bulgaria	Dated 1966. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences. Both Governments undertake to endeavour to increase volume of trade with each other.
Romania and Hungary	Dated 1967. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences.
Republic of China (Taiwan)	Dated 1968. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences.

General Agreement on Tariffs and Trade (G.A.T.T.)

The General Agreement on Tariffs and Trade, to which Australia was one of the original contracting parties, is an international trade agreement which has been in operation since 1 January 1948. At the end of January 1970, seventy-six countries, whose foreign trade represented over 80 per cent of the total volume of world trade, were full contracting parties to the Agreement, two had acceded provisionally, and thirteen applied the Agreement on a *de facto* basis.

Six series of tariff negotiations have been conducted, as a result of which Australia has obtained tariff concessions on almost all the principal products of which Australia is an actual or potential exporter to the individual countries concerned.

Excise Tariff

The Excise Tariff applies to certain articles which can only be manufactured under licence and subject to certain conditions. The tariff relates to beer, spirits, amylic alcohol and fusel oil, saccharin, liqueurs, flavoured spirituous liquors, tobacco, cigars, cigarettes, snuff, coal, certain petroleum, shale, or coal tar distillates, playing cards, cigarette papers, matches, wine (certain types), and canned fruit.

Customs (Import Licensing) Regulations

Import licensing, introduced at the beginning of the Second World War, was relaxed progressively after the war so that by March 1952 goods from the non-dollar area (except Japan, to which special conditions applied until 1957) were virtually free from import licensing controls. A fall in the price of wool and a large increase in imports in the year 1951-52 so endangered Australia's external financial position that in March 1952 the import restrictions were again intensified. The war-time regulations were subsequently replaced by regulations made under the *Customs Act 1901-1954*.

Between March 1952 and February 1960 import restrictions were varied broadly in line with Australia's balance of trade position.

After the changes made in February 1960 only about 10 per cent of imports remained subject to control. The remaining restrictions were removed in October 1962 for all commodities, with the exception of a small group which were retained under control for reasons of association with the protection of the Australian industries concerned.

Export controls and incentives

The Customs Act makes provision for the prohibition of exportation of certain goods from Australia either absolutely, or to a certain place, or unless prescribed conditions are complied with. The *Banking Act 1959* contains provisions to ensure that the full proceeds of exports are received into the Australian banking system in the currency and in the manner prescribed by the Reserve Bank of Australia.

The Commonwealth Government provides taxation concessions as financial incentives to export. A special income tax allowance, equal and additional to the ordinary allowable deduction in respect of specified expenses, is designed to encourage firms to incur promotion expenditure in advance of export sales. Rebates of pay-roll tax are granted to employers whose export sales have increased above their average annual level in a base period. Rebates are also available to employers who have supplied components embodied in the product exported.

Australian trade missions

During the last decade trade missions have become an integral part of the Commonwealth Department of Trade and Industry's campaign to develop and expand Australia's export trade. They have proved successful in creating an awareness, especially in new markets, of Australia as a producer of quality primary and secondary commodities, in establishing Australia as a source of supply, in establishing a basis for long-term business and in producing valuable export business from "on the spot" trading. Trade missions have been directly responsible for substantial and permanent increases in export earnings.

Trade missions may be of the survey or selling type. The general survey mission is designed to carry out a survey of a particular area, obtain market information, and assess the market potential for Australian products. The specialised survey mission undertakes a market survey on behalf of a particular industry or for specific commodities. A survey mission usually comprises about five members; the Government selects suitable specialists and

meets the full cost of the project. The mission reports back and recommends further appropriate trade promotional activity.

The general selling mission is a planned "hard sell" overseas visit of a group of businessmen whose products have market prospects in the countries to which the mission will travel. Membership is usually about twenty although numbers have been as high as forty and as low as seven members. The specialised selling mission is similar to the general selling mission in relation to the responsibilities of members and the facilities provided by the Government, but differs in that it is concerned with specific industries, is normally smaller, and is sometimes backed up by small displays at selected centres to give additional impact.

As members of a selling mission, businessmen pay their own fares and accommodation and contribute towards the cost of mission entertainment. The Government meets the costs of a leader and manager, determines the itinerary, makes all necessary arrangements in Australia, and through Trade Commissioners in the countries being visited, organises government and business contracts, press receptions, and supporting advertising and publicity for the mission while it is away. A report on the mission's findings and recommendations is published and distributed.

Since 1954 Australia has sent overseas forty-five trade and survey missions and five trade ships. The areas visited include Africa, South-east Asia, New Zealand, India and Ceylon, North America and Canada, the Pacific Islands, the Middle East and Mediterranean, South America and the Caribbean, and Britain and Northern Europe.

Victoria's pattern of trade, 1964

Overseas trade : recorded value of imports and exports

The recorded value of goods imported is the actual money price paid plus any special deduction or the current domestic value of the goods, whichever is the higher, plus all charges ordinarily payable for placing the goods free on board (f.o.b.) at the port of export. When the invoiced value of the imported goods is in a currency other than Australian, the equivalent value in Australian currency is recorded. The recorded value of exports, if sold before export, is equivalent to the f.o.b. value of the goods. If shipped on consignment, the value recorded is the Australian f.o.b. equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods are consigned for sale. With regard to wool shipped on consignment, the f.o.b. equivalent of the current price ruling in Australia approximates sufficiently to the f.o.b. equivalent of the price ultimately received. For information about the law relating to exports, see page 572 of the *Victorian Year Book* 1968.

Overseas trade of Victoria

Statistics of Australia's overseas trade passing through Victorian ports are compiled from documents obtained under the Customs Act and are presented in the following series of tables.

The total values of the overseas trade of Victoria for each of the five years 1964-65 to 1968-69 are set out below. Exports do not include the value of stores shipped at Victorian ports on board overseas ships.

VICTORIA—OVERSEAS TRADE : RECORDED VALUES OF IMPORTS INTO
AND EXPORTS FROM VICTORIAN PORTS
(\$'000 f.o.b.)

Year	Imports	Exports			Excess of imports
		Australian produce	Re-exports	Total	
1964-65	1,026,834	708,395	14,652	723,047	303,787
1965-66	1,017,360	753,514	14,549	768,063	249,297
1966-67	1,072,514	785,462	15,725	801,187	271,327
1967-68	1,130,741	661,989	23,766	685,755	444,986
1968-69	1,182,747	688,402	19,177	707,579	475,168

VALUE OF AUSTRALIAN TRADE, AND PROPORTION
HANDLED AT VICTORIAN PORTS

Year	Australian trade			Proportion of Australian trade handled at Victorian ports		
	Imports	Exports	Total	Imports	Exports	Total
		\$'000 f.o.b.			per cent	
1964-65	2,904,703	2,651,449	5,556,152	35.4	27.3	31.5
1965-66	2,939,492	2,720,953	5,660,445	34.6	28.2	31.5
1966-67	3,045,341	3,023,925	6,069,266	35.2	26.5	30.9
1967-68	3,264,473	3,044,675	6,309,148	34.6	22.5	28.8
1968-69	3,468,505	3,374,263	6,842,768	34.1	21.0	27.6

Classification of overseas imports and exports

From July 1965 imports have been classified according to the new Australian Import Commodity Classification. This classification is based on the Standard International Trade Classification, Revised (S.I.T.C.), which is closely related to the Brussels Tariff Nomenclature used in the new Australian Customs Tariff. A new Australian Export Commodity Classification based on S.I.T.C. was introduced in July 1966.

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS
(\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1967-68	1968-69	1967-68	1968-69
00	Live animals	533	639	894	533
01	Meat and meat preparations	293	322	85,585	73,477
02	Dairy products and eggs	1,716	2,069	59,171	56,614
03	Fish and fish preparations	7,392	8,202	6,207	4,759
04	Cereals and cereal preparations	1,317	3,310	59,797	47,165
05	Fruit and vegetables	7,646	7,984	61,062	56,299
06	Sugar and sugar preparations and honey	808	877	403	351
07	Coffee, tea, cocoa, spices and manufactures thereof	18,247	19,842	126	331
08	Feeding-stuff for animals (except unmilled cereals)	1,127	1,018	2,395	3,447
09	Miscellaneous preparations chiefly for food	651	898	1,225	1,405
11	Beverages	1,828	2,226	1,509	1,304
12	Tobacco and tobacco manufactures	11,022	14,790	436	298
21	Hides, skins and fur skins, undressed	1,314	1,204	25,613	32,524
22	Oil-seeds, oil nuts and oil kernels	846	593	3	143
23	Crude rubber (including synthetic and reclaimed)	12,052	14,309	239	212

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS—*continued*
 (\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1967-68	1968-69	1967-68	1966-89
24	Wood, timber and cork	7,051	8,927	130	78
25	Pulp and waste paper	8,593	8,303	60	62
26	Textile fibres and their waste	19,043	20,635	204,577	223,739
27	Crude fertilisers and crude minerals (except coal, petroleum, and precious stones)	18,898	19,251	235	246
28	Metalliferous ores and metal scrap	381	369	10,740	13,767
29	Crude animal and vegetable materials, n.e.s.	4,603	4,773	6,087	4,618
32	Coal, coke and briquettes	36	61	244	288
33	Petroleum and petroleum products	77,969	76,939	12,129	12,085
34	Petroleum gases and other gaseous hydrocarbons	5	6	5	19
41	Animal oils and fats	102	116	3,596	4,286
42	Fixed vegetable oils and fats	3,945	3,763	31	17
43	Animal and vegetable oils and fats, processed, and waxes of animal or vegetable origin	680	713	295	254
51	Chemical elements and compounds	26,863	31,821	1,709	2,367
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	1,592	1,117	5	1
53	Dyeing, tanning and colouring materials	8,646	8,691	883	1,432
54	Medicinal and pharmaceutical products	9,812	10,041	3,021	3,219
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	3,080	3,625	984	1,048
56	Fertilisers, manufactured	3,158	4,082	33	71
57	Explosives and pyrotechnic products	2,537	1,182	1,968	1,784
58	Plastic materials, regenerated cellulose and artificial resins	42,313	43,383	2,214	2,456
59	Chemical materials and products, n.e.s.	13,136	15,873	9,283	12,405
61	Leather, leather manufactures, n.e.s., and dressed fur skins	3,142	3,567	2,019	2,112
62	Rubber manufactures, n.e.s.	10,030	10,403	907	2,011
63	Wood and cork manufactures (except furniture)	4,065	4,871	486	527
64	Paper, paperboard and manufactures thereof	32,281	34,173	2,027	1,994
65	Textile yarn, fabrics, made-up articles and related products	103,064	112,477	4,694	5,782
66	Non-metallic mineral manufactures, n.e.s.	18,206	21,064	1,282	3,906
67	Iron and steel	36,847	40,101	1,062	1,648
68	Non-ferrous metals	6,494	8,550	7,468	7,909
69	Manufactures of metal, n.e.s.	27,362	28,287	8,713	11,719
71	Machinery (except electric)	208,398	206,697	17,770	21,035
72	Electrical machinery, apparatus and appliances	62,730	66,603	5,562	6,503
73	Transport equipment	166,700	159,505	33,661	35,180
81	Sanitary, plumbing, heating and lighting fixtures and fittings	1,790	1,962	377	380
82	Furniture	1,399	1,671	330	264
83	Travel goods, handbags and similar articles	1,271	1,388	28	22
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	10,793	10,830	1,866	3,110

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS—*continued*
(\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1967-68	1968-69	1967-68	1968-69
85	Footwear, gaiters, and similar articles and parts therefor	3,334	4,234	123	105
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	33,485	36,502	5,131	6,016
89	Miscellaneous manufactured articles, n.e.s.	38,198	42,002	3,852	3,922
9A	Commodities and transactions of merchandise trade, not elsewhere classified	35,829	38,949	14,984	16,064
	Total merchandise	1,124,652	1,175,785	675,240	693,312
9B	Commodities and transactions not included in merchandise trade	6,089	6,962	10,515	14,268
	Total	1,130,741	1,182,747	685,755	707,579

Trade with countries

The value of trade with overseas countries from 1966-67 to 1968-69 is shown in the following table :

VICTORIA—OVERSEAS IMPORTS AND EXPORTS : COUNTRIES OF ORIGIN AND CONSIGNMENT
(\$'000 f.o.b.)

Country	Imports			Exports		
	1966-67	1967-68	1968-69	1966-67	1967-68	1968-69
Belgium-Luxembourg	7,279	8,937	8,687	10,000	8,247	8,325
Canada	39,141	44,863	46,754	22,143	21,270	24,167
Ceylon	5,951	5,562	5,830	6,092	5,970	4,962
China (mainland)	8,927	7,837	9,550	17,621	13,508	19,609
China, Republic of (Taiwan)	1,722	3,233	4,723	6,020	3,271	5,091
Czechoslovakia	2,528	2,312	2,951	2,135	1,025	1,339
Finland	5,484	5,102	5,293	358	319	238
France	48,968	35,507	28,793	40,988	30,442	37,245
Germany (Federal Republic)	68,661	82,708	89,431	22,977	25,883	26,126
Greece	1,149	1,187	1,285	4,220	2,426	1,475
Hong Kong	10,712	13,706	14,358	11,792	9,876	17,594
India	11,005	11,012	10,054	15,234	13,038	5,584
Indonesia	4,315	7,079	6,697	2,140	5,548	5,259
Iran	14,242	7,494	1,731	6,517	3,224	3,614
Iraq	11,924	8,006	10,526	837	786	1,567
Italy	19,133	28,685	30,519	38,404	24,181	26,285
Japan	113,249	127,027	147,918	137,841	106,944	107,526
Kuwait	16,578	18,627	18,309	1,580	1,274	1,305
Malaysia	8,623	8,645	10,234	24,228	15,367	13,576
Mexico	1,870	1,510	722	6,720	5,937	7,694
Netherlands	20,555	15,300	17,460	8,499	7,673	9,128
New Zealand	15,354	19,960	23,108	47,785	45,068	45,516
Pakistan	6,106	5,277	5,291	8,588	2,511	1,045
Papua and New Guinea	3,553	3,934	5,475	11,216	11,813	11,771
Philippines	510	808	735	10,260	14,294	13,178
Poland	795	965	1,049	8,675	4,223	3,896
Qatar	3,007	2,054	12,556	143	154	102

VICTORIA—OVERSEAS IMPORTS AND EXPORTS : COUNTRIES OF
ORIGIN AND CONSIGNMENT—*continued*
(\$'000 f.o.b.)

Country	Imports			Exports		
	1966-67	1967-68	1968-69	1966-67	1967-68	1968-69
Saudi Arabia	9,518	11,246	10,594	5,012	5,507	5,010
Singapore	1,381	1,333	2,627	19,741	13,155	16,024
South Africa (Republic)	5,368	4,993	4,860	11,761	10,674	18,878
Sweden	20,588	18,642	18,504	2,756	2,304	2,076
Switzerland	14,382	15,243	14,443	962	880	781
Thailand	477	522	642	7,256	6,255	6,958
Trucial States	10,930	10,488	3,509	184	370	682
United Kingdom	266,986	262,230	275,526	117,320	106,908	100,565
U.S.A.	240,391	270,072	267,149	83,399	81,320	83,942
U.S.S.R.	525	547	735	3,677	5,710	8,916
Yugoslavia	247	279	239	9,385	6,200	5,981
Other and unknown	50,380	57,809	63,880	66,721	62,200	54,549
Total	1,072,514	1,130,741	1,182,747	801,187	685,755	707,579

Interstate trade

Statistics of trade between Victoria and other Australian States are incomplete and relate mainly to seaborne trade. Although a substantial quantity of freight is carried by road and rail transport between Victoria and neighbouring States, no details of this traffic are available. A small tonnage of freight is carried interstate by air (see page 750).

Interstate trade by sea

In terms of quantity, the principal cargoes carried interstate by ship to and from Victorian ports are coal and briquettes, petroleum and petroleum products, steel, sugar and sugar preparations, and timber. However, there is also a considerable trade in foodstuffs, motor vehicles, and other manufactured goods, particularly through the Port of Melbourne. Details of the principal commodities in interstate shipments handled by the ports of Melbourne and Geelong during 1969 are shown below. For many commodities comparison with details for previous years is not possible because of changes in classification. In addition, details of exports from the Port of Melbourne are not comparable with those for previous years because of changes in the method of calculating tonnages. Some cargoes are recorded in tons weight, while others are recorded in tons measurement. In the statistics the measurement of 40 cu ft is taken as the equivalent of 1 ton.

Port of Melbourne

Interstate exports during 1969 totalled 1,602,434 tons. The principal commodities were petroleum and petroleum products, 359,791 tons; transport equipment (including touring passenger cars), 300,494 tons; fruit and vegetables, 36,787 tons; paper, paperboard and manufactures thereof, 21,483 tons; chemical elements and compounds, 16,562 tons; and iron and steel, 43,660 tons.

Interstate imports during the same period totalled 2,396,360 tons, the principal commodities being petroleum and petroleum products, 421,911 tons; iron and steel, 203,391 tons; sugar and sugar preparations, 236,153

tons ; coal, coke and briquettes, 139,980 tons ; wood, timber and cork, 184,372 tons ; paper, paperboard and manufactures thereof, 205,201 tons ; crude fertilisers and crude minerals, 147,892 tons ; and transport equipment (including touring passenger cars), 135,078 tons.

Port of Geelong

Total interstate exports during 1969 amounted to 497,017 tons of which petroleum and petroleum products accounted for 443,247 tons. Total interstate imports amounted to 920,356 tons, and consisted mainly of petroleum and petroleum products, 431,453 tons ; coal, 202,706 tons ; pig iron and steel, 131,792 tons ; and alumina, 117,065 tons.

Trade of Victoria with Western Australia and Tasmania

Details of trade between Victoria and other States are available only for trade with Western Australia and trade by sea with Tasmania.

Western Australia

Exports from Victoria to Western Australia are valued in terms of landed cost (i.e., c.i.f. basis) at port of entry. Imports from Western Australia are valued at the f.o.b. equivalent at the port of shipment of the price at which the goods were sold. The small proportion of goods received by rail is valued at the f.o.r. equivalent.

For the year 1968-69, the value of exports from Victoria to Western Australia totalled \$235.8m. Transport equipment (\$41.3m), machinery other than electric machinery (\$27.2m), clothing and clothing accessories (\$24.2m), tobacco and tobacco manufactures (\$11.4m), and rubber manufactures (\$8.5m) were the main types of commodities included in this total.

Imports from Western Australia during the same period were valued at \$48.8m. Petroleum and petroleum products (\$18.0m), inorganic chemical elements and compounds (\$6.3m), and iron and steel (\$3.9m) were the main types of commodities imported.

Detailed statistics of this trade appear in the publications *External Trade*, 1968-69 and *Interstate Trade of Western Australia*, 1968-69 issued by the Deputy Commonwealth Statistician, Perth.

Tasmania

Details of trade between Victoria and Tasmania are available only for trade by sea. Both exports and imports are valued on an f.o.b. basis.

In 1968-69 exports by sea from Victoria to Tasmania were valued at \$165.5m. Transport equipment (\$21.7m), petroleum products (\$13.8m), and tobacco and tobacco manufactures (\$13.0m) were the main types of commodities. The value of tourists' motor vehicles included in this total was approximately \$19.1m.

Imports from Tasmania during this period amounted to \$137.8m. Timber (\$12.7m) and preserved vegetables (\$13.1m) were the main commodities imported. The value of tourists' motor vehicles included in the total was approximately \$18.4m.

Additional details of trade by sea between Victoria and Tasmania are available from the Deputy Commonwealth Statistician, Hobart.

Customs and excise revenue

The total gross customs duties collected by the Commonwealth in Victoria in each of the three years 1966-67 to 1968-69 was \$108,565,998, \$107,976,098, and \$121,206,549, respectively. Collections include duty received on account of goods transferred to other States for consumption and exclude duty in respect of goods imported into other States but consumed in Victoria.

The principal commodities produced in Victoria on which the Commonwealth imposes excise duty are set out in the table below, together with the gross amount of duty collected on account of each item for each of the three years 1966-67 to 1968-69. As with customs duties, collections include duty levied on goods exported to other States for consumption and exclude duty in respect of goods produced in other States, but consumed in Victoria.

VICTORIA—GROSS EXCISE DUTY COLLECTED ON PRINCIPAL COMMODITIES

Article and unit of quantity	Quantity on which duty was collected			Gross excise duty collected		
	1966-67	1967-68	1968-69	1966-67	1967-68	1968-69
	'000	'000	'000	\$'000	\$'000	\$'000
Spirits (potable) proof gal	547	624	600	5,416	6,164	5,903
Tobacco lb	1,843	1,770	1,674	4,128	3,967	3,750
Cigars and cigarettes lb	18,563	19,522	20,275	77,962	81,950	85,329
Petrol gal	527,357	556,528	616,031	64,865	68,453	75,772
All other articles (a)	..	..	..	102,062	109,065	113,464
Total	..	..	..	254,433	269,599	284,218

(a) Includes excise duty collected on beer, which is not available for separate publication.

The overseas trade and the gross revenue collected at Victorian ports during the year 1968-69 are shown in the following table :

VICTORIA—OVERSEAS TRADE AND GROSS REVENUE COLLECTED AT VICTORIAN PORTS, 1968-69 (\$'000)

Particulars	Melbourne (a)	Geelong	Portland	Western Port	Total
Overseas trade—					
Imports	1,106,471	56,090	4,644	15,542	1,182,747
Exports	633,724	52,722	19,878	1,255	707,579
Total	1,740,195	108,812	24,522	16,797	1,890,326
Gross revenue—					
Customs	132,521	1,277	..	..	133,798
Excise	274,080	5,599	4,539	..	284,218
Total	406,601	6,876	4,539	..	418,016

(a) Includes Port of Melbourne, Essendon Airport, and parcels post.

AUSTRALIA—VALUE OF OVERSEAS TRADE, GROSS CUSTOMS, AND EXCISE
DUTY COLLECTED BY STATES, 1968-69
(\$'000)

State	Imports	Exports	Excess of exports	Gross duty collected	
				Customs	Excise
New South Wales	1,500,559	1,010,488	-490,071	176,586	340,367
Victoria	1,182,747	707,579	-475,168	133,798	284,218
Queensland	288,599	677,459	388,860	25,059	114,316
South Australia	231,956	300,934	68,978	21,439	73,939
Western Australia	203,534	546,366	342,832	21,202	69,289
Tasmania	37,509	102,061	64,552	3,164	23,247
Northern Territory	21,800	28,934	7,134	1,962	3,624
Australian Capital Territory	1,801	442	-1,359	111	20
Australia	3,468,505	3,374,263	-94,242	383,321	909,020

NOTE. Minus (-) sign denotes excess of imports.

TRANSPORT

Shipping*Coastal trade*

In the post-war years, particularly since 1959, significant changes have taken place in the carriage of goods by sea around the Australian coast. The Port of Melbourne, the principal sea terminal for Victoria which is the centre of the coastal trade routes around the mainland coast and to Tasmania, has been experimenting with new methods of cargo handling and "packaging" and the introduction of new specialised ships. In the years following the Second World War, Australian shipowners revised their trading practices in the face of vigorous competition from the land-based transport operators. As a result the entire coastal trade by sea was transformed, and ships modified to make them more useful as a means of transportation around the coast.

One of the results of this was the expansion of the bulk cargo trade in which more goods (such as sugar and a variety of oils and oil products) began to be carried in bulk. Later, single bags, boxes, and packages began to be packed into unit loads and containers which facilitated handling on ship and shore by means of new and improved mechanical cargo handling equipment. These new methods led to the specialised ship, exclusively designed and equipped to meet the requirements of the particular trade. These were the roll-on roll-off stern loading ships for cargo packed on road vehicles which travelled in the vessel, and the container ship designed for containerised cargo and other unit loads. The first roll-on roll-off ship in Australia was introduced in 1959 between Melbourne and Devonport in northern Tasmania.

Australia's first specially designed container ship came into service between Melbourne and Launceston in 1961, and was followed in 1964 by a larger container ship for the Melbourne-Fremantle trade. By then, between 7,000 and 8,000 containers were in transit between all States on these ships

as well as on conventional and specially modified ships. These new methods are now well established and are being extended to the ports of Sydney and Brisbane.

Efforts are continuing to improve the handling and carrying of general cargo in addition to bulk cargoes which are most suitably carried by sea. More specialised and larger ships in the bulk trades are also proving valuable.

New packaging and cargo handling methods, as well as new ships, are bringing changes to port facilities, where specially designed wharves, equipment, and port modifications are matching the new concepts in ship and cargo handling around the Australian coast. These new concepts are also being extended to Australia's overseas trade.

Searoad service between Victoria and Tasmania

The following table gives details of the searoad service operated by the Australian Coastal Shipping Commission between Victoria and Tasmania :

VICTORIA—TASMANIA : SEAROAD SERVICE (a), 1968-69

Name of vessel	Passengers	Accompanied vehicles	Trade vehicles (b)	Mail vans
<i>Princess of Tasmania</i>	86,378	23,402	3,383	302
<i>Australian Trader</i>	78	..	..	4
<i>Bass Trader</i>	439	696	3,518	296
<i>South Esk</i>	..	..	96	..
Other A.C.S.C. vessels	..	..	1,033	..
Total	86,895	24,098	8,030	602

(a) Excludes commercial cargo which consists of unit loads, i.e., containers, trailers, timber packs, etc., as well as commercial vehicles.

(b) Motor vehicles available for sale.

Vessels entered and cleared

The number of vessels entering Victorian ports, the number cleared from those ports, and their total tonnage in each of the five years 1964-65 to 1968-69 were as follows :

VICTORIA—OVERSEAS AND INTERSTATE SHIPPING

Particulars		1964-65	1965-66	1966-67	1967-68	1968-69
Entrances	number	3,690	3,753	3,706	3,550	3,618
	'000 net tons	16,534	16,380	17,439	17,161	17,944
Clearances	number	3,679	3,754	3,710	3,548	3,591
	'000 net tons	16,448	16,384	17,427	17,142	17,769

Nationality of shipping

The countries of registration of vessels which entered or were cleared at Victorian ports during the years 1967-68 and 1968-69 were as follows :

VICTORIA—NATIONALITY OF SHIPPING
(’000 net tons)

Vessels registered at ports in—	Vessels entered		Vessels cleared	
	1967-68	1968-69	1967-68	1968-69
Australia	3,383	3,303	3,380	3,272
Belgium	..	7	..	7
Denmark	308	396	308	388
France	220	239	220	239
Germany, Federal Republic of	418	484	411	482
Greece	550	540	546	540
Hong Kong	190	162	187	160
India	97	178	97	178
Israel	14	49	14	46
Italy	787	622	787	624
Japan	806	985	806	979
Liberia	1,580	1,770	1,570	1,752
Netherlands	841	784	834	772
New Zealand	153	164	157	161
Norway	1,366	1,461	1,372	1,414
Panama	173	170	173	170
Singapore	48	49	48	49
Sweden	663	652	665	633
United Kingdom	5,034	5,261	5,044	5,233
United States of America	209	183	204	188
U.S.S.R.	26	77	26	77
Yugoslavia	7	18	6	18
Other	288	390	287	387
Total	17,161	17,944	17,142	17,769

Shipping entered at Victorian ports

Particulars of shipping which entered each principal port of Victoria are given in the following table for the years 1967-68 and 1968-69 :

VICTORIA—VESSELS ENTERED AT EACH PORT

Class of vessel	Melbourne		Geelong		Portland		Western Port	
	1967-68	1968-69	1967-68	1968-69	1967-68	1968-69	1967-68	1968-69
NUMBER								
Overseas—								
Direct	245	291	158	93	6	20	33	40
Other	1,495	1,475	189	225	80	69	8	8
Interstate	1,116	1,158	152	146	26	18	41	71
Total	2,856	2,924	499	464	112	107	82	119
’000 NET TONS								
Overseas—								
Direct	992	1,366	1,252	1,629	36	151	456	615
Other	9,088	9,026	1,565	1,481	349	326	65	73
Interstate	2,214	2,179	691	668	154	113	292	293
Total	12,294	12,571	3,508	3,778	539	590	813	981

Cargoes discharged and shipped

The following tables show the tonnage of overseas and interstate cargoes discharged and shipped in Victorian ports during 1967-68 and 1968-69, as well as the tonnage of overseas cargoes discharged and shipped during the years 1966-67 to 1968-69 according to the countries of origin and consignment, and the nationalities of the vessels in which the cargoes were carried :

VICTORIA—CARGOES DISCHARGED AND SHIPPED AT EACH PORT
(‘000 tons)

Particulars	Melbourne		Geelong		Portland		Western Port	
	1967-68	1968-69	1967-68	1968-69	1967-68	1968-69	1967-68	1968-69
DISCHARGED								
Interstate—								
Weight	1,774	1,740	763	867	208	166	102	94
Measure	747	762	..	..	..	..	..	33
Overseas—								
Weight	3,489	3,662	3,788	3,597	24	139	1,173	1,326
Measure	1,678	1,954	57	16	..	..	..	..
SHIPPED								
Interstate—								
Weight	536	505	691	634	..	1	576	523
Measure	827	867	..	5	..	..	..	1
Overseas—								
Weight	1,093	1,065	822	843	39	92	83	56
Measure	662	635	10	20	1	7	..	..

NOTE. 1 ton measurement = 40 cu ft.

VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED ACCORDING
TO GEOGRAPHIC TRADE AREAS
(‘000 tons)

Geographic trade area of origin or consignment	1966-67		1967-68		1968-69	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
North America and Hawaiian Islands—						
Weight	770,455	139,713	727,317	151,793	736,092	140,947
Measure	412,563	41,911	336,956	63,374	383,146	55,771
South America—						
Weight	472	15,385	10,586	11,046	11,217	9,076
Measure	384	2,228	337	3,576	151	2,342
Europe (incl. U.S.S.R.)—						
Weight	242,322	474,981	211,929	251,464	270,393	284,544
Measure	631,503	241,069	705,819	283,449	801,840	259,046
Africa—						
Weight	58,025	93,834	51,736	32,343	72,507	38,794
Measure	29,362	24,385	28,666	22,686	21,726	42,510
Asia—						
Weight	6,925,120	1,918,287	6,712,408	1,251,677	6,676,465	1,299,814
Measure	393,346	150,541	530,064	151,254	631,275	160,102
Papua and New Guinea, New Zealand, and Pacific Islands—						
Weight	603,345	232,722	452,235	337,910	698,803	277,952
Measure	88,790	138,629	133,568	147,175	131,352	142,799
Indian Ocean Islands and Antarctic Area—						
Weight	300,888	4,952	308,219	1,079	258,138	5,556
Measure	126	..	..	1,236	..	65
Total						
Weight	8,900,627	2,879,874	8,474,430	2,037,312	8,723,615	2,056,683
Measure	1,556,074	598,763	1,735,410	672,750	1,969,490	662,635

NOTE. 1 ton measurement = 40 cu ft.

VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED ACCORDING
TO NATIONALITIES OF VESSELS
(*000 tons)

Vessels registered at ports in—	1966-67		1967-68		1968-69	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
Australia	8	1	9	..	14	..
Belgium	54	..	..	..	..	13
Denmark	286	44	339	72	361	34
France	454	18	224	12	290	14
Germany, Federal Republic of	310	78	379	72	335	64
Greece	247	298	419	161	325	101
Hong Kong	127	84	67	52	121	69
India	78	65	43	19	52	27
Italy	73	5	71	7	18	6
Japan	438	180	500	173	826	146
Liberia	186	234	2,017	200	1,983	169
Mexico	16	2	..	..	..	..
Netherlands	611	429	345	166	199	171
New Zealand	85	123	121	92	121	92
Norway	1,802	338	1,869	260	1,721	427
Pakistan	25	12	4	22	..	..
Panama	202	40	78	46	89	36
Sweden	333	252	386	235	276	171
United Kingdom	3,562	1,161	2,998	1,012	3,526	995
United States of America	46	39	63	38	58	38
Other	1,514	76	278	71	378	146
Total	10,457	3,479	10,210	2,710	10,693	2,719

NOTE. In the above table tons measurement has been added to tons weight.

Port Phillip Sea Pilots

Thirty-six former shipmasters are licensed by the Marine Board of Victoria to perform all pilotage duty within Port Phillip Bay. One is in charge of the Williamstown office as Secretary-Treasurer; the others, in turn, take a week in command of the pilot steamer cruising off Point Lonsdale to put pilots aboard incoming ships or take them off departing vessels.

Thirty-four pilots are rostered for the various pilotage duties: from the Heads to Port Melbourne, Williamstown, Geelong, and Western Port; between Geelong and Melbourne; in the Yarra River or Victoria Dock; or elsewhere as required. Pilots for inward ships are organised by the pilot-in-charge of the steamer; those for departing ships and ships berthing by the Williamstown office staff.

Tide is the pilot's greatest hazard at the Heads. Flowing over an uneven, rocky bottom at a rate of up to 10 knots, it creates a steep and turbulent sea at the narrowest part of the entrance. These strong tides have scoured out a deep gutter round Point Nepean, and the main stream of the tide following this gutter has the effect of setting ships sideways, towards the dangerous reefs bordering Point Nepean.

Inside the Heads is the twelve mile long South Channel for deep-loaded ships and the shorter and narrower eight mile long West Channel for ships under 17 ft draught. From the end of these channels, vessels may proceed either to the Port of Geelong or to the Port of Melbourne.

Vacancies in the Pilot Service are filled by shipmasters with a pilotage exemption certificate who have traded regularly to the Port. Each pilot must purchase a share in the pilot vessels and other necessary plant. Pilotage dues are set and collected by the Marine Board. Ten per cent of these are taken out for expenses and contributions to the Pilots Sick and Superannuation Fund, the balance of 90 per cent being paid to the pilots for disbursements, crew and staff wages, and for pilots' remuneration.

The following table shows the number of ships (sailing inwards and outwards) piloted through Port Phillip Heads during the years 1960 to 1969 :

VICTORIA—NUMBER OF SHIPS PILOTED THROUGH
PORT PHILLIP HEADS

Year	Number of ships	Year	Number of ships	Year	Number of ships
1960	3,768	1964	4,505	1967	4,606
1961	4,228	1965	4,738	1968	4,614
1962	4,177	1966	4,759	1969	4,388
1963	4,333				

Further reference, 1963

Melbourne Harbor Trust

Administration

The Melbourne Harbor Trust Commissioners are a financially independent, corporate body operating under the provisions of the *Melbourne Harbor Trust Act 1876*, and subsequent amendments and variations. The land and waters of the 10½ square mile port area are vested in the six commissioners who are appointed by the Governor in Council. They comprise a full-time chairman who also is virtually the port's managing director, and five part-time commissioners who in accordance with the Act must be associated with various port activities, i.e., shipping, primary production, imports, exports, and labour.

The Melbourne Harbor Trust Commissioners are both the port authority and the conservancy authority of the Port of Melbourne. The Trust maintains, improves, and develops the port, and is empowered under its Act to make regulations for the management and financing of the port subject to the approval of the Governor in Council.

Finance

The Port of Melbourne is self-supporting and does not receive any financial grants from the State Government. The Trust's revenue is derived from a number of charges paid by the users of the port. The charges are principally wharfage rates levied on each ton of cargo landed in, or shipped out of the port, and tonnage rates levied on the gross registered tonnage of ships and the time they spend in port. Other charges cover rent of sheds, hire of port owned cargo handling equipment, general port services, and rental of land reserved for essential long term port development. Expenditure is on port maintenance, reconstruction, modernisation, and development, with any surplus put back into port development. In 1969 the Trust had approximately \$90m invested in port assets. Capital works are financed out of revenue and out of loans, which are mainly privately arranged and are raised and financed by the Trust itself and guaranteed by the Trust's income from wharfage and

tonnage. The Trust is required to pay into the Consolidated Revenue of the State Government approximately one fifth of its revenue from wharfage and tonnage.

The following table shows particulars of the financial operations of the Melbourne Harbor Trust for the years 1965 to 1969 :

VICTORIA—MELBOURNE HARBOR TRUST : REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1965	1966	1967	1968	1969
REVENUE					
Wharfage and tonnage rates	7,058	6,393	6,692	8,357	8,901
Rent of sheds	606	572	586	638	576
Special berth charges	431	317	381	489	461
Rent of lands	725	949	965	1,154	1,665
Crane fees	1,800	1,672	1,793	2,043	1,937
Other	814	792	796	892	781
Total revenue	11,434	10,695	11,213	13,573	14,321
EXPENDITURE AND APPROPRIATIONS					
Administration and general expenses	784	874	908	1,098	1,590
Port operating expenses	2,413	2,422	2,642	2,821	3,074
Maintenance—					
Dredging	508	265	203	266	315
Harbour	123	110	116	101	117
Wharves	648	638	581	593	691
Approaches	117	125	152	119	133
Railways	51	79	80	80	53
Cargo handling equipment	325	342	358	371	362
Other properties	62	93	54	55	62
Interest	1,465	1,551	1,706	1,780	1,927
Depreciation and renewals	1,486	1,584	1,427	2,295	2,536
Insurance	96	99	103	108	113
Sinking fund	928	160	435	600	200
General reserve	800	900	1,037	1,600	1,400
Payments to Consolidated Revenue	1,420	1,287	1,346	1,468	1,506
Other	1	2	2	(a)	(a)
Total expenditure and appropriations	11,226	10,530	11,150	13,355	14,079
CAPITAL OUTLAY					
Land and property	224	106	201	291	56
Reclamation	32	312	408	359	80
Deepening waterways	786	1,239	1,235	2,517	3,238
Wharves and sheds construction	1,709	1,760	2,095	3,214	2,548
Cargo handling equipment	359	1,252	91	537	395
Approaches construction	464	303	355	412	587
Floating plant	11	95	51	167	731
Other works, etc.	768	675	769	588	674
Total capital outlay	4,352	5,742	5,205	8,085	8,309
Loan indebtedness at 31 December	30,473	32,247	34,484	36,029	37,889

(a) Under \$500.

Advent of new cargo pattern

Container and unit-load methods of cargo handling in the Port of Melbourne have been introduced and extended during the 1960s following the provision of a specially designed berth and ship in 1959. By 1969 the cumulative effect of gradually developing these new facilities

had a significant impact on the port as a whole. Towards the end of 1969 the emphasis of cargo handling activities in the port began to shift from the long established conventional cargo handling areas to five areas where new dock complexes had been built, a new specially designed berth added to existing docks, and an old conventional berth converted for use with container and unit-load ships cargo handling methods.

With this shift it also became evident that the traditional hub of the port was shifting, and that it would re-establish itself over the next few years in one of the new areas which would emerge as the cargo handling centre of a virtually "new" Port of Melbourne.

In 1969 the port handled a volume of 13.2 mill. tons of import, export, and transshipment cargo, an increase of 10.5 per cent over 1968. However, this volume was handled by coastal and overseas shipping which paid only 2,948 calls at the port, a decline of about 4.3 per cent. This was the first time since the end of the Second World War that there has been such a considerable drop in the number of calls paid by coastal and overseas ships, even though at the same time the port handled a substantial increase in cargo.

The changes in the character of the port began to be really noticeable with the arrival, in March 1969, of the first overseas container ship on the United Kingdom—Australia Service.

Cargoes flowing through all ports of the world are classed as either "dry or wet" bulk—such as oil carried in tankers or sugar carried loose in the hold of a bulk carrier—or "general" which includes the variety of goods usually crated, boxed, or carried in some other individual packaging. Container ships carry this "general" cargo in containers of various international standard sizes.

Unit-load multi-purpose vessels, which first began to operate out of Melbourne in the overseas service in 1966 and in the coastal trade some eight years earlier, are vessels specially designed to carry containers and unit-loads which are a collection of general cargo assembled into one load, usually on a tray or pallet. These ships can also carry conventional cargo, namely, individual items of general cargo handled and loaded separately, and handled individually inside the ship and on shore.

In 1969 the emerging significant change in the character of the port was the result of the completion of a number of unit-load and container cargo handling berths and terminals, and associated shore based cargo consolidation depots; the introduction of container ships in the overseas trade; and additional unit-load ships and container ships in the coastal trade. Changes in some of the dock facilities are outlined below.

Swanson Dock. This is a new dock complex initially designed for container ships in the new overseas services and the existing coastal services. The first berth in the new dock No. 1 West, which is 1,050 ft long and equipped with a 45 ton twin lift container crane and a multi-stacking container terminal on an adjacent 25 acre site, was officially opened early in 1969. An extension to the berth, to be known as No. 2 West, was started soon afterwards. A new container and unit-load berth of a similar style, but 800 ft long, to be known as No. 1 East was also being built for the increasing number of container and unit load ships to be introduced in trade between Melbourne and overseas ports.

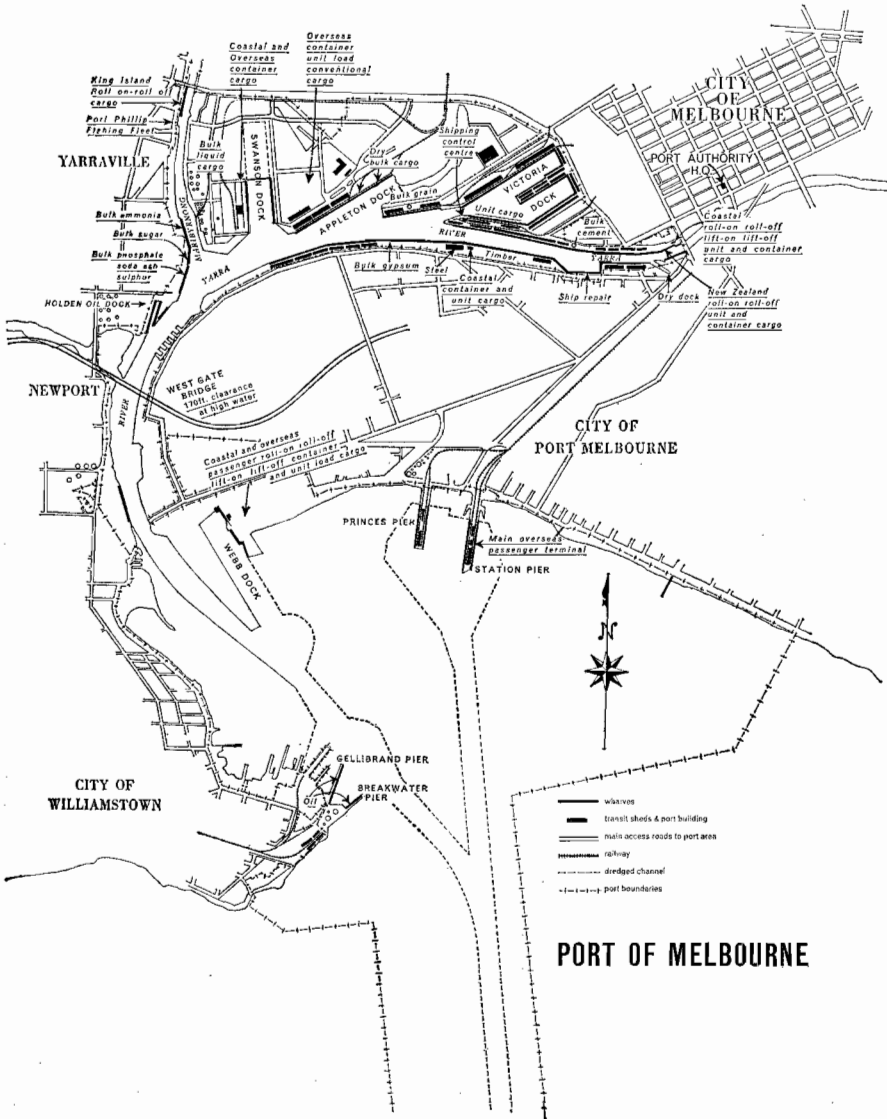


FIGURE 17.

North Wharf. In the upper extremity of the port, a new berth was completed for a new roll-on roll-off container and unit-load ship which entered the trans-Tasman service later in 1969. The berth was similar to and alongside an existing berth catering for ships in the coastal service, and the two berths with a 7 acre area behind them now formed a new cargo terminal complex.

Victoria Dock. In this complex of 24 berths—formerly the hub of the port's overseas conventional cargo trade—three berths, Nos. 2, 3, and 4, had already been reconstructed and modernised with rail facilities. In 1969 they came into increased use for unit-load and container ships and

cargo handling, and in the area alongside, new terminal operations for cargo handling and general consolidation were begun.

Appleton Dock. In this dock, formerly the most modern 3-berth conventional cargo handling complex in the Port of Melbourne, two berths were established as unit-load container handling berths serving an adjacent cargo handling and consolidating terminal in the overseas trade. The terminal and berths became fully operational during 1969 and there are plans for almost immediate expansion in the terminal area.

Webb Dock. In this region of the port a unit-load container handling berth and terminal were first established in 1959. It was here that this type of cargo handling from specially designed ships was introduced to shipping services on the Australian coast. In 1969 a third berth was completed, and the terminal area was increased from 6 acres to 21 acres. This catered for extended coastal services by additional new ships of special design and for the introduction of a new regular overseas service which for the first time in more than 40 years included an Australian flag ship.

By the end of 1969 three or four new and additional coastal ships had been introduced and a considerably increased volume of cargo now passed through the larger terminal.

Further references, 1961 to 1969 ; Changing trends in port development, 1968 ; Port facilities, 1969 ; Port emergency service, 1970

Geelong Harbor Trust

The Port of Geelong is under the control of the Geelong Harbor Trust which was constituted under an Act of 1905. The Trust consists of three Commissioners appointed by the Governor in Council.

Entrance to the port is by 15 miles of channel dredged to a depth of 36 ft and a width of 400 ft.

There are nineteen effective berths in the port and two berths at the Commonwealth Explosives Pier, Point Wilson—owned and operated by the Commonwealth. Maximum water depths are 36 ft at eight berths, 32 ft at ten berths (all within the inner harbour), and three outer harbour berths of 30 ft. Special berths are provided for the handling of coal, grain, phosphatic rock and sulphur, oil, and alumina. The bulk grain terminal has a 28 mill. bushel storage capacity, and is capable of loading ships at the rate of 1,600 tons an hour.

Refinery Pier can accommodate simultaneously four oil tankers with maximum drafts of 34 ft. The Harbor Trust cool stores have a storage capacity of 900,000 cu ft. Adequate open coal storage is available. The port has good clearance facilities, with direct rail loading at seven berths and road clearance at all berths.

The new dry bulk berth (renamed Lascelles Wharf) came into operation early in 1970 and this together with the No. 2 berth (formerly Kings Wharf) provides 1,140 ft of modern wharf facilities for discharge of phosphatic rock and other fertiliser components.

A stern loading ramp with associated storage facilities was constructed at Corio Quay South No. 1 and came into operation in January 1971.

The Harbor Trust has floating plant which includes six tugs, six barges, and one diesel-powered floating crane.

VICTORIA—GEELONG HARBOR TRUST: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1965	1966	1967	1968	1969
REVENUE					
Wharfage, tonnage, and special berth rates	2,238	2,373	2,464	2,428	2,536
Shipping services	722	838	851	801	756
Rents, fees, and licences	43	45	47	51	49
Freezing works and abattoirs	63	64	64	80	100
Other	159	120	53	5	10
Total revenue	3,225	3,440	3,479	3,365	3,451
EXPENDITURE AND APPROPRIATIONS					
Management expenses	344	366	382	432	466
Shipping services	622	647	614	670	687
Maintenance—					
Wharves and approaches	77	102	89	91	79
Harbour	85	71	81	99	109
Floating plant	10	13	16	18	22
Other	18	17	26	25	20
Interest on loans	390	401	400	413	422
Sinking fund	77	76	77	79	81
Depreciation provision	432	515	603	693	737
Port development fund		1,007	500	250	700
Other	72	62	66	68	75
Total expenditure and appropriations	2,127	3,277	2,854	2,838	3,398
CAPITAL OUTLAY (NET)					
Floating plant	100		651	131	19
Land and property	294	70	138	77	210
Deepening waterways	500	69	1,942	313	8
Wharves and approaches	2,332	431	553	709	718
Other	46	11	36	46	34
Total capital outlay	3,272	581	3,320	1,276	989
LOAN INDEBTEDNESS AT 31 DECEMBER					
State Government	193	124	118	118	87
Public	7,490	7,404	7,618	7,815	8,007
Total loan indebtedness	7,683	7,528	7,736	7,933	8,094

Portland Harbor Trust

Situated on the south-west coast of Victoria, the Port of Portland has been administered by a board of three commissioners since 1951 and serves an area of almost 40,000 square miles of western Victoria and the south-east of South Australia. The port is within a few miles of main shipping routes with deep water approaches right to the entrance of the harbour basin.

Plans to double the storage capacity of the Harbor Trust's seaboard grain terminal were finalised during 1968-69 when contracts were accepted for foundation piling and erection of new storage bins with a capacity of one million bushels. This duplication was scheduled for completion in time for the 1969-70 harvest season. The Australian Barley Board also concluded an agreement with the Trust for the continuous reservation of 700,000 bushels of storage for the next harvest season.

The commissioners now employ a new 1,600 hp tug to assist with the handling of large ships entering the port. Vessels of 20,000 tons deadweight frequently enter the port and on occasions the Trust has berthed vessels up to 40,000 tons deadweight.

Although affected to some degree by the effects of the preceding year's drought, the volume of cargo handled in 1968-69 constituted a record 473,550 tons; an increase of 43.8 per cent over the previous year's figure, and 6 per cent higher than the previous record established during 1966-67. One feature of export trade was the recovery in the shipment of bulk oats, which totalled 71,903 tons. More than 50 per cent of this tonnage was shipped for the first time to Japan. Excluding oil exploration traffic, 136 vessels were berthed in the port during the year. Gross register of vessels berthed amounted to 1,154,474 tons. This included 22 vessels berthed for bunkers and other purposes, but excludes those making use of the port anchorage.

VICTORIA—PORTLAND HARBOR TRUST: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
REVENUE					
Wharfage rates	117	137	156	159	224
Tonnage rates	24	21	26	23	26
Shipping services	84	63	108	101	139
State Government grant	711	576	615	760	616
Grain terminal	5	82	207	17	144
Other	53	46	57	86	83
Total revenue	994	925	1,169	1,146	1,232
EXPENDITURE AND APPROPRIATIONS					
Administration	59	68	76	92	103
Maintenance	67	78	66	70	96
Shipping services	92	61	88	77	98
Depreciation	12	26	27	27	27
Interest on loans	622	677	739	807	846
Sinking fund	47	50	52	53	53
Loan redemption	..	33	36	43	49
Grain terminal (excl. depreciation)	4	35	73	35	61
Other	8	4	2	2	6
Total expenditure and appropriations	911	1,032	1,159	1,206	1,339
CAPITAL OUTLAY					
Port rail system	..	..	49	66	89
Reclamation	30	315	114	59	51
Grain terminal	1,036	111	131	79	226
Deepening waterways	..	51	51	26	52
Wharves and sheds	173	386	395	388	41
Breakwater construction	18	..	42	..	37
Floating plant	..	..	..	..	423
Other	131	185	196	278	180
Total	1,388	1,048	978	896	1,099
Loan indebtedness at 30 June—					
State Government	4,083	4,083	4,083	3,673	3,673
Public	12,310	13,027	13,939	14,826	15,610
Total loan indebtedness	16,393	17,110	18,022	18,499	19,283

Lighthouses, 1964

Western Port

Western Port is an extensive inlet eastward of and adjacent to Port Phillip, and is separated from it by the Mornington Peninsula which is 9 miles wide. The Port is sheltered from Bass Strait by Phillip Island at its southerly end and the waters between the western side of this island and the mainland form the entrance to the Port. It is approximately 26 miles from the entrance to the northern extremity of the inlet.

Although the entrance contains some large sandbanks, a deep water channel up to 102 ft deep runs close to the island. This navigable channel extending from the Western Entrance to Crib Point is 13 miles long with low-water depths of 47 ft and 49 ft, respectively, in the Northern and Western Arms. Tidal rises are of the order of 9 ft springs and 7 ft neaps.

Pilotage for the port is undertaken by the Port Phillip Sea Pilots. Large tankers inward bound from the west generally take their pilot aboard at the Pilot Boarding Station off Port Phillip Heads; tankers from the east take their pilot aboard at Flinders, where a 36 ft pilot launch is provided.

Harbour services comprise two 1,500 hp firefighting tugs each with a bollard pull of some 23 tons as well as mooring launches. The channels are marked by 34 gas buoys and the whole of the harbor services are co-ordinated from the Harbor Master's office at Stony Point.

For many years Western Port remained unexploited except for its use by a commercial fishing fleet and amateur fishing and boating enthusiasts. In June 1963 the Westernport (Oil Refinery) Act was passed by the Victorian Government giving effect to an agreement between the State and B.P. Refinery (Westernport) Pty Ltd to establish a refinery and associated port facilities. The marine terminal established provides two berthing heads, one capable of taking tankers up to 100,000 tons deadweight and the other tankers up to 40,000 tons.

Large scale development of offshore oil and natural gas reserves in nearby Bass Strait led to the Westernport Development Act being passed in December 1967. This Act gives effect to an agreement between the State and Hematite Petroleum Pty Ltd and Esso Exploration and Production Inc. to construct a fractionation plant to process the gas liquids (LPG) and a single berth marine terminal, which is located at Long Island Point, designed to accommodate tankers up to 100,000 tons deadweight. The terminal was completed in 1969. Dredging to give 47 ft in channel and swinging circle and 52 ft alongside was completed in 1970.

The erection of a plant for Cresco Fertilizers Ltd added to the recent development of the area and continued growth seems assured following the joint announcements in 1969 by B.H.P. and Guest, Keen and Nettlefolds. Their decision to develop progressively a rolling mills and major steel works complex on the western shores will require large capital investment and a large labour force.

Western Port is well located in relation to the State's major electric power grid. Port maintenance facilities have been established at Stony Point and other services such as transport, water supply, and sewerage can be progressively developed.

Railways

Geographical factors

The Victorian transport system is centred on Melbourne, the capital of the State. The existence of considerable gaps in the Great Dividing Range has allowed the railway system to fan out to the main agricultural and pastoral areas.

The line to the north-east and Sydney passes through the Kilmore gap ; through the Woodend gap goes the northern line to Bendigo and beyond ; the Geelong line crosses the basalt plains to the south-west ; and to the east, the Gippsland valley (between the Dividing Range and the Strzelecki Ranges) provides a convenient path for the electrified main line handling the vast brown coal resources of the Latrobe Valley.

In the north-western part of the State, the Mallee region, the railway has stimulated development of what was previously regarded as arid, worthless land into prosperous farm lands. It also links Melbourne with Mildura, centre of the dried fruit industry.

Historical development

The first proposed railway for Victoria dates back to March 1839, when Robert Hoddle, Government Surveyor at Port Phillip, marked out a town site at the Beach (Port Melbourne) and planned a line from Melbourne. Seven years later, Geelong residents proposed the construction of a 200 mile line from Geelong to the vicinity of Portland and Hamilton in the Western District. In 1852-53 private railway companies were formed in Victoria and given Government approval to build lines.

Australia's first steam railway began operating between Flinders Street and Sandridge (now Port Melbourne) on 12 September 1854 and was opened by the Hobson's Bay Railway Company for public traffic the following day. The first Victorian country railway, Melbourne to Geelong, was opened on 25 June 1857, and private companies' lines were built from Melbourne to Windsor, Brighton Beach, and Hawthorn between 1859 and 1861.

In 1862 Government lines were opened to Ballarat and Bendigo, and two years later, from Bendigo to Echuca. (The Geelong-Melbourne railway had been purchased by the Government in 1860.)

In less than a decade, Victoria saw fulfilled the promise of building the main trunk railways. Through the 1870s, construction proceeded to the south-west from Geelong and to the south-east from Melbourne. In 1870 contracts were let for building the line from Essendon to Wodonga. The north-eastern railway, opened in sections, reached Wodonga in 1873. Nearly ten years elapsed before junction was made with the New South Wales system at Albury on 14 June 1883. This was the beginning of the break of gauge, which continued to disrupt New South Wales-Victoria traffic until 79 years later, when the standard gauge track between Melbourne and Albury was opened for traffic in 1962.

Administration and functions

The Victorian Railways Department was established on 19 March 1856. It is administered by a board of three commissioners, appointed by and responsible to the Government through the Minister of Transport. Each commissioner gives special attention to particular branches of railway

operation. They are also responsible for a number of sections of railway constructed in New South Wales under the Border Railways Agreement. The lines in the Riverina district are extensions of Victorian lines.

Main locations of tracks

The main interstate lines are the north-east to Sydney, comprising both broad (5 ft 3 in) and standard (4 ft 8½ in) gauge tracks to the border city of Albury (190½ miles), and the north-western broad gauge line linking Melbourne with Adelaide. The Victorian terminal station on this line is Serviceton (287 miles). The north-east line branches at Mangalore to serve the Goulburn Valley. The north-western line branches at Ballarat (74 miles) to Maryborough (112 miles), thence to Mildura (351 miles, the State's longest country main line), and at Ararat to Portland, the Western District's new port (250.75 miles).

The Gippsland line is electrified as far as Traralgon (97½ miles), and thence is diesel operated to Bairnsdale (171 miles). The goods service, also diesel operated, is continued through to Orbost (231 miles). Lines branch from Dandenong to Nyora and from there to Wonthaggi (86 miles) and Yarram (136 miles) in South Gippsland.

Other main lines are Melbourne-Bendigo (101 miles, known as the "main line") from where lines branch further north; and Melbourne-Geelong (45 miles), continuing to Warrnambool (166 miles) and to Port Fairy (186½ miles).

Main types of rolling stock and services

Diesel-electric locomotives, the S class and X class (1,800–2,200 hp) and B class (1,600 hp), haul Victorian Railways fast passenger and freight trains. The T class (950–1,050 hp) diesel-electric locomotive is mainly a freight train operator, but it also hauls selected passenger trains. The Y class (650–750 hp) diesel-electric locomotive hauls branch line freight trains and is also used on freight yard work. The W class (650 hp) diesel-hydraulic locomotive and the F class (350 hp) diesel-electric are almost exclusively used on shunting and transfer work. In addition, five H class (1,050 hp) hump shunting diesel-electric locomotives have been brought into service. The L class (2,400 hp) electric locomotive hauls passenger and freight trains on the Gippsland line, Victoria's longest electrified track. Country passenger train services are supplemented by 102 hp, 153 hp, and 280 hp diesel, and 260 hp diesel-electric rail-cars.

Modern multiple-unit saloon type suburban electric trains are progressively replacing obsolete swing-door compartment type trains on the suburban electric service. Most carriages on interstate and many on mainline country trains are of steel construction and air-conditioned, but a number of excursion and corridor compartment-type, non air-conditioned carriages of wooden construction are also used for country passenger traffic.

Freight wagons are of the fixed wheel or bogie types. They include many types of wagons and vans, up to 57 ton capacity, and a wide variety of specially designed wagons to carry loads ranging up to 170 tons.

Melbourne yard modernisation

The new automated hump shunting project, costing about \$13m, has provided an improved service to and from Melbourne and a more efficient

return of locomotives and rolling stock into traffic after arrival of trains. The project, in addition to enlarging the capacity of the yard, also included the installation of the latest electronic and mechanical equipment to replace obsolete methods of shunting and train handling.

The Melbourne Yard was built early in the 1900s when trains were shorter and fewer in number. It thus had insufficient tracks and no track capable of handling the longer trains of today ; its layout was quite unsuited to fast operations ; and considerable cross-movements were necessary, which caused many delays.

By planning thirty-nine stages in a five-year modernisation project, the Victorian Railways were able to maintain services on the original site while works progressed, with only minor inconvenience to clients.

Before modernisation, trains had to be sorted solely by manual operations —by allowing wagons to roll down an incline or by using a locomotive to start the vehicle rolling and controlling the speed by a shunter operating the vehicle's handbrake. The routes into sorting sidings also were set manually by shunters operating separate hand points.

The modernised yard with automated hump shunting, however, has not only increased the speed of operations but also given precise control of vehicle movement by eliminating the risks of human error. In this system, trains are pushed up an elevated track ; near the crest, wagons are uncoupled, singly or in groups, and roll down a single track which branches into a number of sorting sidings. As vehicles roll down the incline the speed is measured by radar at several places and fed to a computer. The computer controls the operation of retarders which are attached to the rails and press against wheel flanges to regulate vehicle speed. Automatic switching equipment directs vehicles to the sorting siding desired.

Before a train is pushed on to the hump, a " cut list " is prepared to show the siding into which the vehicle is to be sorted. The " cut list " is transferred to a tape-reader which electronically arranges for all track routes to be set just ahead of each wagon. This electronic equipment is housed in a new control building known as the West Tower. The modernised yard also includes a new signalling system also controlled from the West Tower.

Yard expansion has included a new yard to give better service to shippers and serve the Victoria, Appleton, and Swanson Docks. Here, rail wagons can be assembled and held in readiness for demand for loading or unloading ships. To cope with modern rail freighting, four additional goods sheds or verandahs were built.

The benefits from the Melbourne yard modernisation mean that at least 3,750 rail vehicles a day can be handled (possibly more) compared with 2,500 under the old yard system. The new system has reduced operating costs, and increased efficiency for both the rail-user and the railway.

Suburban tracks

Victoria's first section of 5 ft 3 in gauge suburban line, from Flinders Street station to Sandridge (now Port Melbourne), was completed in 1854 for Australia's first train. Construction of other lines was as follows : Flinders Street to St Kilda (1857) ; Footscray to Williamstown (1859) ; Princes Bridge to Hawthorn, Richmond to Brighton Beach (1859 to 1861) ;

Melbourne to Essendon (1860); Essendon to Broadmeadows (1872); South Yarra to Dandenong (1877 to 1879); Caulfield to Frankston (1881–82); Hawthorn to Lilydale (1882); Brighton Beach to Sandringham (1887); North Melbourne to Somerton (1884 to 1889); Collingwood to Heidelberg (1888); Ringwood to Upper Ferntree Gully, Clifton Hill to Preston (1889); Burnley to Darling and Camberwell to Ashburton (1890); Princes Bridge to Collingwood (1901); Heidelberg to Eltham (1902); Eltham to Hurstbridge (1912); Darling to Glen Waverley (1929–30); Ashburton to Alamein (reconditioned and reopened in 1948); Fawkner to Upfield (reopened in 1959); Upper Ferntree Gully to Belgrave (converted to broad gauge and electrified in 1962); and Lalor to Epping (reopened in 1964).

Australia's first electric train ran from Newmarket to Flemington Racecourse on Sunday 6 October 1918. However, electric traction for passengers did not start until the following year.

The line from Essendon to Sandringham was the first converted from steam to electric traction, and four years later the electrification of Melbourne suburban railways, as originally planned, was completed. Since then electric traction has been extended to several sections of the outer suburban area. Victoria, which was first with the steam train, was also first with electric traction in Australia.

Passenger and goods traffic, fares, and freight rates

The general conditions under which goods and livestock are carried by rail are published in the Goods Rates Book, and for rating purposes goods are classified alphabetically into twenty main class rates, while special rates are provided for livestock. Relatively low rates are applicable to agricultural produce and concessions are provided for country industries. Competitive freight contract rates to meet road transport activities operate in the main Victorian country towns, particularly those close to the borders where road competition is intense. Special rates, under agreement with forwarding agents and manufacturers, provide for the transport of goods interstate in specified wagon-loads and also for the carriage of goods in various containers including flexi-vans.

Most of the passenger revenue is derived from the operation of the suburban electrified service; traffic on this has fallen slightly in recent years. However, additional trains are needed to handle a growing long distance peak period load. In 1946 the number of trains used for peak service was 109; in 1969 it was 138. Following elimination of break of gauge at Albury for passenger trains since April 1962, a significant gain has been recorded in passenger traffic between Melbourne and Sydney, and interstate passenger business generally has been active. Introduction of air-conditioned carriages on several country lines in recent years has also resulted in improved services. The ordinary fares are competitive and attractive concessions are available, e.g., to students travelling on vacation, and party travel.

Parcels sent by passenger trains are a large revenue earner.

Standardisation of gauge in Australian network

The track mileage of the standard gauge line between Melbourne and

Albury, including loops, departmental sidings, and dual gauge, but not including private sidings, is 243 miles.

Linking of Sydney with Perth by an all standard gauge route through Broken Hill has not been to the disadvantage of Victoria. Melbourne consignors have direct access to the Sydney standard gauge line connecting with every station in New South Wales and with Brisbane, and to the broad gauge line to Adelaide, connecting with practically every important centre of population in South Australia. These connections give direct rail access to about three quarters of the population of Australia.

Bogie exchange

The standard gauge line from Wodonga to Melbourne provided Melbourne consignors with direct access to the standard gauge network and every station in New South Wales. However, a considerable tonnage of Victorian and overland broad gauge traffic consigned to areas in New South Wales or to Brisbane still required transshipment at either Albury or Melbourne.

The exchange of bogies, introduced in Australia by the Victorian Railways, is now an essential part of interstate railway operations. It has enabled loaded rail wagons to travel over different gauge lines and eliminated the manual transfer of goods from one wagon to another at break of gauge terminals. Bogies can be changed under a loaded vehicle in much less time than that taken for transshipping goods from one wagon to another. The main bogie exchange centre in Victoria at South Dynon handled 34,791 vehicles for the year ended 30 June 1969. A small centre at Wodonga handles traffic between northern and north-eastern Victoria and the northern States. With bogie exchange, the tonnage of overland traffic handled in Victoria increased steadily and is now very much greater than that handled in 1962.

Mechanised track maintenance

Using modern mechanised techniques, the Victorian Railways continually maintain and re-lay their railway tracks for passenger and freight traffic. Track maintenance and renewals constitute one of the larger railway budget items, the cost in 1968-69 being approximately \$13.4m.

Track machinery bought during 1968-69 included three ballast regulators, two sleeper spacers, two spike pulling machines, and three sleeper renewal machines. During the year about 202 miles of track in country districts were relaid with heavier rail. Points and crossings were renewed at various locations, using a total of 175 sets of points and 358 crossings. Re-laying of the broad gauge north-eastern line progressed towards completion, and similar work took place between Dandenong and Foster, Ararat and Portland, Heywood and Mt Gambier, Warracknabeal and Beulah, and on the Sea Lake and Mildura lines.

Further references, 1964-1970

The following tables relate to the State railways and road motor services under the control of the Victorian Railways Commissioners. Certain border railways in New South Wales are, by agreement between the Victorian and New South Wales Governments, under the control of the Victorian Railways Commissioners. Particulars of these have been included with those of the State railways being operated within Victoria. Details of the operations of the road motor services are shown on page 732.

Capital cost of railways and equipment

The capital cost of all lines constructed and in course of construction, and of all works, rolling stock and equipment of the Railway Department as at 30 June of each of the five years 1965 to 1969 is shown in the following table :

VICTORIA—TOTAL CAPITAL COST OF RAILWAYS, ETC.:
EQUIPMENT AND ROLLING STOCK
(\$'000)

At 30 June—	Railways		Road motor services	Total capital cost (a)
	Lines open	Lines in process of construction		
1965	322,329	2,686	38	325,053
1966	332,956	2,693	61	335,710
1967	345,813	389	45	346,247
1968	357,135	120	36	357,291
1969	368,036	426	28	368,490

(a) Written down in accordance with *Railways (Finances Adjustment) Act 1936*, and allowing for depreciation since 1 July 1937. Particulars are exclusive of the cost of stores and materials on hand and in course of manufacture.

At 30 June 1969 the capital cost of rolling stock, after being written down in accordance with the *Railways (Finances Adjustment) Act 1936*, and allowing for depreciation was : \$100m broad gauge, \$10,000 narrow gauge, and \$6.1m uniform gauge.

Loan liability and interest

The face value of stock and bonds allocated to the Railways Department, as reduced in accordance with the *Railways (Finances Adjustment) Act 1936*, amounted to \$414.1m at 30 June 1969. After deducting the value of securities purchased from the National Debt Sinking Fund and cancelled (\$58m), the net liability on current loans outstanding at that date was \$356.1m.

The total liability of the State for railways construction, etc., at 30 June 1968 (which includes the liability referred to in the previous paragraph) was \$476m. Deduction of securities purchased from the National Debt Sinking Fund and cancelled (\$79.2m) together with cash at credit in the Fund (\$2.9m) reduced the amount outstanding at the end of the year to a net liability of \$394m.

The *Railways (Funds) Act 1961* provided that interest and other charges on moneys borrowed for the purposes of the *Railways Act 1958* should not henceforth be included in the accounts of the Victorian Railways, but would be charged against the revenues of the State. However, the *Railways (Funds) Act 1964* reimposed on the Railways, with effect from 1 July 1964, the obligation to pay interest and debt charges on moneys borrowed for the purposes of the *Railways Act 1958* on and after 1 July 1960. The total annual interest payable on the liability of \$394m at 30 June 1968 amounted to \$18.3m at an average rate of 4.802 per cent. Of this amount, the Victorian Railways are liable for \$6.1m. In addition, the State is required to pay a contribution of \$3.5m at a rate of 4.5 per cent on cancelled securities.

Additional funds, which amounted to \$53.9m at 30 June 1968, have been provided for railway construction, equipment, stores, etc., out of Consolidated Revenue, the Uniform Railway Gauge Trust Fund, and other funds. No interest is charged against railway revenue on these amounts, with the exception that interest, at 5 per cent, is payable to the Commonwealth on the repayable principal amount outstanding in respect of expenditure on the uniform gauge. (See page 621 of the *Victorian Year Book* 1966.)

Railway staff

The number of officers and employees in the Railways Service (including casual labour and butty-gang workers) and the amount of salaries and wages (including travelling and incidental expenses) paid in each of the five financial years 1964-65 to 1968-69 are shown in the following table :

VICTORIA—RAILWAYS STAFF : NUMBERS, SALARIES, ETC.

Period	Number of employees at end of year			Salaries, wages, and travelling expenses
	Permanent	Supernumerary and casual	Total	
1964-65	16,859	10,604	27,463	\$'000 75,760
1965-66	16,158	11,473	27,631	77,980
1966-67	15,704	11,038	26,742	79,464
1967-68	15,422	11,989	27,411	82,862
1968-69	15,179	11,197	26,376	87,529

Railways route mileage

The route mileage of the railways (exclusive of road motor service route mileage) for each of the years 1964-65 to 1968-69 is given in the following table.

It should be noted that the Victorian Railways operate certain services in New South Wales. At 30 June 1969 the total length of these services was 204 route miles. This distance is included in the single track broad gauge section of the table.

VICTORIA—RAILWAYS ROUTE MILEAGE (EXCLUDING ROAD MOTOR SERVICES)
(Route miles)

Lines open for traffic	1964-65	1965-66	1966-67	1967-68	1968-69
Single track —Broad gauge (a)	3,694	3,671	3,711	3,694	3,648
Narrow gauge	8	8	8	8	8
Double track —Broad gauge (a)	431	431	431	433	440
Other multi-track—Broad gauge (a)	78	78	79	80	80
Total route mileage	4,211	4,188	4,230	4,215	4,176

(a) Broad gauge refers to 5 ft 3 in and includes 4 ft 8½ in gauge track.

Railways rolling stock

The following table provides a description of the various types of rolling stock in service (exclusive of road motor rolling stock) for each of the years 1964-65 to 1968-69 :

VICTORIA—RAILWAYS ROLLING STOCK IN SERVICE (EXCLUDING ROAD MOTOR SERVICES)

Rolling stock in service	1964-65	1965-66	1966-67	1967-68	1968-69
Locomotives—					
Steam	220	181	132	50	72
Electric	35	35	35	35	35
Diesel electric	161	185	199	220	237
Other (a)	87	85	87	90	90
Total	503	486	453	395	434
Passenger coaches—					
Electric suburban	1,080	1,089	1,116	1,113	1,110
Other (b)	712	698	675	659	659
Total	1,792	1,787	1,791	1,772	1,769
Goods stock (c)	21,891	21,914	21,725	21,489	21,374
Service stock	1,676	1,659	1,625	1,625	1,625

(a) Other locomotives comprise diesel hydraulic locomotives, cranes, rail motor diesel power units, and non-passenger carrying rail tractors.

(b) Passenger coaches owned jointly with New South Wales and South Australia have been included.

(c) All parcels and brake vans and standard gauge stock have been included.

Railways traffic

The traffic of the railways (exclusive of road motor traffic) for each of the years 1964-65 to 1968-69 is shown in the table below :

VICTORIA—RAILWAYS TRAFFIC (EXCLUDING ROAD MOTOR SERVICES)

Traffic		1964-65	1965-66	1966-67	1967-68	1968-69
Traffic train mileage—Country	'000	4,836	4,738	4,798	4,833	4,741
Suburban	'000	8,480	8,458	8,504	8,420	8,139
Goods	'000	7,172	6,949	6,733	6,633	6,809
Total	'000	20,488	20,145	20,035	19,886	19,689
Passenger journeys—Country	'000	4,907	4,793	4,674	4,535	4,078
Suburban	'000	144,846	144,332	141,593	141,733	140,788
Total	'000	149,753	149,125	146,267	146,268	144,866
Goods and livestock carried	'000 tons	12,596	12,156	12,075	11,116	11,316

The tonnage of various classes of goods and the total tonnage of livestock carried by the Victorian Railways for each of the years 1964-65 to 1968-69 are shown in the following table :

VICTORIA—RAILWAYS GOODS AND LIVESTOCK TRAFFIC
(Excluding road motor goods services)
('000 tons)

Class of goods	Quantity carried				
	1964-65	1965-66	1966-67	1967-68	1968-69
Butter	90	82	69	65	68
Grain—					
Barley	215	210	196	136	191
Wheat	2,235	2,035	1,869	1,231	1,689
Other	343	220	322	161	359

VICTORIA—RAILWAYS GOODS AND LIVESTOCK TRAFFIC—*continued*
 (Excluding road motor goods services)
 ('000 tons)

Class of goods	Quantity carried				
	1964-65	1965-66	1966-67	1967-68	1968-89
Flour	197	153	145	167	157
Bran, pollard, and sharps	76	53	51	50	44
Fruit—					
Fresh	110	92	86	99	83
Dried	71	74	103	72	64
Beer	129	134	140	144	137
Briquettes	1,594	1,571	1,487	1,416	1,028
Cement	731	782	807	766	765
Coal—					
Black	214	195	213	170	75
Brown	389	363	363	326	200
Galvanised iron	111	104	116	71	91
Iron, steel, bar rods, etc., unprepared	473	424	462	498	661
Manures	1,077	1,154	1,171	877	914
Motor cars and bodies	192	182	197	218	225
Petrol, benzine, etc.	155	133	145	165	182
Pulpwood	109	124	124	101	72
Pulp and paper	129	125	135	138	150
Timber	292	272	252	262	253
Wool	136	133	141	128	140
All other goods	3,169	3,303	3,322	3,520	3,489
Total goods	12,237	11,917	11,916	10,781	11,037
Total livestock	359	239	158	335	279
Grand total goods and livestock	12,596	12,156	12,075	11,116	11,316

Railways revenue and expenditure

Revenue for 1968-69 increased by \$1,197,365 compared with 1967-68. Total working expenses increased by \$6,140,161 as compared with the previous year.

Under the provisions of the *Railways (Funds) Act* 1961, an account was created in the Trust Fund and called the "Railway Equalisation Account". The Act provided for the annual appropriation out of the Consolidated Revenue and the payment into the Equalisation Account of any excess of railway income over railway operating expenses for the preceding year. Moneys standing to the credit of the Account were to be available for the purpose of supplementing railway income in the event of its falling short of railway operating expenses. The amounts paid into the Equalisation Account were \$1,840,692 for the year 1960-61, \$7,318 for 1961-62, and \$740,758 for 1963-64. To offset deficits for the years 1962-63 and 1964-65, amounts of \$419,168 and \$2,169,601, respectively, were transferred to Railway Revenue from the Equalisation Account, the latter transfer extinguishing the balance in the Account. The calculation of these amounts was based on Treasury figures (which on the income side are mainly cash records) and not on net revenue shown in the following table.

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE
('\$000)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
REVENUE					
Passenger, etc., business—					
Passenger fares	27,455	27,826	30,162	30,330	30,507
Parcels, mails, etc.	3,376	3,630	4,135	4,077	4,149
Other	87	163	88	104	103
Goods, etc., business—					
Goods	60,488	59,276	61,531	55,465	56,637
Livestock	2,158	1,478	1,026	1,703	1,265
Miscellaneous	722	692	769	637	631
Miscellaneous—					
Dining car and refreshment services	3,058	3,345	3,464	3,451	3,467
Rentals	1,653	1,710	1,880	2,101	2,178
Bookstalls	920	1,054	1,053	1,052	1,061
Advertising	208	211	228	234	234
Other	201	234	241	240	359
Total revenue	100,326	99,619	104,579	99,394	100,591
EXPENDITURE					
Working expenses—					
Way and works	18,851	19,633	19,940	20,695	22,372
Rolling stock	29,071	28,997	28,740	27,484	29,137
Traffic	31,743	32,939	34,611	35,876	37,688
Electrical engineering branch	4,471	4,563	4,427	4,494	4,425
Stores branch	1,406	1,426	1,563	1,585	1,633
Pensions	4,870	4,945	5,073	5,273	5,451
Service grants and retiring gratuities	1,343	1,173	1,146	1,116	1,146
Contributions to Railway Renewals and Replacement Fund	400	400	400	400	400
Contributions to Railway Accident and Fire Insurance Fund	1,533	1,315	1,441	1,740	2,116
Pay-roll tax	1,803	1,744	1,852	1,874	1,982
Long service leave	1,371	1,353	1,521	1,606	1,829
Other (a) (b)	2,606	2,664	2,846	3,061	3,164
Total working expenses	99,470	101,151	103,560	105,204	111,344
Net revenue	+ 856	- 1,532	+ 1,019	- 5,810	- 10,753
Debt charges—					
Interest charges and expenses (b)	(c) 2,918	3,726	4,546	5,377	6,221
Exchange on interest payments and redemption	(c) 131	129	132	119	106
Contribution to National Debt Sinking Fund	(c) 137	176	213	251	288
Net result for year	- 2,330	- 5,563	- 3,872	- 11,557	- 17,368
Proportion of working expenses to revenue	% 99·1	% 101·5	% 99·0	% 105·8	% 110·7

(a) Including interest paid to Commonwealth under Railways Standardisation Agreement, namely, 1965, \$229,796; 1966, \$224,898; 1967, \$220,000; 1968, \$215,103; and 1969, \$210,204.

(b) Including Loan Conversion Expenses.

(c) Under the provisions of the *Railways (Funds) Act 1964*, interest and debt charges on moneys borrowed on and after 1 July 1960 became chargeable against Railway Revenue with effect from 1 July 1964.

The gross revenue and working expenses per average mile of railway worked for each of the five years 1964-65 to 1968-69 are shown in the following table :

**VICTORIA—RAILWAYS REVENUE AND EXPENDITURE PER AVERAGE
MILE OPEN (EXCLUDING ROAD MOTOR SERVICES)**

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Average number of miles open for traffic	4,211	4,189	4,218	4,210	4,190
Gross revenue per average mile open \$	23,807	23,765	24,777	23,594	23,992
Working expenses per average mile open \$	23,590	24,112	24,519	24,961	26,543

Road motor services

The following table gives, for each of the five years 1964-65 to 1968-69, particulars of the operations of the road motor services under the control of the Railways Commissioners:

**VICTORIA—ROAD MOTOR SERVICES
(Under the control of the Railways Commissioners)**

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Car mileage	329,635	314,337	283,301	241,069	258,561
Passenger journeys	1,154,104	1,060,324	1,033,774	888,834	902,967
Gross revenue \$	73,274	68,925	70,287	62,216	62,378
Working expenses \$	133,138	145,393	136,571	119,601	128,057
Capital expenditure at end of year (less depreciation written off) \$	38,156	60,859	44,990	36,374	27,758

NOTE. The apparent discrepancy between the amount of working expenses and revenue was brought about by revenue not having received a proportion of combined rail and road services earnings, while working expenses have been charged with road motor operating cost in full.

Tramway and omnibus services

Melbourne and Metropolitan Tramways Board

The Melbourne and Metropolitan Tramways Act provides for a Board consisting of chairman, deputy chairman, and a member appointed by the Governor in Council. Subject to the direction of the Minister, the Board controls, manages, operates, and maintains the tramways of the metropolitan area, and a fleet of buses plying on routes permitted by the Transport Regulation Board.

Particulars relating to the tramway systems under the control of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1964-65 to 1968-69 in the following table:

**VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD:
TRAMWAYS**

Period	Track open at end of year		Tram mileage	Passenger journeys	Operating receipts	Operating expenses	At end of year	
	Double	Single					Rolling stock	Persons employed
	miles	miles					'000	'000	$'000	$'000	number	number
1964-65	134	4	16,920	147,891	14,552	15,047	703	3,793
1965-66	134	4	16,609	140,556	14,727	15,636	693	3,786
1966-67	134	4	16,571	131,876	15,921	16,440	693	3,745
1967-68	134	3	16,480	127,575	15,628	16,604	691	3,726
1968-69	134	3	16,069	119,009	15,946	17,042	698	3,525

As the community grows and the use of private motor vehicles extends, passengers using public transport become fewer and this causes financial strain. Notwithstanding this, the Board has a policy of expansion and in 1961 acquired a privately owned network of buses in the rapidly developing suburbs of Box Hill, Nunawading, Ringwood, Mitcham, Doncaster, Bulleen, and Warrandyte, and extended some other services.

Details of the revenue and expenditure of the Melbourne and Metropolitan Tramways Board for the years 1965-66 to 1968-69 are shown in the following table :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69
REVENUE				
Traffic receipts	17,421	19,060	18,864	19,269
Miscellaneous operating receipts	177	176	176	176
Non-operating receipts	356	312	287	240
Total revenue	17,954	19,548	19,327	19,685
EXPENDITURE				
Traffic operation costs	8,430	9,096	9,325	9,595
Maintenance—				
Permanent way	924	960	903	934
Tramcars	2,315	2,457	2,480	2,550
Buses	774	765	851	921
Electrical equipment of lines and substations	501	474	526	537
Buildings and grounds	229	206	245	264
Electric traction energy	884	874	884	874
Fuel oil for buses	171	184	197	190
Bus licence and road tax fees	27	25	23	21
General administration and stores department costs	1,183	1,178	1,166	1,173
Pay-roll tax	326	346	355	367
Workers compensation payments	338	496	407	465
Depreciation	1,013	1,014	1,001	1,018
Non-operating expenses	63	65	76	96
Provisions—				
Long service leave	318	290	292	290
Retiring gratuities	587	527	543	486
Accrued sick leave	57	56	92	70
Public risk insurance	234	286	231	300
Interest on loans	1,129	1,222	1,274	1,311
Obsolescence in stores stock	7	8	..	..
Total expenditure	19,509	20,529	20,871	21,462
Net surplus (+) or deficit (—)	-1,555	-981	-1,544	-1,777
Capital outlay	1,442	1,317	938	691
Loan indebtedness at 30 June	22,396	23,397	23,840	24,224

In the following table, the operations of the motor omnibus systems of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1964-65 to 1968-69 :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
MOTOR OMNIBUS SYSTEMS

Period	Route miles	Bus mileage	Passenger journeys	Operating receipts	Operating expenses	At end of year	
						Rolling stock	Persons employed
		'000	'000	\$'000	\$'000	number	number
1964-65	123	7,267	29,812	3,199	3,797	223	842
1965-66	123	6,763	25,120	2,871	3,809	231	828
1966-67	126	6,931	25,107	3,315	4,024	223	817
1967-68	140	7,335	25,576	3,413	4,192	233	844
1968-69	139	7,099	24,271	3,499	4,324	226	791

The following tables give an analysis of operating receipts, operating expenses, etc., for each of the five years 1964-65 to 1968-69 :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
TRAMWAYS : OPERATING RECEIPTS, OPERATING EXPENSES, ETC.,
PER MILE, ETC.

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle mile	Per passenger	Amount	Per vehicle mile	
	\$'000	cents	cents	\$'000	cents	per cent
1964-65	14,552	86·00	9·84	15,047	88·93	103·40
1965-66	14,727	88·67	10·48	15,636	94·14	106·17
1966-67	15,921	96·08	12·07	16,440	99·21	103·26
1967-68	15,628	94·83	12·25	16,604	100·75	106·25
1968-69	15,946	99·23	13·40	17,042	106·06	106·87

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
MOTOR OMNIBUS SYSTEMS : OPERATING RECEIPTS, OPERATING
EXPENSES, ETC., PER MILE, ETC.

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle mile	Per passenger	Amount	Per vehicle mile	
	\$'000	cents	cents	\$'000	cents	per cent
1964-65	3,199	44·02	10·73	3,797	52·25	118·69
1965-66	2,871	42·45	11·43	3,809	56·32	132·67
1966-67	3,315	47·83	13·20	4,024	58·06	121·39
1967-68	3,413	46·53	13·34	4,192	57·15	122·82
1968-69	3,499	49·29	14·42	4,324	60·91	123·58

Private motor omnibus services

The following table contains particulars of the operations of Victorian private omnibus services. In addition to details of route operations, charter, school, and other special services are included. In the year 1968-69 route operations accounted for 59 per cent of total mileage travelled, while charter, school, and other special services accounted for 12, 27, and 2 per cent, respectively.

VICTORIA—PRIVATE MOTOR OMNIBUS SERVICES

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Number of vehicles	2,549	2,843	2,701	2,846	2,811
Mileage—Petrol vehicles	'000 miles 35,355	35,669	35,114	36,079	34,627
Diesel vehicles	'000 miles 14,196	16,461	16,713	19,995	20,308
Total mileage	'000 miles 49,551	52,130	51,826	56,074	54,935
Revenue	\$'000 17,364	\$'000 18,476	\$'000 19,628	\$'000 21,297	\$'000 22,057
Expenditure—					
Drivers' wages	5,531	6,068	6,273	6,904	7,270
Repairs and maintenance	2,182	2,268	2,431	2,646	2,734
Depreciation	1,758	1,887	1,910	2,062	2,045
Other	5,653	6,203	6,620	7,441	7,343
Total expenditure	15,124	16,426	17,234	19,053	19,392
Assets (a)—					
Motor vehicles	4,680	5,403	5,199	5,758	5,645
Other assets	6,136	7,081	7,444	8,120	8,609
Total assets	10,816	12,484	12,643	13,878	14,254
Liabilities (a)	3,896	4,417	4,534	5,650	5,762

(a) Incomplete. Assets and liabilities of operators engaged solely in school bus services are not available.

Tramways in provincial cities

The cities outside the metropolitan area having electric tramway systems are : Ballarat, with 13·84 miles of lines (2·33 double and 11·51 single track) and Bendigo, with 8·64 miles of lines (2·43 double and 6·21 single track). Both of these systems are operated by the State Electricity Commission of Victoria.

The traffic particulars of these lines for each of the five years 1964-65 to 1968-69 are summarised in the following table :

VICTORIA—TRAMWAYS IN PROVINCIAL CITIES

Period	Track open		Tram mileage	Passenger journeys	Traffic receipts	Operating expenses	Rolling stock	Persons employed
	Double	Single						
	miles	miles						
1964-65	5	18	828	4,728	230	661	46	184
1965-66	5	18	830	4,333	248	720	46	187
1966-67	5	18	836	3,861	282	755	48	184
1967-68	5	18	824	3,537	265	753	48	185
1968-69	5	18	828	3,237	264	744	46	174

Further references, 1961-1963

Motor vehicles

Registration, licences, etc.

Every motor car and motor cycle must be registered with the Chief Commissioner of Police if used on Victorian roads. All trailers (except agricultural implements and certain small trailers for private use), fore-cars, and side cars drawn by or attached to motor cars or motor cycles must also be registered.

The following is a brief summary of the annual fees applicable at 1 March 1969 in respect of the principal types of registration and for the licensing of drivers and riders :

VICTORIA—REGISTRATION AND LICENCE RATES AT 1 MARCH 1969

Type of registration or licence	Annual rate
REGISTRATION—	
Motor cycle (without trailer, etc.)	\$4.10
Motor cycle (with trailer, etc., attached)	\$6.10
Motor car (private use)	\$0.60 for each power-weight unit (a)
Motor car (private and business use)	\$0.75 for each power-weight unit (a)
Trailer (attached to motor car)	From \$2.50 each, according to the unladen weight and use
Motor car (commercial passenger vehicle) operating on a stage omnibus service or a temporary school service licence	\$15
Motor car (used for carrying passengers or goods for hire or in the course of trade)	From \$1.10 to \$2.30 for each power-weight unit (a) according to the unladen weight and the type of tyres
Motor car (constructed for the carriage of goods owned by primary producers and used solely in connection with their business)	From \$0.30 to \$1.30 for each power-weight unit (a) according to the number of wheels and the type of tyres. (When more than one motor car is so owned, the rate shall apply to one motor car only.)
Mobile crane, self-propelled (used otherwise than for lifting and towing vehicles)	\$27.10 (Unless a lower fee would otherwise have been payable.)
LICENCE—	
Driver or rider licence	\$6 issued for a three year period. (An additional fee of \$2 is payable by all applicants for new licences.)
Instructors' licences	\$20 issued for a three year period

(a) The number of power-weight units is that number which is equal to the sum of the horsepower and the weight in hundredweights of a motor car unladen and ready for use.

NOTE: The minimum annual fee for the registration of any motor vehicle other than a motor cycle is \$12.

The following tables show, for each of the years 1964–65 to 1968–69, the number of drivers' and riders' licences in force and the total revenue received at the Motor Registration Branch of the Police Department :

VICTORIA—DRIVERS' AND RIDERS' LICENCES IN FORCE AT 30 JUNE

Type of licence	1965	1966	1967	1968	1969
Drivers'	1,185,050	1,227,990	1,280,459	1,337,381	1,399,903
Riders'	30,385	31,487	32,832	34,292	35,894
Total	1,215,435	1,259,477	1,313,291	1,371,673	1,435,797

VICTORIA—GROSS REVENUE COLLECTED BY MOTOR
REGISTRATION BRANCH
(\$'000)

Particulars	1964–65	1965–66	1966–67	1967–68	1968–69
Registrations and tax	29,714	41,052	43,299	47,219	54,190
Drivers' licences	1,824	2,872	2,746	2,792	3,272
Other	605	581	612	748	764
Total	32,143	44,505	46,657	50,759	58,226

The following table shows the number of motor vehicles on the register by type at the end of each of the years 1955, 1962 (census years), 1967, 1968, and 1969. Particulars of Commonwealth-owned vehicles with the exception of defence service vehicles are included. Tractor-type vehicles, plant, and trailers are excluded.

VICTORIA—MOTOR VEHICLES ON THE REGISTER ACCORDING TO TYPE

Type of vehicle	At 31 December—				
	1955	1962	1967	1968	1969
Cars (a)	422,543	611,496	763,585	807,028	852,365
Station wagons	5,690	69,528	159,915	173,216	184,825
Utilities	75,721	94,470	91,615	91,674	91,719
Panel vans	19,913	31,328	35,300	36,557	37,724
Trucks (b)	70,362	79,482	90,606	92,432	94,992
Omnibuses	2,580	3,409	4,266	4,365	4,625
Total (excluding motor cycles)	596,809	889,713	1,145,287	1,205,272	1,266,250
Motor cycles (c)	26,406	15,802	13,601	17,042	19,881
Grand total	623,215	905,515	1,158,888	1,222,314	1,286,131

(a) Includes ambulances and hearses.

(b) Includes trucks and truck-type vehicles, but excludes tractors, plant, and trailers.

(c) Includes motor scooters.

The following tables, giving new vehicle registrations by types and makes of vehicles, include details of Commonwealth-owned vehicles (other than those of the defence services). They are not strictly comparable with the preceding table.

VICTORIA—REGISTRATIONS OF NEW MOTOR CARS AND STATION WAGONS ACCORDING TO MAKE

(Includes Commonwealth-owned vehicles other than those of the defence services)

Make	Motor cars (a)			Station wagons		
	1967	1968	1969	1967	1968	1969
Austin	3,033	3,567	3,056	..	..	1
Chevrolet	417	287	193	3	4	1
Chrysler	7,935	8,218	9,226	2,268	2,297	2,222
Datsun	2,234	2,822	3,385	551	457	247
Fiat	328	634	993	6	22	2
Ford	17,424	16,934	18,833	3,799	3,408	3,544
Hillman	1,852	2,437	2,962	85	297	525
Holden	21,365	26,241	30,167	8,490	7,701	7,505
Honda	74	328	530	..	1	..
Isuzu	288	203	151	..	..	..
Jaguar	204	220	159	..	..	..
M.G.	319	380	405	..	..	..
Mazda	884	2,413	3,254	88	242	280
Mercedes Benz	543	641	624	1	..	..
Morris	5,939	5,720	5,215	..	1	..
Peug	453	549	640	54	64	62
Renault	658	1,071	1,389	4	1	..
Toyota	5,348	7,027	6,882	541	532	440
Triumph	355	441	513	..	..	..
Volkswagen	3,775	2,688	1,952	334	371	498
Other	2,726	1,639	1,566	46	52	63
Total	76,154	84,460	92,095	16,270	15,450	15,390

(a) Includes ambulances, hearses, and cars other than sedans.

VICTORIA—REGISTRATIONS OF NEW MOTOR VEHICLES OTHER THAN
MOTOR CARS, STATION WAGONS, AND MOTOR CYCLES
ACCORDING TO MAKE

(Includes Commonwealth-owned vehicles other than those of the defence services)

Make	1968				1969			
	Utilities	Panel vans	Other (a)	Total	Utilities	Panel vans	Other (a)	Total
Austin	138	2	201	341	146	..	..	146
B.M.C.	..	..	..	..	129	27	300	456
Bedford	1	105	1,506	1,612	2	94	1,746	1,842
Chrysler	515	..	..	515	622	..	..	622
Commer	2	101	245	348	2	50	337	389
Datsun	268	67	189	524	292	52	372	716
Dodge	247	33	536	816	268	12	680	960
Ford	1,718	940	727	3,385	1,746	752	1,417	3,915
Holden	2,935	1,749	..	4,684	3,045	1,767	..	4,812
International	104	35	1,344	1,483	106	26	1,448	1,580
Land Rover	187	10	125	322	237	2	38	277
Mazda	26	88	80	194	43	162	54	259
Morris (b)	125	637	78	840	..	599	..	599
Toyota	310	165	744	1,219	368	148	776	1,292
Volkswagen	73	149	348	570	87	51	707	845
Other	30	29	543	602	38	31	693	762
Total	6,679	4,110	6,666	17,455	7,131	3,773	8,568	19,472

(a) Other vehicles including trucks, omnibuses, milk tankers, petrol tankers, etc.

(b) Since 1 January 1969, B.M.C. includes all Austin and Morris commercial vehicles except Austin 15 hp utilities and Morris 10 hp panel vans.

Transport Regulation Board

General

The *Transport Regulation Act 1932* set up a Board of Inquiry to investigate Victoria's land transport problems. The recommendations of this Board led to the constitution of the Transport Regulation Board in 1934. The Board, consisting of a chairman, a primary producers' representative, and a representative of commercial interests outside a radius of 25 miles of the G.P.O., Melbourne, is a statutory authority responsible for the improvement and co-ordination of, and the facilities for, locomotion and transport, and, at present, derives its authority from the *Transport Regulation Act 1958* and the *Commercial Goods Vehicles Act 1958*. The Board is also represented on the Melbourne Transportation Committee and assists in the transport information centre at the Victorian Government Tourist Bureau.

Functions

Licences

With the exception of vehicles used exclusively on interstate trade and primary producer vehicles not exceeding 2 tons load capacity, all commercial passenger and goods vehicles are subject to the control and licensing of the Board. Licences issued fall into two broad groups.

The first group which comprises the majority of licences in force, are issued on application and are classed "as of right" goods licences. These licences are issued at a fee fixed by legislation and confer rights clearly defined in that legislation. They confer restricted rights and are confined to commercial goods vehicles.

The second group, termed "discretionary" licences, are issued at the discretion of the Board. The legislation sets out fully the matters to be taken into consideration by the Board before granting or refusing passenger or discretionary goods licences. All licences for passenger vehicles fall into this category.

The following table shows the numbers of "as of right" licences for commercial goods vehicles and the number of "discretionary" licences for commercial goods and commercial passenger vehicles current at the end of each year, together with brief details of the financial activities of the Transport Regulation Board during the years 1964-65 to 1968-69:

VICTORIA—TRANSPORT REGULATION BOARD: LICENCES ISSUED:
SUMMARY OF FINANCIAL OPERATIONS

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Licences issued "as of right"—					
25 miles radius of the G.P.O. or P.O.—					
Melbourne	14,067	14,798	14,831	15,147	15,316
Ballarat	} 1,618	} 1,537	} 1,512	} 1,507	} 1,544
Bendigo					
Geelong					
25 miles radius of owner's place of business	7,018	6,714	6,821	6,909	6,970
Primary producers (vehicles over 2 tons load capacity)	17,086	17,080	17,414	17,313	17,522
Butter, milk, and cheese factories	758	708	694	546	501
50 miles radius of owner's place of business (vehicles up to 4 tons load capacity)	45,756	47,218	49,498	51,618	53,886
Third Schedule commodities	11,434	12,203	12,548	12,684	13,062
Approved decentralised secondary industries	507	679	768	799	899
"Discretionary" licences—					
Passenger	6,430	6,603	6,576	6,543	6,563
Temporary passenger	223	221	214	177	172
Goods (4 years)	10,333	10,995	11,582	12,518	13,357
Temporary goods	1,502	963	756	807	590
Goods—passenger	56	52	46	38	34
Total licences issued	116,788	119,771	123,260	126,606	130,416
Financial transactions—	\$'000	\$'000	\$'000	\$'000	\$'000
Revenue	1,749	(a) 2,025	2,383	2,403	2,511
Expenditure (including payments to local authorities for road maintenance, comfort stations, and bus shelters)	1,475	1,636	1,860	1,990	2,172
Balance	274	389	523	413	339
Road charges collected and transferred direct to Country Roads Board	5,927	6,378	6,733	7,248	7,841
Motor boat registration fees collected and paid to Tourist Fund	163	179	193	219	233
Log book fees (b)	(b)	(b)	5	21	11

(a) Includes amount recouped from Country Roads Board for road charges collected.

(b) As from 15 May 1967 all collections paid to Country Roads Board.

Permits

Permits are issued at the discretion of the Board to authorise temporarily the operation of a vehicle in a manner not specified in the licence. For the year ended 30 June 1969 the number of goods permits and passenger permits issued were 153,707 and 8,765, respectively.

Drivers certificates

Commercial passenger vehicles. Every driver of a commercial passenger vehicle must possess a driver's certificate issued by the Board. This certificate is a separate authority additional to the motor car driver's licence issued by the Police. In October 1968 the Board agreed to receive applications from female drivers for commercial passenger vehicle certificates and by the end of 1968 had certificated 112 women to drive metropolitan taxis. At 30 June 1969 the 13,894 certificates on issue to drivers of commercial passenger vehicles consisted of the following types: buses 4,721; taxis 8,904; goods/passenger 233; temporary 36.

Tow trucks. Every driver of a tow truck must possess a driver's certificate issued by the Board before he can legally drive such a vehicle. At 30 December 1969 there were 2,134 certificates on issue.

Passenger fares

The Board approved new fares for metropolitan and suburban taxis and metropolitan hire-cars as from 13 December 1970. The new fares are 25c flag fall, 22c per mile, and \$3 per hour for detention. An increase in fares of omnibus services became necessary in November 1970 to provide operators with adequate revenue. Private bus fares still compare favourably with those charged on rail and tram services. It is estimated that 22 per cent of all passenger journeys within the metropolitan area—by rail, tram, and bus—are on private bus routes licensed by the Board.

Public hearings

Public hearings are designed to give all parties concerned with matters affecting the issue of discretionary licences, or of a generally contentious nature, an opportunity to present their views to the Board. During the year ended 30 June 1969 the Board heard thirty-seven applications for discretionary goods licences at public hearings.

The major hearings were concerned with applications for goods services between Melbourne and Heathcote and between Melbourne and Mallacoota.

Another matter considered by the Board arose from objections by the Railways Commissioners to the automatic issue of road permits for asbestos cement pipes moving from Melbourne to country water and sewerage authorities. After examination, the Board concluded that from 1 July 1969 road permits would not be granted automatically for transport of these pipes.

In relation to commercial passenger vehicles, a total of fifty-five applications for new licences, variations of existing licences or transfers of licences were dealt with at public hearings during the year.

In addition, the Board held public inquiries in Ballarat and Bendigo to examine the public passenger transport facilities and whether the existing tram service can be adequately replaced by buses. The Board's conclusion was that only bus services can provide the flexibility which is needed in areas of low or comparatively low population density. It recommended that both electric tramway systems be discontinued as soon as alternative motor omnibus services can be provided.

Enforcement

The Board's inspectorate is primarily concerned with the enforcement of the provisions of the *Transport Regulation Act 1958*, the *Commercial*

Goods Vehicles Act 1958, and the Transport Consolidated Regulations made pursuant to these Acts. In addition, Board officers are empowered to enforce the *Motor Car Act 1958* and Regulations, and the *Road Traffic Act 1958* and Regulations, as they relate to commercial road transport. The Board is also responsible for the safe operation and vehicle standards of licensed commercial passenger vehicles. During the year over 7,000 vehicles were inspected.

Road maintenance charges

Owners of commercial goods vehicles with a load capacity exceeding four tons are required to pay a ton-mile charge as compensation for wear and tear caused to Victorian roads. Journeys made solely in connection with the carriage of certain primary produce and livestock do not attract this charge. Vehicles operating on interstate trade are not exempt.

Motor boats

The Board registers privately used motor boats not exceeding 65 ft in length. The Victoria Police, assisted by other government authorities, are responsible for the enforcement of regulations governing the operation of boats and use of equipment. At 30 June 1969 the number of motor boats on the register was 42,169.

Traffic Commission

Under the *Road Traffic Act 1958* the function of the Commission is to advise the Government about regulations generally and for the improvement of traffic conditions and traffic control. The Commission is empowered to make any inquiries thought fit in exercising these functions and, where necessary, may co-opt persons of special skills to assist in these inquiries. Under the *Road Traffic Act*, the establishment, renovation, alteration or improvement of any particular sign, mark or device, or the removal of any parking area, obstruction or erection in or on any street or road are subject to control. Advice for action under this Act is furnished by the Commission.

The *Road Traffic Regulations 1962* provide that no person may erect or establish a major traffic control device without the consent of the Commission. In addition, the Commission is authorised to consent to the establishment of minor traffic control devices. These wide statutory responsibilities enable the Commission to establish standards and practices for the guidance of highway authorities.

Surveys conducted by the Commission have shown the need for traffic engineering measures to improve the flow of peak-hour traffic, particularly in the metropolitan area. Clearways have been established and in four localities with pronounced peak hour flows, municipalities, with the encouragement of the Commission, have introduced off-centre operation using overhead signals. At four additional places the use of cones enables traffic moving in the direction of peak flow to use three lanes of the four lane roadway.

The Commission is the repository of the State road accident records collected by the Victoria Police. It, therefore, maintains close liaison with the Department in the collection and application of accident statistics and in the operation of traffic control devices. The principal traffic control

items in use in Victoria at 30 November 1968 were : 422 stop-go traffic signals at intersections ; 288 pedestrian operated stop-go signals not controlling an intersection ; 291 pedestrian crossings ; and 1,304 school crossings.

Speed limits

Speed limits in Victoria are based on two basic concepts : the regulatory speed limit of 35 mph in built-up areas, and the regulatory speed limit of 50 mph outside a built-up area, unless it is demonstrably safe to travel at a higher speed. This speed limit is known as a 50 mph *prima facie* speed limit, because it is *prima facie* evidence of a breach of Regulations if a driver travels at a higher speed unless he can prove that it is safe.

The effect of a correct speed limit is to reduce the range of speeds within which drivers travel ; it slows down the very fast drivers and speeds up the very slow drivers. This has a safety effect. However, a speed limit can only be effective if it accords with the judgment of the drivers who are travelling at speeds which they consider are safe within the limits of the road conditions and their own driving skill.

It is usual to assess a realistic speed limit by examining the development alongside a particular road. Experience shows that the appropriate speed can be assessed from the development pattern, as schools, houses, factories and environmental conditions are the cues which a driver uses to determine at which speed he should travel. The expectancy of the risk of dogs, people, bicycles, motor traffic, intersections and other hazards of the road is increased with the density of roadside development. The driver thereupon slows down and adopts a matching speed.

These considerations influence the selection of the beginning and end of speed zones posted by signs, within which the speed limit is established.

Speed zoning of a selected rural highway in accordance with the environmental conditions where 50 mph would be too slow is being considered. This would be an experiment to determine what effect realistic rural speed zoning would have on accident experience. Eighty-five per cent of drivers on rural highways travel at or below speeds which fall between 65 and 70 mph and the effect of posted speed limits on drivers travelling at these speeds will be measured and any safety benefits evaluated.

In recreational areas, subject to heavy pedestrian movement from camps, etc., but without significant permanent roadside development, seasonal (summer) speed limits have been posted in order that drivers should be guided to travel at a speed which is perhaps lower than that which their normal expectancy of hazard would lead them to select. It is the expectancy of hazard which determines the speed which a driver selects, and a speed limit is a means of advising the driver that there are hazards which are beyond his normal expectancy and therefore would not be included in his subjective assessment of the speed at which he should travel.

Lower Yarra Crossing Authority

West Gate Bridge

A new road bridge over the Yarra River near the mouth of the river has been under construction since April 1968 on Route 9 as designed in 1954 by the Melbourne and Metropolitan Board of Works Town Planning Committee. The bridge was to have been completed in 1971 but a major accident on 15

October 1970 in which thirty-three men died will delay completion. A Royal Commission was appointed to investigate the accident.

In 1957 the Western Industries Association was formed and in 1965 established the Lower Yarra Crossing Authority. The main function of this Authority has been to construct a bridge over the river which would improve transport to and from the western metropolitan districts and thus relieve heavy industrial traffic from the arduous journey through the busy Footscray area. In December 1965 the State Government passed legislation, known as the *Lower Yarra Crossing Authority Act 1965*, granting the Lower Yarra Crossing Authority a 40 year franchise to construct and operate a high level toll bridge over the Yarra on the alignment of Route 9. The franchise length, from Graham Street Port Melbourne on the east to Williamstown Road Spotswood on the west, is approximately 3½ miles.

The Country Roads Board provides liaison between the Authority and the State Government and will construct the approach roads from the City to Graham Street Port Melbourne and from Williamstown Road to Princes Highway (Geelong Road)—a distance of more than 4 miles. The total length of major roadwork including the bridge and the Country Roads Board freeway is approximately 7½ miles. On 1 February 1967 the Victorian Government approved the plans and specifications of the Lower Yarra Crossing. The Victorian Government has also guaranteed the finances of the Lower Yarra Crossing Authority.

The West Gate Bridge will be the biggest road bridge in Australia. Traffic, travelling south-west, after passing through the toll plaza at Port Melbourne, will have a clear run to Geelong. The delay in paying the toll will be about six seconds. All traffic interchanges will be of a continuous type, which will provide a safe and speedy limited access throughway. Development of industrial and residential facilities on the western side of the Yarra will be accelerated, and eight traffic lanes will be provided for the anticipated increase in traffic.

Some of the principal dimensions are as follows :

Total length—8,500 ft.

Maximum width of bridge—122 ft 6 inches.

Traffic lanes—eight traffic lanes, the carriageway in each direction will have two 11 ft and two 11 ft 6 inches lanes and an 8 ft 2 inches break-down lane. This provides for a later increase to ten traffic lanes without structural alterations.

The predicted commercial vehicle content will be a maximum capacity of 15,500 vehicles per hour.

The navigation clearance at low water is 176 ft as required by the Melbourne Harbor Trust, thus providing for 170 ft clearance above an abnormally high tide.

All foundations have a rock base. On the Port Melbourne side it was necessary to support the piers on cylindrical piles 5 ft in diameter, the depth of which averaged 170 ft with a maximum depth of 205 ft. Most piers on the Williamstown side are based on spread concrete foundations as the rock is close to the surface. The estimated cost of the complete undertaking was \$42m. Further information on bridges is set out on pages 592 to 594.

Further reference, 1970

Road traffic accidents

The following tables include particulars of all road traffic accidents reported by the Victoria Police during the periods specified, which satisfied the following conditions :

1. that the accident occurred on any road, street, lane, throughfare, footpath, or place open to or used by the public by right or custom, at the time of the accident ;
2. that it involved :
 - (i) any road vehicle which, at the time of the accident, was in motion ; or
 - (ii) any animal which, at the time of the accident, was in motion and was being used for the purpose of transportation or travel ; or
 - (iii) any train passing over a level crossing for the time being open to the public ; and
3. that the accident resulted in :
 - (i) death of any person within a period of thirty days after the accident ; or
 - (ii) bodily injury to any person to an extent requiring surgical or medical treatment.

The tables do not include figures of accidents on railway lines (except at level crossings), or on private property. For these and other reasons, the total number of deaths shown in these tables is not comparable with those shown on page 161.

**VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
NUMBER OF PERSONS KILLED OR INJURED**

Period	Number of accidents	Persons killed	Persons injured	Per 100,000 of mean population		
				Number of accidents	Persons killed	Persons injured
1954-55	10,217	528	12,833	405	21	509
1955-56	10,606	582	13,483	414	23	525
1956-57	10,804	589	14,120	409	22	535
1957-58	11,233	571	15,015	418	21	559
1958-59	12,462	661	16,784	449	24	605
1959-60	12,267	698	16,595	430	24	582
1960-61	12,140	773	16,757	420	27	579
1961-62	11,639	818	16,074	393	28	543
1962-63	12,330	803	17,149	408	27	568
1963-64	13,067	838	18,401	423	27	595
1964-65	14,432	907	20,482	455	29	646
1965-66	14,110	933	20,277	442	29	636
1966-67	14,077	963	19,994	433	30	616
1967-68	15,113	868	21,932	458	26	664
1968-69	15,622	964	22,498	466	29	670

The table which follows provides a description of types of road users killed or injured in road traffic accidents occurring during the years 1966-67 to 1968-69 :

**VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
DESCRIPTION OF PERSONS KILLED OR INJURED**

Description	1966-67		1967-68		1968-69	
	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	343	7,858	317	8,787	391	9,109
Motor cyclists	12	381	15	501	29	642
Passengers (any type)	300	8,201	261	9,004	289	8,997
Pedestrians	265	2,570	229	2,612	215	2,716
Pedal cyclists	37	939	39	979	36	991
Other	6	45	7	49	4	43
Total	963	19,994	868	21,932	964	22,498

Particulars of victims of road traffic accidents during the years 1966-67 to 1968-69 are shown according to age in the following table :

**VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
AGE OF PERSONS KILLED OR INJURED**

Age group (years)	1966-67		1967-68		1968-69	
	Killed	Injured	Killed	Injured	Killed	Injured
Under 5	43	709	31	733	29	774
5 and under 7	11	412	15	431	15	462
7 and under 17	74	2,283	57	2,525	76	2,513
17 and under 21	150	4,163	147	4,698	163	4,734
21 and under 30	191	4,301	181	4,989	211	5,314
30 and under 40	115	2,411	85	2,589	102	2,627
40 and under 50	104	2,130	86	2,338	97	2,380
50 and under 60	90	1,636	90	1,655	109	1,710
60 and over	183	1,532	176	1,608	159	1,627
Not stated	2	417	..	366	3	357
Total	963	19,994	868	21,932	964	22,498

Australian Road Safety Council, 1966; Melbourne Transportation Committee, 1968

Civil aviation

Control of aviation

The Victorian *Air Navigation Act* 1958 prescribes that control of aviation within the State shall be vested in the Commonwealth. The Air Navigation Act and Regulations in Victoria are consequently administered by the Department of Civil Aviation through its Regional Director in Melbourne.

The functions performed by the Department include the following :

1. the registration and marking of aircraft ;
2. the determination and enforcement of airworthiness requirements for aircraft and the issue of certificates of airworthiness, certificates of type approval, and supervision of aircraft design ;
3. the licensing of pilots, navigators, aircraft radio operators, flight engineers, and aircraft maintenance engineers ;
4. the licensing of airline, aerial work, and charter operators, and supervision of their activities ;
5. the provision and maintenance of aeronautical communications, navigational aids, aerodromes, and landing grounds ;

6. the establishment and operation of air traffic control, aeronautical information, and search and rescue services ; and
7. the investigation of aircraft accidents, incidents, and defects.

Aerodromes

Victoria is served by ten Commonwealth Government owned aerodromes at Tullamarine (international), Essendon, Moorabbin, Avalon, Bacchus Marsh, Benalla, Echuca, Mallacoota, Mangalore, and Sale and by twenty-two licensed aerodromes at Ararat, Ballarat, Bairnsdale, Corryong, Grovedale, Hamilton, Horsham, Kerang, Latrobe Valley, Mildura, Nhill, Shepparton, Swan Hill, Warracknabeal, Warrnambool, Yarram, Portland, Birchip, Orbost, Stawell, St Arnaud, and Wycheproof.

Domestic operations at Melbourne Airport (Tullamarine) are still under consideration and no definite date has been set for their commencement. The licences of all the licensed aerodromes except Grovedale are held by the local government authority. Under the Aerodrome Local Ownership Plan assistance is given to local authorities to maintain licensed aerodromes on a \$1 for \$1 basis. Similar assistance is given the local authority to develop and maintain aerodromes which are or will be served by a regular public transport service. Local authorities which have received developmental assistance include Bairnsdale, Corryong, Horsham, Mildura, Nhill, Portland, Shepparton, Warracknabeal, and Warrnambool. The assistance authorised by the Commonwealth to Victorian local authorities for aerodrome works in the year ending 30 June 1970 was \$27,000 for development and \$80,000 for maintenance works.

In addition to these main aerodromes, there are hundreds of authorised landing grounds which serve the needs of the increasing number of light aircraft users throughout the State.

Private operations

In this category, aircraft are used for the personal purposes of the owner. The extent of this activity within the State may be gauged from the fact that there are 270 aircraft registered in the private category and approximately 2,580 licensed private aeroplane pilots in Victoria.

Aerial work operations

Aerial survey, spotting, agricultural operations, advertising, flying training, aerial ambulance operations, and flying for government purposes are examples of the operations included in this category. In terms of hours flown, the most significant operations are agricultural (see page 304) and flying training. In 1969 over 65,000 training hours were flown by training organisations in Victoria. In the interests of encouraging flying for defence and commercial purposes, training organisations receive financial assistance from the Commonwealth. They receive direct assistance in the form of subsidy payments and provision of facilities and indirect assistance through the Australian Flying Scholarship Scheme under which, in 1969-70, twenty-four Victorian resident pilots commenced flying training.

Charter operations

These consist of flights for the carriage of passengers or cargo for hire or reward, but which may not be notified to the general public as being

operated between fixed terminals or to fixed schedules, or for the carriage of passengers or cargo between fixed terminals to fixed schedules in circumstances in which the accommodation in the aircraft is not available to members of the public. During the 1950s most charter operations were conducted in single engine aircraft, but there is now an increasing use of the modern small twin engine "executive" aircraft. There are 120 Victorian based operators licensed to conduct charter operations and flying hours have increased, over a ten year period, from 1,825 in 1959 to over 34,000 in 1969.

Commuter services

Since the Second World War country or feeder air services within Victoria were commenced on different occasions but ceased when they proved uneconomic. In 1966 the Commonwealth Government decided a new attempt should be made to provide this type of air service between the capital and numerous country centres. As it was felt charter operators would be prevented by the Air Navigation Regulations from operating to a fixed schedule, it was decided to grant certain exemptions under the Regulations. A charter operator who met appropriate additional requirements and standards would be permitted to operate air services between centres to a fixed schedule and on a regular basis.

By October 1967 exemptions under the regulations had been granted to three operators. Using single and light twin engined aircraft capable of carrying six to thirteen passengers, these operators were approved to operate services to Stawell, Ararat, Ballarat, Kerang, Swan Hill, Echuca, Shepparton, Latrobe Valley, West Sale, and Bairnsdale, and to the interstate centres of Albury and Merimbula. Some of these services commenced in November 1967 and others followed with varying degrees of success and continuity. At May 1970 commuter services of the type in question were operating between the following centres on a regular basis: Essendon-Warracknabeal-Horsham, Essendon-Bairnsdale-Merimbula, Essendon-Sale, Essendon-Echuca-Swan Hill, and Albury-Mangalore-Essendon.

Melbourne (Tullamarine) Airport

Tullamarine was the site chosen for the development of Melbourne Airport when Essendon could not be further enlarged. The now completed aerodrome is 12½ miles from the G.P.O., and is accessible by a new freeway. The north-south and east-west runways of 8,500 and 7,500 ft, respectively, are capable of further extension and an elaborate system of turn offs permit runways to be vacated at 60 mph. Aircraft such as the Boeing 747 (Jumbo Jet) and supersonic aircraft up to 800,000 lb landing weight will be accommodated. Terminal apron accommodation can handle twenty large aircraft now and planned development is for seventy-six aircraft simultaneously.

The Terminal Building is a three storey structure with provision for international and domestic passengers, airline and departmental offices, restaurants, cocktail lounges, reception rooms and pilot briefings, and visitor observation areas. The construction is of precast-concrete floor slabs, beams and columns with external finish in brickwork and extensive glazing.

Instrument landing systems are provided for approaches from the north and east enabling an aircraft to land with a cloud base of 200 ft, and visibility of half a mile. Other navigation aids are long range and approach radars, distance measuring equipment, radio locator beacons and visual approach lights. The control tower cabin is 150 ft above ground level and enables complete visual observation of the airport and its surroundings. International air services commenced from the airport in July 1970 with domestic services due to follow by May 1971.

Passenger movements, which represent the total of embarkations and disembarkations, for 1969 for each Victorian aerodrome served by a regular service were as follows:

VICTORIA—PASSENGER MOVEMENTS, 1969

Airport	Passenger movements	Airport	Passenger movements
Essendon	2,431,200	Mildura	13,460
Portland	5,730	Warrnambool	6,590

Gliding clubs

Gliding is carried out mainly by clubs which operate at Bacchus Marsh, Benalla, Colac, Horsham, and Mildura. A Commonwealth subsidy is granted to clubs through the Gliding Federation of Australia.

Air traffic control

Control of air traffic is maintained by the Department of Civil Aviation through its Air Traffic Control Organisation. This embraces the closely co-ordinated sections of operational control which concerns each individual flight; airport control which applies to all movements on or within 20 miles of an aerodrome; and area control which controls aircraft along the main air routes to ensure collision avoidance. In conjunction with air traffic control, the Department maintains a wide range of air navigation aids and a comprehensive search and rescue organisation. This is described in detail on pages 773-775 of the *Victorian Year Book* 1965.

Aircraft parts and materials

There are about 142 organisations in Victoria which have been approved by the Department of Civil Aviation to distribute aircraft parts, materials, and fuel.

Radar developments in the Melbourne area

In the days before the general use of radar, departing aircraft were processed on mathematically calculated time standards, an aircraft being required to depart at a specific time after preceding traffic. Following aircraft were delayed until they had the required separation in time with previously departed aircraft.

Radar has given Air Traffic Control a new concept: aircraft can be observed safely clear of one another or can be directed safely around or past one another. By being able to monitor the disposition of air traffic, it is possible to ensure the safe orderly and expeditious flow of arriving and departing aircraft. A good example of the use of radar is found in the departure of a faster aircraft along the same route as a slower one. If the slower aircraft is several miles on its way, the faster one can be monitored on the same track provided it becomes vertically separated above the first

aircraft before the minimum distance of five miles between aircraft is reached. If this is not possible the faster aircraft is vectored five miles off track to pass the slower one in safety.

Radar was used with success during the Second World War to give early warning of air attack and to guide defending aircraft in their counter attacks. At the end of 1946 as a result of wartime commitments, Essendon was equipped with a radar facility (ex R.A.A.F.) for monitoring aircraft movements. Its performance was limited and it was soon replaced by better equipment with a remote indication system. This continued in use until 1957, when a "Cossor" approach control radar was installed to assist air traffic control in the Melbourne area.

This, in turn, was superseded in 1966 with the introduction of a modern sophisticated surveillance radar, which is located physically in a specially constructed building at Melbourne (Tullamarine) Airport, and was commissioned for full operation in 1967 at a cost of \$500,000. It is capable of handling traffic to a range of 160 miles.

The base installation, or "Radar Head", is located on a small hill overlooking the runway area. The antenna is mounted on a heavy latticed steel tower 70 ft high and rotates at 5 r.p.m. The radar radiates a peak power of 4 megawatts. Incoming information is relayed by co-axial cable some 2 miles to the operations building where it is reproduced on a series of 25 inch diameter T.V. type screens known as a Bright Display system. It is also relayed to the Essendon and Melbourne Airport Control Towers. The pattern of aircraft movements thus presented enables Air Traffic Control staff to keep constant watch on the position of all aircraft within the range of the radar.

It was always necessary in the early days of radar for the operator to watch the glowing screen in a darkened environment. Here the "sweep" or time base rotated around the screen like a single glowing spoke, leaving a "paint" or "blip" indicating the aircraft's position in its wake. It took some will-power for the radar operator not to be mesmerised into following the rotating sweep with his eyes and head. The new radar employs a device, known as a scan converter, which translates the rotating swept scan into a television type picture which can be viewed in almost any light conditions except direct sunlight. The screen remains circular in deference to the circular radar scan, and the blips still show as blips, but daylight viewing and a line map superimposed on the radar picture have made the life of the radar controller much easier.

In the Area Approach Control Centre, each sector has its own display with a designed range of 160 miles. The Arrivals Controller, who controls arriving aircraft on all routes from 80 miles into 30 miles, sees only a 0-90 mile range from the centre of display, and the Approach and Departures Controllers, who control all aircraft within 30 miles, see only 0-40 miles. These reduced ranges are electronically enlarged to take full advantage of the scan displays and this, in turn, gives better definition closer-in where traffic density is likely to be greatest.

Because of the separate positions of the controllers and the differences in viewing range, it is necessary for the position of an aircraft which is to be transferred from one controller to another to be indicated to the

accepting controller. This is done by an electronic symbol which can be positioned adjacent to an aircraft's blip and, by pressing a button, transferred to appear next to the corresponding blip on the screen of the accepting controller. Thus an arriving aircraft can be pointed out to the Arrivals Controller by the En Route Controller when the aircraft reaches the 90 mile range, and the Arrivals Controller can point out the same aircraft to the Approach Controller when the aircraft reaches the 40 mile range. The Approach Controller can provide the same service to the control towers on their 40 mile screens. The identification of a particular aircraft is thus passed around the room, and from the control centre to the control towers, positively and without the need for personal contact. With this new device, Melbourne Air Traffic Control has become appreciably more efficient. The Centre is now capable of handling a greater density of faster traffic with increased smoothness and facility for the industry.

Another radar facility provided at the Melbourne Approach Control Centre is a storm warning device, the full title of the service being "Joint Approach Control Meteorological Advisory Service" (JACMAS). The basic equipment for this service is located in the University of Melbourne. Information from the radar is relayed through a meteorological office in the city to be displayed on a series of small T.V. type screens mounted physically adjacent to the large bright-display screens. These enable each controller to assess weather conditions as he follows aircraft movements.

With increased traffic, the need has developed for a specialised approach control radar providing a more rapid rate of information renewal on aircraft in the critical approach area (i.e., within 40 miles of Melbourne). This additional equipment was expected to be in operation by the middle of 1971.

To complete the radar coverage of the main air routes in eastern Australia, additional radar equipment known as "digital remoting equipment" will be progressively installed at sites remote from the Operational Centres. This information will be relayed to the Operations Centres over a radio link giving a chain of information on all aircraft movements.

Civil aviation statistics

The following table shows particulars for 1969 of regular interstate and intrastate air services terminating in Victoria :

VICTORIA—REGULAR INTERSTATE AND INTRASTATE AIR SERVICES TERMINATING IN VICTORIA, 1969

Particulars		Interstate	Intrastate	Total
Miles flown	'000	23,545	126	23,671
Paying passengers	'000	2,602	12	2,614
Passenger miles	'000	1,117,715	1,938	1,119,653
Freight—				
Short tons		53,602	38	53,640
Ton miles	'000	23,610	6	23,616
Mail—				
Short tons		4,745	15	4,760
Ton miles	'000	2,201	2	2,203

The first of the following tables deals with aircraft registered and licences issued by the Department of Civil Aviation in Victoria, and the second with details of Essendon Airport activities:

VICTORIA—CIVIL AVIATION

Particulars	1965	1966	1967	1968	1969
Registered aircraft owners	236	332	370	391	362
Registered aircraft	510	630	742	754	785
Student pilot licences	1,726	2,574	2,672	2,548	2,559
Private pilot licences	1,271	1,927	2,253	2,510	2,844
Commercial pilot licences	259	481	515	613	597
Airline pilot licences	510	501	533	535	824
Aircraft maintenance engineers licences	728	757	864	873	900

VICTORIA—ESSENDON AIRPORT

Particulars	1966	1967	1968	1969
Domestic aircraft movements	48,243	49,939	50,066	54,192
Domestic passengers embarked	890,043	976,779	1,075,898	1,201,469
Domestic passengers disembarked	898,493	984,911	1,069,415	1,229,748
International aircraft movements	1,120	1,036	1,018	1,021
Passengers arriving/departing overseas	42,784	48,445	49,277	56,064

History of Civil Aviation, 1962; Classification of Flying Activities, 1964; Radio Aids to Air Navigation in Victoria, 1965; Aerial Agricultural Operations, 1966; Flying Training in Victoria, 1967; Regular Public Transport, 1968; Commuter Services, 1969

COMMUNICATIONS

Postmaster-General's Department

In 1837 Mr E. J. Foster, Clerk to the Bench at the Port Phillip Settlement, was officially permitted to act as Postmaster in addition to performing his normal duties. In the intervening years, the Postmaster-General's Department in Victoria has progressed from a staff of one, and a crude bark hut, to a large administration employing a staff of approximately 28,000 persons located throughout the State.

The complexity of modern communications requires specialisation in activities, and, to meet these requirements, the Victorian Administration is divided into six major sectors; Postal Services Division, Engineering Division, Telecommunications Division, Personnel Branch, Supply Branch, and Finance and Accounting Branch. Each of these sectors is further divided for efficient functioning.

At 30 June 1969 there were 330 official and 1,567 non-official post offices, 672 country automatic telephone exchanges, 576 country manual exchanges, and 104 metropolitan automatic exchanges. These offices and installations ensure that departmental services are within the reach of all but the most isolated homes.

To maintain the operating staff at desirable levels, large numbers of trainees are recruited each year. In 1969, 488 technicians-in-training began their five year course at either of the Departmental training schools in Tooronga (Melbourne) or Wendouree (Ballarat). Their course of training includes theory and laboratory studies in electronics including radio, television, telegraph transmission, and telephony. Trainees showing certain aptitudes during training may be trained further in specialised activities.

One hundred and eighty-nine linemen-in-training commenced a one year course in 1969 at one of the training schools in Doncaster (Mel-

bourne), Bendigo, or Wendouree. The subjects in their course include practical mathematics, science, applied electricity, magnetism, wood and metal work, aerial construction, conduits, cables, and skill with tools. In the same year, an eight months training course was provided for 145 postal clerks-in-training at the Postal Training School in Melbourne. About half of the training period was spent under actual working conditions at various post offices.

As well as postal, telephone, and telegraphic services, the Postmaster-General's Department also provides transmitting and other technical facilities for the national broadcasting and television services. The general supervision of broadcasting stations and television stations, however, is vested in the Australian Broadcasting Control Board under the *Broadcasting and Television Act 1942-1956*, while, under the same Act, the Australian Broadcasting Commission controls the activities of the National Broadcasting Service and National Television Service.

Major activities

The following information relates mainly to branches and divisions of the Australian Post Office that are associated with services directly available to the public.

Post Offices Branch

During the financial year 1968-69 new official post office buildings were opened at Healesville, Benalla, Portland, and Noble Park. Modern and attractive in appearance, yet strictly functional and planned to meet future needs, they provide facilities for the latest mail handling techniques as well as providing greatly improved amenities for staff.

Mail transported in containers

The use of standard-size containers to transport a variety of bulk materials has proved to be speedy and economical. The system was first used to dispatch surface mail from Australia on 11 April 1969, when two containers of 325 mail bags were placed aboard the new container vessel *Encounter Bay* at Melbourne for shipment to Britain.

Changed frequency of mail deliveries

Mail delivery frequency was changed in Victoria on 10 February 1969, when the Melbourne City deliveries were reduced to twice daily, and all other areas to once daily. In the same period changes were made in the dispatch procedures at the Mail Exchange and from 30 March 1969 a midnight dispatch was introduced to ensure that the 117 suburban letter delivery post offices received mail for delivery beginning early in the morning. Before this date, only 46 offices were receiving mail from the midnight dispatch.

Transport Branch

The Transport Branch of the Postal Services Division has a fleet of 519 vehicles and a staff of 405 persons. This figure includes 329 motor drivers who are employed largely on rostered shifts and who transport mails and clear public telephone coin boxes and street letter boxes throughout the metropolitan area. The Branch also provides a pool of sedan cars for authorised departmental staff, and undertakes the movement of bulk equip-

ment, stores, cables, and poles by truck to specified locations.

In some areas, mails are conveyed by private contractors. There are 1,164 of these services in Victoria which operate over a total of 13,054,165 miles, at a cost of \$1.6m per annum. Most of the mail routes operated under private contract serve the more sparsely populated areas of the State.

The vehicles allotted to the Transport Branch form only a part of the total fleet of 3,772 vehicles belonging to the Department in Victoria. This total includes the 3,253 vehicles which are allotted to the Engineering Division, and are stationed at various depots throughout the State. Many have been designed for specific duties, such as the conveyance of large drums of cable, lengthy telephone poles, or for use as mobile cranes. Others are fitted out as mobile workshops.

In addition to these vehicles, the Engineering Division also employs 476 major mechanical aids, the majority of which are used for earth-moving activities. Another 1,190 small mobile units are used for various special purposes.

Telecommunications services

These services are the joint responsibility of the Engineering Division and the Telecommunications Division. The Engineering Division provides and maintains the technical facilities for telephone and telegraph services and for the national radio and television networks. It allots frequencies, monitors transmissions, and issues licences for privately operated radio services. The Telecommunications Division makes telephone and telegraph facilities available to the public, orders new services, provides customer advice, issues telephone directories, and deals with other telecommunications administrative matters.

Automatic telephone service

Steady progress is being maintained towards providing a totally automatic telephone network throughout the State. During 1968-69 several new automatic telephone exchanges were brought into service, the largest ones being at Camperdown, Ferntree Gully, Kyneton, Maryborough, Myrtleford, and Terang.

Lonsdale Automatic Telephone Exchange

The new Lonsdale Exchange Building, for which the contract was let in August 1965, was completed in mid-1969. Work on the installation of exchange equipment has commenced but this is a long-range project estimated to take some years to complete. The old Central Telephone Exchange Building, which was completed in December 1909 at a cost of \$40,000 was demolished early in 1965. This building originally had only two floors, but a third floor was added at a later date. The new building has seventeen floors, and rises 232 ft above ground level. It has cost approximately \$6.8m. Each floor provides approximately 14,000 sq ft making a total of some 240,000 sq ft.

One of the greatest difficulties to overcome in any automatic exchange is the presence of dust, which works its way between switch contacts and causes noisy or intermittent circuits. To reduce this trouble to a minimum, the new building has few windows. Ventilation is supplied by an air-conditioning plant located on each of the seventeen floors. The building has

elaborate fire prevention facilities, five passenger lifts, and one goods lift.

Telephone directory covers

During recent years, the covers of the Department's metropolitan and country telephone directories have featured an attractive colour photograph of a landscape or other local item of interest to subscribers in the area served by that directory.

In 1968-69, however, the Department introduced a new feature to its country directory covers. Each directory was illustrated with a colour photograph of a bird commonly seen in that area. Birds selected for the series were the Red-browed Finch, the Elegant Parrot, Marsh Tern, Regent Parrot, Rufous Fantail, Yellow-tufted Honey Eater, and the Rainbow Bird.

Recorded information services

One new recorded information service—the "Thredbo News"—was introduced during 1968-69. This service came into use on 1 June 1969 to provide topical information for the ski enthusiast. In October 1968 the "T.A.B. Racing Service" registered the record number of 530,841 calls, 22,544 more than the previous highest total.

Additional telephone channels to Japan

During the year four additional telephone channels were provided between Australia and Japan by means of the INTELSAT III satellite. This brings to eight the total number of telephone circuits available to Japan—four via the SEACOM cable, in addition to the new circuits via the satellite.

Subscriber Trunk Dialling (S.T.D.)

S.T.D. facilities which enable a telephone subscriber to dial direct to distant subscribers, without the assistance of a P.M.G. operator, have continued to expand rapidly. During the year ended 30 June 1969, 220 exchanges in Victoria provided 585,426 services with access to S.T.D. Some additional centres to which S.T.D. became available during this time include Horsham, Camperdown, Dandenong, Frankston, Berwick, and Terang.

Automatic Telex

Automatic Telex is basically similar to S.T.D., but the type-written message from the teleprinter is communicated instead of the spoken word. During the year ended 30 June 1969 an additional 257 Telex services were connected, bringing the total services in operation to 1,388. Victorian Telex subscribers now have access to more than 5,067 services in Australia, and to some 100 countries overseas.

"Datel" service

There is now an increasing demand for facilities to transmit digital data for computers over telephone and telegraph lines. Known originally as "Data Transmission", the service has recently been re-named "Datel". Questions sent by teleprinter to the computer have to be converted to signals that can be "understood" by the computer. Likewise, answers have to be converted to a form that can be transmitted over the lines provided by the Department. This conversion is performed by a modulator/demodulator unit, known as a "Modem". Before 31 December 1968 customers

provided their own Modem units, and these varied considerably in their technical standards. From 1 January 1969 the Department has provided a range of standard Modems, manufactured to the latest international standards. The data can be sent over the telephone network ; over private telephone or telegraph lines providing point to point circuits for the customer's exclusive use ; or by means of the Telex network. All lines except those used in the Telex network are suitable for high transmission speeds.

At 30 June 1969, twenty-seven customers were using Datel services via the telephone network, and fourteen were using private lines.

Television translators

A television translator is basically a relay or booster station, designed to improve television reception in areas where reception is normally poor. The translator receives programmes from a parent T.V. station, and re-broadcasts them on a new wave-length, and under a new call-sign. Two new television translators were brought into operation in Victoria during 1968-69, one at Orbost, and the other at Eildon. The Orbost Translator, which relays the National television station ABLV4, began service operations during April 1969. It has a power of 50 watts, and serves a population of approximately 4,000. The Eildon translator, which was completed towards mid-1969, relays the National station ABVG3 and the local commercial station GMV6. This translator has an effective radiated power of 50 watts, and serves viewers in the Snobs Creek and Eildon Valley area.

Radio communications

All civil radio communications stations are licenced and controlled by the Radio Branch of the Engineering Division, where rigid technical standards for equipment design and performances are enforced by regular inspection, by monitoring, and by frequent transmission checks.

As a member of the International Telecommunications Union, the Postmaster-General's Department in Australia observes and checks all radio transmissions received in Australia. Results of these observations are forwarded to the International Frequency Registration Board in Geneva, Switzerland.

The Radio Branch investigates complaints from broadcast listeners and television viewers concerning interference to reception. On behalf of the Department of Shipping and Transport, its staff also inspect the radio installations aboard vessels in the ports of Melbourne and Geelong.

Revenue and expenditure

For the years prior to 1968-69, cash receipts were paid into the Commonwealth Consolidated Revenue Fund. As from 1968-69 cash receipts were paid into the Post Office Trust Account which forms part of the Trust Fund of the Commonwealth. In addition receipt classifications have been reconstituted and cannot be compared with those used previously.

In Victoria for the year 1968-69 cash receipts were \$163.3m. The collections were postal \$42.6m, telephone \$111.6m, telegraph \$3.5m, proceeds of sales \$1.8m, recoverable works \$3.7m, and international services \$0.1m.

As in the case of cash receipts, the new expenditure classifications cannot be compared with those used previously. These were cash payments made for Post Office purposes from the Commonwealth Consolidated Revenue Fund but are now made from the Post Office Trust Account.

In Victoria for the year 1968-69 cash expenditure was \$168.5m, salaries and wages were \$95.4m, materials \$46.8m, carriage of mails by contractors \$2.9m, buildings, sites, properties \$9.0m, accommodation and services \$5.0m, and other \$9.4m.

Statistics

The number of post offices and telephone offices and the number of persons employed by the Postmaster-General's Department in each of the five years 1964-65 to 1968-69 were as follows :

VICTORIA—POST OFFICES, TELEPHONE OFFICES, PERSONS EMPLOYED

Period	Number of post offices	Number of telephone offices	Persons employed					Total
			Permanent	Temporary and exempt	Semi- and non-official postmasters and staffs	Mail contractors	Other (a)	
1964-65	2,136	129	16,385	9,007	2,427	998	783	29,600
1965-66	2,094	109	16,160	9,555	2,387	942	813	29,857
1966-67	2,044	91	16,571	9,990	2,341	1,021	812	30,735
1967-68	1,981	77	17,312	9,753	2,267	1,052	791	31,175
1968-69	1,900	63	18,081	9,124	2,159	898	782	31,044

(a) Includes telephone office-keepers and part-time temporary and exempt employees.

The following table shows the total number and value of money orders and postal notes issued and paid in each of the five years 1964-65 to 1968-69 :

VICTORIA—MONEY ORDERS AND POSTAL ORDERS (a)

Period	Money Orders				Postal Orders			
	Issued		Paid		Issued		Paid	
	No.	Value	No.	Value	No.	Value	No.	Value
	'000	\$'000	'000	\$'000	'000	\$'000	'000	\$'000
1964-65	3,031	100,446	2,922	99,174	3,818	4,019	5,334	5,056
1965-66	3,230	107,608	2,980	107,197	3,846	3,863	4,918	4,747
1966-67	3,070	112,445	2,883	111,563	3,239	4,343	4,472	5,147
1967-68	2,763	115,739	2,573	115,197	3,303	5,484	3,410	5,330
1968-69	2,166	47,189	2,086	46,767	3,543	6,925	3,495	6,484

(a) From 1 June 1966 Postal Orders replaced Postal Notes.

Of the money orders issued in 1968-69, 2,039,459 for \$46,170,037 were payable in the Commonwealth of Australia and 126,911 for \$1,018,915 in other countries. The orders paid included 2,034,337 for \$45,771,449 issued in the Commonwealth, and 51,246 for \$995,713 in other countries.

Particulars relating to the number of letters, etc., posted and received within Victoria during the years 1964-65 to 1968-69 are as follows :

VICTORIA—LETTERS, ETC., POSTED AND RECEIVED
(’000)

Period	Letters, postcards, etc.	Registered articles (except parcels)	Newspapers and packets	Parcels (including those registered)
POSTED FOR DELIVERY WITHIN THE COMMONWEALTH				
1964-65	542,554	2,313	89,312	5,183
1965-66	577,379	2,414	99,611	4,943
1966-67	604,213	2,475	104,711	5,168
1967-68	580,820	2,385	100,854	5,531
1968-69	575,773	2,307	100,878	5,473
DISPATCHED TO AND RECEIVED FROM PLACES BEYOND THE COMMONWEALTH				
1964-65	71,489	1,059	16,348	544
1965-66	76,393	1,062	16,102	625
1966-67	82,866	1,087	16,137	672
1967-68	83,387	1,151	15,447	705
1968-69	91,724	1,171	14,372	734
TOTAL POSTED AND RECEIVED				
1964-65	614,042	3,372	105,660	5,726
1965-66	653,773	3,476	115,714	5,568
1966-67	687,079	3,562	120,848	5,840
1967-68	664,207	3,536	116,301	6,236
1968-69	667,497	3,478	115,250	6,207

The number of radio communication stations authorised in Victoria at 30 June in each of the years 1965 to 1969 is shown in the following table. Figures relate to radio communication (radio-telegraph and radio-telephone) stations only.

VICTORIA—RADIO COMMUNICATION STATIONS AUTHORISED

Class of station	1964-65	1965-66	1966-67	1967-68	1968-69
Transmitting and receiving—					
Fixed stations (a)—					
Aeronautical	4	4	4	4	4
Services with other countries	13	13	12	12	12
Other	222	241	216	223	226
Land stations (b)—					
Aeronautical	20	23	27	28	24
Base stations—					
Land mobile services	1,158	1,279	1,453	1,527	1,693
Harbour mobile services	24	22	21	22	23
Coast (c)	15	15	16	16	20
Special experimental	135	150	141	143	153
Mobile stations (d)—					
Aeronautical	316	362	422	449	437
Land mobile services	13,128	14,655	16,633	17,795	20,225
Harbour mobile services	162	150	159	163	178
Ships	407	473	526	626	728
Amateur stations	1,511	1,567	1,648	1,723	1,785
Total transmitting and receiving	17,115	18,954	21,278	22,731	25,508
Receiving only—					
Fixed stations (a)	193	198	197	198	199
Grand total	17,308	19,152	21,475	22,929	25,707

(a) Stations established at fixed locations for communication with other stations similarly established.

(b) Stations established at fixed locations for communication with mobile stations.

(c) Land stations for communication with ocean-going vessels.

(d) Equipment installed in motor vehicles and harbour vessels.

Information relating to the telephone service is given below for the years 1964-65 to 1968-69 :

VICTORIA—TELEPHONE SERVICES

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Telephone exchanges	1,625	1,565	1,506	1,425	1,353
Public telephones	7,279	7,292	7,344	7,373	7,463
Services in operation	631,950	660,974	693,134	727,575	770,162
Instruments connected	860,438	904,925	957,668	1,019,603	1,080,223
Instruments per 1,000 of population	268·2	281·2	292·7	306·7	319·2

Broadcast and television licences in force

The number of stations licensed for broadcasting and television, and the number of holders of Broadcast Listeners' and Television Viewers' Licences in Victoria at the end of the years 1964-65 to 1968-69 are shown below :

VICTORIA—NUMBER OF BROADCASTING AND TELEVISION LICENCES IN FORCE

Class of licence	1964-65	1965-66	1966-67	1967-68	1968-69
Broadcasting stations (a)	20	20	20	20	20
Television stations (b)	8	9	9	9	9
Broadcast receiver	512,205	141,639	114,778	94,982	80,685
Television receiver	488,583	87,640	92,822	96,789	73,078
Combined broadcast and television receiver (c)	132,413	574,955	598,035	629,729	647,814
Amateur	1,511	1,567	1,648	1,723	1,785

(a) Exclusive of eight broadcasting stations (including three shortwave) operated by the National Broadcasting Service.

(b) Exclusive of eight television stations operated by the National Television Service.

(c) Combined licences were introduced on 1 April 1965.

Overseas Telecommunications Commission

The Overseas Telecommunications Commission (Australia) is the authority responsible for Australia's external telecommunication services by cable and radio.

The Commission was established in August 1946 under the Overseas Telecommunications Act. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunication services of the British Commonwealth countries concerned and for establishment of a representative advisory board, the Commonwealth Telecommunications Board, to co-ordinate their development.

The Commission provides telegraph, telex, phototelegraph, and, in conjunction with the Postmaster-General's Department, telephone services with overseas countries and Australian territories. Leased one-way and two-way circuits are also provided for large commercial users. In addition, it operates the Australian coastal radio services for communication with ships at sea in Australian waters and high frequency radio services in communication with ships in any part of the world. The Commission's coastal radio stations also provide certain services to a number of remote stations within Australia and its territories.

To meet Australia's increasing demand for overseas communication channels, and because of limitations to performance and capacity inherent

in current forms of telegraph cables and high frequency radio systems, the Commission, in partnership with the overseas telecommunications authorities of Britain, Canada, and New Zealand, has installed a large capacity co-axial cable across the Pacific Ocean connecting Australia, New Zealand, and Canada via Suva and Honolulu.

The cable (COMPAC) was opened in December 1963, and forms part of a British Commonwealth large capacity cable scheme in which a complementary cable between Britain and Canada was opened late in 1961. The Commonwealth cable system feeds into the United States of America network at Hawaii and into the European network at London.

The last stage of the system, the South-East Asia cable project (SEACOM), extends the large capacity telephone cable from Sydney to Singapore and Kuala Lumpur via Cairns, Madang, Guam, Hong Kong, and Kota Kinabalu. It was opened for service on 30 March 1967.

The Commonwealth Cable Management Committee, comprising representatives of the partner Governments, Britain, Canada, Australia, New Zealand, Malaysia, and Singapore, administers COMPAC and SEACOM.

In 1964 a number of countries, including Australia, agreed to establish a global commercial communications satellite system at an estimated cost, for the space segment, of \$US200m. "Space segment" is a broad description of the orbiting satellites and the tracking, control, command, and related facilities required to support their operation.

In March 1968 a satellite earth station at Moree, New South Wales, owned and operated by the Commission, commenced commercial communications, including a capability for television transmissions/receptions, through an INTELSAT II satellite launched in January 1967 and positioned in stationary orbit 22,300 miles above the equator. This station was the first in Australia constructed as a "standard" station of the INTELSAT network and carries direct circuits between Australia and other countries in the Pacific Region. Since 15 February 1969 these services have been provided through a Pacific Ocean INTELSAT III satellite. The link with Japan, the first by satellite from Australia to an Asian country, was established for commercial operation on 14 March 1969.

The Commission's small satellite earth station at Carnarvon continued to provide a direct link between Western Australia and the United States of America for the National Aeronautics and Space Administration (NASA).

On 1 February 1969 the Carnarvon earth station commenced service as a tracking, telemetry and command (T.T. & C.) station for INTELSAT satellites. In the period up to 1 October 1969 it performed this function on a part-time basis while also providing communications for the National Aeronautics and Space Administration. From 1 October 1969 when the new standard earth station at Carnarvon became available for commercial services, the original station was fully devoted to T.T. & C.

An additional satellite earth station for the Commission, at Ceduna, South Australia, was officially opened in February 1970. This station will operate through an Indian Ocean INTELSAT III satellite to earth stations in the United Kingdom, Europe, Africa, the Middle East, and Asia.

The following tables give statistics of Australia's overseas radio-telephone services, and overseas cable and radio telegraph services over a five year period. Statistics of services with the Australian Territories are included.

AUSTRALIA—OVERSEAS TELECOMMUNICATIONS COMMISSION :
OVERSEAS RADIO-TELEPHONE SERVICES: NUMBER OF PAID MINUTES
('000)

Particulars	Year ended 31 March—					
	1968			1969		
	From Australia	To Australia	Total	From Australia	To Australia	Total
United Kingdom	640	476	1,116	804	671	1,475
Europe	225	90	315	264	95	359
U.S.A.	547	650	1,197	746	1,226	1,972
New Zealand	659	964	1,623	761	1,055	1,816
Papua/New Guinea	128	198	326	159	256	415
Japan	94	93	187	132	130	262
Canada	72	113	185	91	143	234
Hong Kong	78	43	121	92	63	155
Singapore	44	32	76	69	50	119
Malaysia	19	25	44	25	26	51
Others	142	113	255	173	169	342
Total	2,648	2,797	5,445	3,316	3,884	7,200

AUSTRALIA—OVERSEAS TELECOMMUNICATIONS COMMISSION :
TELEGRAPH SERVICES (CABLE AND RADIO):
NUMBER OF WORDS TRANSMITTED
('000)

Particulars	Year ended 31 March—				
	1965	1966	1967	1968	1969
From Australia—					
Ordinary	18,393	19,414	21,323	23,463	24,718
Letter	20,046	21,592	24,275	27,503	28,367
Press (a)	3,673	6,702	5,157	4,350	4,411
Other	3,227	3,510	4,258	4,579	3,885
Total	45,339	51,218	55,013	59,895	61,381
To Australia—					
Ordinary	17,249	18,228	20,021	21,535	23,927
Letter	17,609	18,777	20,688	22,469	24,537
Press (a)	10,720	7,289	4,850	4,079	2,867
Other	5,015	5,372	5,973	6,195	5,978
Total	50,593	49,666	51,532	54,278	57,309
Total traffic	95,932	100,884	106,545	114,173	118,690

(a) General decrease in press traffic due to growth in number of leased circuits.

Further reference, 1962

Appendix A

HAMILTON

History

The explorations of Major Mitchell in 1836 took him as far south as Portland Bay ; his route had taken him through some fine country, of which he told Edward Henty who had settled at the Bay. Leaving the area to return to Sydney, he travelled by Mt Napier and Mt Abrupt, passing over the Grange Burn which he so named, and through more good country of which Hamilton was later to be the central point. His full report made in Sydney created much interest, particularly concerning the good grazing country. The Hentys, the first to act on Mitchell's information, in 1837 took up "Muntham", about 30 miles west of Hamilton, after pushing a track through the forest which isolated the inland from Portland. The following year Samuel Pratt Winter took up "Murndal" nearby.

From 1839 onwards many runs were taken up. Charles Wedge and his brothers were the first to settle in the Hamilton district, taking up land along the Grange Burn, a portion of which was later included in the survey of the Hamilton township. Many of those taking up runs came from Van Diemen's Land and were not familiar with the squatting regulations, and by the end of 1840 there were many boundary disputes ; there were no fences, and boundaries were only marked by means of a creek or perhaps a furrow, and formed a haphazard pattern. Later arrivals further aggravated the position ; on finding all suitable land and water frontages already occupied, they just squeezed in, causing more trouble and bitterness.

To encourage the Aborigines to adopt a less nomadic existence an attempt was made in 1842 to settle them in a station of sixty huts at Mt Rouse, 18 miles east of Hamilton. Rations of meat and flour were distributed, but the venture was unsuccessful and was abandoned after a few years.

Between 1841 and 1843 sheep and wool prices fell and the pastoralists faced difficult times. The low prices forced many holders off their runs ; later, as sheep were unsaleable but tallow had some value, the sheep were slaughtered and the carcasses boiled down for tallow.

At that time rough tracks comprised the road system and in winter these were in poor condition. Recognised routes from Melbourne, Portland, Port Fairy, and the Wannon Ford converged at the Grange Burn at a point close to where Mitchell had made his crossing. Here the first signs of a township

developed. By 1843 the first inn, of slab sides with a bark roof, had been erected, as well as a store, post office, blacksmith shop, and two houses. By January 1850 the Grange, as the locality was then called, had developed sufficiently for the National School committee to apply for land for a school site. This was followed in March by the approval of David Beath's application to purchase land on which he had a store and other buildings. Following these requests, the Chief Surveyor, Robert Hoddle, instructed Wade, then surveying in the district, to survey a site for a township with some cultivation allotments; this was completed in May 1850, the new township was called Hamilton, and the first sale of building allotments took place in October 1851. While its original area was 1,293 acres, early plans show that it was confined within the boundaries of Cox, Lonsdale, Carmichael, and Martin Streets (180 acres). Beath's store was now located in the agricultural allotments at the Grange, while the inn was part of the 1,293 acres set apart for the Hamilton township. Because of the continued use of both names on mail, the Post Office directed that from 1 January 1854 the most recent name be used to obviate difficulties experienced in the distribution of letters.

The National School, now the State School, opened in June 1852, and other schools to open were the Hamilton Academy in 1870, Hamilton College in 1871, Alexandra College in 1872, and Hamilton High School in 1912, the latter being opened on a trial basis on the first floor of a shop in the main street.

On 29 November 1852 Hoddle recommended to the Surveyor-General in Sydney that land around Hamilton should be alienated because he had had a number of applications from Germans for land; twelve families of German Lutherans were interested in settling. They had come overland from South Australia to Portland where they had hoped to find better conditions, but being unable to buy the land they were interested in, and hearing of good land at Hamilton, they decided to investigate. Their efforts here were frustrated as they had been at Portland, where they had been submitted to numerous indignities. When the Hamilton land was finally submitted to auction the price was forced up to £10 an acre which they were unable to afford, and they had to be content with inferior land at £4.12.0 per acre. However, when their first crops were cut they were eagerly purchased, the straw selling at a high price as thatch for homes.

The poor state of roads and the lack of causeways and bridges were a continual source of irritation, as were the mail services which sometimes took nine days to come from Melbourne. However, the formation of the Dundas Road Board in August 1857 presaged the provision of improved roads and urgently needed bridges.

Squatting was a problem the Government found difficult to counter, and it prevented sales of land to the smaller farmer who would develop it. The *Land Act* 1862, enacted to overcome this, required personal attendance at the sale, together with a cash payment of the upset price to accompany the application. By this stipulation it was expected to attract only *bona fide* applicants, but the intentions of the Act were defeated, mainly by the squatters using dummy selectors. On one instance there was only feeble competition at a sale, as £800 had been paid prior to the sale to prevent competition. Other sales showed similar trends, and it became evident that

successful applicants had in fact prevented competition by buying off intending purchasers.

The first land sale in Hamilton under this Act in September 1862 created great interest ; 23,687 acres were offered in 136 allotments. Where more than one person had applied for the same allotment a ballot was held, and with up to 1,200 applications balloting would frequently last all night. Interest in the land sales appeared whenever fresh areas were opened up, and up to a thousand persons would be waiting for the opening of the Lands Office to pay their deposits. Over 300,000 acres was applied for at the September sale, the upset price being 12s 6d per acre.

When it became evident that *bona fide* settlers were not becoming the selectors and that very few of those successful in obtaining land would eventually occupy and cultivate it, further changes made the Act more successful. With contract survey parties active in the district the land rapidly changed from Crown land to private ownership and by the end of the century many substantial estates surrounded Hamilton. After the discharge of servicemen from the First and Second World Wars, the Closer Settlement Commission subdivided some forty-four of the larger estates around Hamilton into several hundred holdings to provide for the re-settlement of these men. Under the scheme a house, buildings, fencing, and water were provided, which enabled the settler to get his block under production as soon as possible. In addition to opening up more land, re-settlement also benefited the district through the extension of roads and by the provision of schools and other public amenities.

The failure of banks in 1893 had less impact on the Hamilton district than elsewhere, apparently because of its well established rural community on whom it chiefly relied. While the confidence of some may have been shaken through financial losses it did not affect land sales, and purchasers continued to pay normal prices. Hamilton appeared to be one of the few areas in Victoria to have escaped a serious depression.

Bushfires have always been a danger in the district. Records show that on Black Thursday (6 February 1851) the district suffered considerable losses in sheep and property. Other serious fires occurred in 1860, 1893, 1900, and the most destructive was in 1944. The enforcement of measures to prevent fires and the preventive action of rural fire fighting units has greatly reduced the fire danger, but in an emergency many farm fire fighting units, both heavy and light, are available.

While entertainment through mass media is now available, the early settlers had no such amenities, but usually visited each other's homes to enjoy some social life. The opening of mechanics institutes was a means of education and entertainment that quickly assumed an important place in the community. In 1859 the Hamilton Mechanics Institute was already meeting such a need, as well as providing a selection of books. The concert room of the Victoria Hotel was another location for many social occasions, and was also the first meeting place for the local council which has since moved its location on several occasions, the last move being into its present modern premises.

Gas first appeared in Hamilton in 1877, but it was not until 1910 that outside lighting of business premises by gas was made possible. Electricity was introduced soon after, and since the end of the Second World War the

State Electricity Commission has extended electricity supply to country areas, bringing many comforts to people living on the land.

In 1910 district farming methods underwent a big change. A consignment of some twenty harvesters, drills, and reapers and binders, mainly of imported manufacture and valued at £1,000, arrived in Hamilton. This mechanisation of farming methods indicated that the material prosperity and development of the district was due to agriculture rather than to industry. The district has always had a reputation for its high quality wool, and on several occasions in the 1950s prices realised were at a record high level; in fact, its lambs' wool then also broke world records when it brought 312 pence per lb.

It was not until 1932 when the district was just emerging from the years of depression that Hamilton established its first significant industry. This was a butter factory which was successful from the beginning, but after a series of amalgamations which enabled it to transfer manufacture to various centres of production, it closed in 1962. A twist drill factory, opened in 1946, has continued to operate in the city.

The water supply for Hamilton in the 1860s was carted mainly from stagnant pools on the outskirts of the town. The Water Trust now has storage capacity for over 300 million gallons of mountain water, the last storage being completed in 1969. This now caters for a population of over 10,000, compared with a 30 million gallon supply for a population of 4,170 in 1901.

Climate

Hamilton is 615 feet above sea level and approximately 40 miles from the coast. These two factors controlling air temperature, and the depressions associated with the westerly winds, largely explain Hamilton's climate. It has a climate of mild winters and warm summers, its mean temperature being about 3°F. lower than that of Melbourne.

The annual rainfall, averaged over a period of 93 years, is 27·17 inches and has varied between 14·29 inches (in 1967) and 42·97 inches (in 1946); the average winter rainfall is 8·82 inches, and that of the summer 4·36 inches. The highest monthly rainfall ever recorded was 11·91 inches registered in March 1946, of which almost 8 inches fell in three days. Rainfall is fairly reliable, giving a growing season from April to November in most years, and the season has a good chance of starting in March every second year. The normal period of flush growth is spring when adequate soil moisture coincides with rising temperatures.

In summer the days are not as warm as at stations further inland, February being the hottest month with an average maximum of 78·7°F. The humidity is considerably lower than that experienced by coastal stations. Summer nights are mild with an average minimum temperature of 50·7°F. In winter, the average maximum temperature is lowest (54·0°F.) in July, the nights being cold with the average minimum temperature falling to 39·3°F. Light frosts occur on an average of 26 days a year. The mean diurnal range of temperature is 14·9°F. in June and 26·6°F. in January. Comparing these values with Portland's figures of 12·2°F. and 16·3°F., respectively, it can be seen that Hamilton's temperatures are well removed from oceanic influences.

Saturation deficit, which is the difference between the saturation vapour pressure and the actual vapour pressure of the air, is a measure of the drying

power of the atmosphere and can be used as a guide to evaporation. The values at Hamilton range from 0.270 millibars in January to 0.039 millibars in June. Thus the "water deficit" of the air is highest in summer and the evaporation is very much greater in summer than in winter. January evaporation is between 5 and 7 inches while June evaporation ranges between 1 and 1.5 inches.

Geology

Hamilton is built on the lava flows of ancient volcanoes which radioactive dating has shown are of the order of $4\frac{1}{2}$ million years old. Because of its age the terrain is deeply weathered, and carries some very ancient soils. Another result of the antiquity of the terrain is that the streams have cut their courses deep into the country rock. A few miles west of Hamilton the twin streams Grange Burn and Muddy Creek have incised their channels about 200 ft so that the banks reveal the whole geological history of the area.

Beneath the basalt the pre-volcanic terrain is preserved. It includes swamplands, lake deposits, and marshland soils with carbonate nodules. The terrain was flat, and was probably part of a coastal plain not long abandoned by the sea. Numerous trains of large bubbles show that the lava flows moved over wet country. In the fossil soil below the basalt are stumps of trees in position of growth, and it appears that the forest was destroyed by the advancing lava flows. The tree stumps to be seen in the banks of Grange Burn under the basalt are celery top pines (*Phyllocladus*), now extinct in Victoria but still living in the rainforests of western Tasmania; they require wet conditions. Sifting the fossil soil between the stumps has yielded the teeth of various possums, bats, and wallabies which lived in that ancient forest.

Analysis of the pollens, spores, and leaves from the lake deposits under the basalt has shown that the subtropical forest which provided the raw materials for the brown coals of Victoria was dying out, and that the present day eucalyptus-acacia flora was replacing it; there was roughly half of each. A similar record of this floral revolution has recently been discovered in the Ballarat district. The Grange Burn lake deposits have also yielded fossil freshwater sponges, and many different kinds of diatoms. In the fossil soil at Grange Burn volcanic ash is present, and nearby on Muddy Creek there is a thick deposit, proving that a volcano existed not far away. After the explosive volcanic activity which produced the ash, there was the considerable effusive phase that produced the lava flows.

Grange Burn and Muddy Creek have cut through still deeper layers to reveal an earlier geological history which shows that the Hamilton area, before the basalts and before the softwood forests, was completely different because it was covered by the sea. The evidence for this is extensive strata of marine sediments often packed with sea shells and other marine fossils. Hamilton is noted for these fossils and many large museums of the world have samples from this site, where the fossil beds are justly renowned for the rich fauna yielding hundreds of well preserved species. There are rocks composed almost completely of the minute shells of Foraminifera; in one bed alone there are about 150 species of sea shells (Mollusca), including many now found only in the warmer waters to the north. There are also

numerous sea stars and similar marine forms (Echinodermata), corals, and sea mats (Polyzoa), and bones of whales and the teeth of sharks are not uncommon. Such a mass of organic remains with comparatively little sediment from the land is unusual, but the reason for these special conditions in the Hamilton region is easy to find. Jutting up through the marine beds are masses of quartz porphyry which are so hard and so difficult to erode that they yielded little sediment, while the warm shallow seas thrived with the life that yielded the fossil remains. The porphyry reefs also provided a substrate for rock shells and so increased the number of types of molluscan life. The position of the bones of a fossil whale suggests that it came to rub itself against one of these humpbacks of porphyry.

One of the rarest groups of fossils in Australia is that of the ancestors (of Tertiary age) of the distinctive Australian marsupials, particularly when occurring in rocks which can be dated. The Hamilton area has produced such a fossil, for part of a kangaroo was discovered in a marine bed on Grange Burn.

Geography

Hamilton is situated on the western fringe of one of the largest volcanic plains in the world, and this has caused the undulating character of the Hamilton district. The northern and eastern horizons are dominated by the Grampians, a mountainous backbone which is a continuation of the Great Dividing Range. South of Hamilton the undulating country is broken by Mt Napier, a composite volcanic cone, which is 1,440 ft above sea level, and which, together with Mt Rouse at Penshurst further east of Hamilton, was the source of most of the lava flow covering the Hamilton area. The oldest lava flows are deeply weathered and are suited to agriculture.

The succession of lava flows and the slight grade have caused an ill-defined drainage pattern. The Wannon River is the largest stream in the district and is joined by a number of small tributaries, including the Grange Burn which flows through Hamilton. To the east of Hamilton the Wannon River has been diverted to the north-west by a lava flow, and it now passes through a large chain of swamps around the edge of the flow. To the west of Hamilton, the Wannon flowing over the end of the lava flow formed the Wannon Falls and the Nigretta Falls. The collapse of the underground caverns in the lava sheet have added to this ill-defined drainage pattern; where the land has sagged several irregular lakes such as Lake Linlithgow dot the landscape.

The Hamilton district with its temperate climate and fertile gently undulating basalt plain is an intensively farmed district with the main concentration on the production of sheep and fat lambs, but with emphasis also on beef cattle and dairying. Pastures, either improved or natural, provide most of the grazing but special purpose crops of oats, rape, chou moellier, and turnips are grown, principally as supplementary feed for stock during autumn and winter.

Soils, land use, and pastures

The soils in the Hamilton area are typically podsoils formed on the basalt flows constituting the western fringe of the volcanic plains. These basalt flows forming the parent material of this area are probably late

Pliocene in age (1 to 6 million years old). More recent basalt flows occur at Mt Napier and Mt Eccles and these could be as little as 4,000 years old. Deep kaolinitic weathering with only mild erosion has produced a gently rolling relief. Podsollic soils have developed on the basalt and are moderately acid ; laterisation of the basalt has been particularly intense around Hamilton and the soils are grey-brown with redder, more friable sub-soils. The soils are used mainly for pastoral purposes, but they are well-structured and are also used for cultivation ; mineral deficiencies have been corrected by the use of fertilisers. Exceptions to this general soil pattern occur in areas where recent lava flows have not weathered sufficiently. Recent lava flows from Mt Napier into Harman Valley are still skeletal soils and these stony rises are forested. In many low lying areas subject to inundation and deposition of alluvium, swamp-type soils have developed. These soils are normally heavy clays, but sometimes peat occurs in swamps. Where drainage has been restricted, these soils are often saline and have poor structure.

Originally the area appears to have been a tall or savannah woodland of swamp gum, blackwood, and she-oak, and the removal of this timber left a pasture of native grasses ; following the widespread clearing, the swamp gum failed to regenerate successfully. The soils in the area were eminently suited to the development of stable perennial pastures based on native grasses mainly of *Danthonia* species. Because of the tree-less nature and gently undulating topography of the land the region was very suitable for Merino wool production, which became the dominant land use ; grazing about one sheep per acre continued with little change up to 1925.

During the late 1920s and the 1930s farmers in the district began to adopt pasture improvement methods which had been developed in South Australia. These involved the introduction of a pasture legume, subterranean clover, and the application of superphosphate to the pasture, and resulted in a marked change in the productivity and botanical composition of the pastures. The new pastures are much more productive and stock numbers increased steadily and in 1969 were three times those of 1925.

Between 1925 and 1940, 28 per cent of the rural area in the Western Statistical Division had been sown with subterranean clover. In the post-war period pasture improvement increased rapidly, reaching 62 per cent of the area in 1960 and 84 per cent by 1968. Improved pastures are based largely on perennial ryegrass and subterranean clover, but increasing use is being made of summer drough-resistant perennial grasses, particularly *phalaris tuberosa* and currie cocksfoot.

The area is predominantly a Merino wool growing area, although there are increasing numbers of beef cattle. Some stronger woolled comeback type sheep have been introduced as well as limited numbers of prime lamb breeds. Most of the cropping in the area is for oat grain, although small areas of barley and oil seed crops occur.

Superphosphate is applied annually at an average rate of about a hundredweight per acre, and is still the major fertiliser for the area. However, on large tracts of land which have long histories of top dressing, marginal deficiencies of potash are becoming evident. In some areas pasture productivity is improved with the trace element molybdenum, and occasionally the application of copper sulphate has produced good results in terms of stock health.

Wool production

Woolgrowing is the economic basis of the City of Hamilton, and the returns from wool comprise three quarters of farm incomes. Wool has held this predominant position since Hamilton was first settled, and since then woolgrowing has seldom been seriously challenged as the major form of land use ; however, in the late 1960s with declining wool prices, beef production became a stronger competitor.

A typical woolgrowing property consists of an owner-operated farm of 500 to 1,000 acres, but about 10 per cent of sheep properties in the Shire of Dundas are over 2,000 acres. Property size is changing slowly with both small and large properties being reduced in number. The post-war land settlement schemes intensified the development of the grazing industry and the district's social structure. Merino woolgrowing is the major enterprise and two thirds of properties run Merino sheep whilst the other third run Comeback, Corriedale, or Polwarth sheep. A small number of flocks produce fat lambs which are mainly sold for local consumption. Cattle are commonly run in conjunction with sheep, the proportion varying from one to five beasts per 100 sheep.

Flocks for wool production comprise breeding ewes, wethers, and young sheep of both sexes. Wethers, as efficient wool producers, are often kept until 3 or 4 years of age in Corriedale and Polwarth flocks and up to 5 or 6 years in Merino flocks. They are then sold for mutton, much of which is exported through Portland, making an important contribution to Australia's overseas mutton trade. When wethers are run, the breeding ewes normally comprise from 30 to 40 per cent of the flock. Ewes bearing and weaning lambs average 80 per cent of a breeding flock, and one ram is used for from 30 to 60 ewes. During the 1950s mating was generally timed for autumn lambing, but by the mid-1960s more flocks were lambing in the spring than in the autumn. This change occurred at the same time as research at the Pastoral Research Station indicated the advantages of spring lambing.

The number of sheep grazed per acre is a significant factor affecting the profitability of wool production. A survey conducted in the district by the Bureau of Agricultural Economics between 1958 and 1962 showed that three quarters of properties on the basalt plain carried more than two and a half sheep per acre, but not more than half those on the Dundas highland carried this number. Shearing is traditionally a springtime activity, but in recent years many properties have changed to autumn shearing. Wool from the Hamilton area is usually classed in the shed after skirting and rolling the fleeces, but some is re-classed on reaching the broker's store; it is well known for its quality and its standard of preparation, and is generally sold at Portland or Geelong.

During the drought of 1967 and early 1968 the number of sheep declined by 15 per cent in the Western District, and by March 1969 was still 4 per cent below the 1967 level. The rainfall during 1967 was the lowest recorded at Hamilton since the 1877 drought, and many graziers had to purchase fodder to sustain their flocks. In addition, the price of wool declined drastically in 1967 and 1968, the decline being more severe in the crossbred wools produced by Corriedales and Polwarths. The combined effect of drought and low wool prices left the industry seriously indebted, and although

producers still have confidence in wool as their main source of income, there is evidence of a swing away from crossbred wools and of an interest in alternative forms of production such as beef.

Beef production

Beef production has been associated with wool growing since the early days of settlement in the Western District, and around Hamilton approximately one fifth of the pasture is now used by cattle. Very few properties are devoted entirely to beef cattle, but almost all farms carry some cattle and the majority have between one and five beasts per 100 sheep. A Bureau of Agricultural Economics survey made from 1958 to 1962 showed that 10 per cent of farm income was derived from beef; a recent study showed that this had risen to 20 per cent in the period 1965 to 1968.

The form of beef enterprise adopted varies considerably. Many properties carry breeding cows, but vary the age and condition at which they market the progeny. They frequently sell calves from pure beef herds at special weaner cattle sales, where quality cattle are keenly sought for fattening. Other properties carry the young cattle on, fatten them at 1½ to 2½ years of age, and generally sell them in the Hamilton market as they reach market condition. A proportion of steers is carried through to three years of age and sold as fat bullocks. Vealer production is also popular and the calves are sold at 6 to 10 months of age; cows with some dairy breeding for high milk production are often used for breeding, and they are grazed at lower stocking rates than are cows producing calves in store condition. A few properties produce high quality young beef by taking weaned calves on to fifteen months and feeding them grain, hay, and silage during the summer and autumn.

The Hereford is the most popular breed in the Hamilton area, but Angus and Shorthorn breeds are well represented. Cross breeding between beef breeds is quite common, and on smaller properties the herds have often originated as dairy herds which have been crossed to beef bulls. In recent years, and particularly since the 1967-68 drought, Friesian cattle have been seen in increasing numbers. Friesian cows crossed with bulls of beef breeds produce vealers, and steers from dairy herds are sometimes fattened. A number of properties rear dairy bred calves on milk substitute for beef production. The surplus of wheat in the late 1960s depressed the prices of feed grains, and the feeding of grain to beef cattle became economically sound. The Hamilton Pastoral Research Station has investigated fattening cattle on hay and oats over the summer period, and has demonstrated that steers can be fattened profitably at this time. Cross breeding seems to be a likely trend, and on present indications there will be an increase in cattle numbers relative to sheep. Prices for finished cattle have been relatively stable and tended upwards during the 1960s whilst wool prices have declined.

Dairying

The land around Hamilton is mostly unsuitable or marginal for dairy production, but in favourable locations with more fertile soil dairying has been carried out, and sideline dairying with small herds on mixed farms has been practised, particularly to the east of Hamilton. At a greater

distance at Macarthur, Wallacedale, Coleraine, Casterton, and Merino, dairying has been a firmly established form of production since the turn of the century.

During the depression of the 1930s the price of butter compared favourably with wool and meat prices, and dairying expanded rapidly. In 1932 a butter factory was established at Hamilton, and within a few years achieved a production of 1,000 tons of butter per year, drawing supplies from as far afield as Casterton, Merino, and Peshurst in competition with the local factories. In a series of amalgamations it took over the factories at Macarthur, Coleraine, and Merino, and re-organised them to cater for the local production. Dairy production was further stimulated with the resettlement of returned servicemen after the Second World War, but with the high wool prices of the 1950s dairying declined in importance, and the Hamilton butter factory ceased production in 1962.

During the 1960s the number of cows used for dairy production in the area around Hamilton declined by 25 per cent, but most of the decline involved a changeover to beef production. However, several specialist dairy farms continue in the area for the supply of wholemilk to Hamilton. These include one of Victoria's best Friesian studs, a herd of 160 at Strathkellar.

The most popular dairy breeds in the district are Jersey, Milking Shorthorn, and Friesian. Because of the long dry summer, cows are usually calved in late autumn and early winter; in the late 1960s prices for calves increased substantially as a result of increasing interest in beef and veal production.

In the specialist dairy areas farther from Hamilton, dairy production continues to be a profitable enterprise. In the late 1960s the collection and manufacture of dairy products was again re-organised when a large co-operative took over all the factories to the south and west of Hamilton and concentrated all manufacturing at Koroit and Portland. This led to a higher proportion of wholemilk being collected, and an increase in the production of dried milk products.

Crops

Although crop production is seldom a major enterprise on grazing properties, many landholders grow small areas of crop. Cropping is often undertaken in the process of improving native pasture, and many pastures have been established by sowing subterranean clover and perennial grasses with an oat crop. The most commonly grown crop is oats, while some wheat and barley are grown on better drained soils; waterlogging of the soil in winter is frequently a problem, as it reduces the yields of most crops. Climatic and soil conditions in the district suit oats better than either wheat or barley. Oat crops are often grazed during winter to supplement pasture, and may be conserved as hay or harvested as grain either for sale or for stock feed. Mustard and linseed are grown on a small scale, usually on a contract basis, and there is an increasing interest in rape seed for oil.

Grazing enterprises, although now less profitable than in the previous decades, remain more attractive than cereals, and the prices obtained recently do not encourage the expansion of cereal growing. The only

increase in crop production appears to be in rape seed for vegetable oil production; mustard, linseed, and field peas maintain a fairly steady level of demand.

City of Hamilton

Hamilton was created a local government area in 1859, proclaimed a borough in 1863, a town in 1928, and a city in 1949. The city now covers an area of 5,351 acres and in 1969 the population was 10,160. There were 2,936 dwellings and 276 shops and factories, with a net annual value of \$11.5m, an unimproved capital value of \$9.2m, and a capital improved value of \$28.4m. A planning scheme for Hamilton has been completed and Ministerial approval was awaited in 1969. The undertakings conducted by the Council are the municipal saleyards, abattoirs, and by-products plant, and the Peshurst quarry; their combined annual income is about \$175,000.

Hamilton has developed as a market and district shopping centre. The importance of Hamilton in the wool industry has been recognised by the State Department of Agriculture which has established near the City the State's first regional veterinary diagnostic laboratory; it specialises in sheep diseases such as foot rot. The city is well served with rail, road, and air transport, gas, electricity, reticulated water supply, and sewerage. Hamilton radio broadcasting station 3HA is a commercial station serving western Victoria. Television facilities are provided from BTV 6 (Ballarat) and SES 8 (Mount Gambier), and one National station, ABRV 3 at Ballarat, relays programmes from Melbourne. The *Hamilton Spectator*, printed thrice weekly, covers an area within a 50 mile radius.

New buildings comprising council chambers, administrative block and new foyer for the Town Hall, and the Art Gallery and Regional Library form a civic complex which serves various administrative and cultural functions. An arts council co-ordinates the activities of various cultural groups, and has organised festivals in music, drama, and ballet. The botanical gardens with a music bowl, and numerous parks and reserves throughout the city offer other amenities. Various sports clubs flourish in the city. There is an Olympic swimming pool, and a basketball stadium was completed at a cost of \$75,000 in the late 1960s.

Ten churches, many of which are architecturally distinguished and historically significant, cater for the religious needs of the community.

Shire of Dundas

Initially created the Dundas Road Board District in August 1957, the Shire of Dundas was proclaimed a local government area in December 1863. Its present area of 1,338 square miles surrounding the City of Hamilton includes much of the land taken up by squatters. The townships of the Shire date from the middle of the nineteenth century. Cavendish was surveyed in 1850, and Tarrington (known as Hochkirch until 1914) was established by the Lutheran settlers who had migrated from the Lyndoch Valley in South Australia. Byaduk, situated in a valley of volcanic formation, dates back to the 1860s when the district was opened for selection. Fluctuating periods of development have dictated the demand for inns, post offices, mills, stores, butter factories, blacksmiths, shops, and other services.

Since 1945 the growth of soldier settlement has stimulated Shire development. Between 1946 and 1959 the Soldier Settlement Commission purchased the whole or part of twenty-one separate properties within the Shire, involving over 63,000 acres which provided 115 settlement blocks. This has resulted in greater demand for services, and general development. Agricultural research with its emphasis on breeding and techniques, as well as increased stud activities, has increased the livestock carried in the Shire. The Department of Agriculture has assisted in this with its Pastoral Research Station and its diagnostic laboratory.

Water supply and sewerage

These services are supplied by the Hamilton Waterworks Trust, the Hamilton Sewerage Authority, and the Shire of Dundas Waterworks Trust. Each is autonomous, but, as the State Government usually provides considerable financial aid, the engineering works and financial policies are supervised by the State Rivers and Water Supply Commission. The Hamilton Waterworks Trust, constituted in 1898, controls water supplies to a population of 10,000 whose annual consumption is 340 million gallons. The headwaters of the supply are four creeks on the western slopes of the Victoria Range in the Grampians. Water is delivered through twenty-eight miles of pipeline to two reservoirs with a combined capacity of 275 million gallons, and two service basins, each with a capacity of fourteen million gallons. From here the water travels by feeder mains to the Hamilton reticulation system. Capital cost of the works was \$1.3m.

The Hamilton Sewerage Authority, constituted in 1935, serves a population of 10,000 housed in 2,800 dwellings. Raw sewage gravitates to a main pumping station, from where it is pumped through a concrete rising main to the treatment works, 3 miles south-west of Hamilton. The works comprise a grit chamber, sedimentation tanks, separate sludge digestion tanks, sludge drying beds, and trickle filters. Final disposal of effluent is by irrigation on an area of about 200 acres. The capital cost of works to 1969 was \$690,000.

Shire of Dundas Waterworks Trust

The establishment of a water supply service to Cavendish and a proposed supply to Tarrington is controlled by the Shire of Dundas Waterworks Trust. Water for Cavendish with a population of 220 will be taken from the Hamilton Waterworks Trust's supply main and delivered by pipeline to a 500,000 gallon storage reservoir near the town. The works will cost about \$80,000 and construction began in September 1969. A proposal has been made for the supply of water to Tarrington. Under this scheme water will be purchased from the Hamilton Waterworks Trust and transferred to the Tarrington system at a point near the water tower in Mt Napier Road, Hamilton. It will then be pumped through four miles of rising main to a 40,000 gallon elevated storage tank at Tarrington. The works are estimated to cost \$71,000 and will serve a population of 280.

Wannon River investigation

The Parliamentary Public Works Committee has made a comprehensive investigation of the resources of the Wannon River. Its report, completed in November 1968, recommended that the State Rivers and Water Supply

Commission proceed to an advanced planning stage of the Burrah Gap-Bullrush Swamp proposal. This is based on a 20,000 acre ft storage and associated distribution works near Burrah Gap on the Wannon River, the works to be developed in stages but only on condition that a referendum of landholders proved a demand for the scheme. Water would be conveyed from Burrah Gap, north of Dunkeld, by pipeline to a storage at Bullrush Swamp 12 miles east of Hamilton. This would provide water for urban and industrial purposes in Hamilton and surrounding towns, as well as for stock and domestic use.

Hamilton Hydrographic Centre

As part of its programme of river and stream measurement in Victoria the State Rivers and Water Supply Commission established the Hamilton Hydrographic Centre in January 1965. It controls eighty-two permanent recording stations on selected streams through the Hamilton, Horsham, and Camperdown areas.

Trade, industry, and services

Gross earnings for the area within about 50 miles of Hamilton have recently been estimated at \$72m a year. In this figure, secondary industries and trade are less important than the rural industries. The area contains some 7,500 rural holdings which run more than 250,000 cattle and 5 million sheep. The district's wool clip, which provides its major source of income, is more than 50 million lb a year. Apart from the pastoral activities, wheat, oats, barley, fruit, and vegetables are cultivated. The biggest of these, the oat crop, covers some 35,000 acres annually.

The secondary industries are generally geared to serve the primary producers. Most of the city's seventy-one factories are service industries or are based on primary products available in the district. The city has two sawmills, using the readily available red gum timber. The Hamilton Hardy Wool Company is being revived to apply its wool scouring process in the area. Other larger industries include the Frost Engineering Co. Ltd, which employs eighty-six persons and produces precision drills, and a joinery works.

Trade links with other centres play an important part in the economic life of the city. A number of road hauliers are engaged in transporting wool to stores at Portland and stock to and from the Hamilton saleyards. Hamilton is also an important railway centre. It is linked by rail to most of the smaller surrounding centres and is a major stop on the Portland-Ararat line which joins the main Melbourne-Adelaide rail artery. The line between Portland and Ararat is being strengthened to provide more efficient passenger and goods services. Wool, oats, and primary producer requirements such as superphosphate are among the main items transported by rail.

Hamilton, as the centre of a pastoral region, is closely linked with the commercial activities of its stock and station agents. Wool sales are conducted at Portland, 53 miles away, and weekly and special sales of sheep and cattle are conducted in the Hamilton municipal saleyards. Eight stock and station agents combine through the Hamilton and District Stock and Station Agents Association to operate weekly cattle markets every Monday and sheep markets every Wednesday. Stock turnover at the saleyards, which are controlled by the Hamilton City Council, has increased in the past decade.

In 1961–62 about 32,000 cattle and 188,000 sheep were yarded. The drought further increased these figures to 72,000 cattle and 503,000 sheep in 1967–68. Yardings in 1968–69 were 64,000 cattle and 271,000 sheep, a considerable increase over the early 1960s.

The city has six hotels, some of which have been remodelled since 1966, three motels, and a caravan park and camping ground.

Education

Hamilton, the centre of an Education Department inspectorate, is provided with educational facilities ranging from pre-school, kindergarten, and primary to matriculation and diploma studies. The oldest established school in the area is the State School at Cavendish which was opened as a private college on 23 January 1852; the State School at Hamilton was opened a few months later. There are two pre-school centres and two kindergartens, and the day training centre, Mulleraterong, which provides for the mentally handicapped. Of the students attending schools within the City of Hamilton, over 1,000 are transported by twenty-one buses, the longest route being 44 miles. Within twenty miles of Hamilton, including the city itself, there are eleven State primary schools with a total enrolment of over 1,400 pupils.

Among the registered schools, the Lutheran Church has four primary schools at Hamilton, Warrayure, Tarrington, and Tabor with total enrolments of about 220. There are two Roman Catholic primary schools—St Mary's at Hamilton and St Joseph's at Penshurst with a total of about 480 enrolments. A large boarding college for boys, "Monivae", is conducted by Missionaries of the Sacred Heart, whose teachers are mainly priests. Of the 400 currently enrolled in Forms 1 to 6, 274 are boarders, many coming from overseas countries as well as from other States of Australia. A recently established non-residential secondary school is "Maryknoll", a Roman Catholic girls school staffed by Sisters of the Good Samaritan, which has 135 students.

The two Presbyterian schools formerly known as Alexandra College (for girls) and Hamilton and Western District College (for boys) have amalgamated and are now known as Hamilton District and Alexandra College. These well established schools were founded in the 1870s. Of the 242 co-educational students, residential accommodation is provided for 136. The first stage of a new building for boys began in 1969.

The enrolment at the Hamilton High School, founded in 1916, numbered 868 in 1970. It is a co-educational school which caters for a wide range of subjects up to Higher School Certificate, at which fifty students are offered thirteen subjects. Six evening classes are also conducted. Hamilton Technical School, now housed in modern buildings, began in a technical wing at Hamilton High School. In 1961 the new school opened with 270 boys in Forms 1 to 5. The enrolment figures in 1969 were 585 full-time day boys up to 1st year diploma, 334 part-time day students, including apprentices, and 150 attending evening classes. Courses in agriculture and woolclassing are important features of the curriculum.

The Hamilton Education Committee, an organisation representative of every school in the area, sponsors and co-ordinates activities which are of mutual benefit and interest. Annual events among these are an art

exhibition held at Hamilton Art Gallery, a secondary schools drama festival, a music festival, and a concert.

Glenelg Base Hospital

The Glenelg Base Hospital, established in 1862 as the Hamilton Hospital and Benevolent Asylum, was one of the early institutions in Australia to practise antiseptic surgery regularly. Originally the hospital was also a benevolent home but in 1924 when the benevolent home patients were transferred to Ballarat it became the Hamilton and District Hospital. In 1929 it was graded a Base Hospital, and was renamed the Glenelg Base Hospital in 1957.

In 1969 the hospital had 182 beds and there were sixteen medical and 154 nursing staff; it treats about 3,000 patients a year and costs nearly \$1m to maintain. Training courses for nurses were first introduced in 1890 as a one year course for probationary nurses; the hospital now conducts courses for both nurses and nursing aides. The hospital provides paramedical services for the region including pathology, pharmacy, physiotherapy, radiology, occupational therapy, splint-making and a blood bank; it also provides a central linen service to regional hospitals and undertakes the management of five small neighbouring hospitals.

Social welfare

There is a regional office of the Victorian Social Welfare Department in Hamilton, with a regional officer from the Department's Family Welfare Division who advises and reports on matters relating to foster care and adoption of children, on families seeking financial assistance for children, and on deserted mothers and widows with children. In addition, a regional probation and parole officer at Hamilton is responsible for persons admitted to probation and for any persons released on parole who reside within the region. At present the region covers approximately the area from Warracknabeal to Portland and from Dunkeld to the South Australian border.

The Commonwealth Department of Social Services also has offices in Hamilton to administer the social welfare benefits provided under the Social Services Act and to advise those requiring information on social and family problems about the benefits obtainable.

The Hamilton branch of the Combined Pensioners Association has converted a centrally sited building into clubrooms. An active voluntary committee has established and managed the Mulleraterong Centre for Intellectually Handicapped Children for some years, and has provided for the instruction of these handicapped children. A meals-on-wheels service is conducted by a local committee for those residents who are unable to shop for, or prepare, meals for themselves. This service does not receive a government subsidy but is supported by church and service organisations.

City of Hamilton Art Gallery

The Art Gallery owes its origin to the bequest of art works to the City of Hamilton as the nucleus of an art collection by the late Mr H. B. Shaw, a grazier who resided near Hamilton. The collection consists of paintings, tapestries, porcelain, glass, and oriental arts; it includes Chinese ceramics, antique silver and silver-gilt, and antique pottery from the Mediterranean area.

The building, opened in 1961, was the first of its type to be erected in Australia for over thirty years, and marked the beginnings of a new approach to art galleries, particularly in the provincial centres of Victoria. The design, in contemporary style, is thoroughly functional, and was conceived to house not only the collection of paintings and drawings, but also a large collection of decorative works.

Outstanding works of art include eighteenth century English, German, and French porcelain pieces, and the collection of Chinese ceramics from the Han, T'ang, Sung, Ming, and later dynasties. In the ancient arts section are rare examples of pottery from Greece dating from 2,200 B.C., Bronze Age and Iron Age pottery, and a small collection of early Egyptian Ushabi and domestic pottery. The large glass collection contains a group of forty-nine pieces of first and second century Roman glass, some of which are unique in Australia, particularly three flasks of blue glass splashed with yellow, from the city of Antioch. The collection also has several fine examples of English, Irish, Scottish, and European glass of the seventeenth, eighteenth, and nineteenth centuries, the rarest and most outstanding piece being a wine glass of the Charles II period. This very interesting piece is a Wentworth-Woodhouse glass of circa 1665 ; only nine examples of this glass are known to exist.

Several pieces in the collection of silver-gilt are also unique in Australia ; many of them were originally housed in the collections of European royal families. There are eight pieces from the Kaiser Wilhelm II collection, two from the collection of Catherine the Great of Russia, and a number from other famous royal collections. The collection of Oriental carvings consists of pieces of jade, rock-crystal, amethyst, amber, onyx, agate, malachite, and quartz, and a fine group of early Chinese carved ivories. Among the smaller pieces of the collection is antique jewellery of the seventeenth, eighteenth, and early nineteenth centuries. There are several fine European tapestries, including a large seventeenth century French Gobelin tapestry designed by Charles le Brun.

The collection of paintings has works of Australian painters including McCubbin, Bunny, Streeton, Heysen, Ashton, and Young of the earlier period, and Bell, Shore, Nolan, and Boyd of the later period. Pictures in the European section include a sepia-wash drawing by Richard Parkes Bonnington, a wash drawing by Claude, a chalk drawing of the Peter Rubens School, and a small drawing by Luti of the Italian School of the seventeenth century.

A trust fund was established during the early years of the Gallery for the purpose of purchasing works of art for addition to the collections. In 1969 about \$23,000 was held in trust.

A State Government grant of \$120,000 in 1970 enabled the Gallery to purchase a rare collection of eighteenth century English water colours and etchings by Paul Sandby from the Gaussen family, who will provide \$30,000 towards extending the Gallery to house the collection. The Art Gallery is also concerned with art education, and as it is also a " regional " art gallery many schools use it each week. The Art Gallery Group, an adult body, meets each month in the Gallery auditorium for lectures, discussions, and films. This same group meets each week for an informal painting school.

Glenelg Regional Library

The Glenelg Regional Library, with headquarters in Hamilton, was formed in 1959 by the City of Hamilton and the Shires of Dundas, Glenelg, and Wannon. It acquired the bookstock of the Mechanics Institute which had existed from the 1850s. Over 10,000 new books were obtained and the Library opened at Hamilton in the Mechanics Institute building in 1960. A bookmobile was purchased and commenced a service to outlying towns in the area early in 1961. Later that year the new headquarters building of the regional system, a complex incorporating the Hamilton Art Gallery, was opened. A permanent branch library provided at Coleraine in 1963 enabled the bookmobile to go further afield in the shires ; its schedule over each fortnight now includes ten service points and covers approximately 600 miles.

In 1968 Portland was admitted to the Regional Library service. An attractive new building erected on the site of the old free library was officially opened in June 1969, and the branch library began operations a few days later. A collection of historical material is housed at the Portland branch library, and has been augmented by donations and by purchase as funds permit. At Hamilton a special collection of books donated by Thomas Skeyhill illustrates aspects of political thought after the First World War. A unique volume is the original scorebook of the cricket matches played in England in 1868 by the Aboriginal cricket team from Victoria.

The Glenelg Regional Library contains approximately 18,300 volumes, and is relatively strong in the fine arts ; it receives 150 serial publications, many of which are permanently filed. The Library now serves a population of 31,150, with a current registration figure of 7,102 including both adults and children. Book issues for each year are about 150,000 ; on any given day up to 7,000 books are on loan throughout the region. The children's sections throughout the regional library system are widely used because of the high quality of the books provided. The library co-operates with five other western Victorian regional libraries in meeting requests for particular books and acts as the headquarters of the group.

Appendix B

AUSTRALIAN NATIONAL ACCOUNTS

The information given in this appendix has been derived from the publication *Australian National Accounts, National Income and Expenditure, 1968-69*, published by the Commonwealth Statistician, Canberra.

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially those which relate to the production and use of goods and services and to transfers of income or capital between sections of the economy.

Concepts

The following notes describe briefly the fundamental concepts of production and the income and expenditure involved.

Gross national product at market prices (usually referred to as the gross national product) is the total market value of goods and services produced in Australia within a given period, after deducting the cost of goods and services (other than capital equipment) used in the process of production. It is the sum, for all producers, of the value of their sales (including any indirect taxes levied thereon) plus increases in their stocks, less their purchases of goods and services from other producers. For those producers, like public authorities and financial enterprises, which do not actually sell their output, it includes their output, instead of their sales, valued at cost.

Gross national product at factor cost is defined as gross national product at market prices, less indirect taxes, but with the addition of subsidies, and is the total amount of gross national product accruing to the factors of production employed.

Net national product is the resulting aggregate if depreciation is deducted from gross national product at factor cost. In the national accounts, allowances for depreciation are restricted to public and private enterprises, no depreciation being attributed to assets used by public authorities, non-profit making organisations, etc.

National income is defined as the value of net national product, less total income payable overseas in the form of interest, dividends, undistributed income, etc., plus income receivable from overseas in these forms. Adjustments are also made to deduct wages, professional earnings, etc., earned in Australia by non-residents, and to add similar incomes earned abroad by persons normally resident in Australia.

National turnover of goods and services is the sum of the gross national product plus imports of goods and services. In turn, the total turnover of

goods and services equals the sum of gross national expenditure and exports of goods and services.

Gross national expenditure is the total expenditure within a given period on final goods and services bought for use in the Australian economy. It consists of personal consumption expenditure, fixed capital expenditure by private and public enterprises and public authorities, any increase in the value of stocks, and net current expenditure on goods and services by public authorities and financial enterprises.

Sectors

The following is a brief description of the sectors into which the economy has been divided for the purposes of the National Accounts :

1. *The personal sector* includes all persons and private non-profit organisations serving persons other than those included in the financial enterprises sector.
2. *The public authority sector* includes the whole of the activities of the Commonwealth Government, State and local governments, and semi-governmental bodies with the exception of the current operations of public trading and financial enterprises which are excluded. Public trading and financial enterprises are defined as bodies which aim at covering the bulk of their expenses either by sales of goods and services (trading), or by charges for services and net interest receipts (financial).
3. *The financial enterprises sector* includes both public and private financial enterprises which are regarded as providing the financial mechanism for the functioning of the economy rather than producing or distributing goods and services. In one way or another they are engaged mainly in the borrowing and lending of money. Examples of the enterprises included in this sector are banks, hire purchase companies, co-operative building societies, life insurance companies, and superannuation funds.
4. *The trading enterprises sector* includes all business undertakings engaged in producing goods and services. Thus it includes companies, public enterprises, partnerships, and self-employed persons, including farmers. Owners of all dwellings are included because they are regarded as operating business, receiving rents (from themselves), and paying expenses.
5. *The overseas sector accounts* record all transactions between Australian persons, businesses, and governments, and overseas residents.

National Accounts

Tables 1 to 7, which follow, summarise the transactions which have taken place in the Australian economy during 1968-69 with a production account and a capital account for the economy as a whole. For each of the different sectors, however, a current (or income appropriation) account is given. The following is a short description of the accounts which appear in the tables :

1. *The National Production Account* is a consolidation of the production accounts of each sector. Credited to the account are the following items : net current expenditure on goods and services ; gross fixed capital expenditure ; change in value of stocks ; and exports of goods and services. The payments side shows wages and salaries, indirect taxes, and imports of goods and services. The balance, which represents the gross operating

surplus of trading enterprises, is carried to the Trading Enterprises Income Appropriation Account.

2. *The Trading Enterprises Income Appropriation Account* is shown as receiving the gross operating surplus of trading enterprises from the National Production Account, and property income, namely, dividends, non-dwelling rent, and interest from other sectors. This total is allocated to depreciation allowances and to various transfer payments.

3. *The Financial Enterprises Income Appropriation Account* shows property income as the sole receipt. The net current expenditure on goods and services of these enterprises is shown on the outlay side.

4. *The Personal Current Account* records as receipts, wages and salaries, and transfer incomes. Payments include current payments for goods and services and transfer payments. The balance is transferred to the national capital account under the heading "Personal saving".

5. *The Public Authorities Current Account* records receipts of taxes (direct and indirect), interest, and the net income of public trading and financial enterprises. Expenditure includes net current expenditure on goods and services by those government and semi-governmental bodies which are not trading or financial enterprises. Also included are cash benefits (paid to persons in return for which no service is rendered or goods supplied), interest paid, subsidies granted, overseas gifts, and grants towards private capital expenditure.

6. *The Overseas Current Account* records all transactions of a current nature between Australian and overseas residents. The balance of the account reflects the net inflow of capital from overseas and withdrawal from monetary reserves.

7. *The National Capital Account* shows, on the receipts side, the savings of the various sectors. The public authority surplus includes the net income of public enterprises. Payments include, for all sectors, purchases of new buildings and capital equipment and the increase in value of stocks.

1. NATIONAL PRODUCTION ACCOUNT, 1968-69
(\$m)

Wages, salaries, and supplements	13,862	Net current expenditure on goods and services—	
Gross operating surplus of trading enterprises—		Personal consumption	15,813
Companies	4,104	Financial enterprises	370
Unincorporated enterprises	4,177	Public authorities	3,330
Dwellings owned by persons	1,281	Gross fixed capital expenditure—	
Public enterprises	895	Private	4,669
Gross national product at factor cost	24,319	Public enterprises	1,425
		Public authorities	1,113
Indirect taxes, less subsidies	2,852	Increase in value of stocks—	
		Value of physical change in stocks	762
Gross national product	27,171	Stock valuation adjustment	98
Imports of goods and services	4,247	Statistical discrepancy	-52
		Gross national expenditure	27,528
National turnover of goods and services	31,418	Exports of goods and services	3,890
		National turnover of goods and services	31,418

2. TRADING ENTERPRISES INCOME APPROPRIATION ACCOUNT, 1968-69
(\$m)

Depreciation allowances	2,356	Gross operating surplus	10,457
Interest, etc., paid	1,361	Interest, etc., and dividends received	198
Company income—		Undistributed income accruing from overseas	21
Income tax payable	} 2,693		
Dividends payable			
Undistributed income			
Unincorporated enterprises income	3,047		
Personal income from dwelling rent	674		
Public enterprises income	545		
Total outlay	10,676	Total receipts	10,676

3. FINANCIAL ENTERPRISES INCOME APPROPRIATION ACCOUNT, 1968-69
(\$m)

Depreciation allowances	34	Interest, etc., received	1,743
Net current expenditure on goods and services	370	Dividends received and undistributed income accruing from overseas	54
Interest paid	576		
Company income—			
Income tax payable	} 201		
Dividends payable			
Undistributed income			
Public enterprises income	183		
Retained investment income of life insurance funds, etc.	433		
Total outlay	1,797	Total receipts	1,797

4. PERSONAL CURRENT ACCOUNT, 1968-69
(\$m)

Personal consumption	15,813	Wages, salaries, and supplements	13,862
Interest paid	231	Interest, etc., received	704
Income tax payable	2,394	Dividends	550
Estate and gift duties paid	203	Unincorporated enterprises income	3,047
Remittances overseas	90	Income from dwelling rent	674
Saving	1,712	Remittances from overseas	164
		Cash benefits from public authorities	1,442
Total outlay	20,443	Total receipts	20,443

5. PUBLIC AUTHORITIES CURRENT ACCOUNT, 1968-69
(\$m)

Net current expenditure on goods and services	3,330	Indirect taxes	3,078
Subsidies	226	Income tax, estate, and gift duties	3,617
Interest, etc., paid	670	Interest, etc., received	112
Overseas grants	159	Public enterprises income	728
Cash benefits to persons	1,442		
Grants towards private capital expenditure	46		
Surplus on current account	1,662		
Total outlay	7,535	Total receipts	7,535

6. OVERSEAS CURRENT ACCOUNT, 1968-69

(\$m)

Exports of goods and services	3,890	Imports of goods and services	4,247
Interest, etc., received from overseas	127	Interest, etc., paid and dividends payable and profit remitted overseas	425
Dividends receivable from overseas			
Undistributed income accruing from overseas	21	Undistributed income accruing to overseas residents	295
Personal remittances from overseas	164	Personal remittances overseas	90
Overseas balance on current account	1,014	Public authority grants and contributions	159
Total debits to non-residents	5,216	Total credits to non-residents	5,216

7. NATIONAL CAPITAL ACCOUNT, 1968-69

(\$m)

Gross fixed capital expenditure—		Depreciation allowances	2,390
Private	4,669	Increase in dividend and income tax provisions	147
Public enterprises	1,425	Undistributed company income accruing to residents	611
Public authorities	1,113	Retained investment income of life insurance funds, etc.	433
Increase in value of stocks—		Personal saving	1,712
Value of physical change in stocks	762	Public authority grants towards private capital expenditure	46
Stock valuation adjustment	98	Public authorities surplus on current account	1,662
Total use of funds	8,067	Overseas balance on current account	1,014
Statistical discrepancy	-52	Total capital funds accruing	8,015
Total capital funds accruing	8,015		

The following tables are included to provide information of personal income and personal consumption expenditure within Victoria during each of the years 1964-65 to 1968-69, together with an analysis of Victorian farm income during the same period. Tables are also given to show total Victorian figures relative to those of other Australian States.

VICTORIA—PERSONAL INCOME

(\$m)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Wages, salaries, and supplements	2,883	3,100	3,374	3,655	4,013
Farm income (a)	413	374	370	226	317
Income from dwelling rent	195	213	230	242	254
Cash benefits from public authorities	288	307	333	344	372
All other income	754	792	855	909	994
Total	4,533	4,786	5,162	5,376	5,950

(a) Unincorporated farms only.

AUSTRALIA—TOTAL PERSONAL INCOME BY STATES
(\$m)

State	1964-65	1965-66	1966-67	1967-68	1968-69
New South Wales	5,867	6,016	6,725	7,035	7,969
Victoria	4,533	4,786	5,162	5,376	5,950
Queensland	1,950	2,052	2,245	2,366	2,643
South Australia	1,371	1,435	1,553	1,575	1,802
Western Australia	924	1,087	1,202	1,340	1,525
Tasmania	421	445	490	509	554
Total Australia	15,066	15,821	17,377	18,201	20,443

VICTORIA—PERSONAL CONSUMPTION EXPENDITURE
(\$m)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Food	785	830	882	937	970
Cigarettes and tobacco	111	122	126	133	136
Alcoholic drinks	193	218	237	263	281
Clothing, etc.	365	371	392	418	436
Chemists' goods	90	96	102	108	120
Medical, hospital, and funeral expenses	120	131	147	164	181
Rent	451	488	530	572	618
Gas, electricity, fuel	112	121	127	132	149
Household durables	259	263	279	298	328
Newspapers, books, etc.	64	68	74	78	82
All other goods, n.e.i.	103	112	119	122	129
Travel and communication	485	498	533	582	627
All other services	354	379	409	451	486
Total	3,492	3,697	3,956	4,258	4,543

AUSTRALIA—TOTAL PERSONAL CONSUMPTION EXPENDITURE BY STATES
(\$m)

State	1964-65	1965-66	1966-67	1967-68	1968-69
New South Wales	4,687	4,953	5,327	5,794	6,215
Victoria	3,492	3,697	3,956	4,258	4,543
Queensland	1,576	1,665	1,784	1,921	2,011
South Australia	1,088	1,141	1,204	1,295	1,383
Western Australia	806	883	972	1,087	1,213
Tasmania	351	368	396	426	449
Total Australia	12,001	12,706	13,639	14,780	15,813

VICTORIA—FARM INCOME
(**\$m**)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
Gross value of farm production—					
Wool	176	194	181	133	} 929
Other pastoral products	197	220	196	222	
Wheat	109	90	104	44	
Other grain crops	22	20	27	10	
Other crops	164	153	194	168	
Dairying, poultry, etc.	243	242	264	233	
Total	911	919	966	810	929
Less costs—					
Marketing costs	96	95	92	69	} 609
Seed and fodder	83	105	127	133	
Depreciation	87	84	94	99	
Wages, net rent and interest paid	72	74	82	86	
Other costs	154	183	196	194	
Total	492	541	591	581	609
Total farm income	419	378	375	229	320
Less company income	6	4	5	3	3
Income of farm unincorporated enterprises	413	374	370	226	317

AUSTRALIA—TOTAL FARM INCOMES BY STATES (a)
(**\$m**)

Particulars	1964-65	1965-66	1966-67	1967-68	1968-69
New South Wales	404	199	415	175	319
Victoria	413	374	370	226	317
Queensland	219	200	252	224	292
South Australia	137	113	149	57	137
Western Australia	63	125	113	96	121
Tasmania	38	32	36	21	26
Total Australia	1,274	1,043	1,335	799	1,212

(a) Unincorporated farms only.

Appendix C

HEALTH BENEFITS PLAN

On 1 January 1970 the Commonwealth Government introduced a new subsidised health insurance which enabled families on low incomes, persons receiving unemployment and sickness benefits, and newly arrived migrants to receive special assistance in obtaining health insurance cover.

From 1 July 1970 subsidised health insurance became available to many more low income families. Families whose weekly incomes do not exceed \$42.50 (formerly \$39.00), people receiving unemployment and sickness benefits, and newly arrived migrants can receive free health insurance coverage. Families with incomes above \$42.50 but not exceeding \$45.50 a week need to pay only one third of the normal health insurance contribution rate for the new benefits coverage and for coverage against public ward charges in hospitals. Families with incomes above \$45.50 but not exceeding \$48.50 need to pay two thirds of the usual contribution rate for this coverage.

As from 1 July 1970 contributors to health insurance funds have been able to receive increased Commonwealth and health fund benefits for medical and hospital services. The new medical benefits determined are based on a "common fee for services rendered" concept. The Australian Medical Association and the health insurance funds conducted comprehensive surveys of fees actually charged by medical practitioners to determine the most common fee for each type of medical service.

A medical fund contributor has to meet only 80 cents of the common fee for general practitioner consultations and \$1.20 of the common fee for general practitioner home or hospital visits. Higher benefits are paid for specialist consultations if the patient is referred by another practitioner. Medical benefits are payable for certain services by oral surgeons and are payable at the higher specialist rate on referral to an ophthalmologist by an optometrist. The higher specialist rate of benefits is also payable on referral to a medical specialist by a dentist.

A contributor bears no more than \$5 of the common fee of an operation performed by a general practitioner or by a specialist where the patient is referred by another practitioner. Differential rates of benefits are paid for over 300 services which are customarily performed by either a general practitioner or a specialist. Where an operation involves other direct services, including the administration of an anaesthetic, the contributor bears no more than \$5 of the combined common fees.

To ensure that all contributors are adequately covered against the cost

of medical treatment, to eliminate any confusion or uncertainty as to the level of cover provided, and to simplify administration, only one table of medical benefits and three tables for hospital benefits (related to standard, intermediate, and private ward charges) operate in each State. All funds pay medical benefits at the same rate, but contribution rates may vary between funds depending on their financial position. The new family medical benefit contribution rate for major open funds in Victoria is 60 cents a week while the single contribution rate is 30 cents a week. Contributors must transfer to the new rates to qualify for the new benefits.

All contributors receive the same medical benefits for the same medical service. Discrimination against persons suffering from pre-existing or the more serious long-term illnesses has been eliminated for both medical and hospital benefits.

Appendix D

PRINCIPAL EVENTS FROM 1 JULY 1969 TO 30 JUNE 1970

1969

- July 1* The Melbourne Metropolitan Board of Works announced it would compulsorily buy a strip of land (30 miles long and 250 feet wide) from Carrum to Cape Schanck for a sewerage pipeline.
- August 19* The Yarra River was diverted at Heyington to allow the South-Eastern Freeway to be constructed in the old river bed.
- September 11* Light snow fell in Melbourne for the first time in 18 years.
- September 15* The *Spirit of Progress* was derailed near Mittagong causing injury to 35 passengers.
- September 30* *Newsday*, Melbourne's second afternoon paper, was issued for the first time.
- October 8* Oil started to flow from the Esso-B.H.P. wells in Bass Strait to an onshore stabilisation plant at Longford near Sale. From Longford oil will be piped 117 miles to Long Island Point near Hastings.
- October 17* The State Government approved a \$14m extension to the Alfred Hospital. When completed, capacity at the hospital will be increased by 600 beds.
- October 25* A \$6m, 10 storey, private hospital is to be erected in Victoria Parade, East Melbourne next to St Vincent's public hospital. The new hospital, to be named St Vincent's private hospital, will have a capacity of 219 beds, and will be run by the Sisters of Charity.
- October 29* Legislation was introduced in State Parliament to increase Victoria's National Parks by 130,000 acres, including an addition of 84,000 acres to the Little Desert National Park.
- November 10* A 327 ft high office building, erected at a cost of \$20m on the corner of Bourke and William Streets, was officially opened.
- November 26* The Lurgi Gas Plant at Morwell ceased operation because supplies of natural gas have made the production of coal gas redundant. Opened in 1956 by the Duke of Edinburgh, the Lurgi Plant was built at a cost of \$10m.
- December 1* A decision handed down from the Full Bench of the Arbitration Commission will raise the total wage for men and women by 3 per cent. The minimum wage for Victorian men will rise by \$3.50 to \$42.30 per week. The new wholesale market at West Melbourne commenced business.
- December 11* A severe thunderstorm lashed Melbourne for one hour during the afternoon causing one death and heavy damage to property in some suburbs.
- December 13* The Minister of Water Supply, the Hon. W. A. Borthwick, announced that a reservoir with a storage capacity of 13,000 million gallons is to be built at Bungal, 16 miles south-east of Ballarat, at a cost of \$4.5m. The new reservoir, to be known as the Lal Lal Reservoir, will serve Ballarat and Geelong.
- December 17* The Minister of Transport, the Hon. V. F. Wilcox, released a report of the Metropolitan Transportation Committee, which recommends a major overhaul of Melbourne's transportation system. To cope with an estimated population of 3,750,000 in 1985, a vast network of freeways and arterial roads and three new suburban railways would have to be built at an estimated cost of \$2,616m.
- December 22* First section of the new Tullamarine Freeway was opened for traffic.

1970

- January 2* During the early morning 3 inches of rain driven by strong winds fell on Melbourne and suburbs.
- February 3* The completed Tullamarine Freeway was opened for traffic by the Premier, the Hon. Sir Henry Bolte.

- February 12* Victoria will be granted \$13m by the Commonwealth Government under a Commonwealth-State plan for teacher training projects.
- February 16* The Minister of Health, the Hon. V. O. Dickie, announced that the State Government would build a \$20m teaching hospital at Monash University and a hospital for old people at Moorabbin.
The Minister for Education, the Hon. L. H. S. Thompson, announced details of plans for a new teachers college at La Trobe University and extensions to existing teachers colleges. The proposed buildings will cost \$20m.
- February 19* The Full High Court ruled that the receipts taxes levied by the Victorian and Western Australian Governments are invalid.
- February 26* Victoria, New South Wales, and South Australia signed an agreement with the Commonwealth to build the Dartmouth Dam at a cost of \$57m. The State Rivers and Water Supply Commission of Victoria will be the constructing authority.
- March 5* At an auction in Melbourne a London dealer paid \$80,000 for a copy of Gould's *Birds of Australia*.
The Australian Barley Board's first shipment of bulk barley was shipped from Portland.
- March 21* Heavy rain in Victoria caused flooding in Gippsland and in some Melbourne suburbs.
- March 23* An estimated 4,500 farmers marched through Melbourne in protest because of falling incomes and increasing production costs.
First production delivery of Bass Strait crude oil loaded on the oil tanker *Hemiglypta* for refining in Adelaide.
- March 30* Melbourne had its wettest March for 21 years.
- April 4* The Queen, Prince Philip, Prince Charles, and Princess Anne arrived in Melbourne to start their visit to Victoria.
- April 8* The Royal family left Melbourne after touring Victoria.
- April 20* Cape Everard, in Gippsland, was re-named Point Hicks by the Premier, the Hon. Sir Henry Bolte, as a dedication to Lieutenant Hicks who first sighted the point 200 years ago while voyaging with Captain James Cook.
- May 2* *Newsday* ceased publication.
- May 20* The Minister for Transport, the Hon. V. F. Wilcox, announced that fifty new air-conditioned suburban trains are to be built at a cost of \$30m by the Victorian Railways.
- May 21* The second stage of the South-Eastern Freeway was opened by the Minister for Local Government, the Hon. R. J. Hamer, E.D.
- May 30* Victorian con-joint elections held. Liberal Party returned.
- June 1* Heavy rains caused the worst flooding for 20 years in East Gippsland.
- June 18* A collection of Sir Hans Heysen paintings were auctioned at Malvern Town Hall. One hundred and twenty paintings were sold for \$76,000.
- June 22* Melbourne and Metropolitan Board of Works announced a 15 per cent increase in rates.

Appendix E

LIST OF SPECIAL ARTICLES IN VICTORIAN YEAR BOOKS

(Commencing with new series: Volume 75, 1961)

The following is a list of major articles which appear in the new series of the *Victorian Year Book* commencing with Volume 75, 1961, up to, and including the current edition. Some articles have been omitted in editions since 1961 to provide space for new material. Where an article has appeared more than once, reference is given only to its most recent appearance. The figures below indicate the year and page of the *Year Book* to which reference is made.

- Administrative Staff College, Australian, 1961, 213
Aeronautical meteorology, 1967, 53
Agent-General for Victoria, 1964, 74
Agriculture
 scientific research, application of, 1970, 305
 Department of, history of, 1971, 105
 research stations, 1971, 293
Agricultural
 education, tertiary, 1966, 480
 Economics, Bureau of, 1966, 485
 extension services, 1968, 303
 machinery industry, 1966, 587
 meteorology, 1964, 33
Airlines, country, 1969, 790
Alfred Hospital, 1963, 265
Aluminium industry, 1967, 415
Amphibians and reptiles, 1971, 1
Animal
 husbandry, 1963, 539
 sanctuary, Sir Colin MacKenzie, 1965, 198
Apprenticeship Commission, 1968, 193
Architecture
 in Victoria, development of, 1962, 343
 hospital, 1966, 241
Art
 education in galleries, 1971, 434
 galleries, Victorian, 1970, 457
Asthma Foundation of Victoria, 1969, 550
Assurance, life, 1962, 666
Audio-visual education, 1964, 211
Austin Hospital, Heidelberg, 1966, 250
Australian
 Administrative Staff College, 1961, 213
 Dairy Produce Board, 1970, 436
 Meat Board, 1971, 340
 Resources Development Bank Limited, 1970, 68
 Road Safety Council, 1966, 761
 Wheat Board, history and functions of, 1969, 331
Automation and technical development in industry, 1967, 376
Aviation, civil
 aerial agricultural operations, 1964, 553
 classification of flying activities, 1964, 843
 commuter services, 1969, 790
 history of, 1962, 742
 flying training, 1967, 783
 radio aids to air navigation, 1965, 773
 regular public transport, 1968, 779
Ballarat, 1963, 389
Ballet, drama, and opera, 1968, 443
Bank, State Savings, of Victoria, history of, 1961, 630
Banking in Victoria, history of, 1961, 625
Bendigo, 1964, 413
Birds of Victoria, 1966, 1
Book publishing, 1965, 181
Botanic gardens, 1969, 474
Boy Scout movement, 1964, 190
Broadcasting
 and television programme standards, 1965, 196
 history of, 1961, 164
Broadcasts, educational, to schools, 1968, 449

- Brown coal production, State Electricity Commission of Victoria, 1962, 606
- Building
developments in methods since 1945, 1964, 365
in early Victoria, 1968, 598
materials, 1966, 324
re-development of the inner residential areas, 1967, 599
trends since 1945, 1963, 345
- Bureau of Agricultural Economics, 1966, 485
- Canning of foodstuffs, 1969, 432
- Car industry, 1962, 591
- Cattle, tuberculosis eradication, 1962, 525
- Censuses, Integrated Economic, 1968-69, 1971, 368
- Charities, Victorian, 1968, 514
- Chemical industry, 1963, 615
- Chest X-rays, compulsory, 1965, 244
- Child welfare, voluntary, 1967, 557
- Children's Welfare Department, history, 1961, 266
- Civil aviation *see* Aviation, civil
- Civil defence and the State Disaster Plan, 1966, 404
- Clays, Victorian, 1970, 376
- Clearways, 1969, 785
- Coastline
physiography, 1967, 32
Victorian, 1966, 33
- Commercial fisheries, 1964, 601
- Commonwealth
Scholarships, 1964, 245
Serum Laboratories, 1967, 535
- Communicable diseases, 1964, 258
- Company law in Victoria, 1967, 571
- Computers *see* Automation and technical development in industry
- Consolidation of Statutes, 1961, 296
- Control of poisons and deleterious substances, 1965, 245
- Country Roads Board, history of, 1961, 375
- Criminal law, administration in Victoria, 1963, 322
- Crown Law Department, 1965, 100
- Currency, history of, 1961, 627
- Curricula for schools, development of, 1969, 479
- Dairying industry, economic problems, 1964, 581
- Dairy Produce Board, Australian, 1970, 436
- Deaf persons, aid, 1971
- Dental Hospital, history of, 1965, 267
- Diseases, communicable, 1964, 258
- Drama
commercial and non-commercial, 1963, 180
opera, and ballet, 1968, 443
- Dried fruits industry, 1967, 335
- Drought 1967-68, 1970, 309
- Economic Censuses, Integrated 1968-69, 1971, 368
- Education
agricultural, tertiary, 1966, 480
audio-visual, 1964, 211
school broadcasts, 1968, 449
Australian College of, 1961, 214
Catholic, history of, 1961, 188
Department, history of, 1969, 107
development of curricula, 1969, 479
for management, 1970, 515
legal, 1971, 571
of handicapped children, 1968, 464
postgraduate, 1964, 234
primary, history of, 1963, 191
Science and Technology Careers Bureau, 1965, 241
secondary, 1945-1960, 1962, 206
State, history of, 1961, 176
technical, 1965, 207
university development, 1966, 203
- Egg marketing, 1970, 358
- Elderly persons, care of, 1969, 582
- Electricity Commission, State, history of, 1961, 580
- Electronic data processing *see* Automation and technical development in industry
- Employers' associations, 1964, 474
- Engineering, heavy, 1971, 419
- Epidemics, 1967, 501
- Epidemiological Research Unit, Fairfield Hospital, 1969, 549
- Erosion and sedimentation, 1971, 44
- Export Payments Insurance Corporation 1970, 702
- Export trade, law, 1968, 572
- Fairfield Hospital, Epidemiological Research Unit, 1969, 549
- Family Welfare Advisory Council, 1969, 575
- Farm management in Victoria, 1967, 302
- Farming
industry, Government assistance, 1964, 525
mechanisation, 1962, 493
Film, State Centre, 1969, 517
- Fire prevention, meteorology, 1968, 55
- Fish of Victoria, 1967, 1
- Fisheries
and Wildlife Department of, research, freshwater, 1965, 557
marine, 1966, 539
commercial, 1964, 601
- Flora of Victoria, 1962, 1
- Food standards and pure food control, 1964, 258
- Forestry laboratory and field research, 1965, 555
- Forests
Commonwealth-State Reforestation Agreement, 1969, 372
economic aspects, 1967, 361
- Freeways in Melbourne, 1969, 272
- Fuel and Power, Ministry of, 1969, 444
- Gardens, Victorian provincial, 1967, 455
- Geelong, 1962, 379
- Geology, 1961, 42
- Glass industry, 1965, 606

- Gordon Institute of Technology, 1962, 236
- Government
 assistance to farming industry, 1964, 525
 instrumentalities, 1969, 102
- Governors, list of, 1961, 68
- Grapes, growing of for wine, 1964, 573
- Groundwater in Victoria, 1964, 544 and 1969, 384
- Hamilton, 1971, 761
- Handicapped persons, employment of, 1970, 578
- Hansard parliamentary debates, 1969, 77
- Health in Victoria, history of, 1961, 215
- High Court in Victoria, 1971, 566
- Horsham, 1970, 797
- Hospital architecture, 1966, 241
- Hospitals
 Alfred, 1963, 265
 Austin, 1966, 250
 Dental, 1965, 267
 Fairfield, 1961, 241
 Geelong, 1962, 273
 in Victoria, 1964, 267
 Prince Henry's, 1964, 286
 Queen Victoria Memorial, 1967, 529
 Royal Children's, 1964, 284
 Royal Melbourne, 1962, 271
 Royal Victorian Eye and Ear, 1968, 525
 St Vincent's, 1965, 266
- Housing
 Commission of Victoria, 1965, 358
 of aged persons, 1969, 636
 re-development of the inner residential areas, 1967, 599
- Industrial
 development since 1945, 1962, 553
 hygiene, 1964, 254
- Insects of Victoria, 1969, 1
- Instrumentalities, government, 1969, 102
- Integrated Economic Censuses, 1968-69, 1971
- Irrigation, 1962, 479
- Kindergarten Training College, 1971, 494
- La Trobe
 Library, 1966, 167
 Library, manuscript collection, 1967, 441
- Lakes, 1965, 33
- Land
 in strata, subdivision of, 1968, 695
 settlement, history of, 1961, 447
- Latrobe Valley, 1965, 791
- Law
 company, 1967, 571
 contract, 1965, 318
 criminal, 1963, 322
 Crown, Department of, 1965, 100
 export trade, 1968, 572
 function of, 1961, 289
 retail sales and hire purchase, 1966, 298
- Statutes, consolidation of, 1961, 296
 taxation, Commonwealth and State
 Part I, 1969, 590
 Part II, 1970, 588
 torts, 1964, 339
- Legal education, 1971, 571
- Legislation, private, 1962, 86
- Libraries, special and research, 1964, 163
- Library
 Council of Victoria, Library Services
 Division, 1969, 457
 La Trobe, 1966, 167
 Services, Board of Inquiry, 1966, 168
 regional services, development of, 1965, 184
- Life assurance, 1962, 666
- Lighthouses, 1964, 816
- Local government administration, history of, 1961, 347
- Mammals, 1963, 1
- Management
 education, 1970, 515
 techniques in manufacturing industry, 1963, 577
- Manufacturing, history of, 1961, 531
- Mapping and survey, 1969, 46
- Marine animal ecology of Victoria's coastline, 1969, 36
- Maritime meteorology, 1966, 53
- Marketing tobacco, 1969, 343
- Meat Board, Australian, 1971, 340
- Medical research
 Monash University, 1966, 257
 Royal Women's Hospital, 1965, 273
- St Vincent's School, 1965, 274
- University of Melbourne, 1964, 292
 Walter and Eliza Hall Institute, 1968, 533
- Medicine
 developments in, 1910-1960, 1963, 230
 University of Melbourne, School of, 1963, 216
- Melbourne
 Airport, 1970, 783
 City Council, 1969, 243
 Harbor Trust, port facilities, 1969, 755
 Medical Post-graduate Committee, 1967, 527
 Permanent Post-graduate Committee, 1967, 527
 tramways, history, 1961, 690
 Transportation Committee, 1968, 776
 Zoological Gardens 1971, 447
- Mental
 Health Research Institute, 1969, 532
 Hygiene Authority, 1963, 248
- Meteorology
 aeronautical, 1967, 53
 agricultural, 1964, 33
 computers in, 1971, 65
 in fire prevention, 1968, 55
 maritime, 1966, 53
 services for commerce and industry, 1969, 61
- Mildura, 1969, 807
- Milk Board, 1971, 331
- Minerals in Victoria, 1970, 1
- Mines Department, history of, 1970, 105

- Mining, 1964, 604
 Ministers of the Crown, 1851-1855, 1961, 72
 Ministries and Premiers, 1855-1955, 1961, 73
 Ministry of Fuel and Power, 1969, 444
 Molluscs of Victoria, 1968, 1
 Monash University, medical research 1966, 257
 Money Bills in Parliament, 1963, 73
 Motor vehicle industry, 1962, 591
 Mountain regions, 1962, 43
 Museum
 National, of Victoria, 1969, 463
 Swan Hill Folk, 1971, 435
 Music, 1965, 187
- National**
 Heart Foundation of Australia (Victorian Division) 1964, 297
 Museum of Victoria, 1969, 463
 parks, classification of, 1968, 456
 Natural gas, 1968, 364
Newspapers
 country, 1967, 447
 suburban, 1969, 465
 Nursing, history of, 1961, 240
- Oil**
 and natural gas, 1969, 378
 refining industry, 1961, 566
 Old People's Welfare Council, 1966, 286
 Opera, drama, and ballet, 1968, 443
- Painting in Victoria to 1945, 1964, 166
 Palaeontology, 1965, 1
 Para-medical services, 1969, 548
Parliament
 administrative machinery of, 1968, 71
 Houses of, 1970, 77
 money bills, 1963, 73
 presiding officers of, 1967, 73
 private legislation, 1962, 86
 resolving deadlocks between the two Houses, 1965, 79
Parliamentary
 committees, 1964, 52
 debates, Victorian (Hansard), 1969, 77
 Papers, 1971, 79
 privilege, 1966, 72
 Pastoral industry, history of, 1963, 549
 Pastures, development of, 1962, 467
 Pesticides, Inter-departmental Committee on, 1965, 245
 Petrochemical industry, 1964, 650
 Physically handicapped persons, voluntary social welfare work for, 1968, 558
 Pilots, Port Phillip, 1963, 762
 Plant ecology of the coast, 1968, 31
 Poisons and deleterious substances, control of, 1965, 245
 Poliomyelitis and allied diseases, 1964, 255
Port
 development, changing trends, 1968, 745
 facilities, Melbourne Harbor Trust, 1969, 755
 Port Phillip Authority, 1969, 282
 Port Phillip Sea Pilots, 1963, 762
 Postgraduate education, 1964, 234
 Post Office, history of, 1961, 702
 Premier's Department, history of, 1964, 81
 Prince Henry's Hospital, 1964, 286
 Private legislation in Parliament, 1962, 86
 Property distribution, 1969, 314
 Provincial daily newspapers, 1967, 447
Public
 health engineering, 1969, 520
 records in Victoria, 1968, 439
 Works Department, history of, 1967, 98
 Publishing, Book, 1965, 181
- Quarrying**, 1966, 546
 Queen Victoria Memorial Hospital, 1967, 529
- Radio**
 Australia, 1966, 174
 programmes, A.B.C., development of, 1969, 467
 Railways, history, 1962, 722
Regional
 libraries, 1965, 184
 planning and State development, 1969, 284
 Rehabilitation of disabled persons, 1970, 577
 Reptiles, 1971, 11
Research
 in Victorian universities, 1968, 492
 stations, Department of Agriculture, 1971, 293
 Resources Development Bank Limited, Australian, 1970, 688
Retailing
 in Victoria, 1962, 700
 since 1957, 1969, 735
 River improvement and drainage trusts, 1968, 299
Rivers
 and water resources, 1963, 30
 and streams, metropolitan, 1969, 267
 Road Safety Council, Australian, 1966, 761
 Royal Botanic Gardens of Melbourne, 1969, 474
 Royal Children's Hospital, 1964, 284
 Royal Institute for the Blind, 1970, 579
 Royal Melbourne Hospital, 1962, 271
 Royal Society of Victoria, 1963, 171
 Royal Victorian Eye and Ear Hospital, 1968, 525
Rural
 finance, 1965, 487
 holdings in Victoria, size distribution, 1969, 314
- Sanctuary, Sir Colin MacKenzie, 1965, 198
 St Vincent's Hospital, 1965, 266
 School of Medical Research, 1965, 274
 Scallop fishery, 1968, 362
 Science and Technology Careers Bureau, 1965, 241

- Scholarships, Commonwealth, 1964, 245
 School Dental Service, 1966, 226
 School Medical Service, Victorian, 1969, 522
 Sculpture in Victoria, 1964, 171
 Scouting movement, 1964, 190
 Secondary industry
 development, 1965, 569
 educational requirements, 1964, 613
 Sewerage
 and water supply in country towns, 1968, 270
 Metropolitan Board of Works Farm, Werribee, 1965, 413
 Sheep *see* pastoral industry, history of
 Sheltered Employment (Assistance) Act, 1969, 561
 Shepparton, 1967, 797
 Short-term money market, 1967, 708
 Sidney Myer Music Bowl, 1970, 465
 Social services
 Commonwealth, history of, 1962, 281
 voluntary, 1965, 304
 welfare work, voluntary, for physically handicapped persons, 1968, 558
 Soil Conservation Authority, 1961, 452
 Soils, 1964, 1
 Sport, 1964, 191
 State
 development and regional planning 1969, 284
 Electricity Commission of Victoria, history of, 1961, 580
 capital financing since 1945, 1970, 445
 Film Centre, 1969, 517
 Savings Bank, history of, 1961, 630
 wildlife reserves system, 1966, 540
 Statistician's Office, history of, 1963, 801
 Statutes, Consolidation of, 1961, 296
 Subdivision of land in strata, 1968, 695
 Suburban newspapers, 1969, 465
 Survey and mapping, 1969, 46
 Swan Hill Folk Museum, 1971, 435
 Swinburne Technical College, 1963, 224
 Taxation law, Commonwealth-State
 Part I, 1969, 590
 Part II, 1970, 588
 Teacher training, 1967, 480
 Technical education, 1965, 207
 Telecommunications, overseas, history, 1962, 752
 Telegraph services, (TRESS), 1963, 791
 Television
 and broadcasting programme standards, 1965, 196
 programme research, 1966, 178
 programmes, A.B.C., development of, 1970, 470
 technical planning, 1967, 453
 Textile industry, 1968, 416
 Tobacco marketing, 1969, 343
 Torts, law of, 1964, 339
 Tourist attractions, 1966, 182
 Development Authority, 1962, 182
 Tower Hill State Game Reserve, 1969, 374
 Town and country planning, 1961, 325
 Trade unions, 1971, 192
 Victoria's pattern of, 1964, 781
 Traffic control, 1969, 614
 Tramways, 1930-1961, 1963, 771
 Transportation, Melbourne Committee, 1968, 776
 Treasury, 1966, 97
 TRESS, telegraph services, 1963, 791
 Tuberculosis
 in cattle, eradication of, 1962, 525
 and mass X-ray surveys, 1967, 507
 Tullamarine (Melbourne Airport), 1970, 783
 Underground water, 1969, 384
 Unions, trade, 1971, 192
 Universities, employment of graduates, 1967, 488
 University
 development in Victoria, 1966, 203
 of Melbourne
 affiliated residential colleges, 1966, 212
 medical research, 1964, 292
 medical school, 1862-1962, 1963, 216
 research, 1968, 492
 Victoria, history of, 1961, 1
 Victorian Railways, history of, 1962, 722
 Victorian School for Deaf Children, 1971, 557
 Walter and Eliza Hall Institute of Medical Research, 1968, 533
 Wangaratta, 1968, 795
 Warrnambool, 1966, 777
 Water
 conservation, 1969, 309
 Research Foundation, 1966, 479
 supply and sewerage in country towns, 1968, 270
 underground, Victorian, 1969, 384
 Wheat Board, Australian, history and functions of, 1969, 331
 Wildlife
 in relation to natural resources, 1962, 544
 State Reserves System, 1966, 540
 Wine, 1968, 336
 grape growing for, 1964, 573
 Zoological Gardens, Melbourne, 1971, 447

Appendix F

LIST OF MAPS IN VICTORIAN YEAR BOOKS

(Commencing with new series : Volume 75, 1961)

The figures below indicate the year and page of the *Year Book* to which reference is made. Where a map has been reproduced more than once, only the latest edition in which it appears is shown.

- Air services, regular, 1964, 845
Alpine regions, 1962, facing 44
Amphibians and reptiles : environmental factors and zoogeographic regions, 1971, facing 14
Anglesea, vegetation map, 1968, 34
Average annual rainfall, 1971, 56
- Beef cattle, distribution, 31 March 1962, 1964, 579
Bird regions, 1966, facing 2
Brown coal, 1971, 361
- Coal deposits, 1963, 639
Coastal vegetation around Western Port, 1968, 35
Coastline, geological map and detailed maps of typical features, 1967, facing 32
Coastline, outline map, 1966, facing 32
Counties and statistical districts, 1971, 301
- Dairy cattle, distribution, 31 March 1962, 1964, 578
Dandenong Valley Authority, 1968, 301
- Electoral Districts, Legislative Assembly, 1971, facing 94
Electoral Districts, Legislative Assembly (prior to 1965 redistribution), 1965, 94
Electoral Provinces, Legislative Council, 1971, facing 96
Electoral Provinces, Legislative Council (prior to 1965 redistribution), 1965, 93
Electricity transmission system, 1970, 448
- Fishing grounds, 1967, facing 2
Forest type, principal zones of natural occurrence, 1962, 55
- Geology, 1961, facing 42
Gippsland natural gas and crude oil fields development and distribution, 1966-1970, 1971, facing 354
Groundwater provinces, 1969, facing 384
- Irrigation, private diversions, distribution, 1966, 478
- Lake systems, position, 1965, 36
Lakes, Gippsland, 1965, 37
Lakes, Mallee-Wimmera, 1965, 37
Lakes, Western District, 1965, 36
Latrobe Valley, 1965, 792
- Marine zones and provinces, 1969, facing 38
Melbourne metropolitan area, as defined by Greater Melbourne Plan, 1962, 408
Melbourne Statistical Division, 1971, inside back cover
Mildura Irrigation Trust and Urban Water Trust, area covered, 1969, 815
Mineral deposits, 1970, facing 10
Mt Buffalo National Park, 1970, 473
- Natural gas and oil exploration, May 1967, 1968, facing 364
Natural gas and oil wells, and associated pipelines, 30 September 1968, 1969, facing 454
Natural gas pipeline, Dutson to Dandenong, 1969, facing 382
- Oil and natural gas exploration, May 1967, 1968, facing 364
Oil and natural gas wells, and associated pipelines, as at 30 September 1968, 1969, facing 454
Ornithological regions, 1966, facing 2

- Physiographic divisions, 1971, 37
Pigs, distribution, 31 March 1962, 1964, 580
Planning, at 30 June 1967, Town and Country Planning Board, 1968, facing 602
Population density, 1971, inside back cover
Port of Melbourne, 1971, 717
Power transmission system, 1971, 425
- Radio navigation, 1965, 776
Railways, 1970, facing 758
Rainfall, annual, 1960, 1962, 70
Rainfall, annual, 1961, 1963, 51
Rainfall, annual, 1962, 1964, 28
Rainfall, annual, 1963, 1965, 55
Rainfall, average annual, 1971, 56
Rainfall variability, based on district annual rainfall, 1971, 58
Regional planning boundaries, 1969, 287
Reptiles and amphibians: environmental factors and zoogeographic regions, 1971, facing 14
River basins, 1971, 48
Rivers, lakes, water conservation works and distributory systems, 1965, facing 34
Road system, by type of construction, C.R.B., 1966, facing 380
- Sheep distribution, 31 March 1962, 1964, 577
Shepparton irrigation area, 1967, 801
- Soil regions, 1964, facing 6
Statistical Division, Melbourne, 1971, inside back cover
Statistical Divisions, Victoria, 1971, inside back cover
Sunday Island, land and vegetation features, 1968, 35
- Television, national, estimated service areas, 1965, 782
- Vegetation, 1962, facing 6
Vegetation and land features, Sunday Island, 1968, 35
Vegetation map, Anglesea area, 1968, 34
- Wangaratta and surrounding district, 1968, 798
Warrnambool and district, 1966, 778
Water conservation works and distributory systems, rivers and lakes, 1965, facing 34
Water resources, key plan to river basins, 1967, 38
Water supply system, M.M.B.W., 1964, 440
Western Port, 1967, 754
Western Port, coastal vegetation, 1968, 35
Western Port water supply, 1971, 290
Wildlife reserves and co-operative projects, 1966, 541
Wilsons Promontory National Park, 1971, 450
Wimmera-Mallee stock and domestic water supply system, 1970, 803

Appendix G

SELECT BIBLIOGRAPHY OF BOOKS ABOUT VICTORIA

- Australian encyclopaedia*. Editor-in-chief, Alec Chisholm. Sydney, Grolier Society of Australia, 1965. 10 volumes.
- BASSETT, M. *The Hentys; an Australian colonial tapestry*. London, Oxford University Press, 1954. 550 pages.
- BILLIS, R. V. and KENYON, A. S. *Pastoral pioneers of Port Phillip*. Melbourne, Macmillan, 1932. 278 pages.
- BLAINEY, G. *The rush that never ended; a history of Australian mining*. Melbourne University Press, 1963. 369 pages.
- BONWICK,, J. *Port Phillip settlement*. London, Sampson, Low, Marston, 1883. 538 pages.
- BOYS, R. D. *First years at Port Phillip*. Melbourne, Robertson and Mullens, 1935. 158 pages.
- BRIDE, T. F., editor. *Letters from Victorian pioneers*. Melbourne, Public Library of Victoria, 1898. 325 pages.
- BROWN, M. M. *Australian son; the story of Ned Kelly*. Melbourne, Georgian House, 1948. 282 pages.
- CANNON, M. *The land boomers*. Melbourne University Press, 1966. 248 pages.
- CANTLON, M. *Homesteads of Victoria 1836-1910*. Melbourne, Georgian House, 1967. 108 pages.
- CARBONI, R. *The Eureka Stockade*. Melbourne University Press, 1963. 182 pages.
- CAVANOUGH, M. and DAVIES, M. *Cup day; the story of the Melbourne Cup, 1861-1960*. Melbourne, Cheshire, 1960. 370 pages.
- CLUNE, F. P. *The Kelly hunters; the authentic history of the life and times of Edward Kelly*. Sydney, Angus and Robertson, 1954. 362 pages.
- COCHRANE, G. R. *Flowers and plants of Victoria*. Sydney, Reed, 1968. 216 pages.
- CURR, E. M. *Recollections of squatting in Victoria; from 1841 to 1851*. New edition. Melbourne University Press, 1965. 194 pages.
- DALEY, C. *The story of Gippsland*. Melbourne, Whitcombe and Tombs, 1962. 220 pages.
- DEAN, A. *A multitude of counsellors; history of the Bar of Victoria*. Melbourne, Cheshire, 1968. 332 pages.
- EGGLESTON, F. W. *State socialism in Victoria*. London, King, 1932. 354 pages.
- FINN, E. (Garryowen) *Chronicles of early Melbourne, 1835-52; historical anecdotal and personal*. Melbourne, Fergusson and Mitchell, 1888. 2 volumes.
- FITZGERALD, R. T. *The printers of Melbourne; the history of a union*. Melbourne, Pitman, 1967. 173 pages.
- GIFFORD, K. H. *The Victorian local government handbook*. 6th edition. Melbourne, Law Book Co., 1967. 244 pages.
- GRANT, J. and SEARLE, G. *The Melbourne scene 1803-1956*. Melbourne University Press, 1956. 308 pages.
- GREGORY, J. S. "A contribution to the bibliography of the economic geology of Victoria, to the end of 1903". In *Records of the Geological Survey of Victoria*. Melbourne, Department of Mines, 1904. 132 pages.

- GUNSON, N. *The good country; Cranbourne Shire*. Melbourne, Cheshire, 1968. 308 pages.
- HALL, A. R. *The Stock Exchange of Melbourne and the Victorian economy, 1852-1900*. Canberra, Australian National University Press, 1968. 267 pages.
- HARRIGAN, L. *Victorian Railways to '62*. Melbourne, Victorian Railways Public Relations and Betterment Board, 1962. 300 pages.
- HENDERSON, A. *Early pioneer families of Victoria and Riverina; a genealogical and biographical record*. Melbourne, McCarron Bird, 1936. 584 pages.
- HILL, E. *Water into gold*. Melbourne, Robertson and Mullens, 1949. 328 pages.
- HUNTER, A. *The economics of Australian industry; studies in environment and structure*. Melbourne University Press, 1963. 543 pages.
- KIDDLE, M. *Men of yesterday; social history of the Western District of Victoria, 1834-1890*. Melbourne University Press, 1962. 574 pages.
- LA NAUZE, J. A. *Alfred Deakin; a biography*. Melbourne University Press, 1965. 2 volumes.
- LEEPER, G. W. *Introducing Victoria*. Melbourne University Press, 1955. 306 pages.
- McCRAE, H. *Georgiana's journal; Melbourne a hundred years ago*. Sydney, Angus and Robertson, 1934. 314 pages.
- MASSOLA, A. "Bibliography of printed literature upon Victorian Aborigines". In *Memoirs of the National Museum of Victoria*, No. 24. Melbourne, National Museum, 1959. 156 pages.
- O'CALLAGHAN, T. *Names of Victorian railway stations*. Melbourne, Government Printer, 1918. 100 pages.
- RIVETT, R. *Australian citizen; Herbert Brookes 1867-1963*. Melbourne University Press, 1965. 218 pages.
- ROBERTSON, E. G. *Victorian heritage; ornamental cast iron in architecture*. Melbourne, Georgian House, 1960. 230 pages.
- ROBIN, A. de Q. *Charles Perry, Bishop of Melbourne; the challenges of a colonial episcopate, 1847-76*. Nedlands, University of Western Australia Press, 1967. 229 pages.
- ROE, M. *Quest for authority in eastern Australia, 1835-1851*. Melbourne University Press, 1965. 258 pages.
- Sands and McDougall's directory of Victoria*. Melbourne, Sands and McDougall, 1970. 2,450 pages.
- SAUNDERS, D., editor. *Historic buildings in Victoria*. Melbourne, Jacaranda for the National Trust of Australia (Victoria), 1966. 278 pages.
- SAYERS, C. E. *David Syme; a life*. Melbourne, Cheshire, 1965. 312 pages.
- SERLE, G. *The golden age; a history of the Colony of Victoria, 1851-1861*. Melbourne University Press, 1963. 456 pages.
- SHANN, E. O. G. *An economic history of Australia*. Australian edition. Cambridge University Press, 1948. 456 pages.
- SHILLINGLAW, J. J. *Historical records of Port Phillip; the first annals of the Colony of Victoria*. Melbourne, Government Printer, 1879. 142 pages.
- SINCLAIR, W. A. *Economic recovery in Victoria, 1894-1899*. Canberra, Australian National University Press, 1956. 128 pages.
- SMYTH, R. B. *The Aborigines of Victoria*. Melbourne, Government Printer, 1878. 2 volumes.
- SUTHERLAND, A. *Victoria and its metropolis, past and present*. Melbourne, McCarron Bird, 1888. 2 volumes.
- TENNISON, P. and GRAY, L. *Meet the gallery; a literary and visual introduction to Victoria's new National Gallery*. Melbourne, Sun Books, 1968. 68 pages.
- TREGENZA, John. *Professor of democracy; the life of Charles Henry Pearson, 1830-1894, Oxford don and Australian radical*. Melbourne University Press, 1968. 279 pages.
- TURNBULL, C. *Eureka; the story of Peter Lalor*. Melbourne, Hawthorn Press, 1946. 50 pages.
- TURNER, H. G. *A history of the Colony of Victoria from its discovery to its absorption into the Commonwealth of Australia*. London, Longmans, 1904. 2 volumes.
- Universal business directory*. 20th edition, 1969-70. South Melbourne, Directory House, 1969-70. 3 volumes. Contents: Melbourne, city and suburbs; West Victoria; East Victoria.

- Victorian municipal directory*. Also Commonwealth and State guide and water supply record for 1970. Melbourne, Arnall and Jackson, 1970. 1,158 pages.
- VICTORIA PARLIAMENT. *One hundred years of responsible government in Victoria, 1856-1956*. Melbourne, Government Printer, 1957. 266 pages.
- Victorian State parliamentary and civic guide*. 9th edition. Melbourne, Eric White Associates, 1971. 154 pages.
- Walkabout; Australian way of life magazine*. Melbourne, National Travel Association, monthly, 1934 to date.
- Who's who in Australia*. 19th edition. Melbourne, Herald and Weekly Times Ltd, 1968. 955 pages.
- WORTHINGTON, J. M. *Index to parliamentary papers, reports of select committees, and returns to orders, bills, etc., 1851-1909*. Melbourne, Government Printer, 1909. 324 pages.
- ZUBRZYCKI, J. *Settlers of the Latrobe Valley*. Canberra, Australian National University Press, 1964. 306 pages.

Appendix H

SELECT BIBLIOGRAPHY OF BOOKS PUBLISHED IN VICTORIA

The following list of books published in Victoria during 1969-70 is intended to be neither complete nor comprehensive. Its purpose rather is to illustrate the range and diversity of subject matter contained in books published in this State. It has been compiled in collaboration with the State Library of Victoria which receives a copy of every item published in Victoria under provisions included in the *Library Council of Victoria Act 1965* and before that in the *State Library Act 1960*.

- ABBOTT, G. J. *Economic growth of Australia, 1788-1821*. Edited by G. J. Abbott and N. B. Nairn. Melbourne University Press, 1969. 361 pages.
- ANDERSON, H. McD. *The flowers of the field; a history of Ripon Shire*. Together with Mrs Kirkland's "Life in the bush", from *Chambers' miscellany*, 1845. Melbourne, Hill of Content, 1969. 240 pages.
- ANDERSON, H. McD. *Eureka; Victorian parliamentary papers; votes and proceedings, 1854-1867*. Collected and introduced by H. Anderson. Melbourne, Hill of Content, 1969. 1 volume (various pagings).
- ANGUS, J. C. and FORSTER, H. W. *The Ovens Valley*. Melbourne, Cypress Books, 1970. (Historical Backgrounds, 3.) Cover title: The Ovens Valley; Wangaratta, Benalla, Bright, Beechworth and district. 65 pages.
- Australian Aboriginal art; *Cave paintings of Arnhemland*. Foreword by C. P. Mountford. Melbourne, Newcraft Publicity, 1968. Limited edition of 200 copies. 5 volumes.
- AUSTRALIAN COUNCIL OF NATIONAL TRUSTS. *Historic homesteads of Australia*. Melbourne, Cassell, 1969. (Historic Buildings of Australia, volume 1.) 288 pages.
- AUSTRALIAN INSTITUTE OF MANAGEMENT, VICTORIA. INDUSTRIAL RELATIONS GROUP. "*Fringe benefits for wages employees*"; a research study. Melbourne, Australian Institute of Management, 1969. 229 pages.
- BALL, W. McM. *Australia and Japan*. Melbourne, Nelson (Australia), 1969. (Documents and Readings in Australian History.) 172 pages.
- BALLARAT HISTORICAL PARK ASSOCIATION. *Ballarat Historical Park*. Ballarat, Victoria, 1969. Cover title: A presentation of the project of the Ballarat Historical Park Association. 28 pages.
- BENALLA SHIRE COUNCIL. *Shire of Benalla; centenary of local government, 1869-1969*. Benalla, Victoria, 1969. 14 pages.
- BERNSTEIN, D. L. *First Tuesday in November; the story of the Melbourne Cup*. Melbourne, Heinemann, 1969. 327 pages.
- BILLOT, C. P. *Geelong; then and now*. Melbourne, Lothian Publications, 1969. 39 pages.
- BILLOT, C. P. *Melbourne; an annotated bibliography to 1850*. Geelong, Ripple-side Press, 1970. 1 volume (various pagings).
- BLACKWOOD, R. R. *Beautiful Bali*. Melbourne, Hampden Hall, 1970. 158 pages.
- BOLDREWOOD, R. pseudonym. *Old Melbourne memories*. Introduction and editorial commentary by C. E. Sayers. New edition. Melbourne, Heinemann, 1969. (Heinemann Pioneer Series.) 210 pages.
- BOSENCE, W. H. *Tatura; and the Shire of Rodney*. Melbourne, Hawthorn Press, 1969. 334 pages.

- BOWD, D. G. *Macquarie country; a history of the Hawkesbury*. Melbourne, Cheshire, 1969. 242 pages.
- BOWDEN, K. M. *The Western Port settlement and its leading personalities*. Bentleigh, Victoria, South Eastern Historical Association, 1970. 60 pages.
- BOYCE, D. W. *Clarke of the Kindur; convict, bushranger, explorer*. Melbourne University Press, 1970. 100 pages.
- BRIDE, T. F. *Letters from Victorian pioneers, being a series of papers on the early occupation of the colony, the aborigines, etc., addressed by Victorian pioneers to His Excellency Charles Joseph La Trobe*. Edited with an introduction and notes by C. E. Sayers, from the original edition edited for the Trustees of the Public Library. New edition. Melbourne, Heinemann, 1969. 455 pages.
- CAIRNS, J. F. *The eagle and the lotus; Western intervention in Vietnam, 1847-1968*. Melbourne, Lansdowne, 1969. 250 pages.
- CAMPBELL, D., editor. *Modern Australian poetry*. Melbourne, Sun Books, 1970. (Sun Poetry Series.) 312 pages.
- COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION, DIVISION OF ENTOMOLOGY. *The insects of Australia; a textbook for students and research workers*. Melbourne University Press, 1970. 1,029 pages.
- CONGALTON, A. A. *Status and prestige in Australia*. Melbourne, Cheshire, 1969. 160 pages.
- DAVIDSON, B. R. *Australia wet or dry? the physical and economic limits to the expansion of irrigation*. Paperback edition. Melbourne University Press, 1969. 264 pages.
- DAVIS, A. J. *In this our necessity; a book on water in south-eastern Australia*. Melbourne, Hall's Book Store, 1969. 162 pages.
- DAWE, B. *Beyond the subdivision; poems*. Melbourne, Cheshire, 1969. 52 pages.
- DE' LISLE, G. *Introducing Australia*. Written, photographed, and designed by G. De'Lisle. Additional photography, research, and co-ordination by C. De'Lisle. Melbourne, Joey Books, 1969. 156 pages.
- DUMAS, F. L. *The story of a full life*. Melbourne, Sun Books, 1969. 226 pages.
- DUNPHY, D. C. *Cliques, crowds and gangs; group life of Sydney adolescents*. Melbourne, Cheshire, 1969. 170 pages.
- DUTTON, G. P. H. *Australia's censorship crisis*. Edited by G. Dutton and M. Harris. Melbourne, Sun Books, 1970.
- ENCEL, S. *Equality and authority; a study of class, status and power in Australia*. Melbourne, Cheshire, 1970. 492 pages.
- FENWICK, J. *The Lightning diary of John Fenwick, 1854*. Edited by I. Wynd with a foreword by P. L. Brown and illustrated by W. A. Smith. Geelong, Geelong Historical Society, 1969. 32 pages.
- FITZGERALD, B. C. *Background to politics; a sourcebook of major documents and statements which affect the course of Australian politics*. Melbourne, Cheshire, 1969. 130 pages.
- FORSHAW, J. M. *Australian parrots*. With five paintings by J. C. Yrizarry. Melbourne, Lansdowne, 1969. 306 pages.
- FRITH, H. J. and CALSBY, J. H. *Kangaroos*, Melbourne, Cheshire, 1969. 209 pages.
- GALBALLY, A. E. *Arthur Streeton*. Melbourne, Lansdowne, 1969. (Australian Art Library.) 87 pages.
- GELBER, H. G. *The Australian-American alliance; costs and benefits*. Ringwood, Victoria, Penguin Books, 1968. (Australian Pelican Books.) 160 pages.
- GLEESON, J. T. *Masterpieces of Australian painting*. Melbourne, Lansdowne, 1969. (Australian Art Library.) 222 pages.
- GLYNN, S. *Urbanisation in Australian history, 1788-1900*. Melbourne, Nelson (Australia), 1970. 67 pages.
- GOODE, J. H. *Smoke, smell and clatter; the revolutionary story of motoring in Australia*. Melbourne, Lansdowne, 1969. 106 pages.
- GREEN, F. C. *Servant of the House*. Melbourne, Heinemann, 1969. 173 pages.
- HARDING, R. W. *Police killings in Australia*. Ringwood, Victoria, Penguin Books, 1970. 266 pages.
- HERALD AND WEEKLY TIMES LTD. *Man on the moon*. Melbourne, 1969. 65 pages.

- HUTTON, J. *Building and construction in Australia*. Melbourne, Cheshire for the Institute of Applied Economic Research, University of Melbourne, 1970. 320 pages.
- JACOBS, C. P. *Proceedings in the Master's Office (with precedents)*. Melbourne, Law Book Co., 1969. 253 pages.
- JOHNSTON, G. K. W. *Annals of Australian literature*. Melbourne, Oxford University Press, 1970. 147 pages.
- JONES, H., supposed author. *Colonists, copper and corn in the Colony of South Australia, 1850-1851*, by Old Colonist. Edited by E. M. Yelland. Melbourne, Hawthorn Press, 1970. Originally published as "Sketches of the present state of the Colony of South Australia" in the "South Australian Register" during 1851. Published with the assistance of the Commonwealth Literary Fund. 212 pages.
- KINGSLEY, H. *The recollections of Geoffrey Hamlyn*. Hawthorn, Victoria, O'Neil, 1970. (Australian Classics.) 474 pages.
- KYNETON GUARDIAN. *History of Kyneton*. Compiled from the files of the *Kyneton Guardian*, 1863 et seq. Republished from the *Kyneton Guardian*, 1934 and 1935. Volume 1. 2nd edition. Kyneton, Victoria, 1967. 169 pages.
- LANDELLS, W. C. *Adam Lindsay Gordon Cottage Folk Museum; Dendy Park, Brighton, Victoria, Australia*. North Brighton, Victoria, Adam Lindsay Gordon Cottage Folk Museum Trust, 1969. 8 pages.
- LONEY, J. K. *Wrecks on the Gippsland coast; a survey of major incidents from Point Nepean to Cape Howe, and nearer islands of Bass Strait, including Westernport, Anderson's Inlet, Waratah Bay, Kent Group, Corner Inlet, Port Albert, Lakes Entrance, Lake Tyers, Marlo, Sydenham Inlet, Mallacoota, and Gabo Island*. 2nd edition revised and enlarged with more than sixty incidents added. Geelong, The Author, 1969? Includes a "Special Supplement on Twofold Bay". 92 pages.
- LONEY, J. K. *Wrecks on Victoria's south west coast; a survey of incidents from the Victorian-South Australian border to Lady Bay, including Portland, Port Fairy, and Warrnambool*. Apollo Bay, Victoria, The Author, 1969. Cover title: *Wrecks on Victoria's south west coast; Portland, Port Fairy, Warrnambool*. 43 pages.
- LOUDON, J. G. *Industrialisation and the individual; an account of H.R.H. the Duke of Edinburgh's Third Commonwealth Study Conference on the Human Problems of Industrial Development and Re-development in Commonwealth Countries, Australia, 12 May-4 June 1968*. Melbourne, Sun Books, 1969. 381 pages.
- LUCK, R. K. *A guide to modern Australian painting*. Melbourne, Sun Books, 1969. 119 pages.
- McANDREW, J. *A regional guide to Victorian geology*. Edited by J. McAndrew and M. A. H. Marsden. Melbourne, Geology Department, University of Melbourne, 1968. Originally prepared as a handbook for geology excursions forming part of 39th ANZAAS Congress, Melbourne, 1967. 219 pages.
- McCAUGHEY, A. P. *Australian abstract art*. Melbourne, Oxford University Press, 1969. (National Gallery Booklets.) 32 pages.
- McCULLOCH, A. McL. *The golden age of Australian painting; Impressionism and the Heidelberg School*. Melbourne, Lansdowne, 1969. (Australian Art Library.) 196 pages.
- McKNIGHT, T. L. *The camel in Australia*. Melbourne University Press, 1969. 154 pages.
- MARTIN, A. W., editor. *Essays in Australian federation*. Melbourne University Press, 1969. (Studies in Australian Federation.) 206 pages.
- MICKLE, D. J., compiler. *Kooweerup; a brief history of 130 years, 1839-1969*. Kooweerup, Victoria, Kooweerup and District War Memorial Swimming Pool Committee, 1969. 24 pages.
- MITCHELL, G. H., compiler. *Growers in action; official history of the Victorian Wheat and Woolgrowers' Association, 1927-1968*. Melbourne, Hawthorn Press, 1969. 356 pages.
- MORGAN, E. J. R. and GILBERT, S. H. *Early Adelaide architecture, 1836 to 1886*. Melbourne, Oxford University Press, 1969. 169 pages.
- MURRAY, K. *A history of the Ballarat Technical School*. Ballarat, 1969. 67 pages.

- NEPEAN HISTORICAL SOCIETY. *The Peninsula story, book 2; hell to health, the history of quarantine at Port Phillip Heads, 1852-1966*, by J. H. Welch. Sorrento, Victoria, 1969. 96 pages.
- NOONAN, W. J. and FRASER, Anne. *Of Wamman and Yanakie*. Foster, Victoria, South Gippsland Publishers, 1969. 70 pages.
- OFFICER, H. R. *Australian flycatchers and their allies*. Illustrated by P. Slater. Maps by A. Stirling. Melbourne, Bird Observers Club, 1969. 108 pages.
- PAGE, R. *Australian bookselling*. Melbourne, Hill of Content, 1970. 175 pages.
- PALMER, V. *Intimate portraits and other pieces*. Essays and articles. Selected with an introduction by H. P. Heseltine. Melbourne, Cheshire, 1969. Published with the assistance of the Commonwealth Literary Fund. 133 pages.
- PEARL, C. A. *Beer, glorious beer; with incidental observations on great beer myths, pubs and publicans, barmaids and breathalysers, mum, flip, beery bards, and beer in the kitchen, etc., etc.* Melbourne, Nelson (Australia), 1969. 173 pages.
- PEARSON, A. M. *Echoes from the mountains; an history of the Omeo Shire Council*. Omeo, Victoria, Shire Council, 1969. 404 pages.
- POYNTER, J. R. *Society and pauperism; English ideas on poor relief, 1795-1834*. Melbourne University Press, 1969. 367 pages.
- PRINCE HENRY'S HOSPITAL. *Prince Henry's Hospital, 1869-1969, 100*. Melbourne, 1969. 41 pages. Cover title in folder: Prince Henry's Hospital, Melbourne, founded 1869.
- RAGGATT, H. G., editor. *Fuel and power in Australia*. Melbourne, Cheshire, 1969. 162 pages.
- REYNOLDS, J. *Launceston; history of an Australian city*. Melbourne, Macmillan for Adult Education Board, Tasmania, 1969. 60 pages.
- RIGG, J., editor. *In her own right; women of Australia*. Melbourne, Nelson (Australia), 1969. 184 pages.
- ROBINSON, L. L. *A century of life; the story of the first one hundred years of the National Mutual Life*. Melbourne, National Mutual Life Association of Australasia Ltd., 1969. Cover title: National Mutual, 1869-1969; a century of life. 139 pages.
- ROBSON, L. L., editor. *Australia and the Great War, 1914-1918*. Narrative and selection of documents. Melbourne, Macmillan, 1969. (The Making of Australia.) 113 pages.
- ROYAL SOCIETY OF VICTORIA. *East Gippsland symposium, Melbourne, 1967*. In *Proceedings*, new series, Vol. 82, No. 1. Melbourne, 1969. 148 pages.
- SAYERS, C. E. *By these we flourish; a history of Warrnambool*. Melbourne, Heinemann, 1969. 190 pages.
- SHAW, M. T. *On Mount Emu Creek; the story of a nineteenth-century Victorian sheep station*. Melbourne, Robertson and Mullens, 1969. 208 pages.
- STOKES, A. *Vineyards of north-east Victoria*. Chiltern, Victoria, Federal Standard, 1970. Cover title: A brief history of the vineyards in the north-east of Victoria. 25 pages.
- TEICHMANN, M. E., editor. *New directions in Australian foreign policy; ally, satellite or neutral?* Ringwood, Victoria, Penguin Books, 1969. (An Australian Pelican.) 211 pages.
- TEMPLETON, J. *Prince Henry's; the evolution of a Melbourne hospital, 1869-1969*. Melbourne, Robertson and Mullens on behalf of Prince Henry's Hospital, 1969. 206 pages.
- THOMAS, J., pseudonym. *The Vagabond papers*, by J. S. James and with an introduction by M. Cannon. Abridged edition. Melbourne University Press, 1969. First published in 5 volumes by George Robertson, 1877-1878. 274 pages.
- TRENGOVE, A. *John Grey Gorton; an informal biography*. Melbourne, Cassell, 1969. 251 pages.
- WAKEFIELD, N. A. *Aspects of exploration and settlement of East Gippsland*. Melbourne, Royal Society of Victoria, 1969. Reprinted from *Proceedings* of the Royal Society of Victoria, Volume 82. Part 1, pages 7 to 26.
- WATEN, J. L. *From Odessa to Odessa, the journey of an Australian writer*. Melbourne, Cheshire, 1969. 189 pages.
- WENTWORTH, B. B. and G. *The Wentworth family—Melbourne; a short history and genealogical description of the male descendants of Emmott Charles William Wentworth*. Melbourne, The Authors, 1969. volume (various pagings).

- WHEELER, K. E., LADLEY, A. M., and LEONG, F. G. *Studies in agricultural geography*. Melbourne, Cheshire, 1969. 171 pages.
- WHITE, D. C. *Man, the earth and tomorrow; an introduction to the conservation and use of Australia's natural resources*. Edited by D. C. White and C. S. Elliot. Melbourne, Cassell, 1969. 102 pages.
- WHITE, O. E. D. *Under the iron rainbow; northwest Australia today*. Melbourne, Heinemann, 1969. 169 pages.
- WILLEY, K. *New Guinea; a journey through 10,000 years*, by R. Smith. With text by K. Willey. Melbourne, Lansdowne, 1969. 168 pages.
- WILLIAMS, M. *The east is red; the Chinese—a new viewpoint*. Melbourne, Sun Books, 1969. 267 pages.
- WILLIAMS, M., editor. *South Australia from the air*. Melbourne, Australian and New Zealand Association for the Advancement of Science in association with Melbourne University Press, 1969. First published for distribution to delegates attending the 41st ANZAAS Congress, Adelaide. 1969. 128 pages.
- WINTER, E. A. and HARRIS, D. D. *Tasmania; regions and themes*. Melbourne, Cheshire, 1969. 167 pages.
- YEA SHIRE COUNCIL. *Yea; a century of local government, 1869–1969*. Yea, Victoria, 1969. 61 pages.

Appendix I

PUBLICATIONS ISSUED BY THE VICTORIAN OFFICE, COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

General

Victorian Year Book
Victorian Pocket Year Book
Victorian Monthly Statistical Review
General Statistics of Local Government Areas (irregular)

Building

Building Approvals (monthly)
Building Approvals by Local Government Areas (quarterly and annual)
Building Operations (quarterly)
Building Operations: Number of New Houses and Flats: Preliminary Estimates (quarterly)

Demography and social

Births, Deaths, and Marriages: Preliminary Statement
Causes of Death
Demography
Divorce
Estimated Age Distribution of the Population
Estimated Population and Dwellings by Local Government Areas
Hospital Morbidity
Industrial Accidents and Workers Compensation
Industrial Accidents: Preliminary Statement
Primary and Secondary Education
Tertiary Education

Secondary production

Secondary Industries
Secondary Industries: Preliminary Statement
Secondary Production (monthly)

Finance, local government, and transport
Fire, Marine, and General Insurance
Housing Finance (quarterly)
Local Government Finance
Mortgages of Real Estate Lodged for Registration (quarterly)
Motor Vehicle Registrations (monthly)
Road Traffic Accidents Involving Casualties (quarterly and annual)

Primary production

Agriculture
Apiculture
Apples and Pears in Cool Stores (monthly: March to November)
Chicken Hatchings and Poultry Slaughtering (monthly)
Citrus Fruit Production
Fisheries (quarterly and annual)
Fruit and Vineyards
Grain and Seed Harvesters on Rural Holdings (triennial)
Grasses and Clovers Harvested for Seed
Livestock
Livestock: Preliminary Numbers
Machinery on Rural Holdings
Maize: Acreage and Production
Mining and Quarrying Operations
Oats and Barley: Acreage and Varieties
Onions: Acreage and Production
Potatoes: Acreage, Production, and Varieties
Potatoes: Estimated Acreage
Rural Industries
Tractors on Rural Holdings (triennial)
Value of Primary Production
Vegetables: Acreage and Production
Viticulture
Wheat: Acreage and Varieties

NOTE. The above publications are issued ANNUALLY except where otherwise indicated, and may be obtained on application to the Deputy Commonwealth Statistician, Melbourne:

Commonwealth Banks Building,
Cnr Elizabeth and Flinders Streets,
MELBOURNE.

Box 2796Y, G.P.O.,
MELBOURNE, VIC. 3001.
Telephone 63 0181

INDEX

- Aboriginal Affairs Act* 1967, 139
Aboriginal Affairs Advisory Council, 140
Aboriginal Affairs, Ministry of, 98, 139
 housing activities, 610
Aboriginals, 139
Accident Insurance Office, State, 672-3
Accidents
 industrial, 186-91
 motor vehicle, 161
 road traffic, 744-5
 transport, 161
Acts of Parliament passed during 1969, 85-89
Administration and government, *see* Government and administration
Adoption, children involved, 151, *see also* Social Welfare Department, Family Welfare Division
Adult education, Council of, 496-7
Aerial agriculture, 304
Aerodromes, 746
Age
 distribution of population, 116
 groups
 intercensal increases, 114
 percentage of population, 115
 pensioners, housing, 607-8
 pensions, 524
 payments, 525
Aged Persons Homes Act, 528
Agricultural education, tertiary, 291-3
 colleges, 291-2
 University of Melbourne, School of, 292-3
Agriculture, *see also* Farm, Farming, Primary production
 aerial, 304
 Department of
 history, 105-8
 research stations, 293-6
Air circulation, climatic effect, 52
Airports
 Essendon, 751
 Melbourne (Tullamarine), 747-8
Alienation of land, 274-5
Ambulance services, 511
Amphibians, *see also* Reptiles
 breeding, 7-10
 classification, 2-4
 climate, 4
 distribution, 4
 ecology, 6
 environment, 4
 environmental adaptations, 6
 mating calls, 8
 taxonomic criteria, 2-4
 zoogeography, 4-6
Annual leave, 181
Anti-Cancer Council of Victoria, 518-9,
 see also Cancer Institute
 expenditure, 519
Apiculture, 344-5
Apprentices employed, 199
Apprenticeship Commission, 197-9
Arbitration, industrial, 166-9
Archives, State, 437
Area
 Victoria and other States, 36
 crops, 305-6, 307, *see also* specific crops
Art, *see* National Gallery of Victoria
Articles in previous *Victorian Year Books*, 789-93
Artificial fertilisers, 302-3
Assurance Fund, 683
Australian
 Broadcasting Commission, 442
 Broadcasting Control Board, 442, 443
 Integrated Economic Censuses, 1968-69, 368-89
 National Accounts, 778-84
 Wheat Board, 310-2
Average
 earnings and hours, employees in industry groups, 176
 weekly earnings, 173-5
 and hours, survey, 175-6
 employees in industry groups, 177
 managerial, executive staff in industry groups, 177
 indexes, 175
 per employed male unit, 175
Aviation, civil, 745-51
 aerial work operations, 746
 aerodromes, 746
 air traffic control, 748
 aircraft parts, materials, 748
 charter operations, 747
 commuter services, 747
 control, 745-6

- Essendon Airport, 751
- gliding clubs, 748
- Melbourne Airport (Tullamarine) 747-8
- passenger movements, 740
- private operations, 746
- radar developments, 748-50
- regular air services, 750
- Baby health centres, *see* Infant welfare
- Ballarat
 - Institute of Advanced Education, 489
 - Sewerage Authority, 262
 - Water Commissioners, 262
- Banking in 1969, 650-2
 - advances, 651-2
 - deposits, 650-1
 - services, 652
- Bankruptcies, 577
- Banks
 - Commonwealth
 - Banking Corporation, 656-9
 - Development Bank, 658-9
 - Savings Bank, 657-8
 - Trading Bank, 656-7
 - Reserve Bank, 652-3
 - savings
 - private, 664-5
 - State, 659-64
 - trading, 654-6
 - advances, classification, 655
 - branches and agencies, 654
 - debits to accounts, average weekly, 656
 - deposits and advances, 655
 - averages, 655
- Barley, 315-6
- Basic wage, 177-81, *see also* Wage rates
 - weekly rates, Melbourne, 179
- Bees, beeswax, *see* Honey
- Bendigo Institute of Technology, 489
- Bibliography
 - about Victoria, 796-8
 - published in Victoria, 799-803
- Bills of sale, 685
- Birth rates, 148
- Birthplaces of the population, 117, *see also* Population
- Births, *see also* Adoptions, Deaths, Population
 - Australia, 147
 - confinements, multiple, 150
 - ex-nuptial, 150
 - ages of mothers, 150
 - percentage of total births, 150
 - law relating to, 140
 - masculinity, 148
 - mothers' ages, ex-nuptial children, 150
 - multiple confinements, 150
 - nuptial
 - confinements
 - mothers' age group, previous issue, 148
 - number of mothers in age groups, total average issue, 149
 - parents, relative age groups, 149
 - first
 - marriage duration, mothers' age group, 149
 - parents' ages, 148
 - registration of, 140
 - sex, 148
 - summary, 140
- Blood Transfusion Service, 559-60
- Board of Works, Melbourne and Metropolitan, 249-59
- Bookmakers, investments with, 634
- Book Resources Committee, Victorian, 439
- Books
 - about Victoria, select bibliography, 796-8
 - published in Victoria, select bibliography, 799-803
- Boroughs, constitution, 214
- Boundaries and area, 36
- Breeding
 - stock, 326-8
 - wheat, 312-3
- Brides, bridegrooms, *see* Marriage
- Bridges, 592-4
- Broadcasting, 442-3
 - commercial, 442-3
 - Commission, Australian, 442
 - Control Board, Australian, 442, 443
 - licences in force, 758
 - music, 445-6
- Broiler industry, 341-2
- Brown coal, *see* Coal, brown
- Building, *see also* Housing
 - bridges, 592-4
 - control, 220, 594
 - development in Melbourne, 1969, 591-2
 - Local Government Act* 1958, 596
 - materials,
 - wholesale prices, 211
 - Wholesale Price Index, 211
 - societies, 674-5
 - statistics, 596-603
 - approvals, value, etc., 598
 - houses and flats (new)
 - commenced, 602-3
 - geographical distribution, 600-1
 - material of outer walls, 602
 - number, 600-1
 - ownership, 601
 - scaffolding inspection, 216
 - town and country planning, 594-6
 - Uniform Building Regulations, 596
 - value of new buildings
 - commenced, 598-9
 - completed, 599-600
 - under construction, 600
 - work done, 600
- Bursaries and scholarships, 459-61
- Bus services, *see* Tramway and omnibus services
- Bush Nursing Association, Victorian, 515-6

- Butter production, 332
- By-laws, 218
- Cabinet
 - composition, 73
 - formation, 73
 - functions, 74
 - powers, 74
 - procedural methods, 74
- Cancer Institute, research and treatment, 517-8, *see also* Anti-Cancer Council of Victoria
- Car
 - accidents, *see* Road traffic accidents
 - insurance, *see* Insurance, motor vehicle
- Cargoes discharged and shipped, 712-3
- Cars, *see* Motor vehicles
- Catholic education, 468-70
- Caulfield Institute of Technology, 490
- Causes of death, 151-61
- Censuses, Integrated Economic, 1968-69, 368-89
- Censuses, *see* individual headings, e.g., Population, Retail, etc.
- Central
 - District, land utilisation, 273-4
 - electric stations, 415-6
 - highlands, physiography, 39
- Cerebrovascular diseases, 159
- Charitable institutions, income, expenditure, etc., 512-4
- Charter operations, 746-7
- Cheese production, 332
- Chicken hatchings and poultry slaughterings, 343
- Chief Justice, 76
- Child
 - endowment, 526
 - labour in factories, 407
- Children's Court, 577-81
 - cases disposed of, charges, etc., 579
 - result of hearing, 579-80
 - jurisdiction, 578
 - Order of the Court, 578-9
 - warning first offenders, 580-1
- Cities, constitution, 214
- Citizenship and naturalisation, 138
- Civil
 - aviation, *see* Aviation, civil
 - marriages, *see* Marriages, civil
- Climate, 52-70
 - computers in meteorology, 65-6
 - Melbourne's, 66-9
 - climatic elements
 - means, 68
 - means and extremes, 69
 - cloud and sunshine, 67
 - fogs, 67
 - rainfall, 66
 - snow and hail, 68
 - temperature, 66
 - wind, 67
 - Victoria's, 52-65
 - circulation patterns, 652-3
 - district rainfall, 54-5
 - monthly, average and 1969, 57
 - droughts, 59-60
 - evaporation, 64
 - floods, 60
 - frosts, 61
 - humidity, 61, 64
 - rainfall, 53-4
 - average annual, 56
 - reliability, 55-9
 - snow, 60
 - summary 1969, 69
 - temperatures, 60-1
 - thunderstorms, 64-5
 - winds, 64
- Climatic elements, means, selected towns, 62-3
- Coal, brown, 359-62
 - deposits, 361
 - developments, 360
 - production, 359
 - Second World War, 361-2
 - State Electricity Commission, establishment, 360-61
 - war-time fuel crisis 1914-1919, 360
- Coal
 - Mine Workers Pension Fund, 641
 - production, 359
- Coastal regions, environment and land use, 42
- Coastline, erosion and sedimentation, 44-6
 - advancing coastlines, 45
 - eroding coastlines, 44
 - human agency, 46
 - wave action, 44
- Colleges
 - agricultural, 291-2
 - of advanced education, Commonwealth grants, 623
- Colonial Gas Association Ltd, 429-30
- Commercial
 - broadcasting, 442-3
 - television, 444
- Commonwealth
 - Banking Corporation, 656-9
 - banking legislation, 650
 - Conciliation and Arbitration Commission, 167
 - Departments, *see* particular headings
 - Development Bank, 658-9
 - equipment finance under hire purchase arrangements, 659
 - loans
 - approved, 658
 - approved (rural) during 1968-69, 282
 - outstanding to rural industries, 659
 - rural finance facilities, 281-2
 - Employment Service, 200-1
 - estate duty, 630
 - grants to Victoria, 619-25
 - Industrial Court, 167
 - Parliament, *see* Parliament, Commonwealth
 - Savings Bank, 657-8
 - accounts, loans, etc., 658

- scholarship schemes, 460
- Scientific and Industrial Research Organization, 393
- Serum Laboratories, history, 519-21
- Superannuation Fund, 642-3
- social services, 522-8
- Trading Bank, 656-7
 - deposits, advances, accounts, etc., 657
- Commonwealth-State financial relations, *see* Public finance
- Communications, 751-60
 - Overseas Telecommunications Commission, 758-60
 - Postmaster-General's Department, 751-8
- Companies, 685-6
 - legislation, 685
 - registered, 685-6
- Company tax, payable, 638
- Compensation, workers, 185
- Conciliation and Arbitration Commission, 167
- Condensed milk production, 332
- Consolidated Revenue Fund, 625-7
- Constitution Act Amendment Act 1958*, 73, 74
- Constitution of Victoria, *see also* Electoral system, Government, Parliament
 - Cabinet, 73-4
 - Executive Council, 73
 - Governor, 71
 - Lieutenant-Governor, 72
- Confinements, *see* Births
- Conjugal condition of persons marrying, *see* Marriage
- Construction, *see also* Building, Housing materials
 - itinerant activities, 362
 - production, 362
- Consumer Price Index, 207-9
 - Melbourne, 209
- Consumption expenditure, personal, 783
- Cool storage, 323-4
- Co-operative
 - credit societies, 676-7
 - housing societies, 611-2
 - organisations, 675-6
 - societies, 563-4, *see also* Friendly societies
- Coroners committals, 584
- Corporations, public, *see* Statutory authorities
- Correspondence School (Education Department), 453-4
- Council
 - of Adult Education, 496-7
 - activities, 496
 - enrolments, 496
 - group activities, 496
 - income and expenditure, 497
 - of Public Education, 466-67
- Councils, municipal, 217
- Counties and Statistical Districts of Victoria, 301
- Country
 - Fire Authority
 - brigades, personnel, and motor vehicles, 266
 - revenue, expenditure, etc., 264-5
 - Roads Board, 243-8
 - road maintenance grants, 225
 - Roads Board Account, 241-2
 - sewerage and water supply, 259-63
- County Court, 575
 - Judges, 76
- Court, courts, *see also* Crime statistics
 - bankruptcies, 577
 - Children's, 577-81
 - County, 575
 - High, 566-8
 - Industrial, 167
 - Industrial Appeals, 168
 - Magistrates', 576-7
 - Petty Sessions, *see* Courts, Magistrates'
 - Supreme, 573-4
 - Credit societies, co-operative, 676-7
- Cremations, 165
- Crime statistics, 581-7
 - Coroners committals, 584
 - Higher courts, persons convicted, etc., 584-7
 - Inquest cases, 583-4
 - Magistrates' Courts, cases dealt with, etc., 581-3
- Crops
 - and growers, 305-7
 - principal, 308-26
- Crown lands, alienation, 274-5
- Crude oil, *see* Natural gas and crude oil
- Cultivation, *see* Farming, cultivation
- Culture and recreation, 433-51
- Customs
 - and excise duty and revenue collected, 708-9
 - Regulations (Import Licensing), 701
- Dairy
 - cows, number, 331
 - herds, size grouping, 330
- Dairying, 329-31
 - gross value of produce, 331
 - production, 331
- Death
 - causes of, 151-61, *see also* Infant mortality
 - accidents, 153
 - age groups, 155-6
 - classification, 151-2
 - blood and blood forming organs, diseases of, 152
 - cerebrovascular disease, 159
 - by sex in various age groups, 159
 - circulatory system, diseases of, 152
 - congenital malformations, 153
 - diabetes mellitus, 159
 - digestive system, diseases of, 160
 - endocrine, nutritional and metabolic diseases, 152
 - external
 - homicide, 161

- motor vehicles, 161
- suicide, 161
- transport accidents, 161
- genito-urinary system, diseases of, 160
- heart diseases, 159
 - by sex in various age groups, 160
- infective and parasitic diseases, 152
- malignant neoplasms, 157
 - by sex in various age groups, 158
- mental disorders, 152
- neoplasms, 152
- numbers and rates, 154
- perinatal morbidity and mortality, 153
- poisonings, 153
- respiratory system, diseases of, 153, 160
- tuberculosis, 156
- violence, 153
- rates
 - Australia, 151
 - from malignant neoplasms in age groups, 157
- Deaths
 - law relating to, 140
 - registration, 140
- Debt
 - Public, 644-9
 - Sinking Fund, National, 648-9
- Demography
 - population, 109-41
 - vital statistics, 141-65
- Departments
 - Commonwealth and State Government, *see* individual headings, e.g., Agriculture, Department of State Government, histories of, 105
- Dental service, school, 504
- Deposits in
 - savings banks, 658, 663, 664-5
 - trading banks, 650-1, 655, 657
- Disabled Members' and Widows Training Scheme, 531
- Diseases, *see* Death, causes of
- Dispensaries, Friendly Societies, 563
- Disputes, industrial, 182-3
- District Nursing Service, Royal, 516-7
- District rainfall, 54
- Divorce, 145-7, *see also* Marriage
 - dissolutions of marriage: petitions granted
 - ages of parties at date of decree, 146
 - duration of marriage and issue, 147
 - grounds for, 146
 - petitions
 - filed and decrees granted, 145
 - granted, ages of parties at date of decree, 146
- Dookie Agricultural College, 291-2
- Drivers' certificates, 740
- Driving licences, 736
- Droughts, 59
- Duties
 - estate, 630
 - lottery, 633
 - probate, 629
 - stamp, 631-2
- Dwellings, *see* Housing, Building
- Earnings and hours
 - average weekly, 173-5
 - survey of, 175-7
- Eastern Highlands, physical environment and land use, 40
- Economic Censuses, *see* Integrated Economic Censuses and individual headings, e.g., Retail, Wholesale
- Education, 451-97
 - agricultural
 - colleges, 291-2
 - tertiary, 291-3
 - University of Melbourne School of Agriculture, 292-3
 - Catholic, 468-70
 - Colleges of advanced education, Commonwealth grants, 623
 - Correspondence School, 453-4
 - Council of
 - Adult Education, 496-7
 - Public Education, 466-7
 - Department, 101, 465-6
 - expenditure
 - educational, 465
 - in State schools, 466
 - on teacher education, 466
 - examinations, 454
 - La Trobe University, 484-7
 - legal, 571-3
 - Matriculation examination, 474
 - Monash University, 479-84
 - pre-school, 455-7
 - registered schools, 467-72
 - scholarships and bursaries, 459-61
 - school types, 452-4
 - State expenditure, 465-6
 - teaching service, 454-5
 - technical, 461-5
 - courses and students, 462
 - number of schools and students, 462
 - tertiary, agricultural, 291-3
 - University of Melbourne, 474-9
 - Victorian Universities and Schools Examination Board, 472-3
 - Educational attainment of the population 1966, 120
 - Egg
 - industry, 342-3
 - marketing, 343-4
 - Electoral system, 91-5, *see also* Constitution, Government, Parliament
 - enrolment of electors, 92
 - enrolments on joint rolls, 92
 - Legislative Assembly District areas, 94
 - Legislative Council Province areas, 95
 - Elections
 - municipal, 217-8

- parliamentary
 - Legislative Assembly, 95-6
 - Legislative Council, 96-7
 - voting features, 92-4
- Electors, number enrolled, 92
- Electric stations, power equipment installed, 415, 416
- Electricity
 - Commission, State, 422-7
 - generated, power stations and sources, 426
 - transmission system, 425
- Employment and unemployment, 200-7
 - control, 200-2
 - civilian, 204-7
 - factories, 402-7
 - industry groups, 405, 406
 - Service, Commonwealth, 200-1
- Engineering, heavy, 419-22
 - companies and products, 421-2
 - development after 1900, 420-1
 - early history, 419
 - present position, 421-2
- English instruction, migrant, 134
- Ensilage, 329
- Entertainments tax, 635
- Environment, physical, *see* Physical environment
- Equal pay, 179
- Erosion, *see* Coastline, erosion and sedimentation
- Essendon Airport, 751
- Estate duty, 630, *see also* Probate duty
- Estimates, population, *see* Population estimates
- Evaporation, 64
- Events, principal Victorian 1969-70, 787-8
- Examinations
 - Education Department, 454
 - Victorian Universities and Schools Examinations Board, 472-3
- Excise
 - revenue, 708-9
 - tariff, 700
- Executive Council, 73
- Expenditure, State, 625-7
- Export, *see also* Trade, overseas
 - controls and incentives, 701
 - Payments Insurance Corporation, 673-4
 - Price Index, 212
- Exports
 - classification, 703-5
 - countries of origin and consignment, 705-6
- Extractive Industries Act* 1966, 276
- Factories, 398-419, *see also* Manufacturing industry
 - classes, 399
 - classification, 395-7
 - development, 398
 - employees
 - average number employed, 400
 - distribution by age, 406
 - Statistical Divisions, 402
 - value of production, 401
 - employment, 402-7
 - female, 406
 - nature of, 405
 - nature by industry classes, 405
 - engines and electric motors
 - horsepower, 414
 - reserve or idle, horsepower, 415
 - fuel used, 409
 - industrial classes, 399
 - materials used, cost, 410
 - nature of employment, 405
 - number in Statistical Divisions, 401
 - output, value, 410
 - power
 - equipment installed in central electric stations, 415
 - fuel and light used, 409
 - production costs, etc.
 - and value of output, 412
 - percentage to value of output, 413
 - production, value, 411
 - salaries and wages paid, 407-8
 - value of
 - land and buildings, 413
 - output, 403
 - plant and machinery, 414
 - production, 403
- Factory
 - costs and output, 411
 - products, 416-8
 - statistics
 - definitions, 394-5
 - monthly summaries, 418-9
- Family welfare, 535-40
- Farm
 - Development Loan Fund, 281
 - income, 784
 - machinery on rural holdings, 304
- Farming, 297-345, *see also* Primary production
 - acreage cultivated annually, 305
 - area under cultivation, 307
 - crops, *see also* principal crops *below*
 - area, 305-6
 - growers, 306
 - value, 305-6
 - yield, 305-6, 307
 - cultivation
 - area, 307
 - progress, 305
 - dairying, 329-32
 - fertilisers, 302-4
 - holdings classified by size and type of activity, 293-300
 - land occupied, 298-9
 - principal crops, 308-26, *see also* crops, *above*
 - barley, 315-6
 - fruit, 321-5
 - hay, 317-8
 - linseed, 319-20
 - maize, 316
 - oats, 313-5
 - onions, 319
 - potatoes, 318-9
 - rye, 317
 - tobacco, 320-1
 - vegetables, 325-6

- wheat, 308-13
 - statistical summary, 298
 - statistics, collection of, 297
 - superphosphate, 302-4
- Fertilisers, 302-4
- Finance, *see* Public finance, Private finance
 - companies, 692-3, *see also* Retail sales, instalment credit
 - rural facilities, 276-83
- Financial relations, Commonwealth-State, 616-25
- Fire
 - Authority, Country, 264-6
 - Brigades Board, Metropolitan, 263-4
 - Insurance, *see* Insurance, fire, marine, and general
- Fires, forest, 348-50
- Fisheries and Wildlife, Department of, 350
- Fisheries, 350-3
 - catch, statistical summary, 352
 - conservation, 351
 - gross value of take, 353
 - men, boats, and equipment, 353
 - quantity of take, 353
 - scallop fishery, 352
- Flats, building, etc., *see* Building
- Floods, 49-51, 60, *see also* Rivers and lakes
- Fodder conservation, 328-9
- Food, retail prices, 209
- Footscray Institute of Technology, 490
- Foreign exchange, 649-50
- Foreigners, period of residence, 117
- Foreshores, Port Phillip Bay, 259
- Forestry, 346-50
 - fire protection, 348-50
 - softwood plantations, 347-8
 - telecommunications, 348
- Forest
 - estate, 346
 - fires
 - areas burnt, 349
 - causes, 348
 - timber, 346-7
- Freeways, Melbourne, 258
- Friendly societies, 561-3, *see also* Co-operative societies
 - disbursements, 563
 - dispensaries, 563
 - funds, 562
 - membership, 561
 - receipts and expenditure, 562
 - specially authorised societies, 563
- Frosts, 61
- Fruit, 321-5
 - cool storage, 323-4
 - dried tree fruit, 323
 - growing, 322
 - industry, 321-3
 - trees
 - number, 323
 - plants, etc., in orchards and gardens, 322
 - vines, 324-5
- Frogs, *see* Amphibians
- Fuel and Power, Ministry of, 422
- Gallery, National, 432-5
- Gaols, 546-9
- Gas, 427-30
 - and Fuel Corporation of Victoria, 427-8
 - gas made and purchased, 428
 - Colonial Gas Association, 429-30
 - Gas Supply Company Ltd, 430
 - Geelong Gas Company, 430
 - natural gas, 428-9
- Geelong
 - Gas Company, 430
 - Harbor Trust, 718-9
 - revenue and expenditure, 719
 - port, exports interstate, 707
 - Waterworks and Sewerage Trust, 260-1
- General
 - Agreement on Tariffs and Trade, 700
 - insurance, *see* Insurance, fire, marine, and general
- Geographical features, 36-51
- Gippsland
 - Institute of Advanced Education, 492
 - land utilisation, 274
 - plains, physiography, 39
- Gleneilg
 - Base Hospital, 775
 - Regional Library, 777
- Gliding clubs, 748
- Gordon Institute of Technology, 490
- Government, *see also* Local government administration, 98-108
 - Constitution, 71-4
 - Departments, 98, *see also* individual headings, e.g., Agriculture, Department of
 - electoral system, *see* Electoral system, Elections
 - financial activity, *see* Public finance
 - Governor of Victoria, 71-2
 - grants to municipalities, 224
 - housing activities, 603-11
 - instrumentalities, 99-105
 - judiciary, 75-6
 - Lieutenant-Governor, 72-3
 - Ministries, 75, 98-9
 - Parliament
 - Commonwealth, 97-8
 - State, 76-91
 - Governor of Victoria, 71-2
 - Grain Elevators Board, 309-10
 - Grants, Commonwealth, to the States, 619-25
 - Grazing, *see* Primary production
 - Gross National
 - Expenditure, 778
 - Product, 779
 - Groundwater, 285
- Hamilton, 761-77
 - Art Gallery, 775-6
 - beef production, 769
 - City, 771
 - climate, 764-5
 - crops, 770
 - dairying, 769-70

- education, 774
- geography, 766
- geology, 765-6
- Glenelg
 - Base Hospital, 775
 - Regional Library, 777
- history, 761-4
- land use, 766-7
- library services, 777
- Shire of Dundas, 771-2
- social welfare, 775
- trade, industry, etc., 773-4
- water supply, etc., 772-3
- wool production, 767-8
- Harbor Trusts
 - Geelong, 718-9
 - Melbourne, 714-8
 - Portland, 719-20
- Hay, 317-8
- Health
 - and medical research, 497-522
 - Benefits
 - Plan (Commonwealth), 785-6
 - National, 532-5
 - Department of, 497-506
 - health promotion, 504
 - Maternal and Child Welfare Branch, 499-503
 - building grants, 502
 - expenditure, 503
 - infant welfare services, 499-500
 - pre-natal service, 500
 - pre-school
 - maintenance subsidy, 501-2
 - services, 500-1
 - training programmes, 592
 - School
 - Dental Service, 504
 - Medical Service, 503-4
 - Tuberculosis Branch, 505-6
- Heart diseases, 159
- High Court of Australia, 566-8
- Highways, bridges, and freeways, 258
- Hire purchase operations, 696
- Holdings, rural, classified by size and activity, 298-300
- Home
 - building, *see* Building
 - Finance Trust, 611
 - Savings Grant Scheme, 605-7
 - applications approved, 606
 - financing, 607
 - operation, 606
- Homes, War Service, 604-5
- Homicide, 161
- Honey industry, 344-5
- Horse racing, *see* Racing, taxation, investments, etc.
- Hospital and nursing home benefits, 532-3, 785-6
- Hospitals
 - and Charities Commission, 508-12
 - ambulance services, 511
 - functions, 508-9
 - nursing, 510
 - private hospitals, 510
 - public hospitals, 509-10
 - rationalised medical services, 511-2
 - regional planning, 510
 - and Charities Sunday Appeal, 521-2
 - bush nursing, receipts and expenditure, 515
 - public and charitable institutions, 512-5
 - accommodation and inmates, 514
 - income and expenditure, 513
 - receipts and expenditure, 514
- Hours
 - and earnings weekly, survey of, 175-7
 - of work, *see* Standard hours of work
- Houses of Parliament, *see* Parliament
- Housing, 591-613, *see also* Building
 - Aboriginal Affairs, Ministry of, activities, 610
 - Aboriginals, 139
 - aged pensioners, 607-8
 - Commission
 - construction of houses, 609
 - revenue and expenditure, 610
 - Commonwealth-State Housing Agreements, 603-4
 - co-operative societies, 611-2
 - Department of, 603
 - Government activity, 603-13
 - Home Finance Trust, 611
 - Home Savings Grant Scheme, 605-7
 - institutions approved, 611
 - finance, 611-3
 - Loans Insurance Corporation, 608-9
 - migrants, 135, 607
 - Rural Finance and Settlement Commission, 69
 - State Savings Bank of Victoria, 612
 - War Service Homes, 604-5
- Humidity, 61
- Immigrants
 - accommodation, 135
 - assisted, arrivals in Australia, etc., 133
 - citizenship, 138
 - English instruction, 134
 - housing, 135
 - naturalisation, 138
 - previous nationality of naturalised persons, 139
 - sources, 133
 - transitory flats, 607
 - welfare, 134
- Immigration, *see also* Population
 - annual programmes, 133
 - organisation, 134
 - policy regarding visitors, 136
 - reasons for, 132
 - State Office, 135
 - Victorian, 136
 - visitors to Australia, 136
- Imports, *see also* Trade, overseas
 - classification, 703-5
 - countries of origin, etc., 705-6
- Improvement purchase leases, 283
- Incidence of industrial awards, 169-70
- Income
 - farm, 784
 - personal, 782-3
 - tax, 635-7

- individuals, 637
 - rates, 636
- Industrial
 - accidents, 186-91
 - definitions, 186
 - females, by industry group, 188
 - information sources and scope, 186
 - males
 - by industry group, 187
 - non-fatal
 - accident factor by age group, 191
 - accident factor by site of injury, 190
 - claims, cost by industry group, 188
 - incapacity period by industry group, 188
 - industry group by accident factor, 189
 - industry group by site of injury, 189
 - industry group by type of injury, 190
- Appeals Court, 168
- arbitration, 166-9
 - Commonwealth
 - Conciliation and Arbitration Commission, 167
 - Industrial Court, 167
 - system, 166-7
 - Commonwealth-State relations, 166
 - Conciliation and Arbitration Act, 167
 - Industrial
 - Appeals Court, 168
 - disputes prevention, 169
 - Labour and Industry Act, 168
 - Labour and Industry (Amendment) Act, 169
 - Ministerial intervention, 169
 - Public Service Arbitration Act, 167
 - State system, 166-7
 - Wages Boards, 167-8
- awards, evidence of, 169-70
- conditions, 186-91
 - agreements, incidence of, 169-70
 - annual leave, 181
 - Apprenticeship Commission, 197-9
 - arbitration, 166-9
 - average weekly earnings, 173, 175
 - basic wage, 178-81
 - control, 195-7
 - determinations, 169-70
 - disputes, 182-3
 - earnings
 - average weekly, 173-5
 - weekly, survey of, 175-7
 - hours
 - of work, 172-4
 - weekly, survey of, 175-7
 - labour organisations, 191-5
 - long service leave, 181-2
 - safety, 183
 - standard hours of work, 72-4
 - wage
 - margins, 181
 - rates, 170-3
 - weekly earnings
 - average, 173, 175
 - survey of, 175-7
 - workers compensation, 183-5
 - disputes, 182-3
 - law, 568-71
 - safety, 183
- Industry, *see also* Manufacturing industry
 - of the population, 118
- Infant
 - deaths, summary of, 141
 - mortality, 161-5
 - ages, 163
 - by cause, 164
 - by sex, 163
 - deaths, 162
 - Melbourne Statistical Division, 162
 - rates, 162
 - stillbirths, 164-5
 - welfare, 499-500
- Inquests, 583-4
- Instalment credit on retail sales, 693-6
- Institute of Applied Science of Victoria, 439-40
- Instrumentalities, 99-105
- Insurance
 - company types, 668
 - covers, 668
 - Export Payments Insurance Corporation, 673-4
 - fire, marine, and general, 668-73
 - claims, percentage to premium income, 671
 - class of business, 669-70
 - expenditure, class of business, 670
 - life, 665-8
 - business in existence, 667
 - policies
 - discontinued or reduced, 667
 - issued, 666
 - premium receipts, 666
 - policy payments, 666
 - motor vehicle, compulsory third party, vehicles insured, 671
- State
 - Accident Insurance Office, 672-3
 - Motor Car Insurance Office, 672
 - statistics, compilation, 668-9
- Integrated Economic Censuses, 1968-69, 368-89
 - Census
 - returns, main items, 380-1
 - units, standardisation, 374-5
 - establishment statistics, data concepts, 379-87
 - enterprise statistics, data concepts, 387-9
 - industrial classification, standardisation, 378-9
 - Integrated Register of Businesses, 376-8
 - integration
 - meaning, 368-9

- purposes, 369-74
- Interstate trade, 706-9
- Invalid pensions, 524-5
- Irrigation, 286-8, *see also* Water supply
 - control, 286
 - area
 - irrigated, 287
 - of systems, 287
 - private, 286-8
 - storages, 288
 - water delivered, 287
- Joint rolls, *see* Electoral system
- Judiciary, 76
- Justice and the administration of law, 564-91
- Kindergarten teacher training, 494-6
- Korea and Malaya Training Scheme, 531
- La Trobe University, 484-7
 - degrees conferred by schools, 486
 - enrolments, 485
 - by school, 486
 - income and expenditure, 487
- Labour and Industry Act* 1958, 39, 168
- Labour
 - and Industry (Amendment) Act, 169
 - and Industry, Department of, 195-7
 - and National Service, Department of, 200-1
 - conditions, control, 195-7
 - councils, *see* Trade unions
 - organisations, *see* Trade unions
- Lakes, 51, *see also* Rivers, Floods
- Lambing, 337-8, *see also* Sheep
 - forecast 1969, 338
- Land
 - alienation, 274-5
 - occupied 1968-69, 298-9
 - settlement, 279-80
 - tax, assessments, 630-1
 - transfer, 681-5
 - Assurance Fund, 683
 - bills of sale, 685
 - dealings under the Property Law Act, 684
 - general law titles, 681
 - mortgages of real estate lodged for registration, 684
 - titles
 - issued, 683
 - Office dealings, 683
 - Transfer of Land Act, 682
 - utilisation, 40-3, 269-74
 - climatic factors, 269
 - Gippsland District, 274
 - Mallee District, 270
 - North-Central District, 272
 - North-Eastern District, 272
 - Northern District, 271-2
 - Western District, 273, *see also* Hamilton
 - Wimmera District, 270-1
 - Valuation Boards of Review, 215
 - Latrobe Valley Water and Sewerage Board, 261
 - Law, administration of, and justice, 564-91
 - in Victoria, 564-6
 - historical, 564-5
 - legal
 - departments and officers, 565
 - profession, 565
 - industrial, 568-71
 - Commonwealth Industrial Tribunals, 568-9
 - employers' associations, 571
 - industrial injuries, 571
 - sources, 568
 - State Industrial Tribunals, 569-70
 - trade
 - union activity, restraints, 570-1
 - unions, 570
 - Leave
 - annual, 181
 - long service, 181-2
 - Legal
 - departments and officers, 565
 - education, *see* Education, legal
 - profession, 565
 - Legislation
 - industrial, 391
 - labour, 196
 - licensing, 587-8
 - racing, 589
 - trade, 698-9
 - Legislative
 - Assembly
 - District areas, 94
 - members, 82-3
 - parliamentary representation, 96
 - voting features, 94
 - Council
 - members, 81-2
 - Province areas, 95
 - voting features, 97
 - Legitimations of children registered, 151
 - Length of roads and streets, 242
 - Letters posted and received, 757
 - Library
 - Council of Victoria, 438-9
 - services
 - municipal, 437-8
 - State Library of Victoria, 436-7
 - Archives Division, 437
 - Victorian Book Resources Committee, 439
 - Licences
 - broadcasting and television, 758
 - driving, 736
 - Licensing legislation, 587-8
 - liquor licences, 588
 - revenue and expenditure, 588
 - Liens on wool and crops, 714
 - Lieutenant-Governor, 72-3
 - Life insurance, *see* Insurance, life
 - Linseed, 319-20
 - Liquor
 - licences, 588
 - tax, 633
 - Livestock
 - breeding, 326-8
 - distribution, 328
 - numbers, 327

- Lizards, *see* Reptiles
 Loan fund expenditure, 643-4
 Local
 Authorities Superannuation Board, 227-8
 benefit contracts account, 228
 government, *see also* Government, Municipalities
 administration, 213-32
 Local Government Department, 213-6
 Melbourne City Council, 229-32
 Municipalities, 216-28
 authorities
 administrative costs, 236
 business undertakings, 236-7
 Country Roads Board Account, 241-2
 expenditure, 233-6
 loans outstanding, 232
 Private Street Account, 241
 properties rated, 232
 revenue, 233-4
 Department, 213-6
 new money loan raisings, 266
 semi-government authorities, 243-68
 statistics, 232-42
 compilation, 232
 Long service leave, 181
 Longerenong Agricultural College, 291-2
 Lord Mayor's
 Children's Camp, Portsea, 561
 Fund, 521-2
 and Hospitals and Charities Sunday Appeal, 522
 Lottery (Tattersall) duty, etc., 633
 Lower Yarra Crossing Authority, 743-4

 Machinery, agricultural, 304
 Magistrates' Courts, 576-7
 cases dealt with, 581-3
 Mail, *see* Postmaster-General's Department
 Maintenance subsidy, pre-school, 501-2
 Maize, 316
 Mallee District, land utilisation, 270
 Manufactured articles, 416-8
 Manufacturing industry, *see also* Secondary production
 activity, 389-419
 Australian Integrated Economic Censuses 1968-69, 368-89
 decentralisation, 391-2
 development 1969, 390-1
 factories, classification, 395-7
 factory statistics, 394-5
 Government activities, 391-3
 individual industries, 419-31
 natural resources and location, 366-8
 protection from imports, 393
 research, 393-4
 standardisation, 393-4
 Maps in *Victorian Year Books*, 794-5
 Margins, wage, 181
 Marine insurance, *see* Insurance, fire, marine, and general
 Marital status of the population, 117

 Marriage, 141-5, *see also* Divorce
 bridegrooms and brides
 mean age, 143
 minors, 143
 percentages in age groups, 142
 rates, 142
 relative ages, 142
 Marriages
 Australia, 141
 civil, 145
 civil and religious, 144
 conjugal condition
 of persons marrying, 143
 percentage of persons, 144
 law relating to, 140
 registration of, 140
 summary, 141
 Married
 Women Teachers Superannuation Fund, *see* Married Women's Superannuation Fund
 Married Women's Superannuation Fund, 642
 Masculinity of the population
 in age groups, 115
 in metropolitan, urban, and rural areas, 121
 Maternal, infant, and pre-school services, 499-502
 Maternity allowances, payments, etc., 525-6
 Matriculation examination, 474
 Meat
 Board, Australian, 340-1
 industry, 339-40
 Medical
 benefits, 533-4, 785-6
 research, 497-522
 service, school, 503-4
 Melbourne and Metropolitan Board of Works, 249-59
 area controlled, 250
 borrowing powers, 256
 farm at Werribee, 255
 finance, 256
 revenue and expenditure, 256-7
 sewerage system, 253-5
 stormwater drainage and river improvements, 255-6
 town planning, 257-9
 water supply, 252-3
 works programme, 250-2
 Melbourne
 and Metropolitan Tramways Board, 732-4
 omnibus (motor) systems, 734
 revenue and expenditure, etc., 733
 tramways, 732
 receipts, operating expenses, etc., 734
 building development, 591-2
 City Council, 229-32
 administrative organisation, 230
 organisation, 229-30
 major works, financing, 230-2
 climate, 66-9
 climatic elements
 means, 68
 means and extremes, yearly, 69

- cloud and sunshine, 67
- fogs, 67
- rainfall, 66
- snow and hail, 68
- temperature, 66
- wind, 67
- Harbor Trust, 714-8
 - administration, 714
 - cargo handling, etc., 715-8
 - finance, 714-5
 - Port of Melbourne, 717
 - revenue and expenditure, 715
- Kindergarten Teachers College, 495-6
 - enrolments, 495
 - income and expenditure, 496
- Port, 717
 - exports interstate, 706-7
 - sewerage system, 253-5
 - Statistical Division, population, 114
 - (Tullamarine) Airport, 747-8
 - water supply, 250
 - Zoological Gardens, 447-8
- Mental Health Authority, 506-8
 - persons under care, 507-8
- Meteorology, use of computers in, 65, *see also* Climate
- Metropolitan
 - Fire Brigades Board, 263-4
 - fire stations, 264
 - revenue, expenditure, etc., 263-4
 - staff employed, 264
 - press, 441
- Migrants, migration, *see* Immigrant, Immigration
- Milk
 - Board, 331-2
 - condensed, production, 332
- Mineral production, 359, *see also* Coal
- Mining, Quarrying
- Minimum weekly wage rates, *see* Wage rates, minimum weekly
- Mining, 353-8, *see also* Coal, Mineral production, Quarrying
- Ministers of the Crown, *see* Executive Council
- Ministries, 75, 98, 99
- Ministry of Fuel and Power, 422
- Minors, marriages, 143
- Monash University, 479-84
 - buildings, 478-80
 - Centre of South-east Asian Studies, 483-4
 - chairs, 481
 - degrees conferred in faculties, 482
 - enrolments, 481
 - by faculties, 482
 - entrance requirements, 481
 - faculties, 481
 - finance, 482-3
 - halls of residence, 480
 - income and expenditure, 483
 - Library, 480
- Money
 - and postal orders, 756
- Market, Short-term, 689-91
 - investment by municipalities, 226-7
 - authorised dealers
 - assets, 691
 - interest rates, 691
 - liabilities classified by type, 691
 - client, 690
- Monthly production statistics, 418-9
- Mortality
 - causes, 151-61
 - infant, 161-5
- Mortgages of
 - real estate lodged for registration, 684
 - stock and liens on wool and crops, 684-5
- Motor
 - boats, 741
 - Car Insurance Office, State, 672
 - Registration Branch, 591
 - revenue, 736
 - taxation, 628-9
 - vehicle
 - accidents, *see* Road traffic accidents
 - insurance, *see* Insurance, motor vehicle
 - vehicles, 735-38
 - drivers' and riders' licences in force, 736
 - (other than cars) registrations by make, 738
 - registered by type, 737
 - registration, 735-8
 - fees, 736
 - registrations by make, 737
- Mountain regions, 43-4
- Municipal
 - Association of Victoria, 227
 - councils, 217
 - elections, 217
 - officers, 218
 - rating, 222-4
 - revenue, 222
- Municipalities, *see also* Local government
 - accounts, 227
 - area, 127-32
 - borrowing powers, 225-6
 - dwellings, 127-32
 - expenditure, 225
 - finance statistics, compilation, 232
 - Government grants to, 224
 - investments on Short-term Money Market, 226
 - population, 127-32
 - powers and duties, 218-22
 - building control, 220
 - by-laws, 218
 - miscellaneous, 221
 - roads and bridges, 218
 - private streets, 218-9
 - sewers, drains, etc., 219
 - town and country planning, 220
 - Town Planning Appeals Tribunal, 221
 - water supply and sewerage, 219
 - road maintenance expenditure, etc., 225
 - superannuation, 227-8
- Murray Basin Plains
 - physical environment and land use, 41
 - physiography, 38

- sic in radio and television, 445-6
 ational
 accounts, 778-84
 concepts, 778-9
 sectors, 779
 Association of Testing Authorities, 394
 Debt Sinking Fund
 receipts, 648-9
 securities repurchased and re-
 deemed, 649
 Gallery of Victoria, 432-5
 Arts Centre, 432-3
 bequests, 433
 education programme, 434-5
 exhibitions, 433-4
 National Gallery Society, 434
 health benefits, 532-5
 hospital and nursing home bene-
 fits, 532-3
 medical benefits, 533-4
 pensioner medical service, 534-5
 pharmaceutical benefits, 534
 Parks, 448-51
 expenditure, 450
 Wilson's Promontory National
 Park, 449-50
 servicemen re-establishment benefits,
 531
 Trust of Australia (Victoria), 440-1
 Welfare Fund, expenditure, 522
 Nationality of the population, 116
 Natural
 disaster payments, Commonwealth,
 624
 gas, 428-9
 and crude oil, 353-8
 development 1969-70, 353-4
 distribution, 355
 exploration, 354
 wells
 erected by Esso and Hema-
 tite, 356
 offshore, drilled from mo-
 bile rigs, 357-8
 onshore, 358
 production, 354-5
 rates of crude oil, 355
 wells, offshore, drilled from
 fixed platforms, 356
 reserves, 356
 increase, population, 111
 resources, 366-8
 location, 367-8
 Naturalisation and citizenship, 138-9
 Newspapers, 441
 North-Central District, land utilisation,
 272
 North-Eastern District, land utilisation,
 272
 Northern District, land utilisation, 271-2
 Nuptial confinements, *see* Births, nuptial
 confinements
 Nursing, 510
 home benefits, 532-3
 Royal District Nursing Service, 516-7
 Victorian Bush Nursing Associa-
 tion, 515-6
 Oats, 313-5
 area sown, 315
 average yield per acre, 315
 gross value, 315
 production, 315
 Occupational status of the population,
 119, 202, 203
 Therapy School of Victoria, 493
 Occupations of the population, major
 groups, 119
 Oil, *see* Natural gas and crude oil
 Omnibus services, 734-5
 Onions, 319
 Orchards, 321-4
 Overseas
 arrivals and departures, 137
 Telecommunications Commission,
 758-60
 radio-telephone services, paid
 minutes, 760
 telegraph services, words trans-
 mitted, 760
 trade, 698-706
 Parks
 Melbourne's, 259
 National, 448-51
 Parliament, *see also* Electoral system
 Commonwealth
 Victorian members
 House of Representatives, 98
 Senate, 97
 State
 Acts passed during 1969, 85-9
 functions, 77
 history, 76
 Houses of, 77
 Members
 Legislative Assembly, 82
 Legislative Council, 81
 Parliamentary
 Contributory Superannuation Fund,
 641-2
 elections, *see* Electoral system
 government, cost of, 84
 Papers, 79
 presented 1969-70, 89-91
 parties, 77
 procedure, 78
 suffrage, 77
 Parliaments
 duration, 84
 number, 84
 Parole, adults and youths, 549-50, 552-3
 Passenger and goods rail traffic, 725
 Pastoral
 and dairying, 326-44
 finance companies, rural advances,
 282-3
 Pensioner Medical Service, 534-5
 Pensions
 age, 524-5
 and gratuities, State, 638-42
 Coal Mine Workers Pension Fund,
 641
 invalid, 524
 Married Women Teachers Pension
 Fund, 642
 Police Pensions Fund, 640

- service, 529
- supplementation, 641
- war, 528-9
- widows', 525
- Personal
 - consumption expenditure, 783
 - income, 782-3
- Petty Sessions, Courts of, *see* Magistrates' Courts
- Pharmaceutical benefits, 534
- Pharmacy, Victorian College of, 493
- Physical
 - divisions, 37-40
 - Central Highlands, 39
 - Gippsland Plains, 39
 - Murray Basin Plains, 38
 - Southern Uplands, 40
 - Western District Plains, 39
 - environment
 - amphibians and reptiles, 1-36
 - climate, 52-70
 - geographic features, 36-51
 - land use, 40-3
- Physiographic divisions, 37
- Physiotherapy School of Victoria, 493
- Pigs, 332-3
- Pilots, Port Phillip Sea, 713-4
- Pipelines Commission, Victorian, 431
- Police, 589-91
 - breath analysis section, 590
 - communications, 590
 - Criminal Investigation Branch, 590
 - force, strength, 591
 - Motor Registration Branch, 591
 - Pensions Fund, 640
 - recruitment, 589
 - Superannuation Fund, 640
 - traffic control, 589-90
 - training, 590-1
 - warnings, 581
- Political parties, *see* Parliament, political parties
- Population, 109-140, *see also* Vital statistics
 - Aboriginals, 139-40
 - age
 - distribution, 116
 - groups
 - percentage intercensal increases, 114
 - percentage of, 115
 - Australia
 - capital cities, 111, 112
 - increase between Censuses, 110
 - natural increase, 111
 - per 1,000 of the mean population, 111
 - overseas arrivals and departures by States, 137
 - States, 110
 - birthplaces of, 117
 - Census, 1966, urban boundaries, delimitation, 120
 - Censuses, history, 109
 - dwellings and area by municipality, 127-32
 - educational attainment, 120
 - estimates, 126
 - industry of, 118
 - intercensal
 - changes, 113
 - increases, 112
 - marital status, 117
 - masculinity
 - age groups, 115
 - in metropolitan, urban, and rural areas, 121
 - Melbourne Statistical Division a rest of State, 114
 - nationality, 116
 - occupational status, 119
 - occupations, major groups, 119
 - percentage in metropolitan, urban and rural areas, 121
 - religion, 118
 - residence, period of, by persons c foreign birth, 117
 - Statistical Divisions, 113
 - summary, 122
 - urban
 - boundaries, delimitation, 120
 - centres, 122, 124
 - summary, 122
- Port
 - of Geelong, 707, 708, 711, 712, 718-9
 - of Melbourne, 706-7, 708, 711, 712, 714-8
 - administration, 714
 - finance, 714-5
 - new cargo pattern, 715-8
 - map of port, 717
 - revenue, expenditure, etc., 715
 - of Portland, 708, 711, 712, 719-20
 - Phillip
 - Authority, 266-8
 - Sea Pilots, 713-4
 - Western, 708, 711, 712, 721
 - Portland Harbor Trust, 719-20
 - revenue, expenditure, etc., 720
- Post Office statistics, 756-8
 - broadcasting and television licences in force, 758
 - employees, etc., 756
 - letters, etc., posted and received, 757
 - money and postal orders, 756
 - radio communication stations authorised, 757
 - telephone services, 758
- Postmaster-General's Department, 751-8, *see also* Overseas Telecommunications Commission
 - Automatic Telex, 754
 - "Datel" service, 754-5
 - Lonsdale Automatic Telephone Exchange, 753-4
 - mail
 - deliveries, changed frequency, 752
 - transported in containers, 752
 - Post Offices Branch, 752
 - recorded information services, 754
 - radio communications, 755
 - revenue and expenditure, 755-6
 - Subscriber Trunk Dialling (S.T.D.), 754
 - telecommunication services, 753

- telephone
 - channels to Japan, 754
 - directory covers, 754
 - service (automatic), 753
 - television translators, 755
 - Transport Branch, 752-3
- Potatoes, 318-9
- Poultry
 - slaughtered for human consumption, 343
 - slaughterings and chicken hatchings, 343
- Power
 - fuel and light used in factories, 409
 - equipment installed in central electric stations, 415-6
 - production, transmission, and distribution, 424-7
 - stations, electric, 426
- Prahran College of Technology, 491
- Pre-natal service, 500
- Pre-school
 - maintenance subsidy, 501-2
 - services, 500-1
- Preferential voting, *see* Electoral system
- Press, metropolitan, 441
- Preston Institute of Technology, 491
- Previous nationality of persons naturalised, 139
- Price
 - Index
 - Consumer, 207-9
 - Export, 212
 - Melbourne Share, 688, 689
 - indexes
 - retail, 207-9
 - wholesale, 210-2
- Prices
 - Export Price Index, 212
 - retail
 - of food, 209
 - indexes, 207-9
 - wholesale
 - indexes, 210-2
 - principal products, 210
- Primage duty, 699
- Primary industries, *see* Farming
 - other than farming, 346-62
 - brown coal, 359-62
 - fisheries and wildlife, 350-3
 - forestry, 346-50
 - mineral production, 359
 - mining, 353-8
 - quarrying, 362
- Primary production
 - agricultural education, 291-3
 - Department of Agriculture, research stations, 293-6
 - farming, 297-345
 - irrigation and land settlement, 269-91
 - local value, 363-5
 - primary industries other than farming, 346-62
 - value
 - gross, 363
 - local, 363-5
 - net, 365
- Principal events from 1 July 1969 to 30 June 1970, 787-8
- Prisons and prisoners, 546-9
- Private
 - finance, 649-96, *see also* Public finance
 - banking in 1969, 650-2
 - building societies, 674-5
 - Commonwealth Banking Corporation, 656-9
 - companies, 685-6
 - co-operative organisations, 675-7
 - Export Payments Insurance Corporation, 673-4
 - finance companies, 692-3
 - fire, marine, and general insurance, 668-73
 - instalment credit for retail sales, 693-6
 - insurance
 - Export Payments Insurance Corporation, 673-4
 - fire, marine, and general, 668-73
 - life, 665-7
 - land transfer, 681-5
 - life insurance, 665-7
 - probate, 679-81
 - Public Trustee, 677-8
 - Reserve Bank of Australia, 652-4
 - savings banks, private, 664-5
 - Short-term Money Market, 689-91
 - State Savings Bank of Victoria, 659-64
 - Stock Exchange of Melbourne, 686-9
 - trading banks, 654-6
 - trustee companies, 678-9
 - streets, construction of, 218-9, 240-1
- Probate, 679-81, *see also* Commonwealth estate duty
 - applications by Public Trustee, 678
 - duty, rates, 629
 - estates of deceased persons, number and net value, 680-1
 - letters of administration, 680
- Probation, adults and youths, 549-52
- Production statistics, monthly, 418-9
- Properties rated, 232
- Public
 - Authorities
 - Capital Account, 616
 - Current Account, 615
 - corporations, 99
 - debt, 645-50
 - annual interest liability, 648
 - due dates of loans at 30 June 1969, 646
 - interest
 - and expenses, 648
 - rates at 30 June 1969, 647
 - loans outstanding, 647
 - transactions, 645-6
 - finance, 614-49, *see also* Private finance
 - Commonwealth
 - payments to Victoria, 620
 - Superannuation Fund, 642

- Consolidated Revenue Fund, revenue, expenditure, etc., 625-7
- expenditure from Loan Fund, 643-4
- Government financial activity, economic importance, 614-6
- public debt, 644-50
- revenue and expenditure, 625-7
- State
 - pensions and gratuities, 638-42
 - trust funds and special accounts, 643
 - State—Commonwealth financial relations, 616-25
 - taxation, 627-38
- Service Arbitration Act, 167
- Solicitor, cases dealt with, 565-6
- Trustee, 677-8
 - Common Fund, 678
 - probate applications, 678
- Publications issued by Victorian Office, Commonwealth Bureau of Census and Statistics, 804
- Pupils, school enrolments, 457-9
- Quarrying, 362, *see also* Coal, Mineral production, Mining
- Queen's representative, *see* Governor
- Racing
 - and trotting meetings, 589
 - legislation, 589
 - taxation, 634-5
 - totalisator investments, 634
- Radar developments in the Melbourne area, 748-50
- Radio, *see also* Broadcasting
 - communication stations, authorised, 757
 - communications, 755
- Railway gauge standardisation, 725-6
- Railways, 722-32
 - administration, 722-3
 - bogie exchange, 726
 - cost, 727
 - development, 722
 - fares, 725
 - freight rates, 725
 - geographical factors, 722
 - loan liability and interest, 727-8
 - Melbourne yard modernisation, 723-4
 - revenue and expenditure, 730-2
 - per average mile open, 732
 - road motor services, 732
 - rolling stock, 723
 - in service, 728-9
 - route mileage, 728
 - staff, numbers, salaries, etc., 728
 - suburban tracks, 725
 - track
 - locations, 723
 - maintenance mechanised, 726
 - traffic, 729
 - goods, 729-30
 - livestock, 729-30
- Rainfall, 53-60
 - annual
 - average, 56
 - variation, 59
 - distribution, 53
 - district monthly average, 57
 - districts, 54
 - relative variability based on district annual rainfall, 58
 - reliability, 55
- Rates of wage, *see* Wage rates
- Rating, municipal, 222-4
- Real estate, mortgages of, 684
- Recreation and culture, 433-51
- Red Cross Society, 558-61
 - Blood Transfusion Service, 559-60
 - Red Cross Service Corps, 560-1
- Registered schools, 457-9
- Registration of births, deaths, and marriages, 143
- Registrations of motor vehicles, 737-8
- Rehabilitation, 527-8
- Religion of the population, 118
- Religious marriages, 144
- Repatriation Department, 528-31
 - education and training, 531
 - general assistance, 531
 - institutions, 530
 - medical care, 530
 - National Servicemen, re-establishment benefits, 531
 - war and service pensions, payments, etc., 528-9
- Reptiles, 11-36, *see also* Amphibians
 - distribution, 16-9
 - ecological requirements, 13
 - evolution, 11
 - reproduction, 16-9
 - species, 15-35
 - thermoregulation, 16-9
 - zoogeographic regions, 13-4
- Research
 - agricultural, 293-6
 - Commonwealth
 - grants, 624
 - Scientific and Industrial Research Organization, 393
 - medical, 517-8
 - Commonwealth Serum Laboratories, 519-21
- Reserve Bank of Australia, 652-4
 - liabilities and assets, 653
 - profit distribution, 654
 - profits, net, 654
 - Rural Credits Department, liabilities and assets, 653
- Residence, period of, by foreigners, 117
- Respiratory system, diseases, 153
- Retail
 - Census, 697
 - survey, 697-8
 - price indexes, 207-9
 - prices of food, 209
 - sales
 - instalment credit, 693-5, *see also* Finance companies
 - amounts financed by commodity groups, 695
 - balances outstanding, 695
 - hire purchase operations, 696
- Retail trade, *see* Trade, retail

- Revenue**
 municipal, 222
 State, 625-7
- River**
 basins, 48
 catchments and lengths, 48
 improvements, Melbourne, 255
- Rivers, 47-8, see also Floods, Lakes**
 location, 49
 reserves, 49
 stream flows, 47
 total flow, 49
- Road**
 construction, Commonwealth grants, 622-3
 motor services, railway, 723
 traffic accidents, 744-5
 persons killed or injured, 744
 age, 745
 description, 745
- Roads**
 length, 242
 municipal responsibility, 218
- Rounding of figures, see Preface**
- Royal**
 District Nursing Service, 516-7
 Melbourne Institute of Technology, 491
- Rural**
 Finance and Settlement Commission, 611
 advances to ex-servicemen, 279
 land acquired and development cost, 278
 relief lending, 280
 Rural Finance Act, 277
 revenue, expenditure, etc., 277
 settlement, 278
 other land, 279-80
 finance facilities, 276-83
 Commonwealth Development Bank, 281-2
 Farm Development Loan Fund, 281
 history, 276-7
 improvement purchase leases, 283
 pastoral finance companies, advances, 283
 Reserve Bank of Australia, 281
 Rural Finance and Settlement Commission, 277-80
 State Savings Bank of Victoria, 281
 trading banks, advances outstanding, 282
 holdings classified by size, 298-9
- Rutherglen Research Station (Department of Agriculture), 293-4**
- Rye, 317**
- Safety, industrial, 183**
- Salaries, wages, and other costs in factories, 407-10**
- Sale, bills of, 685**
- Sanatoria, tuberculosis, 506**
- Savings**
 Bank of Victoria, State *see* State Savings Bank of Victoria
- Banks, private, 664-5**
- Scaffolding inspection, 216**
- Scholarships and bursaries, 459-61**
 Commonwealth
 Advanced Education Scholarship Scheme, 460
 Secondary Scholarship Scheme, 460
 University Scholarship Scheme, 460
 Government
 number granted, 461
 Victorian, 459
- School**
 banking, 662
 Dental Service, 504
 libraries, Commonwealth grants, 624
 Medical Service, 503-4
- Schools**
 Commonwealth grants for science laboratories, 623-4
 independent, Commonwealth grants, 624
 registered, 467-72
 Catholic education, 468-70
 denomination: enrolments by ages, 471
 number and teachers, 470
 State primary and secondary, 457-9, 472
- Scallop fishery, income and expenditure, 351**
- Scientific research and standardisation, 393-4**
- Searoad service between Victoria and Tasmania, 710**
- Secondary**
 industry, *see* Manufacturing industry
 production
 legislation, 391
 monthly statistics, 418-9
- Sedimentation, see Coastline, erosion and sedimentation**
- Select Committees, see Parliamentary Papers**
- Semi-government authorities**
 Ballarat Sewerage Authority, 262
 Ballarat Water Commissioners, 262
- Country**
 Fire Authority, 264-6
 Roads Board, 243-8
 recoups and grants, 225
- Geelong Waterworks and Sewerage Trust, 260**
- Latrobe Valley Water and Sewerage Board, 261**
- Melbourne and Metropolitan Board of Works, 249-59**
- Metropolitan Fire Brigades Board, 263-4**
 new money loan raisings, 266
 Port Phillip Authority, 266-8
 sewerage authorities, country, 262-3
 income and expenditure, 263
 population served, 263
 properties connected, 263

- Western Port Regional Planning Authority, 268
- Senators, 97
- Service pensions, 528-9
- Sewerage
- Authorities, country, *see* Semi-government authorities
 - system, Melbourne's, 253-5
 - Board of Works Farm, Werribee, 255
 - cost, 254
- Sewers, drains, and watercourses, 219
- Share Price Index, Melbourne, 688, 689
- Sheep, 334-9, and lambs in Statistical Districts, 338
- breeding, 334-7
 - geographical distribution of breeds, 335
 - of rams according to breed, 336
 - breeds, 337
 - shorn, 339
 - wool
 - clipped, 339
 - value, 339
- Sheltered employment allowances, 525
- Shipping, 709-13, *see also* Trade cargoes discharged and shipped, 712-3
- geographic trade areas, 712
 - nationalities of vessels, 713
 - coastal trade, 709-10
 - nationality, 711
 - ports
 - vessels
 - entered at ports, 711
 - entered and cleared, 710
 - searoad service between Victoria and Tasmania, 710
 - ships piloted through Port Phillip heads, 714
- Shires, constitution, 214
- Shops
- closing hours, 196-7
 - labour conditions, control, 195-6, *see also* Trade Unions
- Short-term money market, 689-91
- dealers authorised
 - assets, 691
 - interest rates, 691
 - liabilities, 690
 - investment by municipalities, 226-7
- Sickness benefits, 553
- Slaughtering
- poultry, 343
 - stock, 344
- Snakes, *see* Reptiles
- Snow, 60
- Social
- services, Commonwealth, 522-8
 - age pensions, 524
 - Aged Persons Homes Act, 528
 - invalid pensions, 524-5
 - National Welfare Fund, expenditure, 522
 - child endowment, 526
 - maternity allowances, 525-6
 - reciprocal agreements, 528
 - rehabilitation, 527-8
 - sheltered employment allowances, 525
 - social security benefits, 522-4
 - unemployment, sickness, and special benefits, 527
 - widows pensions, 525
- Welfare Department, 535-57
- Family Welfare Division, 535-40
 - adoption service, 539-40
 - assisted families, analysis 1970, 537
 - children under infant life protection provisions, 540
 - family assistance, applications, etc., 536
 - Family Welfare Advisory Council, 540
 - wards of State, 538
 - discharges, 539
 - location, 539
- finance, 556-7
- Prisons Division, 546-9
- offences for which prisoners sentenced, 548
 - prison accommodation, etc., 547
 - prisoners received at and discharged from gaols, 549
- Probation and Parole Division, 549-54
- adult pre-sentence reports, 553
 - parole, 552-4
 - probation, 550-2
- Research and Statistics Division, 556
- revenue and expenditure, 556-7
- Training Division, 554-6
- Social Welfare Training Council, 555
 - training courses, 555-6
- Youth Welfare Division, 540-6
- length of sentences to youth training centres, 543
 - location of persons controlled, 554
 - offences for which sentences imposed, 542
- Youth
- Advisory Council, 546
 - training centres, 543-4
 - Welfare Service, 544-5
- wards
- after care, 545-6
 - discharged, 541
 - of State, 542
- Societies
- building, 674-5
 - co-operative, 563-4, 675-7
 - friendly, 561-3
- Softwood plantations, 347-8
- Soil Conservation Authority, 275-6
- Soldier settlement, 278-9
- Soldiers' Children Education Scheme, 531
- Solicitor, Public, 565-6
- Southern Uplands, physiography, 40

Special

- articles in *Victorian Year Books*, index, 789-93
- benefits, 527
- Speech Therapy, Victorian School of, 493
- Speed limits, 742
- Stamp duties, 631-2
- Standard hours of work
 - history, 172-3
 - females, weekly, by industry groups, 174
 - forty-hour week, 173
 - males, weekly, by industry group, 174
 - weekly hours, 173
- Standards Association of Australia, 393-4
- Standing Committees, *see* Parliamentary Papers
- State
 - Acts passed during 1969, 85-9
 - Accident Insurance Office, Claims, premiums, etc., 672-3
 - archives, 437
 - electoral system, *see* Electoral system
 - Electricity Commission of Victoria, 360-1, 422-7
 - establishment, 360-1
 - electricity
 - generation, 423
 - production, transmission, and distribution, 424-6
 - supply, 423-4
 - future development, 426-7
 - Library of Victoria, 436-7
 - Motor Car Insurance Office, claims, premiums, etc., 672
 - Parliament, *see* Parliament
 - pensions and gratuities, *see* Pensions, State
 - public debt, *see* Public debt
 - Research Farm, Werribee, 293
 - Rivers and Water Supply Commission, 284-91
 - administration, 291
 - finance, 290-1
 - Savings Bank of Victoria, 659-64
 - accounts and deposits, 663
 - changes in savings banking, 660-1
 - industrial savings facilities, 662
 - loans for
 - farms, 661-2
 - housing, 661-2
 - non-profit organisations, 662
 - rural finance facilities, 281
 - school banking, 662
 - transactions, 664
 - travelling facilities, 662
 - schools, primary and secondary
 - age and grade of pupils, 459
 - ages of pupils, 458
 - class of school, 458
 - enrolment, 458
 - sex of pupils, 458
 - teachers, pupils, etc., 457
 - Superannuation Fund, *see* Superannuation, State Fund
 - trust funds and special accounts, 643

Statistical

- Districts and Counties, map, 301
- Divisions
 - percentage of area of State, 121
 - population, 113, 121
 - intercensal changes, 113
- Statutory authorities, 99
- Stillbirths, *see* Infant mortality
- Stipendiary magistrates, 576-7
- Stock
 - breeding, progress, 326-8
 - Exchange of Melbourne, 686-9
 - computer, 688
 - function, 686
 - issues listed and nominal value, 687
 - membership, 686
 - Official List, 686
 - Share Price Index, 688-9
 - transactions, 688
 - turnover, 687
 - value, 688
 - mortgages, 684-5
 - slaughtered, 344
- Streams, *see* Rivers
- Streets
 - and roads, length, 242
 - construction, Commonwealth grants, 622-3
 - municipal responsibility, 218
 - private, construction, 240
- Suffrage, *see* Parliamentary suffrage
- Suicide, 161
- Superannuation
 - Board, Local Authorities, 227-8
 - Fund
 - Commonwealth, 642-3
 - Married Women's, 642
 - Parliamentary Contributory, 641-2
 - Police, 640-1
 - State, 639-40
- Superphosphate, 302-4
- Supreme Court, 76, 573-4
- Survey of
 - average weekly earnings and hours, 175-6
 - retail establishments, 697-8
- Swan Hill Folk Museum, 435-6
- Swinburne College of Technology, 492
- Tariff Board, 699
- Tariffs (G.A.T.T.), 700
- Tattersall lotteries, duty, etc., 633
- Tax
 - company, payable, 638
 - entertainments, 635
 - income, 635-7
 - individuals, 637
 - rates, 636
 - land, assessments, etc., 630-1
 - liquor, 633
 - motor, 628-9
 - probate duties, rates, etc., 629
 - racing, 634-5
- Teaching service, 454-5
- Teachers
 - colleges, Commonwealth grants, 624
 - Married Women, Pension Fund, *see* Married Women's Superannuation Fund

- registration, 467
- Technical
 - colleges, *see* Victoria Institute of Colleges
 - courses
 - and careers in engineering 1970, 463
 - enrolments in courses, 462
 - relations with industry, 464-5
 - schools and enrolments, 462
- Telecommunications Commission, Overseas, 758-60
- services, 760
- Telephone offices, services, etc., *see under* Postmaster-General's Department
- Television, 443-6
 - Australian Broadcasting Control Board, 443
 - commercial, 444
 - programmes, composition, 444
 - stations in operation, 444
 - licences in force, 758
 - music, 445-6
 - national, 444-5
 - stations in operation, 445
 - programme composition, 445
 - programmes
 - commercial, composition, 444
 - national, composition, 445
 - translator stations, 443
- Telex, automatic, 754
- Temperatures, 60-1
- Tertiary agricultural education, 291-3
- The Constitution Act Amendment Act* 1958, 71, 73
- Thunderstorms, 64
- Timber,
 - forest, 346-7
 - estate, 346
 - softwood plantations, 347-8
- Titles of land issued, 683
- Toads, *see* Amphibians
- Tobacco, 320-1
- Tortoises, *see* Reptiles
- Totalisator investments, 634
- Tourism, Ministry of, 99
- Tow trucks and drivers certificates, 776
- Town and country planning, 219, 594-6
 - planning
 - Appeals Tribunal, 221
 - Melbourne, 257-8
- Towns, constitution, 214
- Trade
 - agreements, bilateral, 699-700
 - and Industry, Commonwealth Department of, 392-3
 - coastal, 709-10
 - interstate, 706-7
 - sea, 706
 - Tasmanian, 707-8
 - West Australian, 707
 - legislation and agreements, 698-702
 - missions, Australian, 701-2
 - overseas, 698-706
 - customs
 - and excise duty collected, 708-9
 - Regulations (Import Licensing), 701
 - excise tariff, 700
 - export controls and incentives, 701
 - exports, 703-5
 - General Agreement on Tariffs and Trade, (G.A.T.T.), 700
 - imports
 - classification, 703-5
 - countries of origin and consignment, 705-6
 - primage duty, 699
 - recorded value of imports and exports, 702
 - Tariff Board, 699
 - Victorian, 702-6
 - imports and exports, value, 703
 - portion handled, 703
 - Retail, 697-8
 - Census of Retail Establishments, 697
 - sales, value, 698
 - Survey of Retail Establishments, 697
 - Unions, 191-5, 570
 - history, 192-3
 - industry groups, 195
 - Labour Councils, 195
 - membership, 194
 - number, 194
 - registration, 191
 - Trades Hall Councils, 195
 - Trades Hall Councils, 195
 - Trading banks, *see* Banks, trading
 - Traffic
 - accidents, 744-5
 - Commission, 741-2, *see also* Transport Regulation Board
 - speed limits, 742
 - control by police, 589-90
 - Training centres, youth, 542-4
 - Tramways and omnibus services, 732-5
 - in extra-metropolitan cities, 735
 - Melbourne and Metropolitan Tramways Board, 732-4
 - Transport, 709-51
 - accidents, 161
 - aviation, civil, 745-51
 - Geelong Harbor Trust, 718-9
 - Lower Yarra Crossing Authority, 743-4
 - Melbourne Harbor Trust, 714-8
 - Ministry of, 99
 - motor
 - omnibus services, 734-5
 - vehicles, 735-8
 - Port Phillip Sea Pilots, 713-4
 - Portland Harbor Trust, 719-20
 - railways, 722-32
 - Regulation Board, 738-41, *see also* Traffic Commission
 - drivers certificates, 740
 - enforcement, 740-1
 - financial operations, 739
 - functions, 738-9
 - licences issued, 739
 - motor boats, 741
 - passenger fares, 740
 - permits, 739
 - public hearings, 740
 - road maintenance charges, 741

- road traffic accidents, 744-5
- shipping, 709-13
- Traffic Commission, 741-2
- tramway and omnibus services, 732-5
- Western Port, 721
- Trotting meetings, 589
- Trust funds and special accounts, State, 669-70
- Trustee companies, 678-9
 - value of estates administered, 679
- Tuberculosis
 - Branch, Health Department, 505-6
 - bureaux activity, 506
 - cases, 505
 - deaths, 156-7
 - sanatoria accommodation, etc., 506
- Tullamarine (Melbourne) Airport, 747-8
- Turtles, *see* Reptiles
- Unemployment, sickness, and special benefits, 527
- Unions, Trade, *see* Trade unions
- Universities
 - Commonwealth grants, 623
- University
 - La Trobe, 484-7
 - bachelor degree enrolments, 486
 - degrees conferred by schools, 486
 - enrolments, 485
 - income and expenditure, 487
 - Monash, 479-84
 - buildings and accommodation, 479-80
 - Centre of South-east Asian studies, 483-4
 - degrees conferred in faculties, 482
 - enrolments by faculties, 482
 - entrance requirements, 481
 - faculties, 481
 - finance, 482-3
 - halls of residence, 480
 - income and expenditure, 483
 - Library, 480
 - students enrolled, 481
 - of Melbourne, 474-9
 - Asian students, 476
 - chairs, 474
 - degrees conferred by faculties, 476
 - enrolments by
 - faculties, 475
 - sex and course type, 475
 - fees, 474-5
 - income and expenditure, 476-7
 - School of Agriculture, 292-3
 - Veterinary School, 477-9
- Urban boundaries, delimitation, 126
- Value of
 - primary production, 363-5
 - production, 395
- Valuation Boards of Review, *see* Land Valuation Boards of Review
- Valuer-General, 215
- Valuers Qualification Board, 215
- Vegetables, 325-6
 - area sown, 326
 - production, 326
- Victoria
 - Books
 - about, 796-8
 - published in, 799-803
 - Institute of Colleges, 487-94
 - Ballarat Institute of Advanced Education, 489
 - Bendigo Institute of Technology, 489
 - Caulfield Institute of Technology, 490
 - enrolments in affiliated colleges, 488
 - Footscray Institute of Technology, 490
 - Gippsland Institute of Advanced Education, 493
 - Gordon Institute of Technology, 490
 - Prahran College of Technology, 491
 - Preston Institute of Technology, 491
 - Royal Melbourne Institute of Technology, 491
 - Swinburne College of Technology, 492
 - therapy schools, 493-4
 - Victorian College of Pharmacy, 493
 - Warrnambool Institute of Advanced Education, 492
 - Police, 589-91
 - revenue and expenditure, *see* Public Finance
- Victorian
 - Book Resources Committee, 439
 - Bush Nursing Association, 515-6
 - College of Pharmacy, 493
 - Pipelines Commission, 431
 - Railways, *see* Railways
 - School
 - for Deaf Children, 557-8
 - of Speech Therapy, 493
 - Universities and Schools Examinations Board, 472-3
- Vine fruits, 324-5
 - area planted, 325
 - growers, number, 325
 - production, 325
- Visitors to Australia, immigration policy, 136
- Vital statistics
 - births, 147-51
 - cremation, 165
 - death, causes of, 151-61
 - deaths, 151
 - divorce, 145-7
 - infant mortality, 161-5
 - marriages, 141-5
 - summary, 141
- Voting, *see* Electoral system, Elections, Electors
- Wage
 - and salary earners in civilian employment, 204-7
 - government bodies, 207
 - industry groups, 205-6

- basic, 177-81, *see also* Wage rates
- determinations
 - Commonwealth, 178
 - Victorian, 178
- margins, 181
- rates, 170-2
 - females, Commonwealth, 179
 - history, 170-71
 - minimum weekly, 171, 179
 - industry groups, 172
- Wages, *see also* Earnings and hours
- Boards, 167-8
- determinations, 180-81
- factories, 407-8
- War
 - and service pensions, payments, etc., 529
 - Service Homes Scheme, 604-5
- Warrnambool Institute of Advanced Education, 492
- Water
 - catchment and lengths of rivers, 48
 - consumption, 253
 - supply, 219, 283-91
 - authorities, 248-9
 - control, 284
 - Groundwater Act* 1969, 285
 - history, 283
 - in country towns, 259-62
 - irrigation, 286-8
 - area of systems, etc., 287
 - private, 286, 287
 - storages, 287
 - Melbourne, 250, 252-3
 - municipal responsibilities, 219
 - State Rivers and Water Supply Commission, 284-91
 - ten year plan, 284-5
 - town supplies, 288
 - Western Port, 288-90
- Weather, *see* Climate, Climatic elements
- Weekly earnings, *see* Average weekly earnings
- Weights and measures, 215-6
- Welfare, social, *see* Social welfare
- West Gate Bridge, 743-4
- Western
 - District
 - land utilisation, 273
 - Plains, physiography, 39
 - Highlands, physical environment and land use, 40
 - Port, 721
 - Regional Planning Authority, 268
 - water supply, 288-90
 - Devilbend and Tarago Reservoirs, 289-90
- Wheat, 308-13
 - area sown, 312
 - Board, Australian, 310-12
 - constitution, 311
 - functions, 311-2
 - history, 310-1
 - wheat standard, 312
 - breeding, 312-3
 - Grain Elevators Board, 309-10
 - gross value, 312
 - production, 312
 - varieties sown, 313
 - weight of bushel, 312
 - yield per acre, 312
- Wholesale Price
 - Index, building materials, 211
 - indexes, 210-2
 - prices, principal products, 210
- Widows pensions, payments, etc., 525
- Wildlife reserves, *see* National parks
- Wilson's Promontory National Park, 449-50
- Wimmera District, land utilisation, 270-1
- Winds, 64
- Wool production and value, 399
- Work
 - force, 201-4, *see also* Wage and salary earners
 - industry and occupational status, 203
 - occupational status and wage, 202
 - hours of, *see* Standard hours of work
- Workers compensation, 183-6
- Writs, received by the Sheriff, 575
- X-ray surveys, 505
- Youth Welfare, *see* Social Welfare Department, Youth Welfare Division
- Zoo, *see* Melbourne Zoological Gardens

SUPPLEMENT

STATE MINISTRY

Page 75

On 22 December 1970 the Hon. I. W. Smith, M.L.A. became Minister for Social Welfare and the Hon. R. C. Dunstan, D.S.O., M.L.A. was appointed to the Ministry as Minister of Water Supply.

The Chief Secretary and Member of the Legislative Assembly for Kew, Sir Arthur Rylah, K.B.E., C.M.G., E.D. resigned from State Parliament on 5 March 1971. The Hon. G. O. Reid, M.L.A. was appointed Chief Secretary (in addition to the office of Attorney-General) on 9 March 1971.

On 27 April 1971 the Hon. R. J. Hamer, E.D., M.L.A. succeeded Mr Reid as Chief Secretary and the Hon. A. J. Hunt, M.L.C. was appointed to the Ministry as Minister for Local Government.

STATE PARLIAMENT

Page 81

The Hon. R. J. Hamer, E.D. resigned from the Legislative Council on 17 March 1971. He was elected to the Legislative Assembly seat of Kew at a by-election held on 17 April 1971. The Hon. H. Storey (*LP*) was elected to the Legislative Council seat of East Yarra in his stead at a by-election held on the same day.

COMMONWEALTH PARLIAMENT

Page 98

The Rt Hon. Sir John McEwen, C.H., K.C.M.G. resigned from the House of Representatives on 1 February 1971. At a by-election on 20 March 1971 Mr Bruce Lloyd (*CP*) was elected to the seat of Murray in his stead.

NATIONAL WAGE CASE, 1970

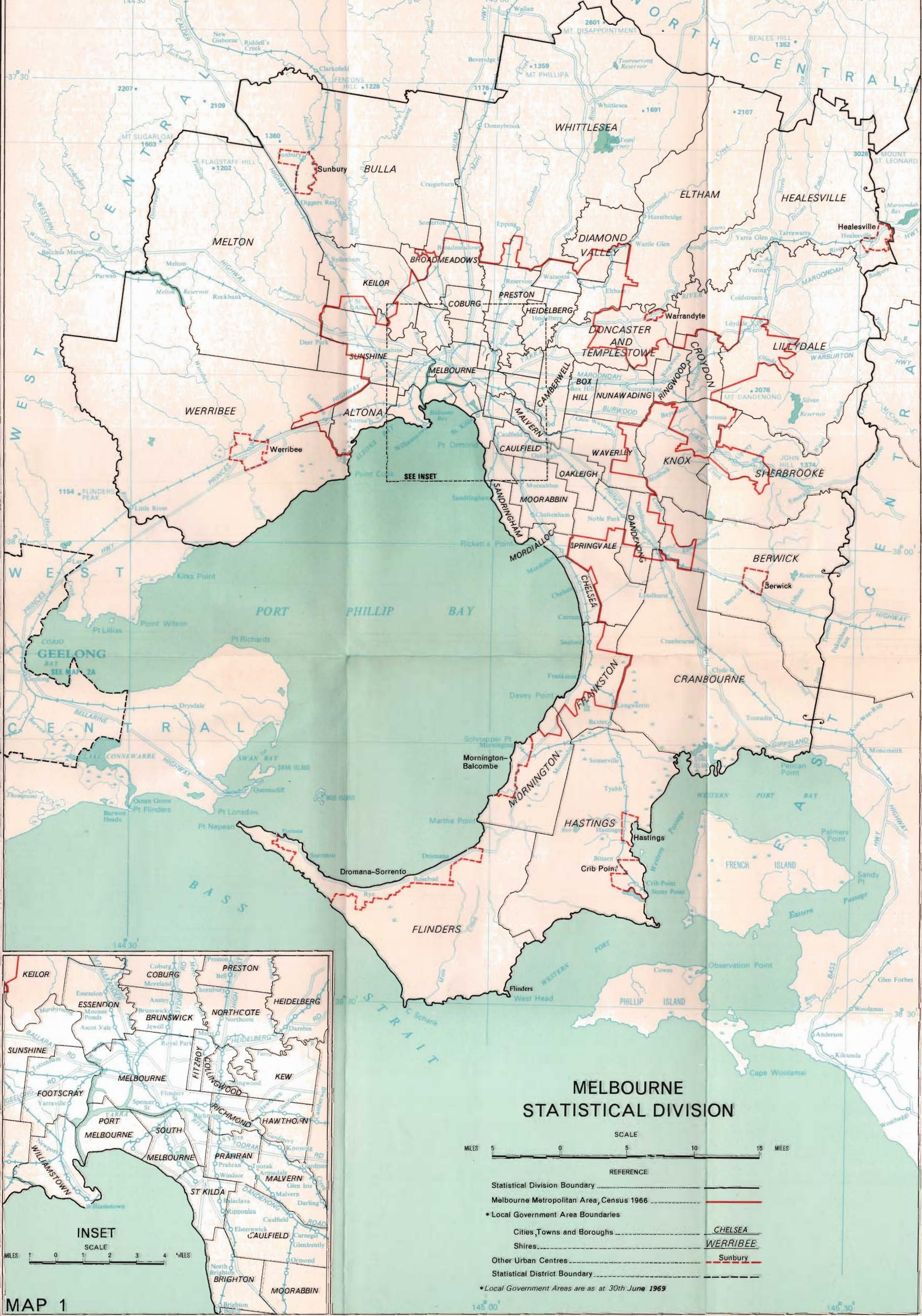
Page 178

3. *National Wage Case, 1970*. The following judgements were handed down:

- (a) The rates in clause 3 Part 1 of the Metal Trades Award, minimum wages for adult males, were increased by \$4.00 per week.
- (b) The rates for males and females appearing generally in clause 4 (b) of Part 1 of the Metal Trades Award were increased by 6 per cent.
- (c) The variations operated from the beginning of the first pay period to commence on or after 1 January 1971 and will remain in force until 30 September 1971.

SUPPLEMENT

- (d) Rates appearing in the Vehicle Industry Award, the Furnishing Trades Award, and the Federal Meat Industry Interim Award were increased by 6 per cent in a similar manner.
- (e) Public Service rates were increased by 6 per cent from the beginning of the first pay period to commence on or after 1 January 1971.
- (f) The increase could be applied to other awards depending upon decisions of the arbitrators.



MELBOURNE STATISTICAL DIVISION



- REFERENCE
- Statistical Division Boundary ————
 - Melbourne Metropolitan Area, Census 1966 ————
 - * Local Government Area Boundaries
 - Cities, Towns and Boroughs ————
 - Shires ————
 - Other Urban Centres ————
 - Statistical District Boundary ————

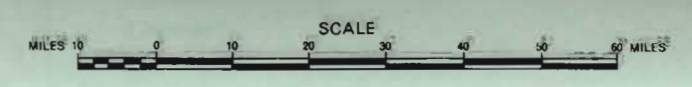
* Local Government Areas are as at 30th June 1969



MAP 1

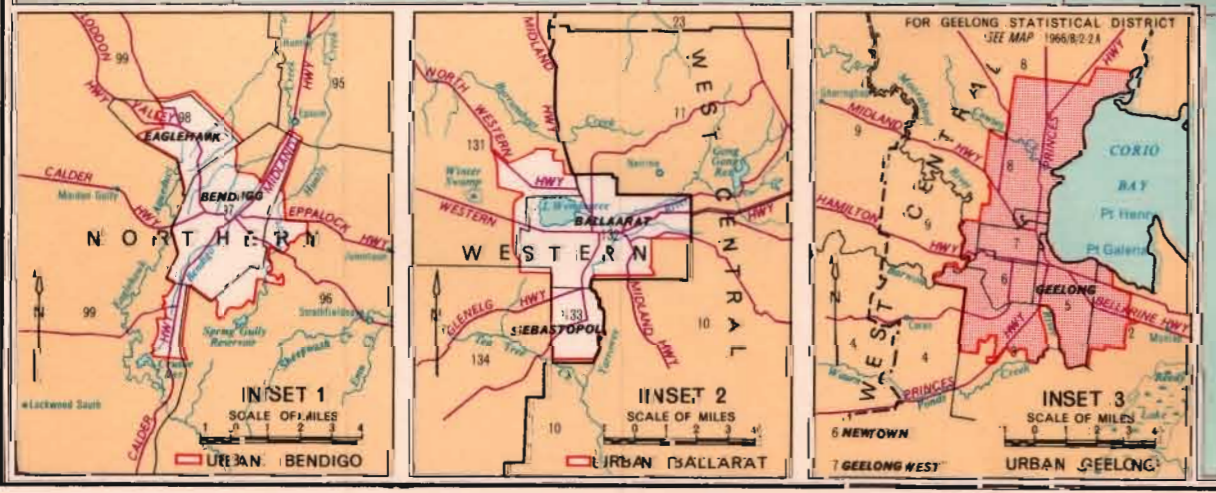


1966 CENSUS
STATISTICAL DIVISIONS
OF
VICTORIA



- REFERENCE
- Statistical Division Boundaries MALLEE
 - Geelong Statistical District Boundary
 - Local Government Areas
 - Cities, Towns and Boroughs COLAC 159
 - Shires 157
 - Urban Centres
 - Major Urban Centres
 - Other Urban Centres Orbos
 - Localities
 - 500-999 Persons Dunolly
 - 100-499 Persons Bannockburn
 - Other Localities Teth Cleck
 - Unincorporated Areas U
 - Elevations in Feet • 6816

* Local Government Areas are as at 30 June 1969
 ** Urban centres are concentrations of 1,000 persons or more, or holiday resorts which have 250 dwellings or more. (See Field Count Statements 4 and 7, or Census Bulletin 2 B for a detailed explanation of urban criteria used in the 1966 Census)
 † Non-farm population.
 See overleaf for numerical and alphabetical indexes to Local Government Areas



INDEX TO LOCAL GOVERNMENT AREAS

T - Town B - Borough S - Shire

NUMERICAL INDEX

ALPHABETICAL INDEX

WEST CENTRAL

QUEENSCLIFFE B.	1
BELLARINE S.	2
SOUTH BARWON S.	3
BARRABOOL S.	4
GEELONG, CITY OF	5
NEWTOWN, CITY OF	5
GEELONG WEST, CITY OF	7
CORIO S.	8
BANNOCKBURN S.	9
BUNINYONG S.	10
BUNGAREE S.	11
BALLAN S.	12
BACCHUS MARSH S.	13
GISBORNE S.	14
ROMSEY S.	15
KILMORE S. (PART)	16

NORTH CENTRAL

BROADFORD S.	17
KILMORE S. (PART)	18
PYALONG S.	19
NEWHAM & WOODEND S.	20
KYNETON S.	21
DAYLESFORD & GLENLYON S.	22
CRESWICK S.	23
TALBOT & CLUNES S.	24
MARYBOROUGH, CITY OF	25
TULLAROOP S.	26
NEWSTEAD S.	27
MALDON S.	28
CASTLEMAINE, CITY OF	29
METCALFE S.	30
MIVVOR S.	31
SEYMOUR S.	32
YEA S.	33
ALEXANDRA S.	34

EAST CENTRAL

HEALESVILLE S. (PART)	35
UPPER YARRA S.	36
BERWICK S. (PART)	37
CRANBOURNE S. (PART)	38
BASS S.	39
PHILLIP I. S.	40
WONTHAGGI B.	41
KORUMBURRA S.	42

GIPPSLAND

WARRAGUL S.	43
BULN BULN S.	44
NARRACAN S.	45
MOE, CITY OF	46
YALLOURN WORKS AREA	47
MORWELL S.	48
MIRBOO S.	49
WOORAYL S.	50
SOUTH GIPPSLAND S.	51
ALBERTON S.	52

TRARALGON S.	53
TRARALGON, CITY OF	54
ROSEDALE S.	55
SALE, CITY OF	56
MAFFRA S.	57
AVON S.	58
BAIRNSDALE S.	59
BAIRNSDALE T.	59A
ORBOST S.	60
TAMBO S.	61

NORTH EASTERN

OMEO S.	62
UPPER MURRAY S.	63
TOWONG S.	64
BRIGHT S.	65
YACKANDANDAH S.	66
WODONGA S.	67
CHILTERN S.	68
RUTHERGLEN S.	69
WANGARATTA S.	70
WANGARATTA, CITY OF	71
BEECHWORTH S.	72
MYRTLEFORD S.	73
OXLEY S.	74
MANSFIELD S.	75
BENALLA S.	76
BENALLA, CITY OF	77
VIOLET TOWN S.	78
EURDA S.	79

NORTHERN

SHEPPARTON S.	80
SHEPPARTON, CITY OF	81
TUNGAMAH S.	82
YARRAWONGA S.	83
COBRAM S.	84
NUMURKAH S.	85
NATHALIA S.	86
KYABRAM B.	87
RODNEY S.	88
GOULBURN S.	89
WARANGA S.	90
DEAKIN S.	91
ECHUCA, CITY OF	92
ROCHESTER S.	93
EAST LODDON S.	94
HUNTLY S.	95
STRATHFIELDSAYE S.	96
BENDIGO, CITY OF	97
EAGLEHAWK B.	98
MARONG S.	99
BET BET S.	100
KORONG S.	101
CHARLTON S.	102
GORDON S.	103
COHUNA S.	104
KERANG B.	105
KERANG S.	106

MALLEE

SWAN HILL, CITY OF	107
SWAN HILL S.	108
MILDURA, CITY OF	109
MILDURA S.	110
WALPEUP S.	111
KARKAROOO S.	112
WYCHEPROOF S.	113
BIRCHIP S.	114

WIMMERA

DONALD S.	115
WARRACKNABEAL S.	116
DIMBOOLA S.	117
LOWAN S.	118
KANIYA S.	119
KOWREE S.	120
ARAPILES S.	121
HORSHAM, CITY OF	122
WIMMERA S.	123
DUNMUNKLE S.	124
STAWELL S.	125
STAWELL T.	126
KARA KARA S.	127
ST. ARNAUD T.	128
AVOCA S.	129

WESTERN

LEXTON S.	130
BALLARAT S.	131
BALLAARAT, CITY OF	132
SEBASTOPOL B.	133
GRENVILLE S.	134
RIPON S.	135
ARARAT, CITY OF	136
ARARAT S.	137
MOUNT ROUSE S.	138
DUNDAS S.	139
HAMILTON, CITY OF	140
WANNON S.	141
GLENELG S.	142
PORTLAND S.	143
PORTLAND T.	144
MINHAMITE S.	145
BELFAST S.	146
PORT FAIRY B.	147
KOROIT B.	148
WARRNAMBOOL, CITY OF	149
WARRNAMBOOL S.	150
MORTLAKE S.	151
HAMPDEN S.	152
CAMPERDOWN T.	153
HEYTESBURY S.	154
OTWAY S.	155
COLAC, CITY OF	156
COLAC S.	157
WINCHELSEA S.	158
LEIGH S.	159

ALBERTON S.	160
ALEXANDRA S.	161
ARAPILES S.	162
ARARAT, CITY OF	163
ARARAT S.	164
AVOCA S.	165
AVON S.	166
BACCHUS MARSH S.	167
BAIRNSDALE S.	168
BAIRNSDALE T.	169
BALLAN S.	170
BALLAARAT, CITY OF	171
BALLARAT S.	172
BANNOCKBURN S.	173
BARRABOOL S.	174
BASS S.	175
BEECHWORTH S.	176
BELFAST S.	177
BELLARINE S.	178
BENALLA, CITY OF	179
BENALLA S.	180
BENDIGO, CITY OF	181
BERWICK S.	182
BET-BET S.	183
BIRCHIP S.	184
BRIGHT S.	185
BROADFORD S.	186
BULN BULN S.	187
BUNGAREE S.	188
BUNINYONG S.	189
CAMPERDOWN T.	190
CASTLEMAINE, CITY OF	191
CHARLTON S.	192
CHILTERN S.	193
COBRAM S.	194
COHUNA S.	195
COLAC, CITY OF	196
COLAC S.	197
CORIO S.	198
CRANBOURNE S.	199
CRESWICK S.	200
DAYLESFORD & GLENLYON S.	201
DEAKIN S.	202
DIMBOOLA S.	203
DONALD S.	204
DUNDAS S.	205
DUNMUNKLE S.	206
EAGLEHAWK B.	207
EAST LODDON S.	208
ECHUCA, CITY OF	209
EUROA S.	210
GEELONG, CITY OF	211
GEELONG WEST, CITY OF	212
GISBORNE S.	213
GLENELG S.	214

GORDON S.	215
GOULBURN S.	216
GRENVILLE S.	217
HAMILTON, CITY OF	218
HAMPDEN S.	219
HEALESVILLE S.	220
HEYTESBURY S.	221
HORSHAM, CITY OF	222
HUNTLY S.	223
KANIYA S.	224
KARA KARA S.	225
KARKAROOO S.	226
KERANG B.	227
KERANG S.	228
KILMORE S.	229
KOROIT B.	230
KORONG S.	231
KORUMBURRA S.	232
KOWREE S.	233
KYABRAM B.	234
KYNETON S.	235
LEIGH S.	236
LEXTON S.	237
LOWAN S.	238
MAFFRA S.	239
MALDON S.	240
MANSFIELD S.	241
MARONG S.	242
MARYBOROUGH, CITY OF	243
MIVVOR S.	244
METCALFE S.	245
MILDURA, CITY OF	246
MILDURA S.	247
MINHAMITE S.	248
MIRBOO S.	249
MOE, CITY OF	250
MORTLAKE S.	251
MORWELL S.	252
MOUNT ROUSE S.	253
MYRTLEFORD S.	254
NARRACAN S.	255
NATHALIA S.	256
NEWHAM & WOODEND S.	257
NEWSTEAD S.	258
NEWTOWN, CITY OF	259
NUMURKAH S.	260
OMEO S.	261
ORBOST S.	262
OTWAY S.	263
OXLEY S.	264
PHILLIP I. S.	265
PORT FAIRY B.	266

PORTLAND S.	143
PORTLAND T.	144
PYALONG S.	19
QUEENSCLIFFE B.	1
RIPON S.	135
ROCHESTER S.	93
RODNEY S.	88
ROMSEY S.	15
ROSEDALE S.	55
RUTHERGLEN S.	69
ST. ARNAUD T.	128
SALE, CITY OF	56
SEBASTOPOL B.	133
SEYMOUR S.	22
SHEPPARTON, CITY OF	81
SHEPPARTON S.	80
SOUTH BARWON S.	3
SOUTH GIPPSLAND S.	51
STAWELL S.	125
STAWELL T.	126
STRATHFIELDSAYE S.	96
SWAN HILL, CITY OF	107
SWAN HILL S.	108
TALBOT & CLUNES S.	24
TAMBO S.	61
TOWONG S.	64
TRARALGON, CITY OF	54
TRARALGON S.	53
TULLAROOP S.	26
TUNGAMAH S.	82
UPPER MURRAY S.	63
UPPER YARRA S.	36
VIOLET TOWN S.	78
WALPEUP S.	111
WANGARATTA, CITY OF	71
WANGARATTA S.	70
WANNON S.	141
WARANGA S.	90
WARRACKNABEAL S.	116
WARRAGUL S.	43
WARRNAMBOOL, CITY OF	149
WARRNAMBOOL S.	150
WIMMERA S.	123
WINCHELSEA S.	158
WONTHAGGI B.	41
WODONGA S.	67
WOORAYL S.	50
WYCHEPROOF S.	113
YACKANDANDAH S.	66
YALLOURN WORKS AREA	47
YARRAWONGA S.	83
YEA S.	33



POPULATION DISTRIBUTION VICTORIA 1966 CENSUS

SCALE 0 20 40 60 80 MILES

URBAN

- Over 100,000 persons
- 50,000 - 99,999 persons
- 20,000 - 49,999 persons
- 10,000 - 19,999 persons
- 5,000 - 9,999 persons
- 2,500 - 4,999 persons
- 1,000 - 2,499 persons

RURAL

- 500 - 999 persons
- 100 persons
- Camps and Institutions over 500 persons

Explanatory Note

Urban centres are concentrations of 1,000 persons or more, or holiday resorts which have 250 dwellings or more, 100 of which are occupied.

Prepared for the Bureau of Census and Statistics by the Division of National Mapping, Department of National Development, 1969.
Distributed by the Bureau of Census and Statistics, Canberra.

