

VICTORIAN YEAR BOOK 1963

*No. 77*

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.

Further copies of this book may be obtained from the

Deputy Commonwealth Statistician,  
8 Elizabeth Street,  
MELBOURNE, C.I.

or leading booksellers. The price is 15s., or if ordered  
by post, please add 3s. 4d. postage.



*With the Compliments  
of the  
Deputy Commonwealth Statistician  
Victoria*

## Gateway to Melbourne . . .



[Australian News and Information Bureau.]

Every ship entering or leaving Port Phillip Bay requires the services of a qualified pilot. This photograph shows one of the pilots being transferred by work boat from the Pilot Ship RMS *Wyuna* to an oversea tanker about to enter the Bay through the Rip.



# VICTORIAN YEAR BOOK

1963

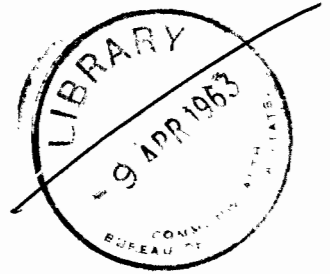
PERIODICALS SECTION,  
DARWIN COMMUNITY  
COLLEGE L.R.C.

21 JUL 1978

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

*Deputy Commonwealth Statistician  
and  
Government Statist for Victoria*

*No. 77*



*Melbourne*

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

*Victorian Office*

1963

DARWIN COMMUNITY COLLEGE L.R.C.

*By Authority :*

A. C. BROOKS, GOVERNMENT PRINTER, MELBOURNE

Registered at the General Post Office, Melbourne,  
for transmission through the post as a book.  
Wholly set up and printed in Australia.

# CONTENTS

<i>Part</i>		<i>Page</i>
	<b>PREFACE</b>	
	<b>ACKNOWLEDGMENTS</b>	
<b>1.</b>	<b>PHYSICAL ENVIRONMENT</b>	
	Mammals of Victoria .. .. .	1
	Geographical Features .. .. .	24
	Rivers and Water Resources .. .. .	30
	Physical Geography .. .. .	43
	Climate .. .. .	49
<b>2.</b>	<b>GOVERNMENT AND ADMINISTRATION</b>	
	Constitution .. .. .	65
	Government .. .. .	69
	Parliament .. .. .	70
	Electoral System .. .. .	84
	Agent-General for Victoria .. .. .	92
	Victorian Government Departments .. .. .	92
<b>3.</b>	<b>DEMOGRAPHY</b>	
	Population .. .. .	105
	Vital Statistics .. .. .	135
<b>4.</b>	<b>SOCIAL CONDITIONS</b>	
	Cultural and Recreational .. .. .	171
	Education .. .. .	191
	Health and Medical Research .. .. .	230
	Social Welfare .. .. .	277
	Justice and the Administration of Law .. .. .	311
	Housing and Building .. .. .	345
<b>5.</b>	<b>LOCAL GOVERNMENT</b>	
	Administration .. .. .	371
	Statistics of Local Government .. .. .	395
	Semi-Governmental Authorities .. .. .	408
<b>6.</b>	<b>WAGES, EMPLOYMENT, AND PRICES</b>	
	Industrial Conditions .. .. .	431
	Wages .. .. .	454
	Employment and Unemployment .. .. .	466
	Prices .. .. .	475

CONTENTS—*continued*

<i>Part</i>	<i>Page</i>
<b>7. PRIMARY PRODUCTION</b>	
Land Settlement and Irrigation .. .. .	483
Agricultural Research, Extension, and Education ..	503
Farming .. .. .	507
Primary Industries other than Farming .. .. .	564
Value of Production .. .. .	575
 <b>8. MANUFACTURING INDUSTRY</b>	
Modern Management Techniques in Manufacturing Industry .. .. .	579
Manufacturing Activity .. .. .	583
Individual Industries .. .. .	615
 <b>9. FINANCE</b>	
Public Finance .. .. .	645
Private Finance .. .. .	686
 <b>10. TRADE, TRANSPORT, AND COMMUNICATIONS</b>	
Retail Trade .. .. .	733
Oversea Trade .. .. .	740
Transport .. .. .	751
Communications .. .. .	789
 <b>APPENDIX A .. History of Victoria's Early Statistics and Statisticians ..</b>	
<b>801</b>	
 <b>APPENDIX B .. Principal Events from 1st July, 1961 to 30th June, 1962 ..</b>	
<b>807</b>	
 <b>APPENDIX C .. Index of Special Articles in the Previous Editions of the Victorian Year Book ..</b>	
<b>810</b>	
 <b>APPENDIX D .. Index of Maps in the Previous Editions of the Victorian Year Book ..</b>	
<b>812</b>	
 <b>APPENDIX E .. Select Bibliography of Books Published in Victoria, 1961-62</b>	
<b>812</b>	
 <b>APPENDIX F .. List of Victorian Statistical Publications ..</b>	
<b>815</b>	
 <b>INDEX .. .. .</b>	
<b>817</b>	

## LIST OF PHOTOGRAPHS

	<i>Page</i>
Transferring the Pilot .. .. . Frontispiece	
Mammals of Victoria .. .. . Facing	18
Life in Victoria Today .. .. . Facing	370
Victoria's Chemical Industry .. .. . Facing	594

## LIST OF MAPS, DIAGRAMS, AND GRAPHS

FOLDING MAP	Victoria's Rivers and Catchments .. Facing	30
FIGURE 1	.. Victoria's Water Resources and River Basins	36
FIGURE 2	.. Physiographic Divisions of Victoria ..	44
FIGURE 3	.. Annual Rainfall of Victoria for 1961 ..	51
FIGURE 4	.. Rainfall Reliability by Districts .. ..	55
FIGURE 5	.. State Electoral Provinces for Legislative Council .. .. .	85
FIGURE 6	.. State Electoral Districts for Legislative Assembly .. .. .	86
FIGURE 7	.. Graph showing age and sex of population at Censuses 1933, 1947, 1954, and 1961	110-111
FOLDING MAP	Statistical Divisions of Victoria .. Facing	114
FIGURE 8	.. Graph showing percentage of total deaths in each age group by sex 1921-1961 ..	152
FIGURE 9	.. Graph showing deaths from selected causes	156
FIGURE 10	.. Graph showing number of houses classified according to building authority ..	356
FIGURE 11	.. Graph showing percentage of houses commenced classified according to materials used .. .. .	357
FIGURE 12	.. Counties and Statistical Districts of Victoria	508
FIGURE 13	.. Graph showing value of output of factories	594
FIGURE 14	.. Graph showing number of factories and value of production classified according to number of persons employed .. ..	594
FIGURE 15	.. Map showing coal deposits in Victoria ..	639
FIGURE 16	.. Graph showing new motor vehicle registrations .. .. .	778
FIGURE 17	.. Victoria : Regular Air Services .. ..	787



The form of the Pink Heath, *Epacris impressa* Labill. was proclaimed by the Governor of Victoria, General Sir Dallas Brooks, to be the Floral Emblem for the State of Victoria on 11th November, 1958. This plant was chosen as the result of a number of plebiscites 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 seventy-seventh volume of the Victorian Year Book again aims to present the main aspects of current life in Victoria along the lines of the previous two editions.

At the present time the rapid growth and change in the community make necessary fairly frequent revision of articles previously published. Continuity is preserved by referring to these previous articles in appropriate places and then listing them in a comprehensive index in Appendix C.

On the statistical side, every effort has been made to bring previous tables up to date and thus ensure comparability. Statistical information on Victorian industry and activity is gradually increasing and this is reflected in a continual expansion of the broad outlines presented in the Year Book. It is not, of course, the place for setting out detail. For the specialist reader, the office publishes, and frequently expands, its wide range of publications, which are listed in Appendix F, and are available on application as shown. For instance, new publications dealing with *Industrial Accidents*, *Education*, and *Hospital Morbidity* are now being published regularly.

The results of the 1961 Census are becoming progressively available. Wherever possible, relevant information has been included in the appropriate part of the text.

The material in the Year Book has been carefully checked throughout, but I would be grateful to be advised of any defects in the text.

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 some three months after this volume.

It is fitting to record here the retirement of Sir Stanley Carver, Kt., O.B.E., B.A., on 6th February, 1962, from the dual offices of Commonwealth Statistician and Government Statistician of New South Wales. After serving in the N.S.W. State Statistical Office from 1920, he was appointed Government Statistician of New South Wales in 1938, and two years later assumed as well the duties of the office of Commonwealth Statistician. It was at this time during the war that the demands of national planning made necessary a tremendous increase in the rather meagre statistical information and facilities that were then available.

This resulted in many statistical records for war planning developing spontaneously in various departments and it was due to Sir Stanley Carver's skill and persistence that these isolated groups were co-ordinated into a single statistical service which was able to supply the War Cabinet with essential information, up to date, co-ordinated, and clear in presentation.

Altogether the period of his occupancy of these two positions saw major developments in the scope and substance of Australian official statistics, and it was his guiding hand which in 1958 finally accomplished the long-standing objective of the integration of the statistical organizations of the Commonwealth and the separate States. The conferring of a knighthood on the eve of his retirement recognized a long and distinguished service.

In view of the number of persons and institutions involved in the preparation of this Year Book, I have expressed my thanks to them in detail in the following pages.

V. H. ARNOLD  
*Deputy Commonwealth Statistician  
and Government Statist*

Commonwealth Bureau of Census and Statistics,  
Victorian Office,  
8 Elizabeth-street,  
Melbourne, C.1,  
February, 1963.



## 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 has been the responsibility of the Assistant Deputy Commonwealth Statistician, Mr. F. W. Sayer, B. Com., and the four divisional supervisors working under him :—Mr. N. Bowden, B.Ec., Primary and Secondary Production ; Mr. N. L. Dunstan, Business Statistics, Building, and Employment ; Mr. T. J. Fallon, B.A., Dip. Pub. Admin., A.I.A., Research, Development, and Publications ; and Mr. G. E. Kitson, Demography, Social Conditions, Finance, Trade and Transport.

Secondly, 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.

Thirdly, I must thank the Government Printer and his staff for their interest, skill, and resourcefulness in printing this book.

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  
State Rivers and Water Supply Commission  
Surveyor General  
University of Melbourne—  
    Department of Geography  
    Department of Geology  
Mr. N. A. Wakefield

### **Part 2.—Government and Administration**

Chief Electoral Officer  
Clerk of Parliament  
Commonwealth Electoral Officer for Victoria  
Crown Law Department  
Messrs. Longmans, Green and Co. Ltd. (Maps)  
Official Secretary to His Excellency, the Governor of Victoria  
Premier's Department  
Public Service Board  
State Library of Victoria—Archives Division

## Part 4—Social Conditions

Age, The  
Alfred Hospital  
Anti-Cancer Council  
Australian Broadcasting Commission (Victoria)  
Australian Broadcasting Control Board  
Australian Elizabethan Theatre Trust  
Australian Red Cross Society (Victoria)  
Baker Medical Research Institute  
Hon. Sir John Barry, Kt., Judge of the Supreme Court of Victoria  
Cancer Institute Board  
Catholic Education Office  
Children's Court  
Children's Welfare Department  
Mr. Neil Clerehan  
Council of Adult Education  
Council of Public Education  
Education Department  
Free Library Service Board  
Department of Health  
Hospitals and Charities Commission  
Housing Commission of Victoria  
Institute of Applied Science  
Sir William Johnston, Kt., C.B.E., D.S.O., M.C., E.D.\*  
Licensing Court  
Lord Mayor's Fund  
Melbourne City Council  
Mental Health Research Institute  
Mental Hygiene Authority  
Monash University  
National Gallery of Victoria  
National Heart Foundation  
National Parks Authority  
Nursing Adviser to the Minister of Health  
Prothonotary of the Supreme Court  
Repatriation Department  
Royal Children's Hospital  
Royal Melbourne Institute of Technology  
Royal Society of Victoria  
Department of Social Services  
Social Welfare Department  
State Film Centre  
State Library of Victoria  
Swinburne Technical College  
Sir William Upjohn, Kt., O.B.E.  
University of Melbourne—  
    Faculty of Medicine  
    Vice Chancellor  
Victoria Police  
Victorian Bush Nursing Association  
Victorian College of Pharmacy

\* Since deceased.

Victorian Headmasters' Conference  
Walter and Eliza Hall Institute of Medical Research  
War Service Homes Division

#### **Part 5—Local Government**

Department of Agriculture (Ballarat District)  
City of Ballaarat  
Ballarat Art Gallery  
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  
Mines Department  
Ronaldson Bros. and Tippett Ltd., Ballarat  
State Rivers and Water Supply Commission

#### **Part 6—Employment, Wages, and Prices**

Department of Labour and Industry

#### **Part 7—Primary Production**

Department of Agriculture  
Australian Wheat Board  
Dr. Alan Barnard, Australian National University  
Commonwealth Scientific and Industrial Research Organization  
—Animal Health Division  
Department of Crown Lands and Survey  
Fisheries and Wildlife Department  
Forests Commission  
Goldsbrough, Mort and Co. Ltd.  
Grain Elevators Board  
Mines Department  
Soil Conservation Authority  
Soldier Settlement Commission  
State Rivers and Water Supply Commission  
Surveyor General  
University of Melbourne—School of Agriculture  
Sir Samuel Wadham, Kt., Emeritus Professor of Agriculture,  
University of Melbourne.

#### **Part 8—Manufacturing Industry**

Gas and Fuel Corporation  
Imperial Chemical Industries of Australia and New Zealand Ltd.  
Mr. Malcolm S. Moore, C.B.E.  
National Gas Association of Australia  
Premier's Department—Division of State Development  
State Electricity Commission

### **Part 9—Finance**

Australia and New Zealand Bank Ltd.  
Commonwealth Banking Corporation  
Council of Fire and Accident Underwriters  
Registrar of Companies  
Registrar of Probates  
Registrar-General of Titles  
Royal Mint  
State Savings Bank of Victoria  
Stock Exchange, Melbourne  
Surveyor General

### **Part 10—Trade, Transport, and Communications**

Australian National Line  
Department of Civil Aviation (Victoria-Tasmania Region)  
Geelong Harbor Trust Commission  
Melbourne Harbor Trust Commissioners  
Melbourne and Metropolitan Tramways Board  
Overseas Telecommunications Commission  
Port Phillip Pilots Service  
Portland Harbor Trust Commissioners  
Postmaster-General's Department (Victoria)  
Department of Trade  
Traffic Commission  
Transport Regulation Board  
Victorian Railways Commissioners

V.H.A.

# Part 1

## PHYSICAL ENVIRONMENT

### *Mammals of Victoria*

#### **Introduction**

In the animal kingdom there are five classes of vertebrates—that is, animals having backbones. These are classified in the phylum *Chordata*, which comprises the most highly evolved animals.

Fish (class *Pisces*) are aquatic and obtain oxygen by means of gills from air that is dissolved in the water. Amphibians (class *Amphibia*) have two distinct stages in the life history: first, they are gilled animals, such as the tadpole stage of a frog, then they develop lungs and breathe atmospheric air. Reptiles (class *Reptilia*), birds (class *Aves*), and mammals (class *Mammalia*) breathe air by means of lungs at all stages of their lives after birth.

Fish, amphibians, and reptiles are cold-blooded; their body temperature varies according to the heat or coldness of the surroundings. Birds and mammals are warm-blooded; when in normal health, their body temperature remains practically constant, irrespective of variation in surrounding conditions.

Reptiles have scaly skin, and the same characteristic is to be seen on the legs and feet of birds. Both birds and mammals possess a covering of material that tends to prevent escape of heat from the body. In the case of birds, the body covering consists of feathers; and in mammals it is fur. Mammals are often referred to, therefore, as the “furred animals”, to distinguish the class from other groups of the animal kingdom.

In reproduction, the young of fish, amphibians, reptiles, and birds are hatched from eggs. When the eggs are laid before the young emerge, reproduction is said to be *oviparous*. This applies to most representatives of these four classes, including all birds. However, when the young hatch from the eggs within the body of the parent, and are then produced alive, as with many reptiles, the reproduction is said to be *ovoviviparous*. The vast majority of mammals are *viviparous*; there is no egg stage during embryonic development, and the young are produced alive and active. However, several mammal species, comprising the monotremes, are *oviparous*.

The term “fur” is used here in a comprehensive sense. The body covering varies greatly from species to species and, according to its texture, may be commonly referred to as wool, fur, hair, bristles, or quills.

A second feature which distinguishes mammals from all other animals, is the suckling of the young by the mother. In all mammal species the female produces milk in glands on the front or underside of the body, and this serves to nourish the young during the

earliest stages of growth after birth. The organs in which the milk is secreted are the *mammæ*, and from this term the name mammal is derived.

### **Classification of Mammals**

Living mammals are grouped into three major divisions: the monotremes or egg-laying mammals, the marsupials or pouched mammals, and the placental or higher mammals. The Australian region is the only part of the world where representatives of all three groups occur naturally. Moreover, because Australia has been isolated for so long from the great land-masses of the world, there survive in this country certain kinds of mammals which seem to indicate some of the early steps by which the class was evolved from ancient reptile groups.

#### *Egg-laying Mammals (Monotremata)*

These number only about six species: the platypus and several kinds of echidna. They are the most primitive present-day mammals, and many of their characteristics are reptilian.

Monotremes are the only mammals that are oviparous; reproduction is by means of shell-less leathery eggs, similar to those of a tortoise or lizard. Certain features of their brain and bone structures also are reptilian rather than mammalian. Body temperature of monotremes is not as well regulated as in other warm-blooded animals. For instance, whereas a man's temperature varies only about  $\frac{1}{2}^{\circ}$  F. from the average ( $98.6^{\circ}$  F.), that of a platypus may fluctuate, according to surrounding conditions, as much as four degrees on either side of the mean.

The mammary glands of monotremes do not have single openings or nipples as in other mammals. Instead, milk exudes through a number of large pores in the breast area, and the young lick the fluid from the skin or fur.

The platypus lays eggs in a nest, as birds do; echidnas develop folds of abdominal skin, to form a rudimentary pouch, in which the egg is carried and in which the young one remains during the early stages of its growth. When the young one is no longer carried about by the parent, the "pouch" of the echidna disappears.

#### *Pouched Mammals (Marsupialia)*

These number about 200 species. The group name is derived from the Greek *marsupion*, meaning "pouch", and it alludes to the development of a recess in which the young are carried after birth. In small insectivorous marsupials, such as phascogales, there is no true pouch but merely an area with nipples to which the young cling. With these animals, the "pouch" is hardly more developed than that of an echidna. More highly developed pouches occur in other marsupials, the nipple area being almost completely enclosed by skin and fur. With kangaroos and possums, the opening of the pouch is at the top or front, but with wombats, koalas, bandicoots, and dasyures, the pouch opens to the rear.

Despite the derivation of the name, the possession of a pouch is of minor significance, auxiliary to the fundamental characteristic of the marsupial. What really distinguishes the sub-class is the nature of embryonic development. There is a very short period of gestation, with little or no nourishment of the embryo during its growth. Only the bandicoots (family *Peramelidae*) have a fairly well-developed placental connexion, but in general the embryonic development of a young marsupial involves very little in the way of nourishment from the parental tissues. Therefore the young are born at a very early stage of development. A new-born kangaroo, for instance, is little over an inch long and weighs about a quarter of an ounce. Eyes, ears, and fur are lacking, and the tail and limbs are little developed.

Nevertheless, young marsupials are active immediately after birth; they use their tiny fore-limbs to scramble to the parent's pouch, where they seek a nipple and take hold of it. The nipple swells in the mouth, so that the tiny animal is tightly attached. In many cases, the number of young which are born exceeds the number of nipples for their accommodation, and the excess young ones must perish.

After attachment, the young lose all power of movement and they are force-fed by milk expressed from the nipples. Gradually they grow; organs such as ears and eyes develop; fur appears; and they regain the ability to move. At this stage, their development is about equivalent to that of a newly-born placental mammal—they may let go the nipple and return to it at will, and they eventually learn to leave the pouch and to get back into it as circumstances warrant. When too large to enter the pouch, a young marsupial will nuzzle into it for a drink of milk, until finally it is weaned.

#### *Placental Mammals (Monodelphia)*

These number many thousands of species. They are often referred to as the higher mammals, and they comprise seventeen of the nineteen orders of present-day mammals. During the development of the embryo in the higher mammals, the placental connexion provides for the transfer of nourishment from the parent's bloodstream to the unborn young. Compared with the marsupials, a much greater development of the embryo is therefore possible, and at birth a placental mammal may weigh as much as one-twentieth the adult's weight. Eyes, ears, and limbs are quite well developed.

### **Distribution of Mammals**

As regards populations of native mammals, Australia is unique amongst the large countries of the world.

#### *Monotremes*

The monotremes are confined to the Australian region (which includes Tasmania and New Guinea). These primitive mammals may represent a very early evolutionary offshoot from a reptile group originally distributed in other parts of the world. Alternatively, the monotremes may have evolved originally in the Australian region, after it was separated from other land-masses. In either case, the survival of

the few species of the order in this part of the world is evidently due to their isolation from the competition of great numbers of species of placental mammals such as inhabit other continents.

### *Marsupials*

Although the marsupials are also a primitive order of mammal, they are much more advanced in evolution than the monotremes. There are nine families of marsupials, and these are divided in distribution between the American and the Australian regions. The American species comprise two families (*Didelphidae* and *Caenolestidae*), which include the original opossums. The other seven families are Australian: dasyures (*Dasyuridae*), numbat (*Myrmecobiidae*), marsupial "moles" (*Notoryctidae*), bandicoots (*Peramelidae*), possums and koala (*Phalangeridae*), wombats (*Phascolomidae*), and kangaroos (*Macropodidae*). Five of these are represented in Victoria, the exceptions being the numbat and marsupial "mole". The order was once more widely distributed in the world than it is today, and the occurrence in the Australian region of such a large proportion of the marsupials which survive is again due to the long isolation of this country from other continents with their numerous placental mammals.

### *Placental Mammals*

The evolution and spread of the placental mammals took place after the isolation of the Australian region. Therefore the mammal fauna of this area has remained very distinct from that of Asia and Indonesia. Groups which are otherwise widespread but which did not reach Australia naturally, include elephants, horses, and rhinoceros, as well as deer and cattle.

Of the order *Primates*, only one representative—man—is native to Australia. No monkey or any member of the several other families of the *Primates* reached the region naturally. When some of the ancestors of the Australian aborigines crossed the seas to this continent, they brought with them domestic dogs. These became the progenitors of the dingo. Thus a single species of the dog family (*Canidae*) is the sole natural representative in Australia of the order *Carnivora*, and no bears (family *Ursidae*) or cats (family *Felidae*) for instance, reached this country before its discovery by Europeans.

Bats (order *Chiroptera*), which developed the power of flight, were able to migrate across seas. About 40 species, representing seven of the world's seventeen families of bats, are found on the mainland of Australia.

During the evolution of mammals, three marine orders developed, and Australian waters acquired representatives of each. Whales and dolphins (order *Cetacea*) are widely distributed; the dugong or sea-cow of northern Australia belongs to the order of sea-sirens (*Sirenia*); and there are several species of seals (order *Pinnipedia*) about the south of the continent.



The only other native Australian placental mammals are rats and mice, which belong to a family (*Muridae*) of the rodents (order *Rodentia*). Although about 80 species of rats and mice are dealt with in recent lists of Australian mammals, critical revision would probably fix the number of valid species at about 40. Nevertheless, there are many kinds of native rats and mice in Australia. The ancestors of the local rodent species evidently reached the Australian mainland and neighbouring islands on floating debris, such as logs and trees carried out to sea by floods. Such fortuitous migrations must have occurred many times, to provide the wide variation in the native murid population. Typical rats (genus *Rattus*) are represented by close relatives of oversea species; but there are also some characteristically Australian murids. The genus *Pseudomys* and its relatives comprise a group which is confined to Australia. Its original stock must have reached Australia a long time ago, as there has since been a period sufficient for members of the group to die out elsewhere in the world, or alternatively for marked evolutionary changes to take place in the Australian animals.

### Prehistoric Australian Marsupials

Fossil remains, in many localities of mainland Australia, Tasmania, and New Guinea, show that in bygone ages there were many more marsupial species in this region than there were at the time of the discovery of Australia by Europeans. Moreover, there were species much larger in size than any present-day marsupials. All or most of these giants were herbivorous, and the abundance of large plant-eating marsupials was accompanied by a development of large flesh-eating species. Radical changes in climatic conditions and in vegetation have been accompanied by the gradual extinction of many marsupials, including all the giant herbivorous species. On the mainland, the large carnivorous species (*Thylacinus* and *Sarcophilus*) died out too, though each survives in Tasmania.

The mainland race of aborigines is thought to have reached Australia between 15,000 and 20,000 years ago, and the Tasmanian race may have been in occupation long before that. It is certain that these people contributed to major changes in the composition of the fauna of Australia, directly by hunting and indirectly as a result of other activities.

The dingo, brought by the aborigines, may also have caused some change, both by preying upon plant-eaters and by competing with flesh-eaters.

### Changes Since European Settlement

During the 175 years that have elapsed since the founding of Sydney, the Australian countryside has been greatly changed in many ways, and this has had a drastic effect on the native fauna, especially on the mammals. Areas of heavy forest were cleared for intensive farming, particularly on alluvial soil along streams. Tracts of natural grassland and lightly forested areas were cultivated for

the growing of cereals, and much of the remainder of the country was used for the grazing of vast flocks and herds. All this reduced the living room of the native mammals, and their numbers decreased in proportion. Many species were hunted extensively for their skins or killed because they interfered with the livelihood of the settlers. Furthermore, the practice of burning off and firing the countryside for other purposes, produced innumerable casualties amongst the fauna.

Apart from domestic and farm animals, many alien mammals were introduced and liberated in Australia. Of these, the rabbit (*Oryctolagus cuniculus*) and the fox (*Vulpes vulpes*) in particular, have had dramatic effects on the native mammal population. The rabbit spread in millions throughout the country and denuded the ground of much of the natural herbage upon which the grazing and browsing marsupials depended. The fox preyed upon small animals and exterminated many of them from large tracts of country. Moreover, diseases were brought to Australia with animals from overseas, and epidemics decimated populations of a number of native species.

As a result of these factors, the mammals of Australia have been reduced, during the past 150 years, to a small fraction of what they were originally, and a few species have become extinct altogether. As Victoria is the most densely populated State of the continent, its native fauna has suffered more than that of other States.

The Red-bellied Pademelon (*Thylogale billardieri*) was originally plentiful across southern Victoria; the Rufous Rat-kangaroo (*Aepyprymnus rufescens*) was to be found in northern and north-eastern districts; and Gaimard's Bettong (*Bettongia gaimardi*) was in central and eastern Victoria. These three have been gone from this State for 60 years or more. Furthermore, evidence in cave deposits indicates that both the Brush-tailed Bettong (*Bettongia penicillata*) and Lesueur's Bettong (*B. lesueur*) originally occurred in Victoria, but it is not known at what stage these disappeared.

The advent of the European fox has been a major factor in the decimation of small members of the kangaroo family. It was evidently the final factor in the elimination from Victoria of the pademelon, and it has been mainly responsible for the near annihilation of the potoroo (*Potorous tridactylus*) and of the rock-wallaby (*Petrogale penicillata*).

During the past several years, a number of deposits of small mammal bones have been found in both eastern and western Victoria. These have shown that several species of pseudo-rat (including *Pseudomys oralis* and *P. auritus*), one species of small native mouse (*Gyomys novaehollandiae*), and a species of *Thetomys*, none of which were recorded for Victoria, had in fact occurred very recently in the State. Moreover, some species which are now extremely rare—Smoky Mouse (*Gyomys fumeus*) and Broad-toothed Rat (*Mastacomys fuscus*)—had been widely distributed. Likewise, a rabbit-rat (*Conilurus albipes*), extinct since last century, had been widespread in Victoria.

### Common Names for Native Mammals

The problem of suitable common or popular names for Australian mammals is considerable. Early explorers and colonists often named them according to oversea groups to which they bore general, or even only slight, resemblance. Thus the names of placental mammals, such as wolf, bear, porcupine, cat, and mouse, were given to marsupials or monotremes. Some of these have been superseded, but others, unfortunately, are still more or less current.

Scientists and naturalists have from time to time endeavoured to rectify this state of affairs, but many of their published suggestions have been too cumbersome for popular use. Occasionally, short euphonious names appear, and many of these are being publicized, to encourage their adoption as common words in our language.

### Egg-laying Mammals

#### *Echidna*

The echidna (*Tachyglossus aculeatus*) is quite abundant in Victoria, and it is widely distributed over Australia. It is the sole mainland representative of the family, though there are other species of echidna in Tasmania and New Guinea. The echidna's body-covering is a mixture of bristles and quills, and the latter range from slender to very stout. The snout is long and slender; the tongue is slender, too, and extremely long. Feet are stout and heavily clawed, for burrowing. An echidna digs into an ants' nest, nuzzles into the tunnels which swarm with the agitated insects, then exerts the slender sticky tongue and takes in scores of ants at a time. In natural conditions, echidnas feed solely on ants. These are ground up between the palate and horny plates on the rear of the tongue, for an echidna has no teeth.

For protection, an echidna digs into the earth, pushing the soil outwards and literally sinking down until it eventually disappears from sight. If rolled over before it has a chance to dig in, the animal folds its head and limbs inward and protects its soft underparts with an array of quills.

After the egg hatches, the baby echidna is carried in the mother's rudimentary pouch until it is too large to be retained there. The young one is coarsely haired, and quills do not appear amongst the hairs until it is quite large.

#### *Platypus*

The platypus (*Ornithorhynchus anatinus*) is the sole species of its family. The body is softly furred, though the tail has long stiff hairs; and the skin of the lips is adapted into a leathery bill like that of a duck. The platypus also lacks teeth, but there are bony plates on the jaws for crushing the aquatic animals which it catches for food. The front feet are strongly clawed for digging, and also webbed for swimming. The web can be spread beyond the claws, but it is folded inward when the animal is burrowing. The male has a strong spur on each hind leg, and this is connected to a poison gland.

A family of platypuses lives in a burrow near the water, and the female builds a nest of grass and leaves in a terminal chamber. Two or three eggs are laid, and the young are reared in the nest.

The platypus is quite plentiful in Victorian streams, in places where there is a certain amount of vegetational cover along the banks. Though the animals feed mainly at night, they may be encountered occasionally in secluded places during the day.

### Families of Australian Marsupials

#### Main Groups

Pouched mammals of the Australian region are classified into three natural groups, which may be distinguished by characters of the feet and of the teeth.

The feet may be *diadactylous* or *syndactylous*. The former condition occurs when all digits of the hind foot are separate. In the syndactylous groups, the second and third digits of the hind foot are united for most of their length within a single sheath or skin, so that there appears to be a toe with two nails.

In dentition, our marsupials are either *polyprotodont* or *diprotodont*. Polyprotodont means, literally, "many front teeth", and it refers to the number of incisors (6, locally) in the lower jaw. Diprotodont means "two front teeth", and this alludes to the pair of large lower incisors which project forward, more or less in line with the jaw, whilst other lower incisors are minute or absent.

The first group is represented in Victoria by the family *Dasyuridae*, whose members are diadactylous and polyprotodont. Being mainly carnivorous, they have sharply cusped, cutting molars.

Secondly, there is the family *Peramelidae*, which are syndactylous and polyprotodont. Though the canines are well developed, the molars are low-cusped for grinding, indicate an omnivorous diet.

The third group comprises three local families: the *Phalangeridae*, *Phascolomidae* and *Macropodidae*. All these are both syndactylous and diprotodont. Teeth are modified for a herbivorous diet; canines are lacking from the lower jaw and are reduced or absent from the upper jaw, while the molars are broad and low-cusped.

#### *Dasyures* (Family *Dasyuridae*)

Members of this family fall into three distinct groups or sub-families. Two of these groups occur in Victoria: the so-called "native cats" (*Dasyurinae*), which are true flesh-eaters, and the smaller species (*Phascogalinae*), which are mainly insectivorous.

The tiger-cat (*Dasyurops maculatus*) is the size of a large domestic cat, but the legs are short in proportion. Both body and tail are long, and are brown in colour with large rather irregular light spots. The natural food of the tiger-cat comprises small native mammals and birds, but now rabbits are probably the main fare. Until quite recently, the species was considered to be rare, but during the past

years, it has come to notice in widely separated localities in southern and eastern Victoria. Occasionally a tiger-cat enters a fowl pen and kills a number of birds, but more often one is caught in a rabbit trap.

Somewhat smaller, is the quoll (*Dasyurus quoll*)—recognized by its unspotted, rather bushy tail. Originally, the quoll was very abundant in most parts of Victoria but, about 1902, an epidemic almost completely eliminated it. Colonies persisted for a few decades in scattered localities, particularly in rough basalt country near Lake Corangamite in the Western District. Whether the species still survives in Victoria is not certain. Quolls lived in dens, to which they carried or dragged their prey and probably also many things which they found dead.

Largest of the phascogale group is the tuan (*Phascogale tapoatafa*). It somewhat resembles a large grey rat, but the tail is clothed, except at the base, with long black spreading hairs. The result is striking: a dark bottle-brush as wide as the animal's body. Tuans hunt in trees, systematically exploring crevices, removing loose bark and rotting wood, and rather noisily crunching the beetles and other insects that they secure. Occasionally they attack and kill larger prey, including roosting fowls in their pens. Because this last depredation brings the tuan to notice, it has the name of being a bloodthirsty killer. However, in its natural habitat it is, like the rest of the sub-family, practically completely insectivorous.

The Dusky Phascogale (*Antechinus swainsonii*) has the appearance of a small rat, but its long pointed snout and very short ears are shrew-like. It inhabits the forest areas of southern Victoria. The Tasmanian Phascogale (*Antechinus minimus*) is similar in general features, and is to be found in tussocky swamp country near Portland.

The Yellow-footed Phascogale (*Antechinus flavipes*) ranges from the Portland district and the Grampians, across the drier forest areas of northern Victoria. It has a grey head and the flanks and underparts are rufous. In southern and eastern districts, there is a smaller animal with uniform colouration. It is *Antechinus stuartii*, and Brown Phascogale is a suitable vernacular name for it. The latter is very abundant, inhabiting coastal scrubs, heavy mountain forests and woodlands.

Phascogales fossick about for insects on the butts of large trees, about logs and amongst leaves and other debris on the forest floor. Their hind limbs spread widely and they move with characteristic jerkiness. When disturbed, they take cover with lightning-like rapidity.

The mouse-sized members, of the genus *Sminthopsis*, favour open country and are more terrestrial in habitat than the species of *Antechinus*. Therefore the rough pads of the soles of the hind feet are much reduced in *Sminthopsis*.

The Fat-tailed Dunnart (*Sminthopsis crassicaudata*) is a short-tailed animal, quite plentiful about the plains of northern and western Victoria. It makes its home under a stone, in a log, or even in a crevice in the hard earth. It feeds on insects and other small terrestrial animals and, in times of plenty, its tail becomes quite swollen with a store of fat.

Little is known of the other two species of *Sminthopsis* which are recorded for Victoria. These are the dunnart (*Sminthopsis murina*) and the White-footed Dunnart (*Sminthopsis leucopus*), both of which are mouse-like in appearance, with the tail long and slender. Each has been recorded during recent years from the Portland area, and the latter also from the Otway Ranges.

Phascogales and dunnarts make nests of grass, leaves and shredded bark, in rock crevices, logs and tree-trunks. According to the number of nipples present, the females are able to rear many young at a time. Twelve may be carried by some small phascogales of the genus *Antechinus*.

### *Bandicoots (Family Peramelidae)*

The Victorian bandicoots grow to the size of a small rabbit. The tail is very short and the snout particularly long. Their feet are very like those of small members of the kangaroo family, but the claws of the fore-paws are long, stout, and almost straight.

The animals find food by scent; their keen sense of smell enabling them to locate insects some inches down in the ground. Front claws and snouts are forced down into the soil so that usually, when the food has been extracted, a neat conical hole is left without any earth being scratched back. However, when a beetle or grub is deep in the soil, an excavation is made and earth thrown back and to the sides. Bandicoots take some vegetable matter also, and animals such as lizards. A nest of grass is made under a large tussock or dense shrub. In it the bandicoot rests during the day, and then comes out to forage at dusk and during the night.

The Short-nosed Bandicoot (*Isoodon obesulus*) is widespread in southern districts of Victoria, from Mallacoota to Portland and the slopes of the Grampians. It favours sandy soil with a covering of bracken and shrubbery, and it is prevalent near the coast. Its range includes remnants of the bayside heathlands of Melbourne's south-eastern suburbs. The term "short-nosed" is comparative; the nose is actually quite long but is much less so than in the following genus.

There are two Victorian representatives of the genus *Perameles*, the long-nosed bandicoots. One is an animal of the grassy plains and, like many species of that habitat, its numbers have been greatly depleted by extensive cultivation of grain crops and the improvement of pastures for sheep grazing. It is the Barred Bandicoot (*Perameles gunnii*), so-named because of the broad bands of lighter colour across the back. The species is still to be found in the Colac district and at Hamilton in western Victoria.

The Long-nosed Bandicoot (*Perameles nasuta*) is an animal of forested hill country. It is quite abundant about the mountains of southern and eastern Victoria, and the deep narrow conical holes which evidence its foraging may be seen amongst the grass on floors of small valleys and about the debris beneath huge forest eucalypts.

Bandicoots sniff audibly as they search for their food and, when disturbed, they make a short explosive snort. In defence, as well as biting, they jump at an enemy and strike with the long claws of the hind feet.

#### *Possums and Koala (Family Phalangeridae)*

These animals may be referred to collectively as phalangers, though this family name is more often applied popularly to gliders. Members of the family sleep during the day, mostly in hollows of tree-trunks and limbs, and they come out to feed at night.

Of all groups of native mammals in this State, the phalanger family has been least affected by European occupation of the country. All twelve of the original Victorian species still survive here, and two of them have even adapted themselves to densely settled areas.

The brushtails (genus *Trichosurus*) are the biggest possums. They are the size and build of a large cat, and their claws are strong and very sharp, for climbing. The tail, too, is adapted for the same purpose; though bushy, it is prehensile and has an area of bare skin on the inside towards the tip, to ensure a good grip.

Our common brushtail possum (*Trichosurus vulpecula*) occurs throughout Australia, and there are distinct varieties in different districts. The Victorian race is known as the silver-grey, because of its colour in this locality. As well as living in hollow trees, silver-greys often occupy caves and crannies in rock outcrops, or even rabbit burrows. In built-up areas, they live in places such as lofts of sheds and above the ceilings of houses. They eat a variety of vegetable foods in the bush, and they will feed upon garden shrubs and orchard fruit as well.

The bobuck (*Trichosurus caninus*) is a larger species, with shorter ears and a less bushy tail. In central Victoria it is grey in colour, whereas in the east of the State the animal is almost black. Bobucks inhabit the heavy mountain forests but may be found in some cases in less dense forests of bordering areas.

Ringtail possums (genus *Pseudocheirus*) are of medium size, and in most species the tail is white for the apical one-third and it is not at all brushed. The common ringtail (*Pseudocheirus peregrinus*) is found throughout Victoria, favouring forest areas with dense undergrowth. In some districts the animals live always in hollows of trees, but in the scrub by lowland creeks and along the coast they make large domed nests of sticks and ferns. These are in tall shrubs, usually well out of reach, and a family of three or four ringtails may be in occupation. Like the silver-grey, our common ringtail has learned to live in town and city surroundings.

Of all Victorian mammals, Leadbeater's Possum (*Gymnobelideus leadbeateri*) has the most interesting history. It was originally discovered in 1867, in South Gippsland, and when, in 1909, one was collected in the Omeo district, there was a total of only five specimens known to science—all from eastern Victoria. There was

no further record of the animal for over 50 years, and it was presumed to have become extinct. Then, early in 1961, the animal was rediscovered near Marysville, about 70 miles north-east of Melbourne. In the heavy mountain forests of that district, the little possum is quite plentiful over at least several miles of country. Leadbeater's Possum is about 6 inches in body length and its tail is slightly longer. It is exceedingly active and sure-footed, both on tree-trunks and high amongst the twigs, and it jumps readily over distances of several feet. Little is known of the natural food of the species, but it probably feeds on nectar from blossoms and insects such as moths.

Pigmy or "dormouse" possums (genus *Cercartetus*) are not much larger than mice. They favour dense scrubby vegetation and build leaf and bark nests in hollows. Sometimes they use the deserted homes of ringtails or similarly massive birds' nests. Probably nectar is the main food of pigmy-possums, with insects a supplementary item of diet.

The common pigmy-possum in Victoria is *Cercartetus nanus*. It is bluish-grey in colour and, when food is plentiful, the basal half of the tail becomes very swollen with a storage of fat. The species is abundant in scrubs along the coast, and it is scattered in the lightly forested hill country of the State.

In the semi-desert of north-western Victoria, there is a smaller species of pigmy-possum. It is a warm red-brown colour on sides and back, and its tail does not become thickened. The technical name of the animal is *Cercartetus concinnus*, and it extends to Western Australia where the aboriginal name "mundarda" is applied to it.

The glider-possums form one of the most interesting groups of marsupials. From fore-leg to hind-leg, along each side of the body, there is a fold of loose skin and fur which stretches taut when the four limbs are spread out. By this means, the animals are able to travel through the air in long swooping glides. They take off from a limb or the trunk, high in one tree, glide down at an angle, and land on another tree. Sufficient control is exercised to swerve around obstacles and to bank for a gentle landing at the end of the flight.

The Dusky Glider (*Schoinobates volans*) is about the size of a ringtail, and its head is much the same, too; but the glider's tail is very long and is clothed with dense spreading hair. The usual colour of head, back, and tail is jet black, and the underparts are white. The division between the two colours is along the edge of the gliding membrane, which stretches from "ankle" to "wrist". However, specimens may be encountered with much of the normal black replaced by light-grey or white.

Dusky Gliders are quite abundant in the heavy forests of Victoria, where they feed upon the foliage of eucalypts. Occasionally, people are startled by the call which the species makes—a long drawn-out gurgling shriek giving way to a bubbling sound. This remarkable call is evidently made by one animal as it glides, so that its mate is aware of the direction it has taken.



In *Petaurus*, the gliding membrane stretches from "ankle" to the fifth digit of the fore-paw, and there are three species of this genus in Victoria. The Fluffy Glider (*Petaurus australis*) is not much smaller than the Dusky Glider. It is yellowish underneath and brown above, with a broad dorsal stripe. The tail is long and dark for most of its length, and the four limbs are blackish, too. These animals have the habit of chewing large patches of bark from such trees as Manna Gum (*Eucalyptus viminalis*) and Apple Box (*Eucalyptus bridgesiana*), both to extract insect larvae and to obtain sweet sap from the inner layers. In some cases, large trees are found with bark removed in a regular pattern from the whole length of the trunk. Fluffy Gliders are scattered across southern Victoria, in rather open forest, and they extend into the mountains to quite high elevations. They have a call something like that of the Dusky Glider.

The Squirrel Glider (*Petaurus norfolcensis*) inhabits open forests of north-central Victoria, and it may be elsewhere in the State. It measures about 2 feet from nose to tail-tip, the general colouration is light-grey with a dark dorsal stripe and white underparts. The hair of the tail is so long that the organ appears to be as wide as the body.

The Sugar Glider (*Petaurus breviceps*) is very similar to the Squirrel Glider, but it is smaller and the tail is not as broad in proportion to the body. Numbers of them nestle together in the hollows of trees, and at night they move out to feed on nectar and insects. They catch moths amongst the foliage or gouge larvae from the bark of trees. These little animals are very agile, their sharp claws enabling them to scamper about on vertical tree-trunks, and their gliding membranes facilitate short jumps or long glides from tree to tree. When alarmed, a Sugar Glider crouches flat against a tree-trunk or limb and calls "wok . . . wok . . . wok . . ." at intervals, like a young terrier yapping. The anger call is a prolonged snarl, something like the sound of a high-pitched starter-motor. In Victoria, this glider is widespread, its habitat ranging from the woodlands to the dense mountain forests.

The feathertail (*Acrobates pygmaeus*) is small enough to curl up in a matchbox, with room to spare. Its tail is not long-haired as in the other gliders, but has a row of stiff hairs on each side, giving the impression of a long narrow feather. The little feathertails are quite plentiful throughout Victoria, but because of their small size and nocturnal habits, they are rarely observed.

The largest phalangiers, such as the brushtail possums, have a single young one at a time, medium-sized species usually have two; and the pigmy members of the family may produce four or more.

Most popular of all marsupials is the koala (*Phascolarctos cinereus*). It is a unique species from the scientific point of view and, because of past uncertainty as to its affinities, it has usually been regarded as constituting a separate family. However, it is now grouped in the possum family.

The koala is larger than any possum, and it differs markedly in the absence of a tail and the backward-opening pouch. Both digits and claws are strong, to ensure a firm grip at rest and when climbing, for the koala is almost completely arboreal. It feeds upon the mature leaves of a few species of eucalypts of which the Manna Gum (*Eucalyptus viminalis*) is favoured in Victoria. Our popular name for the animal is said to be an aboriginal word meaning "non-drinker", for the koala has learned to do without water.

Originally, koalas were abundantly distributed from eastern Queensland, through New South Wales and Victoria, to the border of South Australia. During the course of a century, the species was almost exterminated. Factors responsible were destruction of food trees during clearing operations, shooting for skins, bushfires and epidemic diseases. Very few koalas were left in Victoria by 1930, but a very effective rehabilitation programme has since been carried out by the State's Fisheries and Wildlife Department. As a result, there are now several thousand koalas, distributed widely, in Victoria.

#### *Wombats (Family Phascolomidae)*

The common wombat (*Phascolomis mitchellii*) is a large, sturdily built animal, with short broad head, short limbs and strong claws. It inhabits forest country, where it burrows deep into the hillsides to provide itself with a home.

Wombats crop coarse vegetation, and they often dig over many square yards of ground to obtain roots of shrubs and rhizomes of certain grasses. Occasionally, they bare the roots of trees and remove areas of bark, to lick the sweet sap from the growing wood.

Because they breach wire-netting of rabbit-proof fences round farm properties, wombats are placed in the same category as the introduced rabbit and fox. These are classed as "vermin", and it is the duty of landholders to endeavour to eradicate them from their holdings. Were the country rid of rabbits, there would be little need to construct expensive netting fences and the wombat could be reclassified as a legally protected animal. The teeth of a wombat are like those of a rabbit; they grow continuously from a basal pith, and it is necessary for them to be kept worn down. To accomplish this, wombats may periodically chew the fibrous bark of stringybark eucalypts. Wombats are found in most of the forested parts of Victoria. They range from the coast to the tops of Victoria's highest mountains, where, in winter, their tracks may be seen in the snow.

#### *Kangaroos (Family Macropodidae)*

Members of the macropod or kangaroo family are Australia's grazing animals. Mainly according to size, they are called such names as kangaroos, wallabies, wallaroos, and rat-kangaroos. The term "macropod" literally means "large foot", and it refers to the great development of the hind feet, upon which kangaroos progress in a series of leaps.

Though the fore-limbs are comparatively small, they are stoutly built, with five strongly clawed digits. When the large kangaroos and wallabies graze, they creep along by alternately supporting the body upon tail and fore-paws while the hind-limbs are placed forward, then on the hind-limbs while tail and fore-limbs are moved forward. Small wallabies and rat-kangaroos do not use the tail as a support when creeping along, but take short leaps instead, now and again putting fore-paws to the ground even when scampering along quite fast.

The Grey Kangaroo or forester (*Macropus major*) is widespread and abundant in Victoria, mainly in the lowlands but occasionally quite high in the mountains. The animals rest during the day, in the shelter of trees and shrubs, and come out at night to graze in open grassy areas. If the weather is dull and misty, kangaroos may be seen grazing during the day.

When a family of kangaroos is attacked by dogs, the male or "old man" often remains to fight while the others seek refuge in flight. In his defensive stance—on toes and tail-tip—he may be as much as 7 feet tall. From this position, he endeavours to grasp an attacking dog with his fore-limbs and then strike with the hind-limbs, while momentarily balanced on his tail. In this way, using the large toes of the feet, a kangaroo can disembowel a dog. When hard pressed, a kangaroo or large wallaby may take to a lagoon or creek. As it stands at bay, in a few feet of water, it has the advantage of its attacker, and it may grasp and drown a dog which ventures to swim out to it.

The Red Kangaroo (*Macropus rufus*) is an animal of the inland plains. It is abundant enough in western New South Wales to constitute a serious problem to pastoralists. However, in Victoria it is not common, being restricted to the lower River Murray district and adjoining Mallee areas. The male is the reddish animal, whereas the female is bluish-grey.

The wallaroo (*Macropus robustus*) is almost equal in size to a large kangaroo, but it is more stockily built, with short limbs to suit its rocky habitat. The species has been recorded in Victoria once only, when two specimens were obtained in mountainous country near the Snowy River in north-eastern Gippsland.

In areas of moderate to high rainfall, where there is dense vegetation, the Swamp Wallaby (*Wallabia bicolor*) abounds. It thrives alike on treefern-clad mountain-sides, on swampy tea-tree flats and amongst vigorous growths of bracken. In keeping with this sombre habitat, the animal is of a general dark-brown colour with black tips. It is sometimes referred to as the Black-tailed Wallaby or simply the Black Wallaby.

Victoria's second wallaby has an even greater variety of common names. Officially it is the Red-necked Wallaby (*Wallabia rufogrisea*), but "Brush Wallaby" is widely used too. It favours areas of rather sparse vegetation and is equally plentiful in the open forests of the lowlands and amongst the snow-gums (*Eucalyptus pauciflora*) of sub-alpine plateaux.

Originally, the Brush-tailed Rock-wallaby (*Petrogale penicillata*) was extremely abundant about rock outcrops in eastern Victoria, from the Buchan district to the vicinity of Omeo and the upper River Murray area. Numbers were drastically reduced by hunters who shot many thousands for their pelts, and the coming of the fox accelerated their demise. From about 1917 onwards, it was thought that rock-wallabies had gone completely from Victoria, but twenty years later a colony of them was found overlooking the Suggan Buggan valley in north-eastern Gippsland. Further investigation has revealed that the species survives in about ten small areas of rocky escarpment and river gorge in the Snowy River valley. The habitat is evidently restricted to places where the wallabies can elude foxes.

The local rock-wallaby stands about 18 inches high; it is grey in general colouration, with black feet and reddish flanks; and the tail carries a brush of long hair.

Of the several smaller macropods which formerly inhabited Victoria, only one survives—the potoroo (*Potorous tridactylus*). It is about the size of a rabbit, brown in colour, and with hind legs less developed than in larger macropods. The potoroo inhabits scrubby areas where it has runways through the tussocky vegetation. It is fairly plentiful in parts of the Portland district, and it occurs also near Colac and about the Otway Ranges.

#### Whales and Dolphins (Order Cetacea)

The truly marine mammals have the front limbs modified into flippers and the hind limbs form horizontal flukes. Unless accidentally stranded, they do not come ashore at any time. About 30 species have been listed as occurring in Australian waters, but Victoria has definite records of only seven species.

Whalebone whales (family *Balaenopteridae*) are the species in which rudimentary teeth are replaced early by whalebone or baleen—the fringed plates which are used to strain minute crustaceans and other organisms from the sea water.

The Rorqual or Blue Whale (*Balaenoptera musculus*) is the largest of all animals. It may attain a length of over 100 feet. The species has a world-wide distribution, and a 90-ft. specimen was washed up on to the beach outside Port Phillip Bay in 1867.

The Humpback Whale (*Megaptera nodosa*) is fairly common in the Australian seas, and specimens are occasionally stranded on the Victorian coast. It grows to about 50 feet in length.

Toothed whales (family *Delphinidae*) are armed with numerous teeth, for they are mainly carnivorous. The following four species frequent Victorian seas :—

The Killer Whale (*Orcinus orcus*) grows to 30 feet in length and has a large dorsal fin. Killers hunt in packs; they eat seals and dolphins and will even attack and kill whales much larger than themselves.

Schools of Pilot Whales (*Globiocephalus melas*) are sometimes stranded and die on beaches of eastern Victoria. There have been two such occurrences during the past twenty years—one on the Ninety-mile Beach and the other near Port Welshpool. The reason for this is not certain, but it is probably linked with seasonal migration north along the east coast of Australia. A school which is off-course in Bass Strait may endeavour instinctively to move to the north. Pilot Whales grow to almost 30 feet in length and are black with a rounded head.

The common dolphin (*Delphinus delphis*) grows to several feet in length. Groups or schools of them are often seen in bays and other near-coastal waters of the State. The Bottle-nosed Dolphin (*Tursiops truncatus*) is larger and less common. It has a shorter "beak" and a longer lower jaw.

The final Victorian whale record is of a member of the family *Ziphiidae*: a Beaked Whale (*Mesoplodon layardi*) was stranded near Port Fairy in 1962. The species is blackish and grows to about 18 feet in length. It has a single large tooth which, in the male, projects tusk-like on either side of the lower jaw.

### Seals (Order *Pinnipedia*)

These sea-going mammals have all four limbs adapted to form paddles or flippers. However, the claws of the feet are present, and the limbs can be used to a certain extent for movement on land.

Eared seals (family *Otariidae*) have a small but definite ear auricle (*pinna*), and softly furred coat. The hind flippers are strong and can be turned forward to support the body for progress on shore. All the teeth are incisor-like, for cutting their fish food, large pieces of which are swallowed with no preliminary mastication.

Colonies of fur-seals (*Gypsophoca dorifera*) occur off the Victorian coast, on islands such as the Skerries in the east, Seal Rocks near Westernport Bay, and Lady Julia Percy Island off Port Fairy. They live in large groups, and usually each male or bull has a harem of several females. During the breeding season, fighting occurs between males, and they usually bear numerous scars from wounds inflicted by the sharp teeth.

On Lady Julia Percy Island small parties of a larger species, the Australian Sea-lion (*Neophoca cinerea*), are occasionally seen. The males are recognized by their conspicuous whitish manes. This is a South Australian species, very rare now in Victorian waters but reputedly plentiful originally in western Bass Strait.

Species of true seals (family *Phocidae*) occasionally visit Australian waters, but they are merely stragglers from Antarctic seas. In this group, the species have no soft fur, and they lack the ear pinna. They are more truly aquatic, for their hind limbs are directed

backwards and cannot be used as legs for progress on land. When out of water they wriggle along. The following three of this group are recorded for Victoria:—

The Leopard Seal (*Hydrurga leptonyx*) is large and spotted. It inhabits seas about Antarctica and the sub-Antarctic islands, feeding mainly on penguins. Occasionally, one visits Victorian waters, and there is a record of a Leopard Seal entering the mouth of the Snowy River and making its way upstream to the vicinity of Orbost in 1926.

The Crab-eater Seal (*Lobodon carcinophaga*) is an even rarer visitor from Antarctica. It is a large, light-coloured species with a small head; and its remarkably lobed molar teeth are used to strain water from the small crustaceans which constitute its food. A few years ago a Crab-eater Seal appeared for a short time in Port Phillip Bay.

Elephant Seals (*Mirounga leonina*) are massive, males growing to a length of 20 feet and weighing about 3 tons. They apparently lived about Tasmania and Bass Strait islands originally, but now only rarely does one appear in Australian waters. It is reported that a solitary Elephant Seal has visited Lady Julia Percy Island a few times during recent years, and one was stranded on a beach near Port Fairy.

#### Rats and Mice (Family *Muridae*)

These rodents are characterized by the upper and lower jaws, each having two chisel-like incisors which protrude forward, while the only other teeth are the molars set well back in the mouth.

Water-rats comprise a separate sub-family. They inhabit streams, lakes, swamps, and inlets, and feed mainly upon small aquatic animal life. Their nests are built in hollow logs or in piles of debris in or near the water. The combined length of head and body is as much as 12 inches, and the apical part of the tail is white.

The Eastern Water-rat (*Hydromys chrysogaster*) is usually golden-brown in colour, and it is abundant in most districts of Victoria. All other native Victorian rodents belong to the very large sub-family which contains also the introduced rats and mice.

The true rats (genus *Rattus*) are represented in the State by three native species. They live in extensive warrens from which definite runways radiate, and at night they range widely in search of food. Like the introduced species, the native ones are omnivorous.

The Allied Rat (*Rattus assimilis*) is greyish-brown, with a long tail and pale feet. It is very abundant in central Victoria and Gippsland, where its habitats include wet fern gullies, coastal heathlands, and the snow-gum woodlands of the sub-alps.



# *Mammals of Victoria*



The Echidna (*Tachyglossus aculeatus*)

## Egg-laying Mammals (Monotremata)

The Platypus (*Ornithorhynchus anatinus*)





Marsupials



Family Dasyuridae

The Quoll  
(*Dasyurus quoll*)



Brown  
Phascogale  
With Young  
(*Antechinus  
stuartii*)

[Photos:  
*N. A. Wakefield*]

The Tuan (*Phascogale tapoatafa*)



Fat-tailed Dunnart  
(*Sminthopsis crassicaudata*)  
[Photo: *C O. Kroker*]





Possum Family (Phalangeridae)

The  
Mundarda  
(*Cercartetus  
concinnus*)

[Photos:  
*N. A. Wakefield*]

Sugar  
Glider  
(*Petaurus  
breviceps*)



Squirrel Glider  
(*Petaurus norfolcensis*)



The Feathertail  
(*Acrobates pygmaeus*)

[Photo: *N. A. Wakefield*]



Dusky  
Glider  
(*Schoinobates  
volans*)

[Photo: *David Fleay*]





Marsupials :

Kangaroo

Family

(Macropodidae)

Brush-tailed  
Rock-wallaby  
(*Petrogale penicillata*)

[Photo: N. A. Wakefield]



Mob of Grey Kangaroos (*Macropus major*)

[Photos: Aust. News and Publicity Bureau]

Female Grey Kangaroo and Joey





(Marsupialia)

The Koala  
(*Phascolarctos  
cinereus*,  
family  
Phalangeridae)



Barred Bandicoot  
(*Perameles gunnii*,  
family Peramelidae)



[Photos.  
Fisheries and  
Wildlife Dept.]

The Wombat (*Phascolomis mitchellii*,  
family Phascolomidae)





Marsupials :



The Ringtail  
(*Pseudocheirus peregrinus*)

The Silver-grey  
(*Trichosurus vulpecula*)

[Photos: N. A. Wakefield]

Leadbeater's Possum  
(*Gymnobelideus leadbeateri*)





Placental  
Mammals  
(Monodelphia)



[Photo: Fisheries and Wildlife Dept.]  
Fur Seal (*Gypsophoca dorifera*)



The Dingo  
(*Canis antarcticus*)  
[Photo:  
Aust. News  
and Publicity  
Bureau]

Swamp Rat (*Rattus lutreolus*)  
[Photo: N. A. Wakefield]



[Photo: E. R. Rotheram]  
Allied Rat (*Rattus assimilis*)

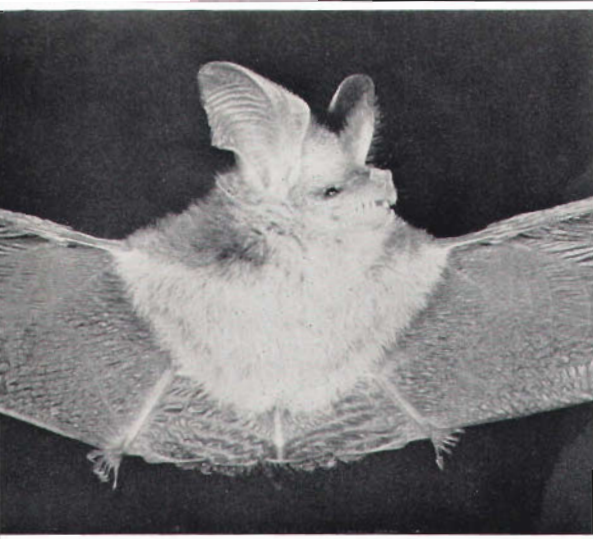
Leopard Seal (*Hydrurga leptonyx*)  
[ANARE photo by W. R. J. Dingle]





## Placental Mammals

### Small Bats (Order Chiroptera)



Long-eared Bat (*Nyctophilus geoffroyi*)

Gould's Bat (*Chalinolobus gouldii*)



Horseshoe Bat (*Rhinolophus megaphyllus*)



Little  
Brown Bat  
(*Eptesicus  
pumilus*)



Mastiff  
Bat  
(*Tadarida  
planiceps*)

[Photos:  
N. A. Wakefield]

Grey's Rat (*Rattus greyii*) is a South Australian species, extending in fair abundance into the Portland district of Victoria. It resembles the Allied Rat in most features but is smaller in size and has minor differences in skull structure. That these two are distinct species is a matter of doubt.

Swamp-rats favour wet terrain, usually with a dense coverage of sedges, grass, and rushes; and their runways are particularly well defined. The general colour of body and feet is a rich brown, and the tail is rather short. The Victorian species, the Eastern Swamp-rat (*Rattus lutreolus*), is plentiful in near-coastal areas and it extends inland to north-western Gippsland and across the Western District to the Grampians.

Little is known of the remnant in Victoria of the once abundant *Pseudomys* group. Two species, and perhaps a third, still survive, but each has been recorded in this State only once or twice during the present century. Species of *Pseudomys* and its allied genera are very different from true rats in details of skull and teeth, but they are very similar in outward appearance. However, females of the genus *Rattus* have six or more nipples, including always one very close to each fore-limb, while in species of the *Pseudomys* group there are four only—all on the abdomen.

The Broad-toothed Rat (*Mastacomys fuscus*) was found in the Otway Ranges some 30 years ago, and recently it was rediscovered in Gippsland. In size and colour it is practically identical with the Swamp-rat, but it has extremely broad molar teeth as well as characteristic cranial features.

There is but one record of living specimens of the Smoky Mouse (*Gyomys fumeus*): its original discovery, in the Otway Ranges about 30 years ago. It is light-grey in colour and smaller in size than the native rats.

The fourth type of native rodent represented in Victoria is the hopping-mouse (genus *Notomys*), which jumps along on the hind feet like a miniature kangaroo. The local species is Mitchell's Hopping-mouse (*Notomys mitchellii*). It inhabits semi-desert areas of the north-west of the State, making deep burrows in the sand. The species was rediscovered near Nhill, in 1955, after a period of 37 years without trace of it in Victoria.

### Bats (Order Chiroptera)

Mammals of a number of different orders have the ability to glide through the air, but bats are the only ones that have the power of true flight. A bat's wings are formed mainly by the great elongation of four digits of each fore-limb. From the tips of the "fingers" stretches a thin membrane to the hind-limb and thence to the tail. All five digits of the hind-limb, as well as the first one of the fore-limb, are free, and each is terminated by a hooked claw. These claws enable a bat to climb about, and its normal sleeping position is hanging upside-down by the claws of the feet.

Because of similarity in colour and in the appearance of the head, fruit-bats (family *Pteropodidae*) are often referred to as "flying foxes". They may have a wing-span of 4 ft., though the body weight rarely exceeds 2 lb. They roost in large rookeries during the day, usually high in trees, and at night move off in quest of food. Fruit-bats have normal eyesight, and they feed mainly on native and cultivated fruit.

Though the group is typically tropical, there is usually an intrusion of the Grey-headed Fruit-bat (*Pteropus poliocephalus*) into eastern Victoria each year. In summer and early autumn, they attack apples growing in the Cann River-Mallacoota district. Often they come to the Orbost area, sometimes as far west as Bairnsdale, and on rare occasions fruit-bats visit Melbourne. Their activities in apple orchards are quite drastic for, as they scramble about, they knock large quantities of fruit from the trees. There are a few records of fruit-bats—apparently lone stragglers—from northern and western Victoria.

The second, and by far the larger, group of bats are insect-eaters, and on the average their wing-span is about 1 ft. They do not possess normal eyesight, but have the equivalent in a well-developed sound-echoing system. A series of high-pitched sounds are emitted vocally and, when these rebound from solid objects, echoes are registered by an auditory nerve system and relayed to the brain. This enables a picture to be obtained in much the same way as other animals see with their eyes. An advantage of the small bats' "sight" is that it functions normally in complete darkness.

During the day, small bats hide away in a variety of places, and each kind seems to have definite preferences in the choice of a home. Nine Victorian species are forest bats, and three inhabit caves. The natural habit of forest bats is to hide in the hollow limbs and trunks of trees or behind loose sheets of bark. However, many of them have learned to live in our buildings, and they may take up residence in the roofs of houses, in church towers, or amongst material stored in sheds.

The following eleven species are Victoria's small bats:—

Horseshoe-bats (family *Rhinolophidae*) have a facial outgrowth known as a nose-leaf, the front part of which is shaped like a horseshoe. The Eastern Horseshoe-bat (*Rhinolophus megaphyllus*) is the sole Victorian species of the family. It is fairly plentiful in a few of the large limestone caves of the Buchan district in Gippsland, but it apparently does not live elsewhere in the State. It always roosts singly, with the wings folded about the body.

Simple-nosed Bats (family *Vespertilionidae*) have little or no development of the nose-leaf, and there are at least the following seven species of the family in Victoria.

The long-eared bats, as their name implies, are characterized by very large ears which, however, are folded up while they are sleeping. There are two local species. The Lesser Long-eared Bat (*Nyctophilus geoffroyi*) is the more plentiful and it is the small bat which habitually



comes into country houses at night. It is recognized by a conspicuous grooved ridge on the nose. The Greater Long-eared Bat (*Nyctophilus timoriensis*) is less known, though apparently it is not rare in Victoria.

The Little Brown Bat (*Eptesicus pumilus*) is a tiny animal with very short rounded ears. It, too, is a forest bat of wide distribution.

Members of the genus *Chalinolobus* have wattle-like lobes between mouth and ear, so they are sometimes referred to as wattled bats. There are two species in Victoria: the Chocolate Bat (*Chalinolobus morio*) and Gould's Bat (*Chalinolobus gouldii*). The former is quite small and is best recognized by the pointed inner ear-lobe (*tragus*), while the latter is larger and has a rounded *tragus*. Of the two, Gould's Bat is the commoner, and though, like the other, it is a forest species, it has been known to inhabit buildings.

The Large-footed Myotis (*Myotis macropus*) has the ears narrow and somewhat pointed, and the *tragus* is very slender. A small colony lives in a cave near Buchan, but it is a very uncommon species in south-eastern Australia.

The common cave bat in the State is the Bent-wing (*Miniopterus schreibersi*), a medium-sized brown species with short nose, abruptly elevated cranium and short rounded ears. It inhabits caves in basalt and limestone country as well as deep crevices in granite and other rock outcrops. Some caves house many thousands of bent-wings, and there may be over a thousand in one tightly packed cluster clinging to a cavern roof. Members of the two preceding families of bats have the whole tail incorporated within the flying membrane, whereas those of the following two families have the apical half of the tail projecting beyond the membrane.

The sole representative of the free-tail bats (family *Emballonuridae*) in Victoria is the Yellow-bellied Bat (*Saccolaimus flaviventris*), a comparatively large species with pointed nose, dark back, and yellowish underparts.

Mastiff-bats (family *Molossidae*) are distinguished from other local groups by the pug-like face, with short muzzle and wrinkled lips, and the forward-projecting bonnet-like ears. They are sometimes referred to as "scurrying bats", because they scramble about on the ground or trunks and limbs of trees, in search of insects. There are two Victorian mastiff-bats. The White-striped Bat (*Tadarida australis*) is Victoria's largest insectivorous species, having a wing span of about 17 inches. Along each side, beneath the wing, is a broad stripe of white hair. The species is widespread in Victoria. The Little Mastiff-bat (*Tadarida planiceps*) is small and grey, and it appears to be restricted in Victoria to north-western districts.

### The Dingo

Although its ancestors were originally brought to this country by man, the dingo has been resident long enough to be included with the native fauna of Australia. Even though it interbreeds with strains of the domestic dog, zoologists usually regard it as a separate species and it may therefore be distinguished as *Canis antarcticus*.

Dingoes have a broad head and fairly short pricked ears, and the tail is rather bushy. The usual colour is dark yellow, often merging to blackish at the points. However, blackish and brindled specimens were noted by early explorers. Dingoes do not bark, but their mournful howling is a feature of some remote areas, and they also have yapping calls.

Wallabies are the dingo's natural food, but many have become sheep-killers. Consequently, they have been classified as vermin; trappers are employed to keep their numbers down; and a bounty is paid for their destruction. In spite of these hazards, they still frequent unsettled areas, particularly along stretches of the coast and in the mountains.

### **Introduced Mammals**

Since the European occupation of Australia, Victoria has acquired fourteen species of exotic mammals which now have permanent breeding populations outside the control of man.

#### *Rabbits and Hares*

The rabbit (*Oryctolagus cuniculus*) is widespread and abundant. It presents a major economic problem, necessitating the construction of wire-netting fences around pastures. It is legally classified as "vermin" and landholders are obliged to endeavour to eradicate rabbits from their properties.

A great number of species of native plants are prevented from regenerating normally, because rabbits eat off their seedlings. This has altered the composition of the natural vegetation of the country, reducing herbaceous ground cover and inducing the growth of scrub. As a result, there is an increase in the immediate run-off of rain-water. Soil erosion has occurred, coupled with the silting-up of streams. In particular, the water-holding capacity of the soil has been reduced, and many streams which were once permanent now cease to flow during prolonged dry periods. This has had drastic and far-reaching effects on catchment for town and city water supplies and for irrigation. The recent introduction of myxomatosis has reduced the rabbit population in many areas, but it appears that the survivors have acquired immunity from the disease.

The Hare (*Lepus europaeus*) is fairly plentiful in open grasslands and savannah forests in many parts of Victoria, but unlike the rabbit it has not become a serious pest.

#### *Squirrels*

Of the oversea rodents, the Eastern Grey Squirrel (*Sciurus carolinensis*) has been introduced to the Melbourne area and is now well established in eastern and south-eastern suburbs. Some were taken to Ballarat, too, and a population of them inhabits a section of public parks and private gardens near Lake Wendouree.

### *European Rats and Mice*

These were introduced to Australia very early. The domestic mouse (*Mus musculans*) lives about buildings and in fields, and it is well established even in remote parts of the countryside, especially in western Victoria. Both the black and the grey varieties of the Ship Rat (*Rattus rattus*) are abundant in settled places, and one or the other is often found in areas of native vegetation. The Brown Rat (*Rattus norvegicus*) remains more closely associated with human habitation, living beneath buildings and frequenting drains in built-up areas.

### *Foxes*

The European fox (*Vulpes vulpes*) has become established in practically every corner of the Victorian countryside, from the coast to the Murray River and from the Mallee to the eastern highlands. Its attacks on poultry and its habit of killing young lambs are well known. Where rabbits occur, it preys on them, and foxes consume numbers of insects such as beetles and grasshoppers. The most significant activity of the fox, however, is the destruction of native fauna, particularly of ground-frequenting birds. Its effect on small members of the kangaroo family has already been discussed.

### *Cats*

The domestic cat (*Felis catus*) has become uncontrolled not only about settlement but in remote parts of the bush. Usually, after a few generations, feral cats revert to tortoise-shell colouration. They live on rabbits in many areas, but where these are not available, their prey consists of small native mammals and birds.

Tame domestic cats tend to eliminate small insectivorous birds from the vicinity of the houses to which they belong, and in country areas they often hunt at night and kill phascogales, gliders, and other native mammals.

### *Horses*

The brumby or wild horse (*Equus caballus*) inhabits the rugged mountain country of eastern Victoria. There are usually family groups comprising a stallion, a few mares, and a number of foals. Individuals may be black, white, brown, grey, or roan.

There are many thousands of brumbies in the Australian Alps. They range over the highest mountain tops during the summer and, in winter, come down to the valleys to escape the snows. They have descended from animals that escaped in the early days of settlement.

### *Deer*

Several kinds of deer (family *Cervidae*) have been introduced into Australia and three species are well established in Victoria. Largest of them is the Indian sambar (*Cervus unicolor*), which is fairly plentiful in the heavily forested areas east and north-east of Melbourne, from Gembrook to the Baw Baws and beyond Marysville. Stags

average 450 to 500 pounds in weight and, after their second year, grow antlers with six points, three on each. Does are much smaller. The Scottish Red Deer (*Cervus elaphus*) inhabits the Otway Ranges, Grampians, and Mount Cole forest, in western Victoria. A full-grown stag may have antlers with as many as eighteen points. Red Deer favour more open forest country than do sambar. On Wilson's Promontory and other parts of south Gippsland, the Japanese Hog Deer (*Cervus porcinus*) may be found. It is a brown animal with light spots and, though the males have fine antlers, an individual stands no more than thirty inches high.

Fallow Deer (*Cervus dama*) are reported to have occurred in the Marysville district, too, but whether any still survive there is uncertain.

### Goats

Wild goats (*Capra hircus*) roam at large in widely separated parts of Victoria. Some occur about the Lerderderg Gorge, west of Melbourne, others in the Mallee, and further groups in east-central districts of the State. A herd of wild goats may number several beasts, but in some cases there are as many as forty. They frequent rocky terrain by preference, and there is usually a lookout posted to warn others of approaching danger.

## Geographical Features\*

### Introduction

Australia is situated in middle and lower-middle latitudes, with about two-fifths of its area lying between the Tropic of Capricorn and the Equator. It is, therefore, one of the warm continents and, since most of its area lies within the zone of the dry, sub-tropical anti-cyclones ("the horse latitudes"), it is for the most part a dry continent. Much of the continent has only small variation in temperature from season to season and receives low rainfall with marked concentration into either summer (in the north) or winter (in the south).

Victoria is, in these respects, not typically Australian. It has a cool to cold winter, and although there are hot periods in each summer, they are interspersed with pleasantly warm or even cool periods. Rainfalls are rather low in the northern parts of the State, and particularly in the north-west, but the greater part is well watered with no marked seasonal concentration. Most of Australia is plateau or plain country with little relief; Victoria has a larger proportion of high country in its total area than any other State except Tasmania and its highest mountains reach over 6,000 feet above sea level. Not surprisingly, it could be called the "most English" part of the mainland, although a closer climatic and agricultural analogy is probably south-western and south-central France. Victoria is in fact transitional between the sub-tropical situation of New South Wales and the temperate situation of Tasmania, between the high rainfall character of the south-eastern Australian coastlands and the arid interior. One finds,

---

\* Excluding rivers and water resources, which are described in detail on pages 30 to 43.

then, year-round, open-air dairying and livestock-and-grass farming in Gippsland and the Western District, and dry-farming of grains and irrigated horticulture of citrus fruits and vineyards in the north. Its climatic conditions made no difficulties for the establishment of secondary industry and, once its power-resource problem had been solved, Victoria reaped the advantages in interstate trade offered by its central position on coastal shipping routes.

Victoria has 2.96 per cent. of the area of Australia (mainland Australia and Tasmania, but not including external territories) and had 27.88 per cent. of the Australian population at 30th June, 1961. In relating population to area, Victoria is the most densely populated of the States with an average density at 30th June, 1961, of 33.34 persons per square mile and is exceeded only by the Australian Capital Territory (62.65 per square mile).

The Victorian population is growing rapidly; comparing the enumerated population of the Census of 30th June, 1954, with that of 30th June, 1961, the population of Victoria increased by 19.48 per cent., being exceeded by South Australia (21.61 per cent.), the Australian Capital Territory (94.06 per cent.), and the Northern Territory (64.52 per cent.).

The distribution of population over the State, however, is very uneven. At the 1961 Census no less than 65 per cent. of the total population of the State was living in the Melbourne Metropolitan Area, a larger concentration of population into the metropolis than was to be found in any other State of the Commonwealth. On the other hand, there are considerable areas of Victoria which are uninhabited or have only a very sparse and seasonal population; these areas are mainly in the Eastern Highlands and in the western and north-western parts of the State along the South Australian border, as in the Mallee, where sandy soils and low, unreliable rainfalls inhibit agriculture. The non-metropolitan population is fairly evenly divided between the rural population (15 per cent. of the State's total in 1961) and the urban centres other than Melbourne (20 per cent. of the total in 1961).

In the rural areas, population is densest in the irrigation areas, in the dairying areas of Gippsland and the Western District, and in the livestock-and-crop farming areas between Ballarat and Bendigo. Lower densities are found in the wheat-farming areas of the Wimmera, and still lower densities in the wheat areas of the Mallee and in the stock-raising areas generally.

Among the non-metropolitan cities four large centres stand out: these are Geelong (population at 30th June, 1961, 91,777), Ballarat (54,880) and Bendigo (40,327), each of which has a variety of manufacturing industries as well as being marketing and transport centres, and the Latrobe Valley group of towns which together contain about 50,000 people and are mainly concerned with power generation and distribution. The next group in order of population size has between 12,000 and 16,000 people each and contains, in addition to the normal urban retail and service functions, fairly large-scale industries processing local products: Warrnambool (dairy products, textiles and clothing), Wangaratta (a rather special case of decentralized industries), Shepparton (fruit canneries), and Mildura (fruit and

vegetable packing). Next, there are a number of regional urban centres between 7,000 and 10,000 people in which retail and service functions predominate; for instance, Hamilton, Colac, Horsham, Benalla, Ararat, Sale, Wodonga, Bairnsdale, Maryborough and Castlemaine. Smaller towns serve more restricted areas and more local requirements.

Although European settlement in Victoria is little over one and a quarter centuries old, there have already developed distinctive regional characteristics in the various parts of the State, and most of these are recognized in popular speech by regional names. The Mallee is the north-western plain of ancient sand ridges, once waterless and covered with the distinctive dwarf eucalypt from which the name is derived, but now with extensive wheat fields and sheep paddocks and with water for stock and domestic purposes supplied through winding channels from storages outside the region. The Wimmera, with red-brown soils and tall eucalypts, with a denser pattern of farms and market towns, has the highest yielding wheat fields in Australia and a considerable sheep and cattle population as well. The Western District, with lush pastures on its well-watered volcanic plains, has both a long tradition of the growing of fine wools on sheep stations dating back to the early days of the pastoral expansion and a much more recent development of intensive dairying. The north-east has irrigated citrus and stonefruit orchards, market gardens and pastures on the plains of the middle Murray and its tributaries, which give way to cattle stations upstream where the valleys run back into the rugged slopes of the Australian Alps. Gippsland spells dairying and fodder-crop growing, timber extraction in the tall forests of the hills, off-shore and coastal fishing, and the industrial enterprises based on the power derived from the Morwell-Yallourn brown-coal deposits in the Latrobe Valley. The Port Phillip Bay region holds Melbourne, the financial and administrative hub of the State and a fast growing port, metropolitan market, and industrial centre, while on the eastern shore commuters' and holiday homes stretch through the Mornington Peninsula to the ocean shores. On the west, secondary industry is extending through Williamstown and Altona to Geelong.

### **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 contains about 87,884 square miles, or 56,245,760 acres.

Victoria is bounded on the north and north-east by New South Wales, from which it is separated by the River Murray, and by a straight line running in a south-easterly direction from a place near the head-waters of that stream, called The Springs, on Forest Hill, to Cape Howe. The total length of this boundary, following the windings of the River Murray from the South Australian border along the Victorian bank to the Indi River, thence by the Indi or River Murray to Forest Hill and thence by the straight line from Forest Hill to Cape Howe, is 1,175 miles. The length of the River Murray forming part of the boundary is approximately 1,200 miles, and of the straight line from Forest Hill to Cape Howe, 110 miles. On the west it is bounded

by South Australia, on the south and south-east its shores are washed by the Southern Ocean, Bass Strait, and the Pacific Ocean. It lies approximately between the 34th and 39th parallels of south latitude and the 141st and 150th meridians of east longitude. 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 Wilson's 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.

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

#### AREA OF AUSTRALIAN STATES

State or Territory	Area	Per cent. of Total Area
	sq. miles	
Western Australia .. .. .	975,920	32·85
Queensland .. .. .	667,000	22·45
Northern Territory .. .. .	523,620	17·62
South Australia .. .. .	380,070	12·79
New South Wales .. .. .	309,433	10·42
<b>Victoria</b> .. .. .	<b>87,884</b>	<b>2·96</b>
Tasmania .. .. .	26,215	0·88
Australian Capital Territory .. .. .	939	0·03
Australia (Total) .. .. .	2,971,081	100·00

#### 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 feet, while in the western sector the volcanic rocks belong mainly to the Newer Volcanic Series and the peaks reach 3,000 feet.

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 Surveys, in the post-war years. Most recent values for some of the highest mountains in Victoria are Mount Bogong, 6,516 feet; Mount Feathertop, 6,307 feet; Mount Nelse, 6,181 feet; Mount Fainter, 6,157 feet; Mount Loch, 6,152 feet; Mount Hotham, 6,101 feet; Mount Niggerhead, 6,048 feet; Mount McKay, 6,045 feet; Mount Cobboras, 6,030 feet; Mount Cope, 6,026 feet; Mount Spion Kopje, 6,025 feet; and Mount Buller, 5,919 feet.

#### **Further References**

An article on Victoria's Mountain Regions will be found on pages 43 to 67 of the Victorian Year Book 1962.

#### **Coastline**

The Victorian ocean coastline stretches some 682 statute miles from the South Australian border to the New South Wales border. Small stations of whalers and sealers were operating along the coast, mainly at Westernport, Portland, and Wilson's Promontory long before the advent of Henty and Batman.

The coastline is now well served with lighthouses, though in the early days it proved hazardous to navigation and no fewer than six ships were wrecked at Port Fairy before 1850. Port Phillip Bay is a safe harbour for shipping and the cities of Geelong and Williamstown afford excellent facilities. The Bay was the first place where settlement was made, at Sorrento in 1803, by a party under Lieutenant-Colonel Collins. In January, 1804, the settlement was abandoned.

Wilson's Promontory is the most southerly part of the State of Victoria; it was rounded by Lieutenant Grant in the *Lady Nelson* in 1801. The original entrance to Lakes Entrance was, owing to silting, closed in 1889, and a new entrance opened  $1\frac{1}{2}$  miles to the west.

When Lieutenant Grant called at an island in Western Port in 1801, he named it Churchill Island (after an English Government official, who supplied a small amount of seed). Wheat was planted



and when Lieutenant Murray in the *Lady Nelson* visited the island some months later, the wheat was growing vigorously, being 6 feet high. It was the first wheat planted in Victoria.

The main features of the coastline are as follows :—

Nelson to Cape Bridgewater	Sandy beach backed by dunes.
Cape Bridgewater to west end of Portland Bay	Cliffs of basalt tuff dune limestone and Miocene limestone.
Portland Bay to Port Fairy	Sandy beach backed by dunes with low cliffs of basalt and dune limestone near Port Fairy.
Port Fairy to Warrnambool	Beach dunes and dune limestone.
Warrnambool to Childers Cove	Cliffs of dune limestone.
Childers Cove to Point Ronald	Bold cliffs of Tertiary limestone.
Point Ronald to Cape Volney	Cliffs of lower Tertiary sandstone and dune limestone.
Cape Volney to Castle Cove	Bold cliffs of Mesozoic sandstone.
Castle Cove to Point Flinders	Bold cliffs of dune limestone.
Point Flinders to north of Lorne (Eastern View)	Cliffs of Mesozoic sandstone.
Eastern View to Torquay	Cliffs of Tertiary sandstone and limestone interspersed with bays and sandy beaches.
Torquay to Cape Schanck	Sandy beach backed by dunes with intermittent low cliffs of dune limestone.
Cape Schanck to Nobbies	Bold cliffs of basalt.
South coast of Phillip Island	Sandy beaches backed by dunes with granite at Pyramid Rock and Cape Woolamai.
Cape Woolamai to Anderson's Inlet	Cliffs of Mesozoic sandstone.
Anderson's Inlet to Cape Liptrap	Sandy beach backed by dunes with low cliffs of dune limestone at south end.
Cape Liptrap Promontory	Cliffs of lower Palaeozoic sediments and diabase.
Waratah Bay as far east as Tongue Point	Sandy beach backed by dunes.
Tongue Point to Mount Hunter	Granite headlands interspersed with bays with sandy beaches backed by dunes.
Mount Hunter to Conran	Sandy beach backed by dunes with lagoons behind dunes.

Cape Conran (granite) to Cape Howe Granite headlands with beaches between them and some local cliffs of metamorphosed lower Palaeozoic sediments at Cape Everard, Little Ram Head and near Mallacoota.

The area of Port Phillip Bay is 762 square miles and the coastline of the bay stretches for some 164 statute miles.

Rivers and Water Resources

Hydrology Characteristics

Length

In describing the characteristics of rivers, those which relate to land are fixed, and those relating to water are variable. The land or geographic features include:—

- (1) The length, and
- (2) the catchment.

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

VICTORIA—SCHEDULE OF FLOWS OF MAIN STREAMS

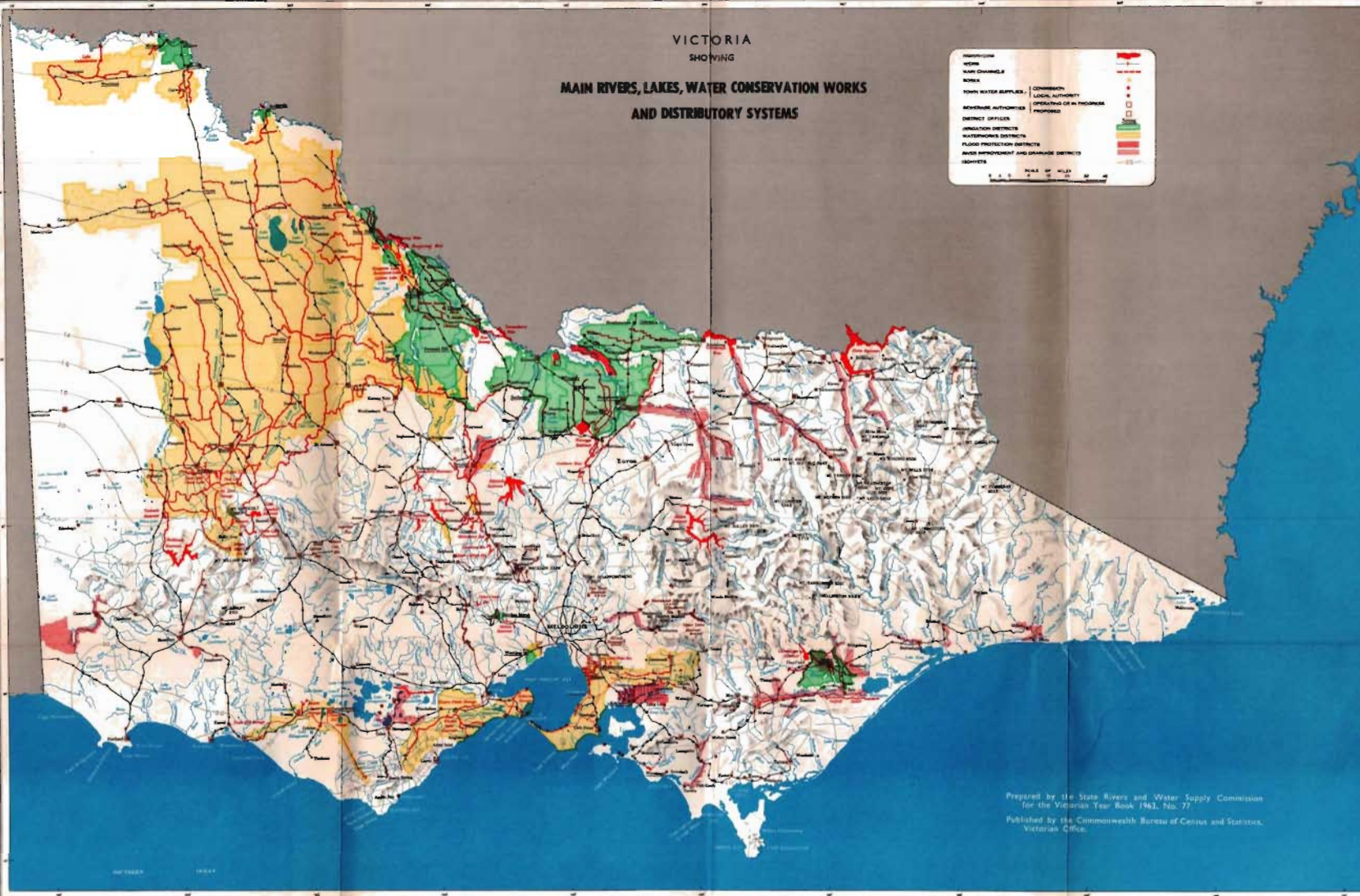
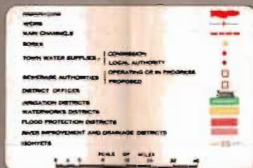
Basin No. *	Stream	Site of Gauging Station	Catchment Area Square Miles	Year Gauged from	Annual Flows in 1,000 Ac. Ft.			
					Mean	No. of Years	Max.	Min.
1	Murray ..	Jingellic ..	2,520	1890	1,974	71	4,978	549
2	Mitta ..	Tallandoon ..	1,840	1886	1,138	75	3,460	203
3	Kiewa ..	Kiewa ..	450	1886	527	75	1,684	146
4	Ovens ..	Wangaratta ..	2,100	1887	1,229	74	3,991	141
5	Broken ..	Goorambat ..	740	1887	208	74	886	15.3
6	Goulburn ..	Murchison ..	4,140	1882	2,385	79	6,139	516
7	Campaspe ..	Elmore ..	1,240	1886	194	75	667	0.6
8	Loddon ..	Laanecoorie ..	1,613	1891	207	70	659	8.9
9	Avoca ..	Coonooer ..	1,000	1890	62	71	321	3.8
11	Wimmera ..	Horsham ..	1,570	1889	106	72	479	0
12	Glenelg ..	Balmoral ..	606	1889 (a)	117	60	439	2.5
14	Hopkins ..	Wickliffe ..	460	1921 (b)	27	29	102	1.3
15	Carlisle ..	Carlisle ..	30	1930 (c)	37	26	89	14.8
17	Barwon ..	Winchelsea ..	369	1922 (d)	116	28	412	25
18	Moorabool ..	Batesford ..	434	1908 (e)	57	16	147	2.5
19	Werribee ..	Melton ..	446	1917 (f)	64	43	190	5.3
20	Maribyrnong ..	Keilor ..	264	1908 (g)	92	30	265	3
21	Yarra ..	Warrandyte ..	899	1892	726	41	1,215	334
22	Bunyip ..	Bunyip ..	268	1908 (h)	124	47	247	55.7
24	Latrobe ..	Rosedale ..	1,604	1901 (i)	788	42	2,633	361
25	Thomson ..	Cowwarr ..	421	1891	335	68	1,050	142
25	Macalister ..	Glenmaggie ..	730	1919	478	42	1,277	181
26	Mitchell ..	Glenaladale ..	1,530	1938	814	23	1,779	368
27	Tambo ..	Bruthen ..	1,030	1906 (j)	179	29	575	50
28	Snowy ..	Jarrahmund ..	5,100	1907	1,682	42	3,254	766

Note	Years Excluded in Estimating Mean	Note	Years Excluded in Estimating Mean
(a) ..	1933-34 to 1938-39	(f) ..	1952-53
(b) ..	1933-34 " 1943-44	(g) ..	1933-34 to 1955-56
(c) ..	1943-44 " 1946-47	(h) ..	1951-52
(d) ..	1933-34 " 1943-44	(i) ..	1919-20 " 1936-37
(e) ..	1921-22 " 1945-46	(j) ..	1924-25 " 1937-38

\* 10 Mallee Basin, no rivers.  
 23 South Gippsland Basin } Short term records only. These are not suitable for inclusion in  
 29 East Gippsland Basin } the table.

VICTORIA  
SHOWING

MAIN RIVERS, LAKES, WATER CONSERVATION WORKS  
AND DISTRIBUTORY SYSTEMS



Prepared by the State Rivers and Water Supply Commission  
for the Victorian Year Book 1963, No. 77.  
Published by the Commonwealth Bureau of Census and Statistics,  
Victorian Office.

The latest figures for the lengths of Victoria's rivers are shown in the following table :—

## VICTORIA—LENGTHS OF STREAMS AND RIVERS

Stream	Approximate Length	Main Stream Basin
	miles	
Aberfeldy River .. .. .	43	Thomson
Acheron River .. .. .	35	Goulburn
Agnes River .. .. .	23	South Gippsland
Aire River .. .. .	25	Otway
Albert River .. .. .	25	South Gippsland
Avoca River .. .. .	168	Avoca
Avon River .. .. .	75	Wimmera
Avon River .. .. .	76	Thomson
Axe Creek .. .. .	30	Campaspe
Back Creek .. .. .	20	Portland
Back (or Boosey) Creek .. .. .	45	Broken
Barly River, East West and Mt. Skene Branches .. .. .	24	Thomson
Barr Creek .. .. .	20	Loddon
Barwon River .. .. .	117	Barwon
Bass River .. .. .	37	South Gippsland
Bemm River .. .. .	60	East Gippsland
Benambra Creek .. .. .	45	Mitta Mitta
Bendigo Creek .. .. .	99	Loddon
Bet Bet (or McNeils) Creek .. .. .	58	Loddon
Big River .. .. .	32	Goulburn
Birregurra Creek .. .. .	20	Barwon
Black River .. .. .	24	Goulburn
Bobby Dick Creek .. .. .	12	Ovens
Boggy (or Prospect) Creek .. .. .	37	Mitchell
Bolinda (or Emu) Creek .. .. .	31	Maribyrnong
Bradford Creek .. .. .	24	Loddon
Brankeet Creek .. .. .	30	Goulburn
Bream Creek .. .. .	28	Otway
Brodribb River .. .. .	70	Snowy
Broken Creek .. .. .	20	Hopkins
Broken Creek .. .. .	140	Broken
Broken River .. .. .	120	Goulburn
Bruthen Creek .. .. .	30	South Gippsland
Buchan River .. .. .	75	Snowy
Buckland River .. .. .	30	Ovens
Buffalo River .. .. .	55	Ovens
Bulabul Creek .. .. .	24	Loddon
Bullarook (or Birches) Creek .. .. .	30	Loddon
Bullock Creek .. .. .	110	Loddon
Bundarra Creek .. .. .	25	Mitta
Bunyip River .. .. .	39	Bunyip
Burnt Creek .. .. .	25	Wimmera
Burrumbeet (or Bo Bcep) Creek .. .. .	23	Hopkins
Cabbage Tree Creek .. .. .	27	Snowy
Campaspe River .. .. .	153	Campaspe
Cann River .. .. .	62	East Gippsland
Cardinia Creek .. .. .	27	Bunyip
Castle Creek .. .. .	40	Goulburn
Cherry Tree Creek .. .. .	20	Avoca
Chetwynd River .. .. .	25	Glenelg
Cobungra Creek or River .. .. .	26	Mitta
Cochrans Creek .. .. .	20	Avoca

VICTORIA—LENGTHS OF STREAMS AND RIVERS—*continued*

Stream	Approximate Length	Main Stream Basin
	miles	
Coimadai (or Pyrote) Creek .. .. .	24	Werribee
Coliban River .. .. .	60	Campaspe
Concongella Creek .. .. .	25	Wimmera
Cornella Creek .. .. .	40	Campaspe
Corryong (or Jeremal Nariel, Wheelers or Zulu) Creek .. .. .	55	Upper Murray
Crawford (or Smoky) River .. .. .	45	Glenelg
Creightons Creek .. .. .	25	Goulburn
Cudgee (or Brucknells) Creek .. .. .	20	Hopkins
Cudgewa Creek .. .. .	46	Upper Murray
Curdies River .. .. .	54	Otway
Dabyminga Creek .. .. .	27	Goulburn
Dandenong Creek (including Patterson River) .. .. .	34	Bunyip
Dargo River .. .. .	58	Mitchell
Darlots Creek .. .. .	20	Portland
Dart River .. .. .	20	Mitta
Deddick (or Jingella) River .. .. .	37	Snowy
Deegay Ponds or Majors Creek .. .. .	30	Goulburn
Delatite River .. .. .	58	Goulburn
Delegate River .. .. .	66	Snowy
Diamond (or Arthurs or Back) Creek .. .. .	24	Yarra
Diddah Diddah Creek .. .. .	16	Ovens
Doma Mungi (or Black Dog) Creek .. .. .	40	Ovens
Drysdale Creek .. .. .	20	Hopkins
Dunmunkle Creek .. .. .	57	Wimmera
Dwyers Main Creek .. .. .	25	Glenelg
Eaglehawk Creek .. .. .	17	Latrobe
Emu Creek .. .. .	33	Maribyrnong
Errinundra River .. .. .	20	East Gippsland
Eumeralla River .. .. .	80	Portland
Ferrers Creek .. .. .	23	Corangamite
Fiery Creek .. .. .	73	Hopkins
Fifteen Mile (or Three Mile) Creek .. .. .	47	Ovens
Fitzroy River .. .. .	26	Portland
Flinn's (or Flynn's) Creek .. .. .	20	Latrobe
Fords Creek .. .. .	20	Goulburn
Franklin River .. .. .	25	South Gippsland
Freestone Creek .. .. .	30	Wimmera
Fyans Creek .. .. .	20	Wimmera
Gellibrand River .. .. .	75	Otway
Genoa River .. .. .	60	East Gippsland
Glenelg River .. .. .	284	Glenelg
Glenmaggie Creek .. .. .	25	Thomson
Gnarkeet Chain .. .. .	24	Corangamite
Goulburn River .. .. .	352	Goulburn
Grange Burn .. .. .	26	Glenelg
Gunbower Creek .. .. .	80	Loddon
Happy Valley Creek .. .. .	20	Ovens
Hodgsons Creek .. .. .	20	Ovens
Hollands Creek .. .. .	40	Broken
Hopkins River .. .. .	170	Hopkins
Howqua River .. .. .	47	Goulburn
Hughes Creek .. .. .	45	Goulburn
Hentys (or Miakite or Grassdale) Creek .. .. .	23	Glenelg

VICTORIA—LENGTHS OF STREAMS AND RIVERS—*continued*

Stream	Approximate Length	Main Stream Basin
Indigo Creek .. .. .	miles 23	Ovens
Jackson's (or Macedon) River ..	55	Maribyrnong
Jamieson Creek .. .. .	42	Otway
Jim Crow (or Sailors) Creek ..	29	Loddon
Jinallala (or Deddick) River ..	37	Snowy
Joyces (or Glengower) Creek ..	32	Loddon
Kiewa (or Little) River .. .. .	115	Kiewa
King Parrot (or Harrangearnong) Creek	30	Goulburn
King River .. .. .	92	Ovens
Koetong (or Cooyatong or Running) Creek .. .. .	23	Upper Murray
Koonongwootong (or Koroite or Bryants) Creek .. .. .	25	Glenelg
Koroite (or Bryants) Creek .. ..	36	Glenelg
Kororoit Creek .. .. .	43	Werribee
Lang Lang River .. .. .	34	Bunyip
Latrobe River .. .. .	156	Latrobe
Leigh (or Yarrowee) River .. ..	80	Barwon
Lerderberg River .. .. .	41	Werribee
Lindsay River .. .. .	30	Mallee
Little River .. .. .	40	Moorarbool
Little Woody Yaloak River or Creek (or Moonlight Creek) .. .. .	20	Corangamite
Livingstone Creek .. .. .	32	Mitta
Loddon River .. .. .	237	Loddon
Macalister River .. .. .	108	Thomson
Maribyrnong River .. .. .	114	Maribyrnong
Marraboos (or Little Murray) River ..	35	Upper Murray
Mathers Creek .. .. .	20	Glenelg
Merri River .. .. .	44	Hopkins
Merri Creek .. .. .	45	Yarra
Merriman's Creek .. .. .	60	South Gippsland
Middle (or Captains) Creek .. ..	28	Loddon
Mitchell River .. .. .	156	Mitchell
Mitta Mitta River (incl. Big River) ..	178	Mitta
Mooneeponds Creek .. .. .	20	Yarra
Moorarbool River .. .. .	95	Moorarbool
Morka River .. .. .	25	Mitchell
Morwell River .. .. .	30	Latrobe
Mountains Creek .. .. .	25	Snowy
Moyne River .. .. .	40	Portland
Mt. Cole Creek .. .. .	18	Wimmera
Mt. Emu Creek .. .. .	165	Hopkins
Mt. Greenock (or McCallums) Creek	30	Loddon
Mt. Hope (or Piccaninny or Bendigo) Creek .. .. .	120	Loddon
Mt. Pleasant Creek .. .. .	23	Campaspe
Mt. William (or Mokepilly) Creek ..	63	Wimmera
Muckleford Creek .. .. .	20	Loddon
Muddy Creek .. .. .	35	Goulburn
Murrabit River .. .. .	35	Loddon

VICTORIA—LENGTHS OF STREAMS AND RIVERS—*continued*

Stream	Approximate Length	Main Stream Basin
Murraboob (or Little Murray) River ..	miles 35	Loddon
Murray River .. .. .	Total 1,600 miles, incl. 1,200 miles from S.A. and Vic. Border to source at Forrest Hill	Murray
Murrindal River .. .. .	35	Snowy
Murrindindi Creek .. .. .	20	Goulburn
Mustons Creek .. .. .	50	Hopkins
Myers Creek .. .. .	32	Loddon
Myrtle Creek .. .. .	20	Campaspe
McKenzie River .. .. .	36	Wimmera
Naringhil Creek .. .. .	29	Corangamite
Native Hut Creek .. .. .	25	Barwon
Nicholson River .. .. .	50	Tambo
Nortons Creek .. .. .	29	Wimmera
Outlet Creek .. .. .	80	Wimmera
Ovens River .. .. .	142	Ovens
Perry River .. .. .	35	Wimmera
Plenty River .. .. .	42	Yarra
Powlett River .. .. .	21	South Gippsland
Pyramid Creek .. .. .	140	Loddon
Reddy (or Reids or Eldorado) Creek	44	Ovens
Richardson (or Rich-avon) River ..	35	Wimmera
Rose River .. .. .	30	Ovens
Ryans (or Kelferra or Kilfers) Creek	30	Broken
Salt Creek .. .. .	35	Hopkins
Serpentine Creek .. .. .	35	Loddon
Sevens Creek .. .. .	60	Goulburn
Shaw River .. .. .	32	Portland
Skeleton Water Holes Creek .. .. .	24	Werribee
Snowy Creek .. .. .	26	Mitta
Snowy River .. .. .	Total 270 miles, 110 miles incl. in Victoria	Snowy
Spring Creek .. .. .	30	Hopkins
Stokes River (or Emu Creek) .. .. .	30	Glenelg
Sugarloaf (or Mollisons) Creek .. .. .	30	Goulburn
Sunday (or Running) Creek .. .. .	32	Goulburn
Surrey (or Surry) River .. .. .	23	Portland
Sutherlands Creek .. .. .	20	Moorarbool
Tallangatta Creek .. .. .	34	Mitta
Tambo River .. .. .	124	Tambo
Tanjil River .. .. .	45	Latrobe
Tarago River .. .. .	22	Bunyip
Tarra River .. .. .	27	South Gippsland
Tarwin River .. .. .	82	South Gippsland
Thomson River .. .. .	130	Latrobe
Thougla (or Thowgla) Creek .. .. .	24	Upper Murray

VICTORIA—LENGTHS OF STREAMS AND RIVERS—*continued*

Stream	Approximate Length	Main Stream Basin
	miles	
Thurra River .. .. .	55	East Gippsland
Timbarra River .. .. .	36	Tambo
Toms Creek .. .. .	20	Mitchell
Toomuc Creek .. .. .	19	Bunyip
Toonginbooka River .. .. .	28	Snowy
Trawalla Creek .. .. .	20	Hopkins
Tsheca Creek .. .. .	25	Broken
Tullaroop (or Deep) Creek .. .. .	67	Loddon
Tyers River, also Eastern, Western and Middle Branches .. .. .	30	Latrobe
Tyrell Creek .. .. .	95	Avoca
Valencia Creek .. .. .	25	Wimmera
Victoria River .. .. .	30	Mitta
Violet Ponds (or Honeysuckle) Creek	35	Goulburn
Wabba Creek .. .. .	25	Upper Murray
Wallpoola Creek .. .. .	30	Mallee
Wando River .. .. .	25	Glenelg
Wannon River .. .. .	146	Glenelg
Warrambine Creek .. .. .	36	Barwon
Watts River .. .. .	23	Yarra
Wellington River .. .. .	21	Thomson
Wentworth River .. .. .	40	Mitchell
Werribee River .. .. .	77	Werribee
Western Moorarbool River .. .. .	33	Moorarbool
Whorouly Creek .. .. .	17	Ovens
Wimmera River .. .. .	181	Wimmera
Wingan River .. .. .	26	East Gippsland
Woody Yaloak (or Smythes) Creek ..	67	Corangamite
Wongungarra River .. .. .	40	Mitchell
Wonnangatta River .. .. .	75	Mitchell
Woori Yallock Creek .. .. .	23	Yarra
Yackandandah Creek .. .. .	25	Kiewa
Yarra River .. .. .	153	Yarra
Yarriambiack Creek .. .. .	80	Wimmera
Yarrowee (or Leigh) River .. .. .	80	Barwon
Yea River .. .. .	40	Goulburn

*Catchments*

Another useful characteristic of streams is their "catchment" which may be defined as the area from which there is run-off to the stream. Catchments may be regarded as the hydrologically effective part of a "basin". Thus, the whole of any area may be subdivided into basins, but part 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 ins. to 20 ins. Above this amount, roughly half the rainfall appears as stream flow.



Figure 1 shows the 29 basins into which Victoria has been divided by the State Rivers and Water Supply Commission for hydrologic purposes.

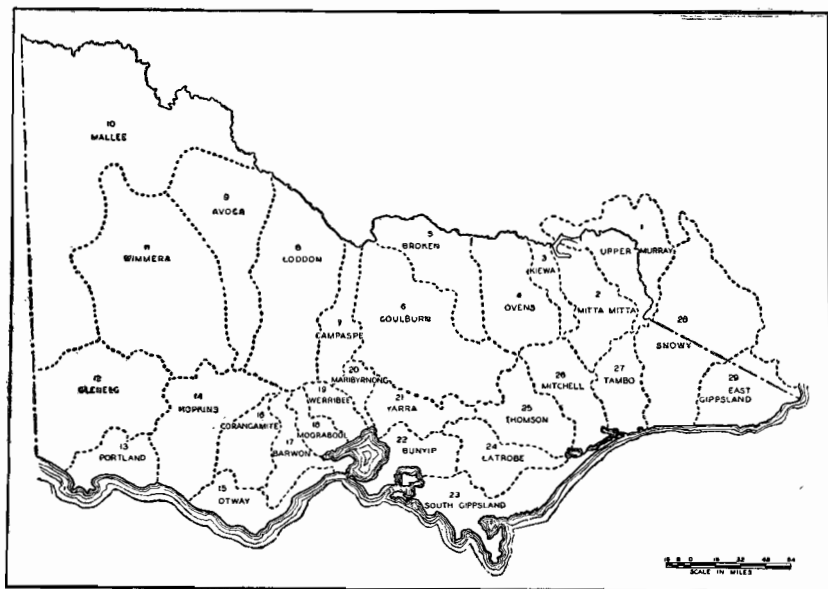


FIGURE 1.—Victoria's water resources showing key plan to river basins.

### Stream Flow

Whereas the accuracy with which the length of streams and the area of catchments can be measured depends on the topographic detail of the maps available, sampling errors of stream flow decrease with increasing length of record. The "representativeness" of flows expressed as averages will depend to some extent on the actual years over which the flow is averaged. Hence, it is desirable to express such estimates of stream flow as "normals", that is, averages taken over a particular period, usually not less than 30 years.

The "average" which is generally used is the simple arithmetic mean. A better average, which is in use in the United States of America, is the "median" or middle value which is such that the flow is greater than this value for half the time. The median is less than the mean for this case, sometimes by a considerable amount.

One obvious characteristic of stream flow is its variability and some measure of this is required. The maximum and minimum flows are often used, but as these values depend on the length of record this should be stated. For statistical purposes, values of the standard deviation or mean deviation are more suitable.

### Flow Measurement

Apart from the inherent difficulty of giving firm values to stream flows because of the finite length of record, it is desirable to recognize that errors occur in the measurement of stream flows, more particularly

for extremes such as floods. Although methods of measurement may change in the near future, current practice largely follows that used for some years. Early flood estimates must therefore be used with caution.

Basically, the technique consists of determining the water level at a fixed point in the stream, preferably continuously, but often only once daily. By "gauging" the flow from time to time at different levels and noting the height at the time, a rating curve is built up over a period of years which enables the recorded levels to be converted to flows. Such flows are normally computed on a daily basis, but for publication are often shown as monthly values.

The major streams of Victoria are now gauged, records of some streams going back to the 1880's. These long records, where sufficiently reliable, give the basic information on flows (including floods and droughts) used in designing water supply schemes.

Although there are still hundreds of ungauged streams, their flows can often be inferred from correlation with gauged streams, but such correlation is greatly improved if some records are available. An assessment of the total flow in Victoria's streams can therefore be made.

#### *Total Flow*

The current estimate of mean annual flow is 17 million acre ft. per annum, 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 million acre ft. (with about 8 million acre ft. in the north east and 6 million acre ft. in the south east) and hence leaving 3 million 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 Lands and Survey, and Commonwealth Military Forces maps with a view to including names which have appeared on them. There are, in addition, many un-named streams, those with locally known names, or names shown on other maps or plans. No attempt was made in the Index to suggest a preferred name, as it was considered that further legislation is necessary before any such action can be made effective.

#### *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.

### *Stream Flows*

Under the Water Act, the State Rivers and Water Supply Commission was given the duty of systematically gauging, recording, and publishing the flow of rivers within the State, a function which had been undertaken by its predecessor, the Victorian Water Supply Department. Actually there are records of stages or river levels on the Murray at Echuca and near Mildura from 1865 obtained from staff gauges installed mainly for the benefit of river-boats. For this purpose the depth "above summer level" was all that was required, as this indicated the clearance above snags. Some of these stages have been used to estimate flood levels, and were particularly useful in determining the profile of the 1870 flood, the largest recorded on the Murray above the Darling. To compare this flood with the major flood of 1956, recorded heights must be adjusted when necessary so that they refer to the same gauge datum—a procedure that cannot always be carried out but, if overlooked, gives misleading results.

The State Rivers and Water Supply Commission has published, usually at intervals of six years, eight volumes of "River Gaugings" which show the minimum, maximum, and mean flows for each month of record. In the earliest and latest volumes, data concerning measurements or gaugings is also provided to assist in assessing the reliability of the published figures. Such records form the basis of hydrologic studies, such as estimation of regulated output from storages, optimum channel, and spillway capacity.

For hydro-meteorological studies, rainfall data, which is collected by the Commonwealth Bureau of Meteorology, is required. By correlating rainfall and stream flow it is possible to estimate the run-off from the ungauged area of the State. Flow from the gauged streams averages about 14 million acre ft. per annum, the ungauged areas contributing about 3 million acre ft. per annum. Hence, although many streams are ungauged, their total flow is only about one-sixth of the flow of the gauged streams. Their flow characteristics can, if necessary, be estimated by correlation with gauged streams, or from rainfall data.

To compare stream flow with the rainfall from which it emanates, flow in acre ft. is converted to inches in depth over the State. This gives a mean run-off of 3½ ins. per annum from a mean rainfall of 25½ ins., the difference of about 22 ins. being the average annual loss by evapo-transpiration.

## **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.

### *Creeping Floods*

Another form of flood damage that has occurred in Victoria is associated with the so-called "creeping floods" where levels of lakes have risen so much above normal as to flood the marginal lands. This is due to a series of wet years upsetting the normal balance between evaporation and inflow. During the last decade, the winter rainfall in the region of Lake Corangamite was 15 per cent. above average, so that the level of the lake rose over 11 feet, increasing its area by about 20 per cent., and inundating about 20 square miles of marginal lands. Some reduction of the area flooded has been achieved by diverting the flow of the Woody Yaloak—the main stream feeding the Lake—to the Barwon. The water of the Woody Yaloak becomes saline when it mixes with the water in the Cundare Pool, the northern arm of Lake Corangamite, and the salinity of the water diverted is a factor limiting the diversion rate. A return to more normal climatic conditions will be the main factor in the Lake reverting to normal levels. Fortunately, it was possible to prevent excessive rise in Lake Colac, a smaller and less saline lake, by diversion to the Barwon.

### *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 ins. over the State is crude, but is 3 ins. more than the next highest figure of 35 ins. in 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.

### **Droughts**

#### *General*

Although floods and flood damage are more spectacular than droughts and drought losses, the expenditure incurred in Victoria on flood mitigation is negligible by comparison with that on storages required to meet water needs in dry periods.

There is no universal definition of drought ; the British Meteorological Office definition of an "absolute drought" as a sequence of more than fifteen days without rain is obviously inapplicable to Australia. However, this definition indicates that drought involves a measure of duration. A similar measure of drought could be applied to streams which cease to flow, but for the more usual case of perennial streams, volumes of flow over a specified duration must be given.

#### *Droughts in Victoria*

Droughts to 1955 in terms of rainfall in Australia have been extensively analysed by the Commonwealth Bureau of Meteorology. There is no such extensive comparative analysis for stream flows, but analyses of Victorian streams to determine the worst ten consecutive years for major streams having up to 70 years of record, show that such flows may be less than half the mean value flow. For the best streams such as the Goulburn and Murray, the minimum ten year mean in 70 years is about 70 per cent. of the long-term average.

The two periods of ten years within the past 70 years that are driest commenced about 1895 and 1937. For shorter periods, 1914-15 and 1938-39 are about on a par, with 1943-45 the worst two consecutive years.

#### *Storage for Droughts*

Both the mean flow of a given stream and its variability will depend on where its flow is measured. Generally as the catchment increases the mean increases, but the variability decreases. However, for streams which flow into areas which do not contribute to the flow, the mean will tend to decrease, and the variability to increase. Droughts

are more widespread than floods, but, owing to climatic differences between the eastern and western parts of Victoria, there will be differences in regard to the severity of a drought in different regions.

To provide water supplies during drought periods, storage is essential except for minor schemes. In the first stage of water resources development, "seasonal" storages, that is storages adequate to store winter flows for use in the following summer, were regarded as sufficient. However, winter flows may fail and output in the following summer will be curtailed unless the storage is large enough to "carry over" flows from previous years. There is, however, an economic limit to storage capacity and the idea of storing all water so that none runs to waste is wishful thinking. Even though there is no secular trend in climatic conditions, it is reasonable to assume that the magnitude of past droughts and floods will be exceeded in the future. Thus it is not possible to guarantee a particular output from storages, and for irrigation purposes at least, the economic output will be such that restrictions will be imposed in years of severe drought.

## Water Use

### *Theory*

As indicated in the previous section, hydrologic data are collected primarily to enable waterworks authorities to design and operate their schemes efficiently. In addition to stream flow data, topographic information is required to assess the suitability of storage sites—geologic data is required at dam sites, surveys are necessary for appurtenant works, such as channels and pipe lines—and soil surveys are needed in areas to be irrigated. The selection of the best storage sites involves too many technical factors to be given here. Schemes in which water is usefully employed may be for towns, irrigation, navigation, power; or sometimes a combination of these uses. "Head", which is vital in power projects, is relatively unimportant in town and irrigation schemes. Briefly, the economic analysis of a scheme involves the determination of costs and benefits. Costs may be determined by recognized methods, but the benefits often involve sociological factors more difficult to assess. For multi-purpose projects, the problem is even more complex if the water resources are to be used most efficiently, for this involves the *relative* benefits of, say, power and irrigation.

It is possible to estimate the uniform regulated output obtainable from a storage of given capacity if stream flow characteristics and permissible frequency of failure are known. In practice, other factors such as variation in demand with climatic conditions, restriction policy during droughts, evaporation losses, &c., render the problem even more complex, and quoted estimates of regulated output depend largely on the assumptions made in their computation. A considerable increase

in mean output is possible by applying restrictions in drought years. However, without a knowledge of the economic and other effects on such restrictions, the determination of optimum output can scarcely be regarded as an objective procedure as yet.

### *Town Supplies*

There is no comprehensive publication dealing with the history of water use in Victoria, but the major authorities concerned, such as the State Rivers and Water Supply Commission, Melbourne and Metropolitan Board of Works, State Electricity Commission, &c., have in various publications and reports given surveys of their undertakings.

The increased population due to the gold mining activity in the early 1850's created a demand for water which resulted in the construction of schemes to the main towns of Melbourne, Ballarat, Bendigo, and Geelong. Melbourne originally drew its supply from the Yarra, but a purer source was sought when the Yarra became too polluted from industrial development and urban drainage. To obtain the necessary catchment area within a reasonable distance of Melbourne and with sufficient head for a gravity supply, the headwaters of the Plenty River, a tributary of the Yarra, were deemed suitable and the Yan Yean scheme was opened at the end of 1857. It was just a century later that the main stream was dammed to give a major storage on the Upper Yarra. The supply to Melbourne is still obtained practically exclusively from the water resources of the Yarra catchment, but adjacent catchments have not been overlooked.

It is fortunate that Ballarat is in an area where rainfall is sufficient to enable water supplies to be obtained by developing catchments near the city. Some 33 square miles of the headwaters of the Moorabool and Leigh Rivers suffice for the needs of Ballarat.

The scheme for supply to Bendigo and district, namely the Coliban scheme, is probably the earliest multi-purpose project in Victoria, water being supplied to towns and for commercial irrigation. It was originally contended that as the alluvial mining diminished, the additional water made available could be used for irrigation. This had the usual appeal of a multi-purpose project, an appeal inherent in the Snowy scheme which is valuable both from the power and irrigation viewpoints.

### *Irrigation*

As irrigation accounts for about 90 per cent. of the water used in Victoria, and about half of this is supplied by the Goulburn System, the estimate of water usage for Victoria may be based on a recent analysis of the regulated output from this system. This analysis showed that a regulated output of  $1\frac{1}{2}$  million acre ft. per annum could be obtained at headworks with the existing storages. For the State as a whole the regulated output for irrigation can be estimated

at about double this figure or  $2\frac{1}{2}$  million acre ft. per annum, and adding another 10 per cent. for evaporation, and a further 10 per cent. for other usage, the total utilized is about 3 million acre ft.

This output comes from storages of a capacity of 6 million acre ft. in streams whose mean annual flow also equals 6 million acre ft., thus giving a regulated output of 50 per cent. of the mean annual flow. This percentage is a fair average for Victorian streams. To obtain the same degree of regulation on all Victorian streams would therefore require an additional storage capacity of about 10 million acre ft. It is clear that present available water resources can be much further developed.

### **Lakes**

For lakes to form, there must be suitable physiographic features and sufficient water supply to offset evaporation and seepage losses. Although the water supply in the western part of the State is comparatively poor, the majority of Victorian lakes occur in the west because of suitable physiography which is attributable to volcanic activity. Some extinct volcanoes carry crater lakes, and on the volcanic plains numerous lakes have been formed, the largest being Lake Corangamite. Lakes on the plains are relatively shallow, their depth and hence volume varying considerably with climatic trends in rainfall.

Lakes also occur in the north-west plains, some of which are intermittently replenished by effluents from rivers. Another type of lake is that which occurs along the coast by sand bars forming across the mouth of a stream. The Gippsland Lakes constitute the main lake system of this type.

Although lakes are often described as "salt" or "fresh", such a classification is misleading in shallow lakes as salinity varies inversely with the volume of water in the lake. Certain Victorian lakes are so shallow that salt is deposited in the summer when evaporation is high and in some cases, such as Lake Tyrell, it is harvested.

### **State Aerial Survey**

Information about the State Aerial Survey and a list of available printed maps will be found on pages 35–36 of the Victorian Year Book 1961.

## *Physical Geography*

### **Physical Divisions**

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

The chief physical divisions of Victoria are shown on the map (Fig. 2). Each of these divisions has certain physical features which distinguish it from the others, as a result of the influence of elevation,



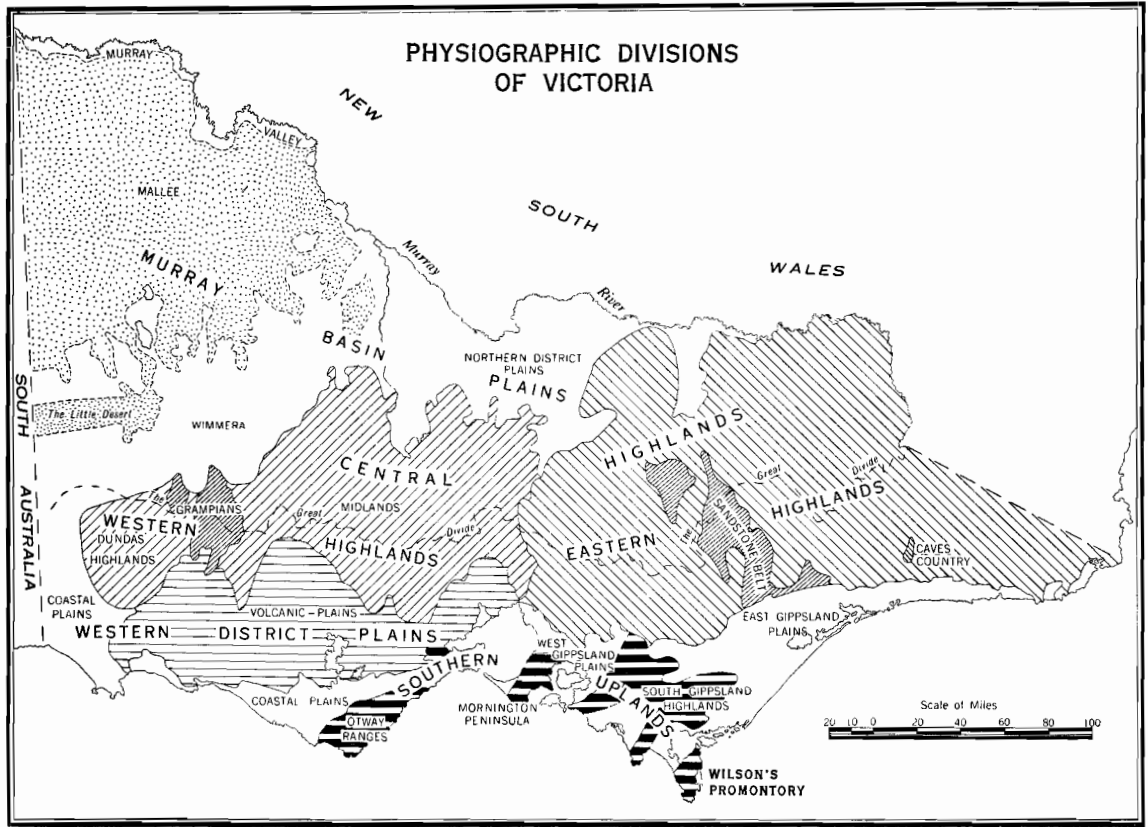


FIGURE 2.

geological structure, climate, and soils, as is recognized in popular terms such as Mallee, Wimmera, Western District and so on. The following is a table of these divisions :—

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) Wilson's 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 periodical 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 feet 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 feet, while the Western Highlands are generally lower, the peaks reaching above 3,000 feet, 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 feet, 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 Bay 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 off-shore 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.

## **Land Surface of Victoria**

The surface features of Victoria were brought into existence as a result of the sum total of all geological events that have affected the region over many millions of years in the past. The understanding of the physical features of the State cannot, therefore, be divorced from a study of its geological history. This applies not only to the various rock masses of granite, basalt, schist, sandstone, limestone, and so on, which are to be found in the different regions of the State and which have characteristic topography, soils and vegetation, but also to remnants of ancient erosional or depositional surfaces that are preserved in many of the landscapes.

### *Mesozoic Peneplain*

Many of the regions of hard rocks such as granite and Devonian dacite in Victoria have plateau summits which are relics of an ancient peneplain, once thought to be Cretaceous, but now recognized as older and perhaps Jurassic in age. During the Jurassic period this old land surface was deformed by down-warps in which non-marine beds were deposited and by up-warps which began to outline the Central Highlands of the State. The presence of marine Cretaceous rocks discovered in

bores in western Victoria indicates that an ancient Bass Strait was already in existence at this time. In the Central Highlands, which were not then as high as they are today, streams cut broad valleys in which gold-bearing gravels were deposited in places during the early Tertiary period, and in the lower lands thick deposits of brown coal, clay and sand were laid down. The older volcanic basalt flows were extruded during Eocene and Oligocene times and renewed earth movements led to the sea invading southern and western Victoria and the Mallee. At its maximum advance the sea reached nearly as far as Broken Hill in New South Wales in a large embayment known as the Murray Gulf, but after the Miocene period it retreated and Victoria gradually assumed its present configuration. The uplift that accompanied the retreat of the sea caused deep erosion in the highlands and deposition of sands, gravels and clays in the low-lying plains. The newer volcanic lava flows and tuffs were extruded after the sea had retreated from western Victoria and it is worth noting that in Port Phillip Bay we have an area which is still a marine transgression over the land. The submergence of Port Phillip and Western Port Bays was partly due to down-faulting and partly to the rise of sea level that occurred all over the world when the ice masses of the great ice age (Pleistocene) melted. This rise of sea level also cut off Tasmania from the mainland.

The various movements which have affected Victoria have not completely ceased, as is shown by the occurrence of earthquakes, some of which have been of moderate severity.

Not only has the State been affected by these various changes of elevation and advances and retreats of sea level, but the climate has changed also. In the later and middle Tertiary period it appears to have been much wetter and warmer, becoming drier in the Pliocene and wetter again during parts of the Pleistocene period. Even in geologically recent times there has been at least one period of aridity during which the sand ridges of the Mallee and of the sand belt between Brighton and Mordialloc were blown up.

The final influence on the surface of Victoria has been man himself by the clearing of forests, irrigation, drainage, the sowing of pastures and orchards, the cutting of roads and the building of dams. Accelerated soil erosion has been one of the serious effects of man's activity, but fortunately we are able to control this by various means, although continual effort is required. Similar effects of man's activities are to be seen along the coast where the building of breakwaters and groins, while often beneficial in some places, has also had adverse effects in causing unwanted erosion or the deposition of sand.

#### **Further References**

*Geology of Victoria*—*Victorian Year Book* 1961, pages 42 to 56.

E. S. Hills *The Physiography of Victoria*: Whitcombe and Tombs, Melbourne, Fourth Edition, 1959.

*Resources Surveys—Preliminary Reports*: Published by the Central Planning Authority, Premier's Department, Melbourne.

*Climate***Climate of Victoria***General*

The State of 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.

*Temperatures*

February is the hottest month of the year with January only slightly cooler. Average maximum temperatures are under 75° F. along the coast and over elevated areas forming the Central Divide and North-East 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 feet 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 6th 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 feet) at an exposed location near a mountain. However, a minimum of minus 8° F. has been recorded at Charlotte Pass (Station height 6,035 feet)—a high valley near Mount Kosciusko in N.S.W.—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.

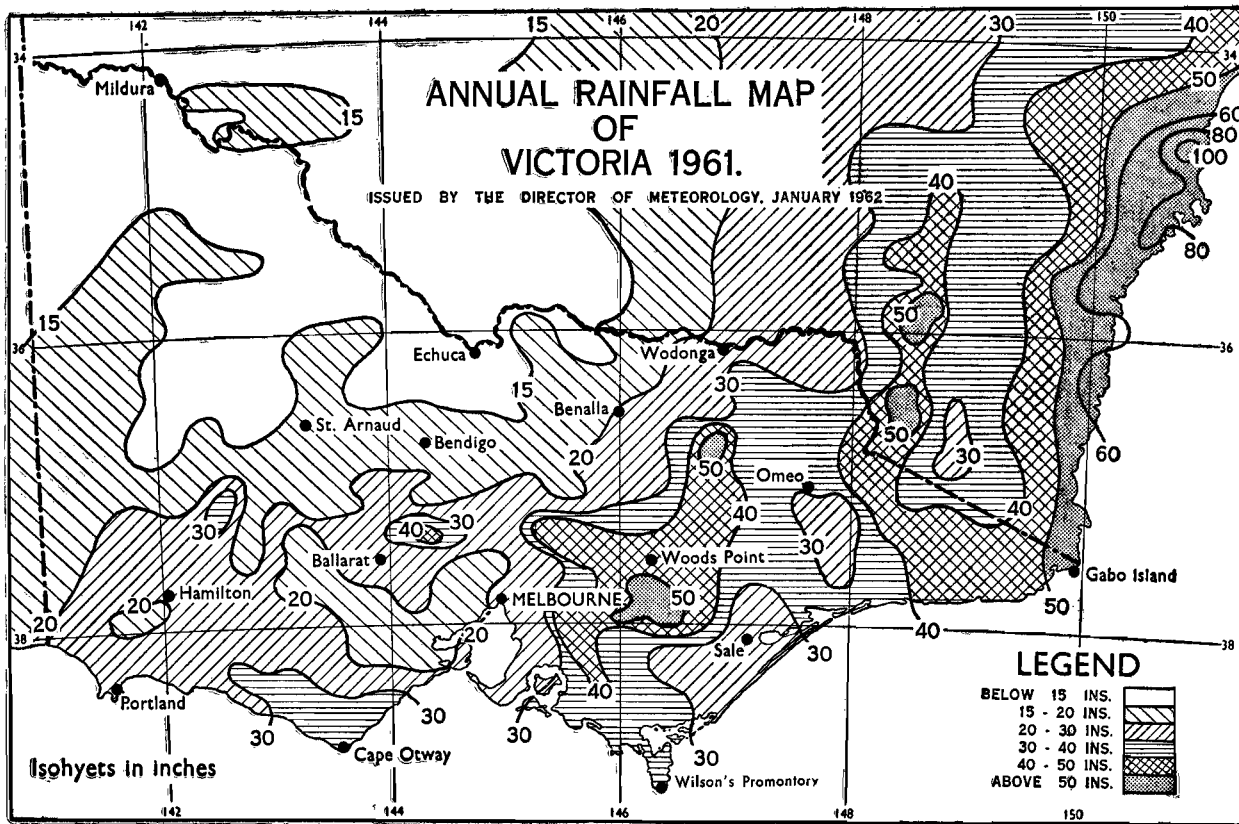
### *Frosts*

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., whilst 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 the bulk 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 over Victoria longer than three or four days are most unusual.

### *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 in the driest parts of the Mallee to over 60 inches in 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 in the Central Highlands, Otway Ranges and South 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 on rare occasions 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, with few exceptions, never 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 June, 1952.

FIGURE 3.





*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 owing to 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.

*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, north, and lower north. The heaviest falls in Victoria are confined to sparsely populated areas and hence general community disorganization 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.

*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 are experienced. 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 90 m.p.h. There is no doubt, however, that stronger gusts have been experienced over the State, although not in the vicinity of a recording anemometer. A number of tornadic squalls have been experienced and from the severe local damage engineers have estimated wind strengths over 100 m.p.h. It is considered that any place in Victoria could feasibly experience at some time a local gust of 100 m.p.h. or more.

### *Droughts*

There have been numerous dry spells over the State, most of them of little consequence, but many long enough to be classified as a drought. The latter was recognized as an agricultural hazard in Victoria from the middle of the previous century when population was extending into drier areas of the State. There have been less than ten significant drought periods during the last fifty years. The State of Victoria is situated on the northern fringe of the belt of prevailing westerly winds, which results in fairly uniform and reliable rainfall throughout the year. By and large, Victoria has a rather equable climate. Although severe droughts, devastating floods, scorching bush fires and severe storms are experienced from time to time, compared with other places in Australia and elsewhere over the world, the climate of Victoria is well behaved.

### **Rainfall Reliability**

It is not possible to give a complete description of rainfall at a place or in a district by using a single parameter. 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.

Several expressions may be used to measure variability, each of which may have a different magnitude. The simplest form 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" distribution. These distributions can be described fully by the mean and standard deviation. To compare one distribution with the other, the co-efficient of variation  $\left( \frac{\text{standard deviation}}{\text{the average}} \right)$  has been used. The coefficient of variation has

been calculated for the fifteen climatic regions of Victoria (see Fig. 4) for the 30 years 1913 to 1942 and the results are tabulated below in order of rainfall reliability :—

### VICTORIA—RAINFALL VARIATION

District	Average Rainfall	Standard Deviation	Coefficient of Variation
	points*		
1. West Coast .. .. .	2960	347	0·117
2. West Gippsland .. .. .	3468	519	0·150
3. Volcanic Plains .. .. .	2390	388	0·162
4. East Gippsland .. .. .	2940	485	0·165
5. East Central .. .. .	3530	589	0·167
6. Wimmera South .. .. .	1911	355	0·186
7. West Central .. .. .	2350	446	0·190
8. Wimmera North .. .. .	1583	321	0·203
9. North Central .. .. .	2666	615	0·231
10. Mallee South .. .. .	1326	334	0·252
11. Upper North-east .. .. .	4299	1113	0·259
12. Lower North-east .. .. .	2985	825	0·276
13. Upper North .. .. .	1964	546	0·278
14. Lower North .. .. .	1658	468	0·282
15. Mallee North .. .. .	1155	344	0·298

\*100 points=One inch.

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.

Most of the elevated areas of eastern and southern Victoria normally receive over 40 inches and over 60 inches in some wetter sections. Interspersed between these wet mountainous areas are sheltered valleys which are deprived to some extent of their rainfall by neighbouring highlands. Along practically the whole south coastline of Victoria the average number of wet days (0·01 inches or more in 24 hours) is over 150, with an average rainfall below 30 inches. The average number of wet days per year is reduced to 100 at a distance of approximately 100 miles inland from the coast.

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.

### Climate of Melbourne

#### Temperatures

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., whilst along the Bay,

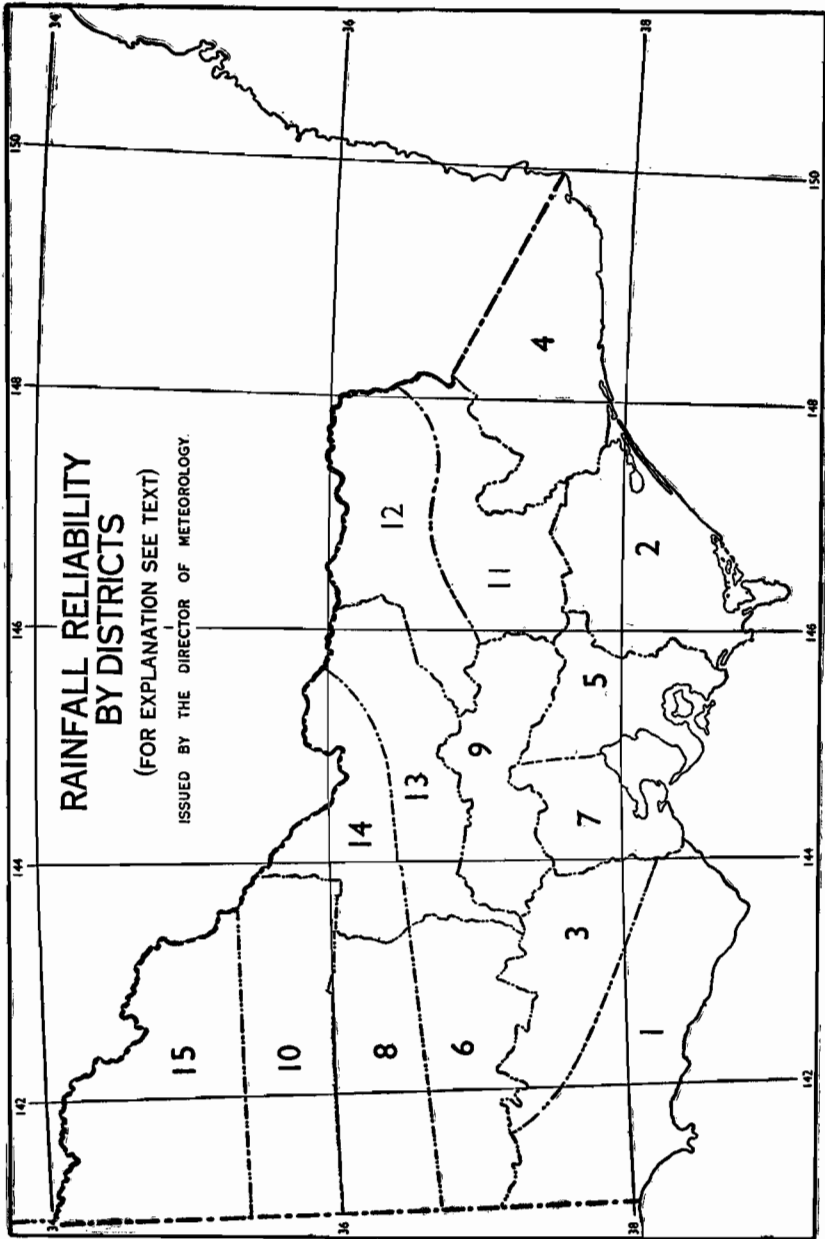


FIGURE 4.—Relative rainfall variability based on district annual rainfall. Names of districts are shown in table on page 54.

Black Rock, subject to any sea breeze, has 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 January 13, 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 just on nineteen.

Nights are coldest at places a considerable distance from the sea such as at Watsonia, which has a good open exposure and where average minima are a few degrees lower than those observed in the City, for there buildings may maintain the air at a slightly higher temperature. The lowest temperature ever recorded in the City was 27° F. on 21st July, 1869, and likewise, the highest minimum ever recorded was 87.0° F. on February 1, 1902.

In Melbourne, the average overnight temperature remains above 70° F. on only about two nights per 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 May to August, whilst 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 outer suburbs and probably to over 30 per 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 25.91 inches over 143 days. From January to August, monthly averages are within a few points of two inches ; then a rise occurs to a maximum of 2.71 inches in October. Rainfall is relatively steady during the winter months when the extreme range is from half an inch to five inches, but variability increases towards the warmer months. In the latter period totals range between practically zero and over seven and a half 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 per month 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 highest number of wet days ever recorded in any one month is 27 in August. On the other hand, there has been only one rainless month in the history of the Melbourne records—in April 1923. On occasions, each month from January to May, has recorded three wet days or less. The longest wet spell ever recorded was sixteen days and the longest dry spell 40 days. Over four inches of rain have been recorded in 24 hours on several occasions, but these have been restricted to the warmer months, September to March. No fall above 2 inches in 24 hours has ever been recorded in the cooler months. Fogs occur on four or five mornings per month in May, June, and July, and average 21 days for the year. The highest number ever recorded in a month was twenty in June 1937.

### *Cloud*

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 98. 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 nearly eight hours per 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 m.p.h., whilst means exceeding 20 m.p.h. are on record for each winter month. These are mean values: the wind is never steady. Continual oscillations take place with lulls, during which the speed may drop to or near zero, and strong surges which may contain an extreme gust, lasting for a period of a few seconds only, up to or even over 60 m.p.h. At Melbourne, gusts exceeding 60 m.p.h. have been registered during every month with a few near or over 70 m.p.h., and an extreme of 74 m.p.h. on February 18, 1951. At both Essendon and Ascendale wind gusts over 90 m.p.h. have 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 25. 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 31st August, 1849. Streets and housetops were covered with several inches of snow, reported to be 1 foot 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.

### **Victorian Weather Summary for 1961**

#### *Summer*

For the greater part of the State this season was a dry one. Apart from East Gippsland, most places only recorded half their average summer rain.

The summer was very warm with both the maximum and minimum temperatures above the average for all districts. There were many occasions throughout the season when days were above 90° F., and a number of times temperatures exceeded 100° F. Generally speaking,

there were no extremely high registrations, the highest being 111° F. at Nhill towards the end of January. In Melbourne the summer was the sunniest on record.

Although the summer was dry and hot and the fire risk was high, the State escaped major bushfire outbreaks. One of the largest fires occurred in the Redesdale–Metcalfe area where some 10,000 acres of grass and scrub land were burnt, destroying houses and stock on 23rd January. A fire in the Pyalong district on 12th February also burnt about 10,000 acres of grazing property and stock losses were heavy.

### *Autumn*

The over-all picture presented by the autumn was quite a favourable one and showed out all the more favourably in comparison with the autumn of 1960.

During the first week of March a storm located about the south-east of the Continent brought flood rains to East Gippsland. Club Terrace recorded 8·3 inches for this week, and Bairnsdale 5·2 inches in 24 hours. In East Gippsland several areas were flooded, some highways and roads were out, and several towns were temporarily isolated.

Although scrub and grass fires were reported during the latter half of March, these were of a minor nature and soon brought under control. A general rain early in April subsequently allowed all fire restrictions to be lifted. About the end of March severe thunderstorm activity in northern suburbs of Melbourne was associated with violent hail storms in the Sunshine–Deer Park area. Hail the size of pigeon eggs smashed windows ; there was local flooding ; and some factories were forced to cease production temporarily. Damage amounted to thousands of pounds. In the Heidelberg area 134 points of rain fell in fifteen minutes with a total of 183 points in half an hour.

The excellent rain which fell during April throughout the cereal growing district provided one of the best openings of the season ever experienced.

By the end of May, practically the only wheat crops not sown were those in areas such as the southern Wimmera and the Western District which are not normally planted until June. Dry conditions during May provided an excellent opportunity for sowing seed. However, further rain was needed to germinate seed and promote growth in the north. Conditions throughout the vine areas in the north were ideal for fruit drying.



*Winter*

The winter of 1961 was comparatively mild and generally well behaved. Maximum temperatures were above normal at most places throughout the State. In the south, minimum temperatures were well above the winter normal and near normal in the north.

The north-west quarter of Victoria which takes in most of the wheat-growing areas was the driest part during winter. Although the rainfall received in this quarter was only about three-quarters of the winter average, falls were timely enough to keep the wheat crop in a fairly good condition.

The winter rainfall in East Gippsland was almost one and a half times the winter average. Over the remainder of the State, rainfall was within about 10 per cent. of the average.

By the end of winter, crops were in a promising condition. However, the subsoil was dry in the wheat-growing areas and good soaking rains were needed.

*Spring*

The mild temperature trend which had been established in the previous season continued throughout spring. Maximum and minimum temperatures over the State were close to normal in a few districts but mostly they were well above the spring average.

The most disappointing feature of the year was the failure of the spring rains over the greater part of Victoria. The only two districts to receive rainfall that was average or above, were the Mallee and East Gippsland. The failure of spring rainfall was most noticeable in the Port Phillip Region.

Although the future of the wheat crop looked promising at the end of winter, there were not sufficient reserves of moisture in the subsoil and the failure of follow-up rain during spring caused crops to deteriorate rapidly. Harvesting commenced much earlier than usual in many areas. The position was further aggravated by abnormally high temperatures.

At the end of spring, it was estimated that the wheat yield this year would be well below the total for the previous year. As the acreage sown this year was much greater than previous years, the yield per acre represented one of the lowest yields for some years. The dry weather during spring also caused a set-back to many vegetables and fruit crops, and irrigation became necessary much earlier than usual.

Stock maintained good to excellent conditions as pasturage was ample ; however, it had dried off considerably by the end of spring. Generally speaking, water was in good supply although some storages were well below the normal at the end of spring.

Predominantly dry and sunny weather continued into December. Reservoirs which supply the Port Phillip Region were at the lowest levels they had been for about 50 years. Water restrictions were necessary in the city and suburbs early in December to conserve the dwindling water reserves. The year ended as one of the warmest and sunniest years on record for many places—particularly around the Port Phillip Region.

### Meteorological Records

The above particulars about climate have been furnished by the Commonwealth Bureau of Meteorology, and some figures are given in the following tables. In the first are shown the rainfall for each district and for the whole State for each of the years 1952 to 1961, together with the average rainfall covering a period of 30 years :—

#### VICTORIA—RAINFALL IN DISTRICTS (Inches)

Year Ended 31st December—	Districts								Whole State
	Mallee	Wimmera	North- ern	North- Central	North- Eastern	Western	Central	Gipps- land	
1952 ..	15.22	21.87	21.86	35.56	46.24	39.30	40.66	48.71	32.75
1953 ..	12.27	19.62	16.81	28.69	35.57	30.40	30.75	35.29	25.38
1954 ..	13.41	17.68	21.22	29.88	35.58	25.92	30.93	34.02	25.02
1955 ..	17.68	22.44	26.00	35.99	49.05	32.40	34.12	33.86	30.24
1956 ..	20.85	24.31	31.45	41.17	55.59	34.02	34.29	44.25	34.69
1957 ..	9.67	14.87	13.55	23.01	27.32	26.82	24.85	31.98	21.03
1958 ..	15.45	17.65	21.40	31.57	37.78	29.05	28.99	35.42	26.35
1959 ..	9.97	15.16	16.56	26.09	27.69	24.46	26.53	33.63	21.70
1960 ..	18.08	24.75	22.70	38.45	40.16	36.01	34.98	37.26	30.42
1961 ..	13.44	15.07	14.90	25.27	27.60	24.03	22.90	33.04	21.67
Average*	12.49	17.52	18.09	28.16	34.81	27.59	28.89	33.47	24.30

\* Averages for a standard 30 years' period 1911-1940.

The heaviest rainfall in the State occurs in the Eastern Highlands (from the Yarra watershed to the Upper Murray), in the Cape Otway Forest in the Western District, and in the South Gippsland, Latrobe and Thomson Basin sections of the Gippsland District. The lightest rainfall is in the Mallee District, the northern portion of which receives on the average from 10 to 12 inches only per year.

The following table shows the monthly rainfall and mean temperatures for 1961 recorded in various Victorian country centres :—

VICTORIA—MONTHLY RAINFALL AND MEAN TEMPERATURE  
OF SELECTED CITIES AND TOWNS, 1961

Locality			Particulars	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Ballarat .. ..	Rainfall (points)	..	28	94	274	356	103	243	302	237	135	257	97	116	
	Temperature °F.	..	70·1	65·6	61·3	57·3	49·2	47·3	44·5	46·9	51·1	56·0	58·7	63·1	
Bendigo .. ..	Rainfall (points)	..	42	82	286	308	70	178	219	111	104	134	88	335	
	Temperature °F.	..	75·5	70·8	66·5	60·2	51·1	48·8	47·2	49·1	54·3	61·1	64·4	69·1	
Colac .. ..	Rainfall (points)	..	36	29	110	364	180	450	320	269	141	231	140	210	
	Temperature °F.	..	69·7	65·5	62·9	58·3	49·7	49·1	46·1	48·3	51·5	54·9	59·1	62·5	
Geelong .. ..	Rainfall (points)	..	10	125	149	173	134	196	120	167	70	141	75	169	
	Temperature °F.	..	70·9	68·2	64·9	59·9	53·8	52·0	49·4	50·7	54·7	59·7	62·3	66·1	
Hamilton .. ..	Rainfall (points)	..	24	51	33	505	165	268	291	241	210	175	107	166	
	Temperature °F.	..	71·5	67·4	63·7	59·5	51·8	50·3	47·3	49·1	53·3	56·8	60·9	63·9	
Horsham .. ..	Rainfall (points)	..	10	79	90	275	84	99	194	66	141	119	123	153	
	Temperature °F.	..	77·1	72·0	67·5	61·5	53·0	50·1	47·5	50·0	55·2	61·3	65·7	70·0	
Mildura .. ..	Rainfall (points)	..	51	42	71	127	34	33	105	43	112	38	308	201	
	Temperature °F.	..	79·3	75·3	70·5	64·5	55·7	53·3	50·2	51·9	59·1	65·5	68·2	73·0	
Sale East .. ..	Rainfall (points)	..	253	70	524	171	163	164	417	274	211	283	101	112	
	Temperature °F.	..	68·2	67·1	63·9	59·2	50·9	50·3	48·6	49·1	53·1	59·3	60·8	65·3	
Wangaratta .. ..	Rainfall (points)	..	45	56	200	224	59	156	230	330	187	110	191	107	
	Temperature °F.	..	75·6	72·1	67·7	61·1	51·1	48·5	46·6	48·4	53·2	62·0	66·3	71·1	
Warrnambool .. ..	Rainfall (points)	..	36	73	93	494	209	317	273	253	236	177	131	323	
	Temperature °F.	..	68·3	64·3	63·2	60·1	54·5	52·7	50·1	51·5	55·1	58·5	60·1	62·1	

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

### MELBOURNE—MEANS OF CLIMATIC ELEMENTS

Meteorological Elements	Spring	Summer	Autumn	Winter
Mean Pressure of Air (Inches) .. ..	29·971	29·920	30·075	30·076
Monthly Range of Pressure of Air (Inches)	0·889	0·763	0·816	0·973
Mean Temperature of Air in Shade (° F.) ..	57·7	66·7	59·4	50·1
Mean Daily Range of Temperature of Air in Shade (° F.) .. ..	18·7	21·1	17·4	14·0
Mean Relative Humidity (Saturation = 100)	64	59	69	74
Mean Rainfall in Inches .. ..	7·36	6·10	6·58	5·86
Mean Number of Days of Rain .. ..	40	25	34	44
Mean Amount of Spontaneous Evaporation in Inches .. ..	10·23	17·33	8·09	3·79
Mean Daily Amount of Cloudiness (Scale 0 to 8)* .. ..	4·8	4·2	4·7	5·1
Mean Number of Days of Fog .. ..	1	1	6	12

\* Scale : 0 = clear, 8 = overcast.

In the following table are shown the yearly means of the climatic elements in Melbourne for each year 1957 to 1961. The extremes between which the yearly mean values of such elements have oscillated in the latter periods are also included.

### MELBOURNE—YEARLY MEANS AND EXTREMES OF CLIMATIC ELEMENTS

Meteorological Elements	1957	1958	1959	1960	1961
Atmospheric Pressure (Inches)—					
Mean .. ..	30·018	30·015	30·080	29·996	30·050
Highest .. ..	30·650	30·522	30·669	30·570	30·620
Lowest .. ..	29·452	29·451	29·233	29·157	29·367
Range .. ..	1·198	1·071	1·436	1·413	1·253
Temperature of Air in Shade (°F.)—					
Mean .. ..	58·7	58·3	59·5	58·8	61·1
Mean Daily Maximum .. ..	68·1	66·6	68·4	67·6	70·4
Mean Daily Minimum .. ..	49·4	49·8	50·7	50·0	51·9
Absolute Maximum .. ..	103·0	101·7	109·0	105·0	107·0
Absolute Minimum .. ..	30·8	32·3	29·5	31·3	33·4
Mean Daily Range .. ..	18·6	16·7	18·4	17·5	18·5
Absolute Annual Range .. ..	72·2	69·4	79·5	73·7	73·6
Terrestrial Radiation Mean Minima (°F.) .. ..	46·0	46·8	47·5	45·9	48·2
Rainfall (Inches) .. ..	20·86	26·98	25·84	33·50	22·05
Number of Wet Days .. ..	146	156	131	162	129
Year's Amount of Free Evaporation (Inches) .. ..	41·40	38·75	38·43	41·44	42·17
Percentage of Humidity (Saturation = 100) .. ..	62	66	65	65	63
Cloudiness (Scale 0 to 8)* .. ..	3·7	4·8	4·6	4·9	4·4
Number of Days of Fog .. ..	18	21	24	21	18

\* Scale : 0 = clear, 8 = overcast.



# Part 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 said Council, he may act in the exercise of his said 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 emphasizes 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.

Since 1949 the Governor of Victoria has been General Sir Reginald Alexander Dallas Brooks, K.C.B., K.C.M.G., K.C.V.O., D.S.O., K.St.J.

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 authorized 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 (3) comprises the Governor and at least two (2) 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, &c., 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 fourteen (14) 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 four (4) of such officers shall at any one time be members of the Legislative Council and not more than ten (10) 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 recognized 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

*Ministries, 1945 to 1962*

The following is a list of the Premiers of the Governments from 1945 to 1962 :—

Ministry and Name of Premier	Date of Assumption of Office	Date of Retirement from Office	Duration of Office
			days
Albert Arthur Dunstan ..	18th September, 1943	2nd October, 1945	746
Ian Macfarlan, K.C. ..	2nd October, 1945	21st November, 1945	51
John Cain .. ..	21st November, 1945	20th November, 1947	730
Thomas Tuke Hollway ..	20th November, 1947	3rd December, 1948	380
Thomas Tuke Hollway ..	3rd December, 1948	27th June, 1950 ..	572
John Gladstone Black McDonald	27th June, 1950 ..	28th October, 1952	855
Thomas Tuke Hollway ..	28th October, 1952	31st October, 1952..	4
John Gladstone Black McDonald	31st October, 1952..	17th December, 1952	48
John Cain .. ..	17th December, 1952	31st March, 1955 ..	835
John Cain .. ..	31st March, 1955 ..	7th June, 1955 ..	69
Henry Edward Bolte ..	7th June, 1955 ..	Still in Office	

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.

*Present Ministry*

The last triennial elections for the Legislative Council and the Legislative Assembly were held on 15th July, 1961.

At 1st August, 1962, the 61st Ministry led by the Hon. H. E. Bolte consisted of the following members :—

*From the Legislative Assembly:*

The Hon. H. E. Bolte ..	..	Premier and Treasurer
„ „ A. G. Rylah, E.D. ..	..	Chief Secretary and Attorney-General
„ „ W. J. Mibus ..	..	Minister of Water Supply and Minister of Mines
„ „ J. S. Bloomfield ..	..	Minister of Education
„ „ H. R. Petty ..	..	Commissioner of Public Works and a Vice-President of the Board of Land and Works
„ „ K. H. Turnbull ..	..	Commissioner of Crown Lands and Survey, Minister of Soldier Settlement, Minister for Conservation, and President of the Board of Land and Works
„ „ G. O. Reid ..	..	Minister of Labour and Industry, and Minister of Electrical Undertakings
„ „ M. V. Porter ..	..	Minister for Local Government
„ „ A. J. Fraser, M.C. ..	..	Minister of State Development
„ „ E. R. Meagher, M.B.E., E.D.	..	Minister of Immigration

*From the Legislative Council:*

The Hon. Sir Arthur Warner	..	Minister of Transport and a Vice-President of the Board of Land and Works
„ „ G. L. Chandler, C.M.G.		Minister of Agriculture and a Vice-President of the Board of Land and Works
„ „ L. H. S. Thompson	..	Minister of Housing and Minister of Forests
„ „ R. W. Mack	..	Minister of Health

**Parliament****Introduction**

The Constitution Act, creating a Legislative Council and a Legislative Assembly, was assented to by Her Majesty in Council on the 21st July, 1855, and came into operation in Victoria on the 23rd 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.

The Legislative Council has 34 members elected from two-member provinces for six year terms and the Legislative Assembly has 66 members elected from single 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 both Houses. The most frequently amended sections of the Constitution dealing with the Parliament have been those setting out the relations between Council and 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; 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 receive different rates.

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, but being capable of re-election, every three years. 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 (August, 1962) represented in the Parliament of Victoria: the Liberal and Country Party, the Labor Party, and the Country Party. Of the 34 members of the Legislative Council, seventeen belong to the Liberal and Country Party, nine to the Labor Party and eight to the Country Party. Of the 66 members of the Legislative Assembly, 39 belong to the Liberal and Country Party, eighteen to the Labor Party and nine to the Country Party. The Liberal and Country 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 last two general elections in 1958 and 1961. The Leader of that Party holds the office of Premier. The Labor Party forms the official Opposition Party, whilst the Country Party sits on the corner benches of the Government side of the Assembly.

### **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 make the suggested amendments if they so desire. 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 respective presiding officers. 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**

An article dealing with this subject will be found on pages 86-87 of the Victorian Year Book 1962.

**Money Bills***General*

A Money Bill, in its widest sense, is a Bill the main purpose of which is either to impose a charge upon the public funds or to impose a charge upon the people, i.e., a tax. It differs from ordinary Bills mainly in its method of introduction and to some extent in its later consideration.

Before tracing the passage of such Bills through Parliament, it is to be appreciated that the Governor, being the executive power, is charged with all the revenues of the State, and with all payments for the public services. The Governor, therefore, acting with the advice of his responsible Ministers, makes known to the Legislative Assembly the pecuniary necessities of the Government ; the Assembly grants such aids or supplies as are required to satisfy these demands ; and it provides by taxes, and by the appropriation of other sources of the public income, the ways and means to meet the supplies which it has granted. Thus the Crown demands money, the Assembly grants it, and the Legislative Council agrees to the grant ; but the Assembly does not vote money unless it be required by the Crown, nor does it impose or augment taxes, unless such taxation be necessary for public services as declared by the Crown through its constitutional advisers.

The Constitution Act provides that all taxes, imposts, rates, duties, and revenues of the Crown, from whatever source, shall form one consolidated revenue to be appropriated for the public services of Victoria. It further lays down the rules that all Bills for appropriating any part of the revenue of Victoria or for imposing any tax, &c., shall originate in the Assembly and may be rejected but not altered by the Council ; and that, before the Assembly may originate or pass a Bill appropriating any part of the revenue, the appropriation must first be recommended by the Governor in a Message to the Assembly.

In addition to the Consolidated Revenue Fund, the Public Account Act establishes the Loan Fund into which are paid all loan moneys received by the State. Appropriations from this Fund for the particular purposes to which the moneys are allocated must also be recommended by a Message from the Governor.

Further to these statutory requirements, the Assembly Standing Orders provide that all Money Bills must originate in a Committee of the Whole House, i.e., the House presided over by the Chairman of Committees instead of the Speaker. There are three different Committees which are concerned with the preliminary consideration of proposals involving charges : the Committee of Supply, the Committee of Ways and Means, and the specially appointed Money Committee. The Committees of Supply and Ways and Means are appointed at the commencement of each Session and remain in

existence for the duration of the Session, while the special Committee is appointed *ad hoc* and goes out of existence as soon as it has reported upon the matter specifically referred to it.

The functions of these Committees will be seen in the following description of proceedings on Money Bills, but it should be noted that the Committee of Supply grants the demands of the Crown for moneys to meet the annual cost of the public services, the Committee of Ways and Means "finds" the moneys required, either by an appropriation of the Consolidated Revenue or the imposition of a tax or charge upon the people, while the special Money Committee considers charges of a novel nature or not included in the annual estimates of expenditure, and appropriations of moneys in the Loan Fund.

Whilst it is not specifically laid down, the right to initiate Money Bills is virtually reserved to Ministers of the Crown, since they alone are in a position to obtain the necessary Governor's Message recommending a charge, or to move the House into a Committee of the Whole for the required preliminary consideration of the charge.

### *Supply Bills*

The recurring costs of Governmental commitments, usually referred to as supply requirements, are transmitted to the Assembly by the Governor in the form of Estimates of Expenditure, together with a Message recommending an appropriation from the Consolidated Revenue accordingly. The Estimates are referred to the Committee of Supply. This Committee then considers the matter and reports to the House that such an appropriation should be made. The resolution from the Committee of Supply having been agreed to by the House, the matter is then referred to the Committee of Ways and Means, which resolves that the sum agreed upon be granted out of the Consolidated Revenue. The House then orders a Bill to be brought in to carry out the resolution. The charging provision in the Bill must agree with the charge contained in the resolution as agreed to by the House, and no amendment may be moved which would have the effect of altering that charge. In other respects the Bill is dealt with in much the same manner as ordinary Bills.

### *Bills Involving Expenditure of a Novel Nature*

Occasionally it is necessary to provide for expenditure not foreseen by the Government and not included in the annual Estimates of Expenditure, such as the cost involved in some sudden contingency requiring legislative enactment. As money for this purpose would be met from Consolidated Revenue, a Message from the Governor recommending an appropriation would be an essential preliminary requirement. A special Committee of the Whole House is set up for the purpose of considering the Message, and having resolved that such an appropriation be made, it reports accordingly to the House. The House, in its turn, considers the resolution, and having agreed to it, a Bill is ordered to be brought in to give effect to the resolution.

### *Loan Bills*

Moneys from the Loan Fund are allocated from time to time for expenditure upon works such as the building of schools, railway construction works, water supply, &c. Whilst this Fund is separate from the Consolidated Revenue Fund, it forms part of the general public account, and appropriations therefrom must also be initiated by a Message from the Governor recommending the appropriation. Here again a special Committee of the Whole House is appointed to give preliminary consideration to the matter.

### *Bills Imposing Taxes*

As has been explained, the fundamental purpose of taxation is to augment the Consolidated Revenue sufficiently to meet the expenditure required by the Government to meet the cost of the public services. The Standing Orders provide that, before the Assembly approves any proposed tax, such proposal must receive preliminary consideration in a Committee of the Whole House. The appropriate Committee in this instance is the Committee of Ways and Means. A motion embodying the proposed tax is moved by a Minister of the Crown and, having been considered and agreed to by the Committee, it is reported in the form of a resolution to the House. The resolution is further considered by the House and, having been agreed to, a Bill is ordered to be brought in to give effect to the resolution. The Bill must repeat the charge contained in the resolution already agreed to, and no amendment may be moved which would have the effect of increasing that charge or altering its incidence; otherwise the Bill is dealt with in the same manner as ordinary Bills.

Whilst the Council cannot amend a Money Bill, but must either agree or disagree with the Bill as a whole, that House is not entirely devoid of influence upon the provisions of such a Bill. The Constitution Act Amendment Act provides that the Council may suggest to the Assembly that certain amendments be made, provided that the suggested amendments would not have the effect of increasing any proposed charge contained in the Bill. The Assembly then considers the suggested amendments and may make them, decide not to make them, or make them with modifications. The Bill is then returned to the Council incorporating such amendments as may have been made by the Assembly and the Council continues its consideration of the Bill as though the amendments formed part of the original Bill.

The importance of Money Bills has always been recognized by Parliament, and in addition to the statutory requirements regarding their initiation, the Standing Orders provide that no two stages of those preliminary proceedings may be taken on the same day. Similarly, should a Money Bill be amended in Committee, the amendments are ordered to be considered by the House on a future day. Thus it is ensured that these Bills receive the careful consideration that is their due, and the rights of the minority representation in Parliament are preserved.



## Members of the State Parliament

## Legislative Council

The following list shows members of the Legislative Council at August, 1962 :—

Member	Province	Number of Electors on Rolls	Number of Electors Who Voted	Total Percentage of Electors Who Voted
Bradbury, The Hon. Archibald Keith	North-Eastern ..	50,548	48,045	95·05
Cameron, The Hon. Sir Ewen	East Yarra ..	131,509	122,836	93·41
Chandler, The Hon. Gilbert Lawrence, C.M.G.	Southern ..	213,166	201,617	94·58
Dickie, The Hon. Vance Oakley	Ballaarat ..	57,149	54,726	95·76
Elliot, The Hon. Douglas George	Melbourne ..	44,990	40,672	90·40
Feltham, The Hon. Percy Victor, M.B.E.	Northern ..	53,405	51,476	96·39
Galbally, The Hon. John William	Melbourne North	147,606	140,166	94·96
Gawith, The Hon. Charles Sherwin	Monash ..	93,699	85,760	91·53
Grigg, The Hon. Thomas Henry	Bendigo ..	60,082	57,788	96·18
Hunt, The Hon. Alan John	South-Eastern ..	123,546	116,941	94·65
McArthur, The Hon. Sir Gordon	South-Western ..	78,816	74,692	94·77
Machin, The Hon. Buckley	Melbourne West	97,267	91,719	94·30
Mack, The Hon. Ronald William	Western ..	56,731	54,665	96·36
Mansell, The Hon. Arthur Robert	North-Western ..	46,689	44,793	95·94
May, The Hon. Robert William	Gippsland ..	75,273	71,019	94·35
Thompson, The Hon. Lindsay Hamilton Simpson	Higinbotham ..	121,354	114,175	94·08
Tripovich, The Hon. John Matthew	Doutta Galla ..	103,026	96,392	93·56

Members of the Legislative Council who did not come up for election at the last triennial election on 15th July, 1961, are shown in the following table :—

Member	Province
Byrne, The Hon. Murray .. .. .	Ballaarat
Byrnes, The Hon. Percy Thomas .. .. .	North-Western
Fulton, The Hon. William Oliver .. .. .	Gippsland
Garrett, The Hon. William Raymond, A.F.C., A.E.A. .. .. .	Southern
Gross, The Hon. Kenneth Samuel .. .. .	Western
Hamer, The Hon. Rupert James .. .. .	East Yarra
Mair, The Hon. William Phillip .. .. .	South-Eastern
Merrifield, The Hon. Samuel .. .. .	Doutta Galla
Nicol, The Hon. Graham John .. .. .	Monash
O'Connell, The Hon. Geoffrey John .. .. .	Melbourne
Smith, The Hon. Arthur .. .. .	Bendigo
Swinburne, The Hon. Ivan Archie .. .. .	North-Eastern
Thom, The Hon. Geoffrey Walter .. .. .	South-Western
Todd, The Hon. Archibald .. .. .	Melbourne West
Walters, The Hon. Dudley Joseph .. .. .	Northern
Walton, The Hon. John Malcolm .. .. .	Melbourne North
Warner, Sir Arthur George, K.B.E. .. .. .	Higinbotham

President: The Hon. Sir Gordon McArthur.

Chairman of Committees: The Hon. Sir Ewen Cameron.

Clerk of the Parliaments and Clerk of the Legislative Council :  
R. S. Sarah, Esquire.

## Legislative Assembly

The following list shows members of the Legislative Assembly at August, 1962. It also includes details of electoral districts and voting at the last general election, which was held on 15th July, 1961 :—

Member	District	Number of Electors on Rolls	Number of Electors Who Voted	Total Percentage of Electors Who Voted
Balfour, James Charles Murray, Esquire	Morwell ..	22,946	21,816	95·08
Barclay, Nathaniel, Esquire, D.C.M.	Mildura ..	20,648	19,687	95·35
Birrell, Hayden Wilson, Esquire	Geelong ..	21,758	20,401	93·76
Bloomfield, The Hon. John Stoughton	Malvern ..	19,098	17,404	91·13
Bolte, The Hon. Henry Edward	Hampden ..	20,975	20,211	96·36
Borthwick, William Archibald, Esquire	Scoresby ..	30,627	29,032	94·79
Brose, The Hon. Richard Keats	Rodney ..	22,401	21,419	95·62
Christie, Vernon, Esquire ..	Ivanhoe ..	23,626	22,273	94·27
Clarey, Reynold Arthur, Esquire	Melbourne ..	15,758	14,096	89·45
Cochrane, Leslie James, Esquire	Gippsland West	22,382	21,279	95·07
Crick, George Roy, Esquire	Grant ..	38,649	36,321	93·98
Darcy, Thomas Anthony, Esquire	Polwarth ..	24,794	23,732	95·72
Divers, William Thomas, Esquire	Footscray ..	20,222	19,341	95·64
Dunstan, Roberts Christian, Esquire, D.S.O.	Mornington ..	28,189	26,273	93·20
Evans, Alexander Thomas, Esquire	Ballaarat North	22,585	21,613	95·70
Evans, Bruce James, Esquire	Gippsland East..	21,537	20,151	93·56
Fennessy, Leo Michael, Esquire	Brunswick East	16,987	15,683	92·32
Floyd, William Laurence, Esquire	Williamstown ..	19,193	18,001	93·79
Fraser, The Hon. Alexander John, M.C.	Caulfield ..	21,439	19,697	91·87
Gainey, Richard John, Esquire, M.B.E.	Elsternwick ..	20,589	19,486	94·64
Galvin, The Hon. Leslie William	Bendigo ..	21,894	21,151	96·61
Garrison, Peter Wolseley, Esquire	Hawthorn ..	18,722	17,187	91·80
Gibbs, George Sampson, Esquire	Portland ..	22,756	21,925	96·35
Gillett, Robert Max, Esquire	Geelong West ..	25,869	24,457	94·54
Holden, Jack Bruce, Esquire	Moonee Ponds ..	20,225	19,141	94·64
*Holding, Allan Clyde, Esquire	Richmond ..	17,549	14,744	84·02
Holland, Kevin Myles Stephen, Esquire	Flemington ..	18,471	17,274	93·52
Hyland, The Hon. Sir Herbert John Thornhill	Gippsland South	23,424	22,100	94·35
Jenkins, Dr. Henry Alfred	Reservoir ..	27,588	26,504	96·07

\* Elected at a by-election on 12th May, 1962, vice, W. J. Towers, deceased, 18th March, 1962.

MEMBERS OF THE LEGISLATIVE ASSEMBLY—*continued*

Member	District	Number of Electors on Rolls	Number of Electors Who Voted	Total Percentage of Electors Who Voted
Lovegrove, Denis, Esquire	Fitzroy ..	17,203	15,633	90·87
Loxton, Samuel John Everett, Esquire	Prahran ..	18,295	16,892	92·33
MacDonald, James David, Esquire	Burwood ..	21,578	20,444	94·74
McDonald, The Hon. Sir William John Farquhar	Dundas ..	21,766	20,987	96·42
Manson, James Williamson, Esquire	Ringwood ..	35,337	33,910	95·96
Meagher, The Hon. Edward Raymond, M.B.E., E.D.	Mentone ..	26,167	24,694	94·37
Mibus, The Hon. Wilfred John	Lowan ..	20,793	19,968	96·03
Mitchell, The Hon. Thomas Walter	Benambra ..	23,039	21,806	94·65
Moss, The Hon. George Colin	Murray Valley ..	23,051	22,081	95·79
Mutton, Charles, Esquire ..	Coburg ..	21,501	20,460	95·16
Petty, The Hon. Horace Rostill	Toorak ..	18,757	16,838	89·77
Porter, The Hon. Murray Victor	Sandringham ..	26,818	25,659	95·68
Rafferty, Joseph Anstice, Esquire	Ormond ..	24,799	23,638	95·32
Reid, The Hon. George Oswald	Box Hill ..	30,533	28,661	93·87
Reid, Leonard Stanley, Esquire, D.F.C.	Dandenong ..	37,575	35,539	94·58
Ring, Eugene Cornelius, Esquire	Preston ..	26,512	25,126	94·77
Rossiter, John Frederick, Esquire	Brighton ..	20,878	19,552	93·65
Rylah, The Hon. Arthur Gordon, E.D.	Kew .. ..	21,462	19,727	91·92
Scanlan, Alan Henry, Esquire	Oakleigh ..	23,142	22,011	95·11
Schintler, George Roy, Esquire	Yarraville ..	21,859	20,765	95·00
Scott, Gordon Lincoln, Esquire	Ballaarat South	21,531	20,595	95·65
Snider, Baron David, Esquire	St. Kilda ..	18,580	16,771	90·26
Stirling, Harold Victor, Esquire	Swan Hill ..	19,703	18,992	96·39
Stokes, Russell Newton, Esquire	Evelyn ..	30,817	28,946	93·93
Stoneham, The Hon. Clive Phillip	Midlands ..	23,306	22,441	96·29
Suggett, Robert Harris, Esquire	Moorabbin ..	30,799	29,512	95·82
Sutton, Patrick Keith, Esquire	Albert Park ..	17,415	16,131	92·63
Tanner, Edgar Stephen, Esquire, C.B.E., E.D.	Ripponlea ..	19,498	17,710	90·83
Taylor, Alexander William, Esquire, E.D.	Balwyn ..	27,107	25,483	94·01
Trewin, Thomas Champion, Esquire	Benalla ..	20,915	19,944	95·36
Turnbull, Campbell, Esquire	Brunswick West	19,472	18,262	93·79
Turnbull, The Hon. Keith Hector	Kara Kara ..	19,521	18,809	96·35

MEMBERS OF THE LEGISLATIVE ASSEMBLY—*continued*

Member	District	Number of Electors on Rolls	Number of Electors Who Voted	Total Percentage of Electors Who Voted
Wheeler, Kenneth Henry, Esquire	Essendon ..	24,434	23,320	95·44
Wilcox, Vernon Francis, Esquire	Camberwell ..	20,642	19,205	93·04
Wilkes, Frank Noel, Esquire	Northcote ..	20,171	19,134	94·86
†Wilton, John Thomas, Esquire	Broadmeadows ..	46,665	42,525	91·13
Wiltshire, Raymond John, Esquire	Mulgrave ..	46,023	43,664	94·87

† Elected at a by-election on 4th August, 1962, *vice*, H. E. Kane, deceased, 30th May, 1962.

Speaker : The Hon. Sir William John Farquhar McDonald.

Chairman of Committees : Joseph Anstice Rafferty, Esquire.

Clerk of the Legislative Assembly : John Archibald Robertson, Esquire.

### Number of Parliaments and Their Duration

During the period 1856 to 1962 there have been 42 Parliaments. The Forty-second Parliament was opened on 1st August, 1961. 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 Year Book for 1928–29, page 21. Similar information for the Twenty-ninth to the Thirty-ninth Parliaments (1927 to 1955) was published in the Year Book for 1952–53 and 1953–54, page 31. As from the commencement of the Thirty-eighth Parliament (20th 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 *	Sittings			
			Legislative Assembly		Legislative Council	
			Number of Sittings	Percentage of Sittings to Duration	Number of Sittings	Percentage of Sittings to Duration
		days				
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

\* 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 30th June, 1954 to 1962. 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 6th October, 1954. Prior to 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 received salaries and allowances only in connection with their offices. Under the new legislation, however, these persons receive salaries and allowances as members of Parliament in addition to those connected with their offices. These former amounts are included under "Parliament".

#### VICTORIA—COST OF PARLIAMENTARY GOVERNMENT

(£)

Year Ended 30th June—	Governor		Ministry	Parliament		Electoral	Royal Commissions, Select Committees, etc.	Total
	Salary	Other Expenses*		Salaries of Members	Other Expenses†			
1954 ..	6,000	55,608	35,144	133,120	154,227	31,763	3,399	419,261
1955 ..	6,000	41,320	27,258	193,814	163,436	101,531	2,180	535,539
1956 ..	6,000	49,143	22,213	225,202	182,257	88,810	13,315	586,940
1957 ..	6,000	54,749	22,584	225,202	241,524	36,547	12,749	599,355
1958 ..	7,500	58,152	22,934	222,400	238,497	103,561	7,761	660,805
1959 ..	7,500	58,984	‡38,037	237,846	267,224	101,422	14,248	725,261
1960 ..	7,500	62,400	‡39,544	284,291	251,010	30,046	20,608	695,399
1961 ..	7,500	60,768	‡41,583	279,794	274,464	59,565	24,817	748,491
1962 ..	7,460	75,773	35,254	281,239	294,586	147,961	27,894	870,167

\* Includes salaries of staff and maintenance of house and gardens.

† Includes cost of members' railway passes, parliamentary staff and maintenance.

‡ Includes cost of oversea conferences in Ministry costs.

### State Acts Passed During 1961

The following Acts were passed by State Parliament during the year ended 31st December, 1961 :—

No.		No.	
6736	Public Works Committee (Special Exemption) Act exempts members of the Public Works Committee from exclusion from voting while enquiring into the water resources of Victoria	6753	Transport Regulation (Compensation) Act provides for compensation to licence holders in certain circumstances
6737	Railways (Permanent Service) Act amends Section 149 of Railways Act 1958	6754	Bread Industry (Legal Proceedings) Act provides for the control of bread quality
6738	Superannuation (Railway Service) Act provides for a reduction of superannuation units of certain Railway staff	6755	Milk Pasteurization (Licences) Act amends the Milk Pasteurization Act 1958
6739	Stamps (Amendment) Act amends the Stamps Act 1959 with respect to the duty payable on the exchange of real property	6756	Health (Proprietary Medicines) Act provides for the review of registration of proprietary medicines
6740	Employers and Employees (Attachment of Wages) Act amends the making of attachment orders	6757	Police Offences (False Reports to Police) Act amends Police Offences Act 1958
6741	St. Kilda (Goldsmith and Shelley streets) Land Act authorizes the closing of two public streets	6758	Evidence (Children) Act concerns court evidence by children under fourteen years of age
6742	Municipal Association (Amendment) Act amends the Municipal Association Act 1907	6759	Statute Law Revision Act repeals the Electoral Provinces Act 1958 and corrects errors in other Acts
6743	Wormbete Land Act authorizes the sale of Crown Lands in the Parish of Wormbete	6760	Transport Regulation (Term of Office) Act provides for members of the Transport Regulation Board to be re-appointed for a second term
6744	Grain Elevators (Borrowing) Act increases the amount of money that may be borrowed by the Grain Elevators Board	6761	Prostitution Act increases the penalties for procuring and soliciting
6745	Housing (Amendment) Act refers to the sale of houses, and the granting of gifts to the Housing Commission by public bodies	6762	Motor Car (Amendment) Act amends the Motor Car Act 1958
6746	Land (North-West Mallee Settlement Areas) Act provides for the conversion of perpetual leases into purchase leases	6763	Game (Amendment) Act controls the sale, exchange or possession of native game
6747	Ripon Peace Memorial Hospital Trust Act varies the objects of a Hospital Trust Fund	6764	The Constitution Act Amendment (Electoral) Act provided for the holding in 1961 of Council and Assembly elections
6748	Road Traffic (Parking on Railway and Municipal Property) Act	6765	Building Societies (Amendment) Act refers to the establishment and incorporation of building societies
6749	Co-operation (Amendment) Act refers to co-operative society membership, and raises the amount guaranteed by the Government	6766	Juries (Amendment) Act relates to the payment of workers' compensation to jurors
6750	Heidelberg and Toolamba Lands Exchange Act provides for the exchange of Crown Land for other lands	6767	Gas and Fuel Corporation (Borrowing) Act increases the borrowing limit of the Corporation
6751	Town and Country Planning (Amendment) Act refers to the continuance of planning schemes following municipal boundary changes	6768	Clean Air (Sub-Committees) Act allows the Committee to appoint sub-committees
6752	Janet Clarke Hall Act incorporates Janet Hall as a separate college	6769	Housing (Home Builders' Account) Act extends the repayment time of certain advances made to the Home Builders' Account from the Public Account

STATE ACTS PASSED DURING 1961—*continued*

No.		No.	
6770	Police Offences (Pinball Machines) Act extends the gaming provisions of the Police Offences Act 1958 to pinball machines	6789	Portland Harbor Trust (Quarrying) Act authorizes the Commissioners to sell surplus quarrying produce
6771	Fisheries (Commercial Council) Act provides for a Commercial Council to advise the Minister on matters relating to the fishing industry	6790	Racing (Bookmakers' Course Agents) Act provides for the registration of certain bookmakers' clerks
6772	Consolidated Revenue Act	6791	Stamps (Further Amendment) Act widely amends the Stamps Act 1958
6773	Consolidated Revenue Act	6792	North Geelong to Fyansford Railway Deviation Act authorizes the construction of a deviation line
6774	Consolidated Revenue Act	6793	Apprenticeship (Amendment) Act amends the Apprenticeship Act 1958
6775	Game (Black Swans) Act permits the issue of licences to take or kill black swans	6794	Land (Unused Roads and Water Frontages) Act amends the Local Government Act 1958
6776	Distribution of Population (Joint Committee) Act provides for a Parliamentary Committee to examine population distribution	6795	Motor Car (Insurance Surcharge) Act makes permanent the surcharge of one pound on third party insurance contracts
6777	Public Works Interim Loan Application Act authorizes the issue of money from the Loan Fund for public works	6796	Forests (Wood Pulp Agreement) Act concerns the supply of pulpwood from State forests to private industry
6778	Legal Profession Practice (Amendment) Act amends the Legal Profession Practice Act 1958	6797	Dandenong Lands Act provides for the surrender of certain lands to the Crown
6779	Home Finance (Amendment) Act increases the maximum value for Home Finance Loans	6798	Local Authorities Superannuation (Amendment) Act amends the Local Authorities Superannuation Act 1958
6780	Cancer (Amendment) Act issues funds to the Cancer Institute	6799	R.S.L. Welfare Trust Fund Act authorizes the variation of the Trust upon which certain funds are held
6781	Tourist (Amendment) Act constitutes the Tourist Development Authority as a body corporate	6800	The Zinc Corporation Limited Act incorporates the Company in Victoria
6782	Water (Ballarat Water Commissioners) Act authorizes the Commissioners to operate timber mills	6801	Mines (Explosives) Act deals with quarry safety regulations
6783	Commercial Goods Vehicles (Tow Trucks) Act controls the construction and equipment of tow trucks, the testing of drivers and issue of licences	6802	University (Officers) Act relates to the membership of the University Council
6784	Consolidated Revenue Act	6803	State Accident Insurance Office Act permits the Office to purchase lands or buildings
6785	Local Government (Municipal Assistance Fund) Act increases the amount that may be paid out of the Municipalities Assistance Fund	6804	Melbourne and Metropolitan Board of Works (Yarra River) Act vests in the Board certain portions of the bed soils and banks of the Yarra River
6786	Agricultural Colleges (Leases) Act provides for the granting or leasing to certain lessees of land divested from agricultural colleges	6805	Legal Aid Act provides for the assistance of poor persons in legal matters
6787	United Lutheran Church Incorporation Act incorporates the Lutheran Church	6806	Crimes (Breath Test Evidence) Act approves the use of breath analysing instruments as sources of evidence in intoxication cases
6788	West Melbourne Market Land (Amendment) Act redefines the boundaries of the West Melbourne Market		



STATE ACTS PASSED DURING 1961—*continued*

No.		No.	
6807	Consolidated Revenue Act	6824	Co-operation (Amendment) Act amends the Co-operation Act 1958
6808	Civil Aviation (Carriers' Liability) Act relates to the liability of airline licence holders for damage done to their passengers	6825	Valuation of Land (Amendment) Act amends the Valuation of Land Act 1960, Local Government Act 1958, Housing Act 1959, and Water Act 1958
6809	Sheep Owners Protection Act re-enacts, with amendments, The Sheep Owners Protection Act 1958	6826	Public Works Loan Application Act authorizes the issue of loan money for public works
6810	Entertainments Tax (Amendment) Act relates to booking fees and tax reductions	6827	Land Tax (Exemptions and Rates) Act relates to exemptions from Land Tax and declares the rates for 1962
6811	Exhibition (Borrowing Powers) Act increases the borrowing power of the Trustees	6828	Landlord and Tenant Act relates to notices to quit
6812	Children's Welfare (Appeals) Act makes provision for appeals against orders for the maintenance of children	6829	Mines (Aluminium Agreement) Act grants certain mineral rights to the aluminium industry
6813	Pawnbrokers (Amendment) Act increases the maximum amount loaned on any article	6830	Railway Loan Application Act sanctions the use of loan moneys for Railway purposes
6814	Property Law (Loans to Minors) Act refers to housing loans to infants not under eighteen years of age	6831	Railways (Funds) Act reorganizes some aspects of Railway accounting
6815	Disposal of Uncollected Goods Act authorizes the disposal of goods accepted in the course of business but not re-delivered	6832	Motor Boating Act controls boating and requires the registration of motor boats
6816	Milk and Dairy Supervision (Amendment) Act relates to the licensing of dairies, dairy farms and factories, and the payment of expenses to Board members	6833	Police Regulations (Amendment) Act provides that members of the Police Force may be required to live in certain districts, and the prescription of fees for special Police services
6817	State Forests Loan Application Act sanctions the issue of loan money for State Forests works	6834	Housing (Commonwealth and State Agreement) Act ratifies the Agreement with the Commonwealth
6818	Health (Dangerous Substances) Act extends control over the use, sale, transportation, and storage of dangerous substances	6835	Education (Amendment) Act authorizes school committees to enter into contracts to carry out certain works
6819	Money Lenders (Amendment) Act amends the Money Lenders Act 1958	6836	Racing (Off-course Doubles Totalizators) Act provides for doubles bets
6820	Water Supply Loan Application Act provides loan money for irrigation, water supply, drainage, flood control, &c.	6837	Medical (Amendment) Act exempts medical employees of the Commonwealth from payment of registration fees. It also transfers certain powers and duties to the Government Statist
6821	Co-operative Housing Societies (Amendment) Act approves the use of funds for dwelling maintenance	6838	Water and Sewerage Authorities (Proceedings and Finances) Act simplifies the making of advances to water and sewerage authorities and their internal administrative and financial procedures
6822	Legal Profession Practice (Further Amendment) Act amends the Legal Profession Practice Act 1958	6839	Companies Act re-enacts the Companies Act 1958
6823	Labour and Industry (Women's Hairdressing) Act permits women's hairdressing shops to remain open until ten o'clock on Thursday evenings		

STATE ACTS PASSED DURING 1961—*continued*

No. 6840	The Constitution Act Amendment Act relates to the Parliamentary candidature of newly naturalized Australians	No. 6845	Limitation of Actions (Recovery of Imposts) Act relates to the recovery of moneys from the Crown
6841	Local Government (Streets and Abattoirs) Act empowers municipalities to operate offal treatment works	6846	Rural Finance and Settlement Commission Act relates to the reorganization of soldier settlement and rural finance
6842	Crown Leases Act amends the Land Act 1958 and the Forests Act 1958	6847	Marine (Amendment) Act amends the Marine Act 1958
6843	Church of England (Greenborough Land) Act changes the objects of a Trust	6848	Dog Act amends the Dog Act 1958
6844	Juries (Fees) Act provides for higher payment to jurors	6849	Town and Country Planning Act re-enacts the Town and Country Planning Act 1958
		6850	Appropriation of Revenue 1961-62 Act

*Electoral System***Introduction***Electoral Basis of the Two Houses*

When first constituted, the Legislative Council or Upper House was composed of 30 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 essential 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.

Victoria is divided, for Legislative Council purposes, into seventeen 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 on the dissolution of the Council, when one-half of the members are to be elected for only three years. (See Fig. 5.)

For Legislative Assembly purposes, the State is divided into 66 Electoral Districts, each returning one member. Members are elected for three years, unless Parliament is dissolved before this period.

*Redistributions of Electoral Districts for the Legislative Assembly*

Under the *Electoral Districts Act* 1953, provision was made for a redivision of the State to be carried out on the basis of each of the 33 Commonwealth Electoral Divisions in Victoria being divided into two Electoral Districts for the Assembly. The first general election conducted on the basis of electorates so created took place on the 28th May, 1955. The *Electoral Districts Act* 1953 (now incorporated into *The Constitution Act Amendment Act* 1958) also provided for recurrent redivisions on the same basis to be made whenever there is any alteration in the number of Commonwealth Electoral Divisions in Victoria, or in any of its boundaries, subject to the proviso that no such redivision shall be made if the whole number of members of the Legislative Assembly would be reduced as a result.

Apart from the redivision mentioned above, the only other redivision made following the *Electoral Districts Act* 1953, took place in 1956 and the general election of 15th July, 1961, was held on the basis of the 66 Electoral Districts created as a result. (See Fig. 6.)

# VICTORIA LEGISLATIVE COUNCIL

## STATE ELECTORAL PROVINCES

- |                    |                  |
|--------------------|------------------|
| A. Melbourne       | J. South-Western |
| B. Melbourne West  | K. Ballarat      |
| C. Dousta Galla    | L. Bendigo       |
| D. Melbourne North | M. North-Eastern |
| E. East Yarra      | N. Gippsland     |
| F. Monash          | O. Western       |
| G. Higinbotham     | P. North-Western |
| H. South-Eastern   | Q. Northern      |
| I. Southern        |                  |

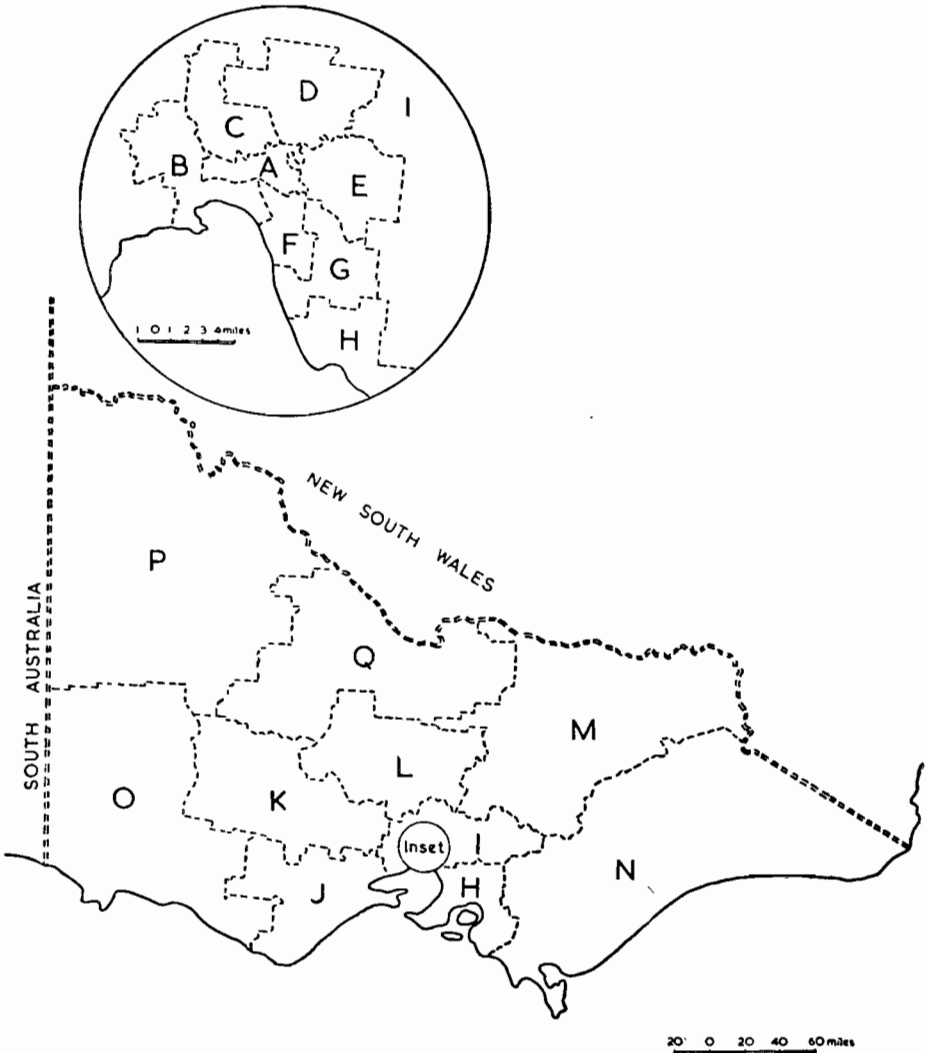


FIGURE 5.—Map of Victoria and inset of Melbourne Metropolitan Area showing State electoral provinces.

## VICTORIA LEGISLATIVE ASSEMBLY

### STATE ELECTORAL DISTRICTS

- |                   |                  |                     |
|-------------------|------------------|---------------------|
| 1. Brunswick East | 23. Balwyn       | 45. Geelong         |
| 2. Fitzroy        | 24. Kew          | 46. Geelong West    |
| 3. Melbourne      | 25. Camberwell   | 47. Ballaarat South |
| 4. Flemington     | 26. Burwood      | 48. Ballaarat North |
| 5. Brunswick West | 27. Malvern      | 49. Midlands        |
| 6. Coburg         | 28. Caulfield    | 50. Bendigo         |
| 7. Northcote      | 29. Oakleigh     | 51. Benalla         |
| 8. Ivanhoe        | 30. Ormond       | 52. Benambra        |
| 9. Richmond       | 31. Elsternwick  | 53. Gippsland East  |
| 10. Hawthorn      | 32. Brighton     | 54. Gippsland South |
| 11. Toorak        | 33. Moorabbin    | 55. Morwell         |
| 12. Prahran       | 34. Sandringham  | 56. Gippsland West  |
| 13. St. Kilda     | 35. Grant        | 57. Polwarth        |
| 14. Ripponlea     | 36. Broadmeadows | 58. Hampden         |
| 15. Albert Park   | 37. Evelyn       | 59. Portland        |
| 16. Williamstown  | 38. Box Hill     | 60. Dundas          |
| 17. Yarraville    | 39. Ringwood     | 61. Lowan           |
| 18. Footscray     | 40. Scoresby     | 62. Kara Kara       |
| 19. Moonee Ponds  | 41. Mulgrave     | 63. Mildura         |
| 20. Essendon      | 42. Dandenong    | 64. Swan Hill       |
| 21. Reservoir     | 43. Mentone      | 65. Rodney          |
| 22. Preston       | 44. Mornington   | 66. Murray Valley   |

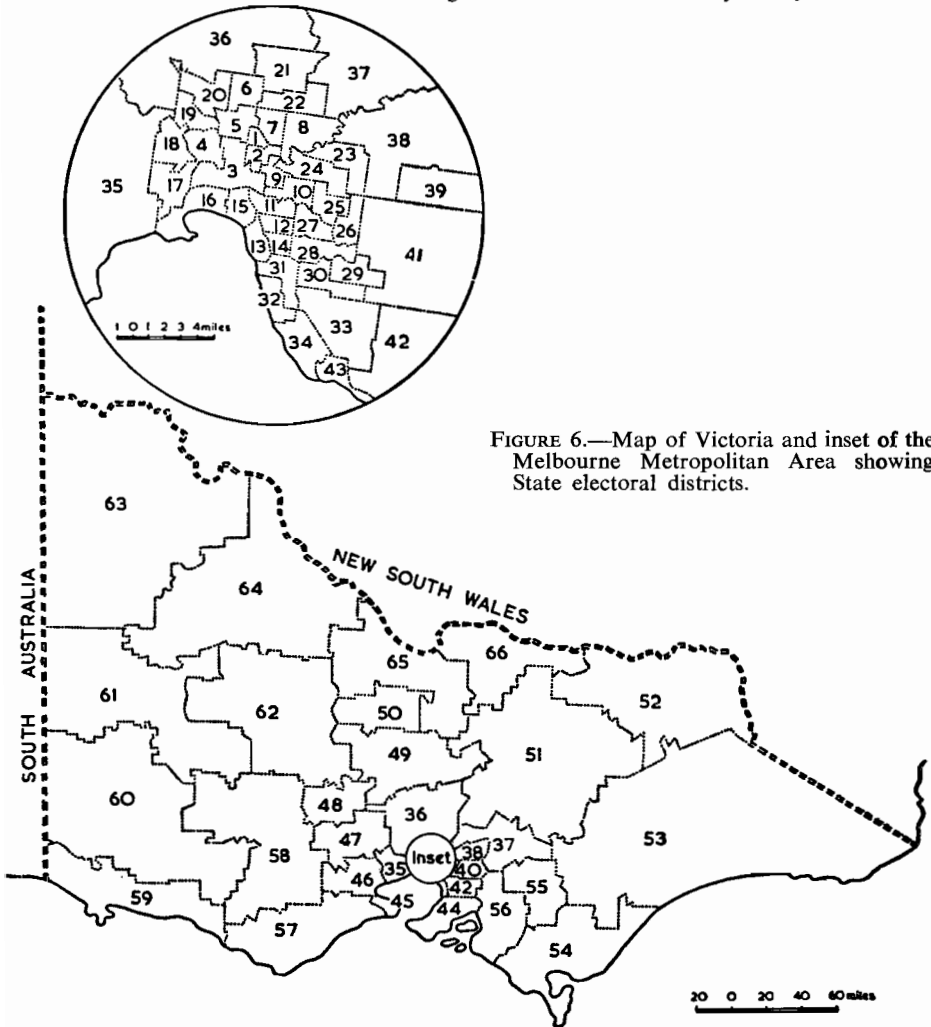


FIGURE 6.—Map of Victoria and inset of the Melbourne Metropolitan Area showing State electoral districts.

*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 naturalized subject of the Queen and who has resided in Australia for six months continuously, and in Victoria for at least three months. 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 Federal 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 297 common Subdivisions, which form the basic units for enrolment on the joint Commonwealth–State of Victoria rolls.

*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 1st 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

Year Ended 30th June—						Number of Electors Enrolled
1958	..	..	..	..	..	1,503,434
1959	..	..	..	..	..	1,506,476
1960	..	..	..	..	..	1,522,481
1961	..	..	..	..	..	1,554,856
1962	..	..	..	..	..	1,588,633

*Voting Features at 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 and are within any part of Australia, or in Great Britain, or New Zealand, 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, &c.) indicating his relative degree of preference being written opposite the names of the other candidates. Where an elector has indicated his order of preference for all candidates except one, he is thought 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 no candidate has an absolute majority, the candidate with the fewest first preference votes is declared defeated and his second preferences distributed to the various continuing or unexcluded candidates to whom they refer.

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, the candidate next elected holds his seat for three years.

### Parliamentary Elections

#### *Legislative Assembly*

At the Legislative Assembly election of 15th July, 1961, there were contests in all of the 66 Electoral Districts and in 65 of them there were more than two candidates engaged.

In 32 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 34 contests, the leading candidate, on the first count, was elected in 21 instances but was defeated in the remaining thirteen instances.

The following table shows the voting in general elections held for the Legislative Assembly since 1927 :—

VICTORIA—VOTING AT GENERAL ELECTIONS FOR THE LEGISLATIVE ASSEMBLY

Year of Election	Whole State		Contested Electorates			
	Electors Enrolled	Electors Enrolled	Votes Recorded		Informal Votes	
			Number	Percentage of Voters	Number	Percentage of Total Votes Recorded
1927 ..	993,211	850,494	780,399	91·76	15,125	1·94
1929 ..	1,029,170	682,190	639,368	93·72	6,934	1·08
1932 ..	1,055,301	729,332	687,042	94·20	9,663	1·41
1935 ..	1,099,251	904,191	853,470	94·39	14,150	1·66
1937 ..	1,136,596	848,680	797,430	93·96	10,938	1·37
1940 ..	1,162,967	841,864	786,359	93·41	12,287	1·56
1943 ..	1,261,630	1,015,750	883,679	87·00	22,876	2·59
1945 ..	1,276,949	1,019,063	896,561	87·98	18,689	2·08
1947 ..	1,345,530	1,291,515	1,206,815	93·44	16,102	1·33
1950 ..	1,362,851	1,294,159	1,221,734	94·40	13,901	1·14
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

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 1927:—

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.		
1927 ..	65	26,500	57·7	993,211	15,280
1929 ..	65	27,300	58·0	1,029,170	15,833
1932 ..	65	27,800	58·4	1,055,301	16,235
1935 ..	65	28,250	59·8	1,099,251	16,912
1937 ..	65	28,550	61·2	1,136,596	17,486
1940 ..	65	28,950	61·8	1,162,967	17,892
1943 ..	65	30,300	64·0	1,261,630	19,410
1945 ..	65	30,900	63·5	1,276,949	19,645
1947 ..	65	31,700	65·3	1,345,530	20,700
1950 ..	65	33,800	62·1	1,362,851	20,967
1952 ..	65	36,300	59·4	1,402,705	21,580
1955 ..	66	38,100	56·6	1,422,588	21,554
1958 ..	66	41,300	54·2	1,478,065	22,395
1961 ..	66	44,398	53·1	1,554,856	23,558



*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 since that year for the Legislative Assembly is found on page 86 of the Victorian Year Book 1961.

*Legislative Council*

The Legislative Council consists of 34 members representing seven-teen Provinces. Voting in elections held for the Legislative Council since 1928 is shown in the next table. At the triennial election of 15th July, 1961, there were contests in all of the seventeen Provinces and in all of them there were more than two candidates engaged.

In six 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 eleven contests, the leading candidate, on the first count, was elected in nine instances but was defeated in the remaining two.

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
1928 ..	444,278	268,164	85,372	31·84	1,388	1·63
1931 ..	470,349	239,975	93,244	38·86	595	0·64
1934 ..	469,395	160,980	47,375	29·43	799	1·69
1937 ..	447,694	265,194	208,925	78·78*	3,055	1·46
1940 ..	471,843	235,784	178,666	75·78	2,823	1·58
1943 ..	465,637	117,584	83,568	71·07	2,135	2·55
1946 ..	517,719	393,907	291,295	73·95	5,912	2·03
1949 ..	550,472	384,188	299,111	77·86	4,272	1·43
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

\* The increase in the percentage of voters is accounted for by voting having been made compulsory for all resident electors by Act No. 4350, passed on 10th December, 1935.

† The increases in enrolments and percentages of voters are due to the operation of Act No. 5465, which was passed on 11th November, 1950, and abolished the former Legislative Council ratepayers and general rolls. Instead, every person enrolled for Legislative Assembly purposes became automatically entitled and required to vote at Legislative Council elections.

### Parliamentary By-elections

The following are details of by-elections held between the General Elections in 1961 and 4th August, 1962 :—

#### Legislative Assembly—

12th May, 1962 : Mr. A. C. Holding was elected for Richmond Electoral District.

4th August, 1962 : Mr. J. T. Wilton was elected for Broadmeadows Electoral District.

### Further References

Chief Electoral Officer for Victoria—*Various Publications Giving Detailed Statistics of State Elections.*

Department of Political Science, University of Melbourne—*The Government of Victoria* (1958).

### Victorian Members of the Federal Parliament

The following are the Senators elected for Victoria sitting in the Senate as at August, 1962 :—

Breen, Marie Freda  
 Cohen, Samuel Herbert  
 Cormack, Magnus Cameron  
 Gorton, The Hon. John Grey  
 Hannan, George Conrad  
 Hendrickson, Albion  
 Kennelly, The Hon. Patrick John  
 Sandford, Charles Walter  
 Wade, Harrie Walter  
 Wedgwood, Ivy Evelyn

The Victorian Members in the House of Representatives and the electorates they represent as at August, 1962, are shown below :—

Member	Constituency*
Beaton, Noel Lawrence .. .. .	Bendigo
Bryant, Gordon Munro .. .. .	Wills
Buchanan, Alexander Andrew .. .. .	McMillan
Cairns, James Ford .. .. .	Yarra
Calwell, The Hon. Arthur Augustus .. .. .	Melbourne
Chipp, Donald Leslie .. .. .	Higinbotham
Courtney, Frank .. .. .	Darebin
Crean, Frank .. .. .	Melbourne Ports
Davis, Francis John .. .. .	Deakin
Erwin, George Dudley .. .. .	Ballaarat
Fox, Edmund Maxwell Cameron .. .. .	Henty
Fraser, John Malcolm .. .. .	Wannon
Haworth, The Hon. William Crawford .. .. .	Isaacs
Holt, The Rt. Hon. Harold Edward .. .. .	Higgins
Holten, Rendle McNeilage .. .. .	Indi

VICTORIAN MEMBERS IN THE HOUSE OF REPRESENTATIVES—*continued*

Member	Constituency*
Howson, Peter .. .. .	Fawkner
Jess, John David .. .. .	La Trobe
Kent Hughes, The Hon. Sir Wilfred Selwyn, K.B.E., M.V.O., M.C., E.D.	Chisholm
King, Robert Shannon .. .. .	Wimmera
Lindsay, Robert William Ludovic .. .. .	Flinders
Mackinnon, Ewen Daniel .. .. .	Corangamite
McEwen, The Rt. Hon. John .. .. .	Murray
McIvor, Hector James .. .. .	Gellibrand
Menzies, The Rt. Hon. Robert Gordon, C.H., Q.C. .. .. .	Kooyong
Nixon, Peter James .. .. .	Gippsland
Opperman, The Hon. Hubert Ferdinand, O.B.E. .. .. .	Corio
Peters, Edward William .. .. .	Scullin
Pollard, The Hon. Reginald Thomas .. .. .	Lalor
Snedden, Billy Mackie .. .. .	Bruce
Stokes, Philip William Clifford, E.D. .. .. .	Maribyrnong
Turnbull, Winton George .. .. .	Mallee
Whittorn, Raymond Harold .. .. .	Balaclava
†Vacant .. .. .	Batman

\* The population as disclosed by the Census taken on 30th June, 1961 necessitated further representational changes, Victorian representation becoming 34. The necessary redistribution of boundaries to bring these into effect has not yet been made.

† Bird, Alan Charles, deceased 21st July, 1962. Benson, Samuel James, elected on 1st September, 1962.

*Agent-General for Victoria*

The State of Victoria maintains an Agent-General's Office in London. As official representative of the State, it is the function of the Agent-General to work in close co-operation with the High Commissioner for Australia, to keep the Government informed of political and economic developments overseas, to promote trade with Britain and other countries, and to act as agent for the State in Britain.

*Victorian Government Departments*

Government administration in Victoria is carried on through a variety of administrative agencies. The Government departments proper and the large statutory corporations administer most of the governmental activities, and there are also small regulatory or advisory bodies or committees set up under statute for specific limited purposes.

**Departments**

The central administration of the State is carried on by fifteen departments. These are the instruments of ministerial action and legislative enactment is generally not required to establish, abolish or re-organize a department, although this is sometimes the method used.

All but three of the departments are organized on a functional basis, that is, all their activities are related in some way to a general function; but the Premier's Department, Chief Secretary's Department, and the Treasury are heterogeneous units comprising a wide variety of dissimilar activities.

The following is a list of departments :—

#### PREMIER'S DEPARTMENT

*Minister* : The Premier.

*Permanent Head* : Secretary to the Premier's Department.

Within the Department some responsibility is delegated by the Premier to other Ministers.

The Department embraces within its organization the Office of the Governor and the Executive Council. It is also responsible for the administration of, and for governmental contact with, the Office of the Agent-General in London. The functions performed by the Department extend over the whole area of the State and are administrative, regulatory, planning, developmental, and educational in character.

*Premier's Office*—Acts as a channel of communication with the British Government, the Commonwealth Government, and all other State Governments.

*Audit Office*—Audits the Treasurer's accounts ; reports to Parliament on the Treasurer's Accounts and Annual Statement ; audits accounts and stores of certain statutory bodies.

*Agent-General's Office, London.*

*Office of the Executive Council and Office of the Governor.*

*State Development Division*—Provides the administrative organizations for the Central Planning Authority, the Decentralization Division, and the Latrobe Valley Development Advisory Committee.

*State Film Centre*—Prepares documentary, educational, and historical films.

*Public Service Board Office*—Responsible for personnel administration of the Public Service and the promotion of efficiency in the working of departments.

#### TREASURY

*Minister* : The Treasurer.

*Permanent Head* : Director of Finance.

The Treasury is the State's central department of financial administration and control, and its prime functions relate to the raising of revenue and the control over governmental expenditure within the ambit of Parliamentary authority. The Treasury co-ordinates government policy in so far as that policy has a financial aspect.

The Department administers a number of branches :—

*State Taxation Office*—Collection of revenue as Land Tax, Probate Duties, and Entertainments Tax.

*Stamps Office*—Sale of duty Stamps ; assessment and collection of duty on taxable documents ; collection of betting tax.

*Registry of Co-operative Housing Societies*—Registration and supervision of societies.

*Registry of Co-operative Societies.*

*Registry of Estate Agents and Money Lenders.*

*Government Printing Office*—Printing and publication of Hansard, Bills, Acts, Regulations, and general printing for departments.

*State Tender Board*—Co-ordination of purchase of stores and materials.

*State Superannuation Board*—Administration of superannuation and pensions schemes for the public service, teaching service, railways, and certain authorities.

*Housing Commission*—Administration of funds provided by the Commonwealth under Commonwealth—State Housing Agreements. Responsibility for housing schemes, slum reclamation, &c.

#### CHIEF SECRETARY'S DEPARTMENT

*Minister* : Chief Secretary.

*Permanent Head* : Under Secretary.

The Chief Secretary's Department performs a multitude of diverse activities connected with the government of the State. It is the direct descendant of the first office of government established in the Colony of Victoria (see pages 100 to 104). Originally it performed almost all the functions of government, but over the years other departments have been created to undertake specific functions and the Chief Secretary's Department has been left with the residue. It has also from time to time acquired other functions in response to governmental needs.

The various branches are :—

Electoral Branch ; Explosives ; Fisheries and Wildlife ; Government Statist ; Police (including Motor Registration) ; Government Shorthand Writer ; Social Welfare (comprising Family Welfare, Youth Welfare, Training, Prisons, Probation and Parole, and Research and Statistics divisions) ; State Immigration ; State Insurance ; State Library, National Gallery, National Museum, and Institute of Applied Science ; Weights and Measures.

Other departmental functions are film censorship, racecourse licensing, totalizator inspection, declaration of public holidays, &c. The Department also provides administrative services for the Traffic Commission, Victorian Licensing Court, and Aborigines' Board.

#### LAW DEPARTMENT

*Minister* : Attorney-General.

*Permanent Head* : Secretary to Law Department.

The substantial function of the Department is concerned with the administration of Justice in the various State Courts. But there are branches in the Department whose functions and activities are not directly associated with the Courts (e.g., Titles Office and Public Trustee).

The following brief descriptions of the various branches indicate the scope and activities of the Department as a whole :—

*Solicitor-General*—The office of the Solicitor-General was established to act as legal adviser of the Attorney-General and of the Government.

*Titles Office and Registrar General's Office*—Is concerned with the registration of transfers of land, conveyances, and related documents.

*Companies Registration Office*—Maintains a register of companies and businesses in Victoria.

*Public Solicitor's Office*—Provides legal aid to poor persons committed for trial for indictable offences and may provide legal assistance in civil proceedings in the Supreme Court, County Court, and Workers Compensation Board.

*Crown Solicitor's Office*—Advises on all legal matters in which the Crown is involved and engages in litigation when necessary.

*Parliamentary Draftsman*—Drafts Parliamentary legislation and Regulations, and prepares consolidation of statutes.

*Courts Branch*—Comprises the administration of the Supreme Court, County Courts and General Sessions; Stipendiary Magistrates (Courts of Petty Sessions and Coroner's Courts); Special Magistrates of Children's Courts; and other officers appointed in the various jurisdictions.

*Court Reporting*—Takes a shorthand record of criminal proceedings in the Supreme Court and Court of General Sessions and of some Supreme Court civil proceedings.

*Public Trustee*—Administers estates of deceased persons committed to the Public Trustee and also estates of mental patients and infirm persons.

#### MINISTRY OF TRANSPORT

*Minister* : Minister of Transport.

*Permanent Head* : Co-ordinator of Transport.

This Department was established to secure the improvement, development and better co-ordination of railway, tramway, and road transport in Victoria.

The Department is also responsible for licensing of certain boats operating in Western Port Bay. As a matter of administrative arrangement, the Department has been allocated certain responsibilities associated with government motor vehicles, motorized plant, and stores.

#### DEPARTMENT OF AGRICULTURE

*Minister* : Minister of Agriculture.

*Permanent Head* : Director of Agriculture.

The functions of this Department can be grouped under three headings :—

*Regulatory*—Registration and inspection of dairy farms, dairies, factories producing butter, cheese and margarine; apiaries, fertilizers, insecticides, sheep dips, fungicides, agricultural lime, stock foods,

stock medicines and agricultural seeds ; inspection and quarantine of animals, plants and plant products imported from overseas ; inspection of dairy products, fruit and vegetables to maintain proper standards of quality ; inspection of orchards and the control of plant diseases and insect pests ; inspection of fruit submitted for export ; prevention and control of animal diseases.

*Research and Investigation*—Comprises research into field crops, pastures and soils, horticultural crops, livestock, plant diseases, and pests.

*Education, Advisory, and Extension Services*—Control of Dookie and Longerenong Agricultural Colleges and the School of Horticulture and Primary Agriculture, Burnley ; visits by departmental officers ; agricultural competitions ; farmers' field days ; farmers' classes ; lectures, demonstrations and films ; mobile dairy science unit ; publications and radio talks. The Department also administers the Government Cool Stores at Victoria Dock, Melbourne.

#### WATER SUPPLY DEPARTMENT

*Minister* : Minister of Water Supply.

*Permanent Head* : Chairman of the State Rivers and Water Supply Commission.

The functions of the Department are performed through a corporation called the State Rivers and Water Supply Commission.

The Department is required to carry out certain functions :—

*Miscellaneous*—Carries out surveys regarding the nature and extent of the water resources of the State ; prepares proposals for the construction of works of water supply ; arranges systematic gauging of stream flows, &c. ; instructs irrigators in irrigated culture and utilization of water.

*Construction*—Carries out works of water supply, drainage, flood protection, and river improvement.

*Supervision of Local River Improvement, Water, Sewerage, &c. Authorities*—Supervises rates, finance, and construction projects of water trusts and sewerage authorities.

*Control of Natural Waters.*

*Advisory Functions*—Advises the Minister and Governor in Council on matters relating to irrigation districts, waterworks, drainage, and flood districts ; grants licences to divert water or leasing of pump sites.

*Regulatory Functions*—Makes and levies rates ; fixes scales of charges and fees ; and makes by-laws for urban districts.

#### MINES DEPARTMENT

*Minister* : Minister of Mines.

*Permanent Head* : Secretary for Mines.

The Department is responsible for investigation of the State's geological structure, mineral wealth, and underground water resources ; the provision of technical services and information to the mining industry ; supervision of the safe working of mines and quarries ; the licensing of mining activity ; and the administration of financial assistance to the mining industry.

*Geological Branch*—Carries out the exploratory work designed to locate deposits of the valuable minerals required in modern technology. The Branch also carries out coal investigations, oil research, and mining geology and does specialized work on fossils and similar scientific tasks. Assistance and advice are provided for public works.

*Mining Inspection Branch*—Is responsible for the safe working of mines and quarries throughout the State and for the examination of the electrical installations at all mines.

*Drilling Branch*—Carries out comprehensive exploratory programmes in connexion with the development of mineral resources and the finding of underground water. This work complements the surface surveys by the Geological Branch.

*Boiler Inspection Branch*—Ensures the correct and safe design and the proper care and maintenance of boilers and other pressure vessels in the State.

*Laboratory Branch*—Assays metalliferous and auriferous ores, analyses coals, fire-tests clays, classifies rocks and minerals, and analyses mine air.

#### EDUCATION DEPARTMENT

*Minister* : Minister of Education.

*Permanent Head* : Director of Education.

The function of the Education Department is to ensure that all children between the ages of six and fourteen years receive efficient and regular instruction in general educational subjects and to provide higher education for children over fourteen years of age. The planning of State education is the responsibility of the Director of Education. The Teaching Service provides the teachers for all State Schools, the Education Department being responsible for the general administration, including the provision and maintenance of school buildings, furniture and equipment, the payment of teachers' salaries, housing of teachers, transport of children to schools in country areas, awarding scholarships and teaching bursaries, and other general administrative functions.

Details of all aspects of education within the State are treated on pages 191 to 202 of this Year Book.

#### PUBLIC WORKS DEPARTMENT

*Minister* : Commissioner of Public Works.

*Permanent Head* : Secretary for Public Works.

The Department's activities relate mainly to the construction, maintenance, and supply of premises for the departments, agencies, and governmental institutions, and also of schools. Although the expenditure involved in the purchase of land and the construction, maintenance, and furnishing of premises is included in the estimates and accounts of the various departments, the actual responsibility for the purchase of land, plans and specifications, construction, maintenance and furnishing of buildings, lies with the Department.



The Department is also responsible for shore protection works on the Victorian coast and the construction and maintenance of all Victorian ports, except the Ports of Melbourne, Geelong, and Portland.

#### DEPARTMENT OF CROWN LANDS AND SURVEY

*Minister* : Commissioner of Crown Lands and Survey.

*Permanent Head* : Secretary for Lands.

This Department is responsible for the disposal, in various forms of tenure, of Crown lands for agricultural and pastoral purposes and survey work in connexion therewith ; the destruction of vermin and the eradication of noxious weeds ; the co-ordination of all survey work undertaken in the State and the compilation of comprehensive maps of the State ; and the provision of reserves of Crown land for recreational and other purposes. It is also responsible for the control and maintenance of the Royal Botanic Gardens and the National Herbarium, Melbourne.

#### DEPARTMENT OF LABOUR AND INDUSTRY

*Minister* : Minister of Labour and Industry.

*Permanent Head* : Secretary for Labour and Industry.

The main functions of the Department are concerned with conditions of employment generally, including wages, hours of work, rest periods, and holidays ; the employment of women, children and young persons, including vocational guidance and training and apprenticeship ; industrial safety, health, and welfare, including the control of dangerous methods and materials, the guarding of machinery, the prevention of accidents, the control and regulation of the industrial aspects of various trades, industrial lighting, ventilation, and the provision of amenities ; industrial relations including the prevention and settlement of industrial disputes ; training within industry ; and statistical research in the industrial field.

These functions are performed by the Wages Board Branch, Apprenticeship Commission Branch, Factories and Shops Inspectorate, and the Industrial Branch.

#### LOCAL GOVERNMENT DEPARTMENT

*Minister* : Minister for Local Government.

*Permanent Head* : Secretary for Local Government.

Prior to the Department's establishment in 1958, the supervision of local government activities was the responsibility of a branch of the Public Works Department. The Department is responsible for supervision of the administration by municipalities of the Local Government Act and related Acts, and the oversight of Government funds allocated to assist municipalities with certain construction works (e.g., recreational facilities, swimming pools, and public halls in country areas).

The Valuer-General's Office whose major function is to co-ordinate valuations made for councils and other rating authorities is included in this Department.

#### STATE FORESTS DEPARTMENT

*Minister* : Minister of Forests.

*Permanent Head* : Chairman of the Forests Commission.

The *Forests Act* 1958 provides for the formation of a Forests Commission of three Commissioners.

The Department is responsible for the protection, conservation, and development of the indigenous forests and the establishment and maintenance of an adequate area of softwoods. It provides forest road systems; develops silvicultural techniques to ensure natural regeneration of indigenous forests and improvement of production potential; organizes fire protection; secures permanent timber reserves; establishes and maintains coniferous plantations; and encourages establishment of new industries, particularly in the pulping and hardboard manufacturing field.

#### DEPARTMENT OF HEALTH

*Minister* : Minister of Health.

*Permanent Head* : Secretary to the Department of Health.

The Department of Health is required to take all such steps as may be desirable to secure the preparation, implementation, and co-ordination of measures conducive to the health of the people, including measures for the prevention and cure of diseases and the avoidance of fraud in connexion with alleged remedies; the treatment of physical defects and mental diseases and disorders; the training of persons for health services; the control, care, and treatment of mental defectives and epileptics; and the initiation and direction of research and the collection, preparation, publication, and dissemination of information and statistics relating to any of these matters.

These functions are carried out by the General Health, Mental Hygiene, Maternal and Child Welfare, and Tuberculosis Branches.

#### **Victorian Government Instrumentalities**

An article dealing with Victorian Governmental Instrumentalities will be found on pages 102 to 110 of the Victorian Year Book 1962.

#### **History of State Government Departments**

It is intended to present, in this and succeeding issues of the Victorian Year Book, short but comprehensive histories of the State Government Departments. The following article, being the first of this series, deals with the historical development of the Chief Secretary's Department.

### **Chief Secretary's Department**

#### *Introduction*

The Department of the Chief Secretary is the oldest and most historic of the departments of the Victorian Public Service. It traces its ancestry to the instructions given to Captain William Lonsdale by Governor Bourke in September, 1836, when a proclamation was issued authorizing a settlement at Port Phillip under Crown Lands regulations then in force in other parts of the Colony of New South Wales and appointing Lonsdale as Police Magistrate of the new district.

Today, the Department of the Chief Secretary is an omnibus department comprising the Chief Secretary's Office and fourteen branches with the Chief Secretary as Minister and the Under Secretary as Permanent Head. The main reason for this diversity of interests is no doubt due to the fact that the Department is the direct descendant of the first office of government established in the Colony of Victoria from which it inherited practically all the functions of government in use at that time. Over the years, various other departments have been created to undertake specific functions, leaving the Chief Secretary's Department with the residue.

#### *Early History*

When the Port Phillip District was first settled in 1835, it was part of the Colony of New South Wales. At that time New South Wales was governed under the provisions of the Act of 1828 by virtue of which the Governor was assisted by a wholly nominated council. Between the years 1828 and 1842, there was no change in this form of administration though agitation for alterations arose not only in Sydney but also in the Port Phillip District. A major grievance was over the appropriation of that portion of the Land Sales revenue which was derived from the Port Phillip District, but used mainly to meet labour needs in connexion with Sydney. This was aggravated by the fact that the colonists of Port Phillip were also suffering from a scarcity of labour. A strong desire was created among the colonists of Port Phillip to sever connexion with New South Wales and secure a Government of their own in order to remedy grievances and administer affairs locally.

On the 28th April, 1842, a Port Phillip petition "for a Local Government independent of the Government of New South Wales and for a Representative Legislature" reached the House of Commons, but the 1842 Act for the Government of New South Wales and Van Diemen's Land did not give what the petition had asked for—neither separation, nor "responsible government", nor "a free and extended representation".

In 1848, La Trobe declared to Governor Fitzroy that any form of Constitution which would take the government out of the hands of the Governor, Executive and Nominee Council, and substitute, for the last named, a representative body would be ill-suited for its real state and position and would render the administration of its government an exceedingly difficult and responsible task. Fitzroy agreed that it was inexpedient to erect Port Phillip into a separate

colony and grant it a representative legislature, but the British Parliament acting on the advice of the Committee for Trade and Foreign Plantations passed an "Act for the Better Government of Her Majesty's Australian Colonies" in 1850. This not only erected Port Phillip into what was now called the Colony of Victoria, in honour of Queen Victoria, but also conferred on the new colony a Constitution similar to that which had existed for New South Wales since 1842. A most noteworthy section of the 1850 Act was section 32 which made it lawful for the Colonies to alter their constitution subject to the consent of Her Majesty in Council.

By a despatch dated 14th September, 1850, Superintendent La Trobe, who had been at the head of the Port Phillip administration since 1839, was appointed the first Lieutenant-Governor of the new Colony of Victoria. With separation, the Office of Superintendent went out of existence and the Colonial Secretary became its administrative successor. Appointed by the Crown, he was the senior executive official under the Lieutenant-Governor to whom he was responsible and he was also a nominee member of the Legislative Council. William Lonsdale was appointed as the first Colonial Secretary for Victoria. The same proclamation that appointed La Trobe as Lieutenant-Governor appointed holders of particular offices members of the new Executive Council (the Crown Prosecutor or the Principal Law Officer of the Crown, the Sub-Treasurer or Treasurer . . . the Collector of Customs or the official officer of customs). Provisional appointments were made by the Lieutenant-Governor to new Government positions and appointments in the old positions confirmed and an Electoral Act passed to enable the permanent execution of the 1850 Act.

### *Colonial Secretary's Office*

The Office of Colonial Secretary, the Chief Executive position, was the focal point of the new administration. The power to govern in Victoria, being delegated by the throne to the Lieutenant-Governor lay in him as the source of authority enabling all executive business of Government. The direct instrument in the process was the Colonial Secretary through whom the Lieutenant-Governor's instructions were received and acted upon by the other executive officers.

Conversely, from the part elective nature of the Government, the Colonial Secretary, as senior member of the Council formed the medium of communication between the advisory Executive Council and the Lieutenant-Governor. Similarly, on the practical level, heads of departments, if asked, could advise the Lieutenant-Governor through the Colonial Secretary on matters where their experience was greater, although final authorization on all questions rested with him.

From separation until the introduction of Parliamentary Government, the entire business of Victoria was conducted directly or indirectly through the Colonial Secretary's Office. All Government business received direction from the Colonial Secretary's Office. It was impossible for a head of a department to act independently, or have direct communication with another except through the Colonial

Secretary. Down the scale, no subordinate officer might communicate with the Colonial Secretary except through the head of his department. Again, subject to advice, if accepted, the decision of the Lieutenant-Governor was the final one. In addition to the administrative business of each department, the Colonial Secretary, on the Lieutenant-Governor's behalf, controlled the housekeeping business of government such as finance and the appointment of civil service officers. In the case of finance, communications could be made directly to the Auditor-General (concerning accounts on Government) and the Colonial Storekeeper (for requisitions). Here again authorization was necessary and duplicates were required to be forwarded to the Colonial Secretary for authorization by the Lieutenant-Governor.

### *Chief Secretary's Office*

During the period 1851-55, a rapid approximation to a Parliamentary system was taking place so that the formal introduction of responsible government in 1855 was more the removal of hindrances to control than a new condition attained without antecedent; for example, under the 1850 Act, the Home Government retained control over Crown Lands and the colonial revenues, but in 1852, due to forceful protests in New South Wales and Victoria, the Imperial Government agreed to cede control of the two matters to the Colonial legislatures. Formal change was made only after a preparatory stage of practice and experience which made the change to responsible government itself part of the development. However, in this period a representative of the Crown might rely on his Executive Council and take it into his confidence as did Lieutenant-Governor La Trobe, or he might, in a marked degree, withhold his confidence from it and act independently, as did Governor Hotham. La Trobe not only sought and acted upon the advice of the Executive Council, but also amicable relations existed between himself and that body. Governor Hotham, however, desired to become conversant with the financial and economic conditions of Victoria and to that end endeavoured to master those details of public business which usually devolved upon the heads of departments. He not only frequently rejected the advice of his Executive Councillors, but also at times sought counsel elsewhere and brought his policy to the Executive in a final form looking upon the members of that body as mere instruments to carry it out, if possible.

With the advent of responsible government, the title of Colonial Secretary, at the wish of the framers of the Constitution, was altered to that of Chief Secretary, who, together with other Heads of Departments, became Responsible Ministers in the new Government. In the main, the Chief Secretary, however, was the head of the Government until the introduction of the Office of Premier, and even then the positions of Chief Secretary and Premier, although two separate offices, were often held by the same person.

Prior to the 29th May, 1883, the Premier's Office was a branch of the Chief Secretary's Department as there was at that time no paid post of Premier. The Chief Secretary was regarded as the Prime, i.e., first Minister, but received only the salary for his portfolio

of Chief Secretary. No inconvenience was felt with this arrangement while the Chief Secretary held the dual role of Chief Secretary and Premier, but administrative difficulties were experienced when the latter position was held by another Minister such as the Treasurer or Attorney-General.

The foundation of the Premier's Department was based on a document prepared on 22nd March, 1883, by the then Secretary to the Premier, Mr. G. J. Thomas, who argued that the Chief Secretary's Department had heretofore comprised two distinct sets of functions—firstly, the administration of the departments constituting the Chief Secretary's Division of the Service as shown in the Estimates and secondly, the functions which fall to it as being the Department of the Prime Minister. These, it was further argued, though hitherto blended are really distinct in their nature, and, when the Minister of the Department is not Premier, their combination is inconvenient, inasmuch as the Premier finds that his special functions as Premier are located in the office of another Minister.

Classifying the functions as above, it was evident that what the Chief Secretary's Department really was, when the Chief Secretary was not Premier, was what in England was called the Home Department. Thus it embraced the internal economy of Government, excepting those departments which, being either technical or otherwise special, formed the domain of separate Ministers. The Chief Secretary, in this view, was really the Secretary for the Home Department, administering the Departments of Police, Gaols and Penal Establishments, Public Health, Hospitals for the Insane, Industrial and Reformatory Schools, the Scientific Department, Audit Office, &c., in fact the most varied and extensive division of the Public Service, including non-technical or specialized aspects. It was further argued that the functions of the Premier as such are quite distinct from these and consist of those in which he acts as Head of the Administration, and, perhaps, may be classed as follows: communicating with the Governor on behalf of the Ministry as a whole; as Head of the Government, representing it externally, e.g., to other colonies, other Governments, to the Agent-General, &c.; and dealing with matters submitted for counsel or ruling by other Ministers.

#### *Separation of Premier's Department*

As a result of these arguments, an Ordinance Order was passed on 29th May, 1883, which created a Premier's Department. This document stated that, because the Premier is very frequently not Chief Secretary, it is submitted to His Excellency the Governor in Council that that part of the business of the Chief Secretary's Office which especially appertains to the Head of the Administration be separated from the Chief Secretary's Office and attached to a distinct department, to be called the Premier's Department.

The Premier's Department dealt with correspondence with the other colonies, Governments and with the Governor, with any matters relating to the Public Service as a whole and any matters which

Ministers of other departments submitted to the Premier or Cabinet for ruling or counsel. It also issued Cabinet circulars and generally attended upon the Cabinet.

This re-organization of the Chief Secretary's and Premier's Department did not, however, quite settle the issues and the Premier's Department was abolished in 1894, becoming a branch of Chief Secretary's Department and subsequently in 1928, was transferred to the Treasury. In 1936, the Premier's Department was created for the second time.

#### *Chief Secretary's Department Today*

Today, the Chief Secretary's Office is the ministerial and administrative office of the Chief Secretary's Department. Heads of Branches are accountable through the Permanent Head of the Department to the responsible Minister of the Crown for the time being occupying the office of the Chief Secretary. The channel of communication for statutory bodies and corporations in matters in which they are accountable to the Minister, is the same.

It is the function of the Chief Secretary's Office to exercise general supervision of the activities of the several branches and to co-ordinate the policy of the Government of the day with the work of the whole Department. Co-ordination and supervision of functions require the giving of advice and directions and the approval of expenditure and proposed courses of action consistent with Governmental policy.

The Chief Secretary's Office administers the following Acts:— *Anzac Day Act* 1928 ; *Banks and Currency Act* 1928 (bank holidays); *Imperial Acts Application Act* (public entertainment on Sundays); *Libraries Act* 1960 ; *Motor Car Act* 1951, Part V. (legal and statistical aspects of third-party insurance); *Police Offences Act* 1957 (control of horse racing, trotting, and dog racing clubs) ; *Road Traffic Act* 1956 ; *Theatres Act* 1928, 1932 (licensing of theatres and censorship of films); *Totalizators Act* 1930–54 ; *Dog Races Act* 1954–5 ; and *Racing Act* 1957.

#### **Further References**

A full list of the branches and statutory bodies administered by the Department is set out on page 94 of this volume, and pages 102 to 110 of the Victorian Year Book 1962.

# Part 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 the 25th May, 1836, less than one year after the date of the arrival of John Batman (29th 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 875,412, on a base population of 2,054,701, in the fourteen years from 1947 to 1961.

The 1850's and the 1950's represent 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 oversea service, which were taken into account in population estimates during the First World War.

Since the Second World War, coinciding with the generally increased level of migration, natural increase has maintained a higher level than during the great economic depression of the late 1920's and early 1930's, but has not attained the yet higher levels characteristic of the earlier years of settlement.

The estimated population at the end of 1961 was 2,949,354.



### Census Populations to 1961

#### General

In the following table is given the census population of each Australian State from 1901 to 1961 :—

#### AUSTRALIA—CENSUS POPULATIONS OF STATES AND TERRITORIES

State or Territory	Population at Census of—						
	1901	1911	1921	1933	1947	1954	1961
New South Wales	1,354,846	1,646,734	2,100,371	2,600,847	2,984,838	3,423,529	3,917,013
Victoria .. ..	<b>1,201,070</b>	<b>1,315,551</b>	<b>1,531,280</b>	<b>1,820,261</b>	<b>2,054,701</b>	<b>2,452,341</b>	<b>2,930,113</b>
Queensland ..	498,129	605,813	755,972	947,534	1,106,415	1,318,259	1,518,828
South Australia ..	358,346	408,558	495,160	580,949	646,073	797,094	969,340
Western Australia	184,124	282,114	332,732	438,852	502,480	639,771	736,629
Tasmania ..	172,475	191,211	213,780	227,599	257,078	308,752	350,340
Northern Territory	4,811	3,310	3,867	4,850	10,868	16,469	27,095
Australian Capital Territory ..	..	1,714*	2,572	8,947	16,905	30,315	58,828
Australia ..	3,773,801	4,455,005	5,435,734	6,629,839	7,579,358	8,986,530	10,508,186

\* Part of New South Wales prior to 1911.

The populations of Australian capital cities at each Census, 1901 to 1961, are shown in the following table :—

#### AUSTRALIA—POPULATIONS OF CAPITAL CITIES

Metropolitan Area	Population at Census of—						
	1901	1911	1921	1933	1947	1954	1961
Sydney .. ..	481,830	629,503	899,059	1,235,267	1,484,004	1,863,161	2,183,388
Melbourne ..	496,079	593,237	782,979	991,934	1,226,409	1,524,111	1,911,895
Brisbane ..	119,428	139,480	209,946	299,748	402,030	502,320	621,550
Adelaide ..	162,261	189,646	255,375	312,619	382,454	483,508	587,957
Perth .. ..	66,832	106,792	154,873	207,440	272,528	348,647	420,133
Hobart .. ..	34,604	39,937	52,361	60,406	76,534	95,206	115,932
Canberra ..	..	..	..	7,325	15,156	28,277	56,449
Total ..	1,361,034	1,698,595	2,354,593	3,114,739	3,859,115	4,845,230	5,897,304
Percentage of Australia	36	38	43	47	51	54	56

NOTE : 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.

Sydney has been the most populous city in Australia since 1902.

The population of Victoria at each Census from 1861 to 1961, 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
1861 ..	538,628	461,283*	596.40*	327,605	281,403*	609.07*	211,023	179,880*	577.59*
1871 ..	730,198	191,570	35.57	400,266	72,661	22.18	329,932	118,909	56.35
1881 ..	861,566	131,368	17.99	451,623	51,357	12.83	409,943	80,011	24.25
1891 ..	1,140,088	278,522	32.33	598,222	146,599	32.46	541,866	131,923	32.18
1901 ..	1,201,070	60,982	5.35	603,720	5,498	0.92	597,350	55,484	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

\* Since 1851.

An analysis of intercensal increases in the population of Victoria between 1933 and 1961 is made in the following table :—

VICTORIA—ANALYSIS OF INTERCENSAL INCREASES IN POPULATION

Particulars	Intercensal Period		
	1933-1947	1947-1954	1954-1961
Population at Beginning of Period ..	1,820,261	2,054,701	2,452,341
Births .. .. .	482,413	350,696	423,811
Deaths .. .. .	290,153	157,955	167,391
Natural Increase .. ..	192,260	192,741	256,420
Net Recorded Migration ..	49,574	191,846	261,648
Total Recorded Increase .. ..	241,834	384,587	518,068
Intercensal Adjustment * .. ..	-7,394	13,053	-40,296
Population at End of Period ..	2,054,701	2,452,341	2,930,113

\* Adjustment of population on the basis of Census results.

Numbers and rates of natural increase in each State and Territory between 1911 and 1961 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									
1911-1920 ..	31,797	18,069	12,013	7,122	5,196	3,649	-- 12	30	77,864
1921-1930 ..	32,346	18,711	12,000	6,431	4,978	3,127	5	50	77,648
1931-1940* ..	22,159	10,811	9,880	3,716	4,396	2,438	32	138	53,570
1941-1950* ..	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									
1957.. ..	46,139	36,333	22,084	11,960	11,627	5,765	531	966	135,405
1958.. ..	47,695	37,644	22,417	12,304	11,177	5,860	591	1,093	138,781
1959.. ..	45,617	37,167	23,250	12,429	11,614	5,845	672	1,170	137,764
1960.. ..	46,953	39,478	22,843	13,162	11,229	6,183	643	1,371	141,862
1961.. ..	51,344	41,386	23,881	14,584	11,349	6,193	750	1,538	151,025

\* Excess of births over civilian deaths for period September, 1939, to June, 1947.

### 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									
1911-1920 ..	16·93	12·75	17·64	15·99	16·64	18·52	-- 3·10	12·95	15·77
1921-1930 ..	13·91	11·16	14·28	11·87	13·12	14·49	1·31	8·75†	12·97
1931-1940* ..	8·32	5·87	10·14	6·33	9·74	10·50	5·73	13·18†	7·92
1941-1950* ..	11·53	10·45	14·35	12·50	14·02	14·83	11·86	28·03†	12·04
1951-1960 ..	12·32	13·20	15·55	13·81	16·50	17·23	26·49	26·63†	13·71
ANNUAL TOTALS									
1957.. ..	12·73	13·68	15·68	13·68	16·91	17·55	25·75	25·42	14·05
1958.. ..	12·90	13·85	15·61	13·72	15·97	17·47	27·18	26·59	14·10
1959.. ..	12·12	13·35	15·88	13·49	16·32	17·12	28·45	25·10	13·70
1960.. ..	12·25	13·82	15·32	13·93	15·53	17·82	25·61	26·08	13·81
1961.. ..	13·11	14·14	15·76	15·04	15·39	17·51	28·38	26·16	14·38

\* Excess of births over civilian deaths for period September, 1939, to June, 1947.

† Rates affected by special local features.

Numerical and percentage changes in the age of the population in age groups for each intercensal period from 1947 to 1961 are given in the following table. A diagrammatic representation of the changes in age distribution, based on the Censuses of 1933 to 1961, is set out on pages 110-111.

VICTORIA—AGES OF THE POPULATION : INTERCENSAL INCREASES, 1947 TO 1961

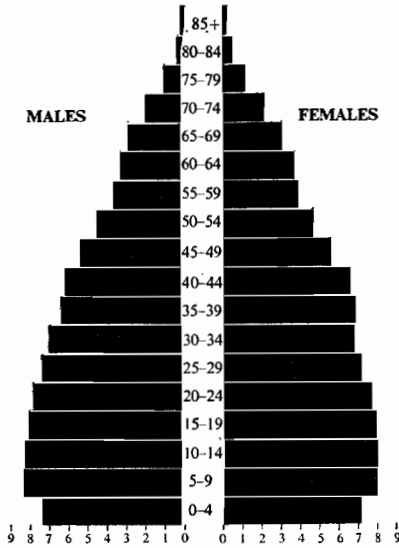
Age Group (Years)	Population at Census			Increase 1947-1954		Increase 1954-1961	
	1947	1954	1961	No.	%	No.	%
0-4 ..	197,239	258,335	307,535	61,096	30.98	49,200	19.05
5-9 ..	154,111	238,857	288,757	84,746	54.99	49,900	20.89
10-14 ..	135,393	180,807	277,848	45,414	33.54	97,041	53.67
15-19 ..	151,994	153,721	219,364	1,727	1.14	65,643	42.70
20-24 ..	165,883	160,930	195,076	-4,953	-2.99	34,146	21.22
25-29 ..	159,483	194,470	186,725	34,987	21.94	-7,745	-3.98
30-34 ..	160,325	195,595	209,543	35,270	22.00	13,948	7.13
35-39 ..	151,734	173,694	217,857	21,960	14.47	44,163	25.43
40-44 ..	139,302	172,584	187,624	33,282	23.89	15,040	8.71
45-49 ..	133,002	152,358	181,825	19,356	14.55	29,467	19.34
50-54 ..	122,875	137,512	158,847	14,637	11.91	21,335	15.52
55-59 ..	112,040	114,856	131,730	2,816	2.51	16,874	14.69
60-64 ..	89,379	108,442	115,030	19,063	21.33	6,588	6.08
65-69 ..	68,608	83,158	95,755	14,550	21.21	12,597	15.15
70-74 ..	49,523	58,227	73,620	8,704	17.58	15,393	26.44
75-79 ..	35,129	36,970	45,364	1,841	5.24	8,394	22.70
80-84 ..	19,569	20,454	24,232	885	4.52	3,778	18.47
85-89 ..	7,397	8,733	10,080	1,336	18.06	1,347	15.42
90-94 ..	1,505	2,346	2,809	841	55.88	463	19.74
95-99 ..	199	276	451	77	38.69	175	63.41
100 and over	11	16	41	5	45.45	25	156.25
Total ..	2,054,701	2,452,341	2,930,113	397,640	19.35	477,772	19.48
Under 21 ..	670,448	861,456	1,134,304	191,008	28.49	272,848	31.67
21-64 ..	1,202,312	1,380,705	1,543,457	178,393	14.84	162,752	11.79
65 and over	181,941	210,180	252,352	28,239	15.52	42,172	20.06

NOTE.—Recorded ages adjusted by distribution of unspecified ages.  
Minus sign (—) denotes decrease.

VICTORIA—POPULATION BY SEX

CENSUS 1933

(TEN THOUSANDS)



CENSUS 1954

(TEN THOUSANDS)

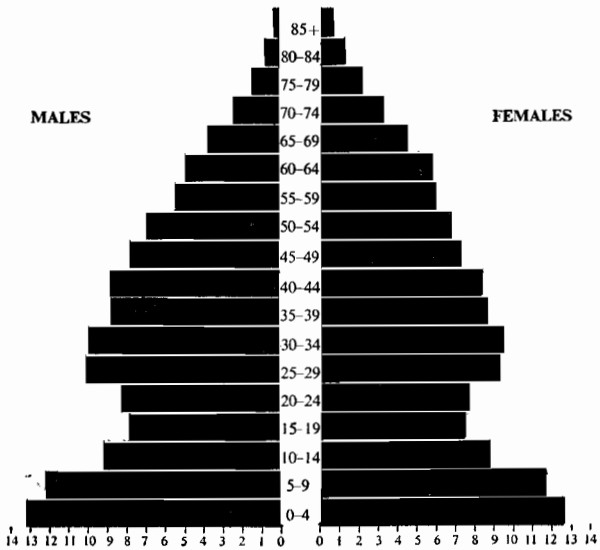
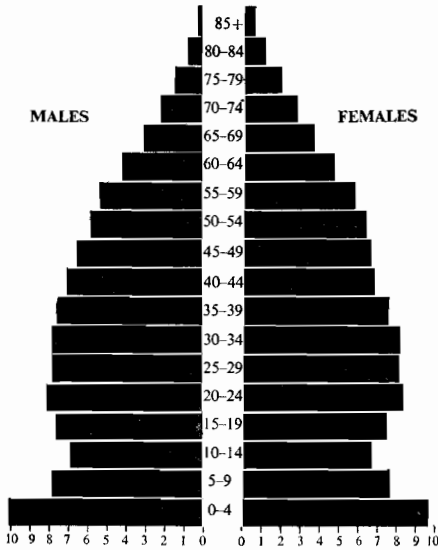


FIGURE 7.

AND FIVE YEAR AGE GROUP

CENSUS 1947  
(TEN THOUSANDS)



CENSUS 1961  
(TEN THOUSANDS)

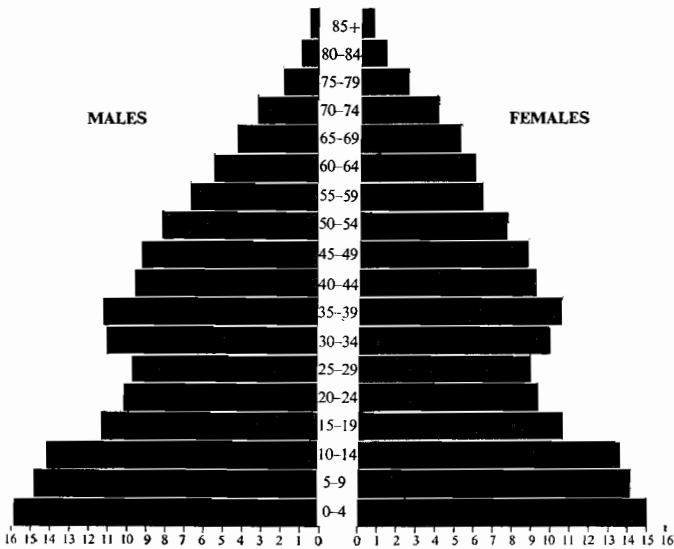


FIGURE 7—continued.

The ratio of males to females in age groups, at each Census from 1933 to 1961, is given in the following table :—

VICTORIA—MASCULINITY\* OF POPULATION IN AGE GROUPS†

Age Last Birthday (Years)	1933	1947	1954	1961
0-4 .. .. .	104·11	104·59	104·78	105·02
5-9 .. .. .	104·32	104·07	104·76	105·43
10-14 .. .. .	103·59	103·13	104·00	104·70
15-19 .. .. .	101·66	101·93	105·11	105·38
20-24 .. .. .	100·97	98·04	108·47	106·81
25-29 .. .. .	103·75	97·47	108·93	108·48
30-34 .. .. .	101·93	97·11	105·66	110·07
35-39 .. .. .	92·44	100·75	102·26	105·67
40-44 .. .. .	94·34	105·25	105·37	102·83
45-49 .. .. .	96·03	99·81	107·60	103·42
50-54 .. .. .	95·49	92·13	102·83	104·90
55-59 .. .. .	92·26	93·81	92·01	102·96
60-64 .. .. .	88·53	89·07	85·99	88·45
65-69 .. .. .	92·07	84·45	83·43	77·79
70-74 .. .. .	90·60	77·44	75·41	73·81
75-79 .. .. .	87·39	75·56	68·96	66·56
80-84 .. .. .	72·66	72·51	62·29	58·24
85-89 .. .. .	62·61	64·41	59·77	51·28
90-94 .. .. .	57·20	56·93	50·10	47·76
95-99 .. .. .	39·13	50·76	35·29	37·50
100 and over .. .. .	33·33	10·00	33·33	24·24
All Ages .. .. .	98·50	97·41	100·81	101·28

\* Number of males per 100 females.

† Recorded ages adjusted by distribution of unspecified ages.

Populations in statistical divisions at census dates from 1933 to 1961 are given in the following table :—

VICTORIA—POPULATION IN STATISTICAL DIVISIONS

Statistical Division	Census			
	1933	1947	1954	1961
Metropolitan* .. .. .	991,934	1,226,409	1,524,111	1,911,895
Central* .. .. .	212,573	230,118	209,447	239,057
North-Central .. .. .	58,860	54,780	67,741	63,039
Western .. .. .	158,374	159,368	180,051	198,022
Wimmera .. .. .	61,131	54,171	57,686	58,799
Mallee .. .. .	63,404	52,770	58,070	62,952
Northern .. .. .	128,766	121,674	139,893	156,364
North-Eastern .. .. .	59,736	60,160	78,770	86,325
Gippsland .. .. .	83,905	91,400	128,531	149,051
Migratory .. .. .	1,578	3,851	8,041	4,609
Total .. .. .	1,820,261	2,054,701	2,452,341	2,930,113

\* The Metropolitan Area was redefined and enlarged, with a corresponding reduction in the defined area of the Central Statistical Division, in 1947, 1954, and 1961.

*Population of the Melbourne Metropolitan Area and Remainder of the State*

In comparing metropolitan and extra-metropolitan populations, it should be remembered that the apparent size of the drift of population from country to city will be partly explained by the arbitrary redefinition of the Metropolitan Area, from time to time, as the metropolis expanded.

The more rapid rate of increase of metropolitan population was in evidence at an early stage of settlement, and, as indicated in the following table, the Census of 1921 showed that the population in the Metropolitan Area then exceeded that in the rest of the State :—

**VICTORIA—POPULATION OF VICTORIA, MELBOURNE  
METROPOLITAN AREA, AND REMAINDER OF THE  
STATE**

Date	Population				
	Victoria	Melbourne Metropolitan Area		Remainder of State	
		Number	Percentage of Victoria	Number	Percentage of Victoria
Census—					
1861 ..	538,628	139,916	25·98	398,712	74·02
1871 ..	730,198	206,780	28·32	523,418	71·68
1881 ..	861,566	282,947	32·84	578,619	67·16
1891 ..	1,140,088	490,896	43·06	649,192	56·94
1901 ..	1,201,070	496,079	41·30	704,991	58·70
1911 ..	1,315,551	593,237	45·09	722,314	54·91
1921 ..	1,531,280	782,979	51·13	748,301	48·87
1933 ..	1,820,261	991,934	54·49	828,327	45·51
1947 ..	2,054,701	1,226,409	59·69	828,292	40·31
1954 ..	2,452,341	1,524,111	62·15	928,230	37·85
1961 ..	2,930,113	1,911,895	65·25	1,018,218	34·75

**Census of 1961**

*It is important to note that all figures in this part giving results of the 1961 Census are subject to revision.*

The following tables show the geographical distribution and other characteristics of the population of Victoria as disclosed by the Census of 29th–30th June, 1961. To facilitate comparison, results from the Census of 1954 are also given in most cases.

The population of each statistical division in Victoria, enumerated at the Census of 1961, is shown in the following table :—

**VICTORIA—POPULATION OF STATISTICAL DIVISIONS,  
ACCORDING TO SEX, AT CENSUS OF 1961**

Statistical Division	Males	Females	Persons
Metropolitan .. .. .	949,719	962,176	1,911,895
Central .. .. .	123,026	116,031	239,057
North-Central .. .. .	32,229	30,810	63,039
Western .. .. .	99,662	98,360	198,022
Wimmera .. .. .	29,838	28,961	58,799
Mallee .. .. .	32,922	30,030	62,952
Northern .. .. .	79,537	76,827	156,364
North-Eastern .. .. .	45,620	40,705	86,325
Gippsland .. .. .	78,082	70,969	149,051
Migratory .. .. .	3,760	849	4,609
Total Victoria .. .. .	1,474,395	1,455,718	2,930,113

NOTE.—The boundary of the Metropolitan Division was re-defined as from 1st January, 1961.



The percentage of population in metropolitan, urban and rural areas and the masculinity of the population in each of these divisions of the State are shown in the following table :—

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

Area	Percentage of Population						Masculinity*	
	Census 1954			Census 1961			Census 1954	Census 1961
	Males	Females	Total	Males	Females	Total		
Metropolitan	60·8	63·6	62·1	64·4	66·1	65·2	96·31	98·71
Urban ..	18·9	19·4	19·2	19·4	19·7	19·6	98·36	99·47
Rural ..	19·8	16·9	18·4	15·9	14·1	15·0	118·17	114·51
Migratory ..	0·5	0·1	0·3	0·3	0·1	0·2	420·12	442·87
Victoria ..	100·0	100·0	100·0	100·0	100·0	100·0	100·81	101·28

\* Number of males per 100 females.

The following table shows the population and the number of dwellings in each of the municipalities of Victoria, by Statistical Division, at the Censuses of 30th June, 1954, and 30th June, 1961, together with the area at 30th June, 1961.

For the purpose of the Census, a "dwelling" is any habitation occupied by a household group living together as a domestic unit, 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.

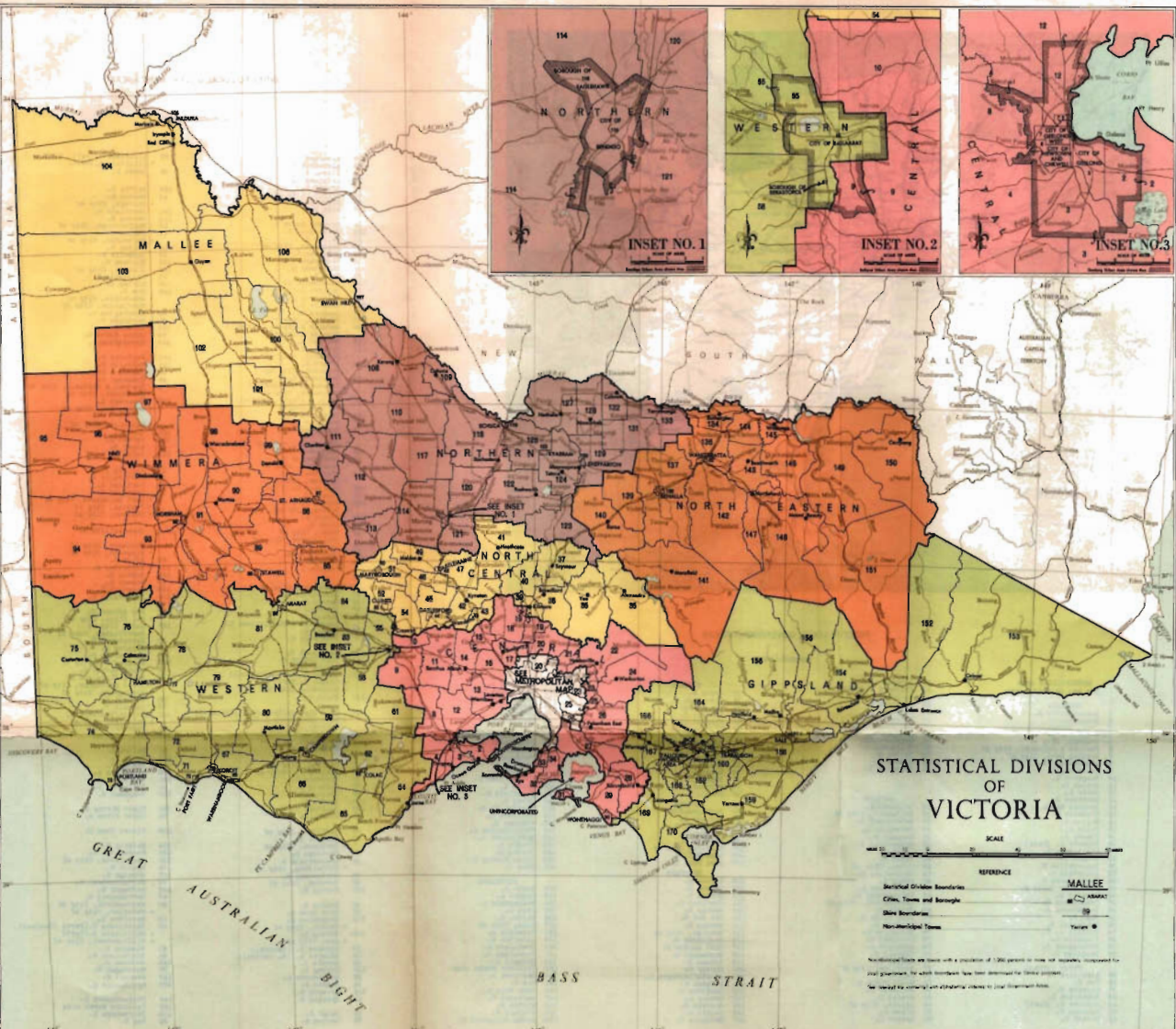
VICTORIA—POPULATION, DWELLINGS, AND AREA BY  
MUNICIPALITY

Municipality	Population		Occupied plus Unoccupied Dwellings		Area at 30.6.61  acres
	At 30.6.54 (Census)	At 30.6.61 (Census)	At 30.6.54 (Census)	At 30.6.61 (Census)	

MELBOURNE METROPOLITAN AREA\*

Altona Shire† ..	6,700	16,167	1,633	3,960	10,135
Berwick Shire (Part) ..	*	10,884	*	2,495	30,617
Box Hill City ..	35,554	50,412	9,795	13,847	5,309
Brighton City ..	40,458	41,302	12,157	12,788	3,380
Broadmeadows City‡	23,065	66,306	5,772	15,481	17,490
Brunswick City ..	53,620	53,093	14,754	14,848	2,625
Bulla Shire (Part)‡	†	581	†	103	14,540
Camberwell City ..	90,397	99,353	26,618	30,289	8,682
Caulfield City ..	75,217	74,859	22,941	23,998	5,431
Chelsea City ..	16,857	22,355	5,027	6,730	3,020
Coburg City ..	62,077	70,771	16,616	18,793	4,616
Collingwood City ..	27,155	25,413	7,387	6,990	1,180

For footnotes see page 121.



# STATISTICAL DIVISIONS OF VICTORIA



REFERENCE	
Statistical Division Boundaries	MALLEE
Cities, Towns and Boroughs	CITY OF MELBOURNE
State Boundaries	10
Non-incorporated Towns	Towns

Non-incorporated towns are those with a population of 1,000 persons or more and are included, except for local government, for which boundaries have been determined for the census purposes.  
 See legend for symbols and abbreviations relating to local government bodies.





VICTORIA—POPULATION, DWELLINGS, AND AREA—continued

Municipality	Population		Occupied plus Unoccupied Dwellings		Area at 30.6.61 acres
	At 30.6.54 (Census)	At 30.6.61 (Census)	At 30.6.54 (Census)	At 30.6.61 (Census)	
<b>MELBOURNE METROPOLITAN AREA*—continued</b>					
Croydon Shire§ .. ..	§	15,694	§	4,460	8,320
Dandenong City¶ .. ..	27,748	24,909	7,418	6,433	8,960
Doncaster and Templestowe Shire .. ..	6,814	19,061	1,958	5,453	22,090
Eltham Shire (Part)* .. ..	7,499	12,745	2,143	3,602	9,505
Essendon City .. ..	57,873	58,987	16,519	17,178	4,073
Fern Tree Gully Shire (Part)* .. ..	22,019	35,927	7,661	11,491	54,012
Fitzroy City .. ..	30,312	29,399	8,436	7,973	904
Footscray City .. ..	57,915	60,734	15,599	16,617	4,441
Frankston Shire   .. ..	15,478	26,722	5,036	8,222	17,460
Hawthorn City .. ..	37,188	36,707	11,731	12,500	2,411
Heidelberg City .. ..	60,007	86,430	15,350	22,002	30,490
Keilor City** .. ..	10,681	29,519	2,829	7,653	24,265
Kew City .. ..	31,518	33,341	8,642	9,441	3,596
Lillydale Shire (Part)§ .. ..	16,619	12,894	5,291	4,145	49,045
Malvern City .. ..	46,910	47,870	14,574	15,376	3,935
Melbourne City .. ..	93,172	76,810	22,800	19,711	7,765
Moorabbin City†† .. ..	65,332	95,669	17,777	25,825	12,655
Mordialloc City .. ..	21,025	26,526	5,876	7,555	3,013
Northcote City .. ..	43,604	44,746	12,473	13,364	2,819
Nunawading City .. ..	23,855	53,246	6,475	14,359	10,275
Oakleigh City†† .. ..	24,305	48,017	6,694	12,736	7,486
Port Melbourne City .. ..	13,104	12,370	3,501	3,399	2,628
Prahran City .. ..	54,009	52,554	18,468	19,259	2,361
Preston City .. ..	63,868	84,146	16,324	21,124	9,155
Richmond City .. ..	35,213	33,863	10,083	9,662	1,513
Ringwood City‡‡ .. ..	12,951	24,427	3,713	6,661	5,625
Sandringham City .. ..	31,758	37,001	9,152	10,910	3,700
South Melbourne City .. ..	37,995	32,528	11,564	9,878	2,203
Springvale City¶¶†† .. ..	¶	28,526	¶	7,439	24,000
St. Kilda City .. ..	53,301	52,205	18,102	19,668	2,118
Sunshine City .. ..	41,332	62,321	9,481	14,470	19,775
Waverley City†† .. ..	20,293	44,987	5,263	11,702	14,585
Whittlesea Shire (Part)*‡ .. ..	* ‡	8,912	* ‡	2,313	34,206
Williamstown City .. ..	29,313	30,606	8,014	8,538	3,377
<b>Total—Melbourne Metropolitan Area .. ..</b>	<b>1,524,111</b>	<b>1,911,895</b>	<b>431,647</b>	<b>541,441</b>	<b>519,791</b>

CENTRAL STATISTICAL DIVISION

Bacchus Marsh Shire .. ..	3,972	4,425	1,053	1,183	144,640
Ballan Shire .. ..	2,752	2,440	921	907	227,200
Bannockburn Shire .. ..	2,126	2,200	623	685	174,080
Barrabool Shire .. ..	1,917	2,344	959	1,517	146,560
Bass Shire .. ..	3,761	3,851	1,176	1,314	129,920
Bellarine Shire .. ..	7,015	10,127	2,280	3,587	81,920
Berwick Shire (Part)* .. ..	12,412	10,815	3,812	3,564	218,343
Broadmeadows Shire‡ .. ..	1,010	..	307	..	..
Bulla Shire (Part)‡§§ .. ..	3,232	4,243	488	831	89,779
Bungaree Shire .. ..	1,966	2,049	484	561	56,320
Buninyong Shire .. ..	3,953	4,313	1,107	1,236	192,000
Corio Shire .. ..	15,808	29,450	3,612	7,009	172,800
Cranbourne Shire .. ..	8,201	10,908	2,596	3,431	183,680

For footnotes see page 121.

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

Municipality	Population		Occupied plus Unoccupied Dwellings		Area at 30.6.61  acres
	At 30.6.54 (Census)	At 30.6.61 (Census)	At 30.6.54 (Census)	At 30.6.61 (Census)	
<b>CENTRAL STATISTICAL DIVISION—<i>continued</i></b>					
Eltham Shire (Part)*§§	3,942	3,830	1,394	1,331	64,736
Fern Tree Gully Shire (Part)*	3,427	1,660	1,483	826	20,871
Flinders Shire§§	12,072	10,512	6,405	8,731	80,000
Geelong City	20,034	18,019	5,263	5,336	3,322
Geelong West City	17,313	17,681	4,805	5,345	1,299
Gisborne Shire	2,122	2,145	750	812	64,000
Hastings Shire§§	2,622	6,883	826	2,367	71,680
Healesville Shire§§	5,168	6,068	1,550	1,968	248,960
Kilmore Shire (Part) (See North-Central Division)†§§	†§§	773	†§§	229	63,360
Korumburra Shire	7,386	7,813	1,962	2,142	151,680
Lillydale Shire (Part)*	4,488	5,390	1,613	1,814	49,197
Melton Shire*	1,424	1,804	424	505	111,298
Mornington Shire..	5,793	7,819	2,191	3,375	22,400
Newtown and Chilwell City§§	11,191	11,788	3,056	3,435	1,480
Phillip Island Shire	1,231	1,241	528	794	24,960
Queenscliffe Borough	2,551	2,659	1,002	1,281	2,099
Romsey Shire§§	2,813	2,636	842	879	152,960
South Barwon Shire§§	11,016	16,794	3,304	5,207	40,856
Upper Yarra Shire	6,952	5,692	1,995	1,916	391,680
Werribee Shire†	9,414	13,689	2,017	2,947	165,120
Whittlesea Shire (Part)*†	5,724	2,578	1,548	783	113,632
Wonthaggi Borough	4,461	4,190	1,327	1,335	13,088
Not Incorporated (French Is.)	178	228	39	47	41,600
<b>Total—Central Statistical Division</b>	<b>209,447</b>	<b>239,057</b>	<b>63,742</b>	<b>79,230</b>	<b>3,717,520</b>
<b>NORTH-CENTRAL STATISTICAL DIVISION</b>					
Alexandra Shire	6,523	4,545	1,533	1,555	462,080
Broadford Shire	1,939	2,076	580	589	144,640
Castlemaine Town	6,577	7,216	1,894	2,108	5,760
Clunes Borough	871	836	307	303	5,760
Creswick Shire	3,554	3,587	1,084	1,100	136,320
Daylesford Borough	3,216	2,776	1,019	1,067	4,013
Glenlyon Shire	2,273	1,869	853	814	146,560
Kilmore Shire (Part) (See Central Division)†§§	1,932	1,955	442	448	60,160
Kyneton Shire	6,063	5,979	1,958	2,022	179,200
Maldon Shire	2,030	2,008	737	715	138,240
Maryborough City§§	6,827	7,235	2,034	2,245	5,760
McIvor Shire§§	2,201	2,140	642	624	357,120
Metcalfe Shire	2,425	2,316	726	743	145,920
Newham and Woodend Shire	2,058	2,102	651	682	60,800
Newstead Shire	2,088	1,874	669	665	101,120
Pyalong Shire	483	456	144	141	149,120
Seymour Shire§§	11,596	9,254	1,963	2,285	234,656
Talbot Shire	803	742	293	276	126,080
Tullaroop Shire	1,416	1,376	430	433	157,440
Yea Shire§§	2,866	2,697	887	959	338,144
<b>Total—North-Central Statisti- cal Division</b>	<b>67,741</b>	<b>63,039</b>	<b>18,846</b>	<b>19,774</b>	<b>2,958,893</b>

For footnotes see page 121.

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

Municipality	Population		Occupied plus Unoccupied Dwellings		Area at 30.6.61
	At 30.6.54 (Census)	At 30.6.61 (Census)	At 30.6.54 (Census)	At 30.6.61 (Census)	
acres					
<b>WESTERN STATISTICAL DIVISION</b>					
Ararat City§§ .. ..	7,414	7,934	1,804	1,999	4,710
Ararat Shire§§ .. ..	4,659	4,600	1,323	1,333	903,629
Ballaarat City .. ..	39,945	41,037	11,218	11,850	8,550
Ballarat Shire .. ..	6,145	10,102	1,327	2,346	117,760
Belfast Shire .. ..	1,949	1,917	489	492	128,000
Camperdown Town§§ .. ..	3,205	3,446	906	1,010	3,591
Colac City§§ .. ..	8,032	9,252	2,164	2,545	2,688
Colac Shire .. ..	6,963	7,326	1,799	1,968	360,320
Dundas Shire§§ .. ..	3,903	4,072	1,038	1,165	856,064
Glenelg Shire .. ..	5,949	5,887	1,684	1,734	885,120
Grenville Shire .. ..	1,862	1,833	575	605	208,640
Hamilton City .. ..	8,507	9,495	2,273	2,641	5,351
Hampden Shire .. ..	8,781	9,176	2,384	2,545	647,040
Heytesbury Shire .. ..	6,464	7,281	1,632	1,846	381,440
Koroit Borough .. ..	1,401	1,466	350	365	5,696
Leigh Shire .. ..	1,096	1,460	334	386	242,560
Lexton Shire .. ..	1,350	1,443	393	398	202,880
Minhamite Shire .. ..	2,520	2,907	678	762	337,280
Mortlake Shire .. ..	4,060	4,627	1,088	1,201	528,000
Mount Rouse Shire .. ..	2,859	3,056	786	858	200,720
Otway Shire .. ..	4,197	3,970	1,204	1,317	435,840
Port Fairy Borough .. ..	2,265	2,426	683	813	5,683
Portland Town§§ .. ..	4,759	6,014	1,470	1,857	5,978
Portland Shire§§ .. ..	7,056	6,982	1,992	2,091	912,000
Ripon Shire .. ..	3,365	3,581	1,020	1,099	378,880
Sebastopol Borough .. ..	3,265	4,663	863	1,186	1,747
Wannon Shire§§ .. ..	3,949	4,154	1,078	1,175	488,576
Warrnambool City§§ .. ..	10,850	15,702	2,907	4,198	7,091
Warrnambool Shir .. ..	8,920	7,610	2,217	1,951	392,320
Winchelsea Shire .. ..	4,361	4,603	1,509	1,743	344,960
Not Incorporated (Lady Julia Percy Is. and Tower Hill Lake Reserve) .. ..	..	..	..	..	2,112
Total—Western Statistical Division .. ..	180,051	198,022	49,188	55,479	9,155,226
<b>WIMMERA STATISTICAL DIVISION</b>					
Arapiles Shire .. ..	2,160	2,133	573	584	491,520
Avoca Shire .. ..	2,381	2,153	744	729	277,760
Dimboola Shire .. ..	6,224	6,038	1,724	1,781	1,215,360
Donald Shire§§ .. ..	2,864	2,921	790	849	357,760
Dunmunkle Shire .. ..	4,110	4,086	1,141	1,181	382,080
Horsham City .. ..	7,767	9,240	2,152	2,646	5,939
Kaniva Shire .. ..	2,290	2,408	620	693	762,240
Kara Kara Shire§§ .. ..	1,663	1,421	488	441	567,040
Kowree Shire .. ..	5,012	5,426	1,308	1,492	1,331,200
Lowan Shire .. ..	3,999	3,872	1,161	1,212	663,040
St. Arnaud Town.. ..	3,037	3,150	865	922	6,279
Stawell Town§§ .. ..	5,463	5,506	1,603	1,691	5,952
Stawell Shire .. ..	2,286	2,193	751	784	645,760
Warracknabeal Shire .. ..	4,861	4,717	1,366	1,455	454,400
Wimmera Shire .. ..	3,569	3,535	963	961	645,760
Total—Wimmera Statistical Division .. ..	57,686	58,799	16,249	17,421	7,812,090

For footnotes see page 121.

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

Municipality	Population		Occupied plus Unoccupied Dwellings		Area at 30.6.61
	At 30.6.54 (Census)	At 30.6.61 (Census)	At 30.6.54 (Census)	At 30.6.61 (Census)	
					acres
<b>MALLEE STATISTICAL DIVISION</b>					
Birchip Shire .. ..	1,745	1,899	459	498	362,880
Karkaroc Shire .. ..	4,424	4,168	1,151	1,162	919,040
Mildura City .. ..	10,972	12,279	2,884	3,458	5,408
Mildura Shire .. ..	15,727	16,340	4,258	4,548	2,605,440
Swan Hill Borough .. ..	5,197	6,186	1,323	1,674	3,373
Swan Hill Shire .. ..	11,147	12,785	2,908	3,292	1,619,200
Walpeup Shire .. ..	4,310	4,548	1,151	1,191	2,667,520
Wycheproof Shire .. ..	4,548	4,747	1,166	1,243	1,016,960
Total—Mallee Statistical Division .. ..	58,070	62,952	15,300	17,066	9,199,821
<b>NORTHERN STATISTICAL DIVISION</b>					
Bendigo City .. ..	28,726	30,195	8,364	9,110	8,032
Bet Bet Shire .. ..	2,296	2,078	735	694	229,120
Charlton Shire .. ..	2,359	2,492	639	683	290,560
Cobram Shire .. ..	3,642	4,798	943	1,212	108,800
Cohuna Shire .. ..	3,872	4,435	997	1,150	122,880
Deakin Shire .. ..	4,635	5,296	1,232	1,404	237,440
Eaglehawk Borough .. ..	4,696	4,926	1,404	1,511	3,584
East Loddon Shire .. ..	1,446	1,703	407	465	295,040
Echuca Borough .. ..	5,405	6,443	1,489	1,773	4,378
Gordon Shire .. ..	2,969	3,227	857	915	499,840
Goulburn Shire§§ .. ..	1,760	1,900	505	643	254,720
Huntly Shire .. ..	2,247	2,295	670	696	216,960
Inglewood Borough§§ .. ..	957	§§	289	§§	§§
Kerang Shire .. ..	8,483	9,095	2,277	2,483	823,680
Korong Shire§§ .. ..	2,986	3,816	938	1,211	589,440
Kyabram Borough .. ..	3,335	3,936	888	1,125	5,152
Marong Shire .. ..	5,421	6,100	1,532	1,754	368,000
Nathalia Shire§§ .. ..	§§	3,208	§§	887	305,920
Numurkah Shire§§ .. ..	8,027	6,111	2,128	1,532	178,560
Rochester Shire .. ..	6,330	7,253	1,713	1,978	480,000
Rodney Shire .. ..	9,181	10,635	2,328	2,758	254,080
Shepparton City .. ..	10,848	13,580	3,004	3,790	4,716
Shepparton Shire .. ..	5,376	6,113	1,362	1,546	230,400
Strathfieldsaye Shire .. ..	4,213	6,031	1,120	1,544	152,960
Tungamah Shire .. ..	2,258	2,446	627	667	282,240
Waranga Shire§§ .. ..	4,655	4,528	1,326	1,304	408,320
Yarrawonga Shire .. ..	3,770	3,724	965	1,087	155,520
Total—Northern Statistical Division .. ..	139,893	156,364	38,739	43,922	6,510,342

For footnotes see page 121.

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

Municipality	Population		Occupied plus Unoccupied Dwellings		Area at 30.6.61  acres
	At 30.6.54 (Census)	At 30.6.61 (Census)	At 30.6.54 (Census)	At 30.6.61 (Census)	
<b>NORTH-EASTERN STATISTICAL DIVISION</b>					
Beechworth Shire .. ..	4,417	4,845	1,039	1,085	190,720
Benalla Borough§§ .. ..	6,045	8,260	1,652	2,102	4,544
Benalla Shire§§ .. ..	4,407	3,692	1,016	1,022	573,568
Bright Shire§§ .. ..	8,060	4,331	2,092	1,532	733,440
Chiltern Shire .. ..	1,613	1,652	502	498	122,880
Euroa Shire .. ..	4,476	4,833	1,303	1,433	330,880
Mansfield Shire .. ..	5,023	4,423	1,447	1,461	965,120
Myrtleford Shire§§ .. ..	§§	3,770	§§	979	176,000
Omeo Shire .. ..	2,072	2,145	609	664	1,428,480
Oxley Shire§§ .. ..	4,393	5,229	1,180	1,408	691,072
Rutherglen Shire .. ..	2,897	2,655	852	847	131,200
Towong Shire .. ..	4,385	4,207	1,187	1,234	1,025,280
Upper Murray Shire .. ..	2,521	2,938	669	820	607,360
Violet Town Shire .. ..	1,424	1,360	412	435	231,040
Wangaratta City§§ .. ..	10,715	13,784	2,761	3,579	5,478
Wangaratta Shire .. ..	2,267	2,140	608	601	226,560
Wodonga Shire .. ..	10,924	12,968	1,890	2,532	85,760
Yackandandah Shire .. ..	3,131	3,093	825	869	274,560
<b>Total—North-Eastern Statistical Division .. ..</b>	<b>78,770</b>	<b>86,325</b>	<b>20,044</b>	<b>23,101</b>	<b>7,803,942</b>
<b>GIPPSLAND STATISTICAL DIVISION</b>					
Alberton Shire .. ..	5,602	5,926	1,665	1,801	461,440
Avon Shire .. ..	3,215	3,214	744	793	588,800
Bairnsdale Shire .. ..	10,104	11,279	2,707	3,188	606,720
Buln Buln Shire .. ..	8,015	8,427	2,212	2,396	311,040
Maffra Shire .. ..	8,554	8,758	2,269	2,356	1,031,040
Mirboo Shire .. ..	1,862	2,052	507	556	62,720
Moe Borough§§ .. ..	§§	15,463	§§	3,727	5,286
Morwell Shire .. ..	13,033	18,359	3,334	4,511	165,760
Narracan Shire§§ .. ..	21,023	9,343	5,499	2,545	570,880
Orbost Shire .. ..	5,492	6,179	1,562	1,818	2,368,000
Rosedale Shire .. ..	3,860	4,566	1,193	1,436	562,560
Sale City .. ..	6,537	7,899	1,737	2,135	5,363
South Gippsland Shire .. ..	4,882	5,247	1,302	1,506	353,920
Tambo Shire .. ..	5,085	5,431	1,418	1,889	867,840
Traralgon Borough§§ .. ..	§§	12,300	§§	3,067	4,930
Traralgon Shire§§ .. ..	10,036	1,229	2,692	330	115,390
Warragul Shire .. ..	8,605	9,585	2,242	2,601	87,040
Woorayl Shire .. ..	7,046	8,784	2,130	2,637	307,840
Yallourn Works Area .. ..	5,580	5,010	1,213	1,192	8,653
Not Incorporated (Gippsland Lakes (Part) and Bass Strait Islands) .. ..	..	..	..	..	82,886
<b>Total—Gippsland Statistical Division .. ..</b>	<b>128,531</b>	<b>149,051</b>	<b>34,426</b>	<b>40,484</b>	<b>8,568,108</b>

For footnotes see page 121.



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

Municipality	Population		Occupied plus Unoccupied Dwellings		Area at 30.6.61
	At 30.6.54 (Census)	At 30.6.61 (Census)	At 30.6.54 (Census)	At 30.6.61 (Census)	
	SUMMARY				acres
Statistical Divisions—					
Metropolitan .. ..	1,524,111	1,911,895	431,647	541,441	519,791
Central .. ..	209,447	239,057	63,742	79,230	3,717,520
North-Central .. ..	67,741	63,039	18,846	19,774	2,958,893
Western .. ..	180,051	198,022	49,188	55,479	9,155,226
Wimmera .. ..	57,686	58,799	16,249	17,421	7,812,090
Mallee .. ..	58,070	62,952	15,300	17,066	9,199,821
Northern .. ..	139,893	156,364	38,739	43,922	6,510,342
North-Eastern .. ..	78,770	86,325	20,044	23,101	7,803,942
Gippsland .. ..	128,531	149,051	34,426	40,484	8,568,108
Migratory .. ..	8,041	4,609	..	..	..
Total—Victoria ..	2,452,341	2,930,113	688,181	837,918	56,245,733
	PRINCIPAL URBAN AREAS				
Geelong Urban Area—					
Geelong City .. ..	20,034	18,019	5,263	5,336	3,322
Geelong West City ..	17,313	17,681	4,805	5,345	1,299
Newtown and Chilwell City§§	11,191	11,788	3,056	3,435	1,480
Bellarine Shire (Part) ..	2,298	4,351	607	1,177	4,384
Corio Shire (Part) ..	12,998	25,712	3,022	6,083	7,546
South Barwon Shire (Part)§§	8,761	14,226	2,253	3,873	11,115
Total—Geelong Urban Area	72,595	91,777	19,006	25,249	29,146
Ballarat Urban Area—					
Ballaarat City .. ..	39,945	41,037	11,218	11,850	8,550
Sebastopol Borough ..	3,265	4,663	863	1,186	1,747
Ballarat Shire (Part) ..	4,199	8,348	848	1,854	3,744
Buninyong Shire (Part) ..	621	832	175	236	3,668
Total—Ballarat Urban Area	48,030	54,880	13,104	15,126	17,709
Bendigo Urban Area—					
Bendigo City .. ..	28,726	30,195	8,364	9,110	8,032
Eaglehawk Borough ..	4,696	4,926	1,404	1,511	3,584
Marong Shire (Part) ..	1,707	2,527	457	659	1,005
Strathfieldsaye Shire (Part)	1,789	2,679	501	745	1,683
Total—Bendigo Urban Area	36,918	40,327	10,726	12,025	14,304
Latrobe Valley Urban Area—					
Yallourn Works Area ..	5,580	5,010	1,213	1,192	8,653
Moe Borough (Moe (N.M.) and Newborough (N.M.) in 1954) .. ..	12,427	15,463	3,132	3,727	5,286
Traralgon Borough (Traral- gon (N.M.) in 1954) ..	8,845	12,300	2,375	3,067	4,930
Morwell (N.M.) .. ..	9,040	14,833	2,289	3,582	5,504
Yallourn North (N.M.) ..	1,457	1,867	398	449	320
Total—Latrobe Valley Urban Area .. ..	37,349	49,473	9,407	12,017	24,693

For footnotes see page 121. For definition of "N.M." see page 124.

\* The Melbourne Metropolitan Area was, for statistical purposes, revised and enlarged on 1st January, 1961. Portion of the Shire of Berwick and additional portions of the Shires of Whittlesea and Fern Tree Gully were included and that portion of the Shire of Melton which was formerly in the Metropolitan Area was excluded.

The following portions of the Shires of Berwick, Bulla, Eltham, Fern Tree Gully, Lillydale, and Whittlesea were included in the Melbourne Metropolitan Area at 30th June, 1961:—

*Berwick:* Berwick Riding.

*Bulla:* Part of Mickleham Riding.

*Eltham:* West and Eltham Ridings and part of Northern Riding.

*Fern Tree Gully:* North, Centre and East Ridings and part of South Riding.

*Lillydale:* Western, North, and Southern Ridings.

*Whittlesea:* Thomastown Riding and part of Morang Riding.

The remaining portions of these Shires were in the Central Division.

† In 1957 the Shire of Werribee was reduced and re-defined, the Altona Riding being constituted as the Shire of Altona.

‡ Parts of the Metropolitan portion of the Shire of Broadmeadows were annexed to the Shires of Bulla (1955 and 1958) and Whittlesea (1955). Prior to these transfers both the Shires of Bulla and Whittlesea were entirely outside the Metropolitan Area.

The entire Extra-Metropolitan portion of the Shire of Broadmeadows (Central Division) was annexed to the Shire of Kilmore in 1955. Prior to this transfer the Shire of Kilmore was entirely in the North-Central Division.

Broadmeadows was proclaimed a city in 1956.

§ The Shire of Lillydale was reduced and re-defined in 1960, the annexed portion becoming the Shire of Croydon.

¶ The Shire of Dandenong was reduced and re-defined in 1955, the annexed portion becoming the Shire of Springvale and Noble Park. Dandenong was proclaimed a city in 1959 and the Shire of Springvale and Noble Park was proclaimed the City of Springvale in 1961.

|| In 1960 the Extra-Metropolitan portion of the Shire of Frankston and Hastings was annexed into the new Shire of Hastings. The Metropolitan portion of the Shire of Frankston and Hastings became the new Shire of Frankston.

\*\* In 1959 part of the Shire of Keilor was annexed to the Shire of Melton. Prior to this transfer the Shire of Melton was entirely outside the Metropolitan Area. Part of the Shire of Melton was annexed by the Shire of Bulla in 1959.

Keilor was proclaimed a city in 1961.

†† Parts of the Shires of Mulgrave, Springvale and Noble Park, and the City of Moorabbin were transferred to the City of Oakleigh in 1959.

The Shire of Mulgrave was proclaimed the City of Waverley in 1961.

‡‡ Ringwood was proclaimed a city in 1960.

§§ The following changes in Non-Metropolitan Local Government Areas took place between the Censuses of 1954 and 1961:—

*New Local Government Areas Constituted:*

Moe Borough by annexation of portion of Narracan Shire (1955); Nathalia Shire, by annexation of portion of Numurkah Shire (1957); Myrtleford Shire, by annexation of portion of Bright Shire (1960); Hastings Shire, by annexation of portions of Flinders Shire and Frankston and Hastings Shire (1960); and Traralgon Borough, by annexation of portion of Traralgon Shire (1961).

*Local Government Areas Amalgamated:*

Inglewood Borough and Shire of Korong united under name of Shire of Korong (1961).

*Annexation of Portion of Shires:*

Kara Kara Shire to Donald Shire (1955); Warrnambool Shire to Warrnambool City (1955); Waranga Shire to Goulburn Shire (1956); McIvor Shire to Goulburn Shire (1956); Benalla Shire to Benalla Borough (1956); Eltham Shire to Healesville Shire (1958); Romsey Shire to Kilmore Shire (1958); Portland Shire to Portland Town (1958); Melton Shire to Bulla Shire (1959); Ararat Shire to Ararat City (1960); South Barwon Shire to Newtown and Chilwell City (1960); Dundas Shire to Wannon Shire (1961); Yea Shire to Seymour Shire (1961); and Oxley Shire to Benalla Shire (1961).

*Changes in Status:*

Declared Cities: Wangaratta (1959); Colac (1960); Maryborough (1961).

Declared Towns: Stawell (1957); Camperdown (1959).

The following table gives the population and dwellings in metropolitan, other urban, and rural areas of the State. The urban areas of Geelong, Ballarat, and Bendigo are shown, also the sum of the urban components of the Latrobe Valley Area. The remainder of cities, towns, and boroughs in the State have been grouped with non-municipal towns of 1,000 or more according to size of population.

### VICTORIA—SUMMARY OF POPULATION

Victoria	Population at Census, 1961	Dwellings at Census, 1961	
		Occupied	Unoccupied
Metropolitan .. .. .	1,911,895	524,608	16,833
Urban—			
Geelong Urban Area .. .. .	91,777	24,586	663
Ballarat Urban Area .. .. .	54,880	14,493	633
Latrobe Valley-Urban .. .. .	49,473	11,675	342
Bendigo Urban Area .. .. .	40,327	11,518	507
	236,457	62,272	2,145
Other Urban—			
Population Exceeding 10,000 (4) ..	55,345	14,507	518
" 7,500 to 9,999 (6) ..	59,578	13,492	576
" 5,000 to 7,499 (11) ..	62,934	19,002	849
" 4,000 to 4,999 (3) ..	13,228	3,456	558
" 3,000 to 3,999 (14) ..	47,042	12,464	2,214
" 2,000 to 2,999 (18) ..	44,146	12,210	2,646
" 1,000 to 1,999 (38) ..	55,200	15,230	3,457
	337,473	90,361	10,818
Rural† .. .. .	439,679	113,288	17,593
Migratory .. .. .	4,609	..	..
Total .. .. .	2,930,113	790,529	47,389

NOTE.—Figures in brackets represent the number of urban localities in the group.  
 † Includes Borough of Clunes—population 836.

The above table shows that urban localities of less than 5,000 in population and rural areas in general had a markedly higher proportion of unoccupied dwellings at the date of the Census 1961 than did the more populated areas of the State. Below is an analysis of unoccupied dwellings in metropolitan, urban, and rural areas according to the reason why they were unoccupied :—

### VICTORIA—UNOCCUPIED DWELLINGS AND REASONS WHY UNOCCUPIED, CENSUS, 1961\*

Area	Reasons Why Unoccupied					Total
	For Sale or Renting	Holiday Home, "Week-end", Seasonal Quarters	Occupants Temporarily Absent	To be Demolished, Condemned	Other and Not Stated	
Metropolitan Area ..	4,555	1,671	6,386	427	3,794	16,833
Urban Areas—						
Geelong .. .. .	158	3	304	17	181	663
Ballarat .. .. .	127	..	360	30	116	633
Latrobe Valley .. .. .	137	..	155	4	46	342
Bendigo .. .. .	80	9	260	19	139	507
Other Urban .. .. .	1,181	5,842	2,297	128	1,370	10,818
Rural Areas .. .. .	1,466	7,850	3,735	576	3,966	17,593
Total .. .. .	7,704	15,375	13,497	1,201	9,612	47,389

\* For definitions see pages 367-68.

The following is a list of those extra-metropolitan localities in Victoria which contained a population of 1,000 persons or more at the Census of 1961 :—

### VICTORIA—POPULATION OF EXTRA-METROPOLITAN LOCALITIES

Locality	Municipal Status at 30th June, 1961	Population at Census, 1954	Population at Census, 1961	Locality	Municipal Status at 30th June, 1961	Population at Census, 1954	Population at Census, 1961
Alexandra ..	NM	1,712	1,945	Kilmore ..	NM	1,474	1,363
Ararat ..	C	7,414	7,934	Koroit ..	B	1,401	1,466
Bacchus Marsh	NM	2,825	3,288	Korumburra ..	NM	2,858	3,237
Bairnsdale ..	NM*	5,718	7,427	Kyabram ..	B	3,335	3,936
Ballaarat ..	C	39,945	41,037	Kyneton ..	NM	3,232	3,366
Beaufort ..	NM	1,281	1,240	Lakes Entrance	NM	1,252	1,602
Beechworth ..	NM	3,153	3,508	Laverton ..	NM	†	4,152
Benalla ..	B	6,045	8,260	Leongatha ..	NM	2,304	2,755
Bendigo ..	C	28,726	30,195	Lorne ..	NM	979	1,080
Broadford ..	NM	1,451	1,678	Maffra ..	NM	3,161	3,404
Camperdown ..	T	3,205	3,446	Maldon ..	NM*	857	1,071
Casterton ..	NM	2,391	2,442	Mansfield ..	NM	1,861	1,944
Castlemaine ..	T	6,577	7,216	Maryborough	C	6,827	7,235
Charlton ..	NM	1,408	1,527	Merbein ..	NM	1,768	1,737
Cobram ..	NM	1,695	2,538	Mildura ..	C	10,972	12,279
Cohuna ..	NM	1,542	1,815	Moe ..	B†	8,770	15,463
Colac ..	C	8,032	9,252	Mooroopna ..	NM	1,796	2,505
Coleraine ..	NM	1,393	1,503	Mornington ..	NM*	3,589	4,886
Corryong ..	NM	†	1,129	Mortlake ..	NM	1,048	1,297
Creswick ..	NM	1,606	1,730	Morwell ..	NM*	9,040	14,833
Daylesford ..	B	3,216	2,776	Mount Beauty	NM	†	1,509
Dimboola ..	NM	1,814	1,923	Murtoa ..	NM	1,132	1,135
Donald ..	NM	1,480	1,517	Myrtleford ..	NM	1,538	2,123
Dromana ..	NM	†	1,151	Nathalia ..	NM	1,046	1,276
Drouin ..	NM	2,104	2,511	Newtown and Chilwell	C	11,191	11,788
Eaglehawk ..	B	4,696	4,926	Nhill ..	NM	2,208	2,233
Echuca ..	B	5,405	6,443	Numurkah ..	NM	2,195	2,687
Euroa ..	NM	2,657	3,040	Ocean Grove	NM	†	1,609
Geelong ..	C	20,034	18,019	Orbost ..	NM	2,214	2,613
Geelong West	C	17,313	17,681	Ouyen ..	NM	1,426	1,695
Hamilton ..	C	8,507	9,495	Pakenham East	NM	1,110	1,408
Healesville ..	NM*	2,707	2,687	Portarlington	NM	†	1,003
Heathcote ..	NM	1,273	1,287	Port Fairy ..	B	2,265	2,426
Heyfield ..	NM	†	1,917	Portland ..	T	4,759	6,014
Horsham ..	C	7,767	9,240	Queenscliffe ..	B	2,551	2,659
Irymple ..	NM	1,068	1,133	Red Cliffs ..	NM	2,361	2,440
Kerang ..	NM	3,227	3,727	Rochester ..	NM	1,791	1,965

**VICTORIA—POPULATION OF EXTRA-METROPOLITAN LOCALITIES—  
continued**

Locality	Municipal Status at 30th June, 1961	Population at Census, 1954	Population at Census, 1961	Locality	Municipal Status at 30th June, 1961	Population at Census, 1954	Population at Census, 1961
Rosebud ..	NM*	1,694	3,726	Trafalgar ..	NM	1,537	1,774
Rushworth ..	NM	976	1,077	Traralgon ..	B	8,845	12,300
Rutherglen ..	NM	1,370	1,292	Wangaratta ..	C	10,715	13,784
Rye ..	NM	†	1,338	Warburton ..	NM*	1,320	1,630
Sale ..	C	6,537	7,899	Warracknabeal	NM	3,009	3,061
Sebastopol ..	B	3,265	4,663	Warragul ..	NM	5,324	6,405
Seymour ..	NM*	3,736	5,104	Warrnambool	C	10,850	15,702
Shepparton ..	C	10,848	13,580	Werribee ..	NM	4,335	5,398
Sorrento ..	NM*	1,823	2,152	Wodonga ..	NM	5,259	7,498
St. Arnaud ..	T	3,037	3,150	Wonthaggi ..	B	4,461	4,190
Stawell ..	T	5,463	5,506	Woodend ..	NM	1,093	1,224
Sunbury ..	NM	2,385	3,131	Yallourn North	NM	1,457	1,867
Swan Hill ..	B	5,197	6,186	Yallourn Works Area ..	§	5,580	5,010
Tatura ..	NM	1,929	2,166	Yarram ..	NM	1,800	2,053
Terang ..	NM	2,365	2,380	Yarrawonga ..	NM	2,953	3,022
Torquay ..	NM	†	1,097	Yea ..	NM	1,131	1,113

NOTE.—C = City; T = Town; B = Borough; NM = Non-Municipal Town.

Prior to a Census the boundaries of certain towns not separately incorporated as local government areas are delineated for statistical purposes, and are termed "Non-municipal Towns." Only those of 1,000 persons or more at the 1961 Census are listed above.

\* The boundaries of these "N.M. Towns" were amended in 1961.

† Not a "N.M. Town" in 1954.

‡ Moe, a "N.M. Town" in 1954, was created a Borough in 1955.

§ The municipal status of the Yallourn Works Area is explained on page 374.

The next table shows the age distribution of the population of Victoria at the Censuses of 1954 and 1961:—

**VICTORIA—AGE DISTRIBUTION OF THE POPULATION**

Age Last Birthday (Years)	Census, 1954			Census, 1961			Increase of Persons 1954 to 1961
	Males	Females	Persons	Males	Females	Persons	
0-4 ..	132,184	126,151	258,335	157,536	149,999	307,535	49,200
5-9 ..	122,204	116,653	238,857	148,193	140,564	288,757	49,900
10-14 ..	92,175	88,632	180,807	142,114	135,734	277,848	97,041
15-19 ..	78,776	74,945	153,721	112,555	106,809	219,364	65,643
20-24 ..	83,734	77,196	160,930	100,751	94,325	195,076	34,146
25-29 ..	101,392	93,078	194,470	97,160	89,565	186,725	-7,745
30-34 ..	100,487	95,108	195,595	109,792	99,751	209,543	13,948
35-39 ..	87,819	85,875	173,694	111,929	105,928	217,857	44,163
40-44 ..	88,548	84,036	172,584	95,120	92,504	187,624	15,040
45-49 ..	78,969	73,389	152,358	92,443	89,382	181,825	29,467
50-54 ..	69,714	67,798	137,512	81,322	77,525	158,847	21,335
55-59 ..	55,039	59,817	114,856	66,826	64,904	131,730	16,874
60-64 ..	50,136	58,306	108,442	53,990	61,040	115,030	6,588
65-69 ..	37,824	45,334	83,158	41,897	53,858	95,755	12,597
70-74 ..	25,032	33,195	58,227	31,264	42,356	73,620	15,393
75-79 ..	15,089	21,881	36,970	18,128	27,236	45,364	8,339
80-84 ..	7,851	12,603	20,454	8,919	15,313	24,232	3,778
85-89 ..	3,267	5,466	8,733	3,417	6,663	10,080	1,347
90-94 ..	783	1,563	2,346	908	1,901	2,809	463
95-99 ..	72	204	276	123	328	451	175
100 and over ..	4	12	16	8	33	41	25
<b>Total ..</b>	<b>1,231,099</b>	<b>1,221,242</b>	<b>2,452,341</b>	<b>1,474,395</b>	<b>1,455,718</b>	<b>2,930,113</b>	<b>477,772</b>
Under 21 ..	440,629	420,827	861,456	581,052	553,252	1,134,304	272,848
21-64 ..	700,548	680,157	1,380,705	1,380,705	754,778	1,543,457	162,752
65 and over ..	89,922	120,258	210,180	104,664	147,688	252,352	42,172
<b>Total ..</b>	<b>1,231,099</b>	<b>1,221,242</b>	<b>2,452,341</b>	<b>1,474,395</b>	<b>1,455,718</b>	<b>2,930,113</b>	<b>477,772</b>

NOTE.—Minus sign (—) denotes decrease.

The Censuses of 1954 and 1961 show the nationality of the population as follows :—

### VICTORIA—NATIONALITY OF THE POPULATION

Nationality	Census, 1954			Census, 1961		
	Males	Females	Persons	Males	Females	Persons
<b>British*—</b>						
Born in Australia	1,020,836	1,062,543	2,083,379	1,160,934	1,199,397	2,360,331
Born outside Australia ..	127,950	104,469	232,419	198,296	165,639	363,935
<b>Total British</b>	<b>1,148,786</b>	<b>1,167,012</b>	<b>2,315,798</b>	<b>1,359,230</b>	<b>1,365,036</b>	<b>2,724,266</b>
<b>Foreign—</b>						
Dutch ..	9,255	7,035	16,290	15,037	12,541	27,578
German ..	6,078	5,414	11,492	13,442	10,453	23,895
Greek ..	4,037	2,241	6,278	14,704	13,368	28,072
Hungarian ..	1,683	1,118	2,801	3,122	2,302	5,424
Italian ..	23,225	11,981	35,206	37,565	30,831	68,396
Latvian, Lithuanian, and Estonian ..	5,203	4,571	9,774	1,384	1,054	2,438
Polish ..	9,370	6,889	16,259	4,535	3,629	8,164
Ukrainian ..	3,185	2,453	5,638	1,028	771	1,799
Yugoslavian ..	3,450	2,045	5,495	6,569	3,822	10,391
Other (including Stateless) ..	16,827	10,483	27,310	17,779	11,911	29,690
<b>Total Foreign</b>	<b>82,313</b>	<b>54,230</b>	<b>136,543</b>	<b>115,165</b>	<b>90,682</b>	<b>205,847</b>
<b>Grand Total..</b>	<b>1,231,099</b>	<b>1,221,242</b>	<b>2,452,341</b>	<b>1,474,395</b>	<b>1,455,718</b>	<b>2,930,113</b>

\* 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.

The following table shows the birthplace of the population at the Censuses of 1954 and 1961 :—

### VICTORIA—BIRTHPLACE OF THE POPULATION

Birthplace	Census, 1954			Census, 1961		
	Males	Females	Persons	Males	Females	Persons
Australia .. .. .	1,020,836	1,062,543	2,083,379	1,160,934	1,199,397	2,360,331
New Zealand .. .. .	5,456	5,675	11,131	5,622	5,848	11,470
<b>Europe—</b>						
United Kingdom and Republic of Ireland ..	92,915	78,813	171,728	108,744	97,785	206,529
Germany .. .. .	11,029	10,743	21,772	20,720	18,568	39,288
Greece .. .. .	5,009	2,636	7,645	17,239	14,421	31,660
Italy .. .. .	27,709	14,720	42,429	51,863	38,966	90,829
Malta .. .. .	4,469	2,662	7,131	10,220	7,631	17,851
Netherlands .. .. .	9,188	6,808	15,996	20,140	16,084	36,224
Poland .. .. .	12,836	8,592	21,428	13,807	9,987	23,794
Other .. .. .	26,896	18,716	45,612	43,236	30,304	73,540
<b>Total Europe</b> .. .. .	<b>190,051</b>	<b>143,690</b>	<b>333,741</b>	<b>285,969</b>	<b>233,746</b>	<b>519,715</b>
Other Birthplaces .. .. .	14,756	9,334	24,090	21,870	16,727	38,597
<b>Grand Total</b> .. .. .	<b>1,231,099</b>	<b>1,221,242</b>	<b>2,452,341</b>	<b>1,474,395</b>	<b>1,455,718</b>	<b>2,930,113</b>

The next table shows the period of residence in Australia, at Censuses of 1954 and 1961, of persons who were not born in Australia :—

**VICTORIA—PERIOD OF RESIDENCE IN AUSTRALIA OF PERSONS WHO WERE NOT BORN IN AUSTRALIA**

Number of Completed Years of Residence	Census, 1954			Census, 1961		
	Males	Females	Persons	Males	Females	Persons
Under 1 ..	18,237	13,343	31,580	24,865	17,287	42,152
1 .. ..	10,416	9,128	19,544	16,375	13,505	29,880
2 .. ..	22,428	13,659	36,087	16,286	15,462	31,748
3 .. ..	24,115	17,329	41,444	13,436	15,438	28,874
4 .. ..	26,517	19,140	45,657	15,080	15,669	30,749
5 .. ..	19,547	14,009	33,556	20,669	17,156	37,825
6 .. ..	5,975	4,483	10,458	19,914	15,788	35,702
Under 7 ..	127,235	91,091	218,326	126,625	110,305	236,930
7 and under 14 ..	79,764	64,811	144,575	116,150	86,253	202,403
14 and over ..				64,670	54,723	119,393
Not Stated ..	3,264	2,797	6,061	6,016	5,040	11,056
Born outside Australia ..	210,263	158,699	368,962	313,461	256,321	569,782
Born in Australia	1,020,836	1,062,543	2,083,379	1,160,934	1,199,397	2,360,331
Total ..	1,231,099	1,221,242	2,452,341	1,474,395	1,455,718	2,930,113

The following table shows the population of Victoria classified according to conjugal condition at the Censuses of 1954 and 1961 :—

**VICTORIA—CONJUGAL CONDITION OF POPULATION**

Conjugal Condition	Census, 1954			Census, 1961		
	Males	Females	Persons	Males	Females	Persons
Never Married—						
Under Fifteen Years of Age	346,563	331,436	677,999	447,843	426,297	874,140
Fifteen Years of Age and over	257,342	196,891	454,233	303,306	222,774	526,080
Total—Never Married ..	603,905	528,327	1,132,232	751,149	649,071	1,400,220
Married .. ..	570,204	564,688	1,134,892	664,984	660,462	1,325,446
Married but Permanently Separated .. ..	15,214	18,144	33,358	18,302	21,927	40,229
Widowed .. ..	30,906	99,058	129,964	31,497	113,940	145,437
Divorced .. ..	7,250	9,062	16,312	8,463	10,318	18,781
Not Stated .. ..	3,620	1,963	5,583	*	*	*
Total .. ..	1,231,099	1,221,242	2,452,341	1,474,395	1,455,718	2,930,113

\* In processing the 1961 Census data, a conjugal condition was allocated prior to tabulation in all instances where this information was not stated.

The following table shows the religion of the population at Censuses of 1954 and 1961 :—

### VICTORIA—RELIGION OF THE POPULATION

Religion	Census, 1954			Census, 1961		
	Males	Females	Persons	Males	Females	Persons
<b>CHRISTIAN—</b>						
Baptist .. .. .	16,084	18,232	34,316	18,225	20,402	38,627
Brethren .. .. .	1,479	1,782	3,261	1,558	1,799	3,357
Catholic, Roman*	99,128	82,083	181,211	134,535	116,287	250,822
Catholic*	188,492	194,951	383,443	254,236	257,676	511,912
Churches of Christ .. .. .	15,797	17,811	33,608	17,883	20,056	37,939
Church of England .. .. .	413,591	418,882	832,473	443,024	450,136	893,160
Congregational .. .. .	5,417	6,505	11,922	5,552	6,552	12,104
Greek Orthodox .. .. .	12,219	7,902	20,121	29,759	25,064	54,823
Lutheran .. .. .	11,785	11,108	22,893	18,267	17,101	35,368
Methodist .. .. .	122,377	130,425	252,802	134,040	141,165	275,205
Presbyterian .. .. .	158,811	167,611	326,422	179,466	187,880	367,346
Protestant, Undefined .. .. .	18,787	18,966	37,753	20,349	19,592	39,941
Salvation Army .. .. .	5,291	6,100	11,391	6,323	7,274	13,597
Seventh Day Adventist .. .. .	1,906	2,562	4,468	2,559	3,161	5,720
Other .. .. .	6,967	7,981	14,948	11,858	13,032	24,890
<b>Total Christian .. .. .</b>	<b>1,078,131</b>	<b>1,092,901</b>	<b>2,171,032</b>	<b>1,277,634</b>	<b>1,287,177</b>	<b>2,564,811</b>
<b>NON-CHRISTIAN—</b>						
Hebrew .. .. .	12,211	11,805	24,016	14,993	14,939	29,932
Other .. .. .	1,830	453	2,283	1,962	911	2,873
<b>Total Non-Christian .. .. .</b>	<b>14,041</b>	<b>12,258</b>	<b>26,299</b>	<b>16,955</b>	<b>15,850</b>	<b>32,805</b>
Indefinite .. .. .	2,579	2,239	4,818	3,637	3,014	6,651
No Religion .. .. .	4,564	2,073	6,637	7,081	3,715	10,796
No Reply .. .. .	131,784	111,771	243,555	169,088	145,962	315,050
<b>Grand Total .. .. .</b>	<b>1,231,099</b>	<b>1,221,242</b>	<b>2,452,341</b>	<b>1,474,395</b>	<b>1,455,718</b>	<b>2,930,113</b>

\* So described on individual census schedules.

In the following table the male and female populations of Victoria are classified according to the industry in which they are usually engaged :—

### VICTORIA—INDUSTRY OF THE POPULATION AT CENSUSES OF 1954 AND 1961

Industry Group	Census, 1954			Census, 1961		
	Males	Females	Persons	Males	Females	Persons
Primary Production .. .. .	108,124	8,376	116,500	99,820	9,964	109,784
Mining and Quarrying .. .. .	4,463	123	4,586	4,690	201	4,891
Manufacturing .. .. .	252,232	89,172	341,404	280,465	99,226	379,691
Electricity, Gas, Water, and Sanitary Services (Production, Supply, and Maintenance) .. .. .	24,116	1,491	25,607	30,469	2,033	32,502
Building and Construction .. .. .	84,401	1,067	85,468	99,543	2,122	101,665
Transport and Storage and Communication .. .. .	76,478	9,022	85,500	84,033	10,414	94,447
Finance and Property .. .. .	18,080	9,237	27,317	25,475	16,343	41,818
Commerce .. .. .	109,675	51,909	161,584	126,447	63,825	190,272
Public Authority ( <i>n.e.i.</i> ) and Defence Services .. .. .	36,135	8,593	44,728	35,775	9,299	45,074
Community and Business Services (Incl. Professional)* .. .. .	37,397	43,381	80,778	51,497	64,250	115,747
Amusements, Hotels and Other Accommodation, Cafes, Personal Service, &c. .. .. .	28,306	32,826	61,132	31,896	36,926	68,822
Other Industries and Industry Inadequately Described or Not Stated .. .. .	7,541	2,249	9,790	16,990	8,308	25,298
<b>Total in Work Force .. .. .</b>	<b>786,948</b>	<b>257,446</b>	<b>1,044,394</b>	<b>887,100</b>	<b>322,911</b>	<b>1,210,011</b>
<b>Persons Not in Work Force .. .. .</b>	<b>444,151</b>	<b>963,796</b>	<b>1,407,947</b>	<b>587,295</b>	<b>1,132,807</b>	<b>1,720,102</b>
<b>Grand Total .. .. .</b>	<b>1,231,099</b>	<b>1,221,242</b>	<b>2,452,341</b>	<b>1,474,395</b>	<b>1,455,718</b>	<b>2,930,113</b>

\* 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, &c.



## Population Estimates

In the following table is given the estimated population of each Australian State at 31st December, 1961 :—

## AUSTRALIA—ESTIMATED POPULATION OF STATES AND TERRITORIES AT 31ST DECEMBER, 1961

State or Territory	Area in Square Miles	Estimated Population at 31st December, 1961	Persons to the Square Mile	Proportion in Each State or Territory
New South Wales .. ..	309,433	3,951,635	12·77	per cent. 37·27
<b>Victoria</b> .. ..	<b>87,884</b>	<b>2,949,354</b>	<b>33·56</b>	<b>27·81</b>
Queensland .. ..	667 000	1,524,784	2·29	14·38
South Australia .. ..	380,070	979,792	2·58	9·24
Western Australia .. ..	975 920	746,174	0·76	7·04
Tasmania .. ..	26 215	364,134	13·89	3·43
Northern Territory .. ..	523 620	25,967	0·05	0·24
Australian Capital Territory* .. ..	939	62,091	66·12	0·59
Australia .. ..	2,971,081	10,603,931	3·57	100·00

\* Includes Jervis Bay.

The following table shows the estimated population of Victoria from 1836 to 1961 :—

## VICTORIA—ESTIMATED POPULATION

Year	Estimated Population, 31st December		
	Males	Females	Total
1836 (25th 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
1951 .. ..	1,150,009	1,149,529	2,299,538
1952 .. ..	1,189,262	1,177,457	2,366,719
1953 .. ..	1,212,060	1,203,975	2,416,035
1954 .. ..	1,245,228	1,232,758	2,477,986
1955 .. ..	1,283,946	1,262,386	2,546,332
1956 .. ..	1,321,478	1,296,634	2,618,112
1957 .. ..	1,350,935	1,329,620	2,680,555
1958 .. ..	1,382,585	1,362,580	2,745,165
1959 .. ..	1,416,347	1,395,082	2,811,429
1960 .. ..	1,455,696	1,432,594	2,888,290
1961 .. ..	1,482,130	1,467,224	2,949,354

## Migration

## Oversea Arrivals and Departures

Oversea arrivals and departures in each State, during the years 1957 to 1961, are shown in the following table :—

**AUSTRALIA—OVERSEA ARRIVALS AND DEPARTURES  
BY STATES**

Year	New South Wales	Victoria	Queens-land	South Australia	Western Australia	Tasmania	Northern Territory	Australia
<b>ARRIVALS</b>								
1957..	141,279	62,613	7,209	6,792	13,754	49	1,632	233,328
1958..	135,396	63,337	8,779	7,373	13,993	25	1,361	230,264
1959..	140,536	77,226	11,113	8,563	14,693	35	1,730	253,896
1960..	176,532	84,851	11,596	7,703	16,161	81	2,237	299,161
1961..	195,573	73,939	15,482	8,338	17,152	119	2,487	313,090
<b>DEPARTURES</b>								
1957..	113,085	22,201	6,953	3,153	7,658	176	1,370	154,596
1958..	113,942	27,695	8,433	4,080	9,347	244	1,157	164,898
1959..	116,190	32,966	11,321	4,940	10,019	389	1,280	177,105
1960..	143,898	34,828	11,781	5,959	10,801	237	1,522	209,026
1961..	174,422	43,132	14,114	5,495	12,246	258	1,900	251,567

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.

The following table shows details of permanent and long term movement and short term movement to and from Australia and Victoria for the years 1957 to 1961 :—

**AUSTRALIA AND VICTORIA—OVERSEA MIGRATION**

Year	Australia				Victoria*			
	Permanent and Long Term Movement†	Short Term Movement		Total	Permanent and Long Term Movement†	Short Term Movement		Total
		Australian Residents Returning or Departing Temporarily	Visitors			Australian Residents Returning or Departing Temporarily	Visitors	
<b>ARRIVALS</b>								
1957..	118,695	56,017	58,616	233,328	50,462	8,133	4,018	62,613
1958..	109,857	59,065	61,342	230,264	47,567	9,887	5,883	63,337
1959..	124,022	61,754	68,120	253,896	57,215	11,577	8,434	77,226
1960..	139,371	75,167	84,623	299,161	63,671	12,546	8,634	84,851
1961..	127,586	86,208	99,296	313,090	50,197	14,438	9,304	73,939
<b>DEPARTURES</b>								
1957..	41,073	53,438	60,085	154,596	9,588	8,285	4,328	22,201
1958..	44,978	58,888	61,032	164,898	11,188	10,880	5,627	27,695
1959..	40,444	64,631	72,030	177,105	11,021	13,607	8,338	32,966
1960..	46,595	77,761	84,670	209,026	12,288	14,337	8,203	34,828
1961..	59,147	89,880	102,540	251,567	17,455	16,077	9,600	43,132

\* See note to preceding table.

† "Permanent and Long Term" movement relates to persons arriving who state that they intend to reside in Australia for a period of one year or more, and to persons departing who state that they intend to reside abroad for a period of one year or more.

Oversea arrivals and departures in Victoria, according to country of embarkation or disembarkation, are shown in the following tables for the period 1957 to 1961 :—

VICTORIA—OVERSEA ARRIVALS

Place of Embarkation	1957	1958	1959	1960	1961
<b>Commonwealth Countries—</b>					
United Kingdom and Ireland ..	18,850	20,958	23,200	22,259	20,443
Canada .. .. .	85	208	394	420	692
Ceylon .. .. .	304	612	605	521	604
Fiji .. .. .	34	301	444	149	110
Hong Kong .. .. .	290	224	250	298	795
India .. .. .	172	339	376	546	290
Malta .. .. .	1,084	1,032	1,380	1,471	1,514
Malaya .. .. .	20	127	110	183	95
Nauru .. .. .	338	296	307	390	322
New Guinea .. .. .	29	50	38	26	24
New Zealand .. .. .	3,708	5,148	7,317	8,917	9,871
Pakistan .. .. .	..	22	45	41	41
Papua .. .. .	8	17	14	23	27
Singapore .. .. .	292	1,247	2,168	1,528	1,545
Other Commonwealth Countries ..	621	1,919	921	1,348	682
<b>Total Commonwealth Countries</b>	<b>25,835</b>	<b>32,500</b>	<b>37,569</b>	<b>38,120</b>	<b>37,055</b>
<b>Foreign—</b>					
Egypt .. .. .	372	234	128	168	305
France .. .. .	15	19	820	98	116
Germany .. .. .	6,121	4,986	8,562	12,728	5,012
Greece .. .. .	3,469	2,869	3,338	5,417	5,197
Indonesia .. .. .	65	75	131	149	108
Italy .. .. .	16,263	13,572	15,951	19,707	17,403
Japan .. .. .	152	155	244	434	719
Netherlands .. .. .	4,845	4,151	4,813	5,064	3,559
Republic of South Africa ..	*	*	*	*	1,005
United States of America ..	211	683	999	557	944
Other Foreign Countries ..	5,265	4,093	4,671	2,409	2,516
<b>Total Foreign Countries ..</b>	<b>36,778</b>	<b>30,837</b>	<b>39,657</b>	<b>46,731</b>	<b>36,884</b>
<b>Total Commonwealth and Foreign .. .. .</b>	<b>62,613</b>	<b>63,337</b>	<b>77,226</b>	<b>84,851</b>	<b>73,939</b>

\* See footnote on following page.

## VICTORIA—OVERSEA DEPARTURES

Place of Disembarkation	1957	1958	1959	1960	1961
<b>Commonwealth Countries—</b>					
United Kingdom and Ireland ..	9,852	10,090	11,006	11,449	13,017
Canada .. .. .	168	138	326	523	538
Ceylon .. .. .	241	344	367	261	291
Fiji .. .. .	14	245	477	126	107
Hong Kong .. .. .	111	96	88	121	136
India .. .. .	235	280	269	307	332
Malta .. .. .	489	223	218	291	316
Malaya .. .. .	13	70	123	83	29
Nauru .. .. .	277	292	295	309	334
New Guinea .. .. .	31	60	23	39	8
New Zealand .. .. .	3,649	4,590	6,940	7,919	11,138
Pakistan .. .. .	1	21	19	18	21
Papua .. .. .	7	18	18	29	17
Singapore .. .. .	297	1,177	1,739	1,597	1,671
Other Commonwealth Countries	593	806	920	896	520
<b>Total Commonwealth Countries</b>	<b>15,978</b>	<b>18,450</b>	<b>22,828</b>	<b>23,968</b>	<b>28,475</b>
<b>Foreign—</b>					
Egypt .. .. .	53	15	41	101	109
France .. .. .	151	294	277	614	410
Germany .. .. .	260	202	294	353	395
Greece .. .. .	22	360	381	862	1,867
Indonesia .. .. .	28	73	131	145	189
Italy .. .. .	4,419	4,658	5,296	5,836	7,326
Japan .. .. .	270	282	341	471	740
Netherlands .. .. .	161	470	816	1,087	1,744
Republic of South Africa ..	*	*	*	*	445
United States of America ..	237	783	1,051	897	1,000
Other Foreign Countries ..	622	2,108	1,510	494	432
<b>Total Foreign Countries ..</b>	<b>6,223</b>	<b>9,245</b>	<b>10,138</b>	<b>10,860</b>	<b>14,657</b>
<b>Total Commonwealth and Foreign .. .. .</b>	<b>22,201</b>	<b>27,695</b>	<b>32,966</b>	<b>34,828</b>	<b>43,132</b>

\* The Republic of South Africa was formed on 15th March, 1961. Prior to this date it was known as the Union of South Africa, and figures for the years 1957 to 1960 are included under "Other Commonwealth Countries".

The following table shows the nationalities of the permanent and long term arrivals and departures in 1961 whose State of disembarkation or embarkation was Victoria :—

VICTORIA—NATIONALITY OF PERMANENT AND LONG TERM ARRIVALS AND DEPARTURES, 1961

Nationality	Arrivals	Departures	Nationality	Arrivals	Departures
British ..	19,299	12,037	Japanese ..	8	..
Irish ..	257	167	Latvian ..	13	3
American (U.S.)	159	122	Lebanese ..	99	8
Austrian ..	893	267	Lithuanian ..	..	4
Belgian ..	396	2	Norwegian ..	54	17
Burmese ..	10	..	Polish* ..	702	50
Chinese ..	116	17	Portuguese ..	7	..
Czechoslovak ..	2	7	Romanian ..	71	2
Danish ..	81	90	Russian† ..	255	11
Dutch ..	2,257	1,390	Ukrainian ..	1	1
Estonian ..	1	..	Spanish ..	1,143	9
Finnish ..	161	91	Swedish ..	72	34
French ..	107	45	Swiss ..	303	60
German ..	4,412	1,218	Turkish ..	11	2
Greek ..	4,939	369	Yugoslav ..	1,628	35
Hungarian ..	150	37	Stateless‡ ..	1,681	46
Indonesian ..	19	30	Other ..	81	40
Israeli ..	70	15			
Italian ..	10,739	1,229	Total ..	50,197	17,455

\* Includes "Stateless" who were formerly Polish. † Includes "Stateless" who were formerly Russian. ‡ Includes "Stateless" with former nationality stated but other than Polish or Russian.

### Assisted Migration

The Migration Scheme in operation prior to the war ceased on the outbreak of war. During the war assisted immigration was discontinued, except in cases of close family reunion involving wives and dependent children, and other cases having exceptional features, for which special approval was required.

More than 910,000 migrants have received assisted passages to Australia since the Second World War. Migrants granted assisted passages pay only £10 Stg. each towards the cost of the passage to Australia, while children under nineteen years of age travel free.

### Naturalization

The *Nationality and Citizenship Act* 1948 commenced on Australia Day (26th 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.

The following table shows the persons of each nationality granted naturalization certificates in Victoria during the five years 1957 to 1961 :—

**VICTORIA—PREVIOUS NATIONALITY OF PERSONS  
NATURALIZED**

Nationality	Number of Naturalization Certificates Granted					Total Granted 1957 to 1961	
	1957	1958	1959	1960	1961	No.	%
Albanian ..	39	23	23	29	27	141	0·24
Austrian ..	114	79	100	169	219	681	1·20
Belgian ..	11	15	12	11	8	57	0·10
Bulgarian ..	23	18	21	21	19	102	0·18
Czechoslovak ..	413	282	191	159	134	1,179	2·07
Danish ..	6	16	12	13	10	57	0·10
Dutch ..	725	1,093	1,258	2,065	1,557	6,698	11·77
Estonian ..	168	137	121	161	67	654	1·14
Finnish ..	1	11	5	24	13	54	0·10
French ..	25	26	47	45	39	182	0·32
German ..	386	537	849	1,669	1,018	4,459	7·83
Greek ..	323	323	536	1,170	1,405	3,757	6·60
Hungarian ..	553	390	253	340	191	1,727	3·04
Italian ..	1,326	2,079	2,953	4,136	3,222	13,716	24·09
Latvian ..	769	762	600	485	268	2,884	5·07
Lithuanian ..	430	340	329	267	129	1,495	2·62
Norwegian ..	15	15	15	18	17	80	0·14
Polish ..	1,989	1,691	1,952	1,822	907	8,361	14·69
Romanian ..	89	71	73	50	28	311	0·55
Russian ..	103	121	154	111	69	558	0·98
Swedish ..	3	8	13	11	8	43	0·07
Swiss ..	54	34	43	46	38	215	0·38
Ukrainian ..	623	649	751	723	342	3,088	5·42
Yugoslav ..	716	728	735	818	513	3,510	6·17
Other European ..	34	35	54	61	30	214	0·38
U.S. American ..	8	10	10	13	10	51	0·08
Other Nationalities	139	123	242	361	428	1,293	2·28
Stateless ..	498	312	204	244	102	1,360	2·39
<b>Total ..</b>	<b>9,583</b>	<b>9,928</b>	<b>11,556</b>	<b>15,042</b>	<b>10,818</b>	<b>56,927</b>	<b>100·00</b>

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 2,100 children in 1957, 2,474 in 1958, 3,071 in 1959, 4,231 in 1960, and 2,610 in 1961, affected by the grant of certificates.

**Aborigines in Victoria**

The estimated number of persons with a significant amount of aboriginal blood living in this State on 30th June, 1961, was 2,300, of whom eighteen were recorded as full-blood.

In 1957, following investigation by a Board of Inquiry appointed by the State Government to inquire into the operation of legislation under which aboriginal affairs were being administered, Parliament passed the present Aborigines Act. It repealed the law then existing and constituted the Aborigines Welfare Board to replace the former Board for the Protection of the Aborigines. The function of the Board is to promote the moral, physical, and intellectual welfare of aboriginal people living anywhere in Victoria, irrespective of their place of birth or degree of native blood, with a view to their assimilation into the general community.

After a preliminary survey of the conditions, the Board gave priority to plans for housing aboriginal people who were living in depressed camp settlements or in sub-standard metropolitan dwellings. Ten houses at Mooroopna and twelve at Robinvale have been completed, and are occupied by families transferred from river-bank camps. In addition, three houses at Drouin and three at Nowa Nowa have been provided by the Board and let to aboriginal families at nominal rentals. Land has been acquired at Dimboola and Orbost for similar projects, and fourteen houses will be available for occupation in those towns early next year.

The aborigines under the direct care of the Board are maintained on Lake Tyers Aboriginal Station, in East Gippsland, which is under the control of the resident manager. The number on the Station at 30th June, 1961, was 139, of whom eight were recorded as full-bloods.

The Board has arranged for women to be transferred from the Lake Tyers Aboriginal Station to the Bairnsdale District Hospital for confinement. Four male and five female children were born to part-aboriginal Lake Tyers parents at that hospital during the year.

Two part-aboriginal couples were married at the Station and three part-aborigines from the Station died at the Bairnsdale District Hospital in the same period.

Approximately 80 part-aborigines live on another aboriginal reserve at Framlingham, in the Western District, which is supervised by a local Welfare Committee, whose funds are subsidized by the Board. These aborigines are provided with Government cottages, for which they are charged a nominal rental, and maintain themselves with assistance from the Welfare Committee. Many of them receive social service allowances.

The Board derives its revenue almost wholly from an Annual Appropriation by Parliament and loan funds. The amount expended by the Board during 1960-61 was £90,000, plus £2,200 Child Endowment money administered on behalf of Lake Tyers Station endowees.

## 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 (so far as regards their registration duties) the clergymen who celebrate marriages. Copies of entries certified by the Government Statist or by an Assistant Government Statist or an authorized 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 1st 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 reorganize 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 1st 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, has been made to the system of registration of marriages.

The repealed legislation providing for registration of births and deaths in Victoria had remained unchanged in principle since the year 1853, and was originally drafted from English legislation enacted in the year 1837.

Under this legislation the State was divided into districts which warranted the creation of an office of Registrar of Births and Deaths. Persons appointed to such office were citizens residing within the district and the method of appointment left much to be desired. Untrained persons, and in many cases persons totally unsuitable for such a position were appointed, which resulted in almost insurmountable administrative difficulties and unnecessarily added to costs.

The system required the responsible person to attend at a Registrar's Office for the purpose of giving information and to sign the registration entry, which had been prepared by the Registrar, of the event being registered. Under present day economic and industrial conditions, this procedure placed a monetary hardship and some



inconvenience upon the responsible person in view of loss of time from employment and in many instances the cost of travel to and from the Registrar's Office.

Under the present system, forms for giving of information for registration of births and deaths are made available to the public through maternity hospitals, funeral directors, institutions, Police Stations, and Collecting Agents. With the ready co-operation of maternity hospitals in the State, a form for registration of a birth is made available to either parent before the mother is discharged from hospital. This form, when completed, signed, and witnessed may be delivered or posted direct, to reach the Office of the Government Statist within 60 days of birth or delivered to a local Collecting Agent, whose duty it is to check the particulars contained in the form and post it to the Government Statist. The person responsible for the establishment in which a birth occurs is also required to forward notification of such event to the Government Statist.

Information forms relating to deaths are usually completed, under the supervision of a funeral director, by some relative with knowledge of the particulars to be registered. In cases of deaths reported to a Coroner, the required information is ascertained by the police. Every funeral director is required to notify particulars of burial, cremation or disposal of any dead body, and any medical practitioner in attendance during the last illness is obliged to submit a medical certificate concerning death, unless the case has been reported to a Coroner.

All registrations are now prepared in standard form in the Office of the Government Statist by officers specially trained in this particular type of work, and registrations are effected without the personal attendance of the informant. The original Information Form, which is a statutory document under the Regulations to the above Act, will be retained in volume form as a duplicate record of the event registered.

Provision is also made in the new legislation for the person giving particulars relating to a birth or death, to be notified that such particulars have been duly registered by posting to him an Extract from the entry. This provision is being carried out by photographing the first four columns of each registration entry and the column stating the name and address of the informant and posting the result in a window-faced envelope. This method was adopted for reasons of economy and lessens the possibility of altering the document. However, investigation on this matter by producing a document laminated in a plastic cover is proceeding.

The response and co-operation from persons placed under an obligation by the Act and from the general public is most encouraging. Although the system has been in operation for a short period and no conclusive statistics are yet available, it would appear from the impression gained that the change has been justified.

The principal numbers and rates relating to vital statistics are given in the following table :—

VICTORIA—SUMMARY OF VITAL STATISTICS, 1961

Division	Number of—				Rate per 1,000 of Mean Population			Infant Mortality
	Marriages	Live Births	Deaths	Deaths under One Year†	Marriages	Live Births	Deaths	Deaths under One Year per 1,000 Live Births
Melbourne Metropolitan Area ..	*	41,198	16,200	719	*	21.39	8.49	17.43
Other Urban Areas—								
Geelong ..	*	2,084	740	42	*	22.98	8.38	21.34
Ballarat ..	*	1,180	509	21	*	21.72	9.62	18.46
Bendigo ..	*	889	382	20	*	22.25	9.82	23.41
Rest of State ..	*	20,535	6,669	371	*	24.84	8.07	18.07
Victoria ..		21,264	65,886	24,500	1,173	7.26	22.51	8.37

\* Not available. † Included in figure for deaths.

Marriages

Marriages in Victoria in 1961 numbered 21,264, an increase of 637 as compared with the number registered in 1960. The rate per 1,000 of mean population in 1961 was 7.26 as compared with a rate of 7.22 in 1960. 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 the mean population in the Australian States and Territories for each of the five years 1957 to 1961:—

AUSTRALIA—NUMBER OF MARRIAGES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957..	28,767	20,239	10,271	6,581	4,897	2,507	178	256	73,696
1958..	28,554	20,649	10,255	6,505	5,038	2,475	201	324	74,001
1959..	28,201	20,456	10,581	6,614	5,387	2,567	205	352	74,363
1960..	29,328	20,627	10,227	6,607	5,323	2,713	208	395	75,428
1961..	29,773	21,264	10,392	6,804	5,150	2,677	207	419	76,686

AUSTRALIA—MARRIAGE RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957..	7.94	7.62	7.29	7.53	7.12	7.63	8.63	6.74	7.65
1958..	7.73	7.60	7.14	7.25	7.20	7.38	9.24	7.88	7.52
1959..	7.50	7.34	7.23	7.18	7.57	7.52	8.68	7.55	7.40
1960..	7.65	7.22	6.86	6.99	7.36	7.82	8.28	7.51	7.34
1961..	7.60	7.26	6.86	7.02	6.98	7.57	7.83	7.13	7.30

The relative ages of bridegrooms and brides who married in Victoria in 1961 are shown in the following table :—

VICTORIA—RELATIVE AGES OF BRIDEGROOMS AND BRIDES, 1961

Ages of Bridegrooms (Years)	Ages of Brides (Years)														Total Bridegrooms	
	13	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 ..	..	..	2	5	4	1	1	1	..	..	..	..	..	..	..	14
17 ..	..	2	14	24	28	9	4	4	3	..	..	..	..	..	..	88
18 ..	..	2	17	41	75	71	30	14	10	..	..	..	..	..	..	260
19 ..	..	3	12	85	128	156	116	51	54	9	3	..	..	..	..	617
20 ..	..	..	15	62	145	193	208	161	182	10	..	..	..	..	..	976
21 to 24 ..	1	2	21	137	419	743	1,264	1,484	3,858	353	34	12	2	..	..	8,330
25 to 29 ..	1	2	5	23	97	237	495	664	2,848	1,051	213	49	3	3	..	5,691
30 to 34 ..	..	..	1	4	22	40	83	121	742	744	408	143	39	17	2	2,366
35 to 39 ..	..	..	..	1	2	4	5	18	152	266	242	217	60	32	16	1,015
40 to 44 ..	..	..	..	..	1	2	3	4	31	76	101	116	107	43	21	505
45 to 49 ..	..	..	..	..	..	..	2	2	9	22	50	98	90	109	44	426
50 to 54 ..	..	..	..	..	..	..	..	..	1	5	25	34	62	74	91	292
55 to 59 ..	..	..	..	..	..	..	..	..	3	2	12	13	25	35	116	206
60 to 64 ..	..	..	..	1	..	..	..	..	..	..	6	5	8	22	133	175
65 and over ..	..	..	..	..	..	..	..	..	1	..	1	2	8	10	281	303
Total Brides	2	11	87	383	921	1,456	2,211	2,524	7,894	2,538	1,095	689	404	345	704	21,264

Of every 1,000 men who married during 1961, 783 were older and 129 were younger than their brides, and 88 were of the same age. In 1961 the oldest bridegroom was aged 91 years and the oldest bride 88 years ; the youngest bridegrooms were aged sixteen years, and the youngest brides thirteen years.

The percentages in age groups of bridegrooms and brides who married in 1961 are shown in the following table :—

VICTORIA—PERCENTAGES OF BRIDEGROOMS AND BRIDES IN AGE GROUPS, 1961

Age Group (Years)	Percentage of Total—		Age Group (Years)	Percentage of Total—	
	Bridegrooms	Brides		Bridegrooms	Brides
Under 16 ..	..	0·5	35 to 39 ..	4·8	3·2
16 ..	0·1	1·8	40 to 44 ..	2·4	1·9
17 ..	0·4	4·3	45 to 49 ..	2·0	1·6
18 ..	1·2	6·9	50 to 54 ..	1·4	1·2
19 ..	2·9	10·4	55 to 59 ..	1·0	0·8
20 ..	4·6	11·9	60 and over ..	2·2	1·3
21 to 24 ..	39·2	37·1			
25 to 29 ..	26·7	11·9		100·0	100·0
30 to 34 ..	11·1	5·2			

The number of minors marrying at each age and the proportion of each sex to the total marriages are given in the following table for each of the five years 1957 to 1961:—

## VICTORIA—MARRIAGES OF MINORS

Year	Age in Years								Total		
	13	14	15	16	17	18	19	20	Number	Percentage of Total Marriages	
<b>BRIDEGROOMS</b>											
1957	..	..	..	9	41	184	434	855	1,523	7·53	
1958	..	..	1	11	58	213	465	851	1,599	7·74	
1959	..	..	..	12	55	218	494	869	1,648	8·06	
1960	..	..	2	13	61	288	559	905	1,828	8·86	
1961	..	..	..	14	88	260	617	976	1,955	9·19	
<b>BRIDES</b>											
1957	..	2	8	64	287	684	1,373	2,010	2,392	6,820	33·70
1958	..	1	9	89	321	731	1,417	2,036	2,512	7,116	34·46
1959	..	..	19	77	327	742	1,377	2,060	2,458	7,060	34·51
1960	..	..	5	78	381	771	1,487	2,175	2,490	7,387	35·81
1961	..	2	11	87	383	921	1,456	2,211	2,524	7,595	35·72

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 1961 these percentages were 9·19 and 35·72 respectively, and in 7·92 per cent. of marriages both parties were under 21 years of age.

The mean ages at marriage, according to conjugal condition, are shown in the following table for each of the five years, 1957 to 1961:—

## VICTORIA—MEAN AGE AT MARRIAGE

Year	Bridegrooms				Brides			
	Bachelors	Widowers	Divorced	All Bridegrooms	Spinsters	Widows	Divorced	All Brides
1957	26·7	56·3	41·3	28·7	23·5	48·9	37·0	25·3
1958	26·7	56·9	41·0	28·6	23·4	48·7	36·9	25·2
1959	26·6	56·3	40·4	28·6	23·2	48·9	37·1	25·2
1960	26·3	56·8	41·1	28·3	23·1	49·2	37·1	25·0
1961	26·2	57·0	41·4	28·2	23·0	49·5	37·9	24·9

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 25 years. The corresponding age for spinsters was 21 years. More bachelors were married at 22 years and spinsters at 21 years (the modal ages) than at any other age.

In the following tables are given the number of persons in each conjugal condition marrying during each of the five years 1957 to 1961, and the proportions in each condition for periods since 1930 :—

### VICTORIA—CONJUGAL CONDITION OF PERSONS MARRYING

Period	Bridegrooms			Brides			Total Marriages
	Bachelors	Widowers	Divorced	Spinsters	Widows	Divorced	
1957 ..	18,405	859	975	18,264	848	1,127	20,239
1958 ..	18,740	808	1,101	18,610	834	1,205	20,649
1959 ..	18,406	841	1,209	18,287	833	1,336	20,456
1960 ..	18,742	830	1,055	18,541	858	1,228	20,627
1961 ..	19,407	836	1,021	19,279	868	1,117	21,264

### VICTORIA—TOTAL MARRIAGES IN 1961 AND PERCENTAGE OF PERSONS MARRYING IN EACH CONJUGAL CONDITION, 1930 TO 1961

Marriages Between—	1961		Conjugal Condition	Percentage of Total—			
	Number	Percentage		1930-39	1940-49	1950-59	1961
<b>BRIDEGROOMS</b>							
Bachelors and Spinsters ..	18,445	86.7	Bachelors	92.3	90.5	89.5	91.3
Bachelors and Widows ..	329	1.6	Widowers	5.5	4.9	4.5	3.9
Bachelors and Divorced Women .. ..	633	3.0	Divorced	2.2	4.6	6.0	4.8
Widowers and Spinsters ..	288	1.4	Total ..	100.0	100.0	100.0	100.0
Widowers and Widows ..	392	1.8					
Widowers and Divorced Women .. ..	156	0.7	<b>BRIDES</b>				
Divorced Men and Spinsters .. ..	546	2.6	Spinsters	94.4	91.4	89.2	90.7
Divorced Men and Widows	147	0.7	Widows	3.4	3.9	4.4	4.1
Divorced Men and Divorced Women .. ..	328	1.5	Divorced	2.2	4.7	6.4	5.2
Total Marriages .. ..	21,264	100.0	Total ..	100.0	100.0	100.0	100.0

In 1961, the number of marriages celebrated by ministers of religion was 19,334 representing 91 per cent. of the total marriages. Civil marriages numbered 1,930, or 9 per cent. of the total.

The number and proportion of civil marriages and of marriages solemnized according to the rites of the principal religious denominations for the years 1941, 1951, and 1961 are shown in the following table :—

### VICTORIA—MARRIAGES, RELIGIOUS AND CIVIL

Denomination	1941		1951		1961	
	Number	Per-centage of Total Marriages	Number	Per-centage of Total Marriages	Number	Per-centage of Total Marriages
Church of England ..	6,578	31·48	6,072	28·76	4,857	22·84
Roman Catholic ..	4,144	19·83	4,376	20·72	6,037	28·39
Presbyterian ..	3,623	17·34	4,119	19·51	3,217	15·13
Methodist ..	2,940	14·07	2,995	14·18	2,584	12·15
Baptist ..	762	3·65	376	1·78	336	1·58
Churches of Christ ..	470	2·25	358	1·70	375	1·76
Congregational ..	307	1·47	345	1·63	249	1·17
Lutheran ..	69	0·33	209	0·99	269	1·27
Hebrew ..	117	0·56	232	1·10	166	0·78
Salvation Army ..	184	0·88	95	0·45	113	0·53
Other Denominations ..	225	1·07	286	1·35	1,131	5·32
Civil Marriages ..	1,478	7·07	1,654	7·83	1,930	9·08
Total ..	20,897	100·00	21,117	100·00	21,264	100·00

The following table shows the number of civil marriages and proportion to total marriages performed for each of the five years 1957 to 1961. 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
1957 .. ..	1,663	8·22	1,535	92·30
1958 .. ..	1,776	8·60	1,620	91·22
1959 .. ..	1,863	9·11	1,687	90·55
1960 .. ..	1,932	9·37	1,764	91·30
1961 .. ..	1,930	9·08	1,720	89·12

### Divorce

Until the proclamation by the Commonwealth of the *Matrimonial Causes Act* 1960, which was proclaimed to operate from 1st February, 1961, the law in Victoria in regard to divorce was contained in the *Marriage Act* 1958.

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 during the year 1961. There were no petitions filed nor decrees granted for judicial separation during that year. Every decree of dissolution of marriage is in the first instance a decree *nisi* and is not made absolute till the expiration of not less than three months thereafter.

#### VICTORIA—DIVORCES, 1961

Petition for—	Petitions Filed by—			Decrees Granted to—		
	Husbands	Wives	Total	Husbands	Wives	Total
Dissolution of Marriage	1,110*	1,186*	2,296*	594	654	1,248
Nullity of Marriage ..	2	8	10	5	4	9
Total .. ..	1,112	1,194	2,306	599	658	1,257

\* Includes three husbands' and four wives' petitions for dissolution or nullity.

The following table shows the number of petitions filed and decrees granted for dissolution, nullity, and judicial separation for each of the five years 1957 to 1961:—

#### VICTORIA—DIVORCE : PETITIONS FILED AND DECREES GRANTED : DISSOLUTION, NULLITY, AND JUDICIAL SEPARATION

Year	Petitions Filed			Decrees Granted		
	Dissolution	Nullity	Judicial Separation	Dissolution	Nullity	Judicial Separation
1957 ..	1,654	21	5	1,345	15	2
1958 ..	1,579	15	..	1,698	19	..
1959 ..	1,650	12	4	1,861	16	..
1960 ..	1,798	17	2	1,296	16	1
1961 ..	2,296*	10	..	1,248	9	..

\* Includes seven petitions for dual relief—dissolution or nullity.

The grounds upon which divorces were granted during the year 1961 are set out in the following table :—

VICTORIA—GROUNDS FOR DIVORCE, 1961

Grounds on Which Granted	Dissolution of Marriage		Nullity of Marriage	
	Husbands' Petitions	Wives' Petitions	Husbands' Petitions	Wives' Petitions
Adultery .. .. .	181	125	..	..
Adultery and Desertion .. .. .	31	24	..	..
Cruelty .. .. .	..	8	..	..
Desertion .. .. .	362	454	..	..
Separation .. .. .	11	23	..	..
Desertion and Separation .. .. .	4	4	..	..
Other Grounds .. .. .	5	16	5	4
Total .. .. .	594	654	5	4

The following table shows the number of petitioners to whom decrees were granted in 1961, the ages of such petitioners at date of decree, and the number of their issue :—

VICTORIA—DIVORCE PETITIONS GRANTED : AGES OF PETITIONERS (AT DATE OF DECREE) AND ISSUE, 1961

Ages of Petitioners (Years)	Dissolution of Marriage		Nullity of Marriage		Number of Children	
	Husbands' Petitions	Wives' Petitions	Husbands' Petitions	Wives' Petitions	Husbands' Petitions	Wives' Petitions
Under 21 .. .. .	1	1	1	..	..	1
21-24 .. .. .	16	34	1	..	14	24
25-29 .. .. .	62	119	..	..	56	120
30-34 .. .. .	123	129	1	2	139	143
35-39 .. .. .	124	117	1	..	129	140
40-44 .. .. .	75	118	..	1	102	164
45-49 .. .. .	68	56	1	..	86	90
50-54 .. .. .	69	38	..	..	89	52
55-59 .. .. .	24	21	..	..	23	30
60 and over .. .. .	32	21	..	1	31	44
Total .. .. .	594	654	5	4	669	808



In the following table particulars are given of the duration of marriage and issue in respect of the petitions granted for dissolution of marriage during 1961 :—

VICTORIA—DISSOLUTIONS OF MARRIAGE : PETITIONS GRANTED : DURATION OF MARRIAGE AND ISSUE, 1961

Duration of Marriage (Years)	Number of Children									Total Dissolutions of Marriage	Total Children
	0	1	2	3	4	5	6	7	8 and over		
1 .. .. .	3	..	..	..	..	..	..	..	..	3	..
2 .. .. .	5	..	..	..	..	..	..	..	..	5	..
3 .. .. .	8	6	1	..	..	..	..	..	..	15	8
4 .. .. .	29	3	1	..	1	..	..	..	..	34	9
5 .. .. .	45	19	8	..	..	..	..	..	..	73	42
6 .. .. .	49	22	9	..	..	..	..	1	..	80	40
7 .. .. .	44	25	6	2	..	..	..	..	..	77	43
8 .. .. .	33	20	17	6	..	..	..	..	..	76	72
9 .. .. .	19	25	22	2	1	..	..	..	..	69	79
10 .. .. .	25	19	24	8	..	..	..	..	..	76	91
11 .. .. .	30	21	13	7	2	..	..	..	..	73	76
12 .. .. .	25	24	11	5	2	2	..	..	..	69	79
13 .. .. .	24	17	10	10	..	1	..	..	..	62	72
14 .. .. .	14	14	11	9	2	1	..	..	..	51	76
15-19 .. .. .	50	55	40	27	7	1	1	..	1	182	263
20-24 .. .. .	39	36	49	22	6	2	..	..	..	154	234
25-29 .. .. .	10	18	26	12	7	1	1	..	..	75	145
30-34 .. .. .	7	2	12	9	1	..	..	..	1	32	66
35-39 .. .. .	4	6	4	5	..	2	1	..	..	22	45
40 and over .. .. .	9	1	3	2	3	1	1	..	..	20	36
Total Dissolutions of Marriage .. .. .	472	333	267	126	32	11	4	1	2	1,248	..
Total Children .. .. .	..	333	534	378	128	55	24	7	17	..	1,476

The following table shows the ages of the parties concerned in the decrees for dissolution of marriage, petitions for which had been granted during 1961 :—

VICTORIA—DISSOLUTIONS OF MARRIAGE : PETITIONS GRANTED : AGES OF PARTIES AT DATE OF DECREE, 1961

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	
Under 21 .. .. .	1	..	..	..	..	..	..	..	..	..	1
21-24 .. .. .	2	19	4	..	..	..	..	..	..	..	25
25-29 .. .. .	2	42	84	12	2	..	..	..	..	..	142
30-34 .. .. .	1	13	98	108	23	2	..	1	..	..	246
35-39 .. .. .	..	2	26	106	98	21	5	1	..	..	259
40-44 .. .. .	..	..	6	31	58	70	12	3	..	..	180
45-49 .. .. .	..	..	1	8	23	60	51	9	2	2	156
50-54 .. .. .	..	..	1	2	6	24	43	37	12	1	126
55-59 .. .. .	..	..	..	2	3	3	12	15	13	3	51
60 and over .. .. .	..	..	..	1	..	2	4	4	13	38	62
Total Wives .. .. .	6	76	220	270	213	182	127	70	40	44	1,248

The following is a table of the number of decrees granted in Victoria for dissolution of marriage and for judicial separation since 1911 :—

VICTORIA—DISSOLUTIONS OF MARRIAGE AND JUDICIAL SEPARATIONS

Period	Decrees Granted For—		Year	Decrees Granted For—	
	Dissolution of Marriage	Judicial Separation		Dissolution of Marriage	Judicial Separation
1911–20 ..	2,499	14	1957	1,345	2
1921–30 ..	4,403	16	1958	1,698	..
1931–40 ..	6,495	16	1959	1,861	..
1941–50 ..	15,460	22	1960	1,296	1
1951–60 ..	16,054	11	1961	1,248	..

### Births

#### General

The number of births registered in Victoria during the year 1961 was 65,886, the highest ever registered in Victoria.

In young communities, birth-rates calculated per 1,000 of the mean population are to some extent misleading. In the earlier periods when, owing to immigration, the population consists for the most part of men and women at the reproductive period of life, such rates are naturally high. As time proceeds, notwithstanding that immigration of reproductive adults may be maintained, the proportion of such adults to the total population must diminish, and, with it, consequently the birth-rate.

Stillbirths, which are excluded from both births and deaths, numbered 885 and corresponded to a ratio of 13·25 per 1,000 infants born alive in 1961. The compulsory registration of still-born 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 1957 to 1961 :—

### AUSTRALIA—NUMBER OF BIRTHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957.. ..	79,456	60,464	33,763	19,536	16,924	8,435	646	1,134	220,358
1958.. ..	80,045	61,269	33,872	20,047	16,731	8,568	697	1,275	222,504
1959.. ..	80,866	62,245	35,599	20,372	17,111	8,625	796	1,362	226,976
1960.. ..	81,983	64,025	35,213	20,966	16,926	8,853	777	1,583	230,326
1961.. ..	86,392	65,886	36,637	22,399	17,078	8,982	878	1,734	239,986

### AUSTRALIA—BIRTH-RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957.. ..	21·92	22·76	23·97	22·35	24·62	25·68	31·33	29·84	22·86
1958.. ..	21·66	22·55	23·59	22·35	23·90	25·55	32·05	31·01	22·60
1959.. ..	21·49	22·36	24·31	22·12	24·04	25·26	33·70	29·22	22·57
1960.. ..	21·38	22·41	23·62	22·19	23·41	25·52	30·95	30·12	22·42
1961.. ..	22·06	22·51	24·18	23·11	23·16	25·40	33·22	29·49	22·85

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 1957 to 1961 :—

### VICTORIA—BIRTHS BY SEX, MASCULINITY, AVERAGE AGE OF FATHER AND MOTHER

Year	Males	Females	Total	Masculinity*	Average Age†	
					Father	Mother
1957 ..	30,968	29,496	60,464	105·00	31·5	28·1
1958 ..	31,517	29,752	61,269	105·93	31·5	28·1
1959 ..	32,041	30,204	62,245	106·08	30·8	27·9
1960 ..	32,825	31,200	64,025	105·21	31·3	28·0
1961 ..	33,875	32,011	65,886	105·82	31·3	27·9

\* Number of male births per 100 female births.

† Average age of father and mother of nuptial children only.

The following table, relating to nuptial confinements, shows the number of previous issue to mothers in the various age groups :—

VICTORIA—NUPTIAL CONFINEMENTS : AGE GROUP OF MOTHER AND PREVIOUS ISSUE\*, 1961

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 15 ..	2	..	..	..	..	..	..	..	..	..	..	2
15-19 .. ..	2,819	651	71	3	1	..	..	..	..	..	..	3,545
20-24 .. ..	9,685	6,366	2,299	669	133	28	6	1	..	..	..	19,187
25-29 .. ..	4,543	6,117	4,624	2,251	874	337	107	24	10	3	..	18,890
30-34 .. ..	1,691	2,734	3,313	2,513	1,284	609	329	125	60	20	11	12,689
35-39 .. ..	652	1,015	1,296	1,281	903	546	310	166	103	43	47	6,362
40-44 .. ..	151	174	255	303	266	180	126	83	57	35	60	1,690
45-49 .. ..	15	14	23	17	18	11	12	13	1	3	10	137
Aged 50 ..	..	2	..	..	..	..	..	..	..	..	..	2
Total ..	19,558	17,073	11,881	7,037	3,479	1,711	890	412	231	104	128	62,504
Proportion of Total Married Mothers	31·29	27·31	19·01	11·26	5·57	2·74	1·42	0·66	0·37	0·17	0·20	100·00

\* Including ex-nuptial children by the same father. Children of former marriage and all stillborn children are excluded.

The average total issue of married mothers in respect of whom births were registered in 1961 is shown in the following table :—

VICTORIA—NUPTIAL CONFINEMENTS : NUMBER OF MOTHERS IN AGE GROUPS, TOTAL ISSUE AND AVERAGE ISSUE, 1961

Age Group of Mother (Years)	Number of Mothers	Total Issue*	Average Issue
Under 20 .. ..	..	..	..
20-24 .. ..	..	..	..
25-29 .. ..	..	..	..
30-34 .. ..	..	..	..
35-39 .. ..	..	..	..
40-44 .. ..	..	..	..
45-49 .. ..	..	..	..
Aged 50 ..	..	..	..
Total .. ..	..	..	..
	62,504	159,991	2·56

\* Includes issue to present confinement and all previous issue to existing union.

The following table shows nuptial confinements according to the relative age groups of parents :—

VICTORIA—NUPTIAL CONFINEMENTS : RELATIVE AGE GROUPS OF PARENTS, 1961

Age Group of Father (Years)	Age Group of Mother (Years)								Total Fathers
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	Aged 50	
Under 20 ..	501	91	2	..	..	..	..	..	594
20-24 ..	2,252	6,589	640	38	1	..	..	..	9,520
25-29 ..	652	9,222	8,263	965	89	6	..	..	19,197
30-34 ..	122	2,728	7,736	5,975	785	64	..	..	17,410
35-39 ..	15	462	1,842	4,287	2,944	274	3	..	9,827
40-44 ..	2	60	306	1,097	1,762	717	13	..	3,957
45-49 ..	1	27	68	250	592	459	66	1	1,464
50 and over ..	2	8	33	77	189	170	55	1	535
Married Mothers	3,547	19,187	18,890	12,689	6,362	1,690	137	2	62,504

Nuptial first births according to age group of mother and duration of marriage are shown in the following table for the year 1961 :—

VICTORIA—NUPTIAL FIRST BIRTHS : AGE GROUP OF MOTHER AND DURATION OF MARRIAGE, 1961

Age 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 15 ..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2
15-19 ..	19	41	70	130	237	430	579	322	110	166	113	110	440	47	5	..	..	2,819
20-24 ..	23	25	49	106	182	328	495	318	388	962	746	636	3,306	1,272	537	203	108	9,684
25-29 ..	9	12	7	20	24	50	74	75	106	289	240	199	1,122	707	546	418	645	4,543
30-34 ..	4	4	6	6	12	23	27	31	40	93	95	54	367	178	144	101	507	1,692
35-39 ..	1	1	4	4	4	7	14	9	21	27	32	21	129	84	58	36	200	652
40-44 ..	..	..	1	..	..	5	3	3	3	7	3	1	25	21	18	6	55	151
45-49 ..	..	..	..	..	..	1	..	..	..	..	..	1	2	2	..	2	7	15
Total	56	83	137	267	459	845	1,192	758	668	1,544	1,229	1,022	5,391	2,311	1,308	766	1,522	19,558

The number of cases of multiple births and the proportions per 1,000 of the total cases of births in each of the five years 1957 to 1961 were as follows:—

VICTORIA—MULTIPLE BIRTHS

Year	Cases of Twins	Cases of Triplets and Quadruplets	Total Multiple Cases	Multiple Cases per 1,000 of Total Confinements
1957 .. ..	695	10	705	11·80
1958 .. ..	759	9	768	12·69
1959 .. ..	711	7	718	11·67
1960 .. ..	734	4	738	11·66
1961 .. ..	713	8*	721	11·06

\* Includes one case of quadruplets.

The last preceding case of quadruplets occurred in 1951.

On the average of the five years 1957 to 1961, the proportion of mothers of twins was one in 86, of mothers of triplets, one in 8,386, and of mothers of all multiple births, one in 85 mothers.

The following tables show the number of ex-nuptial births and the percentage of ex-nuptial births to total births in each State and Territory in Australia in the years 1957 to 1961:—

AUSTRALIA—EX-NUPTIAL BIRTHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957.. ..	3,438	2,065	1,954	651	799	346	87	22	9,362
1958.. ..	3,832	2,219	1,993	738	854	375	99	21	10,131
1959.. ..	4,017	2,308	2,161	745	904	388	133	31	10,687
1960.. ..	4,114	2,380	2,173	841	921	433	100	25	10,987
1961.. ..	4,575	2,706	2,445	1,026	959	404	120	34	12,269

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
1957.. ..	4·33	3·42	5·79	3·33	4·72	4·10	13·47	1·94	4·25
1958.. ..	4·79	3·62	5·88	3·68	5·10	4·38	14·20	1·65	4·55
1959.. ..	4·97	3·71	6·07	3·66	5·28	4·50	16·71	2·28	4·71
1960.. ..	5·02	3·72	6·17	4·01	5·44	4·89	12·87	1·58	4·77
1961.. ..	5·30	4·11	6·67	4·58	5·62	4·50	13·67	1·96	5·11

The ages of mothers of ex-nuptial children in Victoria are shown in the following table for the years 1957 to 1961:—

VICTORIA—AGES OF MOTHERS OF EX-NUPTIAL CHILDREN

Age of Mother (Years)	1957	1958	1959	1960	1961
12 .. .. .	..	..	..	2	..
13 .. .. .	2	4	3	2	1
14 .. .. .	3	10	4	9	18
15 .. .. .	18	38	43	37	41
16 .. .. .	61	73	96	87	131
17 .. .. .	87	117	142	167	180
18 .. .. .	118	135	157	200	238
19 .. .. .	159	173	175	222	209
20 .. .. .	160	149	176	165	221
21-24 .. ..	438	485	478	487	539
25-29 .. ..	457	435	388	385	403
30-34 .. ..	307	317	353	346	378
35-39 .. ..	173	194	201	177	229
40-44 .. ..	52	56	61	73	76
45 and over ..	4	4	9	3	5
Total .. ..	2,039	2,190	2,286	2,362	2,669

*Adoption of Children*

Provision for the legal adoption of children and the registration of each adoption is contained in the *Adoption of Children Act* 1958. Details of the history of this legislation are contained on page 483 of the Victorian Year Book 1954-58.

The following table shows the number of legal adoptions (male and female) from 1957:—

VICTORIA—CHILDREN LEGALLY ADOPTED

Period	Number of Children Adopted	
	Males	Females
1957 .. .. .	612	612
1958 .. .. .	633	665
1959 .. .. .	576	656
1960 .. .. .	633	649
1961 .. .. .	772	806

*Children Legitimated*

Provision for the legitimation of children is contained in the *Registration of Births, Deaths, and Marriages Act 1958*.

The table below shows the number of legitimations and the proportion per 100 ex-nuptial births from 1957 :—

## VICTORIA—LEGITIMATIONS

Period				Number of Legitimations	Proportion per 100 Ex-nuptial Births
1957	..	..	..	124	6.0
1958	..	..	..	87	3.9
1959	..	..	..	86	3.7
1960	..	..	..	107	4.5
1961	..	..	..	100	3.7

Legitimation Acts are in force in all the Australian States, but differ greatly in content, and as a consequence there are marked differences in the numbers of legitimations resulting from them. In proportion to every 100 children born out of wedlock in 1961, the numbers of legitimations in the several States during that year were as follows :—Victoria, 3.7 ; New South Wales, 6.3 ; Queensland, 11.3 ; South Australia, 7.4 ; Western Australia, 20.2 ; and Tasmania, 15.6.

**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 1957 to 1961 :—

## AUSTRALIA—NUMBER OF DEATHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957	33,317	24,131	11,679	7,576	5,297	2,670	115	168	84,953
1958	32,350	23,625	11,455	7,743	5,554	2,708	106	182	83,723
1959	35,249	25,078	12,349	7,943	5,497	2,780	124	192	89,212
1960	35,030	24,547	12,370	7,804	5,697	2,670	134	212	88,464
1961	35,048	24,500	12,756	7,815	5,729	2,789	128	196	88,961

## AUSTRALIA—DEATH-RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957	9.19	9.08	8.29	8.67	7.71	8.13	5.58	4.40	8.81
1958	8.75	8.69	7.98	8.63	7.94	8.07	4.87	4.43	8.50
1959	9.37	9.01	8.43	8.62	7.72	8.14	5.25	4.12	8.87
1960	9.14	8.59	8.30	8.26	7.88	7.70	5.34	4.03	8.61
1961	8.95	8.37	8.42	8.06	7.77	7.89	4.84	3.33	8.47



VICTORIA—PERCENTAGE OF TOTAL DEATHS IN EACH AGE GROUP BY SEX, 1921 TO 1961

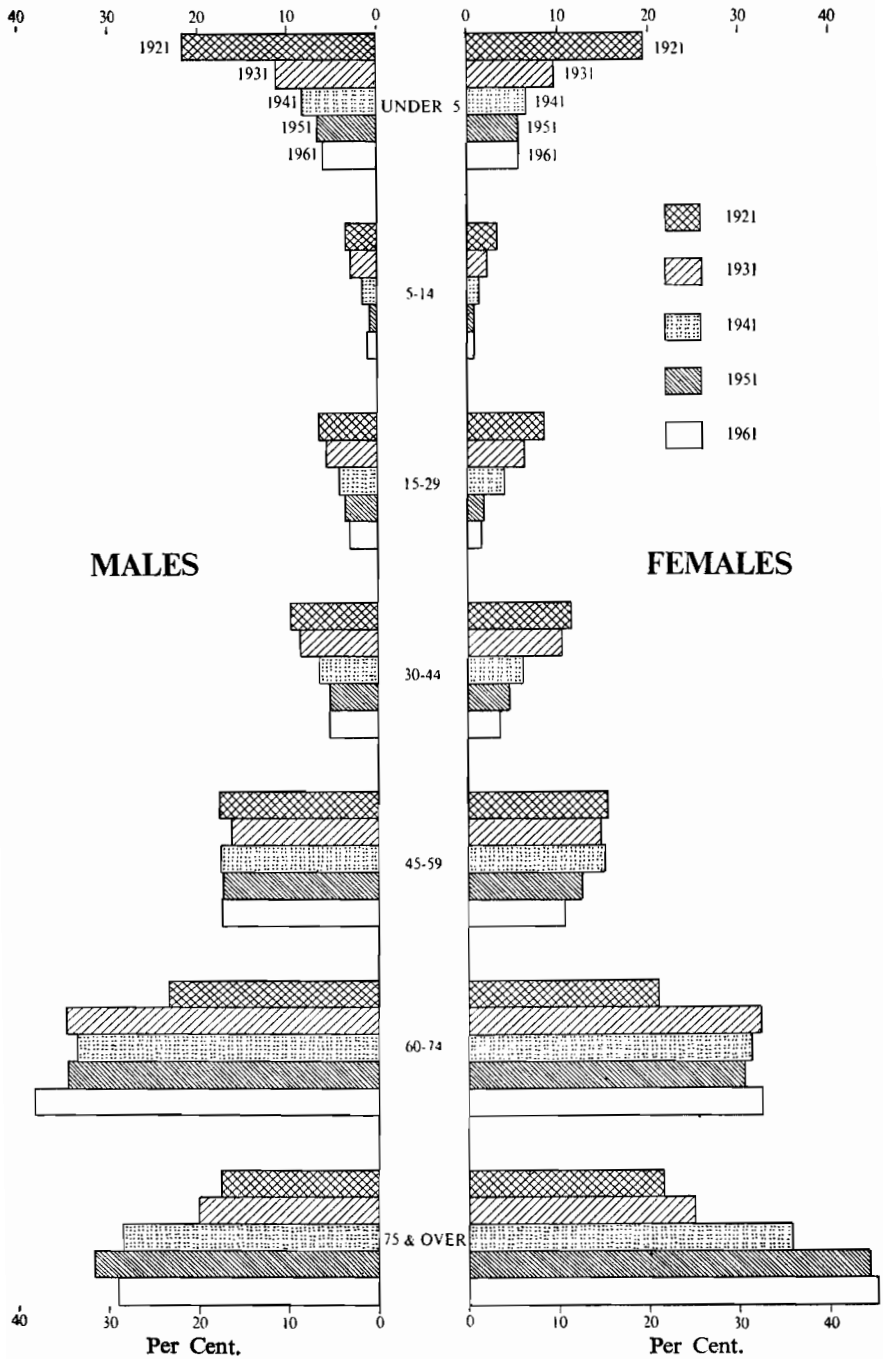


FIGURE 8.

The ages of males and of females who died in each of the years 1947, 1954, and 1961 are shown in the following table :—

## VICTORIA—AGES AT DEATH

Ages	1947			1954			1961		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
Under 1 year .. ..	725	520	1,245	622	433	1,055	656	517	1,173
1 year .. ..	54	38	92	79	50	129	56	35	91
2 years .. ..	35	18	53	49	25	74	36	29	65
3 " .. ..	29	15	44	33	20	53	36	23	59
4 " .. ..	25	13	38	25	21	46	28	25	53
5-9 years .. ..	91	39	130	75	58	133	66	53	119
10-14 " .. ..	47	34	81	46	32	78	77	34	111
15-19 " .. ..	104	60	164	106	35	141	130	63	193
20-24 " .. ..	141	105	246	135	38	173	165	58	223
25-29 " .. ..	131	111	242	162	80	242	125	58	183
30-34 " .. ..	142	139	281	158	98	256	171	72	243
35-39 " .. ..	183	154	337	182	133	315	223	140	363
40-44 " .. ..	296	206	502	280	209	489	324	167	491
45-49 " .. ..	398	320	718	443	257	700	498	275	773
50-54 " .. ..	678	490	1,168	660	417	1,077	778	388	1,166
55-59 " .. ..	928	646	1,574	913	530	1,443	1,077	494	1,571
60-64 " .. ..	1,147	821	1,968	1,274	851	2,125	1,451	808	2,259
65-69 " .. ..	1,299	1,021	2,320	1,551	1,152	2,703	1,771	1,204	2,975
70-74 " .. ..	1,334	1,244	2,578	1,622	1,364	2,986	1,938	1,563	3,501
75-79 " .. ..	1,491	1,535	3,026	1,567	1,542	3,109	1,654	1,608	3,262
80-84 " .. ..	1,126	1,419	2,545	1,139	1,467	2,606	1,268	1,578	2,846
85-89 " .. ..	661	894	1,555	753	1,029	1,782	728	1,125	1,853
90-94 " .. ..	166	288	454	244	469	713	236	495	731
95-99 " .. ..	23	46	69	38	78	116	38	137	175
100 years and over .. ..	2	4	6	3	2	5	3	15	18
Unknown .. ..	5	1	6	3	2	5	1	2	3
Total .. ..	11,261	10,181	21,442	12,162	10,392	22,554	13,534	10,966	24,500

The diagram on page 152 shows the percentages of deaths occurring in certain age groups in calendar years at ten-year intervals between 1921 and 1961, and supplies a graphic representation of the patterns of ages of males and females whose deaths were recorded in those years.

The changing pattern shown by the diagram is the result of a number of demographic features, and although detailed effects of individual features are not readily apparent, the diagram portrays visually the general improvement in survival from earlier ages.

In 1961 there were 1,234 male to every 1,000 female deaths, the average for the preceding five years being 1,188.

## Causes of Death

## Classification

The Sixth (1948) Revision of the International List of Causes of Death was adopted for use in classifying causes of death in 1950.

The Revision introduced international rules for a uniform method of selecting the underlying cause of death to be tabulated if more than one cause is stated on the death certificate.

The comparability of statistics for years subsequent to 1950 with those for years prior to 1950 has been affected by the adoption of the new method.

The Seventh (1955) Revision of the International List of Causes of Death was adopted for use in 1958.

The causes of death in Victoria for 1961, according to the abbreviated list of the Seventh (1955) Revision of the International List of Causes of Death, the proportion of total deaths from each cause, and the rate per million of mean population are shown in the following table :—

VICTORIA—CAUSES OF DEATH : NUMBERS AND RATES,  
1961

Cause of Death*	Detailed List Numbers	Number of Deaths	Proportion of Total	Rate per 1,000,000 of Mean Population
1. Tuberculosis of Respiratory System ..	001-008	116	0.47	40
2. Tuberculosis, Other Forms .. ..	010-019	11	0.05	4
3. Syphilis and its Sequelae .. ..	020-029	35	0.14	12
7. Scarlet Fever and Streptococcal Sore Throat	050, 051	2	0.01	1
8. Diphtheria .. .. .	055	2	0.01	1
10. Meningococcal Infections .. ..	057	9	0.04	3
12. Acute Poliomyelitis .. .. .	080	3	0.01	1
14. Measles .. .. .	085	6	0.02	2
17. All Other Diseases Classified as Infective and Parasitic .. .. .	†	81	0.33	28
18. Malignant Neoplasms—				
Digestive Organs and Peritoneum ..	150-159	1,478	6.03	505
Lung .. .. .	162, 163	556	2.27	190
Breast .. .. .	170	383	1.56	131
Genital Organs .. .. .	171-179	545	2.23	186
Urinary Organs .. .. .	180, 181	197	0.80	67
Leukaemia and Aleukaemia .. ..	204	176	0.72	60
Other Malignant and Lymphatic Neoplasms .. .. .	‡	664	2.71	227
19. Benign and Unspecified Neoplasms ..	210-239	54	0.22	18
20. Diabetes Mellitus .. .. .	260	446	1.82	152
21. Anaemias .. .. .	290-293	99	0.40	34
22. Vascular Lesions Affecting Central Nervous System .. .. .	330-334	3,292	13.44	1,124
23. Non-Meningococcal Meningitis .. ..	340	36	0.15	12
24. Rheumatic Fever .. .. .	400-402	11	0.04	4
25. Chronic Rheumatic Heart Disease ..	410-416	192	0.78	66
26. { Arteriosclerotic Heart Disease .. ..	420	6,094	24.87	2,081
{ Degenerative Heart Disease .. ..	421, 422	1,191	4.86	407
27. Other Diseases of Heart .. .. .	430-434	679	2.77	232
28. Hypertension with Heart Disease ..	440-443	384	1.57	131
29. Hypertension without Mention of Heart ..	444-447	258	1.05	88

VICTORIA—CAUSES OF DEATH: NUMBERS AND RATES, 1961—  
continued

Cause of Death*	Detailed List Numbers	Number of Deaths	Proportion of Total	Rate per 1,000,000 of Mean Population	
30. Influenza .. .. .	480-483	33	0.14	11	
31. Pneumonia .. .. .	490-493	764	3.12	261	
32. Bronchitis .. .. .	500-502	449	1.83	153	
33. Ulcer of Stomach and Duodenum ..	540-541	160	0.65	55	
34. Appendicitis .. .. .	550-553	20	0.08	7	
35. Intestinal Obstruction and Hernia ..	560, 561, 570	119	0.49	41	
36. Gastritis, Duodenitis, Enteritis and Colitis, except Diarrhoea of the Newborn ..	543, 571, 572	91	0.37	31	
37. Cirrhosis of Liver .. .. .	581	148	0.60	51	
38. Nephritis and Nephrosis .. .. .	590-594	222	0.91	76	
39. Hyperplasia of Prostate .. .. .	610	136	0.56	46	
40. Complications of Pregnancy, Childbirth and the Puerperium .. .. .	640-652, 660, 670-689	21	0.09	7	
41. Congenital Malformations .. .. .	750-759	351	1.43	120	
42. Birth Injuries, Post-natal Asphyxia and Atelectasis .. .. .	760-762	410	1.67	140	
43. Infections of the Newborn .. .. .	763-768	56	0.23	19	
44. Other Diseases Peculiar to Early Infancy, and Immaturity Unqualified .. .. .	769-776	255	1.04	87	
45. Senility without Mention of Psychosis, Ill-defined and Unknown Causes .. .. .	780-795	172	0.70	59	
46. {	General Arteriosclerosis .. .. .	450	825	3.37	282
	Other Diseases of Circulatory System ..	451-468	205	0.84	70
	Other Diseases of Respiratory System ..	470-475, 510-527	234	0.96	80
	All Other Diseases .. .. .	Residual	1,008	4.12	344
47. Motor Vehicle Accidents .. .. .	E810-E835	816	3.33	279	
48. All Other Accidents .. .. .	E800-E802, E840-E962	694	2.83	237	
49. Suicide and Self-Inflicted Injury .. ..	E963, E970-E979	271	1.11	93	
50. Homicide and Operations of War .. ..	E964, E 965, E980-E999	40	0.16	14	
Total All Causes .. .. .	..	24,500	100.00	8,370	

\* No deaths were recorded in the following categories in 1961 :- 4. Typhoid Fever (040), 5. Cholera (043), 6. Dysentery (045-048), 9. Whooping Cough (056), 11. Plague (058), 13. Smallpox (084), 15. Typhus and Other Rickettsial Diseases (100-108), 16. Malaria (110-117).

† 030-039, 041, 042, 044, 049, 052-054, 059-074, 081-083, 086-096, 120-138.

‡ 140-148, 160-161, 164, 165, 190-203, 205.

Graphs of death rates from certain causes in selected years in the period 1931 to 1961 appear on page 156.

The diagrams illustrate the decreasing mortality from infectious and respiratory diseases and the decline in infant mortality; increases in death rates from malignant neoplasms and accidents are also illustrated.

VICTORIA—DEATH RATES : SELECTED CAUSES, 1931 TO 1961

Per 100,000 Mean Population

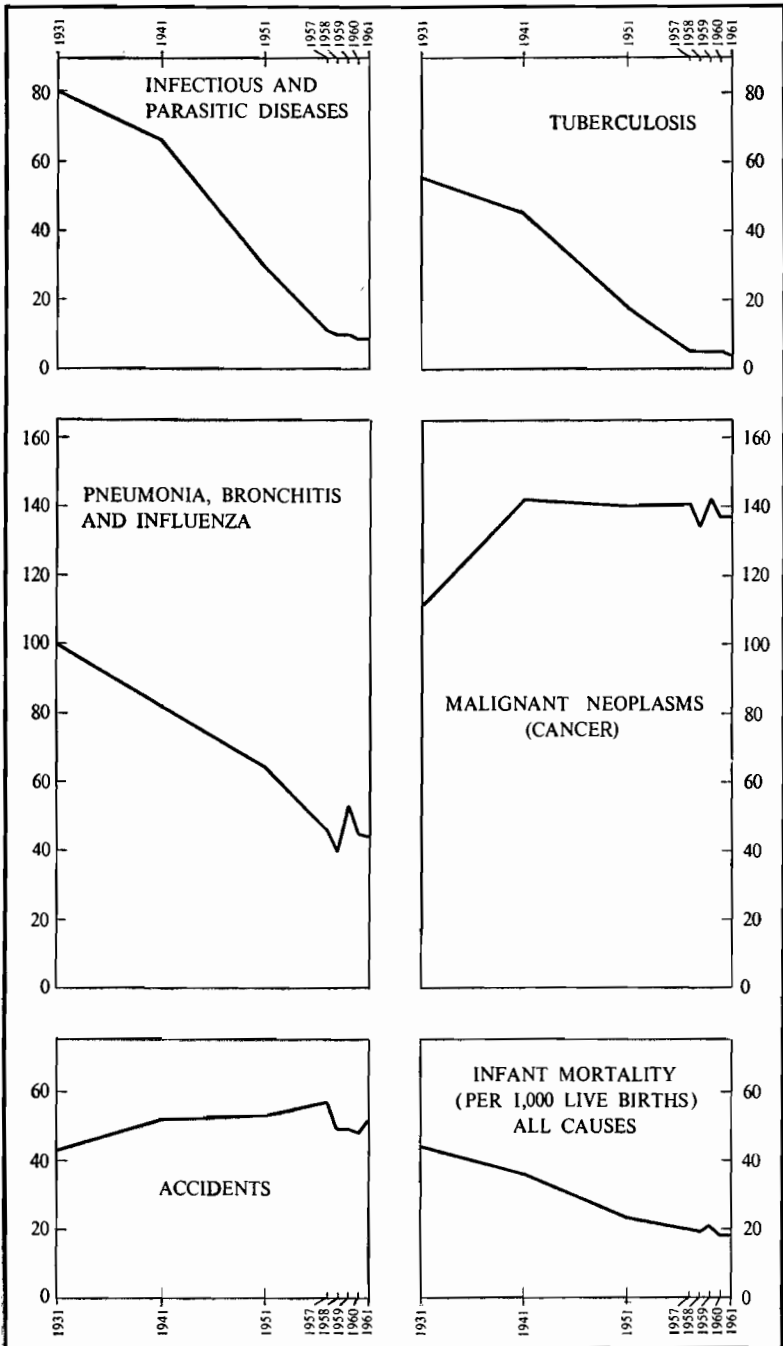


FIGURE 9.

The following table shows deaths in 1961, in certain age groups, detailing the main causes of death within those age groups :—

VICTORIA—MAIN CAUSES OF DEATHS (IN AGE GROUPS),  
1961

International List Number	Age Group and Cause of Death	Deaths from Specified Cause			
		In Age Group		At All Ages	
		Number	Per Cent.	Number	Per Cent.
	<b>Under 1 Year</b> .. .. .	<b>1,173</b>	<b>100·0</b>	..	..
762	Post-natal asphyxia and atelectasis .. .. .	242	20·6	242	100·0
750-759	Congenital malformations .. .. .	228	19·4	351	65·0
760, 761	Birth injuries .. .. .	167	14·2	168	99·4
774-776	Immaturity .. .. .	155	13·2	155	100·0
480-502, 763	Pneumonia, bronchitis and influenza .. .. .	120	10·2	1,290	9·3
	Other causes .. .. .	261	22·3	..	..
	<b>1-4 years</b> .. .. .	<b>268</b>	<b>100·0</b>	..	..
800-999	Accidental and violent deaths .. .. .	98	36·6	1,821	5·4
750-759	Congenital malformations .. .. .	37	13·9	351	10·5
140-205	*Cancer (all forms) .. .. .	28	10·4	3,999	0·7
480-502	Pneumonia, bronchitis and influenza .. .. .	26	9·7	1,290	2·0
001-138	Infective and parasitic diseases .. .. .	21	7·8	265	7·9
	Other causes .. .. .	58	21·6	..	..
	<b>5-14 years</b> .. .. .	<b>230</b>	<b>100·0</b>	..	..
800-999	Accidental and violent deaths .. .. .	92	40·0	1,821	5·1
140-205	*Cancer (all forms) .. .. .	35	15·2	3,999	0·9
750-759	Congenital malformations .. .. .	28	12·2	351	8·0
480-502	Pneumonia, bronchitis and influenza .. .. .	15	6·5	1,290	1·2
330-334	Vascular lesions affecting central nervous system .. .. .	11	4·8	3,292	0·3
	Other causes .. .. .	49	21·3	..	..
	<b>15-19 years</b> .. .. .	<b>193</b>	<b>100·0</b>	..	..
800-999	Accidental and violent deaths .. .. .	119	61·7	1,821	6·5
140-205	*Cancer (all forms) .. .. .	14	7·3	3,999	0·3
401, 410-443	Diseases of the heart .. .. .	10	5·2	8,549	0·1
480-502	Pneumonia, bronchitis and influenza .. .. .	9	4·7	1,290	0·7
750-759	Congenital malformations .. .. .	7	3·6	351	2·0
	Other causes .. .. .	34	17·5	..	..
	<b>20-24 years</b> .. .. .	<b>223</b>	<b>100·0</b>	..	..
800-999	Accidental and violent deaths .. .. .	159	71·3	1,821	8·7
140-205	*Cancer (all forms) .. .. .	20	9·0	3,999	0·5
401, 410-443	Diseases of the heart .. .. .	9	4·0	8,549	0·1
590-594	Nephritis and nephrosis .. .. .	5	2·2	222	2·3
480-502	Pneumonia, bronchitis and influenza .. .. .	4	1·8	1,290	0·3
	Other causes .. .. .	26	11·7	..	..
	<b>25-34 years</b> .. .. .	<b>426</b>	<b>100·0</b>	..	..
800-999	Accidental and violent deaths .. .. .	216	50·7	1,821	11·9
140-205	*Cancer (all forms) .. .. .	62	14·6	3,999	1·6
401, 410-443	Diseases of the heart .. .. .	41	9·6	8,549	0·5
330-334	Vascular lesions affecting central nervous system .. .. .	16	3·8	3,292	0·5
590-594	Nephritis and nephrosis .. .. .	9	2·1	222	4·1
	Other causes .. .. .	82	19·2	..	..

\* Includes Hodgkin's disease and the leukaemias.

VICTORIA—MAIN CAUSES OF DEATHS (IN AGE GROUPS), 1961—  
continued

International List Number	Age Group and Cause of Death	Deaths from Specified Cause			
		In Age Group		At All Ages	
		Number	Per Cent.	Number	Per Cent.
	<b>35-44 years</b> .. .. .	<b>854</b>	<b>100.0</b>	..	..
800-999	Accidental and violent deaths .. .. .	223	26.1	1,821	12.2
140-205	*Cancer (all forms) .. .. .	194	22.7	3,999	4.9
401, 410-443	Diseases of the heart .. .. .	194	22.7	8,549	2.3
330-334	Vascular lesions affecting central nervous system .. .. .	60	7.0	3,292	1.8
001-138	Infective and parasitic diseases .. .. .	17	2.0	265	6.4
	Other causes .. .. .	166	19.5	..	..
	<b>45-54 years</b> .. .. .	<b>1,939</b>	<b>100.0</b>	..	..
401, 410-443	Diseases of the heart .. .. .	653	33.7	8,549	7.6
140-205	*Cancer (all forms) .. .. .	482	24.8	3,999	12.1
800-999	Accidental and violent deaths .. .. .	230	11.9	1,821	12.6
330-334	Vascular lesions affecting central nervous system .. .. .	175	9.0	3,292	5.3
480-502	Pneumonia, bronchitis and influenza .. .. .	40	2.1	1,290	3.1
	Other causes .. .. .	359	18.5	..	..
	<b>55-64 years</b> .. .. .	<b>3,830</b>	<b>100.0</b>	..	..
401, 410-443	Diseases of the heart .. .. .	1,556	40.6	8,549	18.2
140-205	*Cancer (all forms) .. .. .	878	22.9	3,999	22.0
330-334	Vascular lesions affecting central nervous system .. .. .	393	10.3	3,292	11.9
800-999	Accidental and violent deaths .. .. .	206	5.4	1,821	11.3
480-502	Pneumonia, bronchitis and influenza .. .. .	156	4.1	1,290	12.1
	Other causes .. .. .	641	16.7	..	..
	<b>65-74 years</b> .. .. .	<b>6,476</b>	<b>100.0</b>	..	..
401, 410-443	Diseases of the heart .. .. .	2,592	40.0	8,549	30.3
140-205	*Cancer (all forms) .. .. .	1,266	19.5	3,999	31.7
330-334	Vascular lesions affecting central nervous system .. .. .	971	15.0	3,292	29.5
480-502	Pneumonia, bronchitis and influenza .. .. .	309	4.8	1,290	24.0
450-456	Diseases of arteries .. .. .	202	3.1	977	20.7
	Other causes .. .. .	1,136	17.6	..	..
	<b>75 years and over</b> .. .. .	<b>8,885</b>	<b>100.0</b>	..	..
401, 410-443	Diseases of the heart .. .. .	3,470	39.1	8,549	40.6
330-334	Vascular lesions affecting central nervous system .. .. .	1,657	18.6	3,292	50.3
140-205	*Cancer (all forms) .. .. .	1,017	11.4	3,999	25.4
450-456	Diseases of arteries .. .. .	698	7.9	977	71.4
480-502	Pneumonia, bronchitis and influenza .. .. .	591	6.7	1,290	45.8
	Other causes .. .. .	1,452	16.3	..	..

\* Includes Hodgkin's disease and the leukaemias.

### *Tuberculosis*

The number of deaths ascribed to tuberculosis during 1961 was 127, the rate per million of mean population being 43.

The deaths from tuberculosis of the respiratory system in 1961 numbered 116 and equalled a rate of 40 per million of the mean population. Rates for previous 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 1961, tuberculosis of the respiratory system was responsible for 91 per cent. of the total deaths from tuberculosis. Of the 84 males and 32 females dying from tuberculosis of the respiratory system in 1961, two males and four females were under the age of 45 years.

### *Infective and Parasitic Diseases*

There has been a remarkable decrease in both the incidence and mortality rate of certain infective and parasitic diseases since the beginning of the century. Particulars of the decreases in diseases such as tuberculosis, typhoid fever, scarlet fever, streptococcal sore throat, diphtheria, whooping cough, meningococcal infections, small-pox and measles appeared on pages 493 to 495 of the Victorian Year Book 1954–58.

The incidence of poliomyelitis in Victoria has been recorded since the year 1916, when the disease was added to the list of compulsorily notifiable diseases. Since that year the most serious epidemic occurred in 1937–38 when 2,096 cases were reported, resulting in 113 deaths. Other epidemics occurred in 1918 (303 cases, 21 deaths), 1925 (140 cases, 25 deaths), 1949 (760 cases, 48 deaths), and 1954 (569 cases, 36 deaths).

During 1961, there were 68 cases notified which represented a rate of 23 per million of population. Three deaths occurred during the year.

Distribution of the Salk poliomyelitis vaccine began in July, 1956, and there was a marked decline in the number of cases reported since that date. (See pages 246–247 of the Victorian Year Book 1962.)

### *Malignant Neoplasms*

Deaths classified as malignant neoplasms since 1950 include deaths from Hodgkin's disease and leukaemia and aleukaemia, which were not formerly included with neoplasms. Deaths from malignant neoplasms in 1961 numbered 3,999 and represented a rate of 1,366 per million of mean population.

Rates for previous periods were 1,349 in 1960, 1,403 in 1959, 1,329 in 1958, and 1,401 in 1957.



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 six Census periods, when the numbers of the people 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					
	1900-02	1910-12	1920-22	1932-34	1946-48	1953-55
<b>MALES</b>						
Under 5 .. ..	0.30	0.73	0.46	0.27	0.60	1.11
5-9 .. ..	0.42	0.25	0.13	0.20	0.34	0.98
10-14 .. ..	0.20	0.16	0.14	0.24	0.24	0.69
15-19 .. ..	0.22	0.15	0.30	0.37	0.61	0.93
20-24 .. ..	0.33	0.71	0.64	0.73	0.69	1.27
25-34 .. ..	1.26	9.96	0.76	0.93	1.20	1.32
35-44 .. ..	3.69	3.16	3.31	3.04	3.00	4.01
45-54 .. ..	14.14	16.03	13.94	10.13	11.65	13.25
55-64 .. ..	36.00	36.36	40.46	37.25	32.73	36.99
65-74 .. ..	59.04	74.15	78.21	85.19	80.46	82.41
75 and over .. ..	74.04	88.40	110.12	133.78	148.20	163.06
All Ages .. ..	7.52	8.50	9.52	11.63	13.51	13.76
<b>FEMALES</b>						
Under 5 .. ..	0.26	0.19	0.39	0.38	0.48	1.37
5-9 .. ..	0.04	0.10	0.17	0.17	0.18	0.60
10-14 .. ..	..	0.27	0.05	0.08	0.40	0.71
15-19 .. ..	0.28	0.44	0.15	0.17	0.04	0.49
20-24 .. ..	0.23	0.41	0.30	0.39	0.60	0.56
25-34 .. ..	1.61	1.39	1.28	1.57	1.75	1.81
35-44 .. ..	6.05	7.26	6.61	6.00	6.23	6.14
45-54 .. ..	18.13	17.87	19.14	17.31	16.47	16.46
55-64 .. ..	33.05	38.03	34.48	35.82	33.40	30.93
65-74 .. ..	51.18	61.66	63.05	61.17	61.44	59.38
75 and over .. ..	62.70	86.19	92.86	106.19	111.49	117.02
All Ages .. ..	6.64	8.76	9.63	12.00	14.50	14.16

Deaths from malignant neoplasms occur at all age periods, but the rates in the above table show characteristic increases with age, reaching a maximum mortality rate in the oldest age group.

Ninety-one per cent. of the deaths from malignant neoplasms in the year 1961 were at ages 45 years and upwards.

The following table shows the site of the disease in age groups of persons who died from malignant neoplasms in 1961 :—

VICTORIA—DEATHS FROM MALIGNANT NEOPLASMS BY SEX IN VARIOUS AGE GROUPS, 1961

Site of Disease*	Sex	Age (Years)				Total
		Under 25	25-44	45-64	65 and over	
Buccal Cavity and Pharynx (140-148)	M	1	..	20	31	52
	F	1	1	9	15	26
Oesophagus (150) .. ..	M	..	..	15	27	42
	F	..	1	9	27	37
Stomach (151) .. ..	M	..	13	103	166	282
	F	..	5	30	148	183
Intestine, except Rectum (152, 153)	M	..	12	46	133	191
	F	..	10	76	194	280
Rectum (154) .. ..	M	..	2	31	56	89
	F	..	2	20	63	85
Trachea, Bronchus and Lung, Not Specified as Secondary (162, 163) ..	M	..	14	239	237	490
	F	..	4	27	35	66
Breast (170) .. ..	M	..	..	1	2	3
	F	..	38	167	175	380
Cervix Uteri (171) .. ..	F	..	23	42	42	107
Other and Unspecified Parts of Uterus (172-174)	F	1	3	27	33	64
Ovary, Fallopian Tube, and Broad Ligament (175)	F	1	5	58	45	109
Prostate (177) .. ..	M	..	..	24	206	230
Kidney (180) .. ..	M	2	5	23	19	49
	F	2	..	8	10	20
Bladder and Other Urinary Organs (181) .. ..	M	..	1	23	62	86
	F	..	..	7	35	42
Brain and Other Parts of Nervous System (193)	M	13	12	30	15	70
	F	7	10	18	5	40
Leukaemia and Aleukaemia (204)	M	21	8	34	34	97
	F	24	8	16	31	79
Other Neoplasms of Lymphatic and Haematopoietic System (200-203, 205)	M	8	11	49	28	96
	F	6	10	27	40	83
All Other and Unspecified Sites	M	5	39	113	182	339
	F	8	19	68	187	282
Total .. ..	M	50	117	751	1,198	2,116
	F	50	139	609	1,085	1,883

\* Figures in parentheses are in respect of the Seventh Revision of the International List of Causes of Death.

*Diabetes Mellitus*

During 1961, diabetes was responsible for 179 male and 267 female deaths, representing a rate of 152 per million of the mean population. Rates for previous periods were 137 in 1960, 131 in 1959, 150 in 1958, and 167 in 1957.

*Vascular Lesions Affecting Central Nervous System*

In 1961, 1,359 male and 1,933 female deaths were ascribed to vascular lesions affecting the central nervous system, the total—3,292—corresponding to a rate of 1,124 per million of the mean population. Of the 3,292 deaths in 1961, 151 were due to subarachnoid haemorrhage, 1,652 to cerebral haemorrhage, 1,180 to cerebral embolism and thrombosis, and 309 to other vascular lesions.

The following table shows deaths in 1961 from vascular lesions affecting the central nervous system according to sex and age group :—

VICTORIA—DEATHS FROM VASCULAR LESIONS  
AFFECTING CENTRAL NERVOUS SYSTEM BY  
SEX IN VARIOUS AGE GROUPS, 1961

Cause of Death*	Sex	Age Group (Years)					Total Deaths
		Under 45	45-54	55-64	65-74	75 and over	
Subarachnoid Haemorrhage (330)	M	24	13	19	6	4	66
	F	21	22	17	14	11	85
Cerebral Haemorrhage (331) ..	M	21	53	120	224	258	676
	F	12	55	121	304	484	976
Cerebral Embolism and Thrombosis (332)	M	3	11	47	173	249	483
	F	4	13	50	177	453	697
Other and Ill-defined Vascular Lesions Affecting Central Nervous System (334)	M	6	5	13	44	66	134
	F	4	3	6	29	133	175
Total .. ..	M	54	82	199	447	577	1,359
	F	41	93	194	524	1,081	1,933

\* Figures in parentheses are in respect of the Seventh Revision of the International List of Causes of Death.

*Diseases of the Heart*

During 1961, there were 8,540 deaths ascribed to diseases of the heart, including 192 due to chronic rheumatic heart disease, 7,285 to arteriosclerotic and degenerative heart disease, 679 to other diseases of the heart, and 384 to hypertension with heart disease. The total of these causes in 1961 represented a rate of 2,917 per million of the mean population.

The following table shows deaths in Victoria in 1961 from heart diseases, according to sex and age group :—

VICTORIA—DEATHS FROM HEART DISEASES BY SEX IN VARIOUS AGE GROUPS, 1961

Cause of Death*	Sex	Age Group (Years)					Total Deaths
		Under 45	45-54	55-64	65-74	75 and over	
Chronic Rheumatic Heart Disease (410-416)	M	16	18	20	15	16	85
	F	16	15	25	32	19	107
Arteriosclerotic Heart Disease (420)	M	142	459	988	1,292	995	3,876
	F	17	85	317	735	1,064	2,218
Degenerative Heart Disease (421, 422)	M	18	25	52	116	325	536
	F	20	6	27	117	485	655
Other Diseases of Heart (430-434)	M	20	13	52	91	157	333
	F	20	10	25	76	215	346
Hypertension with Heart Disease (440-443)	M	2	13	24	43	57	139
	F	..	7	26	75	137	245
Total .. ..	M	198	528	1,136	1,557	1,550	4,969
	F	73	123	420	1,035	1,920	3,571

\* Figures in parentheses are in respect of the Seventh Revision of the International List of Causes of Death.

### *Diseases of the Respiratory System*

In 1961, deaths from diseases of the respiratory system numbered 1,481 which represented a rate of 506 per million of the mean population. Of these deaths in 1961, 33 were due to influenza, 88 to lobar pneumonia, 559 to broncho-pneumonia, 118 to other and unspecified pneumonia, 449 to bronchitis, ten to empyema and abscess of lung, nine to pleurisy, 15 to pulmonary congestion and hypostasis, 30 to bronchiectasis, and 170 to other diseases.

The 33 deaths from influenza in 1961 represented a rate of 11 per million of the mean population.

Influenza has generally proved more fatal to elderly people than to those at middle or young ages. In the epidemic of 1919, however, 72 per cent. of the deaths were of persons between 20 and 50 years of age. In 1961, 21 per cent. of the deaths were of persons under 50 years of age.

*Diseases of the Digestive System*

In 1961, there were 398 male and 322 female deaths from diseases of the digestive system, representing a rate of 246 per million of the mean population. Rates for previous periods were 270 in 1960, 303 in 1959, 288 in 1958, and 289 in 1957. Deaths from these causes in 1961 were : 160 from ulcers of the stomach and duodenum, three from gastritis and duodenitis, 20 from appendicitis, 119 from intestinal obstruction and hernia, 39 from gastro-enteritis and colitis, except diarrhoea of the newborn, 148 from cirrhosis of the liver, 71 from cholelithiasis and cholecystitis, and 160 from other diseases.

*Disease of the Genito-urinary System*

In 1961, there were 533 deaths attributed to diseases of the genito-urinary system. This number represented a rate of 182 per million of the mean population. In 1961, nephritis and nephrosis were responsible for 222 deaths, infections of the kidney for 110, calculi of urinary system for fourteen, hyperplasia of prostate for 136, and other diseases of genito-urinary system for 51.

*Maternal Deaths*

The death-rate of women in childbirth is usually ascertained by comparing the number of deaths of parturient women with the total number of live births.

This rate varies considerably at different ages, and is higher at older than younger ages. The number of deaths of women in childbirth and the death-rates in various age groups in Victoria for the years 1957 to 1961 are shown in the following table :—

## VICTORIA—MATERNAL DEATHS

Age Group (Years)	Deaths of Mothers					Deaths per 10,000 Children Born Alive to Mothers in Each Age Group				
	1957	1958	1959	1960	1961	1957	1958	1959	1960	1961
Under 20 .. ..	1	1	..	1	..	3·2	2·8	..	2·5	..
20-24 .. .. .	4	2	..	..	3	2·5	1·1	..	..	1·5
25-29 .. .. .	7	4	6	5	6	3·7	2·1	3·1	2·6	3·1
30-34 .. .. .	9	8	4	4	3	7·1	6·2	3·1	3·0	2·3
35-39 .. .. .	5	2	4	3	7	8·7	3·1	6·2	4·6	10·5
40 and over ..	1	2	2	3	2	5·2	10·9	11·2	17·0	10·4
Total .. .. .	27	19	16	16	21	4·6	3·1	2·6	2·5	3·2

*Accidental Deaths*

The following table shows particulars of deaths in Victoria in 1961 which were due to accidents, and which represented 6 per cent. of the total deaths :—

## VICTORIA—ACCIDENTAL DEATHS, 1961

International List No.	Cause of Death	Males	Females	Total
E800-E802 .. ..	Railway accidents .. ..	20	4	24
E810-E835 .. ..	Motor vehicle accidents .. ..	617	199	816
E840-E845 .. ..	Other road vehicle accidents .. ..	15	3	18
E850-E858 .. ..	Water transport accidents .. ..	11	2	13
E860-E866 .. ..	Aircraft accidents .. ..	3	1	4
E870-E888 .. ..	Accidental poisoning by solid and liquid substances .. ..	21	19	40
E890-E895 .. ..	Accidental poisoning by gases and vapours .. ..	9	5	14
E900-E904 .. ..	Accidental falls .. ..	95	152	247
E912 .. ..	Accident caused by machinery .. ..	8	..	8
E914 .. ..	Accident caused by electric current .. ..	23	4	27
E916 .. ..	Accident caused by fire and explosion of combustible material .. ..	20	17	37
E917, E918 .. ..	Accident caused by hot substance, corrosive liquid, steam, and radiation .. ..	1	2	3
E919 .. ..	Accident caused by firearm .. ..	32	2	34
E924, E925 .. ..	Accidental mechanical suffocation .. ..	3	4	7
E927 .. ..	Accidents caused by bites and stings of venomous animals and insects .. ..	..	3	3
E928 .. ..	Other accidents caused by animals .. ..	3	1	4
E929 .. ..	Accidental drowning and submersion .. ..	102	24	126
E935 .. ..	Lightning .. ..	..	..	..
E910, E911, E913, E915, E920-E923, E926, E930-E934, E936, E940-E946, E950-E959, E960-E962 .. ..	} All other accidental causes .. ..	64	21	85
	Total .. ..	1,047	463	1,510

For the five years 1957 to 1961, the female mortality rate from accidents was 44 per cent. of the rate for males.

*Accidental Deaths Involving Motor Vehicles*

The number of motor vehicles (including motor cycles) registered in Victoria and the deaths in which they were involved, for the years 1957 to 1961, were as follows :—

## VICTORIA—DEATHS INVOLVING MOTOR VEHICLES

Year	Number of Motor Vehicles at 30th June	Deaths Involving Motor Vehicles		
		Number*	Per 10,000 Motor Vehicles	Per 1,000,000 of Mean Population
1957 .. ..	708,582	667	9.4	249
1958 .. ..	747,834	597	8.0	218
1959 .. ..	789,358	670	8.5	238
1960 .. ..	846,830	742	8.8	257
1961 .. ..	892,144	816	9.1	279

\*Deaths of pedestrians included in this column numbered 218, 203, 192, 227 and 238 respectively.

*Transport Accidents*

In 1961, deaths from all transport accidents numbered 875, as against 799 in 1960, 739 in 1959, 659 in 1958, and 714 in 1957.

During the year 1961, deaths connected with transport represented 58 per cent. of the total deaths from accidents. The corresponding percentage in 1960 was also 58.

*Suicide and Self-inflicted Injury*

In the year 1961, 182 males and 89 females committed suicide or died from self-inflicted injury not specified as accidental. These deaths represented a rate of 93 per million of the population as compared with 89 in 1960, 94 in 1959, 90 in 1958, and 89 in 1957.

Of the 182 male deaths in 1961, 57 (31 per cent.) were connected with firearms and explosives.

*Homicide*

The number of deaths ascribed to homicide and registered in 1961 was 35 (19 males and 16 females).

Since 1930, deaths from criminal abortion have been excluded from this category and included with deaths from maternal causes.

**Infant Mortality**

The mortality of children under one year, in proportion to live births, reveals a remarkable decline since 1890—the deaths per 1,000 children born having fallen from 133 in 1885–89 to 19 in 1957–61—a reduction of 86 per cent. In other words, where 100 infants died in the earlier period, only fourteen died in the latter.

The reduction has been assisted by various Health Acts and educative measures, including the notification of infectious diseases, the regulation of the manufacture, sale and distribution of foodstuffs and patent medicines, and the provision of a pure water supply. The passing of the Midwives Act in 1915 and the inauguration of the Infant Welfare Movement in 1917 coincide with and, in a large degree, account for the reduction of the rate in latter years.

The following statement shows 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 1957 to 1961 :—

**AUSTRALIA—INFANT DEATHS**

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957 ..	1,804	1,219	732	403	357	170	22	10	4,717
1958 ..	1,704	1,178	657	449	360	167	22	23	4,560
1959 ..	1,832	1,320	721	422	345	202	31	16	4,889
1960 ..	1,735	1,182	740	397	366	169	26	28	4,643
1961 ..	1,800	1,173	733	448	336	151	21	27	4,689

## AUSTRALIA—INFANT MORTALITY RATES\*

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1957 ..	22·70	20·16	21·68	20·63	21·09	20·15	34·06	8·82	21·41
1958 ..	21·29	19·23	19·40	22·40	21·52	19·49	31·56	18·04	20·49
1959 ..	22·65	21·21	20·25	20·71	20·16	23·42	38·94	11·75	21·54
1960 ..	21·16	18·46	21·01	18·94	21·62	19·09	33·46	17·69	20·16
1961 ..	20·84	17·80	20·01	20·00	19·67	16·81	23·92	15·57	19·54

\* Number of deaths under one year of age per 1,000 live births.

The infant death-rates for Melbourne Metropolitan Area, for the remainder of the State, and for the whole State, for the years 1957 to 1961, are shown in the following table :—

## VICTORIA—INFANT MORTALITY

Period	Melbourne Metropolitan Area		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
1957 ..	695	19·6	524	20·9	1,219	20·2
1958 ..	710	19·6	468	18·6	1,178	19·2
1959 ..	758	20·3	562	22·5	1,320	21·2
1960 ..	734	18·7	448	18·0	1,182	18·5
1961 ..	719	17·4	454	18·4	1,173	17·8

The practice was introduced in 1923 of allotting all births and deaths 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.

The infant death-rates have shown a decrease in each quinquennial period from 1885 onwards. In 1954, the rate fell below 20 per 1,000 births for the first time. In 1961, the rate was 17·8, the lowest on record.

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 per 1,000 births for infants "under one week" has varied from 21·5 in the quinquennium 1910-14 to 22·7 in 1925-29 and 12·7 in 1955-59. The rate for infants "one week and under one month" declined from 11·1 in 1910-14 to 1·8 in 1955-59, a decrease of 84 per cent., and that for infants "one month and under one year" from 41·2 to 5·2, a decrease of 87 per cent. Between the ages of one month and one year, Victoria lost 64 out of every 1,000 children born in 1900-04, 33 in 1915-19, and 5 in 1955-59. In 1961, the mortality of infants "under one week" comprised 68 per cent. of the total infant mortality.



The rate for male infants is consistently higher than that for females, and in the period 1957-61 exceeded the female rate by 19·3 per cent. In the same period, male infant deaths exceeded female by 706 and male births were 8,563 in excess of female births.

The following table shows the number of deaths of infants at certain ages by causes in 1961 :—

VICTORIA—INFANT MORTALITY AT CERTAIN AGES,  
BY CAUSES, 1961

Cause of Death*	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	
Infective and Parasitic Diseases (1-138) ..	1	1	6	7	3	18
Pneumonia and Bronchitis (490-493, 500-502) ..	..	..	29	29	17	75
Gastro-enteritis and Colitis (except Ulcerative), Age Four Weeks and over (571) ..	..	..	5	3	3	11
Congenital Malformations (750-759) ..	100	40	39	26	23	228
Certain Diseases of Early Infancy—						
Birth Injuries (760, 761)						
(a) Without Mention of Immaturity ..	67	5	..	..	..	72
(b) With Immaturity ..	94	1	..	..	..	95
Postnatal Asphyxia and Atelectasis (762)—						
(a) Without Mention of Immaturity ..	61	..	1	..	..	62
(b) With Immaturity ..	177	3	..	..	..	180
Infections of the Newborn (763-768)—						
Pneumonia of Newborn—						
(a) Without Mention of Immaturity ..	14	14	..	..	..	28
(b) With Immaturity ..	12	4	..	..	..	16
Diarrhoea of Newborn—						
(a) Without Mention of Immaturity ..	..	1	..	..	..	1
(b) With Immaturity ..	..	2	..	..	..	2
Other Infections of the Newborn—						
(a) Without Mention of Immaturity ..	4	3	1	..	..	8
(b) With Immaturity ..	1	..	..	..	..	1
Other Diseases Peculiar to Early Infancy (769-775)—						
(a) Without Mention of Immaturity ..	48	..	2	..	..	50
(b) With Immaturity ..	52	3	1	..	..	56
Immaturity Unqualified (776) ..	143	6	..	..	..	149
All Other Diseases ..	17	11	25	24	22	99
Accidents, Poisonings, and Violence ..	2	..	3	5	12	22
Total All Causes ..	793	94	112	94	80	1,173

\* Figures in parentheses are in respect of the Seventh Revision of the International List of Causes of Death.

The following tables show mortality rates at certain ages under one year for the years 1957 to 1961 :—

VICTORIA—INFANT MORTALITY AT CERTAIN AGES

Period	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		
1957 ..	13·2	1·8	1·7	1·7	1·8	20·2	21·4	18·8
1958 ..	12·8	1·7	1·4	1·8	1·5	19·2	20·4	17·9
1959 ..	13·4	1·8	1·8	2·2	2·0	21·2	23·2	19·1
1960 ..	12·1	1·7	1·5	1·6	1·6	18·5	20·7	16·1
1961 ..	12·1	1·4	1·7	1·4	1·2	17·8	19·4	16·2

VICTORIA—INFANT MORTALITY AT CERTAIN AGES,  
BY SEX, 1961

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
<b>Males—</b>						
Number .. ..	450	49	61	57	39	656
Rate* .. ..	13·3	1·4	1·8	1·7	1·2	19·4
Percentage at Each Age ..	68·60	7·47	9·30	8·69	5·94	100·00
<b>Females—</b>						
Number .. ..	343	45	51	37	41	517
Rate* .. ..	10·7	1·4	1·6	1·2	1·3	16·2
Percentage at Each Age ..	66·34	8·70	9·87	7·16	7·93	100·00

\* Number of deaths under one year of age per 1,000 live births.

From 1950, infant deaths were classified according to the Sixth (1948) Revision of the International List of Causes of Death. Owing to the change in classification, figures since 1950 are not exactly comparable with figures for previous years. The Seventh (1955) Revision of the International List of Causes of Death was adopted for use in 1958.

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.

In 1961, 499 deaths were connected with immaturity, either directly or in association with other causes, and all except one of these deaths were of children under one month of age. The deaths connected with immaturity represented 43 per cent. of the total infant deaths. Congenital malformations were responsible for 228, or 19 per cent., of the infant deaths. It will thus be seen that 62 per cent. of the total infant mortality in 1961 was related to immaturity and congenital malformations.

### Stillbirths

Registration of stillbirths came into operation in Victoria in 1953. For registration purposes, a "still-born 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.

The following table contains information about stillbirths and infant mortality in Victoria from 1957 to 1961 :—

### 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)
1957 ..	894	14·57	908	14·80	1,802	29·37	2,113	34·44
1958 ..	826	13·31	887	14·28	1,713	27·59	2,004	32·27
1959 ..	799	12·67	950	15·07	1,749	27·74	2,119	33·61
1960 ..	850	13·10	878	13·53	1,728	26·64	2,032	31·32
1961 ..	885	13·25	887	13·28	1,772	26·54	2,058	30·82

The causes of stillbirths in Victoria, classified according to the International Statistical Classification, are given in the following table for the years 1957 to 1961 :—

### VICTORIA—CAUSES OF STILLBIRTHS

Classification Number	Cause of Stillbirth	Number of Stillbirths				
		1957	1958	1959	1960	1961
Y 30 ..	Chronic Disease in Mother .. ..	22	12	26	32	22
Y 31 ..	Acute Disease in Mother .. ..	8	3	1	9	9
Y 32 ..	Diseases and Conditions of Pregnancy and Childbirth .. ..	33	31	53	52	48
Y 33 ..	Absorption of Toxic Substance from Mother .. ..	..	..	..	..	..
Y 34 ..	Difficulties in Labour .. ..	57	70	80	80	76
Y 35 ..	Other Causes in Mother .. ..	4	3	11	4	3
Y 36 ..	Placental and Cord Conditions .. ..	367	353	361	342	397
Y 37 ..	Birth Injury .. ..	21	11	6	17	12
Y 38 ..	Congenital Malformation of Foetus .. ..	79	89	65	84	85
Y 39 ..	Diseases of Foetus, and Ill-defined Causes .. ..	303	254	196	230	233
	Total .. ..	894	826	799	850	885

### Cremation

There are now four crematoria in Victoria—one at Springvale, one at the new Melbourne General Cemetery, Fawkner, one at Ballarat, and one at Western Suburbs Memorial Park, Altona North. The history of the establishment of the first two is contained in an article published in the Year Book 1942-43, page 307. The Ballarat Crematorium commenced operations in 1958, and the Western Suburbs Crematorium in 1961.

The number of cremations in relation to total deaths from 1957 to 1961 are shown in the following table :—

### VICTORIA—CREMATIONS AND DEATHS

Year	Total Cremations	Total Deaths	Percentage of Cremations to Deaths
1957 ..	6,849	24,131	28·38
1958 ..	6,913	23,625	29·26
1959 ..	7,549	25,078	30·10
1960 ..	7,839	24,547	31·93
1961 ..	7,923	24,500	32·34

# Part 4

## SOCIAL CONDITIONS

### *Cultural and Recreational*

#### **Royal Society of Victoria**

The Royal Society of Victoria was founded in the year 1859 as a result of the amalgamation of two scientific societies of almost identical interests.

The Victorian Institute for the Advancement of Science, formed in 1854, had as its basic objective the development of science generally within the Colony, at the same time providing a centre for the collection of observations and specimens from all sources. The other society, the Philosophical Society of Victoria, became established in 1854. It was formed at the direct request of the Legislative Council to co-operate with the Government in the formation of a Museum of Natural History. Apart from this worthy objective, its main object, as stated in the original prospectus, was to “embrace the whole field of science, with a special reference to the cultivation of those departments that are calculated to develop the natural resources of the country”.

The amalgamation of these two scientific bodies in 1855 to form the Philosophical Institute of Victoria paved the way for the granting, in 1859, of the Royal Assent of Queen Victoria to the assuming of the title “Royal Society of Victoria”.

The announcement of this to the members of the Society coincided with the completion and the official opening of the Society's new hall, a structure designed by a well known architect of the times, Joseph Reed. Reed is noted for his designing of such buildings in Melbourne as the Town Hall, Scots Church, the Independent Church, the State Library, and the Exhibition Building.

The early development of the Natural History Museum, later to become known as the National Museum of Victoria, was perhaps the most important single achievement of the Society in its infancy, while questions of acclimatization of animals and astronomy were always in the forefront of discussions.

The decision in the latter portion of 1857 to “fit out in Victoria a Geographical Expedition . . . .” was the first major step in exploration by the Society, and one which set the pattern of other exploration projects later, both within Australia and in the Antarctic. The first of these, later to become known as the ill-fated Burke and

Wills Expedition, was organized by the Exploration Committee of the Society during 1860. Under the command of Robert O'Hara Burke this expedition set out from the Royal Society's Hall in August, 1860, to travel northwards and attempt to make the first south-north crossing of the Continent. The story of the progress and ultimate fate of this exploration party is now a matter of history.

The second project, that of Antarctic Exploration, was begun in 1886 when a Committee of the Society, in association with the Geographical Society of Australia, drew up detailed plans for the organization of an expedition to Antarctica. If these recommendations had been followed at the time, there is no doubt that scientific interest in Antarctica would have developed very much earlier than it did. Although, as it turned out, no exploration party was sent to the Antarctic, interest in such a project has continued throughout the first hundred years of the Society, culminating in December, 1956, when His Royal Highness, the Duke of Edinburgh, opened a symposium in the Society's Hall, entitled "Australia's Part in the Geophysical Year in Antarctica", at the same time conducting an investiture at which 23 polar medals were conferred.

While interest in exploration has been the most spectacular of the activities of the Society, other branches of science were not neglected. In fact, the Society has always advocated the development of all branches of science, and in its earlier stages, fostered the study of mathematics, chemistry, and physics, as well as the natural sciences. However, of more recent years, with the development of their own societies, mathematics, chemistry, and physics have separated from the Royal Society which now concentrates almost exclusively upon the natural sciences.

The Royal Society has always been the medium for the publication, through its Transactions and Proceedings, of scientific papers by its members, and by exchange with similar journals has built up a very large and comprehensive library of scientific periodicals of inestimable value to the scientific members of the community. In addition, the presentation of scientific papers at the monthly meetings of the Society has enabled both members and visitors to become acquainted with the latest developments in scientific research in the State.

The centenary of the Royal Society, which coincided with the centenary of the publication of Charles Darwin's "Origin of Species", was celebrated with a symposium entitled "The Evolution of Living Organisms", at which delegates from interstate and overseas were present and made contributions in the form of papers and discussions. At the same time, a centenary history of the Society was published under the title "The Royal Society of Victoria—from then, 1854 to now, 1959" in Proceedings Volume 73.

The membership of the Royal Society of Victoria at the end of 1960 numbered over 350 members, consisting of professional scientists and business and professional men interested in the advancement of science.

**State Library of Victoria***Introduction*

The Melbourne Public Library was opened in 1856. Later, as the State expanded, it became the Public Library of Victoria and is now the State Library of Victoria.

A branch of the Department of the Chief Secretary, its policy controlled by a Board of seven Trustees appointed by the Government to represent many ideas and interests, the State Library is the basic research library for Victoria. Its rich collections in many fields of learning were built up painstakingly over the century and the present Board follows carefully the high example set by its predecessors.

The collection of manuscripts dating from the 10th century, and a wide and deep collection of the works of the early printers are well known. The fields of religion and comparative religion, the social sciences, philology, ships and shipping, botany, literature, art, biography and history in general, and genealogy are all well covered.

The Lending Branch attends to the borrowing needs of citizens throughout the State and contains a collection of nearly 90,000 volumes.

The Library is also the recognized repository for the official and semi-official archives of the State. The Historical Collection contains many thousands of paintings, drawings, prints, &c., as well as objects illustrating the growth and expansion of Victoria.

*Illustrated Books*

The State Library holds a significant collection of famous and beautiful "colour" books covering those sections of the natural sciences which lend themselves to striking illustrations. The latter part of the 18th century and the early part of the 19th are well represented in the botanical field.

W. Curtis "Flora Londinensis" (1777-87), Pallas "Flora Rossica" (1784-88), and Roxburgh "Plants of the Coast of Coromandel" 3 vols. (1795-1819) are outstanding examples of botanical wisdom and brightness.

Of the "Botanical Magazine" founded by W. Curtis in 1787 and currently still published, the Library holds the complete set. The magazine has always been renowned for the standard of its publications and the beauty of its coloured illustrations.

The most celebrated flower painter of his day, Redouté, is represented by "Les Liliacées" 8 vols. (1802-16). Thornton's "Temple of Flora" (1807-10) contains the first prints with landscape backgrounds showing the natural habitat of the plant. No expense was spared on this magnificent production.

Sibthorpe's "Flora Graeca" 10 vols. (1806-40), of which only 70 copies were made, contains more than 900 hand coloured plates from sketches done in Greece by Ferdinand Bauer.

Included in Mark Catesby's "Natural History of North Carolina" 3rd ed. 2 vols. 1771, are "birds, beasts, fishes, serpents, insects, and plants of Carolina, Florida, and the Bahamas".

Kops "Flora Batava" (1800-1934), Dietrich "Flora Universalis" 10 vols. (1854), Royle "Illustrations of the botany . . . of Himalayan Mountains" 2 vols. (1839), Bateman "Orchidaceae of Mexico and Guatemala" (1837-43), and Sander "Reichenbachia" are a few of the outstanding examples of the Library's coverage of the botanical world.

Most striking of the "bird" books is the magnificent Audubon "Birds of America" 4 vols. (1827-38), in which the birds are represented life size.

When the Library opened in 1856, its most valuable possession was Gould's "Birds of Australia" which had been acquired by the Trustees at the cost of £140. Over the years the complete set of the works of this indefatigable man has been collected. Levaillant (1801-06), Elliot (1873), Bowdler Sharpe (1891-98) are amongst those who captured the Birds of Paradise for generations yet to come. Schlegel and Wulverhost "Traite de Fauconnerie" (1844-53) contains many hand coloured life size plates of the falcons.

The large paper issue of the Comte de Buffon's "Histoire naturelle de oiseaux" 10 vols. (1770-86) and Edwards' "Natural history of birds and Gleanings of natural history" 7 vols. (1743-64) cover between them an enormous territory.

Grandidier for Madagascar and Spix for Brazil are two other publications which help to bring to life the world of birds for the citizens of the State.

### Further References

State Library of Victoria—*Annual Reports*.

*Public Library of Victoria, 1856-1956 (Centenary Volume)*.

A. B. Foxcroft (comp.)—*Catalogue of English Books and Fragments, 1933*.

A. B. Foxcroft (comp.)—*Catalogue of 15th Century Books and Fragments, 1936*.

An historical outline of the State Library of Victoria is contained on pages 155-156 of the Victorian Year Book 1961.

### Free Library Service Board

#### *Historical Development*

In 1934, a significant survey of Australian libraries was undertaken by two eminent librarians. One was Dr. Ralph Munn, the Librarian of the Carnegie Library of Pittsburgh, and the other was the late Ernest Pitt, Chief Librarian of the Public Library of Victoria.

The subsequent report of this survey issued by these two experts had a startling effect on most Governments, and in particular, on local authorities, for it disclosed a striking lack in the provision of library service below the level of State reference libraries and University libraries.

Although there were so called "libraries" established in nearly every country town in Australia, in association with Mechanics Institutes or Schools of Arts halls, these were often completely useless or in the advanced stages of deterioration due to lack of adequate finance associated with the lack of proper organization by properly trained staff.

Most Governments took heed of this serious problem. In Victoria, the Government was rather slow to act on the report, but finally a Library Service Board was established to report to the Government officially on the requirement in this State to establish an efficient system of local public libraries. The Board submitted its report in 1944, and in December, 1946, a permanent library authority, the Free Library Service Board of Victoria, was constituted by Act of Parliament. Its purpose was to promote the establishment of municipally controlled local public libraries, to supervise the standards of these libraries, and to allocate Government grants provided to assist them.

The Board's task was a formidable one, because only five municipal councils maintained municipal libraries, and some of these were sub-standard by any accepted overseas standards. Its primary task, therefore, was to persuade councils that it is necessary to provide a local public library service of a high standard. This necessarily involved expenditure of considerable sums of money initially, and thereafter sufficient money to maintain the service on a proper basis. Councils which had never even considered a library as anything other than a rather unnecessary amenity serving a comparatively small group of booklovers were difficult, indeed, to convince that a library service is essential in a civilized community; that it must be properly organized and properly financed; and, in particular, that the council is expected to provide, from its own funds, considerable sums of money to effect this.

If councils were prepared to accept this responsibility, however, the Government, through the Free Library Service Board, was prepared to offer considerable assistance to them. Firstly, it offered subsidy on a £1 for £1 basis, in respect of the councils' own library expenditure. Secondly, it offered expert advice, through the staff of the Board, in every phase of the planning, establishment, and maintenance of municipal libraries. Thirdly, the *Free Library Service Board Act* 1946 (since consolidated in the *Libraries Act* 1958) provided for the establishment of a Library Training School, through which a constant supply of trained librarians was to be available.



*Present Activities*

The effects of the Board's persuasive efforts and the assistance which the Government is prepared to offer, have had their impact. Since 1947-48, 91 councils, representing a population of 1,700,000, have established library services, which provide a modern and comprehensive library service. In the first year of the Board's life, only twelve councils were subsidized and the subsidy totalled £15,000. In 1961, a subsidy amounting to £309,000 was shared by 91 councils.

The important fact is that these services are being used. The libraries, which have been established with collections of books totalling 1,500,000, covering the widest possible range of subjects for both adults and children, were used in 1960 to the extent of nearly 7,000,000 book issues. Whilst television must certainly have made some initial impact, the interesting fact is that the libraries are more than holding their own. The oversea pattern will probably be repeated in Australia, and all oversea experience shows that following the introduction of television, after an initial fall-off in the use of libraries, the reverse tends to occur.

Television has tended to stimulate the intelligent use of libraries. This happens in two ways—firstly, by the stimulation of interest in a specific subject by a good documentary type of T.V. programme; secondly, in the absence of programmes of a high standard, more viewers tend to return to serious reading.

Victoria is now well on the way to providing an effective library service to all of its citizens. In the Metropolitan Area and in the country, library buildings now exist which are the equal, in attractive and practical design, of any such buildings serving similar populations in other countries. Bookmobile, or mobile library services are now maintained by four metropolitan councils and by five regional library services in the country, and at least six more similar services are being planned.

Regional libraries have been a particularly effective way of providing library service to country areas. Because of the financial difficulty which small rural municipalities experience in meeting the considerable cost of such services, and because of the manifest impossibility of these councils providing a wide enough selection of books in each particular subject category, the Board has urged them, wherever practicable, to form regional library groups. These groups operate on a co-operative basis, funds being pooled and paid to a Central Council which then has the responsibility of providing library service to each of the participating councils within the group. This is done by organizing one large collection of books, processed and catalogued at the Central Library and then distributed on a bulk rotating basis throughout the component municipalities within the group, to branches and depots. Bookmobile services are frequently superimposed on these services, and in addition, all residents of the group have the right of using directly the central library located in the municipality.

The whole service is controlled by a regional committee, comprising representatives of the component councils of the group, and is directly administered by a regional librarian and central library staff. Considerable savings in staff and purchasing of books are effected in this way, and most important of all, the smaller councils receive a service many times more effective than they could possibly enjoy were they to provide their own individual service. Councils have not been slow to recognise the effectiveness of this type of service and already there are sixteen regional library services in operation, comprising 59 councils. Certainly, many more will be established, and during 1962 it is anticipated that at least two smaller groups will be established in the Metropolitan Area.

The Government, for its part, has set the seal of its approval on regional services by providing a special Regional Library Grant of £20,000 per annum as an extra form of assistance.

### **National Gallery of Victoria**

#### *Centenary Year*

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 indeed not until 1864 that the first picture gallery was opened. This pattern can be said to have persisted so that 100 years later Departments of Sculpture, Furniture, Textiles, Ceramics and Metal Work are regarded as of equal importance with those devoted to the "fine arts".

During the Centenary Celebrations this fact was repeatedly stressed and special exhibitions, including a display of textiles, were held. The Centenary Exhibitions Programme was of particular richness, for not only were local exhibitions of special interest presented, but, as a gesture to the Gallery, the British and Netherlands Governments sent fine exhibitions respectively of watercolours by J. M. W. Turner, R. A., and Dutch paintings of the 19th and 20th centuries. In addition a number of concerts, lectures, and receptions was held throughout the State, and a banquet to mark the Centenary was held in the Gallery for the first time.

The National Gallery of Victoria now looks towards its second century by beginning the construction of a new building which will house its rapidly growing collections in a style suitable to their range and quality.

#### *New National Gallery and Cultural Centre*

The new Gallery will occupy a site of 7½ acres located close to the heart of Melbourne near the Alexandra and Botanical Gardens. The architect has designed a building which is quietly in keeping with the blue stone construction of the city's 19th century public buildings, but at the same time inventive in its solution of many of the problems

which have faced art gallery designers in our own time. Particular attention has been paid to lighting, storage, and the problem of "museum fatigue", and this should be one of the most pleasant and easiest galleries for the visitor to enjoy.

In addition to the National Gallery, provision is also being made for an art school, theatres, concert and conference halls, lecture rooms and restaurants, as well as a large exhibition hall for flower shows, and trade and industrial fairs. This will therefore be a centre in which all members of the community can find their own forms of relaxation, stimulation, and information, and which will play a vital role in the growth of our society.

### *New Acquisitions*

The major reason for the move to a new site has been the growth of the collections, particularly in the last 50 years. The National Gallery is fortunate in having available to it the financial resources of the Felton Bequest which has provided over £1,500,000 for the purchase of works of art. In the last year particular attention was paid to four aspects of the collections: early illustrated manuscripts, Greek vases, Australian art, and the work of some experimental contemporary painters and sculptors from Europe and America. In the first category the Felton Bequest enabled the acquisition to be made of an extremely rare work, *The Four Gospels in Greek*, produced in Constantinople about 1100 A.D. (see photographic section), and the late 15th century Acciaiuoli-Strozzi Hours, a most beautiful example of Renaissance design.

The collection of Greek vases, only seriously begun in 1956, was enlarged with the addition of a Corinthian Olpe of the late 7th century B.C., an Etrusco-Corinthian Olpe of the late 6th century B.C., and a Calenian Phiale of the 3rd century B.C. It is the policy of the Trustees that only works of the highest quality will be added to this group.

Australian art is of the highest importance in any Australian gallery, but with the rapidly growing prestige of the work of our painters overseas it is even more important that they should be well represented in public galleries in their own country. To this end special attention has been given to obtaining fine examples by both living artists and those of the past.

The acquisition of works by contemporary artists is one of the more difficult problems facing every public gallery, in that judgments have to be made which are not yet ratified by time. However, it would be wrong to avoid the problem entirely, especially as young people are eager to know what is being done in their own time in other countries. Because of this, the Trustees and the Felton Bequests' Committee have embarked on an adventurous programme of buying 20th century art, and in the last year works by Appel, Tapies, Saura and Norman Bluhm in painting, and by Moore, Frink, Kneale, and Dalwood in sculpture, have been acquired.

### Further References

National Gallery Trustees—*A Catalogue of Paintings, Drawings, and Sculpture* (1948) *With Appendices to July, 1954*.

National Gallery Trustees—*Catalogue of European Paintings before 1800* by Ursula Hoff. 2v. 1961.

National Gallery Trustees—*Some Australian Landscapes*.

Sir Kenneth Clark—*The Idea of a Great Gallery*.

### National Museum of Victoria

An article describing the activities of the Museum will be found on page 158 of the Victorian Year Book 1961.

### Institute of Applied Science of Victoria

The Institute was founded in 1870 as the Industrial and Technological Museum, its name being changed in 1944 to Museum of Applied Science, and in 1961 to its present title. The appointment of a separate body of Trustees in 1949 gave an impetus to development and brought augmented Government support which has continued since that time.

It is situated on the frontage to Swanston-street of the building shared with the State Library and National Gallery of Victoria. During 1960-61 an extension was built which increased the display area by one third. In order to indicate clearly its present function, which is directed more towards interpreting and explaining visually significant advances in applied science and technology than to the preservation of the past, its name was changed in 1961 from Museum to Institute.

The primary function is educational. By displays and other activities, the Institute explains in simple terms scientific and technological advances from their origins to their influence on our lives. The wide range of exhibits is selected from the primary and secondary industries and public health. They are designed to educate by arousing interest and providing some entertainment. To this end many machines, models, sectioned engines and demonstration apparatus can be operated by the visitor or a guide-lecturer, while others are working continuously. The guide-lecturer is available to assist and conduct school groups and other visitors.

Worthy of special mention are the electrical and electronic appliances, the modern telephony exhibit, television, operating railway, shipping and aviation exhibits, displays on atomic physics and radio-isotopes, agricultural implements, the economic botany collection, portraits of the founders of science, the Askew bequest of clocks and watches, and the extensive arms collection. Recent additions include displays on upper air and space exploration, the winning and utilization of brown coal in the Latrobe Valley, and the story of oil.

Special temporary exhibitions are arranged featuring topical events or scientific anniversaries. Among the historical exhibits are a series of Victorian gold field dioramas, relics of the Kelly Gang, the first car imported into Australia, and the Herbert Thomson Car (1896)

and John R. Duigan aeroplane (1910), which were respectively the first automobile and aeroplane designed, built, and successfully used in Australia.

The Institute controls a small observatory in the Domain and issues invitations to the public to attend astronomical demonstrations, including the viewing of celestial objects, on several nights monthly. In 1960, the Sunshine Foundation gave £20,000 for the purchase of a medium-size planetarium in honour of the late Hugh V. McKay. This dome, which will seat about 130 people, will be erected in a large gallery of the Institute.

After several years of developmental work, a radiocarbon dating laboratory was established in 1961, the first of its kind in Australia. It provides a service for the Commonwealth of Australia and for South-East Asia for which a charge is made to defray expenses. This scientific method for measuring the age of any carbonaceous material as old as 40,000 years has been a boon to students of prehistory, especially archaeologists.

In the workshops and laboratories of the Institute many up-to-date exhibits are constructed or modified for installation, and faithful biological models are made. An information service on applied science is provided and photographs or slides of exhibits can be ordered at a nominal charge.

## **Drama**

### *Introduction*

Since the end of the Second World War, drama in Australia has mainly echoed the trends in popular drama from overseas. Latterly, however, a drama more indigenous to this country has been developed; this has stemmed as much from Victoria as from any other State in the Commonwealth. Development has been along two clear paths: commercial and non-commercial.

### *Commercial Theatre*

Generally speaking, the aim of the commercial theatre, as with any other business, is to appeal to the widest market; therefore, the successful formulae copied from overseas have been practised and the results have mainly been as satisfactory. Unfortunately, the immediate post-war renaissance which was experienced by the arts in Great Britain and America, and specifically in the theatre, did not reach Australia and, in spite of the visits of certain oversea artists, the standards of presentation on the commercial stage at that time are not very memorable today. In 1945, Melbourne theatre was reported to have reached its centenary, but it is significant that nothing of note was organized to celebrate this fact. In the following year, leading articles were being published in the press noting the apparent decline in the Australian stage. Actors' Equity were claiming a 25 per cent. quota restriction on oversea artists (August 1947) and the theatrical managers of Victoria united to form a local branch of their Association. Some Australian artists overseas, however, were gaining considerable distinction.

In 1948, the theatre in Victoria was given tremendous stimulation by the visit of Sir Laurence Olivier at the head of an Old Vic Company. Three productions were presented at the Princess Theatre in Melbourne: "Richard III" by William Shakespeare, "School for Scandal" by Richard Brinsley Sheridan, and "The Skin of Our Teeth" by Thornton Wilder.

Melbourne queues became a menace, people waiting on the pavements as long as 27 hours to obtain tickets, and local by-laws were eventually quoted to check the queueing obstruction. The Company finally left Australia after a 5-months tour with a net profit of some £200,000.

This visit of the Old Vic Company was the high water mark in Victoria's theatrical entertainment since the war and generally added enormous prestige to the theatre. Since that time increasing notice of the theatre has been taken by Government and public alike, and a standard of comparison in presentation was set which was to act as a yardstick over future years, sometimes to the detriment of visiting companies.

After the Old Vic Company departed, 1949 saw the visit of the equally famous Stratford-upon-Avon Memorial Company. This was repeated by another Stratford season in 1953 and further Old Vic seasons in 1955 and 1961. None of these seasons had the sensational impact of the 1948 Old Vic season. Sir Ralph Richardson, Dame Sybil Thorndyke and Sir Lewis Casson headed a company in 1955 which presented two plays, and some of the players in this season were recruited locally, although the producer was brought from overseas.

In Victoria, the development in the local commercial theatre was still tending to use the imported artist, supported by the local, in a re-production from the original presentation from overseas; this is still the case, although the standard of presentation is very much higher than ever before. "My Fair Lady", originally produced in Melbourne in 1959, where it ran for 21 months, cost about £75,000 to stage at Her Majesty's Theatre. It is predicted that this musical will have an Australasian run of at least four years.

### *Non-Commercial Theatre*

Under this heading come the activities of the Australian Elizabethan Theatre Trust, as it is relevant to Victoria; the various smaller theatres which have as their chief aim the presenting of work not necessarily with the object of profit-making, and the activities of amateur groups.

The Australian Elizabethan Theatre Trust was formed in Sydney in 1955 but, since its inception as a Commonwealth body, has been in receipt of an annual grant from the Victorian State Government. Today the grant stands at £12,500 per annum, with an additional grant of £2,000 from the Melbourne City Council. The foundation of the Trust came as a manifestation of the mood of the people of Australia to develop a theatre of their own and, to some degree, was inspired by the visits of the well-known overseas companies such as the Old Vic and the Stratford Memorial Company.

The Trust's range of activity extends deeply into the theatrical life of Victoria by direct grant to specific activities of other organizations, such as the National Theatre Movement of Melbourne, the University of Melbourne for the Union Theatre Repertory Company, the Young Elizabethan Players' tours of Shakespeare to schools throughout the Melbourne metropolitan and Victorian country districts, and by regular tours throughout Victoria in collaboration with the Council of Adult Education. These activities are coupled with the larger scale activities of the Trust on a Commonwealth basis, allowing the touring of first class imported companies such as the Bolshoi and Leningrad Ballets to Australia, or with the direct promotion of activities for which subsidy is essential, such as five Grand Opera tours, classical drama tours, and the encouragement of Australian playwrighting.

As far back as 1948, twelve years after its formation and soon after the termination of the Olivier visit with the Old Vic Company, the National Theatre Movement was granted a £5,000 per annum State subsidy for the development of drama, ballet, and opera. In 1961, the Movement celebrated its 25th anniversary with a successful presentation of "The Student Prince". Throughout its 25 years of activity, the National Theatre Movement has mainly been concerned with the development of local artists in Grand Opera and some of the finest Australian voices heard singing overseas today have passed through its opera school. Currently, the National Theatre Movement is in receipt of a grant of £10,000 from the Victorian State Government.

The Movement transferred its headquarters to a cinema in Toorak early in 1962, and the Melbourne City Council made an initial grant of £1,000 to aid this project. However, the cinema was soon afterwards destroyed by fire.

The St. Martins Theatre, formerly the Melbourne Little Theatre, was formed in 1931 and, at the end of 1961, was presenting its 288th production. During that time it has developed a list of over 5,000 subscribers and presents a different play every month in its new home in South Yarra—built in 1956. Its policy in the past has been to present oversea box office successes, when available, together with more experimental work and Australian plays. This policy was initially executed on an amateur basis, but the growth towards a professional status has been slowly taking place. The large subscription audience guarantees a good attendance, in a theatre seating 404, over the 22 performances of each play.

The Union Theatre Repertory Company, with its homes in the Union Theatre, University of Melbourne, and the Russell Street Theatre, was formed in 1953 and at the end of 1961 presented its 104th production. This is a fully professional company, originally designed to present chiefly commercial plays, but now more devoted to presenting plays not usually attempted by commercial managements, but for which there is a growing specialized audience interest. These plays are presented continuously every three weeks. A startling example of the rise in costs in the theatre in Victoria is shown by the fact that in 1953 this company was costing £350 per week to run, whereas at the end of 1961, that figure more than trebled. Because of this and in recognition of the work the company has been doing

(the first Australian productions of, among others, "Summer of the Seventeenth Doll", "Lola Montez", and "The Mystery of a Hansom Cab"), the Australian Elizabethan Theatre Trust has, since 1959, agreed to underwrite this company against loss up to £5,000 per season during its playing at both the Union and the Russell Street Theatres. This guarantee has not been fully called upon at any time.

In the amateur field, the encouragement by the Victorian Drama League, founded in 1952 (initially sponsored by the Council of Adult Education) has been partly responsible for a significant development of amateur drama throughout the State; in the Melbourne Metropolitan Area alone there were 55 amateur groups registered with the Victorian Drama League in 1961, out of a total of 234 throughout the State.

### *Summary*

Since the end of the Second World War, the following events have had a significant effect upon theatrical trends in Victoria. First, the visit of Sir Laurence Olivier and the Old Vic Company in 1948, which opened the eyes of audiences to the current theatrical development overseas and gave the theatre prestige. Secondly, State subsidy to the National Theatre Movement (1948) and the Australian Elizabethan Theatre Trust (1955), which have helped particularly in the development of Grand Opera in English and the popularity of the Australian player and play. Regarding the latter, some commercial managements have not been slow to follow suit. Thirdly, the introduction of television in 1956. This has led to the diversion of the contemporary straight play more and more to the smaller, non-commercial stage and the development of the smaller theatre on a professional line. The tendency also has been to encourage the expansion of such small theatres into the suburbs—the St. Martins Theatre, the Union Theatre Repertory Company, the National Theatre, the Arts Theatre in Richmond and, with the closing of various cinemas in the suburbs, to attract the cinema audience more into the city, where a number of older theatres, the Kings, the Athenaeum, and the St. James have been converted and re-converted for that purpose.

Generally speaking, audience taste now is not very different from that in the immediate post-war years, although a better standard of presentation and performance is demanded. The request is still mainly for comedy and music and it is left to the smaller theatres, with or without subsidies but with lower overheads, to revive the classics and to show the immediately contemporary and *avant garde* to a small variable audience.

### **Music**

A survey of music in Victoria will be found in pages 161 to 163 of the Victorian Year Book 1961.

### **The Press**

During 1961 the Victorian press was affected by the Commonwealth Government's economic measures. These were most severely felt in the field of advertising, with both display advertising and classified advertising falling sharply compared with the peak volumes of the



preceding year. The revenue of both major metropolitan newspaper groups and also of the larger provincial and suburban chains fell away and trading profits decreased.

The sharpest effects of the measures were felt in mid-year when national and general display advertisers trimmed their advertising appropriations severely. In the classified advertising field, used car and professional advertisements fell away in the middle of the year and real estate advertising was at a low ebb until the normal seasonal recovery began in late spring and early summer. In November, some newspapers published record volumes of classified advertising. However, these volumes were based on increased buying of space by some larger advertisers and, in fact, represented a smaller number of individual advertisements than in the same period of 1960.

The decline in advertising through the year was reflected in tighter editorial space allocations, with most papers trimming space allocated to feature material and placing restrictions on news space.

Despite the credit restrictions and their direct effects on advertising and revenue, sales of all principal newspapers reached record heights during the year. Audit figures for the three major Melbourne daily newspapers for the period 2nd April to 30th September showed an average increase per day of 18,763 papers above the corresponding period of 1960. One of the circulation trends was that the sales figures were comparatively stable before the effects of the credit restrictions became severe. Circulations showed their greatest increase in the last nine months of the year as advertising revenue dropped.

Among reasons advanced for the increase in sales in the latter part of the year were:—

- (1) Fairly consistent news of international importance—such as the man in space, the Russian 50 megaton bomb, Princess Margaret's baby ;
- (2) stimulated demand for newspapers, particularly for newspapers carrying employment advertisements, during a period of higher unemployment ; and
- (3) a mild winter. (Circulation experts agree that cold weather has an adverse effect on sales.)

The three Melbourne daily newspapers increased their publicity and promotion effort during 1961. A significant feature was an increased use of "house" advertising and a recognition of television as a suitable medium for promoting sales of newspapers.

There were increases also in sales to new Australian readers. It is apparent that the first generation of new Australians is now leaving school and beginning to buy newspapers in the English language, after ten years in which new Australian readership was mostly concentrated on foreign language publications.

#### **Further References**

An historical survey of the press in Victoria will be found on pages 167 to 171 of the Victorian Year Book 1961.

### State Film Centre

During the Second World War documentary films proved of great value, both as a training aid and a morale builder. When the war ended, governments endeavoured to find ways of keeping documentary films at work in the post-war years and they did this by forming central 16-mm. libraries in strategic places.

In May, 1945, the Australian National Film Board was established and the various State Governments were invited to form State Advisory Committees to assist the Board in its distribution of films. The State Advisory Committee set up in Victoria recommended the formation of a State Film Centre which was established by the Government in June, 1946.

Basically, the State Film Centre is required to promote and assist the screening of documentary films in Victoria; to maintain a free film lending library and actively to promote the effective use of the films; to operate the use of a mobile unit in the country; and to compile information about films.

In the course of its work, the Centre has built up an extensive library of over 8,500 films and circulates them to approximately 1,600 registered regular borrowers each year, and, in addition, lends films occasionally to another four or five hundred organizations.

Each year the Centre's two travelling projectionists take screenings to country areas, in many cases working in with other government bodies such as the Soil Conservation Authority, the State Electricity Commission, the Health Department, and the Council of Adult Education. By means of trailer-mounted generators, it is possible to present film screenings in outback areas beyond the reach of power lines.

Following a policy of decentralization, the Centre supplies a monthly collection of films to ten regional film libraries, which are the municipal book libraries at Bairnsdale, Ballarat, Bendigo, Echuca, Flinders-Mornington, Geelong, Horsham, Wangaratta, Warrnambool, and Yallourn.

The State Film Centre has become a recognized source of reliable technical information in all matters in the presentation and production of 16-mm. motion pictures and gives free advice to schools, film societies, industries, and the 16-mm. film user in general.

Public preview screenings are held regularly in Melbourne at Nicholas Hall and films from the State Film Centre are shown frequently in association with various community activities.

### Broadcasting

#### *Australian Broadcasting Control Board*

Broadcasting and television services in Australia are under the general control of the Board which operates under the provisions of the *Broadcasting and Television Act 1942-1960*.

The Board's powers were further extended by the *Broadcasting and Television Act 1960*, which relates to licences for broadcast and television receivers on hire.

Among the projects recently sponsored by the Board have been investigations into the types of music broadcast by commercial stations, religious, family, and children's programmes, and advertising.

The Board is concerned about children's programmes, particularly their quality, duration, and time of presentation. The Board's inquiries indicated that children under sixteen years of age comprised between 54 per cent. and 72 per cent. of the total listening audience between the hours of 7.00 a.m. and 8.15 a.m. in August, 1961.

Advertising matter has been the subject of analysis in point of time and quantity, and one result of a study of Melbourne commercial broadcast programmes, based on a 10 per cent. random sample of broadcasts to listeners between 6.00 a.m. and 10.00 p.m. daily for two weeks in the Spring of 1960 is shown in the following table :—

**VICTORIA—COMMERCIAL BROADCASTING : DISTRIBUTION OF ADVERTISEMENTS, BY DAYS AND SESSIONS : MELBOURNE PROGRAMMES, 1960**

Day of Week	Percentage of Time Occupied by Advertisements	Session	Percentage of Time Occupied by Advertisements
Monday .. ..	16·2	Breakfast— 6.00 a.m.—8.30 a.m. ..	22·0
Tuesday .. ..	21·9	Morning— 8.30 a.m.—12 noon ..	19·5
Wednesday .. ..	21·0	Midday— 12 noon—2.00 p.m. ..	16·7
Thursday .. ..	21·7	Afternoon— 2.00 p.m.—6.00 p.m. ..	15·5
Friday .. ..	17·4	Evening— 6.00 p.m.—8.00 p.m. ..	14·5
Saturday .. ..	12·7	Night— 8.00 p.m.—10.00 p.m. ..	10·9
Sunday .. ..	7·3		

*National Broadcasting Stations*

At the 30th June, 1961 the Australian Broadcasting Commission, generally referred to as the A.B.C., was operating the Victorian radio stations shown in the following table :—

**VICTORIA—NATIONAL STATIONS, 30TH JUNE, 1961**

Station and Call Sign	Type and Location	Station and Call Sign	Type and Location
	Medium Wave		Short Wave
Metropolitan— 3AR .. .. 3LO .. ..	} Melbourne	Radio Australia, Overseas Service— VLA, VLB, VLC, VLD, VLE, VLY Inland Australia Service— VLG*, VLH, VLR ..	} Shepparton, Northern Victoria
Regional— 3GI .. .. 3WV .. .. 3WL .. ..			

\* Shared between inland and overseas services.

In addition to the wide range of programmes provided through its network of stations, the Commission has established a concert series, and despite the attractions of television, attendances at orchestral concerts and recitals have continued to increase.

The following table shows concerts and attendances for the year 1960-61 :—

VICTORIA—A.B.C. CONCERTS AND ATTENDANCES, 1960-61

Type	Paid Concerts	Attendance	Type	Free Concerts	Attendance
Orchestral ..	80	122,616	Schools Orchestral	38	72,229
Recitals ..	35	26,392	Other Orchestral..	11	27,800
Total ..	115	149,008	Total ..	49	100,029

Subscription concerts were held in the following Victorian centres :—Ballarat, Geelong, Hamilton, Horsham, Sale, and Shepparton. In addition, concerts were also given at Bendigo, Echuca, Maryborough, Mildura, Swan Hill, Wangaratta, and Yallourn. The orchestras also gave free concerts for school children at all centres at which they made public appearances.

MELBOURNE—COMPOSITION OF NATIONAL STATIONS BROADCAST PROGRAMMES, 1961

Contents	%	Contents	%
Music—		Talks Including Women's Session, Interviews, Discussions, News Commentaries, Documentaries	6·8
Classical .. .. .	22·3	News .. .. .	7·8
Light .. .. .	15·1	Sport .. .. .	4·8
Variety and Popular .. .. .	18·2	Education .. .. .	3·7
Drama and Features .. .. .	3·9	Parliament .. .. .	4·5
Children's .. .. .	2·3	Rural .. .. .	1·7
Religious .. .. .	3·5	Announcements, Fill-ins, &c. ..	5·4

Commercial Broadcasting

The twenty commercial stations operating in Victoria are shown in the following table :—

VICTORIA—COMMERCIAL BROADCASTING STATIONS IN OPERATION AT 30TH JUNE, 1961

Call Sign	Location	Call Sign	Location	Call Sign	Location	Call Sign	Location
3AK	} Melbourne	3XY	Melbourne	3GL	Geelong	3SH	Swan Hill
3AW		3BA	Ballarat	3HA	Hamilton	3SR	Shepparton
3DB		3BO	Bendigo	3LK	Lubeck	3TR	Traralgon
3KZ		3CS	Colac	3MA	Mildura	3UL	Warragul
3UZ		3CV	Maryborough	3NE	Wangaratta	3YB	Warrnambool

The following table shows the number of broadcast listeners' licences in Victoria from 1958 to 1962 :—

### VICTORIA—BROADCAST LISTENERS' LICENCES

Year								Number of Listeners' Licences at 30th June
1958	..	..	..	..	..	..	..	557,960
1959	..	..	..	..	..	..	..	605,340
1960	..	..	..	..	..	..	..	606,587
1961	..	..	..	..	..	..	..	589,437
1962	..	..	..	..	..	..	..	585,633

### Television

One national and six commercial television stations were operating in Victoria at 30th April, 1962. The localities served and the call signs of these stations are shown below :—

Metropolitan Area				Country Areas				
Melbourne	..	..	..	*ABV2	Ballarat	..	..	BTV6
"	..	..	..	GTV9	Bendigo	..	..	BCV8
"	..	..	..	HSV7	Goulburn Valley	..	..	GMV6
					Latrobe Valley	..	..	GLV10

\* National Station.

The number of national stations is to be increased, and applications for licences have been called for commercial stations to serve the Upper Murray, Mildura and Murray Valley (Swan Hill) areas.

The following table shows a sample composition of television programmes for Melbourne commercial stations :—

### MELBOURNE—COMPOSITION OF COMMERCIAL TELEVISION PROGRAMMES, 1961

Contents	%	Contents	%
Drama—		Sport—	
Adventure .. .. .	6·4	Events .. .. .	3·6
Crime and Suspense .. .. .	18·3	Other .. .. .	1·3
Domestic and Comedy .. .. .	9·7	Family—	
Western .. .. .	8·2	For Children .. .. .	8·6
Miscellaneous .. .. .	8·3	Family Living and Shopping .. .. .	3·6
Light Entertainment—		News .. .. .	5·1
Cartoons .. .. .	2·7	Information .. .. .	0·5
Light Music .. .. .	1·7	The Arts .. .. .	0·7
Personalities and Oddities .. .. .	5·9	Current Affairs—	
Quiz and Panel Programmes .. .. .	2·6	Australian Activities .. .. .	0·3
Talent Programmes .. .. .	0·3	Religious Matter .. .. .	2·3
Variety .. .. .	8·9	Social, Human Relations, and Controversial Matter .. .. .	1·0

The following table shows the number of television viewers' licences in Victoria from 1958 to 1962 :—

VICTORIA—TELEVISION VIEWERS' LICENCES

Year								Number of Viewers' Licences at 30th June
1958	..	..	..	..	..	..	..	147,721
1959	..	..	..	..	..	..	..	270,073
1960	..	..	..	..	..	..	..	353,091
1961	..	..	..	..	..	..	..	401,395
1962	..	..	..	..	..	..	..	452,098

### Further References

Historical information about the introduction and early history of radio broadcasting and television will be found on pages 164 to 167 of the Victorian Year Book 1961.

### Royal Botanic Gardens

An article describing the Gardens will be found on pages 179 to 181 of the Victorian Year Book 1962.

### National Parks

#### *National Parks Authority*

With the passing of the National Parks Act, there was established a National Parks Authority consisting of a Chairman, a full-time Director and nine other members. These included the Secretary for Lands, the Chairman of the Forests Commission of Victoria, the Secretary for Public Works, the Chairman of the Soil Conservation Authority, the Director of Fisheries and Wildlife, along with two members representing groups of organizations interested in national parks, a representative of the Victorian Ski Association and a representative of the Victorian Government Tourist Bureau.

By virtue of its composition, the Authority is able to tackle problems of national parks' control through the expert knowledge and training of its members. Sub-committees of the Authority handle such basic matters as fire protection, fauna protection, works programmes, policy, &c.

#### *Objects of the Act*

The objects of the Act are as follows :—

- (1) to provide for the establishment and control of national parks ;

- (2) to protect and preserve indigenous plant and animal wild life and features of special scenic, scientific, or historical interest in national parks ;
- (3) to maintain the existing environment of national parks ;
- (4) to provide for the education and enjoyment of visitors to national parks and to encourage and control such visitors.

### Expenditure

Since the formation of the National Parks Authority in 1957, amounts totalling £222,680 have been expended on Victoria's national parks, including Government allocations and revenue from services provided for park visitors. This expenditure represents a notable measure of progress. Details of the expenditure are as follows :—

#### VICTORIA—NATIONAL PARKS EXPENDITURE (£)

National Park	Year Ended 30th June—			
	1958	1959	1960	1961
Wyperfeld National Park ..	..	1,053	1,926	8,961
Kinglake National Park ..	5,937	5,109	5,227	7,856
Fern Tree Gully National Park ..	2,518	494	3,106	4,819
Wilson's Promontory National Park	12,794	32,176	21,582	24,818
Mount Buffalo National Park ..	3,894	7,168	9,984	9,326
Churchill National Park ..	33	10	2,246	9,760
Fraser National Park ..	150	22	13,171	13,689
Tara Valley and Bulga National Park	723	1,080	1,394	2,998
Other National Parks .. ..	3,340	201	329	4,786
Total .. ..	29,389	47,313	58,965	87,013

### Fauna Protection

Control of bush fires and the provision of water supplies are essential factors in fauna conservation ; but in our national parks there is another problem : the protection of native fauna against introduced foxes and conservation of their food supply (grass) in competition with the rabbits.

The problem of destroying rabbits in national parks, without harming the native fauna, is of some interest. The usual method of poisoning rabbits is to place oats treated with strychnine or " 1080 " in a furrow to which the rabbits are attracted. Unfortunately, emus and kangaroos, and possibly other fauna, will take oats and in the past this has resulted in severe fauna losses.

To tackle this problem, the Authority formed a Fauna Protection Committee which has worked in close harmony with the Lands Department. It has been found that diced carrot, dyed with Malachite Green (a coal-tar dye) is unattractive to native fauna. In preliminary experiments in Wyperfeld National Park, using green-dyed carrot

without poison, it was observed that cockatoos picked up the bait in their claws, but rejected it without eating it. Rabbits were observed to come from as far away as a quarter of a mile. When it had been established that the risk to the fauna was low, 3 miles of poison trail was laid, using green-dyed carrot; strychnine was used so that all kills would be picked up close to the trail. Next morning, 328 rabbits were collected, but no birds or kangaroos. Two possums were killed. In several subsequent poisoning campaigns, many miles of trail have been laid, using both strychnine and "1080". The result has always been the same—no native fauna except possums (two or three each run) have been killed, though thousands of rabbits have been destroyed. It is essential in such work that the poison trail be filled in the morning after the poisoning, so that any baits remaining do not attract inquisitive birds or animals. The Authority has secured the co-operation of the Lands Department Officers in this regard. The method described has been applied in other national parks and is now standard procedure.

Foxes and feral cats which constitute a danger to the Lowans (Mallee Hens) in Wyperfeld, have been destroyed by hanging dead chickens or rabbits suitably treated with "1080" or strychnine, from low branches in the vicinity of the mounds. This method had proved very successful in Sherbrooke Forest Park, where the lyrebirds are constantly in danger from foxes and cats.

#### **Further References**

A list of the main National Parks of Victoria, showing their location and area will be found on pages 173 to 176 of the Victorian Year Book 1961.

#### **Tourist Development Authority**

The functions of this Authority are listed on pages 182 to 183 of the Victorian Year Book 1962.

### *Education*

#### **State Primary Education**

##### *Historical*

The Education Department and State education were brought into being in January, 1873. It was not, however, until 1910 that legislative provision was made for State secondary education. So for almost 40 years, the history of the new Department was the history of the primary, or more properly, the elementary schools of the State. This explains why, although now there are State high schools, State technical schools, and State girls' secondary schools, it is the State primary school that is still familiarly referred to as the State School; and the practice of allocating to each such school a number for official filing purposes, which actually antedates the Department itself by ten years, still persists.

The new Department in 1873 faced many problems, but by far the most important was that of establishing new schools throughout the State, especially in the new areas of settlement that were springing



up, following the passing of the *Land Act* 1869. This Act threw open for selection the pastoral lands of the squatters, and from mine, town, and station, a steady stream of work-hungry men and their families set off to establish farms and homes in the outback—on the Wimmera plains or among the rain forests of Gippsland.

Perhaps the chief worry of the new settlers, one that individual initiative and ingenuity and hard work could not provide against, was the fact that their children were growing up without schooling. True, the Common Schools Board would possibly assist them with grants towards the cost of a building and the salary of a teacher, but where would they, living off the land, obtain their share of the cost, and how could they, isolated as they were from the more settled areas, find and house a teacher? The system of State grants had failed to solve the educational problems of the towns and was quite unequal to the new task.

The Royal Commission set up some time before to inquire into the state of public instruction under the Common Schools Act had reported in 1867 that less than half of the children of elementary school age were on the rolls of public and private schools, and stated that the deficiency of the means of instruction in the thinly populated parts of the colony was acknowledged to be "the most crying want of the interior at this moment". Both town and country looked to the new Department to vitalize education, to extend it throughout the colony, and to provide buildings, teachers, and supervision that would ensure the same standard of education within its borders.

The accomplishments of the Department during its first five years show how great had been the need and how vigorously it had set about its task of satisfying that need. Of the schools, numbering about 800, taken over from the Common Schools Board only half were housed in buildings that had been vested in the Board; the remainder were conducted in leased buildings owned by churches or private individuals. Five years later the Department was able to report that the number of schools had been more than doubled, over 800 new buildings had been erected, and many existing buildings had been enlarged and repaired. In all, additional accommodation had been provided and teachers had been supplied for more than 100,000 children.

This rate of expansion was not again to be approached until the present day, when the rise in school population due to immigration and the increased birth rate, coupled with the growth in outer areas of Melbourne and in many provincial and country towns, has produced a very similar crisis and has strained resources of money and man-power to the utmost. Comparison of the achievements of the two periods is, of course, not possible. Today's schools provide much more floor space per child than did those of the earlier period, especially in secondary and technical schools, where special rooms are set aside for "practical" subjects. But the increase in school population during the period 1872-77 was very similar to that of 1955-60, when the total enrolment in all types of State schools rose by 100,000.

It can be said that the ideal behind the Education Act of 1872, that, as far as possible, equal opportunities for education would be available throughout country areas as well as the cities, has been a guiding principle accepted by the Department at all times. In spite of the development in recent years of consolidation of schools in certain country areas, whereby country children are transported by bus to a school centrally situated in the area, the small one-teacher schools are still the main feature of education in the country, and every effort is made to keep them open, although enrolments may drop to as low as six pupils. Of the 1,900 primary schools in operation, more than half are in charge of one teacher.

### *Role of Primary Education*

The establishment of State secondary schools following the 1910 Act foreshadowed a marked change in the role previously allotted to the elementary schools, and this, in turn, has produced changes in aims, in curriculum, and in methods of teaching. Eventually it was accepted that pupils proceeding to secondary education should do so after the Grade VI. year. Consequently, at first in the towns, and later, with the provision of bus transport, in most of the small country schools, the "top" of the elementary school disappeared, and today the number of pupils still remaining in these grades is almost negligible. For instance, of the 40,000 pupils in Grade VI. in 1959, less than 1 per cent. were in the following year to be found in Grade VII. All the others had proceeded to some form of secondary education.

The primary school, therefore, is now called on to provide the first of the two main stages of education; its pupils commence school at the average age of five and pass on to the various forms of secondary schools at the average age of twelve. No longer is it looked on as providing all the schooling a child can obtain; it awards no certificates and there is no "11+" examination for entry into the secondary stage. It is, in the main, the responsibility of the head teacher to maintain standards of progress throughout the six or seven years of the primary school and to decide the standard a pupil should reach in Grade VI. before transferring to the secondary stage. This, of course, results in some lack of uniformity and, at times, in some sharp differences of opinion with the secondary schools, which in the past had received only a selected section of Grade VI. pupils; but it is becoming recognized that secondary education for all involves the adaptation of secondary school courses and teaching to the wide spread of individual differences to be found in any age group. In practice, a middle course is steered between excluding a considerable number of pupils from secondary education altogether and transferring all, irrespective of standard, in an agreed-upon age-group.

This changing role of the primary school has gradually evolved over the past 50 years, but more rapidly over the past twenty. The re-thinking that the change has made necessary has been influenced by developments in child psychology and by the realization that the

primary school should provide for the child's physical, intellectual, and spiritual growth during pre-adolescence and early adolescence, instead of concentrating mainly on what it is imagined will be his adult needs of skills and knowledge.

These changing viewpoints can be traced in the changes in curriculum and methods of teaching that have taken place in the primary school during this century. The narrow curriculum of the three R's, with which the school at the turn of the century concerned itself, has been widened and enriched by teaching that aims to develop interests, personal growth, and social awareness—social and environmental studies, physical activities, music, and art; and the school library has been developed to cater for the increasing intellectual curiosity of the child of to-day and to give him training in self-education.

### *Changing Functions of Teachers*

All this, of course, places more responsibility on the primary school teacher and demands a much greater measure of knowledge, teaching skill, and understanding of child nature and development. The class teacher, responsible for the same group of children throughout the year and for the teaching of the whole curriculum, remains the basis of staffing of the primary school. He needs a wide knowledge of subject-matter and of the ways in which courses can be made interesting and meaningful; he needs sufficient background to enable him to link subject with subject and to teach their basic principles; and he needs to have developed personal interests and enthusiasms in some fields of skill or study that will lift his teaching from the instructional to the educational level. He needs also to be skilled in class and child management and to be adaptable to changing class and school circumstances. Hence the attention that to-day is given to the training of teachers as regards both the initial preparation for teaching and the means of keeping them abreast with new knowledge, methods, and viewpoints.

Trainee teachers nowadays go direct from secondary schools into teachers' colleges. The minimum qualification for college courses is the Leaving Certificate, but about one-third of those selected have passed the Matriculation Examination. The apprenticeship system of training teachers, which continued up to recent years either in conjunction with or as a substitute for a course of training in a teachers' college, has now been discontinued, and students-in-training spend a minimum of two years in college. Those training as teachers specializing in infant-school work take a three-year course, and a number of those taking the two-year course for general primary teaching are granted extensions of their studentships to undertake university or agricultural college courses or further training of at least one year in special fields—in education of the deaf and of the physically and mentally handicapped, arts and crafts and home crafts (for teaching in consolidated schools or craft centres), and as teacher-librarians (for work in central libraries in primary schools).

The demand for more and more teachers to cope with the ever-increasing school enrolments and the ending of the apprenticeship (student teacher) method of training has caused a very large expansion in the number and size of the teachers' colleges, as in other States and countries. In 1939, there was only one college and 334 students. Twenty years later there were eight Primary colleges and 2,867 students. In 1961 the number of students exceeded 3,000.

This flow of new teachers has enabled the Department not only to maintain increasing school staffs with trained teachers, but to plan for a reduction in the size of classes.

### *Planning of Curriculum*

Until recently, it was the custom to revise the curriculum of the primary school at widely spaced intervals and then to introduce a revised course in all subjects at the one time. Because of the difficulty teachers encountered in implementing so far-reaching a revision, the present practice was introduced of keeping the curriculum continually under revision and concentrating on one subject at a time. To control this continuous revision, a Standing Committee, consisting of representative teachers, inspectors, and members of college staffs, has been set up. Subject committees appointed from time to time draw up revised courses, which are submitted in the first instance to the Standing Committee. The Curriculum and Research Branch carries out investigations and trials of various aspects of courses under revision and is primarily responsible for making principles and details known to teachers. This is done by publication of notes on the courses, by classes for teachers, by seminars and "workshops" arranged by district inspectors, and by assisting a number of practising teachers with new methods in order that their classes may be used for demonstration purposes. It frequently happens that in this way certain aspects of a proposed revision are made known to teachers and are being taught in a large number of schools before the actual prescription of the new course. At present special attention is being paid to the teaching of arithmetic, with stress on the understanding of basic mathematical principles involved rather than merely on computational skill. At the same time efforts are being made to evolve a course that will not be so tied to grade standards as in the past, but instead will make provision for the wide individual differences among the children found in most classes in the school. Experimentation and trial courses associated with the arithmetic revision have already demonstrated most clearly that in the past the fixed course for each grade has unnecessarily retarded the development of skill and understanding by the more advanced pupils in each class.

### *Equipment and Accommodation*

The provision of accommodation for the rapidly increasing number of pupils in all types of schools has constituted a major problem for the Department during the past ten years. It is expected that the annual increase in primary school enrolment, which reached the peak of 15,000 in 1952, and was nearly 14,000 as recently as 1958, will vary between 6,000 and 8,000 for many years.

Naturally, the first thought has been for class-rooms, and the standard plan which has been evolved to make for speed in the calling of tenders by the Public Works Department has up to now made no provision for special purpose rooms. However, it can be claimed that the rooms in the new schools are bright, that storage facilities have been improved, and that staff amenities, heating of rooms, and provision and siting of toilet blocks mark a considerable advance in school planning. Except in the case of the very large primary schools, the 5 acre site usually provided has proved to be adequate for playground activities.

Throughout the State there has been considerable improvement in the equipment of primary schools. Local funds raised by school committees and mothers' clubs have been generously supported by parents and have been supplemented on a subsidy basis by the Department. School libraries have been greatly improved, both as regards book stock and management, and radio and sound equipment enable children of most schools to participate in school broadcasts and to have music for assemblies and on other occasions. In every sense the primary school is a neighbourhood unit, and in the new housing areas, both Government and private, it is the first district amenity; as such it has played a large part in helping the residents of a new area to gain a sense of belonging to a neighbourhood and in this way to become adjusted to new conditions.

### **Secondary Education 1945–1960**

An article dealing with this subject will be found on pages 206 to 209 of the Victorian Year Book 1962.

### **Salient Features of Contemporary State Education**

#### *1. Types of Schools*

##### *(a) Primary :—*

- (i) Normal—for Grades I. to VI. ;
- (ii) Consolidated—for Grades I. to VI. and special post-primary courses of four years in rural areas ;
- (iii) Special Schools—for handicapped children, and pupils in institutions ;
- (iv) Special Classes—for remedial work ;
- (v) Correspondence School—correspondence classes for primary and secondary pupils and teachers.

##### *(b) Secondary :—*

- (i) High Schools—six years of post-primary school to University entrance ;
- (ii) Girls' Schools—five years of post-primary school ;
- (iii) Higher Elementary Schools—four years of post-primary school ;

(iv) Central Schools and Classes—two years of post-primary school.

(c) *Technical* :—

(i) Junior Technical—four years of post-primary school ;

(ii) Senior Technical—four years of post-Junior Technical school.

## 2. *Special Services*

Special Services are maintained and extended through officers and staffs in the following fields:—

- (i) Library Services
- (ii) Visual Aids Department
- (iii) Music and Speechcraft
- (iv) Physical Education
- (v) Art
- (vi) Forestry
- (vii) Publications (Including certain texts)
- (viii) Survey and Planning (School sites, Teachers' Colleges, &c.)
- (ix) Curriculum and Research (Revision of certain curricula)
- (x) Australian Broadcasting Commission Liaison
- (xi) Welfare (Teachers' accommodation)
- (xii) Domestic Arts (Primary)
- (xiii) Psychology and Guidance Services.

In addition, the State Schools' Nursery provides valuable instruction for teachers and pupils, and supplies plants to schools.

The School Medical and Dental Services provide inspection and guidance to pupils throughout the State (see page 242). Other school activities such as the Gould League of Bird Lovers and Red Cross are fostered and assisted by teachers.

## 3. *Examinations*

An increasing number of Secondary Schools are providing Class A, or internal examinations, for the University Intermediate and Leaving Certificates. In addition, the Department provides its own Intermediate Certificate for consolidated and girls' schools, and Leaving Certificate for the latter. Teachers may obtain qualifications by in-service courses.

## 4. *Teachers*

Rights of teachers for promotion and transfer have been greatly improved. Teachers' residences and flats for women teachers have been provided in increasing numbers in recent years.

Further details of the State Education system, including particulars of subjects taught and facilities provided, were given on pages 317 to 332 of the Victorian Year Book 1954–1958.

### Primary and Secondary Schools

Particulars of the number of State schools, teachers, and pupils for the years 1957 to 1961 are shown in the following tables. In the tables, which include particulars of the Correspondence School, "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 (1st August in the year concerned) 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	1957	1958	1959	1960	1961
<b>Primary Schools—</b>					
Schools* .. ..	1,909	1,919	1,928	1,929	1,931
Teachers† .. ..	9,233	10,236	10,437	10,586	11,655
Pupils .. ..	269,922	283,701	289,417	294,544	301,514
<b>Secondary Schools—</b>					
Schools .. ..	223	234	256	279	291
Teachers† .. ..	3,493	3,493	3,984	4,348	4,821
Pupils .. ..	90,654	100,216	114,545	127,851	138,226
<b>All Schools—</b>					
Schools .. ..	2,132	2,153	2,184	2,208	2,222
Teachers† .. ..	12,726	13,729	14,421	14,934	16,476
Pupils .. ..	360,576	383,917	403,962	422,395	439,740

\* Includes schools with both primary and post-primary grades.

† Includes teachers temporarily employed, but excludes teachers in training.

#### VICTORIA—STATE PRIMARY AND SECONDARY SCHOOLS : AGES OF PUPILS

Age Last Birthday	At 1st August—				
	1957	1958	1959	1960	1961
Under 6 Years .. ..	29,837	34,893	35,962	38,499	40,331
6 Years .. ..	39,469	40,328	42,296	41,749	43,047
7 " .. ..	39,501	40,299	40,687	42,495	42,051
8 " .. ..	37,748	39,760	40,577	40,837	42,706
9 " .. ..	37,727	37,753	39,843	40,426	41,166
10 " .. ..	41,818	38,266	38,218	39,956	40,877
11 " .. ..	33,512	41,798	38,398	38,308	40,229
12 " .. ..	30,851	33,030	40,814	38,133	37,957
13 " .. ..	29,679	31,259	33,756	42,144	38,995
14 " .. ..	20,601	23,960	26,206	28,553	36,571
15 " .. ..	13,148	14,165	17,162	19,112	21,640
16 " .. ..	4,940	6,078	7,070	8,786	9,976
17 " .. ..	1,378	1,900	2,388	2,680	3,284
18 " .. ..	275	344	494	575	719
Over 18 Years .. ..	92	84	91	142	191
<b>Total .. ..</b>	<b>360,576</b>	<b>383,917</b>	<b>403,962</b>	<b>422,395</b>	<b>439,740</b>

The following tables, which include particulars of the Correspondence School, show the census enrolments, by sex and ages, of pupils attending each class of State primary and secondary school in Victoria in 1961 :—

VICTORIA—STATE PRIMARY AND SECONDARY SCHOOLS :  
CLASS OF SCHOOL : CENSUS ENROLMENT :  
SEX OF PUPILS, 1961

Class of School	Number of Schools	Number of Pupils		
		Male	Female	Total
Primary (Primary Grades) .. ..	} 1,895 {	157,286	144,228	301,514
Primary (Post-Primary Grades) .. ..		172	203	375
Central (Post-Primary) .. ..		4	14	445
Consolidated and Group (Post-Primary)		32	694	1,391
Central Schools and Classes (Secondary)	23	2,046	1,942	3,988
Higher Elementary .. ..	16	712	1,022	1,734
Girls' Secondary .. ..	16	—	6,451	6,451
Junior Technical .. ..	70	32,110	4,609	36,719
District High .. ..	166	39,699	47,424	87,123
Total .. ..	2,222	233,153	206,587	439,740

VICTORIA—STATE PRIMARY AND SECONDARY SCHOOLS :  
CLASS OF SCHOOL : CENSUS ENROLMENT :  
AGE OF PUPILS, 1961

Class of School	Age Last Birthday (At 1st August, 1961)						Total
	Under 14	14	15	16	17	18 and over	
Primary (Primary Grades) .. ..	300,796	502	158	58	..	..	301,514
Primary (Post-Primary Grades) .. ..	274	72	23	6	..	..	375
Central (Post-Primary) .. ..	217	174	45	9	..	..	445
Consolidated and Group (Post-Primary)	840	348	168	34	1	..	1,391
Central Schools and Classes (Secondary) .. ..	3,490	447	47	4	..	..	3,988
Higher Elementary .. ..	986	433	213	88	12	2	1,734
Girls' Secondary .. ..	3,475	1,809	834	284	43	6	6,451
Junior Technical .. ..	17,265	11,165	6,445	1,678	154	12	36,719
District High .. ..	40,016	21,621	13,707	7,815	3,074	890	87,123
Total .. ..	367,359	36,571	21,640	9,976	3,284	910	439,740

### Technical Schools

The table which follows shows census enrolments in Senior Technical Schools in Victoria for the years 1957 to 1961. "Professional Courses" are those for which, on completion, a diploma is granted; "Trade Courses" embrace those through which apprenticeship qualifications may be gained; and "Certificate Courses" cover various aspects of public and business administration. "Other courses" include special studies, as well as single subjects being undertaken by students.



**VICTORIA—SENIOR TECHNICAL SCHOOLS : TYPE OF  
COURSE : CENSUS ENROLMENTS**

Type of Course	At 1st August—				
	1957	1958	1959	1960	1961
<b>Professional Courses—</b>					
Full-time .. ..	3,005	3,593	4,137	4,938	5,813
Part-time .. ..	3,176	3,440	4,151	5,383	4,430
<b>Total .. ..</b>	<b>6,181</b>	<b>7,033</b>	<b>8,288</b>	<b>10,321</b>	<b>10,243</b>
<b>Trade Courses—</b>					
Full-time .. ..	188	231	191	111	175
Part-time .. ..	20,426	19,262	21,155	22,467	23,538
<b>Total .. ..</b>	<b>20,614</b>	<b>19,493</b>	<b>21,346</b>	<b>22,578</b>	<b>23,713</b>
<b>Certificate Courses—</b>					
Full-time .. ..	337	350	190	402	340
Part-time .. ..	2,583	2,938	3,213	3,551	5,558
<b>Total .. ..</b>	<b>2,920</b>	<b>3,288</b>	<b>3,403</b>	<b>3,953</b>	<b>5,898</b>
<b>Other Courses—</b>					
Full-time .. ..	678	688	934	793	1,013
Part-time .. ..	16,964	17,387	17,284	16,271	19,610
<b>Total .. ..</b>	<b>17,642</b>	<b>18,075</b>	<b>18,218</b>	<b>17,064</b>	<b>20,623</b>
<b>All Courses—</b>					
Full-time .. ..	4,208	4,862	5,452	6,244	7,341
Part-time .. ..	43,149	43,027	45,803	47,672	53,136
<b>Total .. ..</b>	<b>47,357</b>	<b>47,889</b>	<b>51,255</b>	<b>53,916</b>	<b>60,477</b>

**State Expenditure on Education**

During 1960–61, £52,437,235 was spent by and on behalf of the Education Department of Victoria. This amount covers expenditure from both revenue and loan and includes payments made by the Treasury to the University, 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 658 and 677 of the Year Book, in that the amounts shown in the Finance Section include expenditure on Agricultural Education, but exclude payments for superannuation and pensions and workers' compensation.

Expenditure on education for each of the years 1956-57 to 1960-61 is shown in the following table :—

VICTORIA—STATE EXPENDITURE ON EDUCATION  
(£'000)

Expenditure on—	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Primary and Secondary Education—					
Primary (Including Special Subjects) ..	12,575	13,760	15,147	15,807	17,492
Secondary ..	5,007	5,752	6,502	7,620	8,717
Buildings and Land..	5,214	5,486	5,548	7,096	7,465
Technical Education—					
Junior and Senior Schools ..	4,037	4,356	4,645	5,936	6,523
Buildings and Land	1,087	1,066	1,209	1,914	2,226
Training of Teachers ..	2,047	2,313	2,694	3,361	3,796
Administration ..	541	584	651	742	824
Pensions ..	632	684	758	851	954
General Expenditure ..	781	822	903	1,026	1,175
University—					
Special Appropriation, &c. ..	1,018	1,212	1,534	1,971	3,253
Scholarships and Bursaries, &c. ..	10	11	13	12	12
Total ..	32,949*	36,046*	39,604*	46,336*	52,437*
*These Totals Exclude—					
Pay-roll Tax ..	427	467	517	576	705
Expenditure on School Medical and Dental Services ..	282	278	319	359	369
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Per Head of Population	12 11 0	13 8 3	14 8 0	16 8 8	18 2 6

In addition to the expenditure shown in the preceding table, the following fees, donations, &c., were retained and expended by the various technical school councils :—

(£'000)

1956-57	1957-58	1958-59	1959-60	1960-61
471	528	557	693	773

Of the amount of £52,437,235 shown in the preceding table as being expended by the State on education in 1960–61, £3,252,600 was appropriated to the University; £11,770 was spent on scholarships and bursaries to the University; £68,023 was spent on Adult Education; £2,000 was granted to the Postgraduate Committee; and the remaining £49,102,842 was expended on education in State schools, as shown in the following table :—

**VICTORIA—EXPENDITURE ON EDUCATION IN STATE SCHOOLS, 1960–61**

(£)

Classification	General Expenditure	Primary Education	Secondary Education	Technical Education	Correspondence School	Teachers' Colleges	Total Expenditure
Cost of Administration	466,103	179,809	82,995	85,030	2,714	7,544	824,195
Cost of Co-ordinate Activities*		32,068					32,068
Cost of Instruction	407,690	14,547,455	6,780,352	5,821,045	112,609	764,204	28,433,355
Operation of School Plant†	2,454	907,824	487,828	122,142	1,052	44,993	1,566,293
Maintenance of School Plant‡	2,513	985,629	205,739	162,972	104	46,526	1,403,483
Auxiliary Costs§	677,699	880,065	1,060,864	382,173	380	2,931,787	5,932,968
Fixed Charges	967,432	156,137	82,044	50,447	989	10,051	1,267,100
Capital Expenditure	1,668	3,303,179	3,486,837	2,211,012	2,915	637,769	9,643,380
Total ..	2,525,559	20,992,166	12,186,659	8,834,821	120,763	4,442,874	49,102,842

\* Refers to Attendance Branch.

† Includes cost of cleaning, fuel, water, &c., and wages of caretakers.

‡ Includes cost of repair of buildings, upkeep of grounds, &c.

§ Includes cost of transportation of pupils, hostel expenses, and board allowances for teachers, &c.

|| Includes pensions and superannuation, rent of buildings, and workers' compensation.

### Registered Schools of Victoria

#### General

The Registered Schools of Victoria are those for which the Government takes no responsibility in the matter of their finance, staffing, or organization. However, some control is exercised in that all such schools must be approved by the Council of Public Education as having adequate buildings and trained staff, and they may be subject to inspection by inspectors of the Education Department.

In the main, these schools are not co-educational and a large number are primary schools provided by the Roman Catholic Church. At the secondary level these schools include boys' schools which are members of the Headmasters' Conference of the Independent Schools of Australia and girls' schools which are members of the Headmistresses' Association of Australia.

It is generally true that these schools owe their foundation to private individuals or groups of individuals or corporate bodies, rather than to the churches to which they belong, except in the case of the Roman Catholic schools.

However, a few of the larger schools which are now just over a century old owe their origin to churchmen; to Bishop Perry of the Church of England, the Free Church Presbytery of Victoria and the Roman Catholic Bishop of Melbourne, Archbishop Goold. As was the case in England, secondary education in Australia was left to the churches to pioneer, although the Victorian Government in the 1850's made substantial grants to the Anglican, Presbyterian, and Roman Catholic Churches for the foundation of Melbourne Grammar, Geelong Grammar, Scotch, and St. Patrick's, which later became Xavier College.

The ultimate control of each of these schools is vested in an autonomous, and usually incorporated, body independent of both the State and any other school. This body generally takes the form of a council made up of representatives of the church and of interested and devoted men or women who give their services to promoting the well-being of the school.

The council appoints the headmaster (or headmistress) who in turn selects the staff, some members of whom may well devote their whole life to the service of the one school. Thus, there is likely to develop a continuity of belief and behaviour which gradually builds up an individual character peculiar to that school.

All of the Independent schools derive their working income from fees charged, very few having any endowments, and most are day schools with some accommodation for boarders. In the main the size of classes is limited to 30 with smaller numbers in certain subject groups. All schools offer scholarships by competition and a full scholarship generally gives remission of all tuition fees.

The methods of teaching within these schools are similar to those employed in the State schools, but emphasis is given to religion in the life of the school, and more use is made of "out of school" activities, including games, as an educational instrument.

In the field of experiments in teaching techniques the Independent schools, have, perhaps, no spectacular record. But some schools have their individual schemes for developing a sense, and habits, of community service whereby service projects on behalf of certain sections of the public are undertaken. Other schools give rural training at country centres near Melbourne, while the development of self-reliance, leadership, and independence is encouraged through schemes similar to the "Outward Bound Schools" in England. But probably the major educational experiment that has been undertaken in recent years has been that of Geelong Grammar School at Timbertop near Mansfield in the Victorian Alps. Under this scheme all boys in the fourth year of their secondary education (average age fourteen and half to fifteen and half years) spend a whole year at Timbertop. The normal academic curriculum is covered, but there are no organized conventional games and the boys help with domestic and other labour.

The scheme has as its objectives "the developing of self-reliance and independence—the satisfying of the desire for adventure and the less recognized relationship between man and nature, with its understanding of the importance of the land, not only to those who work upon it, but to all men". Altogether the contribution of the Independent schools to educational thought and practice in the State, and in Australia, has been a worthy one.

No Independent school in Victoria is permitted to employ anyone who is not registered with the Council of Public Education and to secure registration a teacher must have had some form of recognized training or hold a Diploma of Education from a University. (See pages 206–207.) The training of teachers is mainly in the hands of the State through its training colleges, but the Independent schools have their own training institution at Mercer House, Malvern. Finance for Mercer House comes from voluntary donations from the schools (based on a *per capita* levy) and from fees from the students. The courses are of one or two years' duration and, on completion, give the students registration as sub-primary, primary, or junior secondary teachers.

Mercer House is the only Independent Teacher Training Institution in Australia training teachers for the independent primary and secondary schools. In addition to its function as a training institute, Mercer House is developing "in service" training in the form of refresher courses for teachers and also acts as a centre for bringing together teachers of various subjects for the interchange of ideas.

### **Victorian Girls' Registered Schools**

An article dealing with this subject will be found on pages 187–188 of the Victorian Year Book 1961.

### **Catholic Education**

#### *Primary Education*

Catholic Education began in Victoria at the elementary school level. Since then, the system has developed into education at secondary and tertiary levels as well, but the idea of the importance of elementary education has never diminished, and the aim has been to provide elementary schooling for every Catholic child in a Catholic school.

The first phase of Catholic primary schooling was mostly in the hands of lay teachers. This phase was from 1840 to 1872. In 1872, Catholic schools relinquished the Government grant. In that year there were 94 schools, mostly taught by lay people with a re-inforcement of Religious from 1857. With the cessation of the Government grant, lay teachers could no longer be engaged on account of expense, and the schools became staffed mostly by Religious teachers. By 1900 there were 786 Religious teachers in the schools of Victoria. The

number of lay teachers at that time is not available. This phase, with the Religious teachers being in the majority, continued so that by 1950 there were 1,333 Religious teachers in the schools of Victoria and 263 lay teachers.

After the Second World War an increase of population due to natural increase and immigration increased school populations too much for Religious teachers to handle and re-inforcement was required. An appeal was made to Catholic youth to enter Catholic Training Colleges to teach in Catholic elementary schools. This appeal brought a generous response, and in 1955 Mercy Teachers' College, Ascot Vale, and Our Lady of Sion Teachers' College, Box Hill, took into training 56 Catholic young ladies. In 1956, these two Colleges were re-inforced by O'Neill Teachers' College, Elsternwick, and Kildara Teachers' College, Malvern, with an intake of 65 students. Each year the response has been greater, and now the facilities of training are not sufficient to cope with all those who desire to enter Catholic teaching service.

In 1961 there were 803 Religious teachers and 561 lay teachers in the Primary schools of the Melbourne Archdiocese. The recruitment of lay teachers, who are employed almost exclusively in the Melbourne Archdiocese, is shown in the following table:—

VICTORIA—CATHOLIC SCHOOLS: RECRUITMENT OF LAY TEACHERS

Institution	1957	1958	1959	1960	1961
Mercy Teachers' College, Ascot Vale ..	42	46	54	45	49
Our Lady of Sion Teachers' College, Box Hill	9	12	10	10	6
O'Neill Teachers' College, Elsternwick ..	16	15	16	14	14
Kildara Teachers' College, Malvern ..	10	11	17	17	31
Total .. ..	77	84	97	86	100

**Further References**

Other aspects of Catholic Education will be found on pages 217 to 219 of the Victorian Year Book 1962.

**Council of Public Education**

*Constitution*

The *Registration of Teachers and Schools Act* 1905 came into operation on the 1st 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 came into operation.

This latter Act provided that the Council of Public Education should consist of twenty members with the Director of Education as President.

A new Council is elected every three years and any person who was a member of the previous Council is eligible for re-appointment. Nine members form a quorum. It is the duty of the Council to report to the Minister upon—

- (a) methods of or developments in public education in other countries, if, in its opinion, it is desirable to introduce such methods or developments into Victoria ; and
- (b) any matters in connexion with public education referred to it by the Minister.

### *Registration of Teachers*

The Council's chief functions deal with the registration of teachers and schools, ensuring that schools are registered and properly staffed, and that persons employed in them are registered as teachers or have been granted temporary permission to teach. A Register of Schools and Teachers is kept by the Council with a Supplementary Register prepared each year.

Part III. of the *Education Act* 1958, deals with schools other than State schools. "School" is defined as an assembly at an appointed time of three or more persons between the ages of six and eighteen years for the purpose of their being instructed by a teacher or teachers in all or any of the undermentioned subjects, namely, reading, writing, arithmetic, grammar, geography, English or other language, mathematics, history, any natural or experimental or applied science, book-keeping, shorthand, accountancy ; but "School" does not include the University of Melbourne or any college affiliated therewith or any assembly of persons, all of whom are members of not more than two families, or any State school, or any school aided by the State or any school in any part of Victoria declared by the Governor in Council to be a sparsely populated district for the purposes of the Act.

The Act makes it possible for qualified teachers, if they so desire, to be registered as teachers of art, art and crafts, music, or physical education. Such registration is not compulsory.

To deal with applications for the registration of schools and teachers, the Council appoints a special committee which is called the "Registration Committee". This Committee consists of nine members of the Council.

A total of 22,730 teachers has been registered since 1906 and 1,190 have been registered during the last two years. Each person applying for registration has to give sufficient information to permit

the Registration Committee determine whether he should be registered as a sub-primary, primary, junior secondary, or secondary teacher, or as a teacher of special subjects.

### Registration of Schools

Each school is registered in the Register of Schools as a sub-primary school, primary school, junior secondary school, secondary school, or school of any two or more of 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 is satisfied that its premises or the instruction to be given in it will not be of a satisfactory standard.

Furthermore it cannot register any school unless it is satisfied that the instruction in such school will be given through the medium of the English language except only so far as the use of a language other than English is necessary for giving instruction in such other language as a special subject.

To ensure the competency of those who desire to teach in Registered schools in Victoria, there exists in Victoria a total of nine training institutions, seven of which are under the jurisdiction of the various orders of Sisters and Brothers within the Roman Catholic Church, one under the Incorporated Association of Registered Teachers and one under the Free Kindergarten Union of Victoria. Each of these establishments is visited triennially by the Council's inspectors.

Particulars of Victorian Registered Schools (excluding Business and Coaching Colleges) are shown in the following tables. In these tables "census" enrolments are those at 1st August in the year concerned.

### VICTORIA—NUMBER OF REGISTERED SCHOOLS AND TEACHERS

Particulars	Number of Schools					Number of Teachers				
	1957	1958	1959	1960	1961	1957	1958	1959	1960	1961
Denominational—										
Roman Catholic ..	413	424	433	439	444	2,340	2,482	2,659	2,826	2,956
Church of England ..	34	34	35	36	37	690	724	734	788	794
Presbyterian ..	15	14	14	14	14	349	340	356	385	386
Methodist ..	4	4	4	4	4	171	177	178	188	194
Other ..	24	23	24	23	22	179	187	210	233	248
Undenominational ..	39	31	31	30	27	276	288	264	269	282
Total ..	529	530	541	546	548	4,005	4,198	4,401	4,689	4,860



**VICTORIA—REGISTERED SCHOOLS: CENSUS  
ENROLMENTS BY DENOMINATIONS**

At 1st August—	Denomination					Total Denomi- national	Un- denomi- national	Total Registr- ered Schools
	Roman Catholic	Church of England	Presby- terian	Method- ist	Other			
1957 .. ..	109,184	13,015	6,635	3,568	3,378	135,780	4,121	139,901
1958 .. ..	116,700	13,382	6,982	3,686	3,548	144,298	4,059	148,357
1959 .. ..	121,901	13,557	7,086	3,687	3,857	150,088	4,065	154,153
1960 .. ..	127,275	13,957	7,295	3,675	4,290	156,492	4,083	160,575
1961 .. ..	131,543	14,284	7,420	3,747	4,603	161,597	4,268	165,865

**VICTORIA—REGISTERED SCHOOLS: DENOMINATIONS:  
CENSUS ENROLMENTS BY AGES, 1961**

Age Last Birthday (At 1st August, 1961)	Denomination					Total Denomi- national	Un- denomi- national	Total Registr- ered Schools
	Roman Catholic	Church of England	Presby- terian	Method- ist	Other			
Under 6 Years ..	12,378	516	222	71	283	13,470	487	13,957
6 Years .. ..	13,734	524	285	63	337	14,943	275	15,218
7 " .. ..	13,452	593	315	68	340	14,768	255	15,023
8 " .. ..	13,489	675	385	104	353	15,006	276	15,282
9 " .. ..	12,929	802	352	134	361	14,578	269	14,847
10 " .. ..	13,092	966	451	161	361	15,031	299	15,330
11 " .. ..	12,522	1,178	553	252	391	14,896	332	15,228
12 " .. ..	11,702	1,510	772	447	493	14,924	393	15,317
13 " .. ..	10,561	1,678	836	446	429	13,950	391	14,341
14 " .. ..	8,429	1,899	1,024	595	513	12,460	425	12,885
15 " .. ..	4,998	1,637	954	587	315	8,491	359	8,850
16 " .. ..	2,716	1,329	728	505	251	5,529	318	5,847
17 " .. ..	1,172	754	438	234	141	2,739	167	2,906
18 " .. ..	301	188	98	54	27	668	20	688
Over 18 Years ..	68	35	7	26	8	144	2	146
Total .. ..	131,543	14,284	7,420	3,747	4,603	161,597	4,268	165,865

**VICTORIA—REGISTERED SCHOOLS: CENSUS  
ENROLMENTS: AGES OF PUPILS**

Age Last Birthday	At 1st August—				
	1957	1958	1959	1960	1961
Under 6 Years .. ..	11,124	12,457	12,443	13,224	13,957
6 Years .. ..	13,849	13,740	14,563	14,580	15,218
7 " .. ..	13,719	14,591	14,276	15,097	15,023
8 " .. ..	13,483	14,104	14,595	14,508	15,282
9 " .. ..	13,790	13,909	14,497	14,851	14,847
10 " .. ..	14,738	14,304	14,204	15,111	15,330
11 " .. ..	12,965	15,453	14,768	14,708	15,228
12 " .. ..	12,555	13,524	16,026	15,234	15,317
13 " .. ..	12,077	12,349	13,300	15,548	14,341
14 " .. ..	8,604	9,772	10,227	10,907	12,885
15 " .. ..	6,559	6,795	7,793	8,174	8,850
16 " .. ..	4,121	4,594	4,640	5,520	5,847
17 " .. ..	1,803	2,156	2,229	2,368	2,906
18 " .. ..	413	511	474	633	688
Over 18 Years .. ..	101	98	118	112	146
Total .. ..	139,901	148,357	154,153	160,575	165,865

A comparison between census enrolments in State schools (excluding Senior Technical) and Registered schools for the five years 1957 to 1961 is shown in the following table:—

**VICTORIA—STATE AND REGISTERED SCHOOLS: CENSUS ENROLMENTS**

At 1st August—	State Schools	Registered Schools	Total Enrolments
1957 .. .. .	360,576	139,901	500,477
1958 .. .. .	383,917	148,357	532,274
1959 .. .. .	403,962	154,153	558,115
1960 .. .. .	422,395	160,575	582,970
1961 .. .. .	439,740	165,865	605,605

The census enrolments and ages of pupils in State schools (excluding Senior Technical) and Registered schools for the five years 1957 to 1961, are shown in the following table:—

**VICTORIA—STATE AND REGISTERED SCHOOLS: CENSUS ENROLMENTS: AGES OF PUPILS**

Age Last Birthday	At 1st August—				
	1957	1958	1959	1960	1961
Under 6 Years .. .. .	40,961	47,350	48,405	51,723	54,288
6 Years .. .. .	53,318	54,068	56,859	56,329	58,265
7 " .. .. .	53,220	54,890	54,963	57,592	57,074
8 " .. .. .	51,231	53,864	55,172	55,345	57,988
9 " .. .. .	51,517	51,662	54,340	55,277	56,013
10 " .. .. .	56,556	52,570	52,422	55,067	56,207
11 " .. .. .	46,477	57,251	53,166	53,016	55,457
12 " .. .. .	43,406	46,554	56,840	53,367	53,274
13 " .. .. .	41,756	43,608	47,056	57,692	53,336
14 " .. .. .	29,205	33,732	36,433	39,460	49,456
15 " .. .. .	19,707	20,960	24,955	27,286	30,490
16 " .. .. .	9,061	10,672	11,710	14,306	15,823
17 " .. .. .	3,181	4,056	4,617	5,048	6,190
18 " .. .. .	688	855	968	1,208	1,407
Over 18 Years .. .. .	193	182	209	254	337
Total .. .. .	500,477	532,274	558,115	582,970	605,605

**Public Examinations**

*Intermediate and School Leaving Examinations*

The University, through a Schools' Board (on which the Education Department, the Registered secondary schools, the University teaching staff and the business community are represented), conducts examinations each year for the School Intermediate and School Leaving Certificates.

The following table shows the number of candidates entered for these examinations and the number who passed fully for the years 1957 to 1961:—

VICTORIA—PUBLIC EXAMINATIONS

Year	Number Who Attempted to Pass Full Examination	Number Who Passed Fully	
		Total	Percentage
<b>SCHOOL INTERMEDIATE</b>			
1957 .. .. .	14,812	9,404	63·5
1958 .. .. .	17,228	11,293	65·6
1959 .. .. .	19,323	12,501	64·7
1960 .. .. .	21,230	14,023	66·1
1961 .. .. .	23,621	15,589	66·0
<b>SCHOOL LEAVING</b>			
1957 .. .. .	8,615	5,442	63·2
1958 .. .. .	10,393	6,288	60·5
1959 .. .. .	12,192	7,328	60·1
1960 .. .. .	13,733	8,528	62·1
1961 .. .. .	15,636	9,493	60·7

Of those who passed fully, a number satisfied the examination requirements by submitting a Headmaster's Certificate from an approved school. Details of these students are shown in the following table:—

VICTORIA—PUBLIC EXAMINATIONS: NUMBER OF STUDENTS SUBMITTING HEADMASTER'S CERTIFICATES

Examination	1957	1958	1959	1960	1961
School Intermediate ..	6,240	8,154	8,414	9,809	9,931
School Leaving ..	2,787	2,824	2,847	3,620	3,833

*Matriculation Examination*

For many years prior to 1944, the University's matriculation qualification had been gained by the passing of the School Leaving Examination in a prescribed manner. Then, a new Matriculation Examination was introduced to which the award of the School Leaving

Certificate was pre-requisite, and the matriculation qualification is now gained primarily at this Examination. Statistics of the Matriculation Examinations for the years 1957 to 1961 are as follows :—

### VICTORIA—MATRICULATION EXAMINATIONS

Candidates	1957	1958	1959	1960	1961
Total Entries .. .. .	6,070	7,161	8,151	9,304	11,550
Number Who Attempted to Pass Fully	3,760	4,257	4,723	5,466	6,651
Number Who Passed Fully .. .	2,442	2,808	3,127	3,537	4,280
Percentage Who Passed Fully ..	64·9	66·0	66·2	64·7	64·4

### University of Melbourne

#### General

The University of Melbourne was incorporated and endowed by an Act of the Governor and the Legislative Council of Victoria on 22nd January, 1853. The University consists of and is governed by a Council of 33 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.

To ensure recognition in the United Kingdom of the degrees of the infant University, Royal Letters Patent, issued on 14th March, 1859, laid down that the degrees of the University should be recognized as "academic distinctions and rewards of merit and be entitled to rank, precedence and consideration in our United Kingdom and in our colonies and possessions throughout the world as if the said degrees had been granted by any University of our said United Kingdom".

#### Faculties

The University of Melbourne maintains Chairs either out of general revenue or from endowments, as follows : 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 (Sydney 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 are 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 £150.

Fees include a Union fee, payable by all students, who are thereby entitled to share in the corporate and social activities centred round 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 1961, 58 per cent. of all students were receiving some form of financial assistance. The largest group was that of Commonwealth Scholarship holders (3,195); another 1,578 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 Enrolments*

In 1962, provisional figures indicated that 12,174 students were enrolled at the University of Melbourne, including 49 at R.A.A.F. College, Point Cook. Enrolments had previously reached a high level between 1947 and 1950 when a great number of ex-service students entered the University through the Commonwealth Reconstruction Training Scheme.

The influx of ex-service students was a temporary matter and, although it imposed strains on the University, temporary measures were sufficient to meet the situation. The increase in student numbers since 1954 is not of this type; it is due to three factors:—

- (1) Increase in population of University entry age, due to increased birth rates about seventeen to eighteen years ago, i.e., in 1941 and the later war years;
- (2) increase in population due to immigration;

- (3) socio-economic factors: industrial development and population growth leading to greater demand for University graduates; a higher standard of living which permits children to remain longer at school and qualify for University entry.

The following table shows the numbers of full-time, part-time and external students, by sex, for the five years 1958 to 1962:—

VICTORIA—UNIVERSITY OF MELBOURNE : STUDENTS ENROLLED, CLASSIFIED BY SEX AND TYPE OF COURSE

Year	Full-time		Part-time		External		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
1958.. ..	4,063	1,490	2,404	613	366	84	6,833	2,187
1959.. ..	4,555	1,755	2,675	822	388	84	7,618	2,661
1960.. ..	5,004	1,890	2,816	915	417	115	8,237	2,920
1961.. ..	5,253	1,967	2,778	948	407	98	8,438	3,013
1962* ..	5,439	2,037	2,914	1,148	504	132	8,857	3,317

\* Provisional figures.

Enrolments in the various faculties for the years 1958 to 1962 are shown in the next table:—

VICTORIA—UNIVERSITY OF MELBOURNE : ENROLMENTS CLASSIFIED BY FACULTIES

Faculty	1958	1959	1960	1961	1962*
Agricultural Science .. ..	236	219	227	210	210
Applied Science .. ..	—	—	—	45	82
Architecture .. ..	263	324	367	445	489
Arts .. ..	2,675	3,137	3,268	3,310	3,696
Commerce .. ..	1,330	1,472	1,519	1,593	1,569
Dental Science .. ..	143	151	151	163	164
Education .. ..	548	607	681	745	754
Engineering .. ..	685	689	753	779	758
Journalism .. ..	29	29	43	51	39
Law .. ..	1,021	1,109	1,224	1,201	1,271
Medicine .. ..	927	967	976	1,024	1,004
Music .. ..	174	183	193	186	210
Physical Education .. ..	75	97	126	146	177
Science .. ..	1,122	1,308	1,507	1,546	1,712
Social Studies .. ..	111	145	143	175	214
Town and Regional Planning ..	49	50	71	70	80
Student Total ..	9,020†	10,279†	11,157†	11,451†	12,174†

\* Provisional figures.

† Students taking combined courses are counted in both faculties 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 468 in 1962, of

whom 35 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 1957 to 1961. In addition to degrees shown below, some faculties grant diplomas for certain sub-graduate and postgraduate courses.

**VICTORIA—UNIVERSITY OF MELBOURNE : DEGREES  
CONFERRED IN FACULTIES**

Faculty	1957	1958	1959	1960	1961
Agricultural Science .. ..	26	35	57	46	45
Architecture .. ..	28	33	36	32	28
Arts .. ..	287	306	339	360	386
Commerce .. ..	112	101	98	149	182
Dental Science .. ..	10	30	21	23	16
Education .. ..	81	70	55	59	55
Engineering .. ..	96	101	115	105	136
Law .. ..	59	82	77	113	113
Medicine .. ..	165	139	101	136	146
Music .. ..	6	19	17	30	23
Science .. ..	148	155	194	231	251
Bachelors' Degrees .. ..	936	983	1,013	1,181	1,296
Higher Degrees .. ..	82	88	97	103	85
Total .. ..	1,018	1,071	1,110	1,284	1,381

*Finance*

A statement of income and expenditure for the years 1957 to 1961 is shown in the following table :—

**VICTORIA—UNIVERSITY OF MELBOURNE : INCOME AND  
EXPENDITURE  
(£'000)**

Particulars	Year Ended 31st December—				
	1957	1958	1959	1960	1961
<b>INCOME</b>					
<b>INCOME OF BUILDINGS FUNDS</b>					
State Government Grants .. ..	263	50	270	650	109
Commonwealth Government Grants .. ..	..	9	408	521	61
Donations .. ..	83	41	354	191	145
Income from Investments .. ..	21	6	18	31	36
Contribution to Cost of Purchasing Buildings .. ..	..	30	..	..	..
Loans .. ..	..	..	..	67	456
Total Income of Buildings Funds ..	367	136	1,050	1,460	807
Donations and Bequests to Increase Endowments .. ..	91	86	273	129	166

VICTORIA—UNIVERSITY OF MELBOURNE : INCOME AND EXPENDITURE  
—continued  
(£'000)

Particulars	1957	1958	1959	1960	1961
<b>OTHER INCOME</b>					
State Government Grants—					
General .. .. .	819	940	1,003	1,066	1,190
Other (Except for Buildings) .. .. .	183	196	196	194	212
Commonwealth Government Grants and Reimbursements—					
General .. .. .	510	810	962	1,170	1,314
Other (Except for Buildings) .. .. .	89	114	131	173	195
Students' Fees—					
Lectures .. .. .	452	508	559	773	802
Other .. .. .	151	165	188	223	236
Public Examination, Music Examination, and Certificate Fees .. .. .	114	127	147	156	179
Bequests and Donations (Other than for New Buildings or Increasing Endowments) .. .. .	166	151	238	289	378
Interest, Dividends, and Rent .. .. .	98	101	112	143	168
Other .. .. .	109	116	131	148	200
<b>Total Other Income .. .. .</b>	<b>2,691</b>	<b>3,228</b>	<b>3,667</b>	<b>4,335</b>	<b>4,874</b>
<b>EXPENDITURE</b>					
Land and Buildings .. .. .	658	499	485	1,033*	1,416
<b>OTHER EXPENDITURE</b>					
Salaries, Research Scholarships, Pensions, and Provident Fund Contributions .. .. .	1,765	2,120	2,426	2,899†	3,259†
Apparatus and Laboratory Materials .. .. .	147	225	245	301	379
Books, Periodicals, and Music .. .. .	43	55	54	69	95
Examiners' Fees .. .. .	43	47	52	58	66
Exhibitions and Bursaries .. .. .	12	15	17	16	17
Furniture, Furnishings, and Office Machines .. .. .	23	37	38	42	61
Payment of Students' Fees to Allied Institutions .. .. .	94	100	113	118	125
Pay-roll Tax .. .. .	41	49	57	66	75
Printing and Stationery .. .. .	54	62	70	72	85
Repairs, Alterations, and Grounds .. .. .	79	95	127	91†	102†
Service Charges—Gas, Electricity, Fuel, Water, and Telephones .. .. .	42	50	63	83	85
Other .. .. .	240	270	323	369	421
<b>Total Other Expenditure .. .. .</b>	<b>2,583</b>	<b>3,125</b>	<b>3,585</b>	<b>4,184</b>	<b>4,770</b>

\* Includes £45,000—grants to residential colleges for new buildings.

† Salaries of University Maintenance Staff have been included in "Salaries" instead of under the heading "Repairs, Alterations, and Grounds" as in previous years.

This statement covers all University funds. A substantial portion of the University's income is available for specific purposes only, and may not be used to meet general running expenses. At 31st December, 1961, the accumulated deficit in the University General Fund was £103,108.



*New Faculties and Courses*

A modern University must continue to give its traditional courses in order to maintain the flow of trained professional men into the life of the community. The increase in student numbers has already made an extensive building programme necessary, but what is equally important is the development of new academic departments to meet the demands of a rapidly changing community.

A determined effort is being made to arouse greater interest in Oriental Studies, for which a new Department has been established. The newly appointed Professor will not deal only with the linguistic study of Chinese and Japanese—there will also be broad subjects from which the general student may derive benefit. A special lectureship in the Faculty of Arts has been created for Indian Studies.

A degree in Building has been established in the Faculty of Architecture. In the field of Medicine there are new Chairs in Ophthalmology and Psychiatry.

Veterinary Science was taught in Melbourne until 1929 when the Government grant was withdrawn because the number of students had fallen to one. The increasing demand for veterinary scientists in Victoria has led to a decision, with the support of the Government of Victoria and the Australian Universities Commission, to re-introduce the course. The first year will be done on the University site, the second and third on the area of the Veterinary Research Institute at Parkville, and the final two clinical years at a field station in the country. An appeal for the school was most successful and raised £200,000.

In 1961 the Faculty of Applied Science accepted its first batch of students. There are many types of courses available—the general objective being to produce a scientist with an interest in the solution of technical and social problems. Special attention has been given to incorporating the study of humanities and history into the four-year course. In certain cases a basic two-year science course will be done at Melbourne and the remaining two years spent at an outside institution. The College of Optometry has been approved for this purpose.

*University of Melbourne Medical School—1862–1962*

The oldest medical school in Australasia was opened in 1862. At that time it had only one lecturer, no building, no laboratory, no money and no prospect of getting any, and only three students.

The founder of the School was Anthony Colling Brownless (1817–1897) who, from the time he was elected to the Council in 1855, exerted every effort to establish a medical course in the University. The curriculum, extending over five years, was drawn up by him. The University met with many frustrations over finance, but finally in 1864 the first small building of the school was completed. The first professor, George Britton Halford (1824–1910), held the

Chairs of Anatomy, Physiology and Pathology. He commenced teaching anatomy in 1863. By 1866 there was a staff of one professor and six lecturers for thirteen students. Clinical teaching was then given, with some reluctance, by the honorary staff of the Melbourne Hospital. From these humble beginnings the school has grown until now there is a University staff of twelve professors and 56 full-time members above the rank of lecturer with a clinical staff of 61 full-time and part-time assistants. In 1961 the total number of students was 1,024.

Halford was joined by Harry Brookes Allen, a graduate of the School who was appointed professor of anatomy and pathology in 1882, Halford now being professor of physiology. Other chairs followed later: anatomy in 1906 ; obstetrics, 1929 ; bacteriology, 1934 ; biochemistry, 1938 ; experimental medicine, 1944 ; pharmacology, 1954 ; medicine, 1955 with a second chair in 1957 ; surgery, 1955 ; child health, 1960. Allen's chair of anatomy and pathology was divided in 1906 when he accepted that of pathology. New buildings were erected in 1885 for pathology and anatomy, bacteriology in 1900, lecture theatres in 1900, anatomy in 1923, and biochemistry in 1958.

Clinical teaching at first was restricted to the Melbourne Hospital, but in 1888 a clinical school was established at the Alfred Hospital followed by one at St. Vincent's Hospital in 1909 and another at Prince Henry's Hospital in 1952. Obstetrical training has always been given at the Lying-In Hospital, now the Royal Women's Hospital, and teaching in children's diseases at the Hospital for Sick Children, now the Royal Children's Hospital.

Until 1955 the School had no professors of medicine and surgery and clinical training at the hospitals was in the hands of part-time Stewart lecturers. Now the clinical departments are being expanded and by 1962 there were also Chairs of Ophthalmology and Psychiatry. Research institutes are attached to the Royal Melbourne and the Alfred Hospitals ; of these the Walter and Eliza Hall Institute was established at the Melbourne in 1915. The Baker Institute, at the Alfred, was opened in 1926. Both institutes have made major contributions to medical knowledge.

After the First and Second World Wars there was a very large influx of students to the Medical School as well as to the University as a whole. After the Second World War the increase was of sufficient magnitude to introduce new ideas in tertiary education and first-year medicine was taught at the Mildura Branch. This closed in 1949.

With the overcrowding of the post-war years, limitations were placed on the entry into medicine, but in spite of this it became obvious that a second medical school was needed. With the opening of Monash University in 1961 and the commencement of its medical school a new era of medical education has been opened. Students from Monash will enter clinical schools at the Alfred, Prince Henry's, and Queen Victoria Hospitals, and Melbourne students will attend the Royal Melbourne, St. Vincent's, and the Royal Women's Hospitals.

The dreams of the early founders of the School in wanting a clinical school adjacent to the University departments were realized in 1944 when the Royal Melbourne Hospital moved to its new building in Parkville. By 1963 the buildings of the new medical school will be rising on a new site opposite the hospital. The first of these, for biochemistry, was erected in 1958 and will be followed by physiology, microbiology, anatomy, and pathology. A new medical library is to be built adjacent to the Baillieu Library.

#### *Department of Child Health*

The Stevenson Chair of Child Health was formed in the University of Melbourne in 1959, following a generous donation by Mrs. G. I. Stevenson. The first Professor of Child Health was appointed in late 1959 and commenced duties in 1960.

For many years, undergraduates in Medicine had obtained their clinical training in children's diseases at the Royal Children's Hospital, and it is at this Hospital that the Professor of Child Health has his headquarters.

In the six-year medical course, the student spends three months in the field of paediatrics—ten weeks in the fifth year and two weeks in the sixth year. In this short period he is introduced to a large field of knowledge. Not only does he learn about a multitude of illnesses in childhood, their causes, symptoms, diagnosis, the prevention of illness, and the part that the preventive services of the community play; but while he is learning about illness, he must also learn about normal children from the premature infant to the adolescent. He must understand methods of infant feeding, how children grow—their physical, emotional and intellectual needs; how children's behaviour differs at different ages and something of the management of behaviour problems. In recent years, following the great success of preventive and curative medicine in childhood with the great reduction of deaths, particularly in infancy and early childhood, there is more emphasis upon the handicapped child—the child with cerebral palsy, the intellectually handicapped or mentally retarded child, and the maladjusted. There is emphasis upon the importance of the mother's role in the care of the child, and the place of stable family life in the development of healthy children in the broadest sense.

#### **Affiliated Residential Colleges**

An historical outline of these Colleges will be found in the Victorian Year Book 1961, pages 203–204.

#### **Monash University**

##### *General*

Monash University, which is named after Sir John Monash, was created by an Act of the State Parliament on 15th April, 1958. Teaching began with 347 undergraduate and nine postgraduate students on 13th March, 1961, in the Faculties of Arts, Economics and Politics, Engineering, Medicine, and Science.

### *Interim Council*

The Act provided that the initial planning and development of the University should be carried out by an Interim Council consisting of 27 members appointed by the Governor in Council. This body handed over its responsibilities to the permanent Council of the University on 3rd July, 1961, having secured the 250-acre site at Clayton, approved an over-all plan of development, erected about one-half of the ultimate science buildings, and secured administrative and academic staff for the year 1961.

### *Site and Buildings*

Being free of existing buildings and roads, the site allowed the architects maximum freedom in their planning and it has been possible to provide for buildings and grounds which will create an atmosphere of dignity and quiet, conducive to study and research. Buildings are planned in the form of an open U facing Mount Dandenong and faculty buildings will be around courtyards linked by gardens, lawns, and covered ways.

All buildings available in 1961, with the exception of a maintenance workshop, were science buildings and consisted of the Mathematics and first-year Physics building, the first-year lecture theatres, the first-year Chemistry laboratories, and a main science block. In these buildings the whole activity of the University was located during the year. The perimeter road and car parking facilities became increasingly available and extensive work began on laying out the grounds. The preservation and planting of trees was undertaken, a bush area being preserved for the use of the Biology Department, and the sports area to the east of the site was levelled.

For teaching in 1962 there was available, in addition to buildings already named, the remainder of the science buildings—Biology, senior Chemistry, senior Physics and the senior lecture theatres—and also Stage I. of the Engineering block. This last contains the building which will later house the Science and Engineering Library and a coffee lounge, but which, for two years until the University Library is available, will be used partly as a general library and partly for student cafeteria purposes.

Work commenced during 1961 on the twelve-storey Humanities building which will be occupied by the Faculties of Arts, Economics and Politics and, later, Education. This building will be in partial use in 1963. Site works were carried out in preparation for the buildings of the Faculty of Medicine which were erected during 1962. At the same time, in order to provide teaching facilities for Monash medical students, plans have been made in co-operation with Alfred and Queen Victoria Hospitals for new buildings at those hospitals. Here and at Prince Henry's Hospital, the Royal Children's Hospital, Royal Park Receiving House, and Fairfield Hospital, clinical teaching will be given, at least until Monash's own teaching hospital becomes available on the south-west corner of the site.

The Administration Building and the University Union are planned to come into use in 1964.

*Halls of Residence*

A part of the first Hall of Residence was opened in 1962, providing facilities for 76 students—23 women and 53 men. Ultimately it is hoped to provide accommodation in University Halls of Residence for some 4,000 students out of the total anticipated population in 1968 of about 8,000 full-time and 4,000 part-time students.

*Chairs*

The following Chairs are held in the University:—English, History, French, Philosophy, Economics, Politics, Engineering, Anatomy, Biochemistry, Physiology, Chemistry, Mathematics, Physics, and Zoology and Comparative Physiology. There is also a Department of German. Four new Chairs are being filled in the Faculty of Engineering and an interesting development has been the addition of a Senior Lectureship in Malay and Indonesian Language.

*University Entrance*

The normal matriculation requirement for a student, who must be 17 years of age on or before 31st March in the current year, is a pass in the Matriculation Examination of the University of Melbourne. There are no special faculty prerequisites, but in certain subjects it is assumed that matriculation standard has been reached.

*Student Enrolments*

The following table shows undergraduate and postgraduate enrolments in the various faculties in 1961:—

VICTORIA—MONASH UNIVERSITY: ENROLMENTS  
BY FACULTIES, 1961

Faculty	Undergraduate		Postgraduate	
	Male	Female	Male	Female
Arts .. .. .	67	70	1	..
Economics and Politics .. .. .	53	5	..	..
Engineering .. .. .	22	..	1	..
Medicine .. .. .	91	10	..	..
Science .. .. .	23	6	7	..
Total .. .. .	256	91	9	..

There is as yet no provision for external students nor for evening tuition. Part-time students included above (eighteen males and seven females) are only those who can be released to attend lectures and tutorials during the day.

*Finance*

A statement of income and expenditure for 1961 is shown in the following table:—

**VICTORIA—MONASH UNIVERSITY: INCOME AND  
EXPENDITURE, 1961  
(£'000)**

INCOME						
INCOME OF BUILDINGS FUNDS						
State Government Grants	..	..	..	..	..	1,113
Commonwealth Government Grants	..	..	..	..	..	1,377
Total Income of Buildings Funds	..	..	..	..	..	2,490
OTHER INCOME						
State Government Grants—						
General	..	..	..	..	..	554
Commonwealth Government Grants and Reimbursements—						
General	..	..	..	..	..	233
Students' Fees—						
Lectures	..	..	..	..	..	39
Bequests and Donations	..	..	..	..	..	2
Interest, Dividends, and Rent	..	..	..	..	..	9
Total Other Income	..	..	..	..	..	837
Total Income	..	..	..	..	..	3,327
EXPENDITURE						
Land and Buildings	..	..	..	..	..	2,954
Salaries, Research Scholarships, Pensions, and Superannuation	..	..	..	..	..	279
Apparatus and Laboratory Material	..	..	..	..	..	332
Books and Periodicals	..	..	..	..	..	146
Furniture, Furnishings, and Office Machines	..	..	..	..	..	76
Pay-roll Tax	..	..	..	..	..	7
Printing and Stationery	..	..	..	..	..	13
Repairs, Alterations, and Grounds	..	..	..	..	..	21
Service Charges—Gas, Electricity, Fuel, Water, and Telephones	..	..	..	..	..	10
Other Expenditure	..	..	..	..	..	88
Total Expenditure	..	..	..	..	..	3,926

### Technical Education

In Victoria, as elsewhere, technical education was introduced to meet industrial needs. The first technical school in the State, the Ballarat School of Mines, was opened in 1871; by the end of that

century there were eighteen such schools, all largely independent ; by 1962 the number had risen to 81, including the only remaining six of the older " Council controlled " schools.

Since 1911, when the State entered the field of technical education, there has been tremendous development, affected considerably by two world wars, resulting in a most comprehensive system. It is convenient, if oversimplified, to consider this system as divided into Junior, Trade, Diploma, and Miscellaneous sections.

Junior technical education extends over Forms I to IV, or V. A common course, consisting largely of general subjects, is provided for boys, and another for girls, in Forms I to III. The inclusion in each year of some practical work assists each student in choosing a future career. Girls' studies include domestic subjects, while country schools pay attention to agriculture. In Form IV more time is given to practical subjects by students proposing to enter skilled trades, and to academic subjects by students preparing for a professional course in a senior technical school.

In trade sections, day classes of from four to eight hours per week are provided for apprentices, with supplementary evening classes as required. Technician courses are available for more able apprentices wishing to carry their studies further.

Victorian technical schools providing full diploma courses are called Technical Colleges or Institutes of Technology. Students having the necessary preliminary qualifications are admitted to diploma courses from a wide variety of educational institutions in Australia and overseas. The diploma system includes a very wide range of courses in engineering, applied science, applied art, domestic arts, and commerce. Each course, in general, requires four or five years' full-time study, followed by a year's industrial experience, or a longer period of attendance at evening classes. These provide the only method in the State of obtaining some professional qualifications by part-time study. Another noteworthy feature is that some of these diploma courses are conducted in country technical colleges. For students meeting certain conditions, there are no tuition fees for full-time diploma courses.

Technical college diplomas are qualifications recognized by appropriate professional institutions ; by the Education Department for admission to the teaching service ; and in engineering and applied science, by the University of Melbourne for admission to a degree course with exemptions of up to two years.

Miscellaneous courses and classes, held mostly in the evenings, include subjects ranging from language to radio, from pottery to panel beating. There are post-diploma courses, " sandwich " courses, and short, intensive industrial courses. For those unable to attend classes, correspondence tuition is available.

The accelerating increase in human knowledge requires frequent reviews of technical courses. This continues to be met in Victoria so that technical education may maintain its major contribution to the welfare of the community.

### Royal Melbourne Institute of Technology

The activities of the Institute are described in pages 234 to 236 of the Victorian Year Book 1962.

Details relating to the Institute during the years 1957 to 1961 are shown in the following table :—

#### VICTORIA—ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY

Particulars	1957	1958	1959	1960	1961
<b>Individual Students</b>					
Enrolled—					
Males .. ..	15,782	17,385	17,533	18,115	18,437
Females .. ..	2,433	2,296	2,538	2,806	2,813
<b>Total*</b> ..	<b>18,215</b>	<b>19,681</b>	<b>20,071</b>	<b>20,921</b>	<b>21,250</b>
<b>Courses—</b>					
Commercial† ..	251	248	273	335	381
Science .. ..	7,315	7,500	8,491	8,837	9,928
Trade .. ..	8,596	9,841	9,201	9,591	8,597
Art .. ..	1,580	1,573	1,491	1,524	1,647
Other .. ..	473	519	615	634	697
<b>Receipts—</b>					
Government Grant	£ 601,404	£ 633,796	£ 705,150	£ 781,724	£ 875,762
Fees .. ..	213,597	231,244	245,192	313,291	334,033
Sale of Class Material	12,599	10,458	13,248	11,822	12,137
Miscellaneous ..	35,113	58,365	44,070	47,805	47,191
<b>Total</b> ..	<b>862,713</b>	<b>933,863</b>	<b>1,007,660</b>	<b>1,154,642</b>	<b>1,269,123</b>
<b>Expenditure—</b>					
Salaries—					
Instructors ..	£ 477,558	£ 524,784	£ 576,316	£ 688,691	£ 747,815
Other .. ..	180,750	193,921	205,781	221,781	247,181
Buildings, Furniture, etc. ..	113,964	112,092	113,482	122,740	132,763
Miscellaneous ..	91,531	101,601	113,259	120,625	135,373
<b>Total</b> ..	<b>863,803</b>	<b>932,398</b>	<b>1,008,838</b>	<b>1,153,837</b>	<b>1,263,132</b>

\* These totals exclude Correspondence enrolments, which, in 1961, were estimated at 12,000.

† Commercial courses partially allotted to Science.



### Gordon Institute of Technology, Geelong

The functions of the Gordon Institute are set out on pages 236 to 239 of the Victorian Year Book 1962.

The following table shows details of enrolments, staff, and receipts at the Gordon Institute of Technology, Geelong, for each year from 1957 to 1961:—

#### VICTORIA—GORDON INSTITUTE OF TECHNOLOGY: ENROLMENTS, STAFF, AND RECEIPTS

Particulars	1957	1958	1959	1960	1961
<b>ENROLMENTS</b>					
Full-time					
Diploma .. ..	294	327	365	427	486
Vocational .. ..	130	140	149	136	132
Part-time					
Apprentices .. ..	535	528	500	494	550
Other .. ..	1,376	1,351	1,450	1,563	1,590
<b>STAFF</b>					
Full-time					
Teaching .. ..	64	68	74	78	78
Other .. ..	44	41	43	41	42
Part-time					
Teaching .. ..	48	43	54	58	63
Other .. ..	8	13	12	12	10
<b>RECEIPTS</b>					
Government Grant	£ 137,650	145,900	154,300	188,324	191,676
Fees .. ..	£ 21,600	23,200	23,300	27,028	29,300
Other Receipts	£ 22,550	24,500	23,500	22,080	24,318

### Swinburne Technical College

The Swinburne Technical College was founded as a Limited Liability Company in Hawthorn in 1908 by the late Hon. George Swinburne. Both the founder and his wife made many financial contributions to the College.

The College is one of the six remaining "Council controlled" technical schools in Victoria, and on its Council are representatives of the surrounding municipalities of Hawthorn, Kew, Camberwell, and Box Hill. The Council is responsible, amongst other things, for the administration of the College funds, derived mainly from Government grants, and for the appointment of staff other than teachers in the junior sections of the College. Instructors in the senior sections are frequently recruited direct from the professions.

From being the sole technical school in Melbourne's eastern suburbs, with an initial roll of 80 students in carpentry, plumbing, and blacksmithing, Swinburne Technical College has developed into the most diverse and the second largest technical institution in Victoria, and is now one of the four regional technical colleges in Melbourne. Each of the four major divisions of the College, junior boys, junior girls, trade, and diploma, now occupies substantially a separate block adjacent to the other three. Being favourably served by public transport, the College is readily attended by students from various parts of Melbourne, while in the diploma classes are to be found many young people from Victorian country districts and from South-East Asia.

These diploma courses are conducted in six branches of engineering, in applied chemistry, in applied art, and in commerce, with special developments in heating, ventilating, air conditioning and refrigeration, and in production engineering. The "O. E. Nilsson" Machine Tools Laboratory, opened in 1961, is one of the best of its kind in a technical college in Australia. In this and other College laboratories, a certain amount of investigational work is carried out for industry.

Recent major building additions include the three-storey boys' junior school, and the Ethel Swinburne Centre, a combined hall and cafeteria, both erected in 1961, the latter to commemorate the jubilee of the College.

Throughout the College particular attention is given to library and to visual aid facilities; to student counselling (there is a separate, specially trained, full-time counselling staff); to extra-curricular activities; and, in the junior sections, to music.

The Swinburne Technical College aims not only to train its students for entry into either a profession or a skilled trade, but also to educate them for living the fullest possible life.

### **Council of Adult Education**

#### *General*

The Council of Adult Education was set up in 1946, under an Act of the State Parliament constituting the Council and defining its functions. The Adult Education Act, amended in 1958, is now embodied in the Education Act.

The primary purposes of the Council are to plan and administer a system of Adult Education for Victoria, and to advise the Minister of Education on new developments and proposals. The Council consists of twenty members, widely representative of educational interests. All are volunteers, the majority being nominated for appointment by the Minister, in accord with the provisions of the Act.

The Director, as the Executive Officer of the Council, is appointed by Cabinet on the recommendation of the Council. His term is for five years, and is renewable. A small professional staff has been built up since 1947.

*Activities of the Council*

There are three principal phases of the Council's work :—

(1) Evening classes, generally 10–20 week courses, are organized in the Metropolitan Area. About 100 classes of this kind are organized each year and are taught by tutors engaged by the Council. The greater part of these classes is non-vocational and no diplomas or recognition for attendance is granted. The aim is to provide systematic courses of instruction in subjects suitable for study by adults, at a relatively high level. Guided reading, discussion, encouragement to improve written and spoken expression, and facility in expressing ideas are all features of the work.

Classes meet weekly, for periods up to two hours, principally at the Council's class centre in Flinders-street, Melbourne.

Enrolments vary with the number of classes but average approximately 5,500 for any one year.

(2) Discussion Groups. The basis of the discussion group is prepared material—books, pamphlets, records, art material, together with discussion and study guides sent out to groups from the centre. Groups usually consist of 10–12 people, meeting regularly, generally in private houses, for reading and discussion. Groups select their own leaders. Efforts are made, by visitation of groups, and by the organization of week-end and other schools, to provide training for group leaders, but the principal emphasis in this work is upon the training which the scheme offers of critical reading and discussion. Groups are organized in all parts of the State, material being despatched by rail.

The discussion group has been found to be a very valuable instrument of adult education and is no longer regarded as a substitute for a regular class under a tutor. Matters covered are principally literature, international and social affairs, art, and music.

(3) Extension Activities. The Community Arts Service, consisting principally of regular tours to country centres of drama, music, art exhibitions, opera, ballet, etc., has been a feature of the Council's work since 1948. The purposes served are :—(a) to provide opportunities for the enjoyment of the arts in centres remote from the city; (b) to set standards of performance and to offer encouragement to local artistic endeavour; and (c) to provide opportunities for young professional artists, actors, and others, to gain experience.

Touring companies of professional artists engaged by the Council are sent out generally for eight-week periods. Professional fees are paid and charges corresponding to standard theatre entrance prices are levied.

An important feature of the touring work is the National Gallery—C.A.E. Travelling Exhibition. The pictures sent on tour are drawn from the National Gallery collections, reframed and hung on specially designed panels. The Exhibition visits 30–40 towns in each year. It is becoming increasingly popular and offers a valuable service to the public

and to schools, and also assists in drawing attention to the great value of the National Gallery. The Exhibition is carried in a specially fitted truck and carries its own lighting equipment. The screens on which the pictures are hung can be readily assembled and enable any country hall to be transformed into a very good art gallery. Some of the screens carry explanatory material about the Exhibition.

Pictures are, for the most part, from the Australian section, but classical paintings, some of very considerable value, are also sent out. The National Gallery-C.A.E. Exhibition is the best equipped and most highly organized in the Commonwealth.

The result of this work over a period has been a great stimulus to local endeavour, and many music clubs, dramatic societies, practical painting groups, &c., have been formed as a result.

It is part of the Council's normal work to assist such societies wherever possible by advice and encouragement. Art exhibitions are arranged each year in co-operation with the National Gallery of Victoria.

#### *Supplementary Services*

The Council organizes two main Summer Schools each year : a general school, usually held at Albury, and an art school, held at the National Gallery in Melbourne. Many lectures are organized in country centres at the request of local organizations.

In Melbourne, the Council has recently established a theatre and conference room. The theatre is available to all groups for the performance of plays, operas, &c. The conference room is principally used by the voluntary Adult Education Association, working in close co-operation with the Council for classes and lectures, but is available to other organizations.

The Council has been called upon with increasing frequency to advise and assist country centres in organizing arts festivals and for advice about the planning of stages in country halls.

During 1961, efforts were made to extend the system of "continuation" classes organized by the Education Department. The latest venture was the establishment of an evening college in a disused High School at Wangaratta. Since April, 1962, a regular series of evening classes, cultural group activities, lectures, and exhibitions has been held at the Centre. The programme is primarily instituted by the Education Department, but is intended for adults. The C.A.E. function is to act as adviser and consultant, both to the Education Department and to the local committee.

*Finance*

The Council is financed by (a) a statutory grant (£25,000 per annum) ; (b) an annual appropriation (1961-62, £43,024) ; and (c) revenue derived from the Council's activities (1961-62, £49,484).

**VICTORIA—ADULT EDUCATION : LECTURE CLASSES  
AND ENROLMENTS**

Lecture Classes	1959		1960		1961	
	Autumn Term	Spring Term	Autumn Term	Spring Term	Autumn Term	Spring Term
Courses Offered ..	147	58	150	62	145	69
Students Enrolled ..	4,875	1,436	4,929	1,963	5,637	1,973

**VICTORIA—ADULT EDUCATION : GROUP ACTIVITIES**

Particulars	1958-59	1959-60	1960-61
Discussion Groups—			
Number of Groups .. ..	250	267	280
Students Enrolled .. ..	2,702	2,880	2,994
Performances, &c., Given—			
Music .. ..	94	108	87
Drama .. ..	134	147	59
Ballet and Dance Recitals .. ..	..	64	—
Art Exhibitions .. ..	37	45	30

**Victorian College of Pharmacy**

Since 1884 pharmaceutical education in Victoria has been provided by the Victorian College of Pharmacy, the school of the Pharmaceutical Society of Victoria. This institution has trained entrants to pharmacy for the examinations of the Pharmacy Board as required by the Medical Act Part III. Until recently, the course of training was a concurrent apprenticeship and part-time academic course, but in keeping with modern trends this has been replaced by a three year full-time academic course plus a fourth year of practical training. For this the existing school was inadequate.

A grant from the Victorian Government and financial support from the pharmaceutical profession and the drug and pharmaceutical industry of Australia provided funds for a new college. A site was secured in Parkville within walking distance of the University, and on it the new Victorian College of Pharmacy War Memorial Building was erected in 1960. Planned for an annual intake of 220 students, it provides the lecture rooms, laboratories, and amenities necessary for a three-year course to meet the needs of modern pharmaceutical practice.

The building is of modern functional design with steel and concrete framing and aluminium curtain walls. Floors are of concrete and ceilings are sound-absorbent and fire-proof.

The number of students attending the College from 1957 to 1961 and principal items of receipts and expenditure are shown below :—

#### VICTORIAN COLLEGE OF PHARMACY—STUDENTS

Course	1957	1958	1959	1960	1961
Pharmacy .. .. .	536	533	558	603	544
Medical .. .. .	124	139	165	148	137
Postgraduate (Pharmacy) ..	12	21	7	10	15
Total .. .. .	672	693	730	761	696

#### VICTORIAN COLLEGE OF PHARMACY—PRINCIPAL ITEMS OF RECEIPTS AND EXPENDITURE

(£)

Particulars	1957	1958	1959	1960	1961
<b>PRINCIPAL RECEIPTS</b>					
Lecture Fees .. .. .	43,749	48,624	52,041	73,383	78,458
Examination Fees .. .. .	1,670	1,628	1,861	1,798	1,779
Total Principal Receipts ..	45,419	50,252	53,902	75,181	80,237
<b>PRINCIPAL EXPENDITURE</b>					
Salaries and Fees to Lecturers	18,068	20,203	25,097	33,297	44,312
Drugs and Chemicals .. .. .	1,853	1,949	2,833	8,382	10,537
Administration, etc. .. .. .	22,548	20,743	22,695	26,471	39,456
Total Principal Expenditure ..	42,469	42,895	50,625	68,150	94,305

## *Health and Medical Research*

### **Developments in Medicine, 1910–1960**

#### *Historical*

When Victoria became a separate State in 1851, its first medical practitioners were British and Irish, and hence it was natural that private medical practice and medical institutions in Victoria should be modelled on what was known to these practitioners in their countries of origin. Sparseness of population, primitive conditions in country regions, long distances separating country practitioners, and difficulties of travel all had a modifying effect on old world patterns. There was the necessity of a general practitioner being able to deal with a great variety of medical, surgical, and obstetrical problems, because there were no specially trained consultants available to help him and his patients; and hospitals in the modern sense did not exist.

With the closer settlement of Victoria, a big increase in its population—especially in Melbourne—and with greater facilities of transport, the pattern of practice has changed considerably. Specialization has become common and there are few practitioners so situated that the advantage of skilled consultant advice and well equipped hospital service is not available to them.

#### *Hospitals*

In the early days, hospitals for the poor were established in Melbourne and in some of the more important country towns. They were charitable institutions for the poor depending, like their British prototypes, on free services of doctors and on charitable gifts in money and kind from other citizens. The conception of a hospital being a charitable institution, only for the poor, was gradually supplanted by the idea of a public hospital being a public utility which should be available for any member of the public with his entitlement to entry determined by the condition of his health and not just by his lack of money.

Though charitable gifts still are important for the upkeep of a large hospital, the greater part (about 75 per cent.) of the money required for building, staffing, and maintaining a hospital comes from the taxpayer through the Government, chiefly by way of the Victorian Hospitals and Charities Commission. (See pages 252 to 261.)

The concept of a hospital being a charitable institution for the poor was still very strong up to the time of the First World War, and it lingers on in that a "means test" still operates. Except for some medical or surgical emergency, a person with means above a certain amount cannot be admitted to a public hospital. For this reason, also, the Honorary system of medical attendance on patients in a public hospital still persists, though now there is no honorary service in at least one large specialist hospital. For a long time medical officers in the mental diseases hospitals and in the Fairfield

Hospital (formerly the Infectious Diseases Hospital) have been salaried public servants. Even in hospitals where the honorary system persists, there is a growing corps of salaried full-time medical officers carrying out departmental specialist and general medical and surgical duties.

The increasing accuracy and precision of diagnosis in a modern hospital is achieved by heavy expenditure on scientific equipment with multiplication of salaried technicians. Treatment also is becoming more expensive, especially some of the surgical and anaesthetic procedures, even though the doctors' services are given free of charge. Hospital costs have thus risen above the ability of charity to meet the expense.

### *Medical Education and Research*

While Melbourne was still a small colonial town 100 years ago, the recently constituted University of Melbourne established its medical school, the first in Australia. It started with what was unusual in those days, a five years' curriculum. The high standard it set in the beginning has been maintained ever since. For a long time there was no opportunity for good postgraduate and specialist study. Consequently many of the best graduates went to Britain and Europe for these studies and not a few stayed overseas and were lost to their native land. There were few inducements or opportunities for research or original work in Victoria.

With the establishment of the Walter and Eliza Hall and the Baker Institutes of research, the picture began to change. It is true that many of the younger graduates, who go overseas to take part in research projects, find the facilities at their disposal much more liberal than in Australia, and there is a more congenial atmosphere in that they come in contact with other scientific workers pursuing similar or related researches. Discussion with these and others often helps to throw light on their own problems. Nevertheless there are slowly increasing facilities now available in Victoria for those who feel they have ideas worth following and some excellent work of world repute has been done in Melbourne in recent years. In fact, we now have the gratifying experience of men and women from other countries coming to work in laboratories in Melbourne because the quality of original work in these laboratories has become so favourably known overseas.

### *Women Doctors*

Quite early in the history of the Melbourne University Medical School, women students were admitted to the course and, after graduation, entered into private practice. However, they have not, till recent times, participated as fully in medical practice as their high ability would have justified. The general public was conservative in recognizing women's ability to engage successfully in those activities formerly supposed to be successfully performed by men only. Slowly women medical practitioners were becoming established in several departments of practice; then, during the Second World War, there was a sudden shortage of men practitioners



in civil practice because large numbers of medical men served in the three armed services. Civil medical needs were met with difficulty by men over age or otherwise unfit for military service, and by women practitioners. Often these were married women who, after many years away from medical practice, resumed it in a war-time emergency. The public was therefore obliged to avail itself extensively of the services of women doctors and since then women doctors have found that they have been more readily accepted and widely appreciated. Some are acknowledged leaders in their specialities with reputations far beyond their own State of Victoria.

### *Group Practices*

For very many years it was usual to find that a general practitioner conducted his practice on his own, with his consulting rooms in a part of his home. A few practices were carried on by two or three partners or by a principal with the help of an assistant.

Gradually, after 1920, and much more rapidly since 1949, multiple partnerships in the form of what is commonly called "group practices" have been established in cities and larger country towns. At first such a group consisted of practitioners, each with special training and ability either in surgery, or medicine, or obstetrics and gynaecology. Such a group was capable of giving treatment for nearly all the medical needs of the patients of a large practice, with infrequent necessity of calling a specialist for consultation or treatment. Such an arrangement also made it possible for each of the members of the group to arrange for a time to be off duty and to live with less strain than if he conducted the practice on his own. Other practitioners with special training in pediatrics, or ophthalmology, or otorhinolaryngology, have from time to time been added to these groups so that at present some of them have become large, well organized and efficient "clinics" with x-ray, physiotherapy, and other facilities.

Group clinics of this type sometimes occupy premises specially built for their purposes, geographically situated at a place in the town convenient for their patients. The doctor's private residence is less frequently now the place of a general practitioner's surgery. When such a clinic is staffed by practitioners, each with a special qualification, the advantage to the patient is considerable, but many patients do not favour these group clinics because the patient has a liking to be attended regularly by one doctor only.

Though the earlier group practices were formed by doctors, each with a special qualification, this plan has not applied to all later group practices. Some are multiple partnerships of doctors, each of whom may be a good practitioner, but not a person with any special training or ability. Such a group may be a good business arrangement for the members of the group and has the advantage for the patient that some member of the group can be expected to be available to attend the patient at almost any time.

### *Treatment in Hospitals*

Here and there, the doctors have made financial arrangements with hospital managements to see their private patients at private consulting rooms in the hospital building, carrying out examinations and treatment using the hospital facilities. This is of advantage to the patient and is a great convenience to the doctor or doctors who have made such arrangements.

Specialists in neurosurgery or in cardiac surgery, for the most part, carry out special diagnostic procedures, operations, and post-operative treatment in the large teaching hospitals. Public and private patients have the advantage of special anaesthesia and all the special investigations, techniques, and nursing which are available, to an adequate degree, only in these larger institutions.

So far, the only special hospitals in Melbourne are the Royal Victorian Eye and Ear Hospital, which is undergoing expansion and re-organization, the Royal Women's Hospital taking obstetric and gynaecologic patients, the Royal Children's Hospital for babies and children up to the age of fourteen, and the Mental Hospitals of the Mental Hygiene Department of the State Government. The Peter MacCallum Institute is a radiotherapy institute mainly for the radiotherapy treatment of cancer. It is not a complete cancer hospital as the major surgical operations for cancer are not performed at this Institute, but are done at hospitals in close touch with the Institute.

The Fairfield Hospital, formerly known as the Queen's Memorial Infectious Diseases Hospital, was designed originally to take in patients with infectious diseases only, but with the decline of these diseases in recent years, its patients are no longer entirely those affected by an infectious disease.

The Austin Hospital was founded to accommodate patients dying of incurable diseases, but besides these it now accommodates some patients with cancer or very chronic diseases, patients with paralysis who undergo rehabilitation and are later discharged with varying degrees of restoration of function, and other patients needing long treatment in hospital but not necessarily incurable.

### *Honorary System*

Up till the time of the First World War, the hospitals were staffed by visiting medical practitioners who gave their services to the indigents who formed the hospital population, without fee or honorarium. This honorary system was almost universal. The only salaried medical officers in a hospital were the medical superintendent and a small number of resident medical officers who received their keep but very little or no salary. Later these were given a small honorarium amounting to about £30 annually, and later still they received an appropriate salary.

The first paid officers, in addition to the above, were the registrars, one medical and one surgical, appointed in the Melbourne Hospital in 1909. Their duties were to devise a records system, to see that

these records were properly kept, and to help supervise the work of the resident medical officers. They were not appointed to treat patients or to take over any of the duties of the honoraries. As the hospitals' work became more specialized and increased in amount, it became necessary to appoint more and more paid medical officers to carry out the day-to-day work in special departments, such as X-ray and pathology, or certain treatments for medical and surgical patients, so that gradually the number of salaried medical officers has increased. Thus at present there are at the Royal Melbourne Hospital 85 medical officers, whereas in 1911 there was one superintendent, two registrars and nine resident medical officers.

The Royal Children's Hospital was the first hospital in Melbourne to abolish the honorary system for medical service to its patients. It has full-time salaried officers to carry out daily the duties formerly discharged by honoraries. It also has visiting specialists, who do not attend daily (being also engaged in private practice), but who are paid on a sessional basis for their work at the hospital. They engage in clinical teaching of students. The staffs of mental diseases hospitals and of other Government institutions have always been full-time salaried medical officers.

#### *Changes in Incidence of Diseases*

There have been noticeable changes in the diseases and disabilities met with in medical practice and in the proportion of some types of maladies in the civil population in the last 50 years.

Some of these changes have been due to improved conditions of sanitation and feeding, while some have been due to the altered social and economic conditions of modern life with its increasing nervous or mental stresses. Some are attributable to industrial developments, others to such health measures as preventive vaccinations, shorter working hours, industrial medicine and factory legislation, infant welfare organization, and health education by various agencies stimulating a sensible and generally increasing interest in health matters.

Typhoid fever was a common disease in city and country some 50 years ago, with a high mortality, particularly in young adults. The incidence dropped rapidly with the establishment of a good sewerage system in Melbourne. It dropped not only in the City of Melbourne, but also in many of the country towns, because Melbourne was the great reservoir of infection whence the disease was carried by infected patients to country places. There are still sporadic outbreaks of typhoid in the unsewered areas of the rapidly expanding newer suburbs and in some country towns. The mortality of such cases as do occur has been lowered greatly through the use of some of the modern antibiotic drugs.

Diphtheria which understandably was regarded with such fear and horror 50 years ago, is now responsible for very few deaths. The first improvement came slowly more than 50 years ago with the use, in an early stage of the disease, of anti-diphtheritic serum; but

the present low incidence of the disease and consequent lowered mortality is the consequence of anti-diphtheria vaccination of small children.

Scarlet fever also has declined to a very low figure coinciding with the introduction of the sulfa drugs and antibiotics such as penicillin. Young children are now given quadruple vaccination against diphtheria, whooping cough, tetanus and poliomyelitis.

There is no doubt that the extensive use of Salk vaccination since July, 1956, has been effective in diminishing the incidence and danger of poliomyelitis in those who have been given a full course of Salk vaccination.

The fight against tuberculosis has been persistent and encouraging though much has yet to be achieved. With the strict supervision of dairy herds, bovine tuberculosis in humans declined greatly over the previous generation. Tuberculosis of bones and glands, which all too frequently was seen in children's hospitals, is now uncommon. The mortality of tuberculosis has been reduced to a low figure by modern drug treatment and in consequence there has not been the need for many of the former sanatoria, most of which have now been diverted to other uses, such as homes and hospitals for the aged. The incidence of tuberculosis, however, still remains high. Much has been done for the detection of tuberculosis of the lungs by free chest X-ray examination for all who can be persuaded to make use of this public facility.

These free X-ray examinations by the Public Health Department have been valuable, not only for finding evidence of lung tuberculosis unsuspected by the subject submitting to examination, but also for discovering unsuspected lung disease of other sorts such as tumours and hydatids. These examinations are voluntary, and many spreaders of infection are therefore missed through their failing to volunteer for examination. This applies specially to older subjects with chronic respiratory disorders, who do not suspect the nature of their infections and so unwittingly spread infection among junior members of their community.

Silicosis, often complicated later by pulmonary tuberculosis, was common 50 years ago in gold miners where it was spoken of as "miners' complaint". With the decline in gold mining in Victoria and the closing down of nearly all the gold mines, it has ceased to be the big problem it once was, though of course there are still patients with similar lung disease acquired in occupations other than quartz mining.

Formerly dangerous septic infective diseases such as osteomyelitis, mastoiditis and its complications, orbital cellulitis from facial sepsis, pneumococcal infections, and meningococcal meningitis, now come within the range of diseases successfully treated by the general practitioner using modern drugs. Formerly they required to be treated in hospital; not infrequently they were fatal and commonly they caused permanent crippling or disabilities of varying degree.

Intense study is also being directed to the elucidation of the cause of dangerous vascular diseases responsible for the death of so many people in the middle age group. Hypertension and coronary artery disease received little notice 50 years ago, but though the frequency of these diseases has increased, more is known now about their appropriate treatment. The position can not be regarded yet as satisfactory, but there is reason for optimism concerning future discoveries of the causes of these maladies. Already much is known about their prevention and treatment. The Heart Foundation (see page 276) has recently raised a large amount of money by voluntary contributions, and it is hoped that valuable results will follow studies made possible through this Fund.

Similar public interest was shown in the Cancer Appeal which was over-subscribed. One of the ways in which this Fund is being spent is in educating the public in cancer recognition and in special postgraduate instruction on cancer matters to medical practitioners.

A changed medical attitude in recent years has developed towards treatment of disease in the aged and feeble. Formerly, major operations were considered unjustifiable in chronic invalids of poor physique. A fatalistic attitude towards illness in the aged was also usual. With the invention of the newer drugs, with the improvements of modern anaesthesia and with the help of blood made available in quantity for transfusion, major surgery has been successfully extended into age groups formerly thought quite unsuitable for it.

Similarly, operations became safe for invalids and weakly individuals of all ages. Many were restored to good health and became able to take their places in society as useful citizens.

The same optimistic spirit in medicine has affected the treatment of some of the disabling diseases of old age such as strokes, chronic rheumatic disorders, and heart and circulatory system diseases. Not so long ago it was considered sufficient to attend to the comfort of these patients and no attempt was made to rehabilitate them to an extent that they were no longer entirely dependent on the help of nurses or attendants. Most of these rehabilitation services are available in public institutions. They are uncommon as private medical services.

The most dramatic improvement in morbidity and mortality has been in infants. Infant Welfare centres were established in 1917, and are now State wide through city and country areas. The nurses in these centres are registered trained nurses who have undergone later a special course in all that pertains to the care and feeding, and supervision of the health of infants. They do not treat illnesses, but send an infant showing signs of illness to a doctor or hospital for advice and treatment. They keep a well infant well, and such is their success that Victoria has one of the lowest infant mortality figures in the world. Sick babies are no longer a big section of a general practitioner's patients.

Whereas, in former times, the summer was a dreaded period with a high incidence of summer diarrhoea and colitis with their melancholy high death rates, those diseases are now relatively uncommon and show a low mortality.

Women medical practitioners in Victoria have been prominent in pioneering and developing movements for the welfare and health of women and infants. The infant welfare service is probably one of the greatest health reforms in Victoria in the last century.

As well as the infectious diseases and fevers mentioned already, some of the maladies which were common 50 years ago are much less common now. Chlorosis, a form of anaemia seen formerly in young women, is now very rare. Gout is still encountered, but relatively uncommonly in the florid forms common 50 years ago.

Since the introduction of salvarsan and similar drugs about 1908, there was a rapid decline in the secondary and tertiary manifestations of syphilis. Penicillin brought a further improvement in treatment. Public discussion and education in prophylaxis have helped to lower the incidence of the disease.

Though some of these older diseases may have decreased in frequency or severity, others have come into greater prominence in recent times.

Such diseases are leukaemia and the various forms of malignant disease usually referred to as cancer, some forms of heart disease (such as coronary artery disease), duodenal ulcer, and various types of neuroses. Some of these are considered to be related to the stresses and worries of modern living.

Reference is made on page 270 to the work which has been done by the Anti-Cancer Council in educating the public and medical profession in the earlier recognition of malignant disease. The State has made available in personnel and equipment excellent service in radio-therapy for such cases as are likely to be helped by this form of treatment, either alone or with surgery. However, a great deal needs yet to be discovered before the diagnosis and treatment of so many forms of cancer can be regarded as satisfactory.

### *Surgery*

Surgery of some forms of heart disease is a comparatively recent development and remarkable operations can now be done thanks to technical advances in many fields and with the well planned co-operation of many people in a combined surgical, medical, and anaesthetic team.

Many of these cardiac and other major surgical operations are beyond the capabilities of one surgeon working on his own. There may be one medical practitioner in charge, but he must have many helpers working with him such as nurses, anaesthetist, pathologist, biochemist, radiologist, technicians attending to recording machines

and an electronic engineer. Not all of these will be medical practitioners ; some will be science graduates and some trained technicians. It is all far removed from the pattern of a surgical operation 50 years ago, which was done by one man of outstanding personality and professional distinction, with the help of an assistant and anaesthetist.

### *Pregnancy*

The physiology of pregnancy is now better understood. Medical students, nurses, and prospective mothers are taught what is proper and necessary in dietetics and hygiene from the early months of pregnancy onward. They are taught the benefits to be expected from ante-natal care from an early stage of gestation. Close ante-natal supervision as an out-patient at hospital or in private practice has had a tremendous effect in promoting the safety of mother and baby.

Most women now are confined in private or public hospitals. Confinements in the home are much less common than they were 50 years ago. Since 1915, no one except a registered trained nurse, who has done a further course for a midwifery certificate, can legally act as a midwife.

### *Sources of Doctors' Incomes*

A general practitioner 50 years ago derived his income from fees paid by individual private patients, or from fees received by contracts with friendly societies, or he might obtain his income from both sources.

Contract practice with friendly societies or, as it was generally called, "Lodge practice", has ceased, but there are now other sources of income not in existence 50 years ago, in addition to private patients' fees. Old age and invalid pensioners may have treatment from private practitioners at a lower rate than usual, through a Commonwealth Government agreement. There are also fees, generally at reduced rates, for treatment to workers eligible for such through the Workers Compensation Acts, State and Commonwealth.

Industrial medical officers are sometimes wholly employed by large industrial undertakings, but some general practitioners are employed part-time in such work. Under the National Health Act a large part of the population, through insurance, is able to pay fees as private patients for treatment by a general practitioner or specialist. Formerly such patients would not have been able to afford private treatment, and attended for free treatment at public hospitals.

There are approximately 3,500 medical practitioners in Victoria and about 700 of these are salaried officers, in hospitals, or in various public services.

### **Further Reference**

An article describing the Health of the Victorian Community will be found on pages 243 to 246 of the Victorian Year Book 1962.

**Department of Health***Industrial Hygiene*

The function of this Division is primarily the prevention of industrial (or more broadly occupational) disease.

The first step in its creation was taken by the appointment to the Department in 1937 of a medical officer to work full-time in this field. Since then the Division has been augmented considerably and now includes three medical officers, five scientific officers, four inspectors, two technical assistants, and administrative staff.

The increasing incidence of industrial disease associated with expanding industrialization and the growing awareness of industrial disease through advances in medicine and science have all played their part in developing the service rendered by the Division. From the very start there has been much emphasis on scientific work, which is generally necessary to determine the nature and degree of an industrial hazard. By means of legislation, the Division endeavours to see that certain minimum standards of safety in relation to industrial disease are achieved throughout the State. This legislation consists of a number of regulations made under the Health Act, such as Lead Workers Medical Examination Regulations, Irradiating Apparatus and Radio-Active Substances Regulations, Regulations Relating to the Use and Manufacture of Certain Pesticides, Entry into Confined Spaces Regulations, Benzene Regulations, and Harmful Gases, Vapours, Fumes, Mists, Smokes and Dusts Regulations.

These Regulations are policed by routine factory visits made by the inspectorial staff.

Much time and energy is devoted to achieving the co-operation of both management and labour and, as a result, it has been possible to enforce the spirit of the legislation with a minimum of prosecutions.

The Division provides a free consultative service on industrial disease to the medical profession and this generally takes the form of advice by telephone, analysis of samples submitted, or reports on patients sent in for examination.

Investigations are continually being made into the possibility of hazards existing in certain industries or factories. These investigations are often requested by employers or by individual employees, and sometimes they are initiated from within the Division as a result of information on the hazards of certain substances or processes being reported from places outside Victoria. Over the last decade there has been a growing concern amongst unions about industrial disease, with the consequence that more and more time is being spent on investigations on their behalf.



*Poliomyelitis and Allied Diseases*

The Poliomyelitis Division of the Health Department was established in 1949 on the advice of the Consultative Council on Poliomyelitis, when it was found that the previously established consultant service of orthopædic specialists was not adequate to cope with the long term after-care required for those affected by the paralysis of poliomyelitis. At its inception the staff of the Division consisted of one medical officer and two physiotherapists. This has now increased to 3 medical officers, 22 physiotherapists, and 10 physiotherapy assistants.

The itinerant physiotherapy service covers the whole of the State and patients are seen by the physiotherapists and medical officers, both in their own homes and at clinics held at various metropolitan and country centres. In 1954–55, the total number of medical consultations in the metropolitan and country areas was 2,398. By 1960–61 this number had risen to 4,837—an indication of the increasing need for the service.

Accommodation is provided at the Lady Dugan Red Cross Home, Malvern, for country patients who from time to time require a period of intensive physiotherapy or adjustment and renewal of their splinting. During the year, 373 admissions were made to the Home for periods of up to six weeks.

The medical orthopædic management and physiotherapy is provided without cost to the patients by the Division, and where financial burden is involved in the payment for appliances, assistance is given by the Department of Health.

With the marked drop in the incidence of cases of poliomyelitis after 1956, it was felt that the medical orthopædic and physiotherapy services of the Division could be extended to include diseases allied to poliomyelitis without in any way jeopardizing the after-care of the poliomyelitis cases which were under treatment or which might occur in the future.

Thus, cases of multiple sclerosis, cerebral palsy, Parkinson's Disease, and paralysis resulting from cerebral accidents and other medical orthopædic conditions which have been referred to the Department by members of the medical profession, have been accepted for treatment since 1959. As this part of the service becomes more widely known, increasing numbers of these patients are being referred by the medical staff of the public hospitals and also by private medical practitioners. Physiotherapy service is provided by the Division for these patients by domiciliary visiting, or at the Lady Dugan Home, or at the rehabilitation centre established at the Fairfield Hospital.

*Tuberculosis and Mass X-ray Surveys*

Tuberculosis was recognized as an infectious disease for the greater part of the time of Victoria's development, and statistics relating to deaths due to this disease are available from 1863. By 1920,

there was a small Government chest clinic and some institutional care was provided by municipal and governmental authorities. Thus was formed the basis for present day tuberculosis control, viz., statistical records, segregation and institutional care, diagnostic, and out-patient facilities.

In 1927, a Director of Tuberculosis was appointed, and there was rapid growth of the services provided by the State. More beds became available, clinics with X-ray services for out-patients were built, and with the appointment of more trained nurses, greater emphasis was placed on domiciliary visiting to further instruction in preventive hygiene in the home, education, and examination of contacts of the tuberculous.

In 1940, Mass Micro X-ray was adopted by the armed services for the detection of pulmonary tuberculosis. The Department recognized the great potential of this procedure as a means of detecting unsuspected pulmonary tuberculosis in the community and set about establishing a separate specialized Division for this purpose at the conclusion of hostilities. The aim was to provide facilities for chest X-rays to the public at regular intervals.

The financial handicaps faced by some patients were alleviated in the middle 1940's by the introduction of a generous allowance to sufferers, free treatment, and the establishment of a rehabilitation service.

Thus, the tuberculosis service which was at first limited to the care and segregation of individuals reporting with ill health (and examination of their contacts) has expanded to include detection of sources of infection among the general public.

Tuberculin testing had been used for many years as a diagnostic aid for individuals and epidemiological studies, but has now entered the field of tuberculosis case finding and prophylaxis amongst larger groups.

In 1948, the use of B.C.G. vaccination was adopted as a preventive measure among those at risk, such as tuberculosis contacts, nurses, and medical students. This service was later extended to include the tuberculin testing and vaccination of children before leaving school, so as to give them greater protection against the increased risks of tuberculosis in the working community.

The persons carrying out this work now form a separate unit of the Branch, and conduct epidemiological studies with tuberculin testing. They also offer B.C.G. prophylaxis to the uninfected and isoniazid to infected patients. In addition, they assist in the case finding programmes by examining contacts of infected children.

The basic principles of tuberculosis control are still applicable, but with the aid of effective drugs for treatment, emphasis has now shifted to out-patient care and treatment, search in the community for unknown cases, and active prevention.

*School Medical Service*

The first School Medical Service was established in Britain in the year 1907. During the Boer War it had been discovered that 40 per cent. of recruits presenting for Army Service were physically unfit—the majority as a result of defects which could easily have been remedied had preventive measures been taken during childhood. It was therefore decided to establish “systematized medical inspections of children in schools” in order to deal with the problems revealed. This recommendation received strong support from the British Medical Association. A survey carried out amongst school children in Victoria revealed that a need for a similar service existed here, too. Prompted by these findings and the experiences gained abroad, the Education Department launched the Victorian School Medical Service in 1909.

Three doctors were appointed initially, and in order that they might give an adequate service to the maximum number of school children, only the larger urban areas were visited. However, in 1914, their numbers were supplemented by the appointment, for the first time, of school nurses, and gradually as the staff increased, children in many country areas were also examined.

Meanwhile, a pattern of examinations evolved whereby a child was seen three times during his school life : just after entering school, later, when about to start his secondary education, and finally when thirteen years old before leaving school to commence work. This pattern has continued, with additional opportunities being provided for a child to be seen by a school doctor at the request of the teacher or the parent, whenever a school is visited. By using this system, large numbers of preventable defects are discovered every year.

In 1944, the School Medical Service was incorporated into the Department of Health. Since then, in order to assist those engaged in routine medical examinations, consultative services in pædiatrics and ophthalmology have been established. Special services have also been developed to discover school children with hearing impairments. This reflects the increasing concern shown by the Service in recent years for the problems of the child who is handicapped either physically or mentally. Considerable assistance has been given by the Mental Hygiene Authority in fostering this new development by providing the part-time services of two psychiatrists.

One of the things the Service did early in its history was to set up a supervisory medical service for school teachers. This function is still carried on and involves over 6,000 medical examinations each year. During its 50 years' history, the Service has also given courses in hygiene and health education at the teachers' colleges. This work lapsed during the war, and for a while was undertaken by physical educationalists. Five years ago, however, the Service returned to this field with a course for all those training to be primary school or infant school teachers. In many colleges a student counselling service is also offered.

A recent development was that, in 1961, free medical examination was offered to all first-year University students in Victoria. In 1962, this was combined with the development of a Student Health Service at Monash University. To cover this wide range of duties, the School Medical Service has now grown to 35 doctors and 42 nurses.

### *Pre-Natal, Infant Welfare and Pre-School Services*

#### *Infant Welfare*

The Maternal and Infant 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. The pattern of development has been a decentralized one, the infant welfare centres being established in the municipalities throughout Victoria as a responsibility of the local authorities. The buildings are the property of the local municipal councils, although the State Government pays capital grants (a maximum of £3,000) towards their erection. The councils employ the infant welfare sisters, but again the State Government pays a maintenance grant approximately equal to half the sister's salary.

The infant welfare service provided for a community varies with its population, composition and density, and more specifically its number of births per year. It is estimated that for a municipality with 200 birth notifications per year, a full-time sister is required.

Details of the activities of Infant Welfare Centres are described on page 249 of the Victorian Year Book 1962.

In the most sparsely populated areas, the shires are not able to meet the cost of providing static infant welfare centres and, in addition, many mothers would have to travel too great a distance to reach them, so the Government provides Mobile Infant Welfare services, pays the infant welfare sisters and provides specially fitted vans for their use as centres. Several shires may be served by one of these vans and may make contributions towards the cost in proportion to the amount of service received. As townships spring up and develop along these routes, temporary centres are established where the mothers can congregate and so save the sisters' travelling time. When these townships grow more permanent, the shires establish static centres and relieve the State of the heavy cost of providing the mobile services. Six of these mobile services are in operation.

There are some mothers who, because of their situation, are unable to avail themselves of either the static or the mobile services, and for these assistance is provided through the Infant Welfare Correspondence Scheme which is conducted by the Maternal and Infant Welfare Division. These mothers correspond regularly with the sister in charge and receive progress letters throughout their child's development. Many mothers in outback areas have benefited from this scheme.

Numbers of Infant Welfare Centres in Victoria for the years 1959 to 1961 are shown below :—

VICTORIA—INFANT WELFARE CENTRES

Particulars	1959	1960	1961
Metropolitan Centres .. .. .	159	164	173
Country Centres .. .. .	406	417	426
Centres included in Mobile Circuits .. .. .	21	21	19
Centres in Non-Rate Paying Areas .. .. .	14	14	14
<b>Total Number of Infant Welfare Centres</b>	<b>600</b>	<b>616</b>	<b>632</b>
Number of Infant Welfare Nurses in Centres	287	296	305
Number of Birth Notifications Received .. .. .	61,292	63,824	65,727
Number of Children Attending Centres .. .. .	153,045	158,787	164,462
Total Number of Attendances at Centres .. .. .	1,331,403	1,335,435	1,392,634
<b>INFANT WELFARE CORRESPONDENCE SCHEME</b>			
Number of Children Enrolled .. .. .	368	236	246
Expectant Mothers Enrolled .. .. .	10	10	7

*Infant Welfare Nurses*

The number of registered Infant Welfare Nurses in Victoria was 2,414 in 1961. Approximately 70 nurses are being trained per year, but these provide staff for hospital maternity units as well as for infant welfare centres. There are three infant welfare training schools for nurses, the examination being conducted by the Victorian Nursing Council which issues the certificates.

*Pre-school Services*

The building of pre-school centres throughout Victoria has been aided in a similar way to Infant Welfare Centres. In this case, however, the building may be owned by the Council, and often it is then combined with the infant welfare centre to reduce cost, or it may be owned by a church body or a voluntary organization. In these latter cases, the council must be willing to sponsor the project. A similar building grant on a two to one basis up to a maximum of £3,000 is paid towards the erection of these buildings, which, like the infant welfare centres, have to be approved in the planning stage. Further information about these buildings is set out on page 251 of the Victorian Year Book 1962.

Although the most general type of pre-school centre required by a community is that of a kindergarten, in some areas a pre-school play group may be all that can be established at first. This type of pre-school centre is conducted by a pre-school play leader who is a person with less training than a kindergarten teacher. Only fifteen children can be cared for by such a person at any one time and she is not qualified for parent education.

In urban areas, a third type of pre-school centre is required for the all-day care of children whose mothers have to work. There are thirteen of these day nurseries, and one crèche providing emergency care, subsidized by the Government in Victoria. They take children

from infancy to five years of age and the matron in charge must be a State registered nurse with experience in the care of infants and young children.

All children attending pre-school centres have the opportunity for a free medical examination each year. Their parents can be present at these examinations and may ask the advice of the doctor on any matters concerning them. All children attending pre-school centres are required to be immunized and at the time of this medical examination the opportunity is given for checking up on whether all the necessary booster shots have been given and when the next ones are due.

Although some 90 per cent. of all mothers in Victoria avail themselves of the infant welfare service, up to date the provision of pre-school services is only sufficient to meet less than 20 per cent. of the pre-school population. The cost of maintaining this service is a heavy one, and although the State subsidizes the pre-school centres to the extent of the salary of the kindergarten teacher or play leader, the additional maintenance costs have to be met by the community, either by local councils, church organizations, individual parents, or voluntary efforts of some kind. It is, in fact, a self-help project involving a good deal of community effort, but one which most parents appreciate, as it leads to the establishment of good family life.

#### *Pre-school Maintenance Subsidies*

The subsidy for a full-time kindergarten in 1960 was £720 per annum for ten sessions, and for a pre-school play centre £325 per annum.

In 1961 provision was made for the subsidy for a kindergarten to cover the teacher's salary according to the award—£792 to £1,092—and in the case of a pre-school play centre, the play leader's salary ranging from £546 to £600.

The number of subsidized pre-school centres and the number of children enrolled in the years 1959 to 1961 are as follows:—

#### VICTORIA—SUBSIDIZED PRE-SCHOOL CENTRES AND ENROLMENTS

Particulars	1959		1960		1961	
	Number	Enrolment	Number	Enrolment	Number	Enrolment
Metropolitan—						
Kindergartens .. .. .	226	10,984	225	11,124	233	11,473
Pre-school Play Centres .. .. .	38	1,039	36	1,096	37	1,103
Total .. .. .	264	12,023	261	12,220	270	12,576
Country—						
Kindergartens .. .. .	117	6,135	132	7,013	144	7,659
Pre-school Play Centres .. .. .	70	1,716	65	1,979	71	2,253
Total .. .. .	187	7,851	197	8,992	215	9,912
Day Nurseries—						
Metropolitan* .. .. .	12	†	12	†	12	†
Country .. .. .	1	†	1	†	1	†
Total .. .. .	13	1,376	13	1,237	13	1,398

\* Excluding one crèche used for emergency care.

† Not available.

*Building Grants*

The number of grants made over the years is shown below :—

**VICTORIA—INFANT WELFARE AND PRE-SCHOOL CENTRES : NUMBER OF CAPITAL GRANTS**

Buildings Subsidized	1959	1960	1961	From Inception to 1961
Infant Welfare Centres .. .. .	20	44	20	357
Pre-school Centres .. .. .	23	27	25	413
<b>Total .. .. .</b>	<b>43</b>	<b>71</b>	<b>45</b>	<b>770</b>

*Mothercraft Nurses*

The mothercraft nursing course is of fifteen months' duration and trains girls to care for babies and their mothers during the nursing period. There are nine mothercraft training schools and the examination is conducted by the Victorian Nursing Council. In 1961, 145 mothercraft nurses gained their certificate, making a total of 1,895 on the Mothercraft Nursing Register.

*Pre-natal Service*

In all Infant Welfare Centres advice is given by the infant welfare sisters on pre-natal hygiene and preparation for motherhood. In 1945, pre-natal medical services were introduced at certain centres and there are now 31 municipal centres at which pre-natal clinics are held. These are run in conjunction with public maternity hospitals serving these areas. The extent to which the services are used is shown by the fact that, in 1961, 6,302 expectant mothers availed themselves of the service.

*Expenditure*

The State expenditure on maternal, infant, and pre-school welfare in the years 1958–59 to 1960–61 is shown in the following table :—

**VICTORIA—DEPARTMENT OF HEALTH : EXPENDITURE ON MATERNAL, INFANT, AND PRE-SCHOOL WELFARE (£)**

Particulars	1958–59	1959–60	1960–61
Salaries and Payments in the Nature of Salary Subsidies, &c., to—	77,967	94,743	100,564
Municipalities—			
Infant Welfare Centres .. .. .	173,288	179,969	188,249
Training Schools—			
Infant Welfare .. .. .	5,000	5,000	5,000
Mothercraft .. .. .	9,000	9,000	9,000
Kindergartens and Pre-school Centres .. .. .	274,105	292,992	305,219
Day Nurseries and Crèches .. .. .	47,044	50,906	62,006
Infant Welfare and Pre-school Scholarships .. .. .	15,874	15,415	16,768
Other Expenditure .. .. .	51,550	42,560	30,174
<b>Total .. .. .</b>	<b>653,828</b>	<b>690,585</b>	<b>716,980</b>

*Tuberculosis Bureaux and Sanatoria*

Two sanatoria are functioning in the Metropolitan Area and accommodation is also provided for tuberculosis patients at the Austin Hospital. Ex-servicemen and ex-servicewomen are accommodated at the Repatriation Department Hospitals at Heidelberg and Macleod.

In country districts tuberculosis clinics have been established at Base Hospitals and in a number of cases tuberculosis chalets are also attached.

Visiting nursing services operate throughout the State. Twelve nurses visit homes of patients and contacts in the Metropolitan Area and six nurses visit in the country.

Mobile units are used in the mass X-ray surveys and between 1949 and 1961 the service has undertaken approximately 4,500,000 chest X-ray examinations.

The following tables show particulars of the operation of the Tuberculosis Service :—

**VICTORIA—TUBERCULOSIS SANATORIA :  
ACCOMMODATION, ETC.**

Sanatoria	1957	1958	1959	1960	1961
	<b>ACCOMMODATION</b>				
Metropolitan .. ..	558	541	541	541	541
Country .. ..	211	203	203	203	203
Total .. ..	769	744	744	744	744
	<b>ADMISSIONS</b>				
Metropolitan .. ..	844	1,081	1,046	978	794
Country .. ..	239	218	271	208	207
Total .. ..	1,083	1,299	1,317	1,186	1,001
	<b>DISCHARGES</b>				
Metropolitan .. ..	804	1,055	988	970	811
Country .. ..	192	186	216	223	192
Total .. ..	996	1,241	1,204	1,193	1,003
	<b>DEATHS</b>				
Metropolitan .. ..	31	58	65	66	50
Country .. ..	16	16	22	15	11
Total .. ..	47	74	87	81	61



## VICTORIA—TUBERCULOSIS BUREAUX ACTIVITY

Particulars	1957	1958	1959	1960	1961
New Cases Referred for Investigation	10,303	11,365	10,196	9,614	10,373
Re-attendances (Old Cases and New)	64,534	61,846	64,538	62,419	61,565
Visits to Patients' Homes by Nurses	12,970	12,895	14,656	14,547	12,436
X-ray Examination—Films*—					
Large .. .. .	43,882	37,748	38,809	37,084	40,627
Micro .. .. .	7,078	6,959	6,600	6,999	9,018

\* Excludes mass X-ray surveys with mobile units.

### Further References

Other activities of the Department of Health are described on pages 246 to 248 of the Victorian Year Book 1962.

### Mental Hygiene Authority

#### *Modern Psychiatric Services*

In recent times the trend in medicine has been to reduce hospitalization to the necessary minimum and treat the patient as far as possible within his normal environment. The same changes can be observed in psychiatry.

Not so long ago nearly all persons suffering from mental disorders were treated in mental hospitals, often very far away from and unrelated to the patients' homes and surroundings. Experience, however, has shown that residential care is no longer the most important part of psychiatric treatment; in fact, fewer people need mental hospital care and that for much shorter periods.

In addition to those who need hospitalization, there are many more persons who suffer from difficulties severe enough to prevent them from leading full and socially useful lives. Provision must be made for the intellectually handicapped, the emotionally disturbed, the prematurely senile, the alcoholics, the delinquents, the criminals, the potential suicides, &c.

Modern psychiatric organizations must provide for all the patient's needs from the earliest stages of his illness to his rehabilitation, thus including the promotion of mental health, the prevention of mental illness by community relationships and educational activities, the provision of consultant and information services in conjunction with the general practitioners, out-patient and day hospital facilities, short-stay in-patient care, in-patient rehabilitation, and community rehabilitation services.

Every person, however, should be able to find psychiatric advice or treatment within a reasonable distance of his home and so the general outline of the service needs to be repeated in suitable geographical areas according to the regional population.

With the extensions made continually over recent years and planned for the immediate future, a complete mental health service is gradually being evolved in Victoria.

#### *Functions of the Authority*

In order to fulfil these functions, the Mental Hygiene Authority encompasses within the scope of its work :—

- (1) The treatment of early cases in Receiving Houses ;
- (2) the rehabilitation of the mentally ill in Mental Hospitals ;
- (3) child and family guidance for emotionally disturbed children and families, through its out-patient clinics ;
- (4) diagnostic and training services for intellectually handicapped children and adolescents ;
- (5) psychiatric out-patient services for adults in Melbourne and in country centres ;
- (6) subsidy of occupation centres, hostels, and special institutions for the intellectually handicapped, both in the Metropolitan Area and in the country (altogether numbering approximately 30) ;
- (7) training of psychiatric nurses at training centres attached to the hospitals at Royal Park, Larundel and Ballarat ;
- (8) research into the causes of mental and emotional illness and into new methods of treatment ;
- (9) community education in mental health aspects of different social problems by study courses, seminars, and lectures to professional and non-professional groups ; and
- (10) the provision of a comprehensive Mental Health and Research Library.

At present the Authority operates a 24-hour Personal Emergency telephone service, five Receiving Houses (at Royal Park, Kew (geriatric), Larundel, Traralgon and Ballarat), ten psychiatric hospitals and two day hospitals in the metropolitan and country areas. Of these, Kew is being developed as a psycho-geriatric hospital and Sunbury as a colony for adult defectives. Mont Park includes a modern neuro-surgical Unit with electroencephalography and radiography departments. In this number are included also the two new regional centres at Traralgon, catering for Gippsland, and at Bendigo, serving the northern area.

There are ten metropolitan and eighteen country out-patient clinics. Those with specialized services include Travancore for the intellectually handicapped ; Children's Clinic, operating in close association with the Children's Court ; and Alexandra Clinic, which deals with forensic problems and alcoholism. The Clarendon Clinic provides after-care service and a sheltered workshop for discharged patients.

For the intellectually handicapped the Authority maintains five residential centres and subsidizes and supervises about 30 day centres throughout Victoria.

After-care hostels include two for women, two for men, one for intellectually handicapped girls, and one for alcoholics who have had, or are still having, treatment.

The Mental Health Authority also provides a consultant service, through psychiatrists and psychologists on its staff, to the Social Welfare Department, School Medical Services, and Maternal and Child Welfare Branch. Close co-operation is maintained with the Student Health Service at the University of Melbourne. An outstanding example of inter-departmental co-operation is to be seen in the psychiatric "G" Division of H. M. Gaol, Pentridge, where selected patients receive individual and/or group psycho-therapy.

The Mental Health Authority administers staff of about 4,500 persons.

### *Auxiliary Services*

As physical conditions are being improved, the efforts of the auxiliary organizations are being re-channelled from the mere provision of material comforts to a more personalized service, which would constitute and maintain a link between the hospitalized patient and the community.

Thus the Mental Hospital Auxiliaries which are operating kiosks in hospitals and after-care hostels, and generously contribute to patient amenities, have now established a visiting service; specially trained volunteers assist staff in the wards, in occupational therapy and chaplaincy.

The Country Women's Association operate housecraft centres in country hospitals, where volunteers help in the re-socialization of long-term patients by means of re-education in household skills.

The Red Cross, in addition to its library services and Music in Hospitals programme, has now introduced beauty salons to the hospitals, operated by trained beauty consultants with a nursing background. (See Victorian Year Book 1962, pages 312 to 313.)

In the field of intellectual handicap, a number of voluntary committees of parents and friends help to administer the day centres, assist the staff, procure work for the sheltered workshops, and raise funds for various special projects.

The encouragement of the voluntary organizations to participate in the work of the Authority is part of the over-all policy of bridging the gap between "asylum" and community. Thus the emphasis in treatment, particularly of long-term, chronic patients, is an intensive programme of re-socialization and rehabilitation. A prominent feature of this programme is the successful development of sheltered workshops within the hospitals as well as outside to cater for discharged patients.

The following table shows the numbers under the care of the Mental Hygiene Authority for the years 1956 to 1960 :—

VICTORIA—CERTIFIED PERSONS AND VOLUNTARY BOARDERS ON THE REGISTERS OF THE MENTAL HYGIENE AUTHORITY

Location	1956	1957	1958	1959	1960
In State Hospitals .. .. .	6,718	6,699	6,899	6,753	6,642
On Trial Leave from State Hospitals ..	1,044	1,198	1,153	1,203	1,131
Boarded Out .. .. .	287	320	249	206	190
Absent without Leave .. .. .	23	29	26	35	33
<b>Total Number of Certified Persons ..</b>	<b>8,072</b>	<b>8,246</b>	<b>8,327</b>	<b>8,197</b>	<b>7,996</b>
In Receiving Institutions .. .. .	72	59	63	96	117
On Trial Leave, &c., from Receiving Houses .. .. .	68	177	182	199	235
<b>Total .. .. .</b>	<b>8,212</b>	<b>8,482</b>	<b>8,572</b>	<b>8,492</b>	<b>8,348</b>
<b>Voluntary Boarders .. .. .</b>	<b>870</b>	<b>1,179</b>	<b>1,398</b>	<b>1,599</b>	<b>1,649</b>
<b>Military Mental Cases, Bundoora (Not Included in Above Table) .. .. .</b>	<b>267</b>	<b>258</b>	<b>308</b>	<b>320</b>	<b>332</b>

The number of admissions of certified patients to State mental hospitals for each of the years 1956 to 1960 was as follows :—

VICTORIA—MENTAL HOSPITALS : ADMISSIONS

Year	Direct Admissions			From Receiving Houses			Total Admissions
	Males	Females	Total	Males	Females	Total	
1956 .. .. .	143	98	241	653	558	1,211	1,452
1957 .. .. .	142	119	261	681	651	1,332	1,593
1958 .. .. .	223	135	358	605	676	1,281	1,639
1959 .. .. .	178	87	265	611	625	1,236	1,501
1960 .. .. .	194	79	273	487	547	1,034	1,307

The number of certified patients who were discharged from, or who died in State mental hospitals for each of the years 1956 to 1960 is given below :—

VICTORIA—MENTAL HOSPITALS : DISCHARGES AND DEATHS

Year	Discharges			Deaths			Total Discharges and Deaths
	Males	Females	Total	Males	Females	Total	
1956 .. ..	369	240	609	311	394	705	1,314
1957 .. ..	438	275	713	310	396	706	1,419
1958 .. ..	499	366	865	290	353	643	1,508
1959 .. ..	465	475	940	307	372	679	1,619
1960 .. ..	447	380	827	282	387	669	1,496

### Hospitals and Charities Commission

#### Introduction

During the last 100 years, the functions of hospitals have undergone considerable changes which have been closely linked with the rapid developments in medicine (see also pages 230 to 238). To cite some obvious examples, the practice of antiseptic surgery, the use of X-ray diagnosis, the establishment of various kinds of laboratories, the planning of kitchens to cater for planned diets—all these have contributed to changing the nature of hospitals. They have also increased the cost of running them.

Today the average cost in a Victorian hospital is £6 per patient per day. Even in these days of rising costs, this figure is high—it is a fact that hospital costs have risen more steeply than most costs in the community, but there are good reasons for this.

There is the increase in complexity of medical practice which demands modern equipment with professional and technical staff to handle it. It takes six years to train a doctor; it takes from three to five years to train nurses and technicians. Also, hospitals operate 24 hours per day, every day. This is expensive in these days of penalty rates and loadings, and the hospital, like the power house, has a time of peak loading, but the hospital never knows when that time is coming. It must, therefore, be constantly prepared for the emergency. In former times, hospitals relied heavily on trainees for much of their work. Today they train people. The hospital still teaches, but it is relying less and less on the students for service. It is also noteworthy that 80 per cent. of the hospital work force is female. In recent years, female wages have risen more steeply than male.

What can hospitals show for the rising costs they incur ?

First of all, there is a much longer expectation of life. Hospitals have played an important part in this achievement. Then, there is a quicker recovery by the patient, and consequently an earlier return to home and to work. The patient spends half as much time in hospital as he did twenty years ago.

In Victoria, where almost every mother is confined in hospital, the infant mortality rate is one of the lowest in the world—17·80 deaths per 1,000 live births in 1961. This is worth comparison with the figure in 1880, when there were 114 deaths per 1,000 live births.

Further, the community enjoys almost complete freedom from many diseases which formerly reached catastrophic proportions—smallpox, typhoid fever, diphtheria and, more recently, poliomyelitis, are examples. Hospitals, through their research departments, helped to achieve this result.

This has meant that the death rate from almost every disease has been reduced although some, such as cancer, remain to be finally conquered, and some, such as cancer of the lung and heart disease, are said to be increasing.

#### *Commission's Functions*

Although public hospitals in Victoria received State financial assistance from their inception, it was not until 1864 that the State introduced a measure of control. It required charities to be registered, and provided conditions for the election of committees. From 1881 to 1923, the public hospitals functioned under the aegis of an Inspector assisted by an Advisory Council of four, all of whom were appointed by the Government.

In this regard, it is significant that in 1890 a Royal Commission on charitable institutions recommended . . . “the appointment of a central board of charity to allocate Government grants to the various districts and for control of all charities within the colony”. This recommendation was not implemented until 1923, when the *Hospitals and Charities Act 1922* brought into being the Charities Board of Victoria.

The Board exercised extensive responsibilities and powers of control over the activities of charities seeking voluntary contributions from the public. It classified hospitals and assisted them considerably to improve facilities. It distributed Government grants to the institutions.

In 1948, under the *Hospitals and Charities Act*, the Board was replaced by the *Hospitals and Charities Commission* consisting of three full-time Commissioners and staff. The Commission was given more extensive authority than the Board, particularly in its power to exercise oversight of public hospitals and other institutions, including ambulance services. The combination under one authority of hospitals and charities was a wise provision, because with the passage of time many

charitable institutions have come to work in close association with hospitals ; for example, benevolent homes for the care of the aged, schools for handicapped or crippled children, orphanages and the like.

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, firstly in that it is the authority responsible for determining the site and extent of new hospital construction, and secondly, for co-ordinating hospital and institutional activities after these are established. As part of its general administrative responsibility, the Commission may enquire 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. This has led to the establishment of the Victorian Hospitals' Association, which acts as a central purchasing organization for Victorian hospitals. It 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 25 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 organization handling all types of equipment, drugs, and commodities generally used by hospitals. Total sales by the Victorian Hospitals' Association in the year 1960-61 amounted to £1,691,000.

In the year 1960-61, the Commission distributed a gross amount of £4,561,000 from loan funds for new buildings, additions or re-modelling projects, together with furnishings and equipment for hospitals, institutions and ambulance services. It distributed £12,853,734 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.

### *Public Hospitals*

Since their inception in 1846, Victorian public hospitals have maintained a distinctive pattern. Firstly, they are managed by autonomous committees elected by contributors—following closely the

practice applying in the United Kingdom prior to the introduction of the National Health Service. Secondly, they have received financial assistance by way of Government subsidies. With rising costs, this has increased steadily in amount and proportion. At present, from Government sources, hospitals in Victoria derive 64 per cent. of their income. Thirdly, 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 premium of 3s. a week a public patient can cover himself and his family against the public hospital accommodation charge of £3 a day. The insurance benefit includes an amount of £1 per 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 meet the doctor's bill.

The difference between these fee charges and actual cost is met by State Government subsidy. For the last complete financial year (1960-61) the total public hospital maintenance expenditure of £21,905,207 was met from :—

	£
Patients' Fees .. .. .	7,173,607
Charitable Contributions .. .. .	456,347
Miscellaneous .. .. .	446,093
State Government Subsidy .. .. .	11,311,368
Commonwealth Government Payments .. .. .	2,775,666

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 today, the acute hospital bed need is assessed at fewer than four beds per thousand 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. Although hospital costs and charges have risen steeply since the war, the Victorian spends, on the average, only half the number of days in hospital.

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 proportion of older people in the community. The effects of this trend are being met through energetic efforts by State instrumentalities, in collaboration with the hospitals, and with religious and charitable organizations.



The programme embraces education towards prevention of infirmity, rehabilitation of patients with established infirmities, and institutional care when that is unavoidable. Home care is favoured when possible and the "day hospital" is appearing to assist families meet their obligations to the aged.

Money for the programme is derived from Commonwealth and State sources, together with very substantial contributions from the public. The programme has developed with harmonious relationships between all of the bodies concerned, but much remains to be done. It is directed towards helping old persons physically and mentally, and restoring them to a useful life with standing in the community.

Victoria is rapidly increasing the facilities necessary to care for old people and to provide for the long-term patient, including rehabilitation services in both cases. By these means, the real needs of the community are met in two ways: by the opportunity to give improved services to old people and those suffering from long-term illnesses, with correspondingly improved results; and by freeing acute hospital beds of these patients. This is good economy, but even better medicine.

The significant feature in Victoria's hospital and institutional services is the part played by charitable organizations and voluntary effort. The activities of these bodies are closely co-ordinated with those of the State departments concerned which render, in addition to financial subsidy, advice and technical help in meeting their problems.

The growth of public hospital services in Victoria since 1952 is indicated in the following table, which shows the number of public hospitals functioning and the number of beds available:—

VICTORIA—NUMBER OF PUBLIC HOSPITALS AND BEDS

Year	Number of Hospitals		Number of Hospital Beds (Including Private and Intermediate Sections)		Estimated Population of Victoria at 31st December
	Metropolitan	Country	Metropolitan	Country	
1952 .. ..	21	75	4,568	4,669	2,366,719
1953 .. ..	22	81	4,723	5,009	2,416,035
1954 .. ..	24	85	5,018	5,134	2,477,986
1955 .. ..	26	88	5,782	5,339	2,546,332
1956 .. ..	28	93	5,867	5,483	2,618,112
1957 .. ..	29	98	6,014	5,681	2,680,555
1958 .. ..	29	100	6,177	5,694	2,745,165
1959 .. ..	30	103	6,188	5,814	2,811,429
1960 .. ..	32	105	6,407	5,891	2,888,290
1961 .. ..	33	103	6,643	5,936	2,949,354

NOTE.—This table excludes the Cancer Institute, convalescent homes, sanatoria, mental hospitals and receiving homes, details of which are shown in the table on page 259.

At 30th June, 1961, the Commission had on its register 1,233 institutions and societies. Some registered hospitals are not yet functioning, and are therefore excluded from the previous table. Details of the registrations for the years 1959 to 1961 are shown in the following table :—

VICTORIA—INSTITUTIONS REGISTERED WITH THE  
HOSPITALS AND CHARITIES COMMISSION

Particulars	At 30th June—		
	1959	1960	1961
Hospitals .. .. .	147	145	146
Special Hospitals for the Aged .. ..	—	1	1
Benevolent Homes and Hostels .. ..	79	79	85
Children's Homes .. .. .	52	52	56
Foundling and Rescue Homes .. ..	16	16	15
Organizations for Welfare of Boys and Girls..	222	251	266
Crèches and Kindergartens .. .. .	84	82	87
Bush Nursing Centres .. .. .	16	17	17
Ambulance Organizations .. .. .	34	34	30
Relief Organizations .. .. .	108	109	107
Miscellaneous Organizations .. .. .	140	161	169
Private Hospitals .. .. .	242	255	254
Total .. .. .	1,140	1,202	1,233

### *Hospital Regional Planning*

An article dealing with Hospital Regional Planning in Victoria appears on pages 261–262 of the Victorian Year Book 1962.

### *Private Hospitals*

The Hospitals and Charities Commission controls the standards in private “non-public” hospitals through continual inspections. At the 30th June, 1961, there were, in the Metropolitan Area, 171 registered private hospitals with a total of 4,008 beds, whilst in country areas there were 83 registered private hospitals with a total of 1,316 beds.

Bush nursing hospitals are registered with the Commission as private hospitals.

### *Nurse Training*

An article dealing with Nurse Training appears on page 263 of the Victorian Year Book 1962.

*Ambulance Services*

Ambulance services are organized on a regional basis. Costs of maintaining services are met from voluntary donations, income from contributory schemes, transport fee charges to non-subscribers and special grants by the Commission.

Particulars of the ambulance services from 1958-59 to 1960-61 are shown in the following table :—

## VICTORIA—AMBULANCE SERVICES

Particulars	1958-59	1959-60	1960-61
Vehicles .. .. .	182	187	207
Staff .. .. .	356	384	403
Contributors .. .. .	271,570	288,281	304,597
Patients Carried .. .. .	173,593	183,325	199,366
Mileage Travelled .. .. .	2,929,806	3,169,163	3,479,957
Maintenance Grants .. .. . £	167,309	172,540	193,133
Capital Grants .. .. . £	86,199	118,103	180,231

**Further References**

Further details of these services are set out on page 234 of the Victorian Year Book 1961.

*Care of the Aged*

An article dealing with Care of the Aged appears on page 264 of the Victorian Year Book 1962.

**Public Hospitals and Charitable Institutions**

Information dealing with the receipts, expenditure, accommodation, and inmates of public hospitals and charitable institutions (subsidized) in Victoria during the years 1956-57 to 1960-61 is contained in the following tables. The numbers of indoor and outdoor patients refer to the "cases" treated and not to persons. It is considered probable that some persons obtained relief 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**

Institution	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>Hospitals—</b>					
Special Hospitals* .. ..	10	10	11	11	11
<b>General Hospitals—</b>					
Metropolitan .. ..	19	19	20	20	21
Country .. .. .	98	100	103	105	103
Auxiliary Hospitals .. ..	2	1	1	2	2
Convalescent Hospitals ..	1	1	2	1	1
Sanatoria .. .. .	2	2	2	2	2
Mental Hospitals and Receiving Houses .. .. .	15	15	15	15	16
<b>Total Hospitals .. ..</b>	<b>147</b>	<b>148</b>	<b>154</b>	<b>156</b>	<b>156</b>
<b>Other Institutions and Societies—</b>					
Infants' Homes .. ..	8	8	8	8	8
Children's Homes .. ..	35	33	33	34	34
Maternity Homes .. ..	4	4	4	4	4
Institutions for Maternal and Infant Welfare .. ..	3	3	3	3	3
Rescue Homes .. ..	4	4	4	4	4
Benevolent Homes .. ..	9	9	10	9	9
Deaf, Dumb, and Blind Institutions	5	5	6	6	6
Hostels for the Aged .. ..	10	10	12	13	12
Hospital for the Aged† ..	..	1	1	1	1
Medical Dispensaries .. ..	2	2	2	2	2
<b>Total Other Institutions‡ ..</b>	<b>80</b>	<b>79</b>	<b>83</b>	<b>84</b>	<b>83</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.

† Since 1958 Mt. Royal Benevolent Home has been classified as a Hospital for the Aged, and now includes Prince's Hill Annexe.

‡ In addition to the institutions shown above, there are others registered with the Hospitals and Charities Commission, including bush nursing centres, youth clubs, benevolent societies, and church relief organizations.

**VICTORIA—PUBLIC HOSPITALS AND CHARITABLE  
INSTITUTIONS : RECEIPTS AND EXPENDITURE**

(£'000)

Institutions	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>Hospitals—</b>					
<b>Receipts—</b>					
Government .. .. .	15,517	16,307	16,911	18,065	18,645
Patients .. .. .	3,769	4,337	4,852	5,598	7,156
Other .. .. .	2,114	2,006	1,878	2,415	2,936
<b>Total .. .. .</b>	<b>21,400</b>	<b>22,650</b>	<b>23,641</b>	<b>26,078</b>	<b>28,737</b>
<b>Expenditure—</b>					
Salaries and Wages ..	9,292	9,749	10,390	11,599	12,613
Capital .. .. .	5,170	4,641	4,238	4,244	5,044
Other .. .. .	7,303	7,628	8,247	8,969	10,005
<b>Total .. .. .</b>	<b>21,765</b>	<b>22,018</b>	<b>22,875</b>	<b>24,812</b>	<b>27,662</b>
<b>Sanatoria—</b>					
<b>Receipts .. .. .</b>	<b>505</b>	<b>503</b>	<b>510</b>	<b>499</b>	<b>514</b>
<b>Expenditure—</b>					
Salaries and Wages ..	293	285	288	305	317
Other .. .. .	212	218	222	194	197
<b>Total .. .. .</b>	<b>505</b>	<b>503</b>	<b>510</b>	<b>499</b>	<b>514</b>
<b>Mental Hospitals and Receiving Houses—</b>					
<b>Receipts .. .. .</b>	<b>7,013</b>	<b>7,316</b>	<b>7,370</b>	<b>7,856</b>	<b>8,297</b>
<b>Expenditure—</b>					
Salaries and Wages ..	2,592	2,760	3,190	3,528	3,960
Capital .. .. .	1,710	1,667	1,575	1,425	1,080
Other .. .. .	2,711	2,889	2,605	2,903	3,257
<b>Total .. .. .</b>	<b>7,013</b>	<b>7,316</b>	<b>7,370</b>	<b>7,856</b>	<b>8,297</b>
<b>Other Charitable Institutions—</b>					
<b>Receipts .. .. .</b>	<b>5,592</b>	<b>6,279</b>	<b>6,731</b>	<b>7,823</b>	<b>8,197</b>
<b>Expenditure—</b>					
Salaries and Wages ..	1,940	2,125	2,372	2,717	2,991
Capital .. .. .	1,043	1,417	1,321	1,500	1,899
Other .. .. .	2,543	2,649	3,072	3,443	3,744
<b>Total .. .. .</b>	<b>5,526</b>	<b>6,191</b>	<b>6,765</b>	<b>7,660</b>	<b>8,634</b>
<b>Total Receipts .. .. .</b>	<b>34,510</b>	<b>36,748</b>	<b>38,252</b>	<b>42,256</b>	<b>45,745</b>
<b>Total Expenditure .. .. .</b>	<b>34,809</b>	<b>36,028</b>	<b>37,520</b>	<b>40,827</b>	<b>45,107</b>

**VICTORIA—PUBLIC HOSPITALS AND CHARITABLE INSTITUTIONS : DETAILS OF SOURCES OF INCOME AND ITEMS OF EXPENDITURE**

(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>INCOME</b>					
Government Aid .. .. .	25,751	26,977	28,429	30,062	30,988
Municipal Aid .. .. .	245	256	228	300	320
Collections, Donations, Legacies ..	542	787	881	858	1,025
Fees—					
Out-patients .. .. .	559	651	683	779	859
In-patients—					
Public .. .. .	2,157	2,733	2,595	3,504	4,485
Private and Intermediate .. .. .	2,160	2,312	2,499	2,743	3,374
Other .. .. .	3,096	3,032	2,937	4,010	4,694
<b>Total .. .. .</b>	<b>34,510</b>	<b>36,748</b>	<b>38,252</b>	<b>42,256</b>	<b>45,745</b>
<b>EXPENDITURE</b>					
In-patients and Inmates .. .. .	24,168	25,767	27,452	30,075	32,971
Out-patients .. .. .	1,927	1,975	2,182	2,755	3,250
Capital .. .. .	7,924	7,679	7,134	7,171	8,024
Other .. .. .	790	607	752	826	862
<b>Total .. .. .</b>	<b>34,809</b>	<b>36,028</b>	<b>37,520</b>	<b>40,827</b>	<b>45,107</b>

**VICTORIA—PUBLIC HOSPITALS : ACCOMMODATION AND INMATES, 1960–61**

Institution	Number of Beds in—		Daily Average of Occupied Beds in—		Total Cases Treated in—		Out-patients (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 .. .. .	2,033	331	1,514	223	44,407	9,594	155,230
General Hospitals—							
Metropolitan .. .. .	3,089	820	2,200	677	60,670	32,911	236,903
Country .. .. .	2,957	2,979	1,736	1,844	36,999	85,432	197,814
Auxiliary Hospitals .. .. .	470	..	436	..	2,604	..	..
Convalescent Hospitals .. .. .	56	..	29	..	366	..	..
Sanatoria .. .. .	373	..	285	..	1,005	..	..
Mental Hospitals and Receiving Houses .. .. .	9,326	..	9,255	..	18,383	..	..
<b>Total .. .. .</b>	<b>18,304</b>	<b>4,130</b>	<b>15,455</b>	<b>2,744</b>	<b>164,434</b>	<b>127,937</b>	<b>589,947</b>

### Lord Mayor's Fund for Metropolitan Hospitals and Charities

This Fund was inaugurated in 1923, for the purpose of raising money for the benefit of metropolian hospitals and charities, and was incorporated by a Victorian Act of Parliament in 1930. The Hospital Saturday Fund which was established in 1873, merged with the Lord Mayor's Fund in 1923. The Hospital Sunday Fund which was also established in 1873, for assisting medical charities, still conducts a separate appeal to the Churches on the fourth Sunday in October each year. The organization and administration of this historic appeal to the Churches is conducted under the direction of the Lord Mayor's Fund. The Hospital Saturday and Sunday Funds, subsequently the Lord Mayor's Fund, were the first attempts at "federated giving"—a term commonly applied to a plan for the community-wide campaign for funds for a group of agencies. This type of fund-raising organization has now been widely adopted in the United States and in Canada, and operates in a number of areas in Australia. Since the Fund was established in 1923, subscriptions and donations amounting to £4,569,172 have been received and Church collections for the Hospital Sunday Fund have amounted to £730,799.

The total annual receipts of the two funds during the period 1956–57 to 1960–61 were as follows:—

#### VICTORIA—LORD MAYOR'S FUND AND HOSPITAL SUNDAY FUND : RECEIPTS

(£)

Year Ended 30th June—	Lord Mayor's Fund	Hospital Sunday Fund	Total
1957 .. .. .	199,478	31,070	230,548
1958 .. .. .	290,469	29,946	320,415
1959 .. .. .	240,164	30,486	270,650
1960 .. .. .	236,165	33,720	269,885
1961 .. .. .	307,366	32,782	340,148

### Victorian Bush Nursing Association

The Victorian Bush Nursing Association consists of annual members living in country districts of the State. The object of the Association is to provide nursing and hospital services for the sick and injured in country towns and districts.

The Association is governed by a Central Council. It fulfils many functions, two of them being the provision of financial assistance to hospitals through Government grants and loans from capital held in trust at low rates of interest and repayment, and, through its Nursing Superintendent, the recruitment and posting of nursing staff to all hospitals and centres. The salaries of all the nurses are paid by the Central Council and each hospital reimburses the Council subsequently. This ensures regular payment of the nursing staff as the administration in each hospital is carried out by voluntary workers and may from time to time be unavoidably delayed.

Residents of any district may form a Committee which, when affiliated with the Central Council, may carry out the objects of the Association, which are to build, equip, and run a Bush Nursing hospital or centre.

Maintenance expenditure of the hospitals amounted to £471,000 for the year ending March, 1961. The Government grant towards maintenance was £97,186.

At 31st March, 1961, there were 44 hospitals and sixteen centres throughout the State. In the 44 hospitals there were 421 beds. The centres provide a nursing service only.

Details of the receipts and expenditure of Bush Nursing hospitals and centres for the years ended 31st March, 1957 to 1961, are shown in the following table :—

**VICTORIA—BUSH NURSING HOSPITALS AND CENTRES :  
RECEIPTS AND EXPENDITURE  
(£)**

Particulars	Year Ended 31st March—				
	1957	1958	1959	1960	1961
<b>RECEIPTS</b>					
<b>Grants—</b>					
Government* .. ..	190,407	200,112	176,350	200,498	184,727
Municipalities .. ..	315	500	435	440	275
<b>Collections, Donations, &amp;c.</b>	71,778	85,197	81,764	70,879	49,245
Proceeds from Entertainments	10,761	11,798	5,338	11,393	8,207
Patients' Fees .. ..	211,095	226,221	233,814	226,268	256,539
Members' Fees .. ..	18,733	19,272	22,650	22,285	24,321
Interest and Rent .. ..	314	1,500	1,930	2,333	3,614
Miscellaneous .. ..	17,332	4,375	6,531	10,215	6,055
<b>Total Receipts .. ..</b>	<b>520,735</b>	<b>548,975</b>	<b>528,812</b>	<b>544,311</b>	<b>532,983</b>
<b>EXPENDITURE</b>					
<b>Salaries—</b>					
Nurses (Paid to Central Council) .. ..	134,714	133,268	149,420	168,121	197,046
Other .. ..	100,178	107,634	114,714	98,726	106,416
Provisions, Fuel, Lighting, &c.	79,709	77,693	79,352	78,614	87,917
Surgery and Medicine .. ..	14,017	16,283	14,460	15,550	19,386
Repairs and Maintenance .. ..	13,899	14,779	15,589	13,834	17,910
Furniture and Equipment .. ..	13,596	11,885	9,493	9,097	12,813
Printing, Stationery, &c. .. ..	10,202	10,677	11,305	11,912	14,082
Interest, Rent, Bank Charges, &c. .. ..	1,165	1,373	1,327	1,336	1,670
Miscellaneous .. ..	30,614	15,894	13,607	12,464	13,759
Loan and Interest Repayments	2,081	8,766	3,145	5,504	12,353
Land and Buildings .. ..	32,336	65,998	85,881	95,207	34,384
Alterations and Additions .. ..	18,344	18,639	21,252	25,089	45,557
<b>Total Expenditure .. ..</b>	<b>450,855</b>	<b>482,889</b>	<b>519,545</b>	<b>535,454</b>	<b>563,293</b>

\* Includes £31,058 received under the Hospital Benefits Scheme for 1957, £30,337 for 1958, £32,576 for 1959, £31,813 for 1960, and £35,106 for 1961.



**Melbourne Medical Postgraduate Committee***Historical*

The Melbourne Permanent Postgraduate Committee was founded by the Council of the Victorian Branch of the British Medical Association in February, 1920, in order to meet a demand for postgraduate education created by a large number of doctors who had returned from the First World War and found difficulties in beginning or resuming civilian medical practice. Shortly after the Armistice, the Council of the Victorian Branch of the British Medical Association created a Committee known as the Melbourne Permanent Postgraduate Committee, representing the British Medical Association, the University of Melbourne, and the teaching hospitals. From time to time, additional members have been added to the Committee from other medical bodies. In 1954, the name of the Committee was changed to the Melbourne Medical Postgraduate Committee; it is a member of the Australian Postgraduate Federation in Medicine.

*Finance*

Until 1945, the Committee was entirely dependent on its own resources. In that year, the State Government made its first grant. This was initially at the rate of £1,000 per annum, but in 1952 was increased to £2,000. In 1952, the Committee inaugurated a scheme of annual subscriptions from medical practitioners. From time to time, other medical bodies, such as the Anti-Cancer Council of Victoria, have financed special teaching but, on the whole, the fees of those seeking training have been the main source of income for the Committee's activities.

*Courses*

The first course was given in 1920, a so-called "refresher" in general medicine, a type of course which has become an annual feature. Courses in the specialties were also held early. Country week-end courses were inaugurated in 1926 and, by 1961, the Committee was providing 25 courses a year in country centres in Victoria. Distinguished men from abroad have also been invited to come to Melbourne and give a course of lectures. From an early date the Committee has conducted training for higher qualifications in medicine, surgery and specialties, and each year the demand for these courses grows. Refresher courses are still sought by general practitioners, but often the training has assumed a more individual character with attendance at hospital clinics. Average yearly attendances at the Committee's courses over the last six years have been: Courses for higher qualifications, 166; metropolitan refreshers, 99; and country, 201. Each year an average of 160 instructors take part in the Committee's courses. Recorded lectures by oversea visitors are also circulated to country centres.

*Training of Asians*

The training of Asian graduates has of late years become a matter of importance. Now a steady stream of graduates is coming from Asia to Victoria, mainly under the Colombo Plan, but sometimes through World Health Organization, or the Commonwealth Scholarship and Fellowship

Plan, or sometimes without sponsorship. At present, the Committee acts generally as a placement agency, arranging periods of training in medicine, surgery, and the specialties. The basis of training is personal and depends on the generous co-operation of the staffs of teaching hospitals.

### **Alfred Hospital**

#### *Beginnings*

The Alfred Hospital owes its origin to a committee of citizens formed in 1866 to raise funds for the establishment of a second hospital in Melbourne. The first hospital was the Melbourne Hospital, which had been established in 1848.

Following public indignation at the attempted assassination of Prince Alfred in 1868, thousands of pounds were subscribed to "Alfred Memorial" Funds. The committee availed itself of the opportunity to link its hospital project with the campaign for an "Alfred Memorial", and from then onwards the success of the venture was assured. The foundation stone was laid in 1869.

#### *Erection of Buildings*

The Outpatients' Department opened in 1871, and inpatients were accepted later that year. The original hospital comprised an administrative block and a pavilion of two wards with accommodation for 70 patients. Two years later, a ward known as "The Cottage" was erected for infectious cases. In 1885, a second pavilion with 70 beds was added, and a third was opened in 1902. The ground floor ward of this third pavilion was devoted to the care of children, and was named the "Michaelis Ward", in honour of the Michaelis family, who generously provided its equipment.

In 1920 a new Casualty Department and Outpatients' Building were opened, and in 1924 a fourth pavilion (the Edward Wilson Wing) for inpatients was completed.

In 1933 a private and intermediate section was opened and was named "Hamilton Russell House" in honour of one of the hospital's most distinguished surgeons. In 1935 the Board of Management decided to embark on a "Ten Year Rebuilding Scheme". The first unit, an eight-storey building known as Centre Block, was opened in 1939. Then the Second World War intervened. Nevertheless, in July, 1943, Margaret Coles House (the gift of Sir George and Lady Coles) was opened for private and intermediate maternity patients. The second unit of the rebuilding scheme, South Block, was completed in 1958.

#### *Developments since 1945*

While accommodation for inpatients has increased over the years from 70 beds to the present 450 public beds, and the 90 private and intermediate beds in Margaret Coles House and Hamilton Russell House, there has also been a vast increase in the ancillary diagnostic and therapeutic services. Since the Second World War, the following have been added: Haematology Laboratory and Medical Library (1946), Speech Therapy (1947), Occupational Therapy (1948),

Department of Anaesthesia (1950), Electro-encephalography (1952), Cardiovascular Diagnostic Service (1953), Diabetic and Metabolic Unit, Mass Radiography and Visual Aids Department (1956). In addition, long established departments such as Radiology and Morbid Anatomy have been remodelled and extended. A State School has operated in the Children's Ward since 1955.

The Diabetic and Metabolic Unit was moved in 1958 to the fifth floor of the Centre Block, where a number of generous donations provided for the construction of a small ward (the Marie and Carl Paser Ward) in close proximity to an exceptionally well-equipped laboratory. This was the first unit of its kind in this country.

The Cardiovascular Diagnostic Service was also moved to new quarters, the Sylvia and Stanley Korman Cardiovascular Laboratories, in 1960. This hospital, since the Second World War, has played a leading role in the development of cardiology and cardiac surgery in Australia, and the new department has ensured its continued eminence in this field for years to come.

Since 1948 the Board of Management has been responsible for the administration of Caulfield Hospital, which comprises 180 convalescent and 280 geriatric beds, with excellent and expanding rehabilitation facilities.

#### *Teaching and Medical Research*

In addition to its record of service to the sick, "the Alfred" has a long and honourable record as a teaching hospital. Affiliated with the University of Melbourne as a Clinical School in 1880, the hospital's first medical students (eight male and six female) commenced their clinical studies in 1888. The hospital now has over 100 students from the University of Melbourne in attendance. When the University established departments of medicine and surgery, the Professor of Surgery established his main clinical unit, and the Professor of Medicine established a sub-unit, at the Alfred Hospital in 1956. Negotiations were conducted in 1962 to sever the affiliation with the University of Melbourne, and to affiliate with the new Monash University.

In recent years much attention has been paid to postgraduate medical training, and excellent facilities exist for postgraduate training in General Medicine, General Surgery, Endocrinology, Cardiology, Neurology, Urology, Anaesthesia, Radiology, Pathology and, indeed, in all specialized branches of medicine and surgery.

In addition, the hospital has its own Nurse Training School, which enjoys a very high reputation. Assistance is also provided in the training of many other hospital personnel, such as pharmacists, physiotherapists, occupational therapists, speech therapists, medical social workers, radiographers, and laboratory technologists.

Medical research has also played a large part in the activities of the Alfred Hospital. Since 1926, a very close relationship has existed between the hospital and the Baker Medical Research Institute, which was established in the hospital's grounds in that year. (See pages 271-272.) The hospital also has a considerable endowment fund of its own which is largely used for the promotion of medical research.

### Further References

Articles describing the Royal Melbourne Hospital and Geelong Hospital will be found on pages 271 to 274 of the Victorian Year Book 1962. An article on the Fairfield Hospital will be found on pages 241-242 of the Victorian Year Book 1961.

### Cancer Institute Board

#### General Functions

The Cancer Institute, which was incorporated in 1949, has as its objects the following :—

- (1) To provide facilities for research and investigation into the causation, prevention, diagnosis and treatment of cancer and allied conditions ;
- (2) to undertake such research and investigation ;
- (3) to provide, in Victoria or elsewhere, for the special training of persons in this research and investigation ;
- (4) to provide out-patient and in-patient hospital treatment at the Institute ;
- (5) to arrange for the provision, at any hospital within the meaning of the *Hospitals and Charities Act* 1958, of special clinics at which patients may seek relief from conditions for which appropriate treatment is available at the Institute ;
- (6) to provide hostels, or make other arrangements where necessary, for the accommodation of out-patients who are undergoing treatment at the Institute or at any clinic associated with it ;
- (7) to provide at the Institute and, at any clinic established at any hospital, to arrange for the provision of—
  - (i) teaching facilities for medical students ;
  - (ii) postgraduate instruction for medical practitioners ;
  - and
  - (iii) instruction to nurses, technicians and physicists, with regard to cancer and allied conditions, including the diagnosis and treatment of those conditions ; and
- (8) to co-ordinate all activities arising from the objects outlined above.

From the beginning, the policy of the Cancer Institute Board has been to ensure the provision of maximum clinical service to patients and to carry out related research. To this end, it has collaborated to the highest level with appropriate specialists in the fields of medicine and surgery and has directed its attention to the development of radiation and chemotherapy services. For an Institute which is engaged primarily in the treatment of cancer by radiation, the most significant advance towards the alleviation and arrest of this disease is

the development of megavoltage equipment. This type of equipment may be in the form of Linear Accelerators or Cobalt 60 as the source of energy.

The 4 MeV. Linear Accelerator was installed in Melbourne in 1956, the Cobalt Unit in Launceston in 1957, and another 4 MeV. Linear Accelerator was installed and put into clinical use in Melbourne in March, 1962.

Large-scale building alterations were involved—an old two-storey building was demolished to make way for this unit. Planning for the new building includes space for a third piece of megavoltage equipment. Types of suitable equipment were being studied during 1962.

Other developments of radiotherapy are also being closely studied. One is based on the advantage of oxygen during irradiation. There is convincing evidence both at the clinical and laboratory level that radio-sensitivity of tumours relative to surrounding normal tissue may be raised by a factor of more than two. Equipment for this procedure was developed by the research team of the Radiobiological Research Unit who, in conjunction with the Commonwealth Aircraft Corporation, designed and built the Oxygen Pressure Vessel of light aircraft alloy with heavy perspex windows.

Treatment in this vessel involves pressurizing a patient in an atmosphere of pure oxygen before bombarding the cancerous growth with a stream of high-speed X-rays from the 4 MeV. Linear Accelerator. The effect of the pressurization is to force oxygen into the infected parts where blood vessels are less plentiful. Before treatment the patient is anaesthetized. During the period of pressurization, careful control is maintained by a series of electronic connexions from the patient to an oscillograph which shows pulse, respiration, and other important data.

Pressurization controls on the equipment allow precise positioning of the patient for treatment, thus greatly reducing the risk of radiation to non-cancerous areas. An immediate result of the pressurization is that a patient with a particular type of growth requires only three weekly visits as against daily visits over longer periods.

The Institute is the first centre practically to adopt the treatment outside St. Thomas' Hospital in London, and has four times the capacity of its British counterpart.

### *Research*

A Radiobiological Research Unit was established in 1956, the first of its kind in Australia. The science of radiobiology deals with the effect of ionizing radiations (X-rays and related types of radiation) on living matter. It is a field which owes its present-day importance to the post-war development of nuclear physics and engineering. As a result, machines and apparatus have been devised which produce radiations of much higher energies and different qualities and provide important means of treatment of cancer and allied diseases. The Radiobiological Research Unit encourages a close exchange of experience between clinical and research personnel.

### *Other Activities*

Other activities include the provision of :—

#### *(1) Special Clinics—Metropolitan Hospitals*

Co-operation and collaboration of varying degrees and definition has been made possible with the assistance of the Boards of Management of the Metropolitan Hospitals. Senior members of staff are permitted to accept honorary appointments to these hospitals and the appointment of sessional consultants to the Institute has made possible a degree of specialization which is of immense value.

#### *(2) Country Clinics—Extra-Metropolitan Hospitals*

In accordance with the objects expressed in the Act, the Board has conducted extensive negotiations with the committees of country hospitals with the result that clinics have been established at Ararat, Bairnsdale, Ballarat, Bendigo, Colac, Echuca, Geelong, Hamilton, Kerang, Mildura, Sale, Stawell, Swan Hill, Wangaratta, Warragul, Warrnambool, and Yallourn.

To implement the policy of providing service at country clinics, superficial therapy machines have been installed at Ballarat, Mildura, Geelong and Bendigo. In May, 1962, the Institute commenced using a charter service (light twin-engine aircraft) to visit clinics in country areas. The time and cost factors were considered and the over-all plan provides for seven routes which will reduce staff time spent away from the main clinic in Melbourne, thus allowing greater utilization of specialist and other services.

#### *(3) Visiting Nursing Service*

This service was established mainly for persons eligible for treatment in a public hospital and residing within the Metropolitan Area, and is not limited to patients receiving treatment at the clinic. Skilled nursing attention is provided within the home of the patient who would otherwise require in-patient accommodation at a hospital.

#### *(4) Service in Tasmania*

Under a rather unique agreement between the States of Victoria and Tasmania, the Board is responsible for the service to patients in Tasmania requiring radiation treatment. For this purpose, clinics have been established at the Royal Hobart Hospital and the Launceston General Hospital. Equipment at Launceston includes a Cobalt 60 Unit. Discussions have already commenced with the Director-General of Health Services, Tasmania, for the installation of megavoltage equipment at the Royal Hobart Hospital.

#### *(5) Training*

Teaching facilities are available at the Institute for medical, technical and non-technical personnel. Postgraduate courses are conducted for medical staff and recently a postgraduate course in radiotherapeutic nursing was commenced with the approval of the Victorian Nursing Council.

(6) *General*

In addition to out-patient and in-patient service, highly-skilled technical and scientific services are provided by medical physics, diagnostic X-ray, pathology and dietetic research departments, and, in addition, a central cancer library is conducted in collaboration with the Anti-Cancer Council of Victoria.

(7) *Statistics*

During 1960-61, the Institute received 4,478 new patients. There were 36,534 attendances for treatment at clinics and 70,723 X-ray therapy fields treated, whilst the visiting nursing services conducted 25,754 visits.

**Anti-Cancer Council of Victoria***General*

The Anti-Cancer Council of Victoria, incorporated by Act of Parliament in 1936, is charged with the co-ordination of all cancer activities in Victoria, and more specifically with the encouragement and support of research into the causes and cure of cancer. Funds for this purpose are supplied by public subscription. In the Cancer Campaign in 1958, the Victorian community gave £1,300,000 to the Council. In consequence, the Council's activities have shown a great expansion in the last few years, as is illustrated in the following table of expenditure :—

**VICTORIA—ANTI-CANCER COUNCIL : EXPENDITURE**  
(£)

Particulars	1957	1958	1959	1960	1961
Research .. ..	23,783	34,607	85,541	120,219	137,209
Education .. ..	..	..	4,994	12,942	17,406
Patient Aid .. ..	100	450	8,284	8,308	16,987
Other .. ..	9,534	11,232	20,760	21,274	37,091
Total Expenditure ..	33,417	46,289	119,579	162,743	208,693

As shown, the Council now spends approximately £120,000 annually on support of cancer research in the Universities and Research Institutes and is thus the largest contributor to the financial support of medical research in Victoria. A large part of this support centres in two main fields : first, investigations into the nature, diagnosis, and treatment of leukaemia, and secondly, basic studies in carcinogenesis (causation of cancers).

*Research into Leukaemia*

Research in Victoria on leukaemia ranges from fundamental investigations into the nature of the disease to clinical studies on treatment of affected persons. Leukaemia, which is a cancer of the white cells of the blood, is one of the main causes of death in children.

The Council's Carden Fellow, working at the Walter and Eliza Hall Research Institute, Royal Melbourne Hospital, is engaged in studies of the fundamental causes of mouse leukaemia, which closely resembles one variety of the disease as seen in man. Pure line colonies of two strains of mice are maintained and both develop respectively, as they age, high and low incidences of leukaemia. Attention in the work to date has centred particularly on the period before the mice get leukaemia, so that those factors may be evaluated which determine the appearance of leukaemia in some mice but not in others. It has been shown that the hormonal influences (adrenal, thymic, and oestrogenic) are of particular importance. At the Baker Medical Research Institute at the Alfred Hospital, a group of investigators is studying the enzyme patterns of the white blood cells in leukaemia, to ascertain whether certain enzymes behave abnormally in leukaemic cells. There is close collaboration between this group of research workers, the Carden Fellow at the Walter and Eliza Hall Institute, and the Department of Physiology at the University of Melbourne.

### *Central Cancer Registry*

The staff of the Central Cancer Registry, which is maintained by the Council, is studying the incidence and characteristics of leukaemia in Victoria. This work is done in association with officers of the Health Department, and with the Commonwealth Bureau of Census and Statistics, since leukaemia is a notifiable disease in Victoria. It is commonly believed that the incidence of leukaemia has risen rapidly in the last twenty years. The Victorian data lend no support to this belief; such slight increases as are apparent, after allowance for population growth, appear to be related to improvements in diagnosis.

At the Royal Children's Hospital, a clinical study is being made of all children with leukaemia admitted to that hospital, particularly in relation to treatment of the disease. Unfortunately, at present, leukaemia is an inevitably fatal disease, but methods of treatment have recently been introduced which prolong life for months, sometimes for years. These children can be kept well and happy during this extended period of life, leading practically normal lives at home, and even attending school. These advances in treatment encourage the hope that eventually a cure will be found for leukaemia, as research into its causation is intensified.

### **Baker Medical Research Institute**

The Thomas Baker, Alice Baker, and Eleanor Shaw Medical Research Institute was founded under the terms of a deed of settlement executed in 1926 between the settlers and the Board of Management of Alfred Hospital. The Institute was established to provide an efficient hospital laboratory service and facilities for medical research. In the course of time it was found more satisfactory for these routine services to be placed under the control of the hospital staff, and this transfer was completed in 1948. Since then the Institute staff has been entirely concerned with research, with emphasis on the basic medical sciences.



In 1949, a Clinical Research Unit was set up by the Board of Management of Alfred Hospital to provide facilities for clinical research complementary to those of the Institute. Both functionally and structurally these two research groups have been integrated and are now generally included under the title "Baker Medical Research Institute".

Prior to 1949, the research activities of the Institute were in the fields of bacteriology, serology and biochemistry, with clinical interests in a variety of subjects. During this period important contributions were made concerning the metabolism of carbohydrates and the related disease diabetes mellitus, and the initial studies relating to the introduction of modern techniques of cardiac surgery into this community.

Since 1949, both the basic science and clinical projects have been oriented to diseases of the cardiovascular system. These currently include, amongst others, projects relating to the cardiac muscle, control of body fluid volume, hypertension, mechanism of blood coagulation and open heart surgery, which are being studied from the aspects of physiology, biochemistry, physics, pharmacology, clinical medicine and surgery.

In 1961, the staff consisted of eighteen graduates (nine medical, nine science), 22 non-graduates and three graduates (medical) holding research fellowships.

### **Research Work at Alfred Hospital**

In addition to the research work carried out in the Baker Medical Research Institute, which is described above, research projects are being carried out in several departments of the hospital—notably by the Diabetic and Metabolic Unit, the Thoracic Surgical Unit, and the Department of Pathology.

#### *Diabetic and Metabolic Unit*

In 1929, a Diabetic Instructional Clinic was formed within the Alfred Hospital for the purpose of ensuring adequate instruction and supervision of patients suffering from this complaint. In 1955, the Board of Management decided to reorganize this service as it was felt that concentration on one single aspect of metabolic disorder was no longer desirable. Accordingly, the Diabetic and Metabolic Unit was set up for the investigation and treatment of endocrine disorders. Its functions have been defined as the investigation and treatment of patients, the prosecution of research and the teaching of both undergraduate and postgraduate students.

Since its formation the unit has developed methods of investigation into thyroid disorder, adrenal disease, diabetes mellitus, disorders of calcium metabolism and disordered gonadal function. The unit maintains 24 beds for general purposes at Caulfield Convalescent Hospital and five beds are available for special investigation and research near the laboratories at Alfred Hospital.

Research has proceeded into problems of insulin resistance and of diabetic vascular disease. Long-term investigation has been made into the action of sulphonylurea drugs. Disordered function of the adrenal glands has been studied and effects of various treatments has been evaluated. Studies are proceeding on variations of activity of the thyroid gland and of disorders related to parathyroid dysfunction. Fundamental work is proceeding on disorders of pituitary activity.

In 1961 the staff consisted of twelve graduates (eight medical, four science) and eight non-graduates.

The principle of combining clinical observation on human disorders with intensive investigation and research into human endocrinological problems has been the policy of the unit since its formation.

#### *Thoracic Surgical Unit*

Members of the thoracic surgical unit, in conjunction with other units, carry out research into techniques for cardiac surgery including the use of extra-corporeal pump-oxygenators and into the effects of hypothermia and anaesthesia on heart function. Another project concerns the problems of direct operation on the coronary arteries and reconstruction or replacement of heart valves.

#### *Department of Pathology*

This department is currently engaged in studies of the relative value of different types of antibiotics. A blood coagulation laboratory has recently been established to continue a study, commenced in the Baker Medical Research Institute, into haemophilia and related bleeding diseases.

### **Walter and Eliza Hall Institute of Medical Research**

#### *Research into Immunity Processes*

In December, 1960, the Director, Sir Macfarlane Burnet, O.M., F.R.S., shared with Professor Peter B. Medawar, of London, the Nobel Prize for Medicine for his work in the field of immunological tolerance, a topic of great importance in the understanding of the immune processes of the body. Immunity may be defined as the reaction whereby the body protects itself against attacks by invaders such as bacteria, by producing specialized protein molecules called antibodies. In paving the way for the discovery of immunological tolerance, a whole new field of experimental surgery has been opened up, the ultimate aim of which is to enable surgeons to replace a diseased organ, such as a kidney, with a normal one from a healthy donor, should the donor be willing to make this sacrifice.

Over the past few years, the immunological research activities of the Institute have received increasing emphasis, so that now biological, biochemical and clinical studies are carefully integrated in an attempt to elucidate the mechanism of antibody formation, both normal and abnormal. Antibody forming organs, such as the lymphatic glands and spleen, are composed of a large variety of different types of cells. Recently, techniques have been developed within the Institute which

allow the study of single lymph cells removed from immunized tissues and cultured in tiny droplets. This line of research has shown that only one special type of cell, namely, the plasma cell, can produce antibody and has given valuable information as to how this highly complex antibody protein is actually made.

In a related line of work, single immune cells have actually been made to divide to form a clump of some thousands, visible to the naked eye, when transplanted into a fertile hen's egg. This has allowed more detailed study of the cell's genetic potential. It is of interest to note that the techniques used in this work bear striking similarities to the chick embryo techniques developed by the Institute over the last 30 years for studies on influenza virus. The fertile egg, which provides the scientist with a developing embryo accessible at all stages of maturation to investigation, is thus an experimental tool of continuing value.

Within the Clinical Research Unit, which works in the laboratories of the Institute and the research ward of the Royal Melbourne Hospital, the causation and treatment of so-called autoimmune "diseases" have been carefully studied. Autoimmune diseases are conditions in which the immunity reaction becomes distorted. The body, instead of producing antibodies which attack invaders, directs its immune attack against certain tissues of the body itself—it is this self-destruction by autoantibodies which causes the clinical illness. Significant advances have been made in the understanding and treatment of such conditions, including certain forms of liver cirrhosis, haemolytic anaemia, and some forms of arthritis. Whereas it has been found that cortisone and related drugs can be of some help in these conditions, the search continues for a drug which will cure rather than merely alleviate.

The close connexion between theoretical and clinical interests within the Institute is typified by research being carried out with an unusual strain of inbred mice. These mice were originally bred by a team of researchers in the University of Otago, New Zealand, and are known as the NZB black strain. The extraordinary feature about these inbred mice is that 100 per cent. of them develop a form of autoimmune haemolytic anaemia which eventually kills them. The disease is strikingly similar to certain forms of human anaemia. It is felt that this mouse disease, which appears to be genetically determined, is the first model of a spontaneous autoimmune process observed in a laboratory animal. As such, its study should prove most valuable, not only in elucidating the causation of autoimmune diseases, but in aiding the search for a final cure of these crippling diseases in man.

Recent work, also being performed with embryonic and adult fowls, has shown that there are different types of immune processes, each of which is initiated by a special organ. Thus, in the fowl, it appears that the thymus gland is the source of cells capable of rejecting grafts, whereas a small lymph gland attached to the lower intestine appears to be the original source of all cells capable of forming circulating antibody. Differences between these two types of immune reaction have long been puzzling biologists.

In the past two years the generous financial support that the Walter and Eliza Hall Institute has received from the Commonwealth Government of Australia, the State Government of Victoria, the Walter

and Eliza Hall Trust, the Victorian Anti-Cancer Council, and many private benefactors, has been augmented by substantial overseas grants. The overseas grants, from the National Institutes of Health of the United States Public Health Service, the Rockefeller Foundation, and the Wellcome Foundation, represent concrete evidence of the high esteem in which the work of the Institute is held around the world.

### **Further References**

Further details about the Institute will be found on pages 245–246 of the Victorian Year Book 1961.

### **Mental Health Research Institute**

This Institute was established by the Victorian Department of Mental Hygiene at the end of 1955 and was officially opened in May, 1956. The aims of the Institute are :—

- (1) To act as a focus for research into mental illness in Victoria, including the evaluation of new treatment methods ;
- (2) to study and develop aspects of the prevention of mental ill health in Victoria ; and
- (3) to promote an informed community understanding of mental health problems.

It stimulates persons within the Mental Hygiene Department and in outside scientific establishments to investigate mental health problems and assists them in the design of experiments, evaluation of data, and the collection of bibliographies. To this latter end, a central mental health library has been established.

From its opening until the end of 1961, a variety of studies has been undertaken, involving the evaluation of new drugs, the epidemiology of mental health problems, electro-encephalographic pictures in mental illness, the effects of neurosurgical procedures, neuropathological changes in the central nervous system, psychological estimations, and patterns of social change. Among the studies proceeding at present are further investigations into the epidemiology of mongolism and congenital anomalies of the central nervous system ; a new method of staining nervous tissue ; chromosomal changes in various mental deficiency syndromes ; a follow-up of cases who have had psychosurgery ; a team study of the characteristics of depressive syndromes and their treatment by drugs ; the physiological basis of tremors ; and continuing evaluation of mental illness in the aged.

### **Royal Children's Hospital Medical Research Foundation**

In 1946, the Committee of Management of the Royal Children's Hospital decided to develop organized clinical research in the hospital with the object of bringing the hospital's activities into line with those of a University teaching hospital. A Clinical Research Unit in Medicine was established in 1948 and a similar unit in surgery in 1952. A Virus Research Laboratory was also commenced in 1952 and subsequently other individual research workers were appointed.

These developments were rendered possible only by a substantial endowment from the estate of the late Mr. T. E. Burton and also by the very generous allocation to research of funds raised by the *Sporting Globe* and 3DB Broadcasting Station.

By 1958 it was evident that the growth and diversity of research activity was such that a separate organization was necessary to co-ordinate the work and plan for future extension. In 1959, the Board of Management of the hospital decided to establish an independent, yet closely associated, sister organization—the Royal Children's Hospital Medical Research Foundation. This Foundation has been designed not only to develop and promote research and recruit and train research workers, but also to undertake teaching so that its work will permeate into that of the Royal Children's Hospital and those branches of society concerned with the health and welfare of children.

The scientific activities of the organization cover a wide field in pædiatrics. The two general departments of Clinical Research in Medicine and Surgery are investigating respiratory and urological disorders respectively as their major fields of interest. In addition, they are responsible for training younger research workers and undertaking a share of both undergraduate and postgraduate education in medicine.

At the beginning of 1962 two new special units were established in the charge of senior research workers; one was a unit in gastro-enterology, and the other in fluid and electrolytes metabolism, both of these fields being of considerable importance in children. In addition to these activities, smaller groups are investigating some problems in hæmatology, virus disorders, and cardiovascular disease.

### **Fairfield Hospital Epidemiological Research Unit**

### **St. Vincent's School of Medical Research**

### **Commonwealth Serum Laboratories**

Information about these institutions will be found on pages 277 to 281 of the Victorian Year Book 1962.

### **National Heart Foundation of Australia (Victorian Division)**

The National Heart Foundation was formed in February, 1959, as a Federal body with a division in each State. The aims of the Foundation are to advance knowledge of cardiac and vascular disorders through research and education, and to assist with the rehabilitation and care of patients with cardiovascular diseases.

Through the National Heart Campaign of 1961, £2,250,000 was raised by public donation, with £750,000 from Victoria. This money is being spent over several years, 70 per cent. being for research, 15 per cent. for education and 15 per cent. for rehabilitation and patient care. At least 66 per cent. of the money raised in each State is being used in that State.

Applications for research funds, in the form of grants-in-aid, fellowships and scholarships, are reviewed by a Federal Research Committee, thereby avoiding overlapping of work. The Federal Research Committee receives recommendations from a Research Sub-Committee of the Medical and Scientific Advisory Committee of each State.

Research grants within Victoria for 1962 total £41,000. These grants in the main are disbursed to existing institutions. Work is being supported in departments at the University of Melbourne, at four teaching hospitals, and at the Baker Medical Research Institute. Grants have also been made for oversea travel by research workers.

Professional knowledge of cardiovascular disorders is furthered through symposia, lectures, and meetings for doctors, arranged by the Foundation. Public education is directed toward dissemination of information to help reduce the social, economic, and personal handicaps commonly experienced by sufferers from cardiovascular disorders.

Rehabilitation and patient care are undertaken through the Work Assessment Centre, in the grounds of the Royal Melbourne Hospital. Patients are assessed to determine their fitness or unfitness for work, and are advised regarding suitable employment. Work adjustment and re-training are arranged and assistance is given in finding employment. Almoner services are also available.

## *Social Welfare*

### **Commonwealth Social Services**

#### *History*

An outline of the history of Social Services will be found on pages 281 to 283 of the Victorian Year Book 1962.

#### *Finance*

When age and invalid pensions were introduced in 1909 and 1910, respectively, finance was provided from Consolidated Revenue. Maternity allowances, introduced in 1912, were financed similarly. When child endowment was introduced in 1941 and widows' pensions in 1942, they were also financed from Consolidated Revenue.

A change was made when the National Welfare Fund was established in 1943. At first it was used to finance funeral benefits and maternity allowances, but as time went on, other benefits were made a charge on the Fund. At present, expenditure on all social and health benefits, except repatriation and a few minor benefits, is met from the Fund, but it is not used to finance the cost of administering benefits nor of the capital works associated with them.

Though the Fund was formerly financed by revenue from certain specific sources, e.g., the social services contribution, it was placed on a different basis in 1952. In that year, an amendment to the law provided that sums should be paid into the Fund from Consolidated

Revenue equal to the amount of money paid out of the Fund. In addition to these appropriations from Consolidated Revenue, the Fund receives interest from its investments. The National Welfare Fund, as at present constituted, does not represent revenue from certain sources paid into a special fund for social services ; rather, it represents an appropriation from Consolidated Revenue equal to expenditure from the Fund.

Expenditure in Victoria from the National Welfare Fund in the years 1958-59 to 1960-61 is shown in the following table :—

VICTORIA—NATIONAL WELFARE FUND : EXPENDITURE

(£'000)

Service	Year Ended 30th June—		
	1959	1960	1961
Funeral Benefits .. .. .	92	91	92
Age and Invalid Pensions .. .. .	31,645	35,935	38,734
Widows' Pensions .. .. .	2,545	2,916	3,329
Maternity Allowances .. .. .	1,020	1,008	1,069
Child Endowment .. .. .	18,369	16,963	20,344
Unemployment and Sickness Benefits .. .. .	1,920	1,684	1,672
Commonwealth Rehabilitation Service .. .. .	203	201	203
Medical Benefits .. .. .	1,872	2,204	2,444
Medical Benefits for Pensioners .. .. .	932	978	1,004
Hospital Benefits .. .. .	3,426	4,212	4,824
Pharmaceutical Benefits .. .. .	5,265	6,091	6,316
Pharmaceutical Benefits for Pensioners .. .. .	525	789	1,663
Nutrition of Children .. .. .	783	908	1,018
Miscellaneous Health Services .. .. .	41	55	55
Tuberculosis Benefits .. .. .	1,270	1,308	1,272
Total .. .. .	69,908	75,343	84,039

*Social Security Benefits*

The benefits provided under the Social Services Act are outlined below:—

*Age Pensions*

Age pensions, or old age pensions as they were then called, were introduced in 1909 and were the first of the income security services to be introduced on a Commonwealth-wide basis. Though the rates of pension and qualifying conditions, e.g., the means test, have changed considerably since then, fundamentally the provisions have not altered. The main essentials throughout have been that pensions are granted subject to age, nationality, and residential requirements, and to a means test on income and on property.

The main provisions are as follows :—

*Age:* Qualifying age for men, 65 years ; for women, 60 years.

*Residence* : A person must have lived in Australia at any time continuously for a period of ten years. If he has completed five years' but not ten years' continuous residence and has lived in Australia for periods which, in total, exceed ten years he may be eligible. Residence in New Zealand or the United Kingdom may be treated as residence in Australia. Certain absences do not affect eligibility.

*Nationality* : Aliens are ineligible.

*Rate of Pension* : The maximum rate of pension is £273 a year (£5 5s. a week).

If the pensioner is an invalid or blind, a Child's Allowance of 15s. a week is paid free of the means test for the first child under sixteen years. An extra 10s. a week pension may be paid, subject to the means test, for every other child under sixteen. An allowance of £2 7s. 6d. a week may also be paid to his non-pensioner wife ; this is subject to the means test.

Supplementary assistance of 10s. a week is available to single pensioners and to married couples where only one is a pensioner and no wife's allowance is paid. This is payable only to persons who pay rent and who are considered to depend entirely on their pensions.

If a pensioner lives in a benevolent home, £1 17s. a week of the pension is paid to him. The rest is paid to the home for his maintenance, except where he is a patient in an infirmary ward.

*Means Test* : In March, 1961, a new merged means test came into effect, replacing the tests previously applied separately on income and property.

The amount of pension now payable depends on the claimant's " means as assessed ". These consist of his annual rate of income plus a property component equal to £1 for each complete £10 of his net property above £200.

A person's " means as assessed " may consist entirely of income, entirely of property component or of various combinations of income and property component. The pension payable is calculated by deducting from the maximum annual rate of pension the amount by which " means as assessed " exceed £182. No pension is payable if the value of property is £4,750 or more.

" Income " includes earnings and any other form of income derived from any source, with certain exceptions.

The main exceptions are—Income from property ; gifts or allowances from children ; payments, other than annuities, by way of benefit from friendly societies ; payments for children ; Commonwealth health benefits ; and amounts received from registered benefit organizations.



For means test purposes up to 10s. a week of a claimant's income may be disregarded for each dependent child under sixteen.

"Property" includes all real and personal property, e.g., money, bonds, shares, real estate. The value of the claimant's home in which he lives permanently is disregarded in determining his eligibility for pension. The surrender value of life insurance policies (up to £750) and certain other types of property are also exempt.

*Married Persons:* For married couples, except where they are separated or in other special circumstances, the income and property of each is taken to be half the combined income and property of both, even if only one of the couple is a pensioner or claimant. The pension is then assessed as for a single person.

*Numbers, &c.:* On 30th June, 1961, there were 562,790 age pensioners in the Commonwealth. Of these, 385,519 or 68·5 per cent. were women and 177,271 or 31·5 per cent. were men.

The number of pensioners has grown considerably since the scheme was introduced. A larger population and an increasing number of people in the pensionable age groups have contributed to this, as have liberalizations of the qualifying conditions, particularly those connected with the means test.

The proportion of age pensioners in the pensionable age groups also shows a long-term increase. The percentages at the various censuses were—1911, 32·0; 1921, 32·1; 1933, 32·5; 1947, 37·5; 1954, 42·1. At 30th June, 1961, the estimated percentage was 51·1.

### *Invalid Pensions*

The original pensions legislation (introduced in 1910) contained provisions for invalid as well as age pensions, and, though some of the qualifying conditions necessarily differ, the two schemes have always had many common characteristics. This applies more particularly to the means test provisions.

As with age pensions, the conditions governing invalid pensions have changed over the years, but there have always been fundamental requirements connected with age, incapacity, residence, nationality, income, and property.

The main features of invalid pensions legislation are—

*Age:* Qualifying age is sixteen years or over.

*Incapacity:* To qualify, a person must be permanently incapacitated for work to the extent of at least 85 per cent., or permanently blind.

*Residence* : A person must have lived in Australia at any time continuously for a period of five years. If he became permanently incapacitated or blind outside Australia, except during a temporary absence, ten years' continuous residence is necessary. But if he has completed five years' but not ten years' continuous residence, and has lived in Australia for periods which, in total, exceed ten years he may be eligible. Residence in New Zealand or the United Kingdom may be treated as residence in Australia. Certain absences do not affect eligibility.

*Nationality*: As for age pensions.

*Rate of Pension*:

*Means Test* :

*Supplementary Assistance*:

} As for age pensions, except for blind persons.

*Blind Persons* : All permanently blind persons, qualified in other respects, receive a pension of £5 5s. a week and child's allowance of 15s. a week free of the means test. Payment of wife's allowance, the extra pension of 10s. for each child after the first and supplementary assistance are subject to the means test. There are limits to the amount a blind person may receive from invalid and war pensions.

*Numbers, &c.*: At 30th June, 1961, there were 88,642 invalid pensioners in Australia, comprising 47,204 men and 41,438 women.

With a growing population and with changes in eligibility conditions, numbers of invalid pensioners have also increased since the inception of the programme.

The percentage of invalid pensioners in the population at June, 1961, was 0·84.

The following table giving data for Victoria illustrates the growth in numbers of and expenditure on age and invalid pensioners during the past ten years :—

#### VICTORIA—AGE AND INVALID PENSIONS

Year Ended 30th June—	Pensioners*			Total Payments †
	Age	Invalid	Total	
1952 .. ..	87,845	13,973	101,818	£'000 14,449
1953 .. ..	93,353	15,019	108,372	17,476
1954 .. ..	98,210	15,882	114,092	19,978
1955 .. ..	106,406	17,074	123,480	21,527
1956 .. ..	112,649	18,113	130,762	24,836
1957 .. ..	118,788	19,207	137,995	26,773
1958 .. ..	123,536	20,019	143,555	29,796
1959 .. ..	128,152	21,132	149,284	31,645
1960 .. ..	136,098‡	17,546‡	153,644	35,935
1961 .. ..	143,636	19,434	163,070	38,734

\* Before 1957, excludes pensioners in benevolent homes.

† Includes allowances for wives and children of invalid pensioners.

‡ By statistical adjustment 4,843 pensions were corrected from Invalid to Age Pensions during 1959-60.

*Funeral Benefits*

A funeral benefit of £10 is payable to the person who has paid, or is liable to pay, the cost of the funeral of an age or invalid pensioner. The rate of benefit has been unchanged since its inception in 1943.

*Widows' Pensions*

These pensions were introduced on a Commonwealth-wide basis in 1942. There have been some changes in conditions but, like age and invalid pensions, widows' pensions have always been subject to residential and nationality qualifications and to a means test on income and property. They are payable to widows and other women in several classes.

The main features of the programme are—

*Classes:* The various classes of women provided for are—

Class A.—A widow who has one or more children under sixteen years in her care.

Class B.—A widow, not less than 50 years of age, who has no children ; or a widow who is at least 45 years of age when the Class A pension ceases because she no longer has a child in her care.

Class C.—A widow, under 50 years of age, who has no children, but who is in necessitous circumstances within the 26 weeks following her husband's death. If the widow is pregnant, payment may continue until the birth of her child when she may qualify for a Class A pension.

For Classes A and B, the term "widow" includes 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 qualify for A, B or C Class pensions.

A Class A widow may continue to receive her pension until her child is eighteen, if the child is a full-time student, is not employed, and is dependent on her.

*Residence :* Five years' residence in Australia immediately prior to claiming the pension is required. This period is reduced to one year if the woman and her husband were living permanently in Australia when he died. Certain absences count as residence.

*Nationality :* Aliens are not eligible.

*Rates of Payment* : Maximum pension rates are—

Class A.—£5 10s. a week, plus 15s. a week for each child except the first under sixteen years.

Class B.—£4 12s. 6d. a week.

Class C.—£4 12s. 6d. a week.

Widow pensioners may receive Supplementary Assistance of 10s. a week if they pay rent and are considered to depend entirely on their pensions.

*Means Test* : In general, the means test for Class A and Class B widows operates in a similar way to that for age and invalid pensioners. The maximum rate of pension is not affected unless the widow's "means as assessed" exceed £182.

A widow's "means as assessed" comprises her annual rate of income together with a property component equivalent to £1 for every complete £10 by which the value of her property is in excess of a stipulated sum. In the case of a Class B widow, £200 of property is exempt. A Class A widow has a basic exemption of £1,000 where the value of her property exceeds £2,250, but no property component is calculated where she has property of no more than £2,250 in value.

A Class A pension is not payable where a widow has property valued at £5,680 or more ; no Class B pension is payable where property is £4,430 or more.

There is no specific means test for the Class C pension which is paid where it is evident that a widow has insufficient means of support.

The definitions of "income" and "property" are the same as for age and invalid pensions.

*Women Disqualified* : These include—

- (1) A woman who is receiving a war widow's pension under the Repatriation Act because of her husband's death ;
- (2) a deserted wife or a divorcee who has not taken reasonable action to obtain maintenance from her husband or former husband.

*Numbers, &c.* : The number of widow pensioners has not varied greatly since the pension scheme was introduced. On 30th June, 1961, there were in Australia altogether 55,436 widow pensioners, of whom 24,491 were in Class A, 30,830 in Class B, and 115 in Class C. Class D (covering pensions payable to women whose husbands had been imprisoned for at least six months) was abolished in October, 1960. Widows who were in Class D were transferred to either Class A or Class B.

Numbers and expenditure in Victoria during the past ten years are shown in the table below :—

### VICTORIA—WIDOWS' PENSIONS

Year Ended 30th June—	Number of Widow Pensioners	Total Payments £'000
1952 .. .. .	10,229	1,390
1953 .. .. .	10,185	1,535
1954 .. .. .	9,838	1,567
1955 .. .. .	9,801	1,622
1956 .. .. .	10,253	1,799
1957 .. .. .	10,879	2,036
1958 .. .. .	11,252	2,331
1959 .. .. .	12,141	2,546
1960 .. .. .	12,547	2,916
1961 .. .. .	13,311	3,329

#### *Maternity Allowances*

When these were first introduced in 1912, they were paid to all mothers. During the depression years a means test was imposed, but this was abolished in 1943. The amount of allowance was increased at the same time.

The allowances are paid to mothers to help them with the expenses associated with childbirth and are additional to Commonwealth health benefits.

Current provisions are as follows :—

*Eligibility* : Mothers are entitled to the allowance if they live, or intend to live, permanently in Australia and give birth to a child in Australia. The allowance may be paid for a birth on board a ship travelling to Australia unless the mother is entitled to a similar benefit from another country. In some circumstances, an Australian who gives birth to a child while temporarily overseas is entitled to the allowance.

Payment may be made for the birth of a stillborn child, or a child which lives less than twelve hours, provided the child had developed for at least five and a half calendar months.

*Rates* : The allowance is £15 where there are no other children, £16 where the mother has one or two other children under sixteen years, or £17 10s. where she has three or more such children.

An extra £5 is paid for each additional child in multiple births.

The number of maternity allowances paid annually has increased greatly in the post-war period, reflecting the influence of the immigration programme and the increased number

of births. The total number of allowances granted in Australia in 1960-61 was 239,384, and expenditure amounted to £3,897,771.

Details of allowances paid in Victoria during the past ten years are set out in the following table :—

#### VICTORIA—MATERNITY ALLOWANCES

Year Ended 30th June—	Number Granted	Total Payments
		£'000
1952 .. .. .	52,144	836
1953 .. .. .	55,297	872
1954 .. .. .	54,219	874
1955 .. .. .	55,720	892
1956 .. .. .	58,385	935
1957 .. .. .	59,648	949
1958 .. .. .	60,666	969
1959 .. .. .	63,428	1,020
1960 .. .. .	62,853	1,008
1961 .. .. .	66,511	1,069

#### *Child Endowment*

Though there had been discussion for many years of a system of family allowances and though a Royal Commission on Child Endowment had been conducted in 1927, no Commonwealth scheme was introduced until 1941. Initially this provided for child endowment to be paid at the rate of 5s. 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.

Child endowment may now be claimed by any resident of Australia who has the custody, care, and control of one or more children. There is no means test.

Usually the mother makes the claim and receives the payments. There are special arrangements to meet cases where families are divided by divorce, separation, or death of parents.

The main provisions are :—

*Residence* : Twelve months' residence is required if the mother and the child were not born in Australia. This requirement is waived if the Department of Social Services is satisfied that they are likely to remain in Australia permanently.

Under certain conditions endowment may be continued while the mother is temporarily overseas.

*Nationality* : Where the child's father is not a British subject, endowment is payable if the child was born in Australia, if the mother is a British subject, or if the Department is satisfied that the child is likely to remain permanently in Australia.

*Rates* : The amount of endowment is 5s. a week for the first or only child under sixteen in a family, and 10s. a week for each other child under sixteen. Endowment of 10s. a week is paid for each child in an approved institution.

Following demographic trends and migration influences, the number of endowed families and children has increased considerably in recent years. The total number of endowed families in the Commonwealth on 30th June, 1961, was 1,501,180, and the number of endowed children in families was 3,313,225. There were also 27,077 endowed children in institutions. Expenditure for the year 1960-61 was £74,302,614.

The following table gives details of endowment payments in Victoria since 1957 :—

#### VICTORIA—CHILD ENDOWMENT

Year Ended 30th June—	Number of Endowed Families	Number of Endowed Children in Families	Number of Endowed Children in Institutions	Total Payments
				£'000
1957 ..	373,121	791,026	4,852	15,169
1958 ..	383,926	818,258	5,032	15,719
1959 ..	396,476	851,489	5,041	18,369*
1960 ..	403,934	874,014	5,365	16,963
1961 ..	411,744	900,153	5,761	20,344*

\* There were five twelve-weekly payments made to the credit of bank accounts instead of the usual four during these years.

#### *Unemployment and Sickness 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. There are no nationality requirements. 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 following is an outline of the main features :—

*Age* : Men, sixteen to 65 years ; women, sixteen to 60 years. Special benefits may be granted in certain cases (see next page).

*Residence* : Twelve months' residence in Australia immediately prior to the date of claim is required, or evidence of intention to reside in Australia permanently.

*Other Qualifications* :

- (1) *Unemployment Benefit*.—To receive this benefit a person must (a) be unemployed and show that his unemployment is not due to his being a direct participant in a strike ; (b) be capable and willing to undertake suitable work ; and (c) have taken reasonable steps to obtain work. Registration with the Commonwealth Employment Service is necessary.
- (2) *Sickness Benefit*.—To receive this benefit a person must be temporarily incapacitated for work because of sickness or accident, and have suffered a loss of income as a result.

A married woman is usually not qualified to receive sickness benefit in her own right if it is reasonably possible for her husband to maintain her. If her husband is able to maintain her only partially, some benefit may be paid.

*Rates of Benefit* : Maximum weekly benefit for an adult or a married minor is £4 2s. 6d.; unmarried minors are paid at lower rates. An additional £3 a week is paid for a dependent spouse, and 15s. for each qualifying child.

*Effect of Income* : Income of up to £2 a week in the case of adults and married minors, and £1 a week in the case of unmarried minors does not affect the rate of benefit. If income exceeds these amounts, the benefit is reduced by the amount of the excess.

“Income” includes earnings and any other form of income. For unemployment benefit, the income of the spouse is also taken into account.

Certain types of income are exempt, e.g., child endowment, war pension, Commonwealth health benefits.



*Special Benefits* : This benefit may be granted to a person not qualified for an unemployment or sickness benefit if, because of age, physical or mental disability or domestic circumstances, or for any other reason, he is unable to earn a sufficient livelihood for himself and his dependants. Maximum rate is the same as for unemployment or sickness benefit.

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 1960-61, a total of 161,113 unemployment benefits were granted, and on 30th June, 1961, there were 54,254 persons receiving benefit. Comparable figures for Victoria were 32,126 and 16,089.

The number of sickness benefits shows little variation from year to year. Altogether 58,184 grants of sickness benefits were made in Australia during 1960-61 (13,809 in Victoria), and there were 8,536 persons on benefit at the end of the year (2,121 in Victoria). Total expenditure in the Commonwealth on unemployment, sickness, and special benefits in 1960-61 was £7,139,918 ; expenditure in Victoria during the same period was £1,671,549.

The table which follows gives details of the numbers of persons to whom social service benefits (unemployment, sickness, and special benefits) have been granted, and the amount paid in such benefits for each of the five years 1956-57 to 1960-61 :—

VICTORIA—SOCIAL SERVICES : UNEMPLOYMENT,  
SICKNESS, AND SPECIAL BENEFITS

Year	Number Admitted to Benefit (Year Ended 30th June)			Number Receiving Benefit (At 30th June)			Amount Paid in Benefits (Year Ended 30th June)		
	Un- employ- ment	Sick- ness	Special*	Un- employ- ment	Sick- ness	Special*	Un- employ- ment	Sick- ness	Special†
1956-57	23,938	11,750	8,938	5,073	1,545	531	531	£'000 339	155
1957-58	26,378	12,485	6,474	6,899	1,861	593	1,012	406	222
1958-59	24,501	13,288	9,763	6,013	1,972	1,211	1,224	509	187
1959-60	17,635	13,672	11,139	3,676	2,082	793	936	546	202
1960-61	32,126	13,809	10,435	16,089	2,121	1,854	896	542	234

\* Includes migrants in reception and training centres.

† Includes amounts paid to migrants in reception and training centres.

### *Rehabilitation*

The Commonwealth Rehabilitation Service is one of the more recent additions to the social security programme. In 1941, a limited scheme for the vocational training of invalid pensioners was introduced. Following war-time developments in the training of disabled ex-servicemen, a comprehensive civilian rehabilitation service was begun in 1948. Its general aim is to restore disabled men and women to a state of fitness enabling them to earn their own living and to lead independent, useful lives. Rehabilitation may be effected through medical and hospital treatment, physiotherapy, remedial physical training, occupational therapy, vocational training, and job placement.

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 remediable (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.

Disabled persons who cannot qualify for the free service may pay for rehabilitation themselves or may be sponsored by governmental or private organizations.

During 1960-61, 1,402 persons were accepted for rehabilitation, 287 of them being in Victoria ; 1,070 were placed in employment, 203 of them being in Victoria. Expenditure on rehabilitation in Victoria during the year was £203,159.

### *Reciprocal Agreements*

The Social Services Act provides, *inter alia*, 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 the United Kingdom.

The general basis of these agreements is that residence in New Zealand or the United Kingdom 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.

### Hospital Benefits Scheme

#### Public Hospitals

The existing agreement between the Commonwealth and the State, for the provision of financial assistance by the Commonwealth to the State for persons treated in public hospitals, is authorized by the *Commonwealth National Health Act 1953-1961* and the *Victorian Hospital Benefits Act 1958*.

For the year ended 30th June, 1961, total payments by the Commonwealth to the State amounted to £2,269,308 of which £1,685,022 was for public hospitals. On 1st July, 1948, the Hospital Benefits rate was increased from 6s. to 8s. per day. The rate for pensioners or their dependants, enrolled under the Pensioners' Medical Service and who do not contribute to a Hospital Benefits organization, is 12s. per day.

#### Private Hospitals

The agreement mentioned above was confined wholly to public hospitals, but the Commonwealth Act also provides for the payment of hospital benefits, at such rates and subject to such conditions as are prescribed, for patients in private hospitals.

Such regulations, which are administered in Victoria by the Commonwealth Department of Health, provide for hospital benefits at the rate of 8s. per day, to be allowed as a deduction from the hospital accounts of qualified patients in approved hospitals.

Payments made to private hospitals in Victoria, under the scheme, during the year ended 30th June, 1961, amounted to £584,286.

The following table shows the hospital benefit payments by the Commonwealth Government to the State on account of Victorian hospitals :—

VICTORIA—HOSPITAL BENEFIT PAYMENTS  
(£'000)

Payments on Account of—	1956-57	1957-58	1958-59	1959-60	1960-61
Public Hospitals ..	1,441	1,517	1,594	1,597	1,685
Private Hospitals ..	485	490	510	523	584
Total ..	1,926	2,007	2,104	2,120	2,269

#### Additional Benefits

Commonwealth Statutory Rules No. 119 of 11th October, 1951, introduced an Additional Benefit of 4s. per day (i.e., additional to the 8s. per day mentioned before) payable to public hospital patients and "approved" private hospital patients who are "qualified" and are contributors to a registered Hospital Benefits organization. The Additional Benefits are paid by the Hospital Benefits organizations which are reimbursed by the Commonwealth.

On 1st January, 1958, Additional Benefit was increased to 12s. per day where a qualified patient contributed for a fund benefit of not less than 16s. per day.

As from 1st January, 1959, the Commonwealth guaranteed "Special Accounts" of registered organizations. These accounts provide cover under certain conditions for persons (a) 65 years of age and over, or (b) whose illness or disability was in evidence prior to becoming contributors or during qualifying periods, or (c) suffering from chronic complaints, or (d) where maximum fund benefits have been paid.

The Additional Benefits are payable to the patient who is a contributor of a Benefit organization.

### *Pharmaceutical Benefits*

Under the provisions of the *Commonwealth National Health Act* 1953-1961, the Commonwealth reimburses, through the State, the cost of pharmaceutical benefits supplied free of charge to all patients in public hospitals and mental institutions.

Payments to hospitals, benevolent, and mental institutions for the year ended 30th June, 1961, totalled £1,294,034.

## **Social Welfare Department**

### *General*

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 hitherto exercised by the Children's Welfare Department and the Penal Department are now absorbed by the new Branch and a number of significant additional functions have been introduced. These have then been re-aligned and re-grouped into divisions.

In addition to a central administration which is primarily responsible for the whole Branch, there are the following divisions: Family Welfare, Youth Welfare, Prisons, Research and Statistics, Training, and Probation and Parole. The functions of each division are defined in the Social Welfare Act and are summarized below.

### *Family Welfare Division*

This division is responsible for all functions promoting and maintaining family welfare and for child care within the meaning of the *Children's Welfare Act* 1958. It provides family counselling, family assistance, and child care for children up to the age of fourteen years.

It maintains reception centres for children in need of care and protection and is responsible for State wards, many of whom are placed in foster care with individuals or in approved children's homes maintained by numerous voluntary organizations. It maintains family group homes and small specialized institutions for children in need of specialized care.

Regional centres will be developed throughout the State so that local assistance will be readily available for families in these areas. The first of these is now in existence at Ballarat, and one is being planned at Mildura. Considerable emphasis is to be given to the maintenance of family units wherever possible, as it is clear that early preventive work will be more effective than later remedial measures.

This division has the benefit of advice from the Family Welfare Advisory Council. This Council of twelve members is representative of various voluntary agencies and its members are all closely associated with community work in family welfare.

#### *Youth Welfare Division*

This division is responsible for all functions promoting youth welfare in the community. In addition to what may be described as normal youth activity, it will be responsible for institutions known as Youth Training Centres for delinquent youths aged 14 to 21 years.

It maintains remand and training centres (Turana and Winlaton), and a training centre is to be established at Malmsbury.

All delinquents aged 14–17 hitherto under the care of the Children's Welfare Department, and many offenders aged 17–21 hitherto under the care of the Penal Department, will come under the Youth Welfare Division. However, until Malmsbury is established, the sections of the Act relating to the 17–21 age group will not be proclaimed.

This division has the benefit of advice from the Youth Advisory Council. The Director of Youth Welfare is a member of this Council and one of its functions is to advise the Government on the distribution of funds in the Youth Organizations Assistance Fund.

#### *Prisons Division*

This division is responsible for the control of all prisons (see pages 297 to 300).

#### *Research and Statistics Division*

This division conducts research into social welfare problems. It co-operates with non-governmental research projects and supervises any investigations made in relation to such projects within the departmental organization or institutions.

It supervises the preparation of statistics for all divisions and the collation of all material for issue from the Branch.

#### *Training Division*

Under the *Social Welfare Act 1960* a Social Welfare Training Council is established. The twelve members include the Superintendent of Training, the Director of Family Welfare, the Director of Youth Welfare, the Director of Prisons, representatives of the University of Melbourne and the Department of Education, and persons experienced in the field of social work training.

The Council will provide courses available to persons engaged in social work in governmental and non-governmental agencies.

A very wide range of subjects and courses will be provided and personnel to be covered include staff of State and non-State children's homes, staff of State and non-State Youth Training Centres, staff of prisons, youth leaders in various organizations, honorary and stipendiary probation officers, parole officers, and social workers in specialized fields. Examinations will be conducted and certificates issued.

In addition, the Training Division is responsible for educational programmes in all institutions in the Branch. This includes physical and recreational education, as well as academic and vocational training for all persons in the care of the Department.

The Division will establish and control a central reference library and institutional and circulating libraries throughout the Branch.

#### *Probation and Parole Division*

This division is responsible for all work relating to probation under the *Children's Court Act 1958* and the *Crimes Act 1958*. The probation services available to Children's Courts have been greatly augmented.

It is also responsible for the supervision of trainees on parole from Youth Training Centres and of prisoners on parole from prisons.

Under the *Social Welfare Act 1960* a Youth Parole Board has been established with power to release on parole any trainee from any youth training centre. Under the *Crimes Act 1958* a Parole Board was established with power to release on parole any prisoner after the expiration of the minimum term set by the Supreme Court. Further information on Probation and Parole will be found on pages 300-301 and 328 to 330.

#### *Development of Branch*

The Act was passed in June, 1960. In July, 1960, the provisions of the Act relating to headquarters administration, the Prisons Division, the Research and Statistics Division, and the Training Division were proclaimed; in December, 1960, those provisions relating to the Probation and Parole Division, and in July, 1961, those relating to the Family and Youth Welfare Divisions, and the Youth Parole Board, were proclaimed. Only two sections (38(i) and 57(a)) now remain to be proclaimed; these apply to the 17-21 age group in relation to committal or transfer to youth training centres.

Future statistical information for all divisions will be on a financial year basis, rather than the calendar year as before. The following tables deal with the activities of the Children's Welfare Department

for 1959, 1960, and the half-year ended 30th June, 1961. (In future, amended tables will relate to the Family Welfare and Youth Welfare Divisions.)

VICTORIA—REASONS FOR ADMISSIONS AND COMMITTALS TO THE CHILDREN'S WELFARE DEPARTMENT BY THE CHILDREN'S COURTS

Particulars	1959			1960			1961—To 30th June		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
<b>Committals—</b>									
Pursuant to Section 28, Children's Court Act—									
Larceny and stealing	33	..	33	40	3	43	15	1	16
Breaking and entering (shops, houses, factories, &c.) ..	47	..	47	54	..	54	20	1	21
Illegally using*	55	..	55	68	1	69	38	1	39
Miscellaneous ..	23	..	23	28	..	28	24	..	24
<b>Total Committals</b>	<b>158</b>	<b>..</b>	<b>158</b>	<b>190</b>	<b>4</b>	<b>194</b>	<b>97</b>	<b>3</b>	<b>100</b>
<b>Admissions—</b>									
Pursuant to Section 16, Children's Welfare Act—									
Found wandering or abandoned ..	8	4	12	14	7	21	10	8	18
No means of support or no settled place of abode ..	121	97	218	113	77	190	85	67	152
Not provided with proper food, nurs- ing, clothing, or medical aid ..	63	61	124	87	68	155	37	32	69
In care and custody of persons who are unfit guardians ..	84	66	150	52	54	106	26	26	52
Lapsing or likely to lapse into a career of vice or crime..	175	35	210	217	52	269	107	17	124
Exposed to moral danger .. ..	2	31	33	3	46	49	..	29	29
Truancy .. ..	11	4	15	9	3	12	..	..	..
Other .. ..	1	1	2	..	..	..	..	..	..
Pursuant to Section 19, Children's Welfare Act—									
Uncontrollable ..	15	4	19	19	4	23	15	4	19
<b>Total Admissions..</b>	<b>480</b>	<b>303</b>	<b>783</b>	<b>514</b>	<b>311</b>	<b>825</b>	<b>280</b>	<b>183</b>	<b>463</b>
<b>Total number of children made wards of State through Victorian Chil- dren's Courts .. ..</b>	<b>638</b>	<b>303</b>	<b>941</b>	<b>704</b>	<b>315</b>	<b>1,019</b>	<b>377</b>	<b>186</b>	<b>563</b>

\* e.g. Motor Vehicles

### VICTORIA—CHILDREN BECOMING WARDS OF THE CHILDREN'S WELFARE DEPARTMENT

Particulars	1959			1960			1961— To 30th June		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Court Committals (Children's Court Act)—									
Section 28—Offences—									
To Children's Welfare Department ..	32	..	32	48	..	48	21	1	22
To Juvenile School ..	126	..	126	142	4	146	76	2	78
Court Admissions (Children's Welfare Act)—									
Section 16—Protection Applications ..	465	299	764	495	307	802	265	179	444
Section 19—Uncontrollable Applications ..	15	4	19	19	4	23	15	4	19
Admissions on Application to Department (Children's Welfare Act) ..	141	84	225	126	100	226	66	66	132
Total Admissions and Committals	779	387	1,166	830	415	1,245	443	252	695

### VICTORIA—LOCATION OF WARDS OF CHILDREN'S WELFARE DEPARTMENT

At 31st December—	Boarded Out in Foster Homes	In Foster Homes with a View to Legal Adoption	Placed, without Payment, with Relatives or Foster Parents	In Departmental Institutions	In Non-Departmental Institutions	In Government Subsidized Hostels	Under Employment Agreement	Total
1957 ..	492	67	537	376	1,893	90	135	3,590
1958 ..	463	62	667	432	2,123	105	99	3,951
1959 ..	665	52	743	538	2,151	81	116	4,346
1960 ..	711	78	1,044	568	2,178	80	116	4,775
1961 .. (At 30th June)	734	127	1,053	561	2,387	81	107	5,050

#### *Allowances for Children in Necessitous Circumstances*

Part V. of the *Children's Welfare Act* 1958 enables a parent or any other person having care and custody of any child, who is without sufficient means of support for such child, and is unable by any available legal proceedings to obtain sufficient means of support for such child, to apply in the prescribed form to the Director-General of Social Welfare for a weekly sum towards the child's maintenance. "Child" means any person under the maximum age provided under the Education Acts at which attendance at school ceases to be compulsory, although extension to the age of sixteen is possible where the special circumstances of the case make it advisable.



The number of children in respect of whom assistance was being given at the 31st December in the years 1957 to 1960 and at 30th June, 1961, and the total amount of such assistance paid in each year, are shown in the following table :—

**VICTORIA—CHILDREN'S WELFARE ACT (PART V.) :  
ALLOWANCES PAID**

Period	Number of Children Assisted At End of Period	Total Amount of Assistance Payments During Period
		£
1957 .. .. .	3,659	161,608
1958 .. .. .	4,446	199,119
1959 .. .. .	4,847	235,036
1960 .. .. .	4,881	242,306
1961 (To 30th June) .. .. .	6,161	131,188

*Infant Life Protection*

Part VII. of the Children's Welfare Act (Infant Life Protection) provides that no person shall, for payment or reward, retain in or receive into her charge in any house, any infant under the age of five years for the purpose of rearing, nursing, or maintaining such infant apart from its parents, unless such person and such home are registered by the Department. The provisions of this Part do not apply to a hospital or to an educational establishment. Where the infant is in the care of a relative, exemption may be made by the Minister.

Where payments which are required to be made through the Department fall into arrears for a period of four weeks, the child becomes a ward of the Social Welfare Branch.

The following is a statement of the operations of this Part for the years 1957 to 1960, and the half-year ended 30th June, 1961 :—

**VICTORIA—CHILDREN'S WELFARE ACT : CHILDREN  
UNDER INFANT LIFE PROTECTION PROVISIONS**

Particulars	1957	1958	1959	1960	1961
Children Already Placed at 1st January	236	215	233	256	258
Children Placed during Year (Half Year for 1961) .. .. .	576	588	619	670	301
Children under Supervision at 31st December (30th June for 1961) ..	215	233	256	258	268

*Finance*

The financial operations of the Children's Welfare Department for the years ended 31st December, 1959, 1960, and for the period 1st January, 1961 to 30th June, 1961, are shown below :—

**VICTORIA—CHILDREN'S WELFARE DEPARTMENT :  
RECEIPTS AND EXPENDITURE**

(£)

Particulars	1959	1960	1961 (To 30th June)
<b>RECEIPTS</b>			
Payments by Parents of Wards ..	44,198	49,199	18,528
Child Endowment .. .. .	12,146	13,257	2,842
Miscellaneous Receipts .. ..	2,574	6,197	2,580
<b>Gross Receipts .. .. .</b>	<b>58,918</b>	<b>68,653</b>	<b>23,950</b>
<b>EXPENDITURE</b>			
Boarded-out Children (Foster Homes)	63,857	87,698	51,608
Boarded-out Children (Children's Homes) .. .. .	280,483	332,951	182,763
Juvenile Schools .. .. .	35,775	34,595	27,539
Departmental Establishments ..	379,040	404,521	251,966
Hostels .. .. .	7,694	8,717	4,113
Clothing Outfits .. .. .	9,247	11,152	3,749
Maintenance of Children in Necessitous Circumstances .. .. .	235,036	242,306	131,188
Migrant Children .. .. .	2,778	1,757	729
General Maintenance Items .. ..	18,429	12,960	6,667
Administration .. .. .	119,444	161,794	92,204
<b>Gross Expenditure .. .. .</b>	<b>1,151,783</b>	<b>1,298,451</b>	<b>752,526</b>
<b>Net Expenditure .. .. .</b>	<b>1,092,865</b>	<b>1,229,798</b>	<b>728,576</b>

*Prisons Division*

Victoria has ten prisons for males and one for females. In addition, in some country centres, police gaols are used for short sentences not exceeding thirty days.

Pentridge is the main central prison, and a classification centre established there enables the Classification Committee to classify prisoners and transfer them to the most appropriate institution. In addition, there are separate divisions for trial and remand prisoners, a hospital and psychiatric clinic, a maximum security division, a young offenders' division, a vagrants' division, a long-term division and other general divisions.

Large-scale industries are operated, including printing, textiles, wire-netting, tailoring, shoe-making, laundry, brush-making, sheet metal, engineering, and carpentry. All manufacture is for State use. The total output of these industries for the year ending 30th June, 1961, was valued at £185,874.

At Langi Kal Kal, McLeod, and Beechworth, large-scale farming is practised. At Beechworth, a large pine plantation has been developed. At Coorimungle, forest land is cleared and farms established for settlement under the Lands Settlement Act. At Morwell River, a re-forestation project is being developed in conjunction with the Forests Commission.

In all prisons extensive educational services have been established with teachers provided by the Education Department and trade instructors and voluntary helpers. The Superintendent of Training has developed academic education, vocational training and recreational training, whilst full-time Chaplains are responsible for spiritual training.

The activity programme of all prisons is specifically designed to encourage the fullest participation by inmates, so that every prisoner has the opportunity to leave prison better equipped to live in the community than when he entered prison.

The following statement contains information relating to gaols (excluding police gaols) in Victoria for the year ended 30th June, 1961 :—

**VICTORIA—GAOL ACCOMMODATION AND PRISONERS,  
1960–61**

Institution	Number of Prisoners							
	Accommodation		Daily Average		Total Received (Including Transfers)		In Confinement at 30th June, 1961*	
	Males	Females	Males	Females	Males	Females	Males	Females
Pentridge .. ..	1,150	..	1,127	..	10,770	..	1,171	..
Ballarat .. ..	72	..	56	..	359	..	62	..
Beechworth Training Prison .. ..	115	..	106	..	133	..	110	..
Bendigo Training Prison	120	..	100	..	121	..	117	..
Castlemaine .. ..	115	..	106	..	241	..	112	..
Coorimungle Prison Farm .. ..	49	..	46	..	71	..	50	..
Geelong Training Prison	130	..	119	..	486	..	120	..
Sale .. ..	38	..	24	..	275	..	31	..
McLeod Prison Farm (French Island) ..	102	..	95	..	99	..	99	..
Langi Kal Kal Training Centre .. ..	64	..	60	..	101	..	60	..
Fairlea Female Prison	..	100	..	36	..	694	..	33
<b>Total .. ..</b>	<b>1,955</b>	<b>100</b>	<b>1,839</b>	<b>36</b>	<b>12,656</b>	<b>694</b>	<b>1,932</b>	<b>33</b>

\* Including 135 males and three females awaiting trial.

The number of prisoners received at and discharged from the gaols (excluding police gaols) in Victoria is given in the following table for the years 1957 to 1959, for the period 1st January, 1960 to 30th June, 1960, and for the year ended 30th June, 1961 :—

VICTORIA—PRISONERS RECEIVED AT AND DISCHARGED FROM GAOLS  
(Exclusive of Police Gaols)

Particulars	Year Ended 31st December—			Six Months Ended 30th June, 1960	Year Ended 30th June, 1961
	1957	1958	1959		
Number in Confinement at Beginning of Period—					
Convicted .. .. .	1,462	1,461	1,397	1,539	1,678
Awaiting Trial .. .. .	102	111	99	139	158
Total .. .. .	1,564	1,572	1,496	1,678	1,836
Received during Period—					
Convicted of Felony, Misdemeanour, &c. .. .. .	7,749	9,322	8,462	4,425	8,887
Transfers from—					
Other Gaols .. .. .	1,269	1,187	1,145	574	1,178
Hospitals, Asylums, Reformatory Schools, &c.* .. .. .	53	35	81	50	77
For Trial, not Subsequently Convicted .. .. .	3,582	2,626	2,261	1,332	2,610
For Trial, Released on Bond or Probation .. .. .			320	121	374
Returned on Order .. .. .	88	149	188	99	224
Total .. .. .	12,741	13,319	12,457	6,601	13,350
Discharged during Period .. .. .	12,733	13,395	12,275	6,443	13,221
Number in Confinement at End of Period—					
Convicted .. .. .	1,461	1,397	1,539	1,678	1,827
Awaiting Trial .. .. .	111	99	139	158	138
Total .. .. .	1,572	1,496	1,678	1,836	1,965

\* Since 1st July, 1957, reformatories ceased to exist under the *Penal Reform Act 1956*.

The following table shows the number of prisoners under sentence at the end of each of the years 1957 to 1959, at 30th June, 1960, and 30th June, 1961 :—

VICTORIA—PRISONERS UNDER SENTENCE

At 31st December—	Males	Females	Total	Number per 10,000 of Population
1957 .. .. .	1,428	33	1,461	5·45
1958 .. .. .	1,373	24	1,397	5·09
1959 .. .. .	1,504	35	1,539	5·47
1960 (At 30th June) .. .. .	1,649	29	1,678	5·87
1961 (At 30th June) .. .. .	1,797	30	1,827	6·23

A statement is given below of the daily average number of prisoners in detention in the gaols of the State in each of the years 1957 to 1959, for the period 1st January, 1960 to 30th June, 1960, and for the year ended 30th June, 1961 :—

VICTORIA—DAILY AVERAGE NUMBER OF PRISONERS IN CONFINEMENT

Year	Daily Average Number of Prisoners in Confinement		
	Males	Females	Total
1957 .. .. .	1,537	46	1,583
1958 .. .. .	1,493	40	1,533
1959 .. .. .	1,534	37	1,571
1960 (To 30th June) .. .. .	1,694	33	1,727
1960-61 .. .. .	1,839	36	1,875

*Probation and Parole Division*

*Probation*

Probation is an alternative to imprisonment and offenders may be admitted to probation for any offence for any period up to five years.\*

The Probation Service prepares pre-sentence reports for courts if required. For the year ended 30th June, 1961, there were 271 of these reports prepared, 15 for the Supreme Court, 182 for General Sessions Courts, and 74 for Petty Sessions Courts.

During the same year, 1,375 persons were placed on probation. Of these, 1,289 were males and 86 females; 1,087 were in the Metropolitan Area, and 288 in country areas.

Of these 1,375, 42 were admitted to probation by the Supreme Court, 437 by General Sessions Courts, and 896 by Petty Sessions Courts. There were 215 under the age of 18, 241 aged 18, 191 aged 19, and 112 aged 20. The remaining 616 were 21 years of age or over.

At the 1st July, 1960, 2,580 persons were on probation. During the year, 846 completed their probation and 139 breached their probation, leaving 2,970 persons still on probation at 30th June, 1961.

\* Details of probation are set out on pages 328 to 330.

*Parole*

The Parole Board's major function is to implement the parole provisions of the Crimes Act which are set out on pages 328 to 330.

The following table shows particulars of Parole Board cases for the years ended 30th June, 1959, 1960, and 1961 :—

## VICTORIA—PAROLE BOARD CASES

Particulars	Year Ended 30th June—					
	1959		1960		1961	
	Males	Females	Males	Females	Males	Females
Prisoners Released on Parole .. .. .	648	12	679	7	716	7
Prisoners Sentenced to Preventive Detention .. .. .	..	..	1	..	..	..
Parolees Returned to Gaol—						
Parole Cancelled by Re-conviction .. .. .	120	1	155	..	185	1
Parole Cancelled by Parole Board .. .. .	21	..	18	1	67	..
Successful Completion of Parole during Year	309	7	408	8	432	4

**Friendly Societies**

The law dealing with friendly societies is contained in the *Friendly Societies Act 1958*. An amending Act of 1960 makes provision for the reimbursement of moneys paid for dental treatment to a member, his wife, children, or dependants and for the establishment by societies of dental clinics.

The historical development and benefits paid by friendly societies are set out on pages 277 to 281 of the Victorian Year Book 1961.

The tables which follow contain information about friendly societies in Victoria (excluding dispensaries and specially authorized societies) for the three years 1958–59 to 1960–61. There are juvenile branches connected with some of the societies, but the information about these has not been considered of sufficient importance to be included below.

## VICTORIA—FRIENDLY SOCIETIES : MEMBERSHIP

Particulars	Year Ended 30th June—		
	1959	1960	1961
Number of societies .. .. .	146	145	142
Number of branches .. .. .	1,253	1,223	1,197
Number of sick, funeral, and whole life and endowment assurance benefit members, the majority of whom also contribute for medical and hospital benefits .. .. .	171,834	170,466	168,058
Number of members contributing for medical and hospital benefits only .. .. .	75,739	85,345	93,642
Number of honorary members (no benefit) .. .. .	3,444	3,515	3,490
Number of members who received sick pay .. .. .	32,756	30,877	28,598
Weeks for which sick pay was allowed .. .. .	459,496	458,732	443,520
Deaths of sick and funeral benefit members .. .. .	2,578	2,456	2,421
Deaths of wives and widows entitled to funeral benefits .. .. .	873	782	799

**VICTORIA—FRIENDLY SOCIETIES : RECEIPTS AND  
EXPENDITURE**  
(£'000)

Particulars	Year Ended 30th June—		
	1959	1960	1961
<b>RECEIPTS</b>			
Sick and Funeral Funds and Whole Life and Endowment Assurance Funds .. ..	631	647	702
Medicine and Management Funds .. ..	391	430	424
Medical Services Funds .. .. ..	1,427	1,609	1,781
Hospital Benefit Funds .. .. ..	696	846	1,198
Other Funds .. .. ..	381	409	512
Less Inter-Fund Transfers .. ..	213	234	290
<b>Total Receipts .. .. .</b>	<b>3,313</b>	<b>3,707</b>	<b>4,327</b>
<b>EXPENDITURE</b>			
Sick and Funeral Funds and Whole Life and Endowment Assurance Funds .. ..	460	454	542
Medicine and Management Funds .. ..	368	406	425
Medical Services Funds .. .. ..	1,366	1,603	1,719
Hospital Benefit Funds .. .. ..	581	754	1,025
Other Funds .. .. ..	285	326	338
Less Inter-Fund Transfers .. ..	213	234	290
<b>Total Expenditure .. .. .</b>	<b>2,847</b>	<b>3,309</b>	<b>3,759</b>
<b>Excess of Receipts over Expenditure ..</b>	<b>466</b>	<b>398</b>	<b>568</b>

**VICTORIA—FRIENDLY SOCIETIES : FUNDS**  
(£'000)

Funds	At 30th June—		
	1959	1960	1961
Sick and Funeral Funds and Whole Life and Endowment Assurance Funds .. ..	7,635	7,828	7,989
Medicine and Management Funds .. ..	503	527	526
Medical Services Funds .. .. ..	712	717	780
Hospital Benefit Funds .. .. ..	499	592	764
Other Funds .. .. ..	1,877	1,960	2,133
<b>Total Funds .. .. .</b>	<b>11,226</b>	<b>11,624</b>	<b>12,192</b>

The following table shows the amounts disbursed by societies (excluding specially authorized societies) in sick pay, funeral and mortuary benefits, endowments, medical services, medicine, and hospital benefits during each of the years 1958-59 to 1960-61 :—

**VICTORIA—FRIENDLY SOCIETIES: AMOUNTS DISBURSED  
IN BENEFITS**  
(£'000)

Nature of Benefit	Year Ended 30th June—		
	1959	1960	1961
Sick Pay .. .. .	273	269	263
Funeral and Mortuary .. .. .	78	82	79
Endowment .. .. .	25	30	23
Medical Services—Society Benefit .. .. .	601	751	808
—Government Subsidy .. .. .	598	669	698
Hospital—Society Benefit .. .. .	337	457	612
—Government Subsidy .. .. .	165	204	268
Medicine .. .. .	137	141	134

### *Dispensaries*

At the end of 1960-61 there were 35 United Friendly Societies' Dispensaries registered under the Friendly Societies Act as separate friendly societies. There was also one society consisting of these registered friendly societies. The chief object for which the dispensaries are established is to provide the societies with a means of supplying medicine and medical and surgical appliances to members and to persons claiming through members. The number of members connected with dispensaries at the end of 1960-61 was 87,099. As the greater portion of the receipts and expenditure of the dispensaries are 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 1960-61 amounted to £905,000 and £159,000 respectively.

### *Specially Authorized Societies*

At the end of 1960-61, there were four societies, registered under the Friendly Societies Act, which do not provide any of the customary benefits of friendly societies. Their registration was specially authorized under Section 6 of the Friendly Societies Act. These four societies are known as Total Abstinence Societies. Their membership at the end of 1960-61 was 97 and their assets amounted to £87,000.

### **Co-operative Societies**

In December, 1953 the Victorian Parliament passed the Co-operation Act, now the *Co-operation Act* 1958. The Act, which was proclaimed on the 2nd August, 1954, provides for the formation, registration, and management of co-operative societies which are classified into various kinds according to their objects.



Prior to the Co-operation Act coming into operation, co-operatives were registered under the Companies Act or the Industrial and Provident Societies Act.

The following kinds of societies are provided for in the Co-operation Act :—

- (1) Producers' society, which is intended in the main as an organization of producers, but is also given authority to act in many respects as a trading society;
- (2) trading society, which may carry on any business, trade, manufacture or industry specified in its rules;
- (3) community settlement society, designed to settle and retain people on the land;
- (4) community advancement society, the object of which is to provide any community service or benefit;
- (5) credit society, which may make, arrange or guarantee loans to assist members in many directions ; and
- (6) investment society, which provides a means whereby individuals with small amounts of money to invest may combine in order to secure jointly investments which might otherwise be unobtainable.

Any of these societies may, if authorized by its rules, raise money on loan. With the exception of community advancement societies and investment societies, money may also be received on deposit—again if the rules permit.

Two or more societies of the same kind may form an association to supervise the affairs of and render services to its component societies. A producers' society, which is authorized to carry on trading business, may join an association of trading societies.

Any two or more associations may form a union of associations to supervise the affairs of and render services to its component associations.

The Act designates associations and unions as societies and provides objects and powers which may be written into their rules.

The numbers and types of co-operative societies for the five years 1957 to 1961 are shown in the following table :—

**VICTORIA—CO-OPERATIVE SOCIETIES\***

Type	Number (at 30th June)				
	1957	1958	1959	1960	1961
Producer .. ..	7	6	9	22	33
Trading .. ..	19	20	21	21	26
Community Settlement ..	2	2	3	3	4
Community Advancement	16	20	28	43	63
Credit .. ..	18	26	31	39	57
Associations .. ..	1	2	2	2	2
Total .. ..	63	76	94	130	185

\* Registered under the Co-operation Act. Information regarding co-operative organizations is given on pages 714-715 of this Year Book.

The Act permits the Treasurer of Victoria to guarantee the repayment of any loan raised by a society for the implementation of its objects. To the 30th June, 1961, 32 guarantees were in force, the amount involved being £384,810.

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.

A summary of the operations of Societies for the year ended 30th June, 1961, is given in the following statement:—

**VICTORIA—SUMMARY OF OPERATIONS OF SOCIETIES REGISTERED UNDER THE CO-OPERATION ACT, 1960-61**

Society	Number	Number of Members	Liabilities		Assets
			Members' Funds	External	
				£	
Producers' Societies ..	33	12,092	652,278	452,808	1,105,086
Trading Societies ..	26	10,957	346,769	461,055	807,824
Community Settlement Societies .. ..	4	334	4,150	89,703	93,853
Community Advancement Societies ..	63	3,500	104,563	77,275	181,838
Credit Societies ..	57	6,123	32,764	303,763	336,527
Associations .. ..	2	23	407	2,134	2,541
Total .. ..	185	33,029	1,140,931	1,386,738	2,527,669

### Repatriation

#### General

The Repatriation Department is responsible for the general administration of the Repatriation Act and related legislation which provides pensions, allowances, medical care, and other benefits for entitled ex-servicemen and ex-servicewomen, and dependants, of the First World War, Second World War, the Korea-Malaya Operations, the Australian component of the British Commonwealth Strategic Reserve, and for native members of the Forces in the Territory of Papua-New Guinea and the Torres Strait Islands.

#### War and Service Pensions

War pensions are paid to ex-servicemen and ex-servicewomen who have suffered incapacity due to war service, to their eligible dependants, and to the dependants of those who have died due to war service.

Service pensions are payable to ex-servicemen who served in a theatre of war, either on reaching the age of 60 (55 in the case of an ex-servicewoman) or if they are permanently unemployable. It is also paid to ex-servicemen suffering from pulmonary tuberculosis, irrespective of the area of service. The service pension is equivalent in amount and is subject to the same means test as the Social Services age and invalid pensions.

In addition to war and service pensions, special allowances are payable in certain circumstances.

Excluding 789 war pensions to miscellaneous personnel, involving an annual liability of £108,422, there were 661,290 war pensions payable to ex-servicemen and their dependants at 30th June, 1961, with an annual liability of £58,523,373. Of this amount, £17,298,583 was payable in Victoria in respect of 190,111 war pensions. The number of service pensions in force was 50,302 with an annual liability at 30th June, 1961, of £8,343,831—Victorian liability at the same date amounted to £1,919,484 in respect of 11,902 service pensions.

Particulars of war and service pensions in Victoria for the years 1956–1957 to 1960–1961 are shown in the following table. The table shows the amount paid during each year in respect of war and service pensions, as distinct from the liability at the end of the year expressed in the previous paragraph.

#### VICTORIA—WAR AND SERVICE PENSIONS

Year Ended 30th June—	Members of Forces	Dependants—		Total	Amount Paid during Year
		Of Incapacitated Members	Of Deceased Members		
					£'000
WAR PENSIONS					
1957.. ..	58,204	101,319	14,131	173,654	13,372
1958.. ..	59,430	106,161	14,246	179,837	14,871
1959.. ..	60,389	110,156	14,430	184,975	15,201
1960.. ..	61,057	112,763	14,688	188,508	16,101
1961.. ..	61,452	113,670	14,989	190,111	18,322
SERVICE PENSIONS					
1957.. ..	6,058	2,717	492	9,267	1,090
1958.. ..	6,688	2,870	500	10,058	1,320
1959.. ..	7,230	2,950	512	10,692	1,387
1960.. ..	7,636	2,906	516	11,058	1,518
1961.. ..	8,514	2,880	508	11,902	1,731

#### Medical Care

The medical care of eligible ex-servicemen and dependants of deceased ex-servicemen is a major function of the Repatriation Department, which provides a comprehensive service. Facilities for treatment are provided through a Local Medical Officer Service in which some 5,000 doctors in private practice throughout the Commonwealth participate. In Victoria there are some 1,500 Repatriation local medical officers. During 1960–61, there were 1,794,410 visits made to or by local medical officers and of this number 617,775 visits were made in Victoria. The cost of this service in Victoria for 1960–61 was £1,119,814. In-patient treatment is provided at Repatriation General Hospital, Heidelberg, and other institutions. In certain circumstances, in-patient treatment is provided

in country hospitals at departmental expense. In Victoria, ex-servicemen suffering mental illness and requiring custodial care are accommodated at the Repatriation Hospital, Bundoora, which is owned and financed by the Commonwealth but is staffed and administered by State employees under the control of the Victorian Mental Hygiene Authority.

Out-patient treatment is provided at the out-patient clinic. Dental treatment is also available to those eligible at departmental institutions and from local dentists under the Repatriation Local Dental Officer Scheme.

Artificial limbs, surgical aids and appliances are provided for those eligible at the Repatriation Artificial Limb and Appliance Centre. In addition, artificial limbs and appliances are provided for other Commonwealth Government Departments and agencies, and to the extent that production can be made available, for State Government Departments and philanthropic organizations, and for private persons who cannot be satisfactorily fitted elsewhere.

Medical treatment is provided for all disabilities which have been accepted as due to war service and also for pulmonary tuberculosis not due to war service. In addition, and subject to certain conditions, treatment is provided for disabilities not due to war service for ex-servicemen receiving a war pension at or exceeding the maximum general (100 per cent.) rate; for nurses who served in the First World War; for widows and certain dependants of deceased ex-servicemen whose deaths are due to war service; and for ex-servicemen receiving service pensions.

These classes come under the general practitioner service and are entitled to the full range of departmental facilities for specialist examinations and opinions, and out-patient treatment (including physiotherapy, chiropody, X-rays, pathological tests, and surgical aids and appliances). They are also entitled to in-patient treatment with certain limited exceptions, such as chronic or incurable diseases requiring prolonged treatment; however, an acute or sub-acute phase of a chronic condition may be treated. They may also receive dental treatment, pharmaceutical benefits, and spectacles.

In recent years the full facilities of the Department's medical service have been extended to eligible widows and children of deceased ex-servicemen and have been granted to service pensioners on the same basis as for those who receive war pension at or above the maximum general (100 per cent.) rate.

#### *Problems of Ageing Ex-servicemen*

Provision has also been made for the care of ageing ex-servicemen, especially those who are unable any longer to fend for themselves and who require some institutional care short of the full treatment facilities of a general hospital. Vacant accommodation which has become available at the Department's sanatoria, due to the decline in the number of patients requiring treatment for pulmonary tuberculosis, has been made available to post-operative (convalescent) cases and certain categories of aged, infirm, and long-stay patients not needing

heavy nursing. Special attention is given to the needs of these patients under pleasant conditions and emphasis is placed on retraining and rehabilitation with a view to getting the patient back to work, or, if that is not possible for age or other reasons, enabling him to return and to live a reasonably normal life. This type of patient is accommodated in Victoria at the Macleod Repatriation Hospital, Mont Park.

#### *Psychiatric Work*

As part of its rehabilitation services the Department, in conjunction with the Australian Red Cross Society, conducts a Psychiatric Rehabilitation centre at the Rockingham Red Cross Home at Kew, Victoria. The Centre is operated by the Red Cross for ex-servicemen and is staffed by Repatriation medical officers. The cost of maintaining the Centre is paid by the Department.

This hospital functions as a half-way house and day-hospital for the social rehabilitation of the psychiatric patient. The patient is actively involved in a therapeutic community in which he takes part in psychotherapy, occupational therapy, dance and music therapy, social club meetings, manual arts therapy and organized games. Results have been very encouraging and many patients, some of whom have been chronically ill for years, have been restored to the community and to work.

#### *Repatriation General Hospital, Heidelberg*

The largest of the Department's institutions in Victoria is the Repatriation General Hospital at Heidelberg. This institution is a recognized postgraduate training centre and teaching seminars are held weekly. Training facilities at the hospital also include schools for student nurses and nursing aides. Training is also given in pathology, radiography, and pharmacy.

At the 30th June, 1961, the number of staff employed full time at the hospital was 1,180, comprising 40 medical officers, 326 nursing staff, 74 semi-professional, other professional, technical, and trades staff, 602 household and general duties staff, and 138 administrative and clerical staff. During 1960-61, 10,046 patients were treated at the hospital. The other institutions conducted by the Department in Victoria are Out-patient Clinic, St. Kilda-road, Melbourne; Out-patient Clinic Annexe, Kooyong-road, Caulfield; Anzac Hostel, North-road, Brighton; and Repatriation Artificial Limb and Appliance Centre, South Melbourne.

#### *Education and Vocational Training*

The Repatriation Department administers the Soldiers' Children Education Scheme which provides assistance in the form of school requisites and fares to eligible children up to twelve years of age from commencement of primary education, and for those over twelve years an education allowance while primary and secondary education

continues. Further assistance by way of fees and fares is provided where the child continues a course of specialized education or training to fit him for a career.

Vocational training is provided to ex-servicemen who served in the Korea-Malaya Operations and to ex-servicemen who, through war-caused disabilities, are substantially handicapped, and where training appears to be the only means whereby satisfactory re-establishment may be effected. Training is also provided to widows of ex-servicemen whose death is due to war service and where training is necessary to enable them to follow a suitable occupation.

### General Assistance

The Department also provides general assistance by way of loans and grants to certain categories of ex-servicemen and dependants. These benefits include gift cars and driving devices for seriously disabled ex-servicemen, funeral grants, immediate assistance, furniture grants, business re-establishment loans and allowances, and recreational transport allowances.

## Red Cross Society

### General

The Victorian Division of the Australian Red Cross Society is responsible for all the Society's services and activities in the State of Victoria.

As a voluntary organization sustained by public subscription, the Division undertakes in peace-time a wide variety of services: first, for the welfare of ex-service personnel, and secondly, for the community generally.

The following table gives some indication of the continuing nature and scope of the work of the Victorian Red Cross Society:—

### VICTORIA—RED CROSS SOCIETY

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Income .. .. .	£ 368,036	365,221	384,726	443,708	470,080
Expenditure .. .. .	£ 398,354	375,458	395,935	437,157	472,403
Gross Expenditure over Income .. .. .	£ 30,318	10,237	11,209	6,551	2,323
Gross Income over Expenditure .. .. .	£ 630,162	631,828	632,745	651,259	657,804
Accumulation Account .. .. .	£ 630,162	631,828	632,745	651,259	657,804
Expenditure on—					
Blood Transfusion Service .. .. .	£ 129,367	135,525	145,635	171,841	178,788
Convalescent Homes and Hostels .. .. .	£ 78,456	80,526	81,877	88,577	95,470
Handcraft and Curative Training .. .. .	£ 15,104	16,792	18,172	15,823	18,619
Social Service and Welfare .. .. .	£ 31,022	26,199	27,484	29,353	29,909
Service and Repatriation Hospitals Including Recreation Centres Civilian Hospital and Civilian Relief .. .. .	£ 36,898	36,441	39,187	38,808	38,382
Red Cross Branches and Companies .. .. .	No. 475	436	469	498	507
Junior Red Cross Circles .. .. .	No. 252	244	270	271	284
Blood Donations .. .. .	No. 62,463	72,077	72,801	79,541	82,540
Blood Distributed .. .. .	pints 47,649	49,301	50,478	52,402	54,670
Serum Distributed .. .. .	litres 2,250	2,061	1,848	1,557	1,349
Volumes in Red Cross Libraries .. .. .	No. 44,113	48,989	53,553	56,092	64,103
Transport Mileage .. .. .	372,218	367,884	370,772	363,302	363,904
Admissions to Convalescent Homes .. .. .	No. 1,076	1,255	1,231	1,240	1,212

*Principal Activities*

The principal activities carried out by the Division cover a wide range and include the Blood Transfusion Service ; the Red Cross Homes ; various welfare hospital services ; the teaching of handcrafts to disabled ex-servicemen ; transport ; disaster relief ; a tracing bureau as part of the International Red Cross Tracing Service ; medical loan depots ; assistance to refugee migrants ; and training in first aid and home nursing.

*Blood Transfusion Service*

Pioneered in Victoria in 1929, the Red Cross Blood Transfusion Service has now developed into a major community undertaking which is a vital adjunct to the health services of the State.

Voluntary donors give blood which is tested, processed, and distributed free of charge, either in the form of whole blood or a range of blood derivatives, by the Blood Transfusion Service. The Service also provides a consultant service in blood grouping problems, sets up donor panels, provides blood collecting equipment, and performs thousands of routine tests without charge.

Administered entirely by the Red Cross and financed by Government grants and the Society's funds, the Service operates a Central Blood Bank in Melbourne, Branch Banks at the Royal Melbourne, the Alfred and the Royal Women's Hospitals, and fourteen Regional Banks. In addition, blood is collected by two mobile units working in the suburban and country districts. During 1960-61, 82,540 donations of blood were collected, making a total of 818,154 donations collected since the inception of the service.

Year by year the demands on the Service become more complex, as well as more extensive. The further development of cardiac surgery is an example of this : as more heart operations are carried out, so the demand for blood increases, and more voluntary donors are needed to provide it.

The following analysis shows the proportions in which blood is used at present :—

				%
Elective Surgery	..	..	..	44·4
Emergency Surgery	..	..	..	6·5
Elective Medical	..	..	..	21·6
Emergency Medical	..	..	..	11·8
Obstetrics	..	..	..	9·4
Accidents	..	..	..	4·3
Exchange Transfusions	..	..	..	2·0

### **Lord Mayor's Children's Camp**

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, city, 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. The Camp accommodates 150 girls and 150 boys in five lined huts and five lined dormitories.

Since its inception in 1944, over 48,000 children have enjoyed the facilities of the Camp. During each annual series ten Camps, each of twelve days' duration, are held. The syllabus includes physical education, lifesaving, swimming, launch trips, films, and concerts. The kitchen can cater for 500 children and adults. The main dining hall seats 400 children ; the staff dining hall has a capacity of 90.

Children are selected on a priority basis by various authorities and sponsoring bodies, and are brought to the Camp by selected leaders. In the event of specialist medical treatment being required, children are taken to the Alfred Hospital by Camp transport. The Camp is equipped with its own hospital, physiotherapy solarium, dental, optometry, audiometry and radiography rooms, concert stage, and playing areas. It is considered one of the leading Camps of its kind in the world.

During the 1961-62 series, 2,758 children and 245 leaders attended the ten Camps held. Income was £34,748, and running costs amounted to £35,086. All amenities and prizes for the sporting and other entertainments are provided by the Camp.

## *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 recognizes 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 its sister-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 Crown 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 Crown 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.

### **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 and General Sessions Courts, and Petty Sessions 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 twelve puisne\* judges, appointed from the ranks of practising barristers of not less than eight years' standing, and retiring at the age of 72.

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 General Sessions Courts.

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 (two 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 taxes 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 his own case, and answering that of his opponent.

\* Judges of the Supreme Court other than the Chief Justice are called puisne judges.

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 *fiery 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 Petty Sessions 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.

The following table gives particulars of Supreme Court civil business during the five years, 1957 to 1961 :—

#### VICTORIA—SUPREME COURT CIVIL CASES

Particulars	1957	1958	1959	1960	1961
Number of Places at Which Sittings Were Held .. .. .	11	11	11	11	11
Causes Entered—					
For Assessment of Damages .. .. .	30	10	13	15	16
For Trial .. .. .	1,330	1,493	1,477	1,795	1,868
Number of Cases Tried—					
By Juries of Six .. .. .	265	291	174	283	347
By a Judge .. .. .	54	57	68	73	107
Verdicts Returned for—					
Plaintiff .. .. .	274	299	209	289	343
Defendant .. .. .	45	49	33	45	52
Amounts Awarded .. .. . £	496,832	503,228	656,129	763,782	743,797
Writs of Summons Issued .. .. .	2,890	2,891	3,253	5,452	5,106
Other Original Proceedings .. .. .	45	41	87	155	164
Appellate Proceedings (Other than Criminal Appeals Heard and Determined)—					
By Full Court .. .. .	55	53	63	86	65
By a Judge .. .. .	77	75	47	76	73

*County Court*

The County Court has jurisdiction in civil matters where the amount claimed does not exceed £1,000 in ordinary cases and £2,500 in motor vehicle accident cases. At present there are fifteen County Court judges and one acting judge, who are also Chairmen of General Sessions, and three acting Chairmen of General Sessions. In General Sessions, 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. General Sessions also sits, without a jury, as an Appeals Court to hear appeals from Petty Sessions Courts. In theory, justices of the peace may sit with the Chairmen of General Sessions, but in fact they never do. County Court judges (and Chairmen of General Sessions) 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.

The County and General Sessions Courts sit continuously at Melbourne, and visit 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 cases for the years 1957 to 1961 are shown in the following table :—

## VICTORIA—COUNTY COURT CASES

Year				Number of Cases Tried	Amount Sued for	Amount Awarded*
1957	..	..	..	2,212	£'000 4,802	£'000 310
1958	..	..	..	2,211	4,487	349
1959	..	..	..	2,161	4,926	372
1960	..	..	..	2,336	7,295	597
1961	..	..	..	2,567	10,325	852

\* These figures do not include instances where judgment was entered by consent or default.

The table below records the number of writs received by the Sheriff in the five years, 1957 to 1961 :—

## VICTORIA—WRITS RECEIVED BY THE SHERIFF

Year	Sovereign's Writs against Person and Property	Subjects' Writs against—		Total
		The Person	Property	
1957	2	4	235	241
1958	4	3	258	265
1959	2	8	335	345
1960	7	3	387	397
1961	7	11	581	599

*Courts of Petty Sessions and Stipendiary Magistrates*

Petty Sessions 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 Petty Sessions 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 Petty Sessions Bench as vacancies occur.

Petty Sessions 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 £100 in ordinary debt cases, and £250 in cases of contract, and, subject to certain exceptions, in cases of tort. (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 Petty Sessions 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 General Sessions. 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 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.

In accordance with a cardinal principle of English law, justice in Victoria is administered publicly. In the words of a Lord Chief Justice of England: "It is not merely of some importance, but it is of fundamental importance, that justice should not merely be done, but that it should manifestly and undoubtedly be seen to be done".

Particulars of criminal cases and certain other misdemeanours heard in Courts of Petty Sessions are shown on pages 323, 325, and 327.

Particulars of cases of a civil nature heard in Courts of Petty Sessions for the years 1957 to 1961 are shown in the following table :—

VICTORIA—COURTS OF PETTY SESSIONS : CASES OF A CIVIL NATURE

Particulars	1957	1958	1959	1960	1961
Civil Cases—					
Number Heard .. ..	118,634	133,041	142,915	164,792	208,219
Debts or Damages—					
Claimed .. .. £'000	2,809	3,189	3,611	3,956	5,072
Awarded .. .. £'000	2,153	2,425	2,749	3,019	3,973
Other Cases—					
Appeals against Rates .. ..	1,080	746	1,483	1,791	1,959
Eviction Cases* .. ..	3,662	3,851	3,805	3,240	3,198
Fraud Summonses .. ..	3,913	5,211	7,722	8,783	9,195
Garnishee Cases .. ..	3,151	4,976	7,281	8,013	10,456
Maintenance Cases .. ..	1,912	1,934	1,979	1,992	2,159
Show Cause Summonses .. ..	7,937	10,622	15,445	17,336	20,766
Applications under Landlord and Tenant Acts .. ..	136	235	49	237	58
Miscellaneous .. ..	7,090	10,610	12,200	17,877	30,025
Licences and Certificates Issued	15,585	16,126	18,899	19,430	19,829

\* Figures shown represent cases listed before Courts. Eviction orders granted are available for the Metropolitan Area only ; see next table.

Details of eviction orders granted are available for the Metropolitan Area only, which, for these purposes, consists of the Courts listed in the footnote to the following table :—

VICTORIA—EVICTION CASES AND ORDERS GRANTED IN THE MELBOURNE METROPOLITAN AREA\*

Year	Cases Heard	Eviction Orders Granted
1957 .. .. .	3,068	2,174
1958 .. .. .	3,115	2,253
1959 .. .. .	2,968	1,991
1960 .. .. .	2,522	1,745
1961 .. .. .	2,459	1,771

\* In this table the Metropolitan Area is considered to include Courts of Petty Sessions at Box Hill, Brighton, Brunswick, Camberwell, Carlton, Cheltenham, Coburg, Collingwood, Dandenong, Elsternwick, Eltham, Fitzroy, Flemington, Footscray, Geelong, Glenroy, Hawthorn, Heidelberg, Kew, Malvern, Melbourne, Moonee Ponds, Northcote, North Melbourne, Oakleigh, Port Melbourne, Prahran, Preston, Richmond, Ringwood, Sandringham, South Melbourne, Springvale, St. Kilda, Sunshine, and Williamstown.

*Consolidation of the Statutes*

Details of the 1958 Consolidation of the Victorian Statutes are shown on page 296 of the Victorian Year Book 1961.

*Bankruptcies*

A Bankruptcy Act passed by the Commonwealth Parliament in October, 1924, and amended in 1927, was brought into operation on 1st August, 1928. It supersedes the Bankruptcy and Insolvency Acts of the States, with the exception of any provisions relating to matters not dealt with in the Commonwealth Act.

The number of sequestrations, &c., in Victoria during the five years ended 30th June, 1957 to 1961, under the *Commonwealth Bankruptcy Act* 1924–60, and the amount of liabilities and assets relating to them were as follows :—

## VICTORIA—BANKRUPTCY BUSINESS

Year Ended 30th June—	Sequestration Orders and Orders for Administration of Deceased Debtors' Estates	Compositions, Assignments, &c., under Part XI. of the Act	Deeds of Arrangement under Part XII. of the Act	Total
<b>NUMBER</b>				
1957 .. ..	258	5	72	335
1958 .. ..	357	2	59	418
1959 .. ..	305	1	88	394
1960 .. ..	395	4	95	494
1961 .. ..	362	5	122	489
<b>LIABILITIES</b>				
	£'000	£'000	£'000	£'000
1957 .. ..	562	27	403	992
1958 .. ..	717	4	300	1,021
1959 .. ..	1,016	19	679	1,714
1960 .. ..	1,225	88	706	2,019
1961 .. ..	1,018	63	870	1,951
<b>ASSETS</b>				
	£'000	£'000	£'000	£'000
1957 .. ..	288	21	352	661
1958 .. ..	431	8	237	676
1959 .. ..	412	12	529	953
1960 .. ..	658	21	503	1,182
1961 .. ..	492	45	761	1,298

**Children's Court***General*

The Children's Court which began in Victoria in 1906 is held wherever a Court of Petty Sessions 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 Court of Petty Sessions and presided over by the same Stipendiary Magistrate, but honorary Special Magistrates are appointed for some Courts.

In the Metropolitan Area, two Stipendiary Special Magistrates are appointed and these men visit about thirty Courts at regular intervals.

All Metropolitan Children's Courts are administered from the Melbourne Children's Court, which, in December, 1960, occupied the new Children's Court building in Batman-avenue, built specially to house the Court, Children's Court Clinic, and Probation Officers.

### *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 Courts of Petty Sessions. However, it has considerably wider powers than Petty Sessions and may deal with any offence except homicide.

The child (or the parent if the child is under fourteen 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 (see page 330).

Probation Officers also assist the Court by furnishing reports on children's background. 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 fourteen years may be admitted to the care of the Social Welfare Branch and those over fourteen 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 which were disposed of in Children's Courts in each of the five years 1957 to 1961 is given in the following table :—

VICTORIA—CHILDREN'S COURTS : NUMBER OF CASES

Nature of Offence	1957	1958	1959	1960	1961
Against the Person .. ..	159	286	393	382	517
Against Property .. ..	5,416	6,207	5,963	6,917	6,525
Against Good Order .. ..	276	312	338	380	390
In Need of Care and Protection	925	1,018	1,325	1,513	1,629
Other Offences .. ..	1,252	1,861	1,771	2,317	2,878
Total .. ..	8,028	9,684	9,790	11,509	11,939

The following table gives particulars of the manner in which the cases in the Children's Courts were disposed of in the years 1957 to 1961 :—

VICTORIA—CHILDREN'S COURTS : RESULT OF HEARING

Result of Hearing	1957	1958	1959	1960	1961
Summarily Convicted—					
Adjudured for Period without Probation .. ..	1,810	2,321	2,405	2,835	2,344
Released on Probation .. ..	2,230	2,619	2,266	2,927	3,289
Admitted to Care of Social Welfare Branch* .. ..	1,068	1,275	1,411	1,404	1,651
Committed to Juvenile School or Youth Training Centre ..	131	194	276	327	657
Fined .. ..	1,040	1,506	1,671	1,860	1,899
Committed to Care of a Private Person or Institution ..	9	12	11	38	2
Released on Recognizance to Come up for Sentence When Called .. ..	156	79	56	140	59
Sentenced to a Term of Imprisonment and Suspended Sentences .. ..	78	67	71	88	52
Otherwise Dealt With .. ..	64	95	68	69	83
Total Summarily Convicted ..	6,586	8,168	8,235	9,688	10,036
Summarily Dismissed, &c. ..	1,433	1,488	1,521	1,787	1,885
Committed for Trial .. ..	9	28	34	34	18
Total .. ..	8,028	9,684	9,790	11,509	11,939

\* Previously Children's Welfare Department.

The following table shows the nature of the offence and the result of hearing in Children's Court cases during 1961, but excludes cases of children brought before the Court as being in need of care and protection :—

**VICTORIA—CHILDREN'S COURTS : NATURE OF OFFENCE AND RESULT OF HEARING, 1961**

Nature of Offence	Summarily Disposed of—		Committed for Trial	Total Cases
	Dismissed, Withdrawn, or Struck Out	Convicted		
<b>Against the Person—</b>				
Assault .. ..	61	160	..	221
Other .. ..	51	243	2	296
Total ..	112	403	2	517
<b>Against Property—</b>				
Larceny, &c. ..	877	5,270	11	6,158
Wilful Damage ..	77	169	..	246
Other .. ..	38	83	..	121
Total ..	992	5,522	11	6,525
<b>Against Good Order—</b>				
Drunkenness .. ..	6	26	..	32
Other .. ..	80	278	..	358
Total ..	86	304	..	390
<b>Other Offences—</b>				
Breaches of Traffic Regulations .. ..	133	949	..	1,082
Miscellaneous ..	186	1,605	5	1,796
Total ..	319	2,554	5	2,878
<b>Grand Total</b> ..	<b>1,509</b>	<b>8,783</b>	<b>18</b>	<b>10,310</b>

### **Criminal Law and Its Administration in Victoria**

#### *Substance of the Criminal Law*

The basis of the criminal law of Victoria is the common law of England. "If an uninhabited country be discovered and planted by English subjects, all the English laws then in being, which are the birthright of every English subject, are immediately there in force . . . (but) such colonists carry with them only so much of the English law as is applicable to their own situation and the condition of an infant colony" (*Blackstone's Commentaries* (1768), Vol. 1, p. 107). Under this doctrine, Governor Arthur Phillip brought with him the existing law of England when he took possession of the eastern half of Australia in 1788, and founded the first settlement at Sydney Cove.

In 1828 an Imperial Act provided that all laws and statutes in force within the realm of England on 25th July, 1828, should be applied in the administration of justice in the courts of New South Wales and Van Diemen's Land (as Tasmania was known until 1856) so far as the same could be applied within those colonies. Victoria was part of New South Wales until 13th January, 1851, when it became a separate colony with a Legislative Council, and in November, 1855, responsible government was attained within a constitutional framework consisting of a Governor, representing the Sovereign, a Legislative Council, elected on a restricted franchise, and a Legislative Assembly, a "popular" House elected by voters then (but not now) required to possess a small property qualification.

Since 1856 the criminal law of Victoria consists of the applicable common law and statutes of England, some few laws taken over from New South Wales, the Acts of the Parliament of Victoria, and rules and regulations made under authority delegated by Parliament in particular statutes. Statutes made by the Parliament of the Commonwealth which operate throughout Australia also create criminal offences, but these are outside the scope of this article. For the purposes of the criminal law and the correctional and punitive system, the most important statutes are now the *Crimes Act* 1958, the *Police Offences Act* 1958, the *Justices Act* 1958, the *Juries Act* 1958, the *Supreme Court Act* 1958, the *Gaols Act* 1958, the *Children's Court Act* 1958, and the *Social Welfare Act* 1960.

#### *Criminal Offences*

Criminal offences fall broadly into two divisions: indictable offences, which are tried before a judge and jury when the accused person has been committed for trial upon a preliminary hearing in a court of petty sessions for the purpose of ascertaining if the facts justify that course; and summary offences, which are tried by courts of petty

sessions. Summary offences cover a wide range, but their significant characteristic is that they are mainly concerned with the regulation of public order and decency and the prevention of socially mischievous activities of less gravity than the traditional criminal offences. They are sometimes called "quasi-criminal offences". The courts of petty sessions (now usually presided over by trained officials known as Stipendiary Magistrates, but which may, except for certain offences, e.g., gaming and liquor laws offences, be constituted by two or more honorary justices of the peace) derive their jurisdiction only from statutes, and are limited in the severity of the penalties they may impose. With the consent of the defendant these courts may deal with some offences that would otherwise be heard by a judge and jury.

The graver crimes may be divided broadly into six categories : (1) offences against the public order, internal and external (e.g., treason, riots, sedition) ; (2) abuses and obstructions of public authority (e.g., extortion, bribery, perjury) ; (3) acts injurious to the public (e.g., offences against morality, such as incest, sodomy, obscenity, and common and special nuisances, i.e., disorderly houses and nuisances by particular trades) ; (4) offences against the person, conjugal and parental rights, and the reputation of individuals (e.g., homicide, infanticide, infliction of bodily injuries, assaults, rape and carnal knowledge, bigamy, abduction, libel) ; (5) offences against rights of property (e.g., stealing, embezzlement, robbery, burglary, false pretences, receiving stolen property, forgery, malicious injuries to property) ; and (6) miscellaneous offences (e.g., serious offences in connection with the driving of motor vehicles).

The common law supplies the basis for the criminal prohibitions, but its deficiencies have been remedied and its gaps supplied by extensive statutory provisions. There are important local variations, but there is still a striking similarity between the statute law of Victoria and that of England. Judicial expositions of the common law and of the meaning of statutes are also very close to those adopted in England. This is to be expected ; although, technically, the High Court of Australia and the Supreme Court of Victoria are bound only by the opinions of the Judicial Committee of the Privy Council, the decisions of English courts of authority are treated as having great persuasive force.

Except in some public welfare offences created by statute, the fundamental principle of the criminal law is that, before there may be a conviction, the person charged must be proved beyond reasonable doubt to have done the forbidden act with a criminal intent. To constitute a crime, an act (or omission) must be forbidden by a valid law, and must be done voluntarily and intentionally by a person of competent age. Ignorance of the law is no defence, though it may mitigate punishment. A child under eight years of age is legally incapable of committing a

crime and a child under fourteen is presumed to be incapable of having the requisite criminal intent, though this presumption may be rebutted. Coercion, insanity, necessity, self-defence, honest mistake on reasonable grounds, and accident, exempt from liability. Provocation may reduce an intentional homicide from murder to manslaughter, but is otherwise no defence, though it may mitigate punishment. If the balance of her mind was disturbed by the effect of the birth or of lactation, a mother who kills her child within twelve months of its birth may be convicted of infanticide instead of murder, and may be dealt with and punished as if she were guilty of manslaughter. An attempt to commit a crime is an offence, and all persons participating in a crime commit an offence, the gravity of which depends upon the degree of participation. Accessories to felonies and abettors of misdemeanours and summary offences are also criminally liable.

#### *Institution of Proceedings*

Prosecutions are usually begun by a member of the Police Force, which is the agency of the State officially concerned with the prevention of crime and the apprehension of offenders. As a general rule, however, any citizen may lay an information before a justice of the peace alleging an offence, and the justice may issue a summons requiring the defendant to attend before a court of petty sessions or a warrant authorizing the arrest of the defendant. Unless otherwise provided, an information for a summary offence must be laid within twelve months of the offence. At common law a private citizen may arrest an offender without a warrant in certain circumstances, and under the *Crimes Act 1958* and *Police Offences Act 1958* some additional powers have been conferred. Members of the Police Force have wider common law powers of arrest than citizens, and statutes have greatly enlarged these powers in connection with a variety of statutory offences. Any person arrested, whether by virtue of a warrant or otherwise, must be brought before a justice of the peace or a court of petty sessions as promptly as possible. If this cannot be done within 24 hours, certain police officers have the power to release on bail, except when the charges are of a serious nature. If he gives bail or security for his appearance at court, a person arrested and charged with an offence may be released from custody (and usually is) until the charge is finally determined, except where the charge is murder (for which the penalty is death) and the facts indicate it is likely that guilt will be established. Bail is commonly granted where a defendant appeals to the court of general sessions from a conviction by a court of petty sessions, but rarely and only in special circumstances when the defendant has been convicted upon a trial before a judge and jury and appeals to the Full Court sitting as a Court of Criminal Appeal. A grant of bail may be revoked by a judge of the Supreme Court if the circumstances justify such a course.

*Conduct of Prosecutions**Summary Offences*

If the prosecution is for an offence punishable summarily, and is privately brought, the prosecutor is usually represented by his own lawyer. If the proceedings have been instituted by the police, they are conducted by a police officer, except when the importance or difficulty of the case necessitates the services of a member of the legal profession. The rights of the defendant are carefully safeguarded. The charge must be defined with precision; the defendant is entitled to an opportunity to prepare his defence and to be represented by counsel if he can afford it. There is no provision for legal aid by the State in courts of petty sessions. The defendant cannot be convicted unless his guilt is established beyond reasonable doubt. Sentence is imposed in keeping with the gravity of the offence. A person convicted of a summary offence usually has a right to appeal to a court of general sessions, against the conviction and against the sentence, and on such an appeal the case is heard afresh. If the conviction was wrong, the court of general sessions quashes it, and if it was right, affirms the conviction. It may also confirm the penalty, or may reduce it.

*Indictable Offences*

Before a defendant may be tried by a jury for an indictable offence, there is a preliminary hearing before one or more justices of the peace, or a stipendiary magistrate, to ascertain if there is a probable case of guilt. The witnesses are examined fully, and their evidence taken down in writing. The defendant may enter upon his defence at the preliminary hearing, but he is under no obligation to do so. A coroner conducting an inquest to ascertain the cause of a death may commit a person for trial if he finds a probable case of murder or manslaughter and he may do so also in certain cases of arson. The written record of the evidence is known as the depositions, and if the defendant is committed to stand his trial, he is entitled to be supplied with a copy of the depositions. If the prosecution intends to call additional witnesses at the trial, notice must be given to the defendant.

The grand jury, as a body inquiring into the commission of offences, survives only in a limited form, and is rarely used. If an offence is alleged to have been committed by a body corporate, or if a justice has refused to commit for trial an individual alleged to be guilty of an indictable offence, or if no presentment or indictment has been filed against a person committed for trial, a citizen may obtain an order from the Full Court summoning a grand jury of 23 men, and if a majority of that grand jury finds a "true bill", i.e., that there is evidence to justify putting the alleged offender on his trial before an ordinary jury, he must be tried on the bill of indictment so found. The Attorney-General also has the common law power of filing, by virtue of his office, an information against an accused person.

Commonly, however, the defendant comes for trial before the Supreme Court or a court of general sessions upon committal by a magistrate. The determination of the guilt of the defendant is entrusted to a jury.

A judge of the Supreme Court presides over trials in the Supreme Court, which has unlimited jurisdiction in criminal matters, and a County Court judge (in his capacity as a chairman of general sessions), or a barrister appointed to act as a chairman, presides over trials in the court of general sessions. The latter court has jurisdiction to try all indictable offences except certain grave crimes such as treason, sedition, murder, attempts to murder, and criminal libels, and offences by corporations and certain offences involving fraud, which are reserved to the jurisdiction of the Supreme Court.

#### *Prosecutions for Indictable Offences*

Prosecutions for indictable offences are conducted by a government department, of which the Ministerial head is the Attorney-General, who is a member of Parliament and of the Government. The senior legal adviser to the Attorney-General is a salaried Queen's Counsel, known as the Solicitor-General, who is confined by the terms of his appointment to advising the Government or appearing on its behalf in criminal or civil cases. At a trial, the case against the defendant is presented by the Solicitor-General or by barristers employed as prosecutors for the Queen.

The method of trial is accusatorial. The defendant may be questioned only if he enters the witness box to give evidence on oath, and if he has been convicted previously, neither this fact nor any other evidence of bad character can be brought to the notice of the jury unless he claims to be of good character or casts imputations on the witnesses for the prosecution. He may employ his own counsel, or if he is without means, he may be assigned legal aid and be represented by counsel whose fee is paid by the Government. The defendant is entitled to know with certainty the charge brought against him, and this is set out in a document known as the presentment, which is, for practical purposes, the same as an indictment. If a confession has been extracted from him by violence or by unfair methods, it will be excluded, and if he has been identified in circumstances that make the identification unfair, the trial judge may reject the evidence. A verdict adverse to the defendant may be returned only if the prosecution satisfies beyond reasonable doubt each of the twelve men constituting the jury that the defendant is guilty.

The control of the trial is in the hands of the presiding judge, who may, in the exercise of his judicial discretion, reject evidence if he considers its prejudicial effect outweighs its probative value. The essential qualities of a trial judge are integrity, ability, and fairness, and

it is rightly taken for granted in Victoria that these qualities will always be exhibited. After the prosecution has presented the case against the defendant by calling its witnesses, who are subject to cross-examination, and the defendant has made his defence (in support of which he is entitled to give evidence and to call witnesses, also subject to cross-examination), counsel for the prosecution and counsel for the defence address the jury and the trial judge sums up. In his summing up, the judge instructs the jury upon the law that is applicable to the case, and marshals the facts to enable the jury to understand clearly what are the questions they have to determine in order to arrive at a verdict. The jury retire, and if after six hours they are unable to agree, they may be discharged and a new trial is ordered. If they are unanimous in their finding, they return to court to state if they find the defendant guilty or not guilty.

If the verdict is not guilty, without qualification, the defendant is discharged from custody, but if it is not guilty on the ground of insanity, the court must order that the defendant shall be kept in safe custody during the pleasure of His Excellency the Governor. If the verdict is guilty, the trial judge hears what may be urged on the defendant's behalf by way of extenuation, and if he thinks it desirable, he may remand the prisoner until he obtains a pre-sentence report from the Probation and Parole Service. After sentence has been pronounced, the prisoner is entitled to apply to a Full Court of the Supreme Court, consisting of not less than three judges (commonly referred to as the Court of Criminal Appeal), for leave to appeal against his conviction or his sentence, or both. If his application to the Full Court is unsuccessful, he may apply to the High Court of Australia for special leave to appeal, and if he fails in that court, he may carry his application to the Judicial Committee of the Privy Council. Leave to appeal is granted sparingly by the High Court and the Privy Council, and only in cases where a question of law of grave and general importance is involved.

### *Punishment of Convicted Persons*

#### *Summary Offences*

The penalties for summary offences embrace fines, probation, imprisonment, forfeiture or restitution of the fruits of the crime, destruction of forbidden articles, revocation of licences, and compensation. A court of petty sessions in exceptional cases may adjourn an information without recording a conviction upon the defendant's entering into a recognizance to be of good behaviour during the period of the adjournment. If this recognizance is observed, the information will be dismissed at the adjourned hearing. The maximum penalty, whether by fine or imprisonment, is stipulated in the Act defining the offence, and sometimes (though rarely for a first conviction), a minimum penalty is prescribed. As a general rule courts of petty sessions may not award imprisonment exceeding one year for any one offence.

#### *Indictable Offences*

The only offences punishable in Victoria by death are treason and murder, and sentence of death is mandatory for these crimes, but a person under the age of eighteen years cannot be sentenced to death, but



must be sentenced to be detained during the Governor's pleasure. Execution of the sentence on a woman convicted of a capital offence who is shown by the report of a medical practitioner, appointed by the court, to be pregnant, must be stayed until she is delivered of the child or in the course of nature delivery is no longer possible.

Whether sentence of death will be carried out is determined by the Government through a decision of the Governor in Council. Except in respect of some common law offences, the penalty the court may impose is prescribed in the relevant provision of the statute dealing with the offence, and within that limitation the severity of the penalty (which is imprisonment for felonies, and imprisonment or fine for misdemeanours) rests in the discretion of the court. The maximum period of imprisonment which a court may order for an offence is twenty years. An offender may be sentenced for more than one offence, and it rests with the sentencing judge whether the sentences are to be served cumulatively or concurrently, but they operate cumulatively unless the court directs otherwise.

Courts are empowered to order whippings for crimes attended by cruelty or grave personal violence, but, except for whippings, ordered and administered to two convicts for a wounding during an attempted escape from prison, this power has not been exercised in the post-war years. The power to order solitary confinement as part of a sentence is never used. However, a prisoner who commits certain offences while in gaol may be sentenced to solitary confinement, and this power is exercised for the maintenance of prison discipline.

### *Probation and Parole*

Probation is designed to keep out of gaol an offender who is likely to benefit from an opportunity to redeem himself while on conditional liberty. Parole comes at the other end of the punitive process; it is designed to shorten the time spent in prison by a person who is thought by the Parole Board to be likely to benefit from being released on conditional liberty.

It is for the court to decide whether a person should be released on probation, but the offender must give his consent before he may be placed on probation. While on probation he is subject to the direction and supervision of salaried or (outside Melbourne) honorary probation officers. The salaried probation officers are also parole officers and are members of the Probation and Parole Service, which is a State agency. The probation order may require the offender to undergo medical or psychiatric treatment, and to reside at a specified place or institution, and may contain other appropriate conditions, such as to abstain from alcoholic liquors. If there is a breach of the probation order by disregard of its conditions or by conviction for another offence, the offender is brought before the court, and he may be fined or dealt with for the offence in respect of which he was granted probation. If he completes his period of probation successfully, the conviction is expunged unless he is convicted again.

If a convicted person is sentenced to imprisonment, the court must, if the sentence is for imprisonment for twelve months or more, and may, if the sentence is for a term of less than twelve months, fix a minimum term within the sentence which he must serve before he becomes eligible to be released on parole. By way of illustration, if a person is sentenced to imprisonment for two years, the court must fix a minimum term, the duration of which is entirely within the court's discretion, but it may be twelve months. At the expiration of that twelve months (less remissions for good behaviour), the prisoner comes under the jurisdiction of the Parole Board, which consists of a judge of the Supreme Court as chairman, and four male members, one of whom is the Director-General of Social Welfare. There is also a Parole Board to deal with female prisoners, consisting of the Supreme Court judge, the Director-General, and three women. It is entirely within the discretion of the Parole Board whether a prisoner who has served his minimum term should be released. If he is released, he is under the supervision of a parole officer, a salaried member of the Probation and Parole Service, for the period of parole, which is the difference in time between the date of his release and the expiry date of his sentence. If he completes his parole successfully, he is wholly discharged from his sentence of imprisonment. But if he disobeys the terms of the parole order, and the order is revoked by the Parole Board, or if he is sentenced to imprisonment for an offence committed during the parole period, he is returned to prison to undergo the unserved part of his sentence of imprisonment.

Sentences are served in the following order : firstly, any term in respect of which no minimum term was fixed by the court ; secondly, the minimum term or aggregate of several minimum terms ; and thirdly, unless and until released on parole, the balance of any term or terms after the expiration of the minimum terms or aggregate of the minimum terms. If a further sentence is imposed after the offender has commenced to serve a sentence, that sentence is suspended, if necessary, so that the sentences may be served in the order stated. A prisoner who, after release on parole, is sentenced to a period of imprisonment for which a minimum term is fixed, will ordinarily have to serve the minimum term of that sentence and, in addition, the unexpired part of his previous sentence. Releases on parole, cancellations, &c., are shown on page 301.

It is the duty of the Parole Board to make a yearly report and recommendation to the Minister on every person found not guilty or unfit to plead by reason of insanity, and held in safe custody during the Governor's pleasure. If the Governor orders the release of such a person, the order may specify a period of supervision during which the Parole Board may order that the person be returned to custody. A yearly report and recommendation must also be furnished by the Board upon every person convicted of a capital offence committed when he was under eighteen years of age, and who is detained during the Governor's pleasure. When requested by the Minister, the Board must make a report and recommendation upon any person who was sentenced to death, but whose sentence was commuted to imprisonment. The Board must also make an annual report upon its activities, which is laid before Parliament.

*Youthful Offenders*

Except for the gravest crimes, offenders under seventeen years of age are dealt with by magistrates specially appointed to sit in Children's Courts (see pages 318 to 321). Proceedings are usually conducted in a room that is not a court, and are as informal as possible, and police witnesses do not wear uniform. The press and the public are excluded. Every effort is made by the use of other penalties and of probation to avoid sending youthful offenders to prison, and section 10 of the *Social Welfare Act* 1960 provides for the establishment of remand centres and of youth training centres for detention and for the care and welfare of offenders under 21 years of age. Where a youthful offender is convicted of an indictable offence, instead of sentencing him to imprisonment, the court may direct that he be detained in a youth training centre for not more than three years, and during that time he is under the control of the Youth Parole Board created by that Act. The Youth Parole Board (which consists of a judge who is a chairman of general sessions, the Director-General of Social Welfare, and a male member, the latter being replaced by a female member when the Board deals with females) has jurisdiction over young offenders and may release an offender on parole at any time it thinks proper, except where a minimum term has been fixed by the sentencing court, in which case the offender must serve the minimum term (less remissions) before he is eligible for parole.

**Further References**

- Barry J. V., Paton G., and Sawyer G., *An Introduction to the Criminal Law in Australia* (London, Macmillan, 1948).
- Bourke J. P., and Fogarty J. F., *Police Offences Act 1958* (Butterworth and Co. (Australia), 1959).
- Bourke J. P., Sonenberg D. S., and Blomme D. J. M., *Criminal Law* (Butterworth and Co. (Australia), 1959).
- Brett P., and Waller P. L., *Cases and Materials on Criminal Law* (Butterworth and Co., 1962).
- Pauli W., *Justices of the Peace* (Melbourne, Law Book Co., 1936).
- Paul W., and Anderson K., *Paul's Police Offences*, 4th Edition (Melbourne, Law Book Co., 1949).
- Wiseman H. D., and Vickery N., *Motor and Traffic Law*, 2nd Edition (Butterworth and Co., 1960).
- Victorian Statutes* 1958 (Consolidated) and annual sessional volumes of the Statutes.

**Crime Statistics***Victoria—Courts of Petty Sessions*

In the following statistical tables details are given of the total number of cases dealt with in Courts of Petty Sessions, but excluding Children's Courts, details of which have been shown under that heading, and cases of a civil nature which are shown on page 317. If it is desired 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. These points must also be taken into account in comparing crime in recent years with that in previous periods when there may have been differences in the law and when the population was very differently constituted in regard to sex and age.

### VICTORIA—COURTS OF PETTY SESSIONS : ARREST CASES DISPOSED OF, 1961

Result of Hearing	Males	Females	Total
Fined .. .. .	6,763	858	7,621
Imprisonment for—			
Under 1 Month .. .. .	1,051	38	1,089
1 Month and under 6 Months .. .. .	2,474	91	2,565
6 Months and under 12 Months .. .. .	336	4	340
1 Year and over .. .. .	112	1	113
Admonished (Convicted and Discharged) ..	101	12	113
Ordered to Find Bail or Sentence Suspended on Entering Surety .. .. .	503	44	547
Released on Probation .. .. .	818	70	888
Total Convicted .. .. .	12,158	1,118	13,276
Dismissed, Withdrawn, Struck Out .. .. .	3,602	254	3,856
Committed for Trial .. .. .	3,963	101	4,064
Total Disposed Of .. .. .	19,723	1,473	21,196

NOTE: This table excludes 27,212 cases of arrests for drunkenness. In most cases the result of hearing was a fine with the alternative of imprisonment for default.

### VICTORIA—COURTS OF PETTY SESSIONS : ARREST AND SUMMONS CASES : NATURE OF OFFENCE AND RESULT OF HEARING, 1961

Nature of Offence	Summarily Disposed of—				Committed for Trial		Total Cases
	Dismissed, Withdrawn, or Struck Out		Convicted		Males	Females	
	Males	Females	Males	Females			
Against the Person ..	1,137	65	1,527	68	743	16	3,556
Against Property ..	1,916	177	7,822	591	3,047	84	13,637
Forgery and Offences against the Currency ..	8	3	11	5	279	12	318
Against Good Order ..	1,767	187	5,857	896	129	..	8,836
Other Offences—							
Breaches of—							
Education Act ..	415	72	1,932	323	..	..	2,742
Licensing Act ..	601	78	3,057	203	..	..	3,939
Motor Car Act..	2,795	112	40,091	920	157	1	44,076
Traffic Regulations	3,357	345	96,019	5,904	1	..	105,626
Miscellaneous ..	3,817	372	31,955	2,699	105	6	38,954
Total ..	15,813	1,411	188,271	11,609	4,461	119	221,684

See footnote to preceding table.

Particulars of the disposal of arrest and summons cases for 1961 are given in the table below :—

VICTORIA—COURTS OF PETTY SESSIONS : DISPOSAL OF ARREST AND SUMMONS CASES, 1961

Cases		Summarily Convicted	Dismissed, Withdrawn, or Struck Out	Committed for Trial	Total
Arrest .. ..	Males	12,158	3,602	3,963	19,723
	Females	1,118	254	101	1,473
	Persons	13,276	3,856	4,064	21,196
Summons .. ..	Males	176,113	12,211	498	188,822
	Females	10,491	1,157	18	11,666
	Persons	186,604	13,368	516	200,488
Total Cases ..	Males	188,271	15,813	4,461	208,545
	Females	11,609	1,411	119	13,139
	Persons	199,880	17,224	4,580	221,684

See footnote to preceding tables.

### Offences

#### *Offences against the Person and Property*

Almost all serious crimes are offences against the person or offences against property. The first-named consist mainly of assault, but include murder, manslaughter, shooting, wounding, and sexual offences. Offences against property consist principally of larceny and similar offences, but include burglary, house and shop-breaking, robbery, etc., cattle stealing, and wilful damage to property.

#### *Other Offences*

The only other serious crimes are forgery, counterfeiting, conspiracy, and perjury. Most of the remaining cases are breaches of various Acts of Parliament, by-laws, etc., which indicate no degree of criminal instinct or intent on the part of the person charged, or are offences against good order (including drunkenness), offensive behaviour, indecent language, vagrancy, etc.

#### *Drunkenness*

During 1961, 27,212 persons, including 1,738 females, were charged with drunkenness.

#### *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 of 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 where 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 during the years 1957 to 1961, and the number of persons subsequently committed for trial :—

#### VICTORIA—INQUEST CASES

Year	Inquests into Deaths of—			Persons Committed for Trial		
	Males	Females	Total	Males	Females	Total
1957 .. .. .	1,445	776	2,221	34	2	36
1958 .. .. .	1,499	753	2,252	28	6	34
1959 .. .. .	1,453	731	2,184	35	..	35
1960 .. .. .	1,533	674	2,207	43	1	44
1961 .. .. .	1,503	762	2,265	44	7	51

The table below shows the charges on which persons were committed for trial by coroners during the years 1957 to 1961 :—

#### VICTORIA—COMMITTALS BY CORONERS

Year	Murder			Manslaughter		
	Males	Females	Total	Males	Females	Total.
1957 .. .. .	11	2	13	23	..	23
1958 .. .. .	7	6	13	21	..	21
1959 .. .. .	13	..	13	22	..	22
1960 .. .. .	17	1	18	26	..	26
1961 .. .. .	19	6	25	25	1	26

*Higher Courts*

The tables which follow relate to distinct persons who have been convicted in the Supreme Court and Courts of General Sessions in Victoria. In cases where a person was charged with more than one offence, the principal offence only has been counted.

VICTORIA—HIGHER COURTS: NUMBER OF OFFENDERS CONVICTED OF SPECIFIC OFFENCES

Nature of Offence	1957	1958	1959	1960	1961
<b>Against the Person—</b>					
Murder .. .. .	2	1	3	3	4
Manslaughter .. .. .	13	14	5	8	8
Attempted Murder, Wound with Intent to Murder .. .. .	2	1	2	1	1
Shoot, Wound, &c., and Inflict Grievous Bodily Harm with Intent .. .. .	31	26	31	37	18
Assault with Actual Bodily Harm	22	24	21	31	20
Assault .. .. .	16	11	16	22	43
Rape, Attempted Rape, &c. ..	7	11	15	17	22
Carnal Knowledge, Attempted Carnal Knowledge, &c. ..	77	99	137	169	193
Incest, Attempted Incest .. ..	15	16	13	9	14
Indecent Assault (on Female) ..	62	68	79	93	94
Unnatural Offence, Attempted Unnatural Offence .. .. .	62	125	83	93	76
Indecent Assault (on Male), &c.	41	41	26	26	50
Bigamy .. .. .	14	16	3	13	8
Other .. .. .	12	28	15	27	18
<b>Total .. .. .</b>	<b>376</b>	<b>481</b>	<b>449</b>	<b>549</b>	<b>569</b>
<b>Against Property—</b>					
Robbery under Arms, in Company, with Violence, &c. ..	34	34	58	46	74
Larceny .. .. .	170	201	204	185	233
House, Shop, Office, &c., Breaking and Stealing, Burglary ..	696	694	727	811	994
Cattle and Sheep Stealing, &c. ..	16	11	15	12	14
Assault with Intent to Rob ..	10	9	2	..	..
Receiving .. .. .	57	49	44	57	48
Embezzlement, False Pretences, Fraudulent Conversion, &c. ..	44	59	47	76	58
Illegal Use of Motor Vehicles*	44	54	56	39	57
Other .. .. .	27	32	34	24	34
<b>Total .. .. .</b>	<b>1,098</b>	<b>1,143</b>	<b>1,187</b>	<b>1,250</b>	<b>1,512</b>
<b>Other Offences—</b>					
Driving under the Influence* ..	24	28	18	33	19
Dangerous Driving* .. .. .	37	45	37	40	48
Miscellaneous .. .. .	108	82	108	124	159
<b>Total .. .. .</b>	<b>169</b>	<b>155</b>	<b>163</b>	<b>197</b>	<b>226</b>
<b>Grand Total .. .. .</b>	<b>1,643</b>	<b>1,779</b>	<b>1,799</b>	<b>1,996</b>	<b>2,307</b>

\* By amendment to the appropriate Acts, these became indictable offences during 1956, giving the offender the right to have his case tried in a higher court before a judge and jury.

**VICTORIA—HIGHER COURTS : AGES OF PERSONS  
CONVICTED OF SPECIFIC OFFENCES, 1961**

Nature of Offence	Distinct Persons Convicted—Age Groups (Years)						Total
	Under 20	20-24	25-29	30-34	35-39	40 and over	
<b>Against the Person—</b>							
Murder .. .. .	2	..	1	..	..	1	4
Manslaughter .. ..	2	2	1	1	2	..	8
Attempted Murder, Wound with Intent to Murder .. ..	..	..	..	..	1	..	1
Shoot, Wound, &c., and Inflict Grievous Bodily Harm with Intent .. .. .	1	3	3	7	1	3	18
Assault with Actual Bodily Harm	6	6	4	2	2	..	20
Assault .. .. .	9	11	11	5	1	6	43
Rape, Attempted Rape, &c. ..	3	10	5	..	1	3	22
Carnal Knowledge, Attempted Carnal Knowledge, &c. ..	82	85	17	..	4	5	193
Incest, Attempted Incest ..	..	1	..	1	2	10	14
Indecent Assault (on Female) ..	22	21	7	10	13	21	94
Unnatural Offence, Attempted Unnatural Offence ..	6	17	15	6	15	17	76
Indecent Assault (on Male), &c.	5	14	2	13	5	11	50
Bigamy .. .. .	..	1	1	1	3	2	8
Other .. .. .	2	2	3	1	3	7	18
<b>Total .. .. .</b>	<b>140</b>	<b>173</b>	<b>70</b>	<b>47</b>	<b>53</b>	<b>86</b>	<b>569</b>
<b>Against Property—</b>							
Robbery under Arms, in Company, with Violence, &c.	20	18	16	7	5	8	74
Larceny .. .. .	60	54	38	30	21	30	233
House, Shop, Office, &c., Breaking and Stealing, Burglary .. .. .	321	260	141	90	80	102	994
Cattle and Sheep Stealing, &c. ..	3	5	2	2	1	1	14
Receiving .. .. .	7	7	7	9	5	13	48
Embezzlement, False Pretences, Fraudulent Conversion ..	3	10	8	15	11	11	58
Illegal Use of Motor Vehicles ..	32	18	3	1	3	..	57
Other .. .. .	5	6	5	8	1	9	34
<b>Total .. .. .</b>	<b>451</b>	<b>378</b>	<b>220</b>	<b>162</b>	<b>127</b>	<b>174</b>	<b>1,512</b>
<b>Other Offences—</b>							
Driving under the Influence ..	..	..	1	4	5	9	19
Dangerous Driving .. ..	2	10	5	4	9	18	48
Miscellaneous .. .. .	47	43	25	15	12	17	159
<b>Total .. .. .</b>	<b>49</b>	<b>53</b>	<b>31</b>	<b>23</b>	<b>26</b>	<b>44</b>	<b>226</b>
<b>Grand Total .. .. .</b>	<b>640</b>	<b>604</b>	<b>321</b>	<b>232</b>	<b>206</b>	<b>304</b>	<b>2,307</b>



VICTORIA—HIGHER COURTS : OFFENDERS CONVICTED OF  
SPECIFIC OFFENCES : RESULT OF HEARING, 1961

Nature of Offence	Result of Hearing—							Total
	Fined	Im- prisoned Twelve Months and under	Im- prisoned over Twelve Months	Death Sen- tence*	Sen- tence Sus- pended on En- ter- ing a Bond	Pro- bation	Other	
<b>Against the Person—</b>								
Murder .. .. .	..	..	..	2	..	..	2	4
Manslaughter .. ..	..	..	6	..	1	..	1	8
Attempted Murder and Wound with Intent to Murder ..	..	..	1	..	..	..	..	1
Shoot, Wound, &c., and Inflict Grievous Bodily Harm with Intent .. .. .	..	3	6	..	7	2	..	18
Assault with Actual Bodily Harm .. ..	..	6	9	..	2	3	..	20
Assault .. .. .	5	10	6	..	9	13	..	43
Rape, .. .. .	..	..	19	..	2	1	..	22
Rape, &c. .. .. .	..	..	..	..	..	..	..	..
Carnal Knowledge, Attempted Carnal Knowledge, &c. ..	1	25	17	..	90	60	..	193
Incest, .. .. .	..	..	10	..	2	2	..	14
Incest .. .. .	..	..	..	..	..	..	..	..
Indecent Assault (on Female) .. .. .	2	16	13	..	31	32	..	94
Unnatural Offence, Attempted Un- natural Offence ..	5	10	12	..	36	13	..	76
Indecent Assault (on Male), &c. .. ..	1	15	3	..	22	9	..	50
Bigamy .. .. .	..	3	1	..	4	..	..	8
Other .. .. .	..	1	5	..	9	3	..	18
<b>Total .. .. .</b>	<b>14</b>	<b>89</b>	<b>108</b>	<b>2</b>	<b>215</b>	<b>138</b>	<b>3</b>	<b>569</b>
<b>Against Property—</b>								
Robbery under Arms, in Company, with Violence, &c. ..	..	19	40	..	4	11	..	74
Larceny .. .. .	3	79	31	..	69	50	1	233
House, Shop, Office, &c., Breaking and Stealing, Burglary	8	338	208	..	201	237	2	994
Cattle and Sheep Stealing, &c. ..	..	2	2	..	7	3	..	14
Receiving .. .. .	2	13	10	..	14	9	..	48
Embezzlement, False Pretences, Fraud- ulent Conversion ..	1	22	7	..	20	8	..	58
Illegal Use of Motor Vehicles .. .. .	3	25	6	..	8	14	1	57
Other .. .. .	2	9	5	..	13	5	..	34
<b>Total .. .. .</b>	<b>19</b>	<b>507</b>	<b>309</b>	<b>..</b>	<b>336</b>	<b>337</b>	<b>4</b>	<b>1,512</b>
<b>Other Offences—</b>								
Driving under the Influence .. .. .	12	4	..	..	3	..	..	19
Dangerous Driving ..	37	8	12	..	2	..	..	48
Miscellaneous .. ..	9	71	12	..	41	26	..	159
<b>Total .. .. .</b>	<b>58</b>	<b>83</b>	<b>13</b>	<b>..</b>	<b>46</b>	<b>26</b>	<b>..</b>	<b>226</b>
<b>Grand Total .. ..</b>	<b>91</b>	<b>679</b>	<b>430</b>	<b>2</b>	<b>597</b>	<b>501</b>	<b>7</b>	<b>2,307</b>

\* One commuted to fifteen years' imprisonment, one commuted to forty years' imprisonment.

VICTORIA—HIGHER COURTS : AGES OF PERSONS  
CONVICTED

Age Group		1957	1958	1959	1960	1961
Under 20 Years	Males	381	367	450	525	631
	Females	4	10	11	9	9
20-24 Years	Males	367	436	442	488	599
	Females	9	9	5	10	5
25-29 Years	Males	261	260	231	238	314
	Females	12	16	7	5	7
30-34 Years	Males	203	230	228	220	227
	Females	6	10	11	6	5
35-39 Years	Males	150	178	157	169	201
	Females	1	6	7	9	5
40 Years and over	Males	244	245	240	307	291
	Females	5	12	10	10	13
Total	Males	1,606	1,716	1,748	1,947	2,263
	Females	37	63	51	49	44
	Persons	1,643	1,779	1,799	1,996	2,307

VICTORIA—HIGHER COURTS : NUMBER OF OFFENDERS  
CONVICTED : RESULT OF HEARING

Result of Hearing		1957	1958	1959	1960	1961
Fined	Males	26	56	45	71	91
	Females	..	..	2	2	..
Imprisoned 12 Months and under	Males	507	553	569	615	669
	Females	9	18	14	10	10
Imprisoned over 12 Months	Males	244	298	379	366	427
	Females	1	2	3	2	3
Detained at Governor's Pleasure	Males	1	..	1	..	..
	Females	..	..	..	..	..
Death Sentence*	Males	1	1	2	2	2
	Females	..	..	..	1	..
Sentence Suspended on Entering Bond	Males	549	478	442	501	572
	Females	19	29	21	21	25
Probation†	Males	256	327	310	388	495
	Females	8	14	11	13	6
Other	Males	22	3	..	4	7
	Females	..	..	..	..	..
Total	Males	1,606	1,716	1,748	1,947	2,263
	Females	37	63	51	49	44
	Persons	1,643	1,779	1,799	1,996	2,307

\* The death sentence was not carried out in any of these instances, various terms of imprisonment being substituted.

† Probation for adult offenders was introduced by the *Penal Reform Act 1956*

**Licensing Act 1958***General*

The Licensing Act is administered by the Licensing Court consisting of a chairman, who must be a County Court judge, and two magistrates, one of whom must have experience in hotel accounting and finance. The members of the Court are appointed for a term of not more than seven years and may be re-appointed.

The Court has the power to grant applications for all liquor licences (other than Australian Wine Licences) and billiard table licences, to grant canteen licences under specified conditions, to grant registration of clubs, and to give permission to remove certain licences to other sites. Objectors may be represented in any of these matters.

Legislation in 1960 authorized a new type of licence—the Restaurant Licence—permitting the holder to sell all liquors other than beer, ale and porter, with bona fide meals between 12 noon and 10 p.m. On a date to be proclaimed in 1962, existing Australian Wine Licences will be restricted to the sale of bottled wine for consumption off the premises only. Australian wine licensees applying for a Restaurant Licence before the proclaimed date may be authorized to have, in addition, a “bistro” type of establishment on portion of the licensed premises.

The Court is not restricted as to the number of licences that it has power to grant or reduce, the State being reconstituted one Licensing District in 1954. In the event of the Court cancelling any licence, it then sits as the Licences Reduction Board for the purpose of fixing compensation. This and the acceptance of surrenders of victuallers' licences are the Board's only functions.

All matters relating to changes in licenseeship, &c., and/or rebuilding, or alteration to licensed premises, must receive the approval of the Court.

Permits to consume liquor on unlicensed premises and in public halls and extension of liquor with meals permits for licensed premises are dealt with by a single magistrate without sitting in open Court, providing there is no police objection. If objection is raised, a formal sitting is necessary and the applicant must appear.

*Applications and Reviews*

For the purpose of setting down applications and paying the prescribed fees, Victoria was in 1954 divided into Country and Metropolitan Licensing Areas. A statement showing these areas was published on page 198 of the Victorian Year Book 1952–53 and 1953–54.

Licensing Court sittings are formal. Evidence is taken on oath. Applicants appear in person and are subject to examination and cross-examination and, in most cases, are represented by Counsel. The Licensing Inspector appointed for the particular area appears to assist the Court in general matters of transfers, &c., and the Supervisor of Licensed Premises in applications concerning alterations to premises.

For the purpose of reviewing licences annually the Licensing Court holds an Annual Sittings usually in November and December. Applications for renewal are made by all licensees, country licensees setting down their applications with the Clerk of the Licensing Court for the particular area. A magistrate holds a sitting on the appointed day in the Court House at each of the prescribed centres. Objections by the Licensing Inspector or Supervisor are heard, the licensee having previously been served with a notice setting out the reasons for the objection.

### Fees

Licence-fees are based on 6 per cent. of the total cost of liquor purchased during the financial year preceding the year for which the licence is renewed. The fees were challenged in the High Court of Australia and as a result, percentage fees for *temporary* victuallers were held to be invalid. Following this decision, the fees for this type of licence were varied in 1960 to a fixed fee based on the number of bars per day.

All fees taken under the Licensing Act are paid into the Licensing Fund and, after payment of all administrative expenses, compensation for licences deprived or surrendered, statutory payments to municipalities and transfers to the Police Superannuation Fund, the balance is paid into Consolidated Revenue.

### Licensing Fund

Revenue and expenditure of the Licensing Fund for the years ended 30th June, 1957 to 1961, are shown below :—

#### VICTORIA—LICENSING FUND : REVENUE AND EXPENDITURE £'000

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>REVENUE</b>					
Licences, Certificates, and Permits .. ..	2,515	2,818	2,908	2,995	3,219
Interest on Investments .. ..	10	10	10	10	10
Fees and Fines .. ..	22	22	23	24	30
<b>Total .. ..</b>	<b>2,547</b>	<b>2,850</b>	<b>2,941</b>	<b>3,029</b>	<b>3,259</b>
<b>EXPENDITURE</b>					
Annual Payments to Municipalities .. ..	58	58	58	57	57
Compensation .. ..	1	17	13	9	15
Transfer to Police Superannuation Fund	23	23	23	23	23
Salaries, Office Expenses, &c. .. ..	97	104	108	140	128
Transfer to Revenue .. ..	2,368	2,648	2,739	2,800	3,036
<b>Total .. ..</b>	<b>2,547</b>	<b>2,850</b>	<b>2,941</b>	<b>3,029</b>	<b>3,259</b>

## Number of Liquor Licences

The following table gives details of liquor licences of various types in force in Victoria for the years stated :—

## VICTORIA—NUMBER OF LIQUOR LICENCES

Type of Licence	At 30th June—				
	1957	1958	1959	1960	1961
Hotel .. .. .	1,637	1,614	1,606	1,590	1,583
Registered Club .. .. .	169	176	203	219	235
Grocer .. .. .	299	329	356	376	408
Wholesale Spirit Merchant .. .. .	69	65	65	64	66
Australian Wine .. .. .	99	95	92	91	73
Railway Refreshment Room .. .. .	22	22	21	21	21
Vignerons .. .. .	10	10	10	11	11
Brewer .. .. .	12	12	11	8	8
Restaurant .. .. .	..	..	..	..	18
Total .. .. .	2,317	2,323	2,364	2,380	2,423

### Racing

The Racing Act 1957 collated and presented, in consolidated form, existing legislation from various sources dealing with horse, pony, trotting and dog racing, and allied subject matter.

Legislation from these sources is represented in the Act in six parts, dealing, respectively, with race-courses and race-meetings, trotting control, dog racing, registration of bookmakers and bookmakers' clerks, totalizators, and payments to racing clubs.

This Act was further consolidated in 1958 with the general consolidation of Victorian statutes and therefore the law on this subject is now to be found in the *Racing Act 1958*.

The Act provides that race-meetings for horse races or for trotting races can only be held on race-courses licensed for the purpose. The number of days on which race-meetings can be held on the metropolitan race-courses during the year is set out in the Second Schedule to the Act (e.g., Flemington on seventeen days). A race-course not being within 30 miles radius of the General Post Office, Melbourne, can hold race-meetings on twelve days in the year.

The days on which and the hours during which race-meetings may be held are also governed by this legislation and can be found in Sections 13 and 14 of the Act.

Trotting and dog racing are under the control of the Trotting Control Board and the Dog Racing Control Board respectively. These Boards are both established under the Racing Act.

The registration of bookmakers and bookmakers' clerks is also dealt with under the Act by a registration committee. Bookmakers are required, besides obtaining registration, to obtain a permit from the management of the race-course before they can operate.

The Third Schedule to the *Stamps Act* 1958 sets out the fees required to be paid by bookmakers and their clerks for the issue to them of a registration certificate in accordance with the Racing Act. These fees vary according to the race-course and the enclosure on that race-course at which they field. The Stamps Act also provides for a stamp duty on all betting tickets issued by a bookmaker, and the amount of the tax is set out in the Third Schedule to the Act.

As already mentioned, the Racing Act also deals with the use of the totalizator at a race-meeting, its management during the meeting, and the commission on the revenue received which is paid into Consolidated Revenue.

The *Racing (Totalizators Extension) Act* 1960 established the Totalizator Agency Board, a corporate body of eight members appointed by the Governor in Council, and representatives of racing clubs and associations and of the Trotting Control Board. The principal function of the Totalizator Agency Board is to establish agencies and to provide the necessary facilities enabling persons, who might place a bet lawfully on a totalizator operating on a racing or trotting course, to place a bet lawfully through an agency away from the course. Bets may be placed in cash or through a credit previously established with the Board. The Board commenced operations early in March, 1961.

## **Victoria Police**

### *Introduction*

The basic function of the Police Force is the enforcement of law and order in the community. As life becomes increasingly complex, the successful implementation of this function will involve new methods and modifications of past ideas. The following aspects of police activity today illustrate both how this pattern is developing and how the Victoria Police Force carries out the various duties which ensure the protection of lives and property in the community.

### *Recruitment*

During 1961, the strength of the Police Force was increased by 100 members. The authorized strength at 30th June, 1961, was 4,011. Increases in strength which have been authorized by the Government are effected by monthly intakes of recruits, spread over each financial year. There has not been any difficulty in reaching the authorized strength at the conclusion of each financial year. Each group of applicants is subjected to a rigorous selection which includes a medical examination, an education test, an intelligence test and, finally, an appearance before a Selection Board which seeks to choose only those who have distinct aptitudes for service in the community as members of the Police Force. In fixing the authorized strength each year, the Government has been guided by the capacity of the Police Training Depot to accommodate recruits. The Training Depot has a limited capacity and, in addition, training facilities have become outmoded. Plans are in hand for rebuilding the depot and providing up-to-date housing and training of recruits.

*Training*

The Police Force has three very well established levels of training. The first level includes basic training courses for recruits and a three-year training course for Police Cadets who join immediately they have completed their schooling. The second level includes specialist training and the training of sub-officers. The third level caters for the training of officers at the Police Officers College in South Yarra.

The Police Cadet Training Course has been revised and now offers an education programme for boys who leave school at Intermediate, Leaving or Matriculation standards.

Only boys at age sixteen years are taken with Intermediate standard education. Those who are selected at Leaving or Matriculation standards may be seventeen to eighteen years of age. From the Cadets, it is expected that future officers and specialists will emerge. The Cadet Training Course seeks to further the ordinary education of cadets, so that those with Intermediate may expect to obtain Leaving Certificate; and those with Leaving and higher may expect to obtain Matriculation or additional Matriculation subjects, or to take up training in a Technical College or University. In addition, basic police training and physical education are given to cadets.

*Law Enforcement System*

Police Forces constantly study ways and means of attaining law abidance with a reasonable number of personnel and a maximum of co-operation on the part of ordinary citizens. In Victoria, the co-operation of ordinary citizens has been obtained, partly as a result of the successful operation of radio-controlled patrols which answer calls or reports coming from members of the public without causing embarrassment to the latter.

One of the outstanding factors governing law enforcement in Australia is that of space or "sprawl". Our cities are less densely packed than cities in many oversea countries; and our population is thinly spread beyond city limits. This factor has given rise to the use of police in motor vehicles under radio control. The same factor has been responsible for the adoption in Victoria of a Group Police System. The main feature of this system is the establishment of central police stations which are surrounded by a number of out-stations or sub-stations, all of which are linked by direct telephone lines with the former. Patrols are controlled from communications rooms situated in central stations.

People still like to see a foot policeman patrolling a beat. This is not always possible; and, in many cases, it is certainly neither practical nor economical. However, there are some areas of our cities where "the man on the beat" is still the only answer to effective crime prevention. In other areas the mobility afforded by use of a bicycle is a means of overcoming the factor "space". But beyond these areas, it has been proved that having police operate in motor vehicles is one of the best ways of providing effective law enforcement.

### *Detection and Prevention of Crime*

In modern times crime detection is undertaken with team work. Detectives in the Criminal Investigation Branch are supported by a number of ancillary sections of the Force, including forensic scientists, fingerprint experts, modus operandi and handwriting experts and uniformed police who possess an intimate knowledge of a locality. Crime detection figures in relation to crimes reported are high in Victoria. The total of crimes reported has not outstripped, relatively speaking, the growth of population; but it has become apparent that crimes such as arson, motor vehicle stealing, breaking and entering, and others demand modern methods and maximum efficiency on the part of the crime-fighting sections of the Police Force.

### *Social Guidance*

Apart from his official duties, a new role seems to have devolved upon the policeman. The new role could be called "social guidance". In fact, police are more and more undertaking welfare roles which are aimed at keeping people out of trouble, not by threat of law but rather by good guidance and leadership. Although, officially, the Police Force in Victoria is not obliged to undertake youth club work or that type of guidance which involves lecturing adults on how to drive safely, it is taken for granted that police will do so; and, in fact, most members of the Force are spending a good deal of their time at this type of work.

The social guidance role has also entered the everyday routine of the policeman on patrol, whether on foot or in a motor car. Many calls are received from people who need help in solving their domestic problems. The result of these calls is a lessening of the number of appearances by citizens in Court. It usually amounts to the straightening out of a problem by an understanding policeman who, although not specifically trained for the role of conciliator, appears to be meeting with considerable success.

### *Traffic*

Early in 1960 the Traffic Control Branch reorganized its system of law enforcement. Briefly, the reorganization took the form of dividing the Metropolitan Area into three sub-areas to which men and vehicles were allotted proportionately. The result has been a better application of existing strength.

During the year legislation was passed enabling police to seize the car keys of motorists considered to be unfit to drive as a result of the consumption of alcohol. Plans were also made for the use of breath analysis instruments as a means of testing sobriety. Specially chosen police have been trained in the Pathology Department of Melbourne University to operate and maintain these instruments.

The education aspect of road safety has not been neglected. The Government appointed a special committee, of which the Chief Commissioner acts as chairman, to enquire into means of educating motorists in road safety. The result of its investigations have been conveyed to the Government in a confidential report. Other road safety educational activities are carried out by the Children's Traffic School at Kew, the Council of Pedal Clubs, the Victoria Police Motor Sports Club, and various radio and television stations.



Constant attention has been given throughout the year to developing equipment for traffic control. In some cases the development of this equipment is in its infancy. Activity of this kind is centred around the Traffic School, the Vehicle Safety Testing School and the Technical Branch. Some interesting equipment is under review. It is likely, in the future, that mechanical aids to speed detection and the testing of driver reactions will be introduced.

The following statement gives the numerical strength of the Police Force in Victoria and the number of inhabitants to each police officer at the end of the five years 1957 to 1961 :—

#### VICTORIA—POLICE FORCE : NUMERICAL STRENGTH

Year							Total Strength (Including Police-women)	Number of Inhabitants to Each Police Officer
1957	..	..	..	..	..	..	3,709	721
1958	..	..	..	..	..	..	3,754	730
1959*	..	..	..	..	..	..	3,753	739
1960*	..	..	..	..	..	..	3,867	737
1961*	..	..	..	..	..	..	4,025	719

\* At 30th June.

The next table shows the amount expended in connexion with the police, and with the penal establishments and gaols in Victoria, in each of the five years, 1957 to 1961 :—

#### VICTORIA—EXPENDITURE ON POLICE AND GAOLS

Year Ended 30th June—	Amount Expended (Exclusive of Pensions) on—							
	Salaries, General Expenditure, etc.		Buildings and Rents					
	Police	Gaols and Penal Establish- ments	Police	Gaols and Penal Establish- ments				
	£'000							
1957	..	..	..	..	5,803	779	353	164
1958	..	..	..	..	6,318	854	461	204
1959	..	..	..	..	6,624	882	488	125
1960	..	..	..	..	7,117	964	519	127
1961	..	..	..	..	7,729	1,092	481	156

#### Further References

An outline of the history of Victoria Police will be found on pages 318 to 321 of the Victorian Year Book 1961.

*Housing and Building***Building Trends since 1945***Private Houses*

From 1945, when the State Government took over the administration of building controls, until 1953, the main emphasis in the building industry was on the construction of houses. In the immediate post-war period, houses were limited to 1,250 square feet to spread the available labour and materials. In 1949 the limit was raised to 1,400 square feet. The houses built in this period were, with minor but significant exceptions, basically the same as those built in 1939. In general, however, the size of rooms began to be restricted after the war. The first room to be affected was the dining room ; halls, passages, and kitchens continued to be built to pre-war specifications for about another decade.

By 1955 the post-war homebuilder had adjusted himself to post-war space standards and all areas had been reduced to the allowable minimum, except the livingroom. Thus, in many small houses the single livingroom accounted for anything up to one quarter of the total area. Cost, however, rather than any limits imposed by official regulations, was the principal influence restricting the sizes of rooms and houses.

Although, from 1955 onwards, a few of the larger-type houses began to be built, the trend towards a reduction in the average size of houses continued. In Victoria, in the immediate post-war period, the typical house was built of weatherboard with a tiled roof and timber windows. Subsequently, the brick veneer house became the most common type in Victoria, a characteristic not shared by other States. There were also other changes. Builders voluntarily lowered ceilings from 9 feet in 1945, first to 8 feet 6 inches, and subsequently to 8 feet by 1959. Also, work benches rose from about 2 feet 10 inches to 3 feet high ; separate showers began to be installed ; windows became larger ; and householders heated their water with briquettes and gas instead of by electricity. Breakfast nooks and fireplaces were omitted from new houses and home owners began to introduce simplified forms of central heating. One feature was that even the more modest post-war houses were generously equipped with built-in cupboards.

*City Buildings*

New buildings, other than houses, began to feature elaborate equipment, services, and finishes which grew in importance until they cost more than the structure itself. Although the first multi-storeyed city building was a modest unpublicised building in a lane off Lonsdale-street, it was Gilbert Court in Collins-street which became the prototype of the post-war "curtain-walled" office building.

The prefabricated aluminium and glass "curtain-wall" soon became the distinguishing feature of post-war building. Yet, with the public, it was perhaps the least liked architectural idiom of the century. Curtain walls were used in schools and flats, and even small houses had their length of standardized window walls which replaced the relatively expensive custom-built windows, formerly the distinguishing mark of an architect-designed house.

The post-war city building was characterized by I.C.I. House which was the city's highest building for three years until exceeded, in 1961, by the Consolidated Zinc Building. Rebuilding in the late 1950's transformed complete blocks in the north-western section of the City proper into new areas of glass and aluminium producing a result similar to what had happened in every prosperous city in the world. In Bendigo, Ballarat, Geelong, and Morwell, builders followed the Melbourne pattern and the central areas of these cities became miniature replicas of Melbourne's city streets.

#### *Building Costs*

In the years between 1956 and 1960 the building industry expanded and tackled many problems. Housing costs increased and yet prices remained fairly stable. This was partly because lower profits were accepted and partly because increased output helped to keep unit costs down. Reviewed over a longer period, housing costs showed significant increases. Thus a 1945 house would cost about £1 a square foot, whereas a 1960 house could cost from just below £3 to as much as £10 a square foot, depending upon internal fixtures. The majority of houses were, of course, in the lower levels of this price range. Housing loans of over £3,000 were rarely available and, therefore, prices were more or less fixed. When houses were in high demand, as they were during 1959-1960, many of those offered to buyers were bare and semi-finished. Subsequently, when increased supply improved the buyer's bargaining position, extras such as wall ovens, began to appear as added attractions.

Materials and labour, which in 1945 had been in short supply, were more plentiful by 1952. However, from 1956 onwards, land, which formerly had not been a large proportion of the building budget, became an increasingly important factor in housing finance. By 1960, even land which lacked services and attractive views, frequently represented one third of the total cost of a house. In the inner suburbs it was often equal in value and even more valuable than the house built on it. Thus builders changed their requirements; smaller lots were demanded and pressure developed to reduce lot sizes to the equivalent of sizes acceptable in other States and countries. Multi-storeyed development on smaller blocks of land became a feature of building in Victoria. The 23-storeyed I.C.I. Building and a 20-storeyed block of flats in St. Kilda-road were prominent examples on the Melbourne skyline.

*Increasing Numbers of Flats*

During the early post-war years an average of about 400 flats was built each year in Victoria. As the building boom progressed, flats accounted for more and more of the State's housing construction so that by 1955 the annual output had risen to just over 1,000. This trend is clearly shown in the figures on page 354. Although only 897 flats were built in 1957, flat building began to increase from then on. In 1959, 1,434 were built ; in 1960, 2,062 and in 1961, 4,183 were completed. However, by late winter in 1961, the high rate of flat building had ceased and fewer flats were being commenced than for several years. The 1960 flats were, in general, of a lower standard than their 1940 counterparts having less space, equipment, soundproofing, and privacy. Signs of improvement were, however, becoming apparent and four of the new tall blocks in Melbourne were equipped with lifts and other common services. Some of the flats built were architectural landmarks and were of a quality capable of influencing popular ideas about the suitability of the modern flat as a home.

*Conclusion*

Although the post-war building boom at various times gave prominence to flats, factories, schools and churches, the most significant building activity was the erection of houses. Whilst the demand for houses will probably be partly met by the building of flats, present indications are that for some time to come the demand for dwellings will be satisfied principally by the building of houses.

**Building Development in the City of Melbourne, 1961**

The year 1961 was primarily one of consolidation and re-planning because credit restrictions introduced by the Commonwealth Government late in 1960 (see pages 688 to 691), restrained an inflationary trend which had developed in the economy.

In real estate the increasing number of speculative subdivisions was curbed. However, although tighter credit resulted in fewer sales, prices in the City, at least, remained stable.

The programme for major buildings suffered no material set-back. One reason was that since the war, most major office buildings have been erected primarily for occupation by the owner, as against the pre-war trend of building for tenancy as an investment. Consequently, since the war, the decision to build an office block has not been undertaken lightly. In addition, larger buildings usually take an average of five years from the start of planning until their completion. Locality is carefully considered before a site is acquired ; plans are prepared, considered and reconsidered ; and the decision to build, when finally made, is based on long-term considerations which are not likely to be delayed by credit stringencies, unless these are extremely severe and deep seated. Moreover, once building operations have started, delays cause heavy losses. Thus, in the City of Melbourne, no building projects were known to have been cancelled as a direct result of the restricted credit available.

Major new buildings (of over £500,000 each) completed during 1961 included :—

Ansett Transport Industries Pty. Ltd., 465-501 Swanston-street.  
Automobile Fire and General Insurance Co. Ltd., 277-87 William-street.

Hicks Atkinson Ltd., 387-403 Bourke-street and 362-68 Little Collins-street.

Pearl Assurance Co. Ltd., 143-51 Queen-street.

Royal Automobile Club of Victoria, 113-25 Queen-street.

Sir Owen Dixon Barristers Chambers Ltd., 205-19 William-street.

South British Insurance Co. Ltd., 157-59 Queen-street.

University of Melbourne, North Building, Grattan-street.

Major new buildings (of over £500,000 each) at present (December, 1961) in course of erection include :—

Colonial Mutual Life Assurance Society Ltd., cnr. Elizabeth and Collins streets.

Consolidated Zinc Pty. Ltd., 89-101 Collins-street.

Dental Hospital, cnr. Royal-parade and Flemington-road.

Housing Commission Flats (160), Boundary-road.

National Mutual Life Association of A/asia. Ltd., 435-55 Collins-street.

Royal Children's Hospital, Flemington-road.

Southern Cross Hotel, 131-41 Exhibition-street.

The Age (last stage), 233-35 Collins-street.

Victorian Railways—Maintenance Depot, South Dynon.

Windsor Hotel Ltd., cnr. Bourke and Spring streets.

Although 1961 has been referred to as a year of consolidation, its results show it to have been also a year of progress and solid achievement in the rebuilding of Melbourne.

### **Supervision and Control of Building**

The *Town and Country Planning Act* 1958, 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 Act**

The passing of the Town and Country Planning Act, enabled statutory planning schemes to be prepared and approved and also provided for the setting up of a Town and Country Planning Board, charged with certain duties and responsibilities. Details regarding these responsibilities, planning procedure, responsible authorities, the Metropolitan Planning Scheme, and Interim Development Control, may be found on page 325 of Victorian Year Book 1961.

### **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 the powers and controls provided by these regulations may be found on page 327 of Victorian Year Book 1961.

### **Building Statistics**

#### *General*

The statistics in succeeding pages deal only with the construction of buildings, as distinct from the construction of railways, bridges, earthworks, water storage, &c. Additions of £5,000 and over to existing buildings (other than houses) are included as new buildings. 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 buildings.

Since the September quarter 1945, a quarterly collection of statistics of building operations has been undertaken, which comprises the activities of all private contractors and government authorities engaged on the erection of new buildings, and owner-builders who erect buildings without the services of a contractor.

The bases of the collection are building permits issued by local government authorities, and contracts let or day labour work authorized by Commonwealth, State, semi- 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. Thus, some buildings on farms are excluded, but this does not affect the figures materially.

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 authorized by Commonwealth, State, semi- 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 (whichever occurs first). The value shown in all cases is that of the house as a finished project as planned. As with commencements, the interpretation placed on this definition by informants may not be entirely uniform.

**Under Construction :** Irrespective of when commenced, if a building, on which work has not been permanently abandoned, remains uncompleted at the end of a period, it is regarded as being under construction, regardless of whether construction was actively proceeding on that particular date.

**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 flat dwelling unit.

**Values :** All values shown exclude the value of the land and represent the estimated cost of the buildings on completion.

*Building Approvals*

The following table shows the value of private and government building approved in Victoria, for the years 1956–57 to 1960–61 :—

**VICTORIA—VALUE OF PRIVATE AND GOVERNMENT  
BUILDING APPROVED**

(£'000)

Year Ended 30th June—	Houses and Flats	Other New Buildings	Alterations and Additions to Buildings	Total All Buildings
1957 .. .. .	65,113	38,520	13,341	116,974
1958 .. .. .	76,275	44,975	15,721	136,971
1959 .. .. .	78,942	56,201	16,334	151,477
1960 .. .. .	96,708	63,936	19,277	179,921
1961 .. .. .	83,198	64,494	18,210	165,902

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, due to rising costs caused by the lack of, or delay in, supply of finance, and shortages of labour and materials, (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.

As a result of the credit restrictions introduced late in 1960, the total value of buildings approved during the year 1960–61 declined from that shown for the previous year. Although approvals for new flats and other new buildings increased during this period, there was a large decline in the value of approvals for new houses, and to a lesser extent, alterations and additions to buildings. This can be wholly attributed to reduced house-building activity as indicated by the table on the following page.



*Value of New Buildings Commenced*

The following table shows the value of all new buildings commenced in Victoria, according to the kind of building, for the years 1956-57 to 1960-61. It should be noted that additions to existing buildings (other than houses) of £5,000 and over are included and minor alterations, additions, renovations and repairs to buildings are excluded.

VICTORIA—VALUE (WHEN COMPLETED) OF TOTAL NEW BUILDINGS COMMENCED : CLASSIFIED BY KINDS  
(£'000)

Kind of Building	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Houses .. .. .	63,005	72,078	74,496	79,519	68,266
Flats .. .. .	2,711	3,542	4,391	11,346	15,907
Shops with Dwellings .. ..	440	488	691	509	566
Shops without Dwellings .. ..	2,380	3,173	5,345	5,986	4,610
Hotels, Guest Houses, &c. .. ..	1,210	1,078	1,261	2,283	5,720
Factories .. .. .	13,258	16,013	16,599	19,270	21,126
Business Premises—					
Offices .. .. .	6,008	5,482	9,715	10,626	9,189
Other .. .. .	4,221	5,411	4,803	6,693	6,191
Educational .. .. .	5,816	4,207	5,314	8,990	10,311
Religious .. .. .	1,328	1,539	1,516	1,658	1,767
Health .. .. .	3,807	5,320	2,157	2,325	5,211
Entertainment and Recreation ..	1,505	2,056	1,375	1,107	2,738
Miscellaneous .. .. .	3,645	1,746	3,944	3,292	3,774
<b>Total .. .. .</b>	<b>109,334</b>	<b>122,133</b>	<b>131,607</b>	<b>153,604</b>	<b>155,376</b>

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 realized that, in any period, where there are appreciable increases in the value of buildings commenced for industrial, commercial, business, health, &c., 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.

The table shows similar trends to that of buildings approved for the year ended 1960-61, in that, generally the steady expansion of previous years was maintained in the value of new flats and other new buildings commenced, with a substantial reduction in house building activity.

*Value of New Buildings Completed*

The following table shows the value of all new buildings completed in Victoria, according to the kind of building, for the years 1956-57 to 1960-61. As with commencements, additions to existing buildings (other than houses) of £5,000 and over are included and minor alterations, additions, renovations and repairs to buildings are excluded.

**VICTORIA—VALUE OF TOTAL NEW BUILDINGS  
COMPLETED : CLASSIFIED BY KINDS  
(£'000)**

Kind of Building	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Houses .. .. .	65,771	70,282	80,958	81,748	78,798
Flats .. .. .	2,340	2,914	3,814	5,460	13,536
Shops with Dwellings .. .. .	470	468	707	552	700
Shops without Dwellings .. .. .	2,894	3,198	4,054	4,830	6,201
Hotels, Guest Houses, &c. .. .. .	1,681	1,400	1,292	1,693	2,492
Factories .. .. .	17,416	19,219	16,096	21,506	26,581
Business Premises—					
Offices .. .. .	3,211	9,043	8,683	7,986	11,123
Other .. .. .	6,576	5,348	5,237	7,315	6,070
Educational .. .. .	4,826	7,600	4,495	6,521	7,700
Religious .. .. .	1,050	1,510	2,096	2,356	1,625
Health .. .. .	3,385	6,753	3,993	2,913	2,724
Entertainment and Recreation .. .. .	3,546	1,334	2,120	1,292	1,240
Miscellaneous .. .. .	1,664	2,687	3,892	3,990	4,362
Total .. .. .	114,830	131,756	137,437	148,162	163,152

The text on page 352, regarding the reasons for increases in the value of new buildings over a period of time, also applies to the foregoing table, which again shows increased activity in the value of new flats and other new buildings completed, with a decline in house building during the year 1960-61.

*Value of New Buildings under Construction*

The value of all new building work remaining uncompleted has declined from £127,773,000 at the end of year 1959-60, to £122,187,000 at the end of years 1960-61. Here again decreased house building activity is indicated, for the value of work remaining uncompleted on new houses has dropped from £51,313,000 at the end

of year 1959-60 to £42,006,000 at the end of year 1960-61 and during the year the value of work both commenced and completed declined; whereas, comparable figures for new flats and other new buildings show an increase in commencements, completions and value of work remaining uncompleted.

### Number of New Dwellings

The following table shows the number of new houses, individual flat units (excluding conversion to flats), and shops with dwellings, commenced and completed in the Metropolitan Area and the remainder of the State of Victoria for the years 1956-57 to 1960-61 :—

### VICTORIA—NUMBER OF NEW HOUSES, FLATS, AND SHOPS WITH DWELLINGS CONSTRUCTED : GEOGRAPHICAL DISTRIBUTION

Year Ended 30th June—	Commenced				Completed			
	Houses	Flats	Shops with Dwellings	Total	Houses	Flats	Shops with Dwellings	Total
<b>METROPOLITAN AREA *</b>								
1957 .. ..	13,160	984	63	14,207	13,732	845	70	14,647
1958 .. ..	15,020	1,244	68	16,332	14,544	1,005	74	15,623
1959 .. ..	14,678	1,690	105	16,473	16,827	1,331	104	18,262
1960 .. ..	15,628	3,437	80	19,145	16,125	1,966	85	18,176
1961 .. ..	11,915	4,478	85	16,478	14,729	4,034	100	18,863
<b>REMAINDER OF THE STATE</b>								
1957 .. ..	6,489	126	19	6,634	6,453	52	29	6,534
1958 .. ..	6,913	39	27	6,979	6,823	99	23	6,945
1959 .. ..	7,765	136	26	7,927	7,502	103	31	7,636
1960 .. ..	7,573	84	23	7,680	8,032	96	21	8,149
1961 .. ..	6,602	194	26	6,822	7,365	149	28	7,542
<b>STATE TOTAL</b>								
1957 .. ..	19,649	1,110	82	20,841	20,185	897	99	21,181
1958 .. ..	21,933	1,283	95	23,311	21,367	1,104	97	22,568
1959 .. ..	22,443	1,826	131	24,400	24,329	1,434	135	25,898
1960 .. ..	23,201	3,521	103	26,825	24,157	2,062	106	26,325
1961 .. ..	18,517	4,672	111	23,300	22,094	4,183	128	26,405

\* Metropolitan as defined for statistical purposes prior to changes made 30/6/61. Details of this definition are given on page 121.

The table shows that the number of houses commenced and completed substantially declined in the year 1960-61. The number of houses commenced during the year (18,517) was the lowest recorded figure since the year 1952-53 (16,254). On the other hand, flats commenced and completed reached a peak of 4,672 commenced and 4,183 completed, in both cases the highest figures ever recorded.

## Number of New Houses

The following table shows the number of new houses commenced and completed in Victoria, for private and government ownership for the years 1956-57 to 1960-61 :—

VICTORIA—NUMBER OF NEW HOUSES CONSTRUCTED FOR GOVERNMENT INSTRUMENTALITIES AND PRIVATE PERSONS (OR FIRMS)

Year Ended 30th June—	New Houses Erected for—						Total Houses
	Government Instrumentalities*	Private Persons (or Firms)*					
		By Contractors	By Owner-Builders	Private			
<b>COMMENCED</b>							
1957 .. .. .	1,981	10,390	7,278	17,668			19,649
1958 .. .. .	2,333	13,321	6,279	19,600			21,933
1959 .. .. .	2,223	14,965	5,255	20,220			22,443
1960 .. .. .	2,058	17,314	3,829	21,143			23,201
1961 .. .. .	1,380	13,881	3,256	17,137			18,517
<b>COMPLETED</b>							
1957 .. .. .	2,321	10,838	7,026	17,864			20,185
1958 .. .. .	2,129	12,501	6,737	19,238			21,367
1959 .. .. .	2,313	15,131	6,885	22,016			24,329
1960 .. .. .	2,081	16,119	5,957	22,076			24,157
1961 .. .. .	1,710	15,566	4,818	20,384			22,094
<b>UNDER CONSTRUCTION AT END OF PERIOD</b>							
1957 .. .. .	890	3,838	13,135	16,973			17,863
1958 .. .. .	1,094	4,658	12,677	17,335			18,429
1959 .. .. .	1,004	4,492	11,047	15,539			16,543
1960 .. .. .	981	5,687	8,919	14,606			15,587
1961 .. .. .	651	4,002	7,357	11,359			12,010

\* See definitions on page 350.

As previously mentioned, the number of houses commenced substantially declined during the year 1960-61. This table (see also Fig. 10) shows that the decline is evenly divided between government and private building. Houses completed during the year show a similar trend—a decline by all erecting authorities.

VICTORIA—NUMBER OF NEW HOUSES COMMENCED, 1951-52 TO 1960-61  
 For Government Instrumentalities, Owner-Builders, and Private Persons (or Firms)

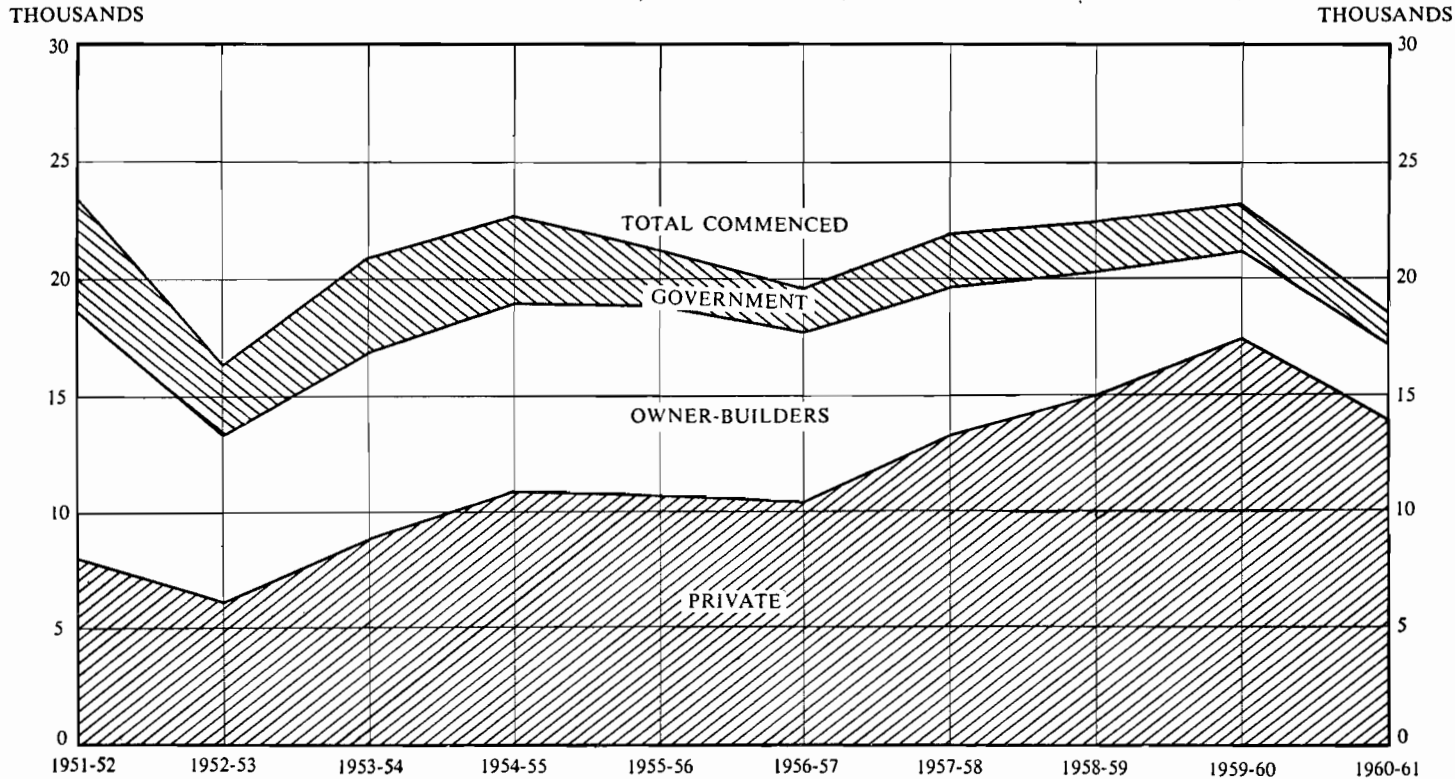


FIGURE 10.  
 Graph showing number of houses classified according to building authority.

For both private and government building, the excess number of houses completed to the number commenced has again resulted in a considerable reduction in the numbers of houses remaining uncompleted, which has fallen from a peak of 27,308 houses under construction at 30th June, 1951, to 12,010 at 30th June, 1961. This is the lowest recorded figure since 30th June, 1947, when the total was 11,680.

VICTORIA—PERCENTAGE NUMBER OF NEW HOUSES COMMENCED BY KINDS, 1951-52 TO 1960-61

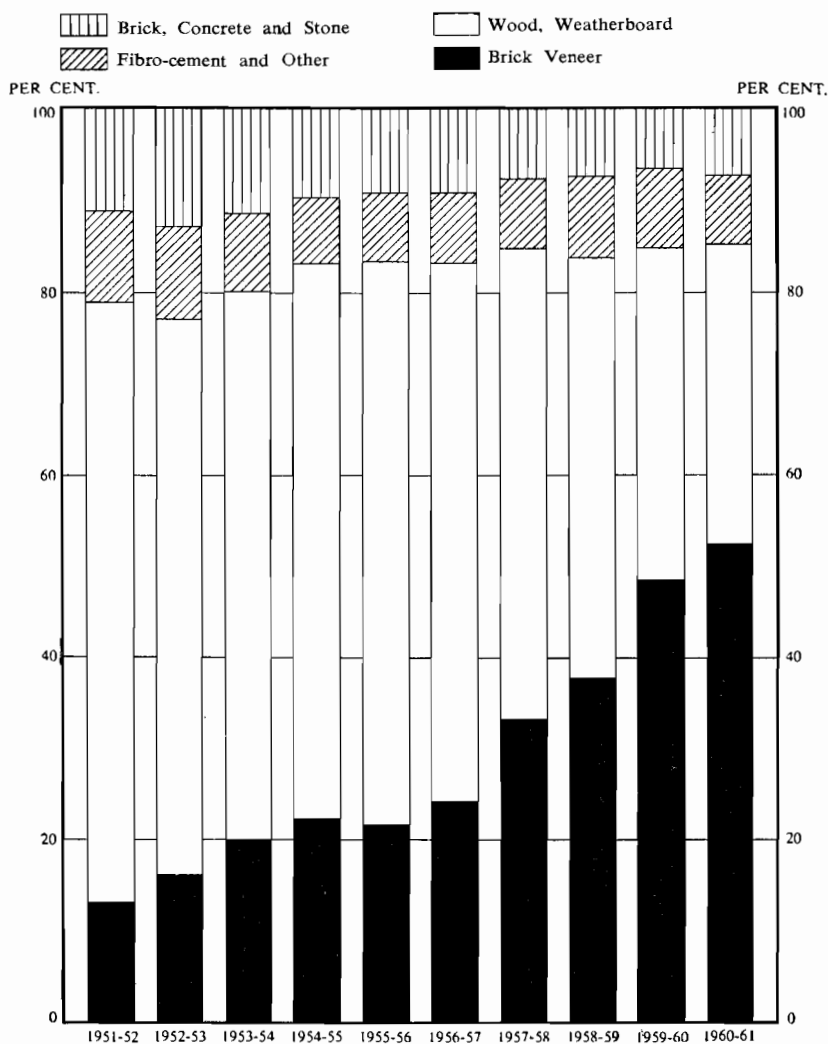


FIGURE 11.

Graph showing percentage number of new houses commenced, classified according to material of outer walls.

Particulars of the number of houses, classified by the material of outer walls, commenced and completed for the years 1956-57 to 1960-61, are shown in the following table :—

VICTORIA—NUMBER OF NEW HOUSES CONSTRUCTED :  
CLASSIFIED BY MATERIAL OF OUTER WALLS

Year Ended 30th June—	Houses						Total
	Brick, Concrete, and Stone*	Brick Veneer	Wood	Fibro-Cement	Other		
COMMENCED							
1957 .. .. .	1,779	4,755	11,594	1,199	322	19,649	
1958 .. .. .	1,647	7,288	11,307	1,185	506	21,933	
1959 .. .. .	1,667	8,452	10,331	1,610	383	22,443	
1960 .. .. .	1,517	11,228	8,436	1,808	212	23,201	
1961 .. .. .	1,312	9,726	6,064	1,260	155	18,517	
COMPLETED							
1957 .. .. .	2,001	5,039	11,627	1,128	390	20,185	
1958 .. .. .	1,846	6,059	11,796	1,201	465	21,367	
1959 .. .. .	1,708	8,692	11,996	1,417	516	24,329	
1960 .. .. .	1,732	10,131	9,987	2,020	287	24,157	
1961 .. .. .	1,415	11,043	7,748	1,689	199	22,094	

\* Includes Housing Commission, Holmesglen, factory-built concrete houses.

This table shows that, during year 1960-61, the marked movements of previous years in the use of materials for external walls of houses have continued. (See Fig. 11.) The trend is still away from brick, concrete and stone solid walls, and wood or weatherboard external walls, to brick-veneer and fibro-cement external walls.

*Value of Work Done during Period*

The following table shows the estimated value of work actually carried out during each year 1956-57 to 1960-61. For any building the sum of these values obtained during its construction equals the value of the building on completion. The figures exclude 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 an almost continuous rise in the cost of building.

VICTORIA—VALUE OF WORK DONE ON NEW BUILDINGS  
(£'000)

Year Ended 30th June—	New Houses and Flats (*)	Other New Buildings (†)	All New Buildings (†)
1957 .. .. .	45,248	53,392	98,640
1958 .. .. .	54,023	49,382	103,405
1959 .. .. .	63,256	55,255	118,511
1960 .. .. .	72,198	61,575	133,773
1961 .. .. .	77,474	71,881	149,355

(\*) Excludes owner-built houses.

(†) Includes partly estimated values for owner-built constructions where actual value of work done during the quarter was not available.

*Building Materials and Fittings*

The requirements of the building industry in Victoria for materials and fittings are met mainly from local production, but important quantities of undressed timber, tiles, floor coverings, colour pigments, plate glass, washing machines and minor quantities of some other items are imported from oversea countries and other Australian States.

The following table shows the principal building materials and fittings currently produced in Victoria. Monthly production of these items is shown in the publication "Victorian Production Statistics".

### VICTORIA—PRODUCTION OF BUILDING MATERIALS AND FITTINGS

Item	Unit of Quantity	Year Ended 30th June—				
		1957	1958	1959	1960	1961
<b>BUILDING MATERIALS</b>						
Sawn Timber (Native)—						
Softwood .. .. .	'000 sup. ft.	24,450	24,665	27,492	27,114	28,257
Hardwood .. .. .	'000 sup. ft.	317,838	321,808	320,975	327,196	293,566
Weatherboards—						
Australian Timbers .. .. .	'000 sup. ft.	841	1,304	1,209	1,797	1,410
Imported Timbers .. .. .	'000 sup. ft.	874	*	444	600	481
Floorboards—						
Australian Timber .. .. .	'000 sup. ft.	19,879	26,118	24,495	24,271	23,269
Imported Timber .. .. .	'000 sup. ft.	1,415	1,438	608	505	329
Plywood .. .. .	'000 sq. ft. †	3,101	2,120	3,681	5,900	7,348
Bricks (Clay) .. .. .	million	208	236	258	283	289
Tiles (Terracotta and Cement)	million	34·0	34·6	37·5	36·9	34·4
Fibrous Plaster Sheets .. .. .	'000 sq. yds.	7,431	7,621	8,297	8,199	7,658
Concrete, Ready-mixed .. .. .	'000 cub. yd.	211	296	510	754	1,028
Paints and Enamels ‡ .. .. .	'000 gall.	3,267	3,323	3,465	3,605	3,682
<b>BUILDING FITTINGS</b>						
Stoves, Domestic Cooking—						
Solid Fuel .. .. .	No.	20,635	19,834	17,735	13,099	12,907
Gas .. .. .	"	24,492	32,810	36,967	44,074	39,649
Sinks, Stainless Steel .. .. .	"	81,312	95,121	96,471	88,399	75,254
Wash Boilers, Gas .. .. .	"	7,805	6,755	6,727	4,957	3,735
Bath Heaters—						
Gas .. .. .	"	7,036	7,620	7,305	6,115	5,506
Electric .. .. .	"	2,214	1,828	1,398	1,086	734
Solid Fuel .. .. .	"	8,426	7,107	7,182	5,979	4,234
Hot Water Systems (Storage) .. .. .	"	23,313	26,317	29,579	30,137	28,302

\* Not available.

†  $\frac{1}{8}$ -inch basis.

‡ Paints, Ready-mixed (Not water) and enamels; includes primers and undercoats.

*Employment*

An indication of the labour resources of the building industry is shown in the following table. The information is obtained from returns collected from private builders and governmental authorities and relates to persons actually working on the jobs of contractors who undertake the erection of new buildings, and of government instrumentalities which erect new buildings, on their own account. They include persons actually engaged on alterations, additions, repairs, and maintenance, when these jobs are undertaken by such contractors and instrumentalities. The figures include working principals and their employees, men working as or for sub-contractors, and men



temporarily laid off on account of weather. Contractors and government instrumentalities are asked to give details of the persons employed on a specified day, but because of frequent movement between jobs and because some tradesmen (such as electricians, &c.) may work on several jobs which are under construction simultaneously by different contractors, some duplication may occur. The figures exclude persons working on owner-built buildings, and employees of builders who undertake only alterations, additions, repairs, and maintenance.

The following table shows details of persons engaged on jobs carried out by builders of new buildings at the 30th June of each year 1957 to 1961 :—

**VICTORIA—PERSONS WORKING ON JOBS CARRIED OUT  
BY BUILDERS OF NEW BUILDINGS**

Particulars	At 30th June—				
	1957	1958	1959	1960	1961
<b>CLASSIFIED BY STATUS</b>					
Contractors* .. ..	2,412	2,456	2,473	2,688	2,390
Sub-Contractors* .. ..	3,760	4,077	4,627	6,267	4,949
Wage Earners Working for—					
Contractors .. ..	18,294	18,073	17,530	17,890	16,513
Sub-Contractors .. ..	6,077	7,028	7,996	10,688	8,343
Total Wage Earners .. ..	24,371	25,101	25,526	28,578	24,856
Total Persons Working .. ..	30,543	31,634	32,626	37,533	32,195
<b>CLASSIFIED BY OCCUPATION</b>					
Carpenters .. ..	12,508	12,636	12,921	14,044	12,049
Bricklayers .. ..	2,629	3,000	3,120	3,964	3,081
Painters .. ..	2,823	2,947	3,099	3,174	2,872
Electricians .. ..	1,190	1,425	1,461	1,783	1,466
Plumbers .. ..	2,238	2,541	2,735	3,163	2,702
Builders' Labourers .. ..	5,074	4,690	4,662	5,363	4,794
Other .. ..	4,081	4,395	4,628	6,042	5,231
Total Persons Working .. ..	30,543	31,634	32,626	37,533	32,195
<b>CLASSIFIED BY TYPE OF BUILDING WORK</b>					
New Buildings—					
Houses and Flats .. ..	12,511	14,987	15,504	19,487	14,162
Other Buildings .. ..	11,701	10,907	12,144	12,814	14,213
Total .. ..	24,212	25,894	27,648	32,301	28,375
Alterations and Additions—					
Houses and Flats .. ..	653	886	612	706	734
Other Buildings .. ..	3,900	3,177	2,845	2,898	1,793
Total .. ..	4,553	4,063	3,457	3,604	2,527
Repairs and Maintenance—					
Total .. ..	1,778	1,677	1,521	1,628	1,293
Total Persons Working .. ..	30,543	31,634	32,626	37,533	32,195

\*Actually working on jobs

**Housing Commission of Victoria**

The Housing Commission of Victoria was appointed on 1st March, 1938, as a result of a preliminary investigation into housing conditions in Victoria begun in July, 1936, when a board for the purpose was appointed by the Government.

Particulars about the establishment of the Housing Commission, together with its powers and duties, may be found on page 336 of the Victorian Year Book 1961.

Since its inception to 30th June, 1961, the Commission has built 44,570 dwellings under Commonwealth-State Agreements and the State Housing Scheme, and at that date there were another 1,575 which were either under construction or for which contracts had been let and work not started. Furthermore, a total of 12,697 houses have been sold.

During 1960-61, the Housing Standards Section of the Commission inspected 1,032 houses, resulting in 633 being declared as unfit for human habitation, and 282 in a state of disrepair. Of the 633 houses "declared", 476 were found to be incapable of being satisfactorily repaired, and orders were issued for the demolition of 446 (leaving a balance of 30 orders to be issued). Of the remaining 157 houses which were considered as capable of being repaired, together with 282 houses declared "in a state of disrepair", 423 notices requiring compliance with the regulations were served (leaving 16 orders yet to be issued). As a result of orders issued, 458 houses were demolished during the year, and 326 houses have been repaired in accordance with the Commission's requirements.

Expansion of the Commission's slum reclamation activities was maintained during the year, when 10·9 acres were acquired, 9·0 acres were proclaimed and subsequently acquired, and 5·0 acres were proclaimed in the Metropolitan Area. The sum of £477,079 was spent on slum reclamation, and £1,496,676 on land and development.

Finance for housing is provided by the Commonwealth Government under the Commonwealth-State Housing Agreement. During the year 1960-61, £7,560,000 was advanced by the Commonwealth Government, and the total outlay upon purchase and development of sites, and the erection of buildings, including the capital cost of houses sold, was £8,563,789. Rental charges for the year were £5,815,886, against which £251,112 was allowed in rent rebates to tenants on low incomes, including pensioners, and £27,494 in rents was lost through vacancies. The steady rise in rebates over recent years is due to the higher rents chargeable for new houses and flats and to the increasing number of elderly people, mainly pensioners, being housed.

The following tables which are compiled from annual reports furnished by the Housing Commission, show its activities for the years 1956-57 to 1960-61 :—

### VICTORIA—HOUSING COMMISSION : DWELLING CONSTRUCTION

Geographical Distribution	Houses and Flat Units				
	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>COMPLETED</b>					
Metropolitan Area* .. ..	1,438	1,347	1,347	1,329	1,387
Remainder of State .. ..	1,142	1,067	1,213	1,265	830
State Total .. ..	2,580	2,414	2,560	2,594	2,217
<b>UNDER CONSTRUCTION AT END OF PERIOD (INCLUDES CONTRACTS LET, WORK NOT STARTED)</b>					
Metropolitan Area* .. ..	748	771	765	962	758
Remainder of State .. ..	602	697	885	751	817
State Total .. ..	1,350	1,468	1,650	1,713	1,575

\* Metropolitan as defined for statistical purposes prior to changes made 30/6/61. Details of this definition are given on page 121.

### VICTORIA—HOUSING COMMISSION : REVENUE, EXPENDITURE, ETC.

(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>REVENUE</b>					
Rentals .. ..	4,983	5,414	5,568	5,562	5,537
Gross Surplus—House Sales ..	1,022	1,041	1,027	1,030	1,535
Loan Redemption Written Back less Allowances to House Purchasers .. ..	58	75	111	130	160
Interest—House Sales (Net) ..	117	210	313	453	588
Sundry .. ..	3	11	9	42	81
Miscellaneous .. ..	1	10	12	24	20
Total Revenue .. ..	6,184	6,761	7,040	7,241	7,921

VICTORIA—HOUSING COMMISSION : REVENUE, EXPENDITURE,  
ETC.—*continued*  
(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>EXPENDITURE</b>					
Interest—Less Amounts Capitalized and Applied to House Sales	2,252	2,503	2,544	2,579	2,591
Loan Redemption—					
Commonwealth—State Agreement .. .. .	738	729	796	779	779
Contribution to National Debt Sinking Fund .. .. .	3	3	3	2	2
Redemption of Debentures and Debenture Loan Sinking Fund Contribution .. .. .	5	5	16	6	6
Administration—General .. .. .	255	330	345	360	384
House Sales .. .. .	61	72	150	166	184
Rates—Less Amount Capitalized	741	780	812	843	871
Provision for Accrued Maintenance .. .. .	934	989	1,004	999	975
Provision for Irrecoverable Rents	80	48	29	6	10
House Purchasers' Death Benefit Fund Appropriation .. .. .	50	84	119	171	210
Transfer to House Sales Reserve Suspense Account .. .. .	872	709	831	940	1,229
Other .. .. .	56	49	53	145	180
<b>Total Expenditure .. .. .</b>	<b>6,047</b>	<b>6,301</b>	<b>6,702</b>	<b>6,996</b>	<b>7,421</b>
<b>Surplus .. .. .</b>	<b>137</b>	<b>460</b>	<b>338</b>	<b>245</b>	<b>500</b>
Fixed Assets at 30th June .. .. .	89,050	94,192	95,815	96,531	95,982
Loan Indebtedness at 30th June—					
Government Advances .. .. .	90,403	97,545	103,889	110,569	117,334
Debenture Issues .. .. .	462	457	442	510	508
Death Benefit Fund Advances .. .. .	..	..	..	..	257

### War Service Homes

#### General

The War Service Homes Commission was set up in 1919 by the Commonwealth Government after the First World War to help provide homes for ex-servicemen and their dependants. It was empowered to build houses for sale on easy terms and to make long term loans at a relatively low rate of interest for the erection of houses, the purchase of existing homes and the discharge of mortgages.

In 1947, the Commission was reconstituted as a Division of the Department of Works and Housing ; in 1951, it was transferred to the Department of Social Services and in 1956, to the Department of National Development. No new legislation affecting the operations of the Division was enacted during the year 1960–61.

Particulars about those eligible for assistance, the sources of funds, types of assistance, and terms and conditions of loans, may be found on page 339 of the Victorian Year Book 1961.

During the year 1960–61 the downward trend in applications for assistance gathered momentum. The reasons for the reduction cannot be determined with certainty, but undoubtedly the large number of homes already provided was an important factor, and also the economic measures introduced late in 1960 appear to have depressed the rate of receipt of applications. In May, 1961, steps were taken to eliminate the waiting period for applicants requiring finance to build a new home (about 60 per cent. of ex-servicemen seeking War Service Homes assistance) ; however, present indications are that this will not result in any significant increase in the rate of application. Whilst inquiries have been received from a large number of eligible persons, it is apparent that many are not in the position to provide the deposit necessary to finance the acquisition of a home.

The sum of £35 mill. was provided by the Commonwealth for expenditure under the War Service Homes Act during the year. This amount, together with an additional amount of £41,819 available for expenditure from miscellaneous receipts, was expended making a total capital expenditure of £35,041,819 for the year. The Victorian share was £9,020,389.

The following table, which is furnished by the War Service Homes Division of the Department of National Development, shows the activities of the Division for the years 1956–57 to 1960–61 and since the scheme's inception in 1919 :—

#### VICTORIA—WAR SERVICE HOMES ACTIVITIES

Year Ended 30th June—	Applications Approved	Homes Built and Assisted to Build	Homes Purchased	Mortgages Discharged	Transfers and Resales
1957.. ..	4,481	958	2,132	576	341
1958.. ..	4,507	1,299	2,316	517	370
1959.. ..	3,920	1,170	2,368	401	342
1960.. ..	4,070	725	2,964	219	302
1961.. ..	3,808	698	2,170	440	315
From Inception to 30th June, 1961 .. ..	69,147	18,164	34,244	10,664	4,849

#### Soldier Settlement Commission

The War Settlement Land Agreement provides that the State shall, *inter alia*, develop and improve land to a stage when it can be brought into production within a reasonable time. (See also pages 492 to 496.) This work envisaged amongst other things, the erection of farm residences.

During the year 1960–61, 29 farm houses were erected and two farm houses renovated and occupied by settlers. At 30th June, 1961, a total of 2,860 farm houses had been erected and 180 farm houses renovated and occupied by settlers, since the inception of the Commission in 1945.

### State Savings Bank of Victoria

Under the provisions of the *State Savings Bank Act 1958*, power was given to the Commissioners of the State Savings Bank of Victoria, to provide dwelling-houses for eligible persons upon such terms and subject to such covenants and conditions as are prescribed or are fixed by the Commissioners. Particulars relating to the exercise of this authority may be found on page 630 of the Victorian Year Book 1961, and on pages 697 to 700 of this volume.

### Co-operative Housing Societies

The *Co-operative Housing Societies Act 1958*, under which co-operative housing societies operate, provides for the financing of home building and purchase on a purely co-operative basis. It empowers societies to raise loans and to make advances to their members under certain terms and provisions, details of which appeared on page 341 of the Victorian Year Book 1961.

At the 30th June, 1961, the regional distribution of the 632 societies on register, based on the location of the registered office was:—Metropolitan and outer metropolitan, 405; urban, 73; and country 154. Since September, 1945 to date, 37,565 members had obtained homes under the scheme, and 4,157 homes were in the course of erection. During the same period Government guarantees given by the Treasurer with respect to loans (other than those of a temporary nature) raised by societies totalled £66,117,500. During the year an amount of £3,498,903 was made available to societies from the Home Builders' Account, under the Commonwealth—State Housing Agreement; £3,100,000 being housing loan funds paid into the account, and £398,903 being provided from the revolving nature of the account.

The following table, compiled from annual reports furnished by the Registrar of Co-operative Housing Societies, provides aggregate particulars relating to the operations of Societies at 30th June of each of the five years 1957 to 1961:—

#### VICTORIA—OPERATIONS OF CO-OPERATIVE HOUSING SOCIETIES

Particulars	Unit	At 30th June—				
		1957	1958	1959	1960	1961
Societies Registered ..	No.	400	442	482	518	632
Members Registered ..	No.	31,687	33,024	34,828	36,641	41,389
Shares Subscribed ..	No.	1,210,271	1,291,614	1,418,663	1,544,714	1,781,982
Nominal Share Capital Subscribed ..	£'000	62,488	66,925	72,851	79,194	90,367
Advances Approved*	No.	24,824	26,929	29,200	31,645	33,917
Government Guarantees Executed*	£'000	50,269	56,436	63,448	71,293	78,763
Indemnities Given and Subsisting ..	No.	305	345	378	408	441
Indemnities Subsisting ..	£'000	50,862	54,777	57,946	61,829	66,118
Housing Loan Funds Paid into Home Builders' Account ..	£'000	2,848	3,103	2,705	2,694	2,464
Dwelling-houses Completed*	£'000	372	434	429	457	441
Dwelling-houses in Course of Erection ..	No.	2,000	4,000	7,100	10,200	13,300
	No.	24,607	27,691	30,850	34,007	37,565
	No.	5,195	4,912	4,812	4,698	4,157

\* Since September, 1945 to date.

### Approved Housing Institutions

The *Home Finance Act* 1958 empowers the Treasurer of Victoria, with the approval of the Governor in Council, to execute a guarantee in favour of an approved institution for the repayment of part of a housing loan made by the institution, on the security of a first mortgage over land on which is erected or is to be erected a dwelling-house.

Particulars of the conditions and terms that apply to the execution of these guarantees may be found on page 345 of the Victorian Year Book 1961.

At the 30th June, 1961, there were 24 approved institutions, and guarantees executed and subsisting totalled 480 : the aggregate amount involved being £299,746.

### Home Finance Trust

The Home Finance Trust is a body corporate, constituted under the *Home Finance Act* 1958, to administer the Acts.

It is authorized to receive moneys on deposit, on such terms and conditions as are agreed upon, from any institution, person or body of persons, corporate or unincorporate, for the purpose of making housing loans on the security of a first mortgage.

Particulars of the conditions and terms that apply to these loans may be found on page 343 of the Victorian Year Book 1961.

To the 30th June, 1961, loans granted and subsisting totalled 1,770, the amount involved being £4,898,685.

### National Trust of Australia (Victoria)

The functions of this Trust are described on page 364 of the Victorian Year Book 1962.

### Dwelling Statistics : 1961 Census

#### *Definitions*

The following tables contain an analysis, in summary form, of the dwellings in Victoria as enumerated at the Census of 30th June, 1961, and in some instances, show comparison with earlier Censuses. Changes in the definition of shared accommodation and other items, and the revision of boundaries of the Metropolitan Urban Division and composition of the other urban and rural divisions must be borne in mind when making intercensal comparisons.

In the tables, "Metropolitan Urban" relates to the City of Melbourne and adjacent cities and shires within boundaries determined for Census purposes. (See pages 114–115.) "Other Urban" relates to (i) all separately incorporated cities and towns outside the Metropolitan Urban Division, except for any portions within the city or town which were specifically regarded as rural for Census purposes or where the population of the whole town was less than 1,000; and (ii) other towns not separately incorporated with a population of 1,000 persons or more. "Rural" relates to the remainder of the State.

Terms used in the tables to describe various types of dwellings are defined below.

*Occupied Dwellings.* An occupied dwelling is any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term, therefore, has a very wide reference and includes, in addition to houses and flats, a great variety of "dwellings" ranging from a single-roomed shack to a multi-roomed hotel or institution. Occupied dwellings are classified into "private" and "other than private" dwellings.

*Private Dwellings.* Private dwellings are further classified into the following four categories :—

*Private House :* Private houses include houses, sheds, huts, garages, &c., used for dwelling purposes, and shared private houses for which only one Householder's Schedule was received.

*Share of Private House :* A share of a private house is a portion of a shared private house which is occupied separately and for which portion a separate Householder's Schedule was furnished.

*Flat :* A flat is part of a house or other building which can be completely closed off and which has its own cooking and bathing facilities.

*Other Private Dwellings :* These include private dwellings such as rooms, apartments, &c., which are parts of buildings but are not self-contained units.

*Other than Private Dwellings.* These include hotels; motels; boarding houses, lodging houses and hostels; educational, religious and charitable institutions; hospitals; defence and penal establishments; police and fire stations; clubs; staff barracks and quarters, &c.

*Unoccupied Dwellings.* These include vacant dwellings available for sale or renting; dwellings such as "week-ender", "holiday home", "second home", "seasonal workers' quarters", which were not



occupied on the night of the Census ; dwellings normally occupied but whose usual occupants were temporarily absent on the night of the Census ; newly completed dwellings whose owners or tenants had not entered into occupation on the night of the Census ; dwellings described as " to be demolished ", " condemned ", " deceased estate ", " exhibition home ", &c.; and buildings constructed as dwellings but used for non-dwelling purposes on the night of the Census. The total number of unoccupied dwellings shown must not, therefore, be read as representing the number of vacant houses and flats available for sale or renting.

A table showing the unoccupied dwellings in metropolitan, urban, and rural areas as well as the reasons why they are unoccupied will be found on page 122.

The following table gives particulars of the various classes of occupied dwellings for the Metropolitan Urban, other urban and rural divisions of Victoria at the Census of 30th June, 1961 :—

**VICTORIA—OCCUPIED DWELLINGS BY CLASS OF  
DWELLING AT CENSUS OF 30TH JUNE, 1961**

Class of Dwelling	Division of State			Total Victoria
	Metropolitan Urban	Other Urban	Rural	
<i>Private Dwellings—</i>				
Private House—				
House .. .. .	431,570	139,498	107,418	678,486
Shed, Hut, &c. .. .. .	1,510	1,398	2,802	5,710
Total Private Houses ..	433,080	140,896	110,220	684,196
Share of Private House ..	24,497	3,148	1,104	28,749
Flat .. .. .	46,674	5,433	757	52,864
Other .. .. .	14,225	1,394	105	15,724
Total Private Dwellings ..	518,476	150,871	112,186	781,533
<i>Dwellings Other than Private—</i>				
Hotel, Licensed .. .. .	583	535	466	1,584
Motel .. .. .	8	46	30	84
Boarding House &c. .. .. .	4,757	724	227	5,708
Educational, Religious, or Charitable Institution ..	307	165	52	524
Hospital .. .. .	187	108	63	358
Other .. .. .	290	184	264	738
Total Dwellings Other than Private .. .. .	6,132	1,762	1,102	8,996
Total Occupied Dwellings	524,608	152,633	113,288	790,529

NOTE.—See text on page 367.

The table which follows shows particulars of the various classes of dwellings in Victoria at each Census since 1933 :—

## VICTORIA—CLASS OF DWELLING

Class of Dwelling	Number at Census				Percentage of Total Occupied Dwellings			
	1933	1947	1954	1961	1933	1947	1954	1961
<i>Occupied Dwellings</i>								
<i>Private—</i>								
Private House—								
House ..	404,977	449,357	566,779	678,486	93·55	85·20	85·78	85·82
Shed, Hut, &c. ..			5,742	5,710		0·87	0·72	
Share of Private House Flat ..			33,542	28,749		6·36	5·17	3·64
	17,300	23,046	28,148	52,864	4·37	4·26	6·69	
Other ..		11,890	16,064	15,724	4·00	2·25	2·43	1·99
<b>Total Private Dwellings</b>	<b>422,277</b>	<b>517,835</b>	<b>650,873</b>	<b>781,533</b>	<b>97·55</b>	<b>98·18</b>	<b>98·51</b>	<b>98·86</b>
<i>Other than Private—</i>								
Hotel, Licensed Motel ..	1,783	1,676	1,650	1,584	0·41	0·32	0·25	0·20
Boarding House &c. Education, Religious, or Charitable Institution ..	6,409	6,426	6,195	84	1·48	1·22	0·94	0·01
Hospital ..				372				
Other ..	1,499	732	1,156	738	0·12	0·07	0·06	0·05
					0·35	0·14	0·17	0·09
<b>Total Dwellings Other than Private ..</b>	<b>10,595</b>	<b>9,571</b>	<b>9,817</b>	<b>8,996</b>	<b>2·45</b>	<b>1·82</b>	<b>1·49</b>	<b>1·14</b>
<b>Total Occupied Dwellings ..</b>	<b>432,872</b>	<b>527,406</b>	<b>660,690</b>	<b>790,529</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>
<i>Unoccupied Dwellings</i>	18,763	11,412	27,491	47,389				
<b>Total Dwellings</b>	<b>451,635</b>	<b>538,818</b>	<b>688,181</b>	<b>837,918</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>

NOTE.—See text on page 367.

Particulars showing the nature of occupancy of occupied private dwellings in Victoria, as at the 1954 and 1961 Censuses, are shown in the following table :—

## VICTORIA—OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NATURE OF OCCUPANCY

Nature of Occupancy	Census, 30th June, 1954		Census, 30th June, 1961				
	Victoria		Victoria		Division of State		
	Total	Per cent. of Total	Total	Per cent. of Total	Metro-politan Urban	Other Urban	Rural
Owner ..	313,429	48·15	368,653	47·17	220,063	75,777	72,813
Purchaser by Instalments ..	104,050	15·99	196,728	25·17	157,014	30,806	8,908
Tenant (Governmental Housing)	29,589	4·55	28,030	3·58	17,342	10,324	364
Tenant ..	187,988	28·88	170,990	21·88	117,373	30,964	22,653
Caretaker ..	6,493	1·00	7,046	0·90	3,163	1,309	2,574
Other Methods of Occupancy ..	6,588	1·01	6,500	0·84	1,718	1,019	3,763
Not Stated ..	2,736	0·42	3,586	0·46	1,803	672	1,111
<b>Total ..</b>	<b>650,873</b>	<b>100·00</b>	<b>781,533</b>	<b>100·00</b>	<b>518,476</b>	<b>150,871</b>	<b>112,186</b>

NOTE.—See text on page 367.

Particulars of occupied private dwellings in Victoria at Census dates, 1954 and 1961, classified according to the material of outer walls, are shown in the following table :—

VICTORIA—OCCUPIED PRIVATE DWELLINGS CLASSIFIED  
ACCORDING TO MATERIAL OF OUTER WALLS

Material of Outer Walls	Division of State			Total Victoria	Division of State			Total Victoria
	Metropolitan Urban	Other Urban	Rural		Metropolitan Urban	Other Urban	Rural	
	Census, 30th June, 1954				Census, 30th June, 1961			
Brick .. ..	182,378	18,109	7,016	207,503	229,998	24,439	8,731	263,168
Stone .. ..	2,043	1,857	1,831	5,731	1,699	1,919	1,648	5,266
Concrete .. ..	9,116	2,992	2,930	15,038	17,201	4,684	3,066	24,951
Wood .. ..	205,811	87,993	82,347	376,151	249,764	102,366	78,917	431,047
Iron .. ..	975	575	2,756	4,306	400	464	2,058	2,922
Fibro-Cement .. ..	13,571	8,655	14,662	36,888	16,504	15,720	16,511	48,735
Other .. ..	1,822	1,268	1,687	4,777	2,330	1,149	1,127	4,606
Not Stated .. ..	273	108	98	479	580	130	128	838
Total .. ..	415,989	121,557	113,327	650,873	518,476	150,871	112,186	781,533

NOTE.—See text on page 367.

The following table shows the average number of inmates and the average number of rooms in the occupied private dwellings in the Metropolitan Urban, other urban, and rural divisions of Victoria at each Census, 1954 and 1961 :—

VICTORIA—OCCUPIED PRIVATE DWELLINGS : AVERAGE  
NUMBER OF INMATES AND ROOMS

Division of State	Census, 30th June, 1954			Census, 30th June, 1961		
	Number of Dwellings	Average Number of—		Number of Dwellings	Average Number of—	
		Inmates	Rooms		Inmates	Rooms
Metropolitan Urban ..	415,989	3·42	4·99	518,476	3·50	5·06
Other Urban .. ..	121,557	3·56	5·08	150,871	3·57	5·13
Rural .. ..	113,327	3·71	5·27	112,186	3·76	5·40
Total Victoria .. ..	650,873	3·50	5·06	781,533	3·55	5·12

NOTE.—See text on page 367.



*[Department of Agriculture*

Shifting cattle after summer grazing on Victoria's high plains.

***Life in Victoria Today***





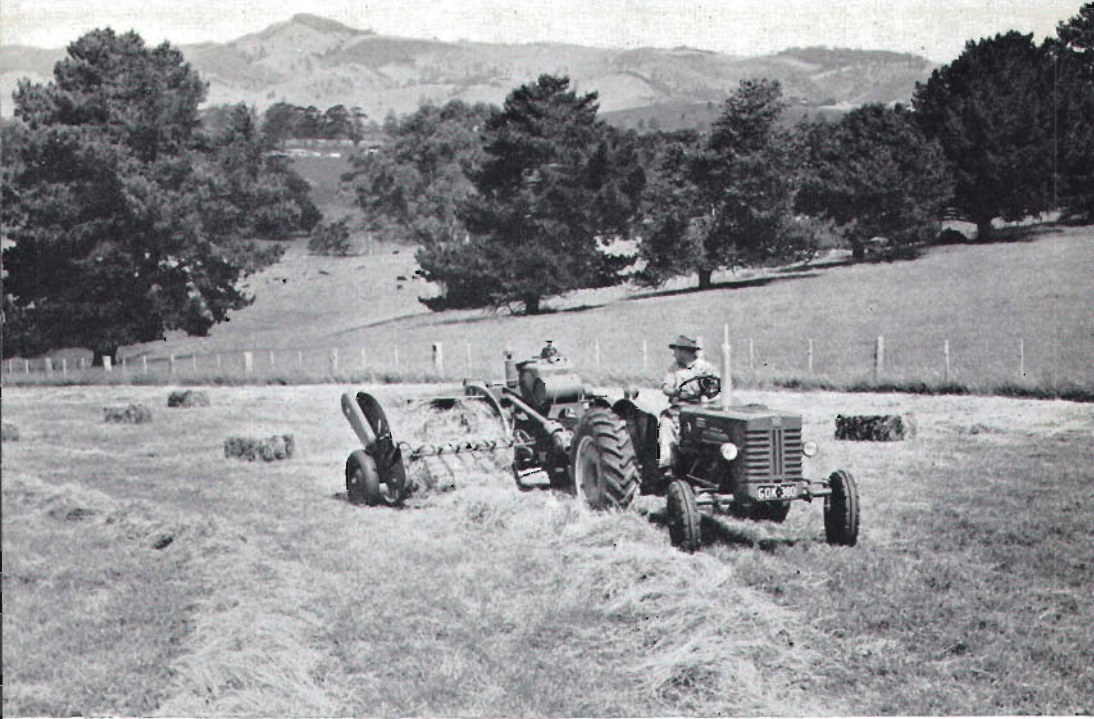
*[Department of Agriculture*

Spirited bidding at a Newmarket sale.



*[Department of Agriculture*

A well-balanced diet is the key to rapid pig growth.



*(International Harvester Company)*

Engine-driven automatic pick-up balers give fast baling even on steep hillsides.

*Right:* Annual topdressing ensures the growth of improved pasture.

*[Department of Agriculture]*





*Right* The farmer directs the pilot of this plane who is giving jaded grazing land a dressing of superphosphate fertilizer

[Department of Civil Aviation



*Left* - Collecting the eggs of trout for breeding and eventual release in Victoria's streams. The eggs lie free in the body cavity and are expelled by air pressure.

[Department of Fisheries and Wildlife



*[State Rivers and Water Supply Commission*

Dam on a prosperous Wimmera farm. Storages in the Grampians supply 7,000 farms with water for domestic and stock purposes through 10,000 miles of channels, as well as providing a reticulated water supply to 50 towns.



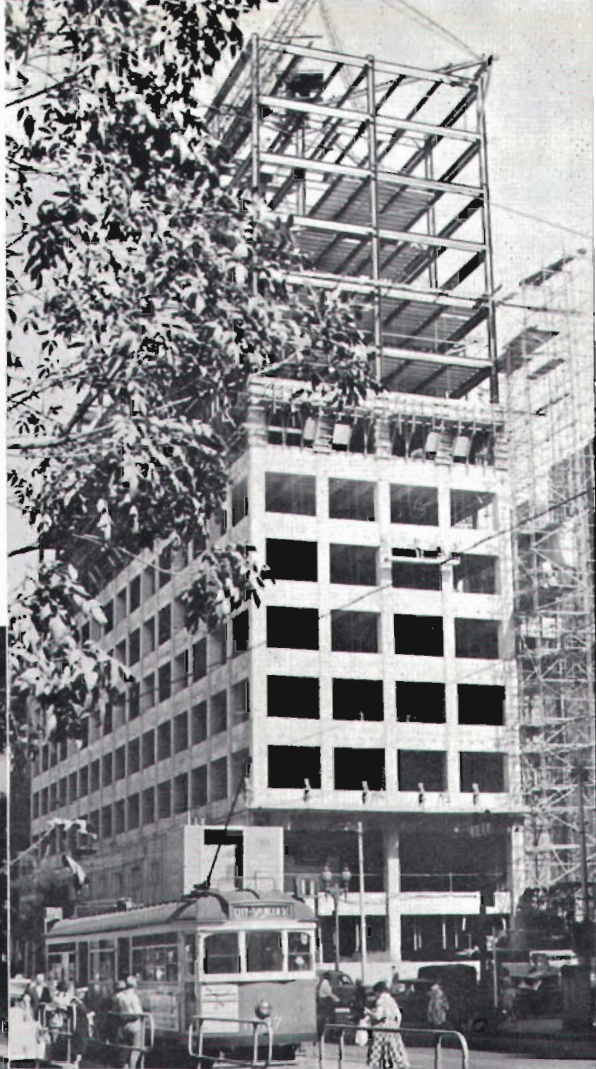
*[State Rivers and Water Supply Commission*

Measuring stream flow in the Yarra River with a current meter.



*Right* View of the new Colonial Mutual Life office building, clearly showing three stages of the wall construction, i.e., steel framework, wall forming in place ready for concreting, and steel framework cased in concrete ready for finishing.

[H. L. Speagle



[University of Melbourne

Redmond Barry Building, University of Melbourne. This building accommodates sections of the faculties of Arts, Commerce, Education, and Science, and provides more lecture theatres and other accommodation to cope with growing student numbers

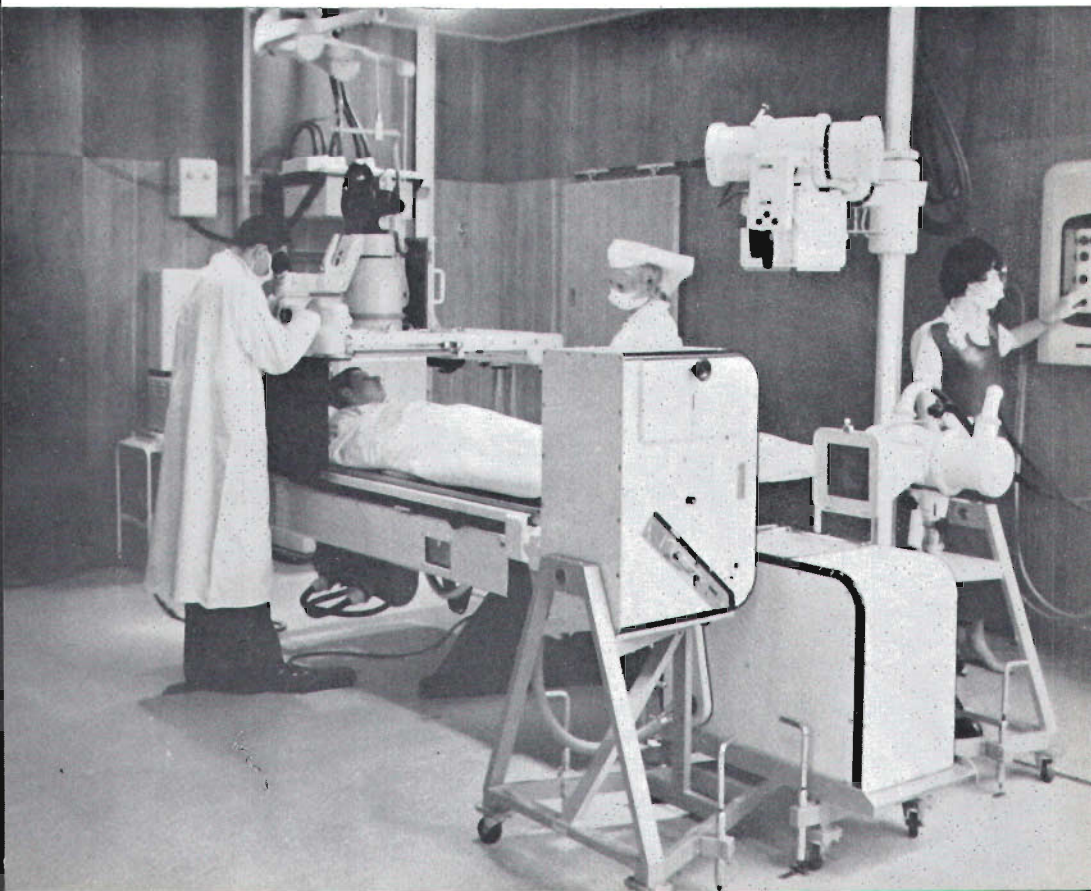


[The "Age"]

*Above* : Model of the first United States "Vanguard" satellite in the Institute of Applied Science of Victoria.

*Below* : Angiocardiography Room at the Alfred Hospital, showing the latest equipment in cardiovascular diagnostic examinations.

[Alfred Hospital]







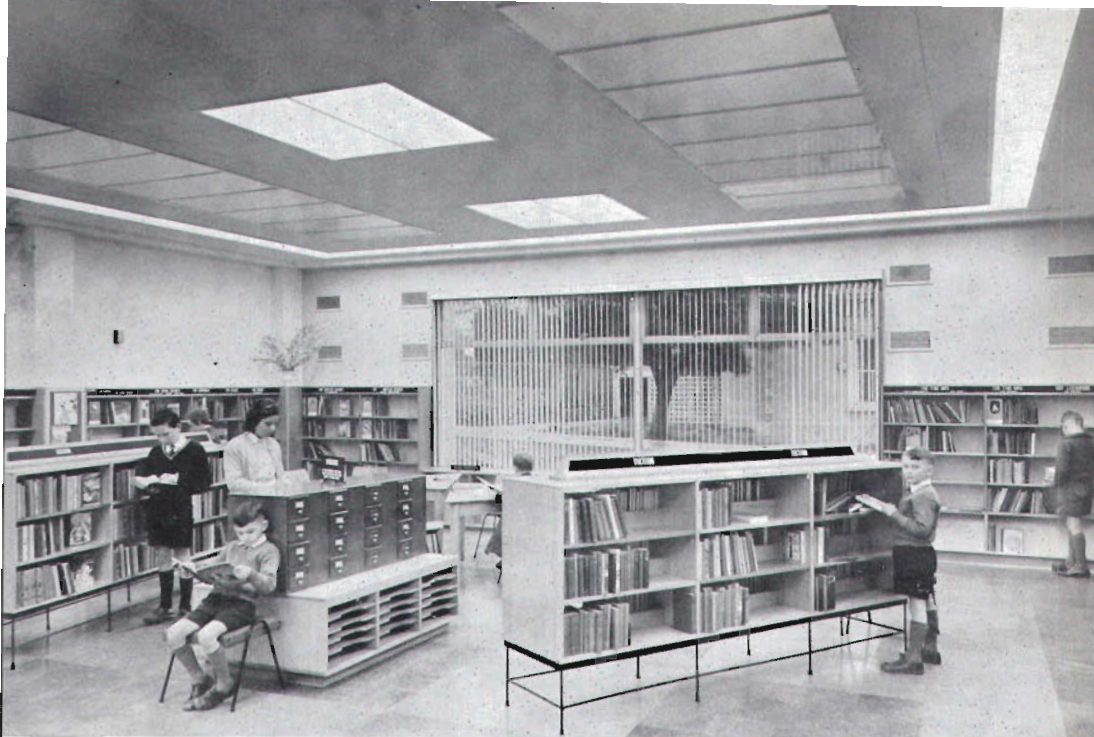
[Education Department

*Above* : Pakenham Consolidated School. This school provides for 600 children aged 5-17, most of whom travel by bus. The school serves an area of approximately 200 square miles.

*Below* : Art in the infant school. With to-day's emphasis on colour and free imaginative work, art teaching in the primary school has undergone a considerable change in recent years.

[Education Department





*{Free Library Service Board*

The Children's Room, Malvern City Library, one of the new municipal libraries recently built in the Melbourne Metropolitan Area.



*{Free Library Service Board*

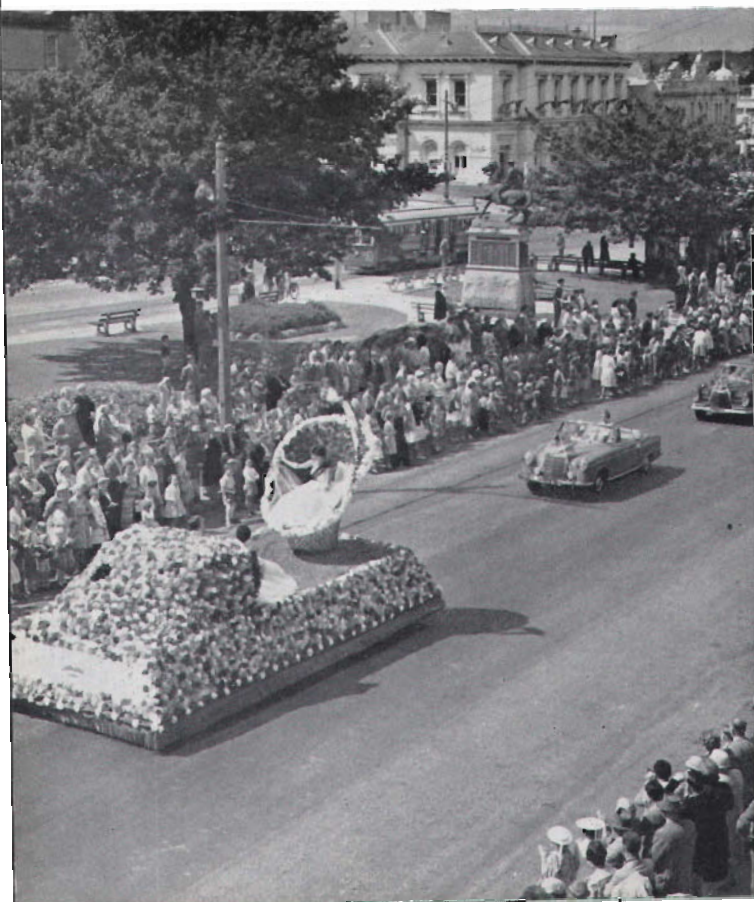
Swan Hill's bookmobile travels to Robinvale and other thriving irrigation centres. It provides library facilities for people living on the land.





[City of Ballarat

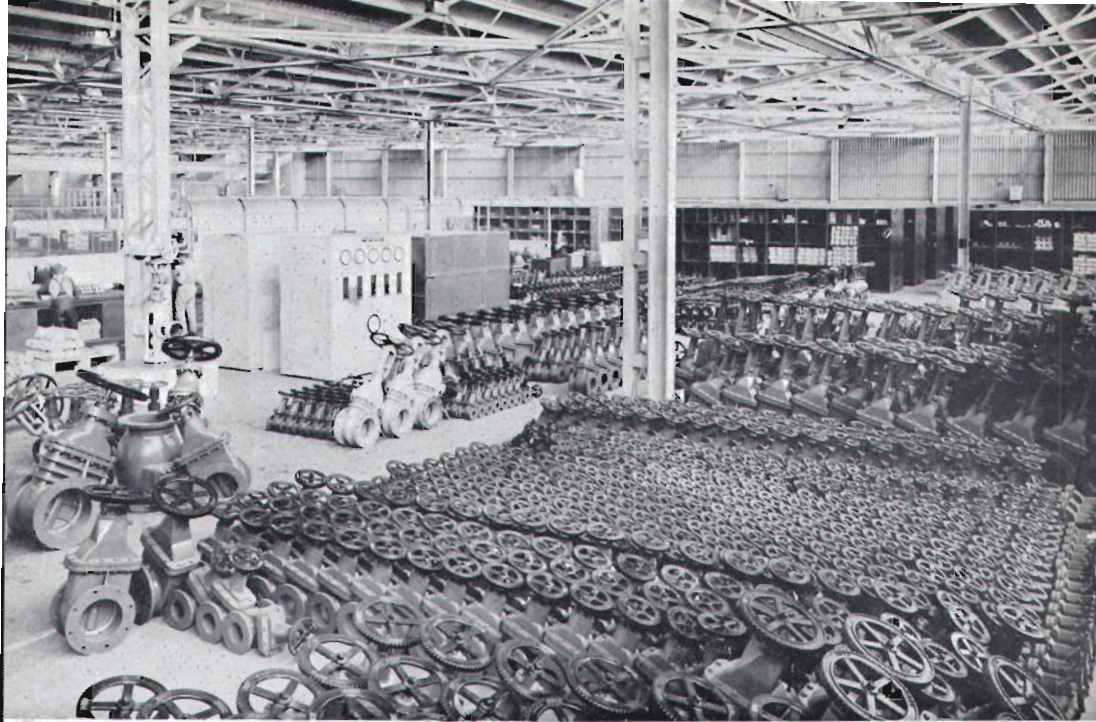
This photo of an early painting of the Canvas Town which grew into the City and District of Ballarat, shows the area of gold discovery in its first years, with tents and diggings scattered over the flat where gold was found.



Left : Ballarat's annual Begonia Festival procession. The substantial buildings in the background indicate the growth of the city from its early beginnings.

[City of Ballarat





[M. B. John and Hattersley Limited

*Above* A factory manufacturing all types of bronze, iron, and steel valves is the present-day outcome of a small foundry which commenced operations in Ballarat in 1896. The photo shows the extensive stock of finished products ready for despatch

*Below* Cattle grazing on prolific pasture growth against a background of diversified cropping land illustrate the intensive agriculture practised in the Deane-Newlyn Area, north-east of Ballarat.

[Department of Agriculture







[Department of Railways. N.S.W.]

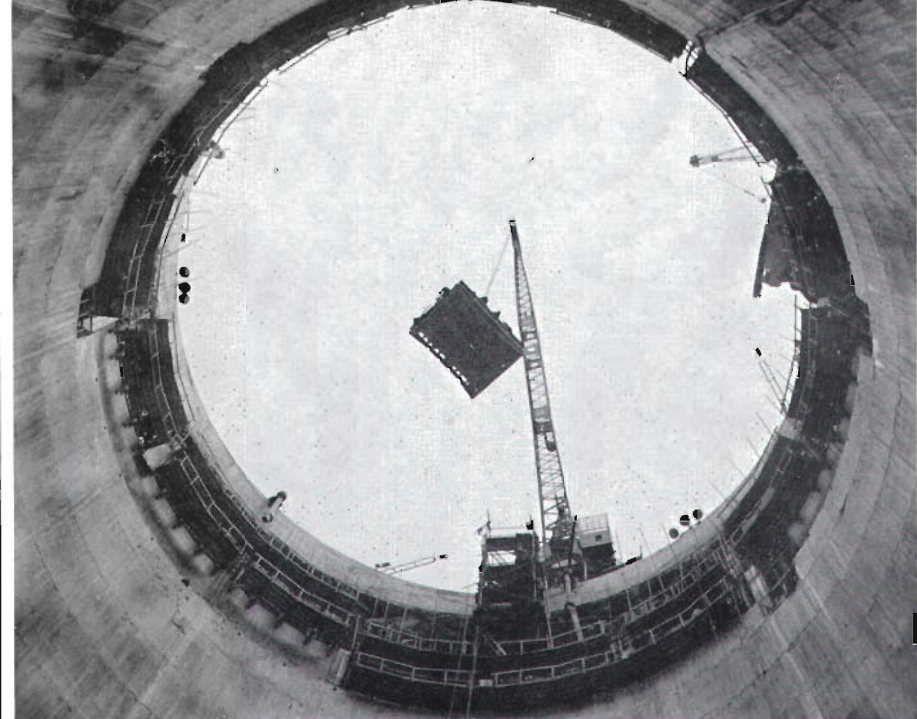
*Above* : The new stainless-steel, air-conditioned sleeper express built for the standard-gauge passenger service straight through between Melbourne and Sydney, which started on 16th April, 1962. It includes ten sleeper carriages to carry 198 passengers, dining and club-cars, and power and luggage-brake vans.

*Below* : The first standard-gauge freight train completes the last few yards of its trip direct from Sydney. The train carried 898 tons of merchandise and was hauled by two 1,800 h.p. "S" class diesel-electric locomotives.

[Victorian Railways]







*[Melbourne and Metropolitan Board of Works*

*Above :* Looking up from the depths of a pump well at the pumping station in Miller's-road, Brooklyn. Form work for completion of the concrete well lining is seen in place near the top of the well.

*Below :* At the Yallourn and Morwell factories of the State Electricity Commission of Victoria briquettes are loaded by conveyors into railway trucks. Production is continuous at both factories, and hundreds of truck-loads are despatched daily from the Latrobe Valley.

*[State Electricity Commission of Victoria*







[State Savings Bank of Victoria

Television speeds up banking at the Elizabeth-street Branch of the State Savings Bank of Victoria. Here a ledgerkeeper on the second floor places a ledger under a television link which is connected to the ground floor tellers' section.



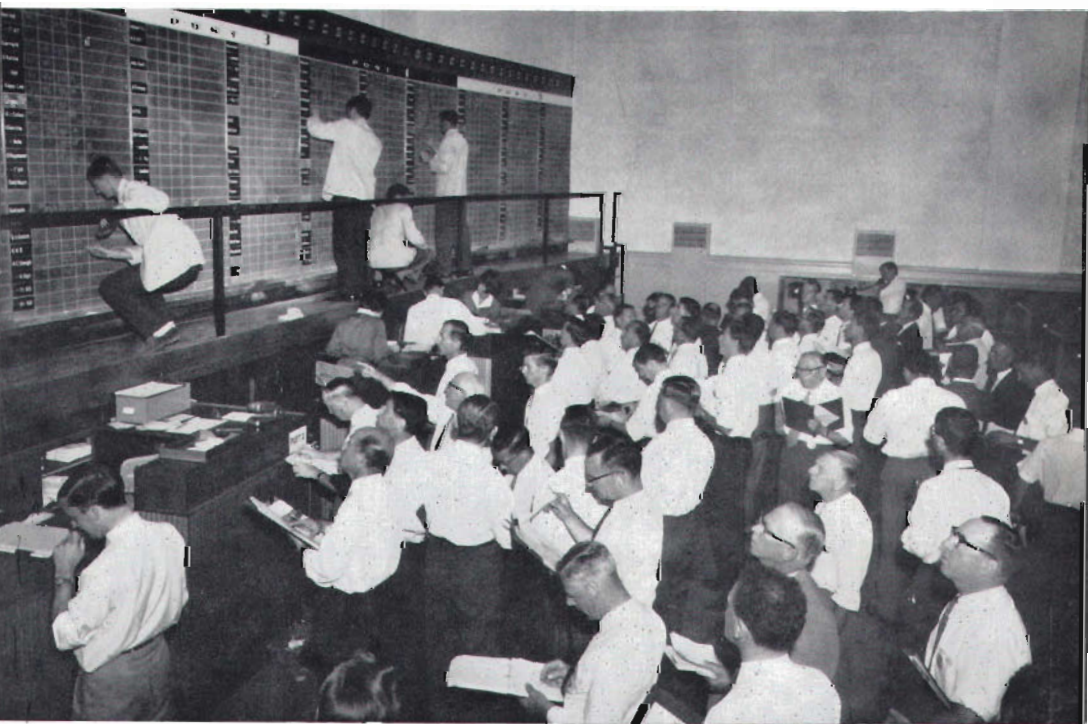
*Left*: The teller reads the state of the depositor's account on a television screen which can be seen only by the teller.

[State Savings Bank of Victoria



*[Stock Exchange of Melbourne*

A scene in the No. 1 Call Room of the Stock Exchange of Melbourne. This method of trading was used for 102 years, and in January, 1962, was replaced by the post-trading system.



*[Stock Exchange of Melbourne*

The post-trading system as depicted above is a much more streamlined method of conducting business. Financial turnover has increased substantially since its introduction.





Incipit officium passionis dñi  
nostri Jesu christi. ad matuti  
num. *¶* Gloriosa passio Je  
su christi perducet nos ad gau  
dia celi. Amen. *¶*



O  
M  
I  
N  
I  
A  
L  
I  
A  
B  
I  
A

[National Gallery of Victoria

An illuminated Byzantine Gospel Book of about 1100 A.D. bought under the terms of the Felton Bequest for the National Gallery of Victoria in 1959. It is the earliest example of Byzantine art in the Gallery's collection.

# Part 5

## LOCAL GOVERNMENT

### *Administration*

#### **Local Government Department**

##### *General Description*

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 23rd 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 of this, transferred and attached to the new Department, and the Minister for Local Government assumed responsibility for administration of the following Acts of Parliament :—

Local Government Act

Acts relating to local government in the Cities of Melbourne and Geelong

Town and Country Planning Act

Melbourne and Metropolitan Board of Works Act

Local Authorities Superannuation Act

Petrol Pumps Act

Drainage Areas Act

Pounds Act

Dog Act.

In addition, the Minister is responsible for the *Valuation of Land Act 1960*. This Act was amended by the *Valuation of Land (Amendment) Act 1961*.

##### *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. Any portion of Victoria containing rateable property of a net annual value of at least £60,000 may be constituted a shire.

2. To constitute new boroughs. Any portion of Victoria may be constituted a borough provided that it—
  - (a) does not exceed nine square miles in area. (Special Acts of Parliament have been passed to permit larger areas to become boroughs, towns, or cities, and any existing city, town, or borough may annex additional territory even though its area is, as a result, increased beyond nine square miles. Eighteen cities, four towns, and two boroughs do exceed nine square miles);
  - (b) has no point within its area distant more than six miles from any other point;
  - (c) contains a population of at least 500 inhabitant householders;
  - (d) contains rateable property of a net annual value of at least £40,000; and
  - (e) does not comprise portions of different boroughs.
3. To sever parts of one municipality and annex such parts to another.
4. To subdivide or re-subdivide any municipality. (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. Twenty-eight municipalities, including seven shires, are not subdivided.)
5. To declare boroughs, cities, or towns. If its revenue from general and extra rates in the preceding year is not less than £15,000, a borough may be declared a town. If the revenue is not less than £30,000 it may be declared 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 1st July, 1961, to 30th June, 1962, no new municipalities were created and there were no changes in the status of existing municipalities.

#### *Valuer-General and Valuers' Qualification Board*

The purpose of the *Valuation of Land Act* 1960 (as amended by the *Valuation of Land (Amendment) Act* 1961) is the co-ordination of rating valuations for municipalities and other rating authorities and the improvement of the standard of such valuations. Valuations will

be still carried out at municipal level (and in some cases where appropriate, by other rating authorities), but an organization is being established to guide and assist valuers, councils, and other rating authorities in valuation matters.

The legislation provides for appointment of a Valuer-General, a Deputy Valuer-General, and other necessary officers who are to be members of the Public Service within the Local Government Department. The Valuers' Qualification Board, under powers vested in it by the legislation, may either conduct examinations of persons desiring to qualify themselves as valuers under the Act, or prescribe examinations or qualifications which it is prepared to accept for this purpose. It is also empowered to issue certificates of qualification, at its complete discretion, to certain persons practising as valuers when the legislation was enacted. In such cases, application was required to be submitted before 14th December, 1961, and to display to the satisfaction of the Board, that the applicant was capable of carrying out valuations for all statutory purposes.

The Board is also empowered to grant certificates of qualification covering the whole of Victoria or for any part or parts of the State, according to the scope of the applicant's experience.

At the 30th June, 1962, all of the legislation had been brought into operation excepting those provisions which require a person to hold a certificate of qualification to carry out a valuation for any statutory purpose. Proclamation of these provisions has been delayed to give the Valuers' Qualification Board opportunity to deal with all of the great number of applications received.

### *Inspection of Scaffolding*

Since 1922, councils have been responsible for supervision of scaffolding erected to support workmen engaged in the construction of buildings or carrying out other works. Councils were required to administer the regulations made under legislation enacted in that year. This legislation was incorporated in the Local Government Act in 1928. In 1960, the provisions of the Local Government Act relating to scaffolding inspection were re-enacted in amended form. Provision was made for a Supervisor of Scaffolding Inspection and Assistants to supervise the administration of the Scaffolding Regulations by municipalities, and also for a Scaffolding Regulations Committee to prepare draft Scaffolding Regulations for consideration by the Minister. The Committee includes representatives from Government Departments, the Municipal Association, the Master Builders' Association, and the Trades Hall Council. The Chairman is the Supervisor of Scaffolding Inspection.

By the end of June, 1962, the Committee had completed preparation of new regulations for the Inspection of Scaffolding, and it was expected that the new legislation and regulations would be in force before the end of 1962.

## Municipalities

### General Description

At 30th June, 1962, Victoria was divided, for local government purposes, into 208 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 208 municipalities comprised :—

Cities	..	..	..	51
Towns	..	..	..	5
Boroughs	..	..	..	14
Shires	..	..	..	138
				208

The only unincorporated areas of the State are French Island (65 square miles) in Westernport Bay, Lady Julia Percy Island (1·02 square miles) off Port Fairy, Bass Strait Islands (1·51 square miles), Gippsland Lakes (Part) (128 square miles), and Tower Hill Lake Reserve (2·28 square 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 24 (except the City of Melbourne, which has 33 councillors). Subdivided municipalities have three councillors for each subdivision.

Any person who is the owner or occupier of property of a rateable value of at least £20, 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 called 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 retire in rotation.

Generally speaking, a councillor, at a council meeting, may not discuss or vote on any matter in which he has a pecuniary interest, and he may become incapable of being or continuing as a councillor if he is in any way concerned in a contract with the municipality. A councillor who acts while incapacitated may be subjected to heavy penalties. Councillors are also liable for heavy penalties if moneys are wrongfully borrowed or expended, and may have to repay the money so borrowed or expended.

### Elections

Municipal elections are held annually in August. Extraordinary elections may be held to fill vacancies occurring between annual elections. To be enrolled on the voters' roll for any municipality, a

person must have reached the age of 21, be a natural born or naturalized subject of Her Majesty, and be liable to be rated on rateable property in the municipality. No person is entitled to be enrolled for property which has an annual value of less than £5, unless there is a house on such property and the person resides there. An occupier of rateable property is entitled to be enrolled instead of the owner. In the City of Melbourne both owners and occupiers are entitled to be enrolled. Plural voting is provided for, up to a maximum of three votes per person, according to the value of the rateable property for which the enrolment is made.

Voting is compulsory in 51 municipalities.

### *Officers*

Every council must appoint a municipal clerk (he is called a town clerk in a city, town, or borough, and a shire secretary in a shire), a treasurer and an engineer, together with such other officers as may be necessary. The other officers usually include 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 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 and 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, by-pass roads, tourist 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 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 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 in the Act, 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 Water-Courses*

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 Board of Land and Works, 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 page 412). 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 in the Extra-Metropolitan Area of the State, 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 421 to 425). 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. Some councils operate waterworks under powers provided in the Local Government Act and, in addition, twelve 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 30th June, 1962, only two boroughs and eighteen 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 over-ride 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.

### *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 and may join with other councils to prepare a joint planning scheme. 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 does not debar metropolitan councils from preparing individual schemes and some municipal councils in this area already have planning schemes in force or are preparing schemes.

These will be absorbed, eventually, as part of the Melbourne and Metropolitan Board of Works scheme for, on approval being given to the Board's scheme by the Minister, it will control all development within the Metropolitan Area. The Town and Country Planning Act was amended and consolidated in 1961. The new legislation came into force in February, 1962.

#### *Other Powers and Duties*

Although for many years councils have been empowered to deal with slum reclamation and to provide dwellings for persons of small means, it has been only in the past few years that some councils have entered into this field. The City of Prahran has recently completed a housing scheme and the City of Melbourne has given land to the Housing Commission upon which now stand blocks of flats, some reserved for elderly people. The Housing Commission has invited assistance from councils for slum reclamation and housing redevelopment and the City of Melbourne has responded with an agreement to provide to the Commission £300,000 over a period of three years which will be applied towards an expenditure by the Commission of some £4,288,000 in flat development within the City of Melbourne area. The council actively assisted in the provision of 96 "Darby and Joan" flats in North Carlton by donating land, finance, and architectural services.

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 municipal gasworks and the number of municipalities generating electricity (at present six) is steadily dwindling. 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, libraries, and museums ;
- (6) registration of dogs under the Dog Act ;
- (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 1960 municipal year, the combined turnover of these undertakings exceeded £16 mill.

### *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, and by charitable organizations.

The council of every municipality is required, from time to time, to have a valuation made of all rateable property within the municipal district.

The *Valuation of Land (Amendment) Act 1961*, contains particular provisions covering the Metropolitan Area of Melbourne and, at the discretion of the Minister, other areas of the State. These provisions are aimed at ensuring a uniformity of municipal valuations used by large rating authorities covering more than one municipality. Metropolitan municipalities are those which have at least one whole subdivision subject to any rate payable to the Melbourne and Metropolitan Board of Works. These municipalities will, in future, be required to make valuations at four instead of six year intervals and, with some exceptions, are required to arrange for a valuation to be returned between the 1st January, 1962, and the 30th September, 1964, to be assessed at the level of general value current at the 31st December, 1961.

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 adopted the provisions of Part XI. of the Local Government Act for the purpose of rating on unimproved capital valuations.

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 realize 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.

Of the 208 municipalities in Victoria at 30th September, 1961, 162 were rating on net annual values and 46 on unimproved capital values. 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 is limited to 4s. 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 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 4s. 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.

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, rubbish, 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. Subsidies are now paid, in certain circumstances, for infant welfare centres, pre-natal centres, pre-school centres, free kindergartens, crèches, libraries, vermin destruction bonuses, public halls,

swimming pools, main drains in country centres, and drainage works in drainage areas. Since 1884, when the Government took over the collection of fees under the Licensing Act, a licence equivalent has been paid to municipalities. It is the nominal equivalent of the amount collected in that year. For the year ended 30th June, 1961, the amount paid to municipalities from the Licensing Fund was £56,836. (A statement of receipts and expenditure of the Licensing Fund appears on page 339.) 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 available, annually, for the number of years for various municipal works, and, after the Second World War, an amount of £100,000 was 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*

Under the *Municipalities and Other Authorities Finances Act 1950* (legislation which is now incorporated in part in the *Local Government Act 1958*), the amount of the annual fee for a motor driver's licence was increased from 5s. to 10s., and it was provided that the additional revenue, less the cost of collection, should be paid to the Municipalities Assistance Fund. Payments are made from the Fund, firstly, towards the cost of works of municipalities and other public bodies, and secondly, 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 subsidized 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 £100,000. The *Local Government (Municipalities Assistance Fund) Act 1961* increased this to £200,000.

For the year ended 30th June, 1961, subsidies paid to various municipalities for works from the Municipalities Assistance Fund amounted to £153,317, while, for the same period, the amount contributed to the Country Fire Authority was £201,079.

#### *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.

### *Expenditure*

The ordinary revenue of a municipality is applied in 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, the 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 on the credit of the municipality 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 any of the following purposes :—

- (a) Temporary accommodation on current account ;
- (b) private street construction ;
- (c) works carried out under the Country Roads and Commonwealth Aid Roads Acts ; or
- (d) purchase and acquisition of land, or the payment of compensation in connexion with certain specified schemes.

### *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 the 30th 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.

### *Commission of Inquiry into Local Government in Victoria*

By an Order published in the *Government Gazette* of 16th September, 1959, the Governor in Council appointed a Commission to inquire into and report upon Local Government in Victoria with particular reference to the following matters :—

- (1) Any disabilities suffered by municipalities in Victoria which prevent or substantially hinder the efficient, economical, and satisfactory performance of their statutory functions ;



- (2) whether the existing division of the State of Victoria into municipalities and/or municipal districts is such as to provide for efficient, economical, and satisfactory units of municipal government ;
- (3) whether the Commission considers that any, and if so what, alterations should be made to municipalities as at present constituted or to the boundaries or subdivisions of the municipal districts of such municipalities to provide more efficient, economical, and satisfactory units of municipal government ; and
- (4) whether the requirements of the Local Government Acts in relation to the constitution of new municipalities and the declaration of cities and towns are satisfactory, and, if not, what amendments would be required to make them satisfactory.

The Commission presented its report to the Government towards the end of 1962.

#### *Municipal Association of Victoria*

All municipalities in Victoria are members of the Municipal Association which began its existence in 1879 and was 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 organization, because it simplifies its task of dealing with the municipalities. The annual conference, which determines Association policy, is held in October. The Association also operates the Municipal Officers' Fidelity Guarantee Fund.

#### *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 the age of 65.

Important changes in the scheme, however, were provided for by the *Local Authorities Superannuation (Amendment) Act* of 1960. Prior to this amending legislation, the scheme had been operated by the Board in conjunction with several approved life assurance organizations. Most permanent employees were required to effect, with an approved

assurer, policies of endowment insurance maturing on the retirement of the assured 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 prior to 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.

Under the new scheme, a Local Authorities Benefit Contracts Account was established by the Board on 1st March, 1961, and at the end of the four months period to 30th June, 1961, it stood as follows :—

**VICTORIA—LOCAL AUTHORITIES BENEFIT CONTRACTS  
ACCOUNT, 1ST MARCH TO 30TH JUNE, 1961**

Particulars	£
Premium and Investment Income .. .. .	536,105
Proceeds of Surrendered Policies .. .. .	838,103
	1,374,208
Less Withdrawal Benefits.. .. .	2,460
Contributions to Management .. .. .	8,333
	10,793
Funds Accumulated (at 30th June, 1961).. ..	1,363,415

The accumulated funds at 30th June, 1961, consisted mainly of investments in semi-government and local authority loans, and cash deposits.

#### Further References

Reference to the historical development of Victorian local government administration will be found on pages 347–348 of the Victorian Year Book 1961.

**Melbourne City Council***Organization and Functions*

Melbourne shares with Geelong 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 a city by Letters Patent of Queen Victoria dated 25th June, 1847. This royal action arose from the desire to establish a bishop's See of the Church of England, and this required the establishment of a cathedral city. Melbourne thus became a cathedral city. On the separation of Victoria from New South Wales in 1851, Melbourne became the capital of the Colony.

The City of Melbourne still operates under sections of the 1842 Act and its amendments, although all other municipalities created subsequent to 1842 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 Board, Road Traffic, Weights and Measures, Town and Country Planning, Police Offences, Petrol Pumps, Motor Car, Electric Light and Power, and Markets.

With a net annual value (for the year 1960-61) of £13·9 mill., rate income of £1·9 mill., other revenue of £7·0 mill., and a work force of approximately 2,700 employees, it is the foremost municipality in the State. Though its daily influx of population is high, its fixed population of 77,000 ranks below that of Camberwell, Heidelberg, Preston, and Moorabbin. For electoral purposes, it is divided into eleven wards, and each ward returns three members, giving a full council of 33 members. Elections are held annually and one member from each ward retires in rotation annually, 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 1,751 acres are parklands and reserves. On those reserves under its control, the City Corporation annually expends some £385,000. The larger reservations are Royal Park, 446 acres, Yarra Park, 140 acres, Prince's Park, 95 acres, Fawkner Park, 101 acres, University and College grounds, 115 acres, Royal Botanic Gardens, 88 acres, Zoological Gardens, 50 acres, Alexandra Gardens and Alexandra Park, 59 acres, Fitzroy Gardens, 64 acres, King's Domain, 78 acres, and Carlton Gardens, 39 acres.

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, 120,000 kilowatts.

The abattoirs and market activities of the Council are equally important to the State. The Newmarket cattle market is the largest and most important to the industry in the State. Last year, 248,000 cattle and 4,542,000 sheep and lambs were handled. The abattoirs, run in close conjunction with the market, supply 45 per cent. of the

meat consumed in the metropolis, and also feed the export market. The Victoria Market, where fruit and vegetables are handled, both wholesale and retail, is the market for the whole of Victoria, and through it pass yearly some 273,000 tons of vegetables and 200,000 tons of fruit, with a yearly value of £25 mill.

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 ten, whilst special committees are constituted from time to time for specific purposes. No councillor may be chairman of more than one permanent committee nor serve on more than three committees. The committees are the workshop 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 organization is effective and achieves all the desirable advantages which spring from the division of labour.

Obviously, under such a system, much of the work of the full Council is taken up with the routine approval of the multifarious recommendations and decisions of the committees, and this is done with little comment. Nevertheless, this does not mean the sovereignty of the Council is abrogated or its effective control impaired, for, at all times, it is free to comment, admonish, alter, reject, or in some other way indicate its attitude of mind to the manner in which the relevant committee is exercising its function.

Of the ten committees, two, Finance and General Purposes, are primarily co-ordinating, whilst 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.

#### *Administration*

For the effective functioning of the committees and for purposes of staff review and control, committees are married to departments, although no committee has exclusive access to the activities of a particular department. At present, the relationship of committees to departments is as follows :—

<i>Committee</i>	<i>Department</i>
Public Works .. ..	City Engineer's City Architect's
Health .. ..	Health
Finance .. ..	City Treasurer's City Valuer's
Electric Supply ..	Electric Supply
General Purposes and Legislative .. ..	Town Clerk's
Abattoirs and Markets ..	Abattoirs and Cattle Markets Markets (Fruit, Vegetables, and Fish)
Parks, Gardens, and Recreation .. ..	Parks and Gardens
Building and Town Plan- ning .. ..	Building Surveyor's

Although departmental organization gives rise to certain administrative difficulties, it provides a structure which satisfactorily fulfils the purpose of an elective form of government relying entirely on honorary service.

### *Public Health Administration*

The Health Department of the Melbourne City Council carries out, at local government level, various health and social services provided for by State Legislation. These are mainly subsidized by the Department of Health.

Headed by the Medical Officer of Health, the Department is divided into three divisions :—

#### *Communicable Diseases*

This division deals with infectious diseases which have been notified by hospitals and doctors ; carries out regular immunization programmes at Infant Welfare Centres, Pre-school Centres, and Schools ; and, in conjunction with the Department of Health, provides facilities for the annual anti-tuberculosis X-ray scheme.

#### *Maternal and Child Welfare*

This division covers all aspects of the health of pre-school children, which includes the provision of medical and dental care.

Medical Officers give advice to mothers on infant welfare, and, where necessary, home visits are made by Infant Welfare Sisters. An ante-natal clinic provides an advisory service for expectant mothers who have arranged to be confined at public maternity hospitals.

The Council has a children's nursery in the central area of the City and provides essential foods for indigent families at low cost or as a free distribution.

There is also a "Home Help Service" for mothers, the elderly, and the sick. Elderly Citizens' Clubs with their amenities and low cost meals are supplemented by a "Meals on Wheels" service for house-bound elderly citizens.

#### *Environmental Hygiene*

This division supervises environmental hygiene and enforces the provisions of the Health Act Regulations.

Routine inspections are made of housing and sanitation ; dwellings are inspected and reports on slum reclamation prepared for the Housing Commission.

Regular inspections are made of food premises, registered dormitory premises, hairdressers, and offensive trade premises.

Foodstuffs are sampled for chemical analysis and swimming pools are sampled both for bacteriological and chemical examination.

### **Further Reference**

A full account of the Melbourne City Council will be found on pages 359 to 362 of the Victorian Year Book 1961.

## Ballarat

### *Historical*

In 1853, there were more than 20,000 miners of many nationalities working the shallow diggings. In that year, 319,154 ounces of gold were taken from Ballarat to Melbourne under police escort, and during the four following years, more than 2,500,000 ounces reached the capital in the same way. On 10th June, 1858, the famous Welcome Nugget was found at Bakery Hill. It weighed 2,217 ounces, had an estimated content of 2,195 ounces of pure gold, and was sold for £10,500.

In the 1860's, when the shallow alluvial deposits of gold were rapidly being exhausted, companies were formed to exploit the deep quartz lodes (see page 393). Many of these proved to be very rich, and by 1868, the Ballarat gold field reached the peak of its prosperity when more than 300 companies were operating and the population of the settlement had increased to 64,000.

In 1870, the year in which Ballarat was proclaimed a city, a recession in the mining industry took place. For no obvious reason, investors lost confidence and the industry suffered accordingly; shares dropped sharply; many mines closed down; and the population decreased by over 40 per cent. Fortunately, more stable industries, particularly iron-founding and textile manufacturing, were being gradually established as the gold mining industry declined, and, in the surrounding district, mixed farming and pastoral pursuits supported an increasing number of settlers.

Today, Ballarat has a population of approximately 55,000, and on this basis is the twelfth largest city in Australia.

### *Industrial Development*

From its beginnings until the gold discovery in August, 1851, Ballarat remained a pastoral district with its headquarters at Buninyong.

The all-important mining industry required heavy winding, pumping and puddling machinery to win the gold in the deep alluvial gutters of the plateau. This gave the foundries a chance to play an important role in the development of industrial Ballarat. At least 68 brass and iron foundries have operated from the day when Richard Trahar melted the first cast-iron in 1855. In 1955, this foundry celebrated its 100th Anniversary.

Starting very early in 1856, Okey Creber and Co. (later Hunt and Opie) established the "Victoria" Foundry—the first engineering works. By 1860, they completed the first locomotive to be built in Ballarat, and the first to run in Western Australia.

Within a month, Messrs. Carter, Oldham, and Shaw began the foundry which was incorporated in 1870 as the famous "Phoenix" Foundry Company. Besides fulfilling large orders for the mines and other enterprises, it was destined to build 353 locomotives and many carriages for the Victorian Railways, and was an important employer until 1906.

John Walker and Company, of Maryborough, Queensland, had their first beginning in Ballarat in 1865. Their "Union" foundry was the second in size only to the "Phoenix" and supplied mining machinery to all parts of Australia.

No less than 150 blacksmiths are listed in an 1865 "Directory". Some of these grew into large agricultural implement, wagon and horse-carriage factories to supply farmers of the surrounding district. These early companies—through their initiative, and the skill of their tradesmen—contributed much to the industrial development of Ballarat (and, incidentally, of Victoria) and laid the foundations of future expansion.

With the gradual growth of Victoria's population, Ballarat was making a significant industrial contribution by the First World War. The industries which had become established there included confectionery, various types of agricultural machinery, as well as bricks, tiles, and stoneware pipes. The foundries which widened their scope well beyond the manufacture of mining equipment, could in many cases trace their descent back to the early blacksmiths.

Between the two World Wars, the textile industry became important, one reason for its establishment in Ballarat being the purity of the water supply. A major bacon-curing plant also came into operation. On the engineering side, engines for agricultural use and many types of valves were being manufactured.

After the Second World War, the industrial expansion became accelerated and now includes a wider range of industrial internal combustion engines, machinery tools, roller bearings, ready mixed concrete, bricks, tiles and pipes, stainless steel and various heavy engineering products. In 1962, an instant ready-mashed potato plant was established, thus helping the potato industry in the district.

### *Water Supply*

The first recorded attempt to conserve water in Ballarat was made in December, 1852, by the Government Camp Authorities who constructed a dam across Gnarr Creek, and intercepted the overflow from Yuilles Swamp, now Lake Wendouree.

In 1855, a 9-in. pipe was laid from the swamp to the present site of the South African Memorial where water was distributed from a stand pipe at a charge of five shillings for 200 gallons. The charge today for reticulated water is one shilling and twopence for a thousand gallons.

The authority which has continued, for the past 80 years, to bear the responsibility for the supply of water to the Ballarat district is the Ballarat Water Commissioners, constituted in 1880 under the Waterworks Act of that year.

Under its present constitution, the Commissioners serve a population of 58,000 persons in a reticulated area of 65 square miles, whose annual consumption of 2,090 mill. gallons is drawn from the Commission's storages with a capacity of 5,606 mill. gallons.

The total catchment area today is 24,182 acres, which has an average annual rainfall of 36 inches. Of this area, only 6,500 acres are vested in the Commissioners. Details of the seven reservoirs comprising the storage system are shown in the following table :—

VICTORIA—BALLARAT DISTRICT WATER STORAGE, 1962

Name of Reservoir	Area of Water	Depth of Water	Embankment		Catchment Area	Storage Capacity
			Length	Height above Sea Level		
	acres		ft.		acres	mill. gall.
Upper Gong Gong ..	62½	72	913	1,695	6,308	411
Kirk's .. ..	17½	40	876	1,678		
Pincott's .. ..	25	17½	538	1,818		
Beale's .. ..	63½	15½	1,338	1,920	1,683	90
Wilson's .. ..	90	21½	1,135	1,996	2,077	220
Moorabool .. ..	392	35¾	2,500	1,993	7,477	1,478
White Swan .. ..	320	122	{1,570 1,190}	1,768	2,760	3,274
Intermediate Catchment Areas .. ..	..	..	..	..	3,877	..
Totals .. ..	970½	..	..	..	24,182	5,606

### Afforestation

A system of afforestation has been carried out consistently by the Commissioners since 1880, and the costs involved in the expansion of the storages and services, have been offset by the production of timber in the watershed areas.

The initial planting of softwoods (*Pinus Radiata* and *Pinus Insignis*) was for conservation purposes only and there are more than one million softwood trees growing in the Commissioners' plantations. Each year upwards of 30,000 trees are planted, whilst only seven to eight thousand are used for milling.

### Agriculture in the Ballarat Area

#### Soils

Ballarat is the centre of an agricultural district having a radius of some 20 miles in which the variability of soil and rainfall is reflected in a diversity of farming pursuits. Highly fertile areas are surrounded by, and encompass very poor soils especially in the east and north-east of the district, where there is a mosaic of soils ranging from rich volcanic ash through deep red loams to poorly drained podzols of low fertility. The soils in the western sector are more uniform, comprising mainly heavy grey loams or clay loams derived from basalt. There are extensive areas of shallow infertile sediments, particularly to the south and immediate north of the city.

The best soil, referred to locally as "chocolate", is intensively cultivated, mainly with potatoes.



On the red loams, fat lamb raising, dairying, cropping, and potato growing are carried on, whilst the grey basalts and poorer sedimentary soils carry sheep for wool and some cereal crops.

### *Crops*

Potatoes do particularly well on the "chocolate" soils because of their depth and physical characteristics of friability and permeability combined with a reliable rainfall. Digging extends from March to September, reaching its peak in June–July–August when the supply of late potatoes to Victorian consumers depends largely on the success of the crop in the Ballarat district.

Oats rank second in importance to potatoes as an annual crop in the area around Ballarat. The reduction in the number of horses used on farms, and in cities and towns has led to a falling off in the quantity of oats grown for hay, but a considerable acreage is still grown for grain and to provide grazing for livestock during the winter.

Other cereal crops are wheat and barley, but these are not important agricultural pursuits in the district. Linseed and field peas are grown to a limited extent.

The Ballarat district is one of the main perennial ryegrass-seed producing areas of Victoria, with an annual average harvest of about 13,000 bushels. Ryegrass is not grown specifically as a seed crop, but is harvested as a sideline from pastures used for dairying or sheep raising.

### *Pastures*

Pasture itself is the most important crop in the district, covering approximately 80 per cent. of the total area used for agriculture, and providing the basis for livestock industries having wool, meat, and dairy produce as their end products.

The history of pasture development near Ballarat goes back for almost a century. In 1870, the Smeaton, Spring Hill and Bullarook Agricultural Association crystallized local interest in pasture development by establishing an experimental farm at Smeaton on 43 acres of land granted by the Government for the purpose.

Early trials showed that perennial ryegrass, white clover, and red clover were admirably adaptable to the better soils in the higher rainfall parts of the district, but it was not until the introduction of subterranean clover some 40 or 50 years later that pasture improvement extended beyond these limits.

Red clover is still unexcelled as a short term pasture in rotation with potatoes, and white clover remains an important legume in the more favoured localities, but the bulk of district pastures now comprise subterranean clover and perennial ryegrass, with *Phalaris Tuberosa* replacing ryegrass in the drier parts.

There has been a sharp increase in the acreage of improved pasture during the past two decades. The discovery of the value of molybdenum as a fertilizer for the lighter soils of the district, the subdivision of large

estates for soldier settlement, and improved prices for primary products during the favourable seasons of the post-war period have been significant spurs to this development.

### *Animal Husbandry*

Wool is the most important product of the grazing industries, with fat lambs second and beef cattle showing some increase during recent years. Dairying is carried on in the higher rainfall areas of the district, frequently in conjunction with other farming pursuits.

### *Mineral Resources of the Ballarat Area*

#### *Gold*

Gold has been the mineral of most outstanding importance in the Ballarat district and was responsible in large degree for the development of the city. The major gold mines in the Ballarat area ceased operation during the First World War after having been in continuous operation since 1851. During its 66 years of activity in mining, the field is estimated to have produced 12·5 mill. oz. of gold. The three main sources of gold production—in the order in which they were worked—were shallow and moderate depth alluvial mining, mainly by individuals and small groups, deep lead alluvial mining by companies, and quartz reef mining mainly by companies.

There are two distinct divisions in the quartz mining in the Ballarat area, each with its own type of lode, namely :—

- (1) The Ballarat West or Sebastopol field, and
- (2) the Ballarat East field.

The Ballarat West lodes are of a more or less bedded type of which the principal lodes are the Consols lode, the Guiding Star lode, and the Albion lode. These lodes occur in west dipping beds on the western limbs of anticlinal folds bearing corresponding names.

The Ballarat East field produced mainly from “leatherjacket” lodes associated with the First Chance anticline and, to a lesser extent, the adjacent Sulieman anticline to the west. These leatherjacket lodes are west dipping fault reefs extending through east dipping beds from the anticline to the adjacent syncline. Several lodes occur one under the other at intervals of 200 feet or more. Perhaps better known than the leatherjacket lodes are the “Indicators” which, though less productive, were more spectacular. Extremely rich gold yields were obtained from the intersection of quartz spurs with these indicators, which are thin, mineralized slate seams.

#### *Other Minerals*

Although minor quantities of metallic sulphides occur in many of the quartz reefs at Ballarat, none of these is in economic quantity. The only metallic mineral other than gold to be mined was wolfram at Linton.

The mineral of most economic importance at the present time is clay—a brickworks, a tileworks, and a pipeworks being the main users. The brickworks use a residual clay from the Ballarat pit adjacent to the

works together with various additions of transported plastic clays from Ballarat East, Enfield, Lal Lal, Talbot, and Berringa, and another residual clay from Creswick. For cream bricks, a blend of Creswick, Ballarat, and Enfield clays is favoured, and the Ballarat clay together with various additions from the other localities is used for reds.

The pipeworks use mainly the Ballarat East clay with additions of Enfield, Talbot, and Lal Lal clays, and a residual clay from Warrenheip is used as a grogging material. The tileworks use Ballarat East clay, with the addition of some Warrenheip clay for grogging.

From Lal Lal a weathered granitic clay is washed and the kaolin used as a paper-filler in the paper mills at Ballarat. A high quality kaolin was formerly mined in the same district from a weathered felspathic dyke. Limited quantities of brown coal and iron ores also occur at Lal Lal. The total consumption of clay in Ballarat is of the order of 120,000 tons annually.

### *Ballarat Fine Art Gallery*

Thirty years after Eureka the Ballarat Art Gallery was founded—the first provincial gallery in Australia. This curious development, from such raw beginnings, is a tribute to a handful of men who, despite the pressing need to provide churches, schools, hospitals, and other public buildings, were far-sighted enough to place one of the town's cultural needs on an equal footing.

The adventurous and creative spirit in the gallery movement was Mr. James Oddie, who met the £200 cost of the First Loan Exhibition of Pictures held in the City Hall in June, 1884. Later that year, a temporary gallery was established in the Academy of Music, which was on the site of the present Her Majesty's Theatre, in Lydiard-street South. In August, 1886, the Gillies-Deakin State Government sanctioned a vote of £2,000 for the purchase of pictures and granted the present gallery site at 40 Lydiard-street North. The building at that time only included, on the second floor, the front gallery, which now houses the Currie Collection and the present watercolour gallery. It was completed in 1887 at a cost, without land, of £6,000, which was raised mainly by 6 per cent. debentures, and the institution was incorporated as the Ballarat Fine Art Public Gallery Association. At this time, the gallery included a School of Design where painting and geometry were taught. Later, two more galleries were added, and these were opened in 1927. This completes the building as it stands today.

The stimulating interest of new acquisitions has mainly come from the generous bequests of local donors, and it is from this source that most of the more important exhibits have been derived. In addition to the important Crouch Prize Bequest 1927, the Alan Currie Bequest 1949, and the Henry Cuthbert Bequest 1958, the gallery collection is linked by major gifts with other local names. Added to this, "The Ballarat Courier", in 1959, established a fund for the creation of "The Ballarat Courier Glass and Porcelain Collection".

The Crouch Prize Bequest was supplemented in 1947 and the revenue provides two acquisitive art prizes each year—the George Crouch Memorial Prize of £132 for oils or sculpture and the Minnie

Crouch Prize of £53 for watercolours. Another feature of this bequest is a superb collection of mediæval and eastern manuscripts. There are, approximately, 113 of these items known in Australia, and thirteen of them are in the Ballarat Gallery. They are of considerable value.

The gallery is conducted by an Executive Committee acting in an honorary capacity and is financed from the following sources :—State Government £600 (this to be doubled in 1962), subscribers £300, rents £350, and City Council £125. There is one full-time member of staff and it is hoped to appoint a professional director in the future. The collection is a wide one in its category and all periods of Australian painting and graphic arts, since the early nineteenth century, are represented. There is a small amount of sculpture, English watercolours, and oils.

## *Statistics of Local Government*

### **General**

Municipal finance statistics are compiled from statements of accounts and returns furnished by the local councils.

As the Metropolitan Area was re-defined in 1954, information concerning municipalities in the Metropolitan Area and municipalities outside the Metropolitan Area is not comparable with that for years prior to 1953–54.

For statistical purposes, the Metropolitan Area is as set out in the table on pages 114–115. In compiling local government finance statistics, however, it is not practicable to dissect those municipalities which lie only partly within this area. Accordingly, in municipal tables in this section, the classification “Other Metropolitan Municipalities” varies from the defined area as follows :—

1955–56 to 1956–57—Includes the whole of the Shires of Eltham, Fern Tree Gully, Frankston and Hastings (as constituted prior to severance of Shire of Hastings), Lillydale (as constituted prior to severance of Shire of Croydon) and Werribee (as constituted prior to severance of Shire of Altona), and excludes the whole of the Shires of Berwick, Bulla and Whittlesea.

1957–58 to 1959–60—As for 1955–56 to 1956–57, with the exception that the new Shire of Altona is included, and the reduced and redefined Shire of Werribee is transferred to “Municipalities outside the Metropolitan Area”.

At 30th September, 1960, in municipalities throughout the State, there were 2,262 councillors, namely, 33 in the City of Melbourne, 492 in 41 other metropolitan municipalities, and 1,737 in 164 municipalities outside the Metropolitan Area.

**Properties Rated, Loans Outstanding, &c.**

In the following table, the number of properties rated, the value of rateable property, General Account income, the amount of loans outstanding, &c., are shown for each of the years 1955-56 to 1959-60:—

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
PROPERTIES RATED, LOANS OUTSTANDING, ETC.**

Year Ended 30th September—	Number of Rate- payers	Number of Properties Rated	Value of Rateable Property		General Account Income	Loans Out- standing
			Net Annual Value	Estimated Capital Improved Value		
	'000	'000	£'000	£'000	£'000	£'000
<b>CITY OF MELBOURNE</b>						
1956 .. ..	32	35	8,766	175,313	2,286	9,751
1957 .. ..	32	35	9,526	190,511	2,757	10,751
1958 .. ..	33	36	10,422	208,443	2,902	11,838
1959 .. ..	35	36	11,299	225,973	3,006	12,630
1960 .. ..	35	35	12,297	245,939	3,377	13,720
<b>OTHER METROPOLITAN MUNICIPALITIES*</b>						
1956 .. ..	571	592	47,325	918,426	10,143	9,992
1957 .. ..	587	608	55,077	1,088,129	11,854	11,355
1958 .. ..	617	614	60,133	1,193,886	12,664	12,442
1959 .. ..	650	629	67,373	1,328,536	14,220	14,078
1960 .. ..	699	653	73,060	1,446,239	16,386	16,691
<b>MUNICIPALITIES OUTSIDE METROPOLITAN AREA</b>						
1956 .. ..	326	414	39,314	785,849	9,676	6,900
1957 .. ..	339	424	42,703	853,875	10,865	7,918
1958 .. ..	358	438	46,097	918,812	11,860	9,818
1959 .. ..	384	450	50,509	1,005,216	12,871	10,945
1960 .. ..	407	470	53,756	1,062,263	14,106	12,151
<b>TOTAL MUNICIPALITIES</b>						
1956 .. ..	929	1,041	95,405	1,879,588	22,105	26,643
1957 .. ..	958	1,067	107,306	2,132,515	25,476	30,024
1958 .. ..	1,008	1,088	116,652	2,321,141	27,426	34,098
1959 .. ..	1,069	1,115	129,181	2,559,725	30,097	37,653
1960 .. ..	1,141	1,158	139,113	2,754,441	33,869	42,562

\* See definition on previous page.

**Municipal Revenue and Expenditure**

The following tables show, for each of the years ended 30th September, 1956 to 1960, the revenue and expenditure of municipalities in Victoria.

The first table gives particulars of revenue and expenditure on account of the ordinary services provided by municipalities, while the second table shows similar details for the business undertakings under municipal control. Transactions presented are generally on a revenue basis.

Particulars relating to Loan Accounts, Private Street Accounts, and Special Improvement Charge Accounts are excluded.

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
ORDINARY SERVICES : REVENUE AND EXPENDITURE  
(£'000)**

Year Ended 30th September—	Revenue				Expenditure			
	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other			City of Melbourne	Other		
1956 ..	2,286	10,143	9,676	22,105	2,306	10,332	9,973	22,611
1957 ..	2,757	11,854	10,865	25,476	2,683	11,720	10,897	25,300
1958 ..	2,902	12,664	11,860	27,426	2,868	12,594	11,748	27,210
1959 ..	3,006	14,220	12,871	30,097	2,985	14,225	12,757	29,967
1960 ..	3,377	16,386	14,106	33,869	3,193	16,049	13,955	33,197

\* See definition on page 395

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES : BUSINESS  
UNDERTAKINGS : REVENUE AND EXPENDITURE  
(£'000)**

Year Ended 30th September—	Revenue				Expenditure			
	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other			City of Melbourne	Other		
1956 ..	3,582	5,709	704	9,995	3,536	5,583	681	9,800
1957 ..	4,164	6,542	756	11,462	4,086	6,300	718	11,104
1958 ..	4,563	7,504	954	13,021	4,494	7,130	917	12,541
1959† ..	4,994	9,089	1,159	15,242	5,005	8,718	1,092	14,815
1960† ..	5,319	10,058	1,128	16,505	5,352	9,779	1,071	16,202

\* See definition on page 395

† Includes business undertakings excluded in previous years, viz :—Quarries, iceworks, and reinforced concrete pipe and culvert works.

**General Account**

The ordinary revenue of a municipality, consisting of rates, Government grants, &c., is payable into the General Account, and such Account is applied towards the payment of all expenses incurred in respect of administration, debt services, ordinary municipal services, &c.

Details of the principal items of revenue received during the year ended 30th September, 1960, are given below :—

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
ORDINARY SERVICES : REVENUE, 1959–60  
(£'000)

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
<b>Taxation—</b>				
Rates (Net) .. .. .	1,773	11,530	8,781	22,084
Penalties .. .. .	8	48	27	83
<b>Licences—</b>				
Dog .. .. .	1	50	44	95
Health, Dairy, Slaughtering, and Noxious Trades .. .. .	5	33	15	53
Other .. .. .	2	10	9	21
<b>Total Taxation .. .. .</b>	<b>1,789</b>	<b>11,671</b>	<b>8,876</b>	<b>22,336</b>
<b>Public Works and Services—</b>				
Sanitary and Garbage Services	17	793	597	1,407
<b>Council Properties—</b>				
Parks, Gardens, Baths, and Other Recreational Facilities	66	237	215	518
Markets .. .. .	347	105	140	592
Halls .. .. .	28	147	96	271
Libraries .. .. .	†	8	27	35
Weighbridges .. .. .	14	3	12	29
Sale of Materials .. .. .	29	41	254	324
Plant Hire .. .. .	..	324	1,677	2,001
Grazing Fees .. .. .	..	..	6	6
Pounds .. .. .	†	2	6	8
Other .. .. .	150	274	175	599
Street Construction .. .. .	54	586	597	1,237
Private Street Supervision .. .. .	..	266	38	304
<b>Other—</b>				
Car Parking .. .. .	283	48	10	341
Building Fees .. .. .	32	241	67	340
Miscellaneous .. .. .	17	172	80	269
<b>Total Public Works and Services .. .. .</b>	<b>1,037</b>	<b>3,247</b>	<b>3,997</b>	<b>8,281</b>
<b>Government Grants—</b>				
Roads .. .. .	6	75	189	270
Libraries .. .. .	11	138	86	235
Parks, Gardens, &c. .. .. .	..	7	211	218
Infant Welfare Centres .. .. .	8	104	101	213
River Works .. .. .	..	..	11	11
Licences Equivalent .. .. .	8	14	35	57
Other .. .. .	14	210	122	346
<b>Total Government Grants</b>	<b>47</b>	<b>548</b>	<b>755</b>	<b>1,350</b>
<b>Transfers from Business Under- takings .. .. .</b>	<b>47</b>	<b>277</b>	<b>32</b>	<b>356</b>
Police Court Fines .. .. .	158	49	12	219
Other Revenue .. .. .	299	594	434	1,327
<b>Total Revenue .. .. .</b>	<b>3,377</b>	<b>16,386</b>	<b>14,106</b>	<b>33,869</b>

\* See definition on page 395.

† Under £500.

After exclusion of an amount of £1,005,468 transferred from other funds, the net General Account income during 1959-60 was £32,864,013. Of this total, 68·0 per cent. was derived from taxation (67·5 per cent. from rates and penalties, and 0·5 per cent. from licences); 25·2 per cent. from public works and services; 1·1 per cent. from transfers from business undertakings; 4·1 per cent. from government grants; and 1·6 per cent. from other sources. The total amount collected from taxation (£22,336,235) was equivalent to £7 17s. 6d. per head of population or to £19 11s. 7d. per ratepayer.

Details of the principal items of expenditure from the General Account during the year ended 30th September, 1960, are set out below :—

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
ORDINARY SERVICES : EXPENDITURE, 1959-60  
(£'000)

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
<b>General Administration—</b>				
Pay-roll Tax .. .. .	38	149	108	295
Other .. .. .	493	2,033	2,095	4,621
<b>Total General Administration</b>	<b>531</b>	<b>2,182</b>	<b>2,203</b>	<b>4,916</b>
<b>Debt Services (Excluding Business Undertakings)—</b>				
<b>Interest—</b>				
Loans .. .. .	429	490	427	1,346
Overdraft .. .. .	..	24	74	98
Redemption .. .. .	173	769	852	1,794
Other .. .. .	1	31	5	37
<b>Total Debt Services ..</b>	<b>603</b>	<b>1,314</b>	<b>1,358</b>	<b>3,275</b>
<b>Public Works and Services—</b>				
Roads, Streets, and Bridges ..	411	4,952	5,324	10,687
Street Lighting .. .. .	†	477	186	663
<b>Health—</b>				
Sanitary and Garbage Services	148	1,521	662	2,331
Other .. .. .	93	904	459	1,456
<b>Council Properties—</b>				
Parks, Gardens, Baths, and Other Recreational Facilities	297	1,283	813	2,393
Markets .. .. .	142	84	93	319
Halls .. .. .	89	440	196	725
Libraries .. .. .	23	306	207	536
Weighbridges .. .. .	9	1	11	21
Materials .. .. .	..	10	111	121
Plant .. .. .	70	448	697	1,215
Grazing Expenses .. .. .	..	..	6	6
Pounds .. .. .	‡	16	22	38
Other .. .. .	82	585	229	896
<b>Other—</b>				
Car Parking .. .. .	219	94	16	329
River Works .. .. .	..	1	10	11
Miscellaneous .. .. .	8	137	83	228
<b>Total Public Works and Services .. .. .</b>	<b>1,591</b>	<b>11,259</b>	<b>9,125</b>	<b>21,975</b>

\* See definition on page 395. † Cost of street lighting is charged to Electricity Undertaking.  
‡ Under £500.



VICTORIA—LOCAL GOVERNMENT AUTHORITIES : ORDINARY  
SERVICES : EXPENDITURE, 1959-60—*continued*  
(£'000)

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
Grants—				
Country Roads Board .. .. .	..	139	617	756
Fire Brigades .. .. .	77	423	1	501
Hospitals and Other Charities .. .. .	43	68	43	154
Other .. .. .	84	261	177	522
Total Grants .. .. .	204	891	838	1,933
Other Expenditure .. .. .	264	403	431	1,098
Total Expenditure .. .. .	3,193	16,049	13,955	33,197

\* See definition on page 395.

After exclusion of an amount of £901,514 transferred to other funds, the net General Account expenditure during 1959-60 was £32,295,133. Of this total, 15·2 per cent. was for administration ; 10·1 per cent. for debt services ; 11·7 per cent. for health services ; 7·4 per cent. for parks, gardens, &c.; 33·1 per cent. for roads, streets, &c.; 3·8 per cent. for plant and equipment ; 12·1 per cent. for other public works and services ; 6·0 per cent. for grants and contributions ; and 0·6 per cent. for miscellaneous items.

### Municipal Administrative Costs

Particulars of the principal items of expenditure, other than Pay-roll Tax, during each of the years ended 30th September, 1956, to 1960, in respect of general municipal administration, are given in the following table :—

VICTORIA—COST OF MUNICIPAL ADMINISTRATION  
(£'000)

Particulars	Year Ended 30th September—				
	1956	1957	1958	1959	1960
Salaries* .. .. .	2,350	2,649	2,875	3,108	3,382
Mayoral and Presidential Allowances .. .. .	72	77	80	87	93
Audit Expenses .. .. .	22	25	28	33	39
Dog Registration Expenses .. .. .	28	33	42	48	54
Election Expenses .. .. .	28	28	30	26	28
Insurances .. .. .	174	235	328	378	362
Legal Expenses .. .. .	49	64	68	51	80
Printing, Stationery, Advertising, Postage, Telephone .. .. .	289	329	346	389	502
Other .. .. .	94	101	91	88	81
Total .. .. .	3,106	3,541	3,888	4,208	4,621

\* Including cost of valuations and travelling expenses, but excluding health officers' salaries, which are included with "Health—Other" on previous page.

**Municipal Business Undertakings**

In Victoria, during 1959-60, 22 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. It should be noted that only twelve municipalities have assumed responsibility for local water supply. A list of all Victorian water supply authorities is to be found on page 412.

The tables which follow show, for the year ended 30th September, 1960, revenue and expenditure of the various types of local authority business undertakings :—

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
BUSINESS UNDERTAKINGS : REVENUE, 1959-60  
(£'000)**

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
Water Supply— Rates, Sale of Water, &c. ..	..	145	169	314
Electricity— Charges for Services and Sales of Products, &c. .. ..	4,967	9,757	575	15,299
Abattoirs— Charges for Services and Sales of Products, &c. .. ..	319	120	188	627
Other †— Charges for Services and Sales of Products, &c. .. ..	33	36	196	265
Total Revenue ..	5,319	10,058	1,128	16,505

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
BUSINESS UNDERTAKINGS : EXPENDITURE, 1959-60  
(£'000)**

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
Water Supply— Working Expenses .. ..	..	129	109	238
Depreciation .. ..	..	..	17	17
Debt Charges .. ..	..	1	42	43
Other Expenditure .. ..	..	2	3	5
Total Water Supply ..	..	132	171	303

\* See definition on page 395.

† Includes hydraulic power, quarries, iceworks, and reinforced concrete pipe and culvert works.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES : BUSINESS  
UNDERTAKINGS : EXPENDITURE, 1959-60—*continued*  
(£'000)

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
<b>Electricity—</b>				
Working Expenses .. ..	4,288	8,737	453	13,478
Depreciation .. ..	253	183	7	443
Debt Charges .. ..	85	306	64	455
Other Expenditure .. ..	295	280	15	590
Total Electricity .. ..	4,921	9,506	539	14,966
<b>Abattoirs—</b>				
Working Expenses .. ..	317	80	134	531
Depreciation .. ..	11	4	5	20
Debt Charges .. ..	35	6	19	60
Other Expenditure .. ..	34	16	14	64
Total Abattoirs .. ..	397	106	172	675
<b>Other†—</b>				
Working Expenses .. ..	27	31	167	225
Depreciation .. ..	2	2	9	13
Debt Charges .. ..	..	1	9	10
Other Expenditure .. ..	4	2	4	10
Total Other .. ..	33	36	189	258
Total Expenditure .. ..	5,351	9,780	1,071	16,202

\* See definition on page 395.

† See footnote on page 401.

### Municipal Loan Finance

#### *Municipal Loan Receipts*

The following tables show loan receipts of municipalities exclusive of redemption loans and loans raised for works in private streets.

The first table shows total loan receipts for each of the years 1955-56 to 1959-60, and the second table details the loan raisings for ordinary services and business undertakings during the year ended 30th September, 1960.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
LOAN RECEIPTS

(Excluding Redemption Loans)

(£'000)

Year Ended 30th September—	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
1956 .. .. .	780	1,212	1,248	3,240
1957 .. .. .	1,392	1,862	1,730	4,984
1958 .. .. .	2,134	2,226	2,269	6,629
1959 .. .. .	2,142	2,194	2,047	6,383
1960 .. .. .	1,833	2,612	2,133	6,578

\* See definition on page 395.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
LOAN RECEIPTS, 1959–60

(Excluding Redemption Loans)

(£'000)

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
Loan Raisings for—				
Ordinary Services .. .. .	1,205	2,196	1,772	5,173
Business Undertakings—				
Water Supply .. .. .	..	..	49	49
Electricity .. .. .	..	254	165	419
Abattoirs .. .. .	16	..	10	26
Other .. .. .	..	..	5	5
Other Receipts (Government Grants, Recoups, &c., to Loan Fund) ..	612	162	132	906
Total Receipts .. .. .	1,833	2,612	2,133	6,578

\* See definition on page 395.

*Municipal Loan Expenditure*

Particulars of the total loan expenditure exclusive of expenditure on private streets, for each of the years 1955–56 to 1959–60, are given in the first of the following tables. The second table details the principal items of expenditure from loan funds during the year ended 30th September, 1960.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
LOAN EXPENDITURE  
(£'000)

Year Ended 30th September—	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
1956 .. .. .	1,305	1,586	1,337	4,228
1957 .. .. .	1,665	1,831	1,508	5,004
1958 .. .. .	1,921	1,994	2,096	6,011
1959 .. .. .	1,690	2,048	2,091	5,829
1960 .. .. .	1,839	2,219	1,993	6,051

\* See definition on page 395.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
LOAN EXPENDITURE, 1959-60  
(£'000)

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
Ordinary Services—				
Roads, Streets, and Bridges ..	329	1,381	1,135	2,845
Council Properties—				
Parks, Gardens, Baths, and Other Recreational Facilities	51	180	137	368
Markets .. .. .	61	20	26	107
Plant .. .. .	10	8	49	67
Other .. .. .	102	329	307	738
Infant Welfare Centres ..	2	20	9	31
Pre-School (Crèches, &c.) ..	2	..	..	2
Other .. .. .	548	5	21	574
<b>Total Ordinary Services</b>	<b>1,105</b>	<b>1,943</b>	<b>1,684</b>	<b>4,732</b>

\* See definition on page 395.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES : LOAN  
EXPENDITURE, 1959-60—*continued*

(£'000)

Particulars	Metropolitan Municipalities*		Municipalities outside Metropolitan Area	Total
	City of Melbourne	Other		
<b>Business Undertakings—</b>				
Water Supply .. ..	..	14	175	189
Electricity .. ..	710	262	117	1,089
Abattoirs .. ..	24	..	12	36
Other .. ..	..	..	5	5
Total Business Undertakings .. ..	734	276	309	1,319
Total Expenditure ..	1,839	2,219	1,993	6,051

\* See definition on page 395.

At 30th September, 1960, there were unexpended balances in Loan Accounts amounting to £3,574,932.

*Municipal Loan Liability*

The loan liability of the municipalities in Victoria, at the end of each of the five years 1955-56 to 1959-60, is given below :—

VICTORIA—MUNICIPAL LOAN LIABILITY

At 30th September—	Due to—		Gross Loan Liability	Accumulated Sinking Funds	Net Loan Liability	
	Government*	Public			Amount	Per Head of Population
			£'000			£ s. d.
1956 ..	409	26,234	26,643	2,580	24,063	9 3 4
1957 ..	475	29,549	30,024	2,889	27,135	10 1 8
1958 ..	637	33,461	34,098	3,160	30,938	11 4 6
1959 ..	858	36,795	37,653	3,145	34,508	12 3 10
1960 ..	951	41,611	42,562	3,376	39,186	13 12 7

\* Excluding liability to Country Roads Board.

**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 40 or, if the council so directs, 60 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, for 1959-60, on 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.,  
1959-60  
(£'000)

Particulars	Metropolitan Municipalities (Excluding City of Melbourne)*	Municipalities outside Metropolitan Area	Total Victoria
<b>Receipts—</b>			
Loans .. .. .	978	212	1,190
Owners' Contributions .. .. .	3,165	511	3,676
Other .. .. .	208	70	278
<b>Total .. .. .</b>	<b>4,351</b>	<b>793</b>	<b>5,144</b>
<b>Expenditure—</b>			
Works .. .. .	3,146	472	3,618
Bank Overdraft (Decrease) .. .. .	237	3	240
<b>Debt Charges—</b>			
Redemption of Loans .. .. .	191	51	242
Interest on Loans .. .. .	103	37	140
Interest on Overdraft .. .. .	74	6	80
Other .. .. .	4	1	5
Other .. .. .	220	50	270
<b>Total .. .. .</b>	<b>3,975</b>	<b>620</b>	<b>4,595</b>
Cash in Hand or in Bank at 30.9.1960 ..	1,139	332	1,471
Bank Overdraft at 30.9.1960 .. .. .	2,217	423	2,640
Loan Indebtedness at 30.9.1960 .. .. .	2,636	715	3,351

\* See definition on page 395.

Details of receipts and expenditure of the private street account including the net increase or decrease in bank overdraft, during each of the years 1955-56 to 1959-60 are shown in the following table :—

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :  
PRIVATE STREET ACCOUNT : RECEIPTS AND  
EXPENDITURE\*  
(£'000)

Particulars	Year Ended 30th September—				
	1956	1957	1958	1959	1960
<b>Receipts—</b>					
Loans .. .. .	271	327	339	653	1,190
Bank Overdraft (Increase)	595	742	182	101	..
Owners' Contributions ..	2,138	2,622	2,662	2,757	3,676
Other .. .. .	71	91	52	136	278
<b>Total .. .. .</b>	<b>3,075</b>	<b>3,782</b>	<b>3,235</b>	<b>3,647</b>	<b>5,144</b>
<b>Expenditure—</b>					
Works .. .. .	2,913	3,276	2,618	2,763	3,618
Bank Overdraft (Decrease)	..	..	..	..	240
<b>Debt Charges—</b>					
Redemption of Loans ..	104	125	150	180	242
Interest on Loans ..	62	77	85	100	140
Interest on Overdraft ..	56	89	98	77	80
Other.. .. .	2	7	2	6	5
Other .. .. .	45	134	149	226	270
<b>Total .. .. .</b>	<b>3,182</b>	<b>3,708</b>	<b>3,102</b>	<b>3,352</b>	<b>4,595</b>

\* Figures for 1956 to 1959 inclusive have been revised.

**Length of Roads and Streets**

The following table shows the estimated length of all roads and streets in the State in the year 1960. The mileage of State highways, Tourists' roads and Forest roads, was supplied by the Country Roads Board, and the mileage of other roads and streets has been compiled from information furnished by all municipal authorities.

VICTORIA—LENGTH OF ALL ROADS AND STREETS AT  
30TH SEPTEMBER, 1960  
(Miles)

Type of Road or Street	State Highways	Tourists' Roads	Forest Roads	Other Roads and Streets	Total
Wood or stone .. .. .	..	..	..	80	80
Portland cement concrete ..	..	..	..	132	132
Asphaltic concrete and sheet asphalt	7	..	..	506	513
Tar or bitumen surface seal over tar or bitumen penetrated or water-bound pavements ..	3,372	171	87	15,071	18,701
Water-bound macadam, gravel, sand, and hard loam pavements ..	465	245	289	31,393	32,392
Formed, but not otherwise paved	..	1	2	23,440	23,443
Surveyed roads (not formed) which are used for general traffic ..	1	..	..	26,189	26,190
<b>Total .. .. .</b>	<b>3,845</b>	<b>417</b>	<b>378</b>	<b>96,811</b>	<b>101,451</b>



*Semi-Governmental Authorities\****Country Roads Board***Introduction*

The Board was constituted under the *Country Roads Act 1912* (now incorporated in the *Country Roads Act 1958*). Thus, early in the motor vehicle era, a new and timely basis was established for the systematic construction and maintenance of the most important elements of the road network of the State.

*Responsibilities of Board*

The principal functions of the Board are to determine what roads shall be main roads, State highways, tourists' roads, forest roads, and by-pass roads; to enquire into the nature and extent of the State's resources in road-making material and the most effective methods of road construction and maintenance; to recommend deviations in existing roads or the construction of new roads in order to facilitate communication and improve the conditions of traffic; to record and make available the results of surveys and investigations; and to purchase land, machinery, tools, and materials that may be required to fulfil its purposes.

The Board is responsible for the full cost of all construction and maintenance works on roads which it declares to be State highways, by-pass roads, tourists' roads or forest roads. Municipalities generally maintain, construct, and reconstruct main roads to standards approved by the Board and the Board bears at least two-thirds of the cost of maintenance expenditure on main roads. Where loan money is used for construction or reconstruction of main roads, the councils are liable for repayment of half of the interest and sinking fund charges.

*Sources of Funds*

Available to the Country Roads Board for works on declared roads is the Country Roads Board Fund, into which receipts are paid from motor registration fees less cost of collection, half the receipts from drivers' licence fees less half cost of collection, two-thirds of the additional registration fee (transfer fee) less cost of collection, and fees and fines under the Motor Car Act. Proceeds of the Ton Mile Tax under the *Commercial Goods Vehicles Act 1958*, are paid into a special "Roads Maintenance Account" in the Country Roads Board Fund. Funds from this special account may be used on any roads, but only for maintenance work.

The Board is also entrusted with the expenditure of road funds available under the Commonwealth Aid Roads Act. For many years, Commonwealth Aid was directly proportional to the usage of motor fuels, but the most recent Act in 1959 departed from this basis and provided fixed sums in each of five years to be paid from Commonwealth Consolidated Revenue. The Commonwealth, in 1959-60, distributed a total of £42 mill. and, in 1960-61, £46 mill. Tasmania receives 5 per cent., and the share of other States of the remainder is based on a formula giving equal weight to area, population, and number of registered motor vehicles. This results in Victoria receiving

---

\* This section includes only those semi-governmental authorities having close associations with local government.

just under 20 per cent. of the total distribution. Of the amount available to Victoria, approximately £200,000 is used by the Public Works Department for works connected with transport, and the balance is available to the Board and is used partly for main roads and other classified roads and partly for works on unclassified roads. Forty per cent. of the funds made available to the State must be expended on rural roads other than State highways and main roads. Unclassified roads are a municipal responsibility but the Board, as far as the Commonwealth funds will allow, assists the councils with works on such roads and, in fact, both for maintenance and construction this assistance is extensive.

#### *Classified Roads*

State highways connect Melbourne with the capital cities of neighbouring States, with provincial centres throughout Victoria, and connect the various provincial centres with each other. In addition to considerable volumes of local traffic in the vicinity of important cities and townships, they carry the long distance road traffic and serve as the main traffic arteries. They are generally of two-lane construction but, with increasing traffic, many sections are being gradually duplicated.

In 1958, the Country Roads Act provided for the creation of "by-pass roads" having no access from adjoining properties and completely insulated from cross traffic. A "by-pass road" is thus the statutory term for defining a "freeway". The freedom from lateral interference conferred on through traffic results in a high traffic-carrying capacity per lane when compared with a normal type of highway. For high traffic volumes, four or more lanes are provided, traffic in the two directions being separated by a median strip. Such facilities are normally more costly because of the necessity to carry minor roads over the "freeway", to provide alternative access for some properties, and to build overpasses and associated ramps at intersections. However, considering the volumes of traffic in question, and allowing for reduction of accidents and the saving in cost of delays to commercial vehicles caused by stopping and starting at ordinary intersections, the cost of transport per vehicle mile is greatly reduced on a by-pass road. A direct route may thus be provided between large centres of population without traversing the streets of smaller townships which may be conveniently by-passed. This may be a very real benefit to such a township since its main street is not cluttered up with "through" traffic. Local traders in the town are protected as no business premises are permitted along the by-pass road, and if travellers desire to make purchases during their journey, the alternative route through the town is available to them. A notable example is the Maltby by-pass road, 6½ miles long, recently opened to traffic between Melbourne and Geelong, and by-passing the main street of Werribee.

Tourists' roads serve tourists' resorts and generally pass through areas from which the local councils obtain little or no rate revenue. Mountain and coastal scenic areas are served in most cases and, in winter, alpine sections are kept open to serve snow resorts.

Forest roads are roads in the vicinity of forest areas or otherwise inaccessible areas from which the local councils receive little or no rate revenue.

Main roads in urban areas provide for some of the main traffic streams apart from those routes declared as State highways. In rural areas, main roads connect areas of production with townships and provide links between townships. In each case, progressive improvements are being undertaken as well as regular maintenance.

At 30th June, 1961, the mileage of declared roads and the mileages with bituminous surface were as follows :—

**VICTORIA—MILEAGE OF DECLARED ROADS AT  
30TH JUNE, 1961**

Classification	Mileage	Mileage Sealed
State Highways .. .. .	4,502	4,033
By-pass Roads .. .. .	9	9
Tourists' Roads .. .. .	426	202
Forest Roads .. .. .	463	144
Main Roads .. .. .	9,111	6,624
Total .. .. .	14,511	11,012

In order to facilitate its own direct work and to ensure technical and administrative co-operation with municipal councils, the Board has established divisional offices, depots, and workshops at Bairnsdale, Ballarat, Benalla, Bendigo, Geelong, Horsham, Traralgon, and Warrnambool. Two divisions (Dandenong and Metropolitan) are located at the Head Office at Kew, and utilize the workshop services of the central depot at Syndal.

*Receipts and Expenditure*

Receipts and expenditure, covering the operations of the Board for each of the years 1956-57 to 1960-61, were as follows :—

**VICTORIA—COUNTRY ROADS BOARD : RECEIPTS AND  
EXPENDITURE**

(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>RECEIPTS</b>					
Fees and Fines—Motor Car Act (Less Cost of Collection) .. .. .	6,420	8,233	8,625	9,394	9,578
Municipalities Repayments—Permanent Works and Maintenance—Main Roads .. .. .	530	560	686	724	789
Commonwealth Aid Roads Acts .. .. .	5,247	6,159	6,871	8,461	8,984
Proceeds from Commercial Goods Vehicles Act .. .. .	1,315	1,529	1,873	2,117	2,254
State Loan Funds .. .. .	405	403	76	160	283
Commonwealth-State Agreement—Flood Restoration .. .. .	237	460	53	5	1
Other Receipts .. .. .	28	37	31	44	50
Total .. .. .	14,182	17,381	18,215	20,905	21,939

VICTORIA—COUNTRY ROADS BOARD : RECEIPTS AND EXPENDITURE  
—continued  
(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
EXPENDITURE					
Construction and Maintenance of Roads and Bridges .. .. .	10,983	14,726	15,021	17,220	19,089
Traffic Line Marking and Traffic Lights .. .. .	28	37	35	38	45
Plant Purchases .. .. .	621	1,053	713	1,028	708
Interest and Sinking Fund Payments .. .. .	807	831	862	875	888
Payment to Tourist Fund .. .. .	76	109	145	152	188
General Expenditure .. .. .	1,340*	824	970	1,636†	1,662‡
<b>Total .. .. .</b>	<b>13,855</b>	<b>17,580</b>	<b>17,746</b>	<b>20,949</b>	<b>22,580</b>

\* Includes £500,000 repayment of advance from Public Account.

† Includes £452,000 expenditure on Kew office.

‡ Includes £528,000 expenditure on Kew office.

*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 1956–57 to 1960–61 :—

VICTORIA—COUNTRY ROADS BOARD : EXPENDITURE  
ON ROADS AND BRIDGES  
(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
State Highways—					
Construction .. .. .	172	2,984	3,484	3,735	4,627
Maintenance and Reconditioning .. .. .	3,907	2,005	1,873	2,117	2,254
By-Pass Roads .. .. .	..	..	29	267	1,097
Main Roads—					
Permanent Works .. .. .	325	4,243	4,357	4,991	4,752
Maintenance and Reconditioning .. .. .	3,596	1,186	1,179	1,268	1,167
Unclassified Roads—					
Construction and Maintenance .. .. .	2,509	3,615	3,371	3,974	4,228
Tourists' Roads—Construction and Maintenance .. .. .	285	458	454	551	600
Forest Roads—Construction and Maintenance .. .. .	116	128	191	192	275
River Murray Bridges and Punts—Maintenance .. .. .	73	107	83	125	89
<b>Total Expenditure .. .. .</b>	<b>10,983</b>	<b>14,726</b>	<b>15,021</b>	<b>17,220</b>	<b>19,089</b>

### Water Supply Authorities

The principal authorities controlling water supply for domestic purposes in Victoria at 31st December, 1961, are listed in the following table :—

#### 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 Acts
Waterworks Trusts (150) .. ..	
Local Governing Bodies—	
Ballarat Water Commissioners .. ..	
Municipal Councils—	
Ararat City .. ..	
Bacchus Marsh Shire .. ..	
Beechworth Shire .. ..	
Bet Bet Shire .. ..	
Clunes Borough .. ..	
Creswick Shire .. ..	
Korong Shire .. ..	
Stawell Town .. ..	
Talbot Shire .. ..	
Warrnambool City .. ..	
Werribee Shire .. ..	
Walpeup Shire .. ..	
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 Trusts Acts
Mildura Urban Water Trust .. ..	

Information about the activities of the State Rivers and Water Supply Commission will be found on pages 496 to 503. The finances of the Commission (which form part of the Public Account and are subject to annual Budget review) are included in the tables in Part 9 of the Year Book.

### Melbourne and Metropolitan Board of Works

#### Introduction

The Board was constituted by Act of Parliament in 1890 and took up its duties on the 18th 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, it was given responsibility for the disposal of nightsoil from unsewered properties within the same area.

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. The Board, in 1949, 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 the authority 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 51 commissioners and a chairman. Each commissioner is appointed by, and must be a member of, one of the municipal councils or groups of councils entitled to representation. Members cannot sit longer than three years without re-election. The chairman, however, is appointed by the Board for a four-year term.

#### *Area under the Control of the Board*

The area under the Board's control has been expanded in stages. The Board is now responsible for water supply, sewerage, drainage, and river improvements over an area of 460 square miles. To this must be added a further 20 square miles in which the Board is responsible for water supply only. Its town planning commitment extends over 688 square miles.

#### *Water Supply System*

On the 30th June, 1961, 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. gall., 36 service reservoirs and elevated tanks with a total capacity of 329.6 mill. gall., and 5,245 miles of aqueducts, mains, and reticulation.

#### *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 1956-57 to 1960-61, together with the total expenditure (less depreciation) to 30th June, 1961 :—

### VICTORIA—CAPITAL OUTLAY ON WATERWORKS (Melbourne and Metropolitan Board of Works Area Only) (£'000)

Particulars	During Year Ended 30th June—					Total Cost to 30th June, 1961
	1957	1958	1959	1960	1961	
Yan Yean System ..	7	3	*	88	85	868
Maroondah System ..	1	26	*	7	1	1,762
O'Shannassy, Upper Yarra and Silvan System ..	2,478	543	232	52	14	20,976
Service Reservoirs ..	14	346	331	189	236	1,810
Large Mains ..	1,148	2,077	2,398	1,932	1,643	14,669
Reticulation ..	449	777	1,429	1,019	1,211	11,553
Afforestation ..	5	9	5	4	10	265
Investigations, Future Works ..	4	2	5	5	5	35
Total Outlay	4,106	3,783	4,400	3,296	3,205	51,938

\* Less than £500.

*Output of Water*

The total output of water from the various sources of supply for each of the years 1956-57 to 1960-61 was as follows :—

**VICTORIA—OUTPUT OF WATER**  
(Melbourne and Metropolitan Board of Works Area Only)  
(’000 Gall.)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Yan Yean Reservoir ..	6,807,500	5,865,600	3,347,400	4,041,100	5,260,200
Maroondah Reservoir	16,713,400	15,408,400	15,392,300	14,783,100	16,032,200
O’Shannassy River, Upper Yarra, and Silvan Reservoirs ..	20,224,800	25,740,300	30,149,000	34,377,600	34,495,400
<b>Total Output ..</b>	<b>43,745,700</b>	<b>47,014,300</b>	<b>48,888,700</b>	<b>53,201,800</b>	<b>55,787,800</b>

*Consumption of Water*

During the year ended 30th June, 1961, the maximum consumption of water in Melbourne and suburbs on any one day was 340·9 mill. gall. on 23rd January, 1961 (the highest on record to this date), and the minimum consumption was 84 mill. gall. on 18th September, 1960.

The following table shows, for each of the years 1956-57 to 1960-61, 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 :—

**VICTORIA—WATER CONSUMPTION IN MELBOURNE AND  
SUBURBS**

(Melbourne and Metropolitan Board of Works Area Only)

Year	Properties Supplied with Water at 30th June	Properties for Which Sewers Were Provided at 30th June	Total Annual Consumption of Water	Daily Average of Annual Consumption of Water	Daily Consumption of Water per Head of Population Served
	No.	No.	mill. gall.	mill. gall.	gall.
1956-57 .. ..	440,159	366,507	43,652	119·59	75·45
1957-58 .. ..	454,853	373,019	47,006	128·78	78·67
1958-59 .. ..	483,410	378,738	48,917	134·02	77·02
1959-60 .. ..	496,841	384,844	53,169	145·27	81·20
1960-61 .. ..	510,078	395,109	55,822	152·94	83·30

*Sewerage System*

There are now three separate systems collecting, purifying, and disposing of sewage from the Melbourne Metropolitan Area. These are the Werribee, South Eastern, and Kew systems.

Werribee is the principal system and serves approximately 98 per cent. of the sewered area of the Metropolis. All sewage collected by this system flows by gravitation through two main sewers to a pumping station at Spotswood.

The North Yarra main sewer, as the name implies, serves the area north of the river, whilst the Hobson's Bay main sewer serves the area south of the river. These main sewers terminate at the pumping station 37 feet and 45 feet respectively, below the low-water level of the bay.

At the pumping station, the sewage is screened and then nine electrically-driven centrifugal pumps lift it 108 feet through three rising mains to a point  $2\frac{1}{2}$  miles away at Brooklyn (see pages 416–417). From there, it gravitates 16 miles along the main outfall sewer to the Board's Farm just beyond Werribee, where it is purified by either land filtration, grass filtration, or lagooning.

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 South Eastern system disposes of the sewage from Mordialloc, Mentone, Parkdale, and Cheltenham, which for economic reasons could not be brought into the Werribee system.

The treatment process established at Braeside for this system is biological, and involves sedimentation of the sewage and subsequent slow filtration through a bed of broken stone from which a clear effluent emerges. The effluent is then stored in large lagoons where it undergoes final purification before being absorbed by the soil.

The Kew system serves an area of 112 acres at Kew which could not be economically connected to the Werribee system. The treatment process is similar to that at Braeside.

#### *Cost of the Sewerage System*

The cost of sewerage works during each of the years 1956–57 to 1960–61, and the total cost (less depreciation) to 30th June, 1961, are shown in the following table:—

#### VICTORIA—CAPITAL OUTLAY ON SEWERAGE SYSTEM (Melbourne and Metropolitan Board of Works Area Only) (£'000)

Particulars	During Year Ended 30th June—					Total Cost to 30th June, 1961
	1957	1958	1959	1960	1961	
Farm Purchase and Preparation ..	191	216	209	195	159	3,995
Treatment Works ..	72	68	23	20	48	479
Outfall Sewers and Rising Mains ..	16	39	136	56	138	924
Pumping Stations, Buildings, and Plant ..	29	23	334	1,606	1,078	3,454
Main and Branch Sewers	286	648	1,367	1,382	1,667	9,375
Reticulation Sewers ..	1,220	1,249	1,482	1,887	1,414	22,270
Cost of House Connexions Chargeable to Capital	..	..	Cr. 274	..	..	397
Sanitary Depots ..	24	36	75	115	68	387
Investigations ..	Cr. 14	10	11	11	10	130
<b>Total Outlay ..</b>	<b>1,824</b>	<b>2,289</b>	<b>3,363</b>	<b>5,272</b>	<b>4,582</b>	<b>41,411</b>



*Metropolitan Sewerage Farm*

Statistical data for the year ended 30th June, 1961, are as follows :—

Total area of farm	..	..	..	26,811 acres
Area used for sewage disposal	..	..	..	15,859 acres
Average rainfall over 66 years	..	..	..	18·83 inches
Net cost of sewage purification per head of population served	..	..	..	4s. 10d.
Profit on cattle and sheep	..	..	..	£213,845

*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 as from 19th November, 1924. By agreement, each council pays to the Board a prescribed amount per annum to offset the cost of the service, &c. For the year 1960–61, working expenses were £72,410 and interest £16,511, making a total of £88,921. Revenue was £15,765, leaving a deficiency of £73,156.

*Brooklyn Pumping Station and Trunk Sewer*

For some years, the Spotswood Pumping Station which pumps the sewage to the main outfall sewer at Brooklyn through three mains with a total capacity of 135 mill. gall. a day, has been inadequate in wet weather. It has also been found that both internal and external corrosion of the mains was so serious that the end of their useful life was in sight. The situation is now being met by the Sewerage Amplification Scheme which was commenced in 1955 and is being implemented in stages.

The first stage of the Scheme requires the construction of a new deep gravity sewer between the present collecting point at Spotswood Pumping Station, and a new pumping station at Miller's-road, Brooklyn. Sewage will be lifted vertically to the main outfall sewer by the new pumping station which consists essentially of five concrete-lined wells (See photographic section "Life in Victoria Today"). Two of the wells will contain four pumping units each; another two wells will house screens to prevent heavy debris from entering the pumps; and the fifth well will house two control gates by which sewage from the trunk sewer may be directed to either or both pump wells or may be stopped from entering the pumping station conduits in an emergency.

With a capacity of 42 mill. gall. per day each, the four pumps in a single well will adequately cope with normal maximum flows in dry weather. In wet weather, a further two pumps will be brought into operation. With six of the eight pumps in operation, the station would be working to maximum capacity, since one pump would be required as a stand-by, and it must be assumed that another will be out of operation for regular maintenance or overhaul.

Contracts have been let for the construction of the Brooklyn Trunk Sewer and Pumping Station and for the supply of pumping plant and other equipment. The total cost of the work, including the superstructure, amounts to approximately £6½ mill., and is scheduled for completion in 1963.

Despite its immensity, the whole station will be operated by one man in the control room, just below the surface.

#### *Stormwater Drains*

Since 1924, the Board has been empowered by Act of Parliament to deal with main drains and main drainage works. Before that date, main drainage problems were the responsibility of individual municipal councils.

The Board has now taken over and maintains many miles of drains previously constructed by councils. It is also the constructing authority for further works to dispose of stormwater drainage from catchments exceeding 150 acres in area.

#### *River Improvements*

The Board is responsible for metropolitan rivers, creeks, and watercourses except for certain parts under the jurisdiction of other public authorities. It works to keep all streams free from pollution, to dredge them for floor control, to provide free safe passage for small boats and pleasure craft, to maintain the banks, and prevent erosion.

#### *Cost of Drainage and River Improvement Works*

The total cost of drainage and river improvement works (less depreciation) to 30th June, 1961, was £8,911,526. The length of main drains under the control of the Board at 30th June, 1961, was 193 miles.

#### *Assessed Value of Property*

The net annual value of property in 1960-61 for the purpose of the Board's rating was as follows :—

For Water Rate	..	..	..	£84,112,717
For Sewerage Rate	..	..	..	£64,775,386
For Drainage Rate	..	..	..	£78,273,526
For Improvement Rate	..	..	..	£82,791,924

#### *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. All money borrowed is charged and secured upon the Board's revenues.

#### *Board's Borrowing Powers*

The Board is empowered to borrow £115 mill. This amount is exclusive of loans amounting to £2,389,934 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 1st July, 1891.

*Loan Liability*

The Board's liability under loans was £94,799,845 at 30th June, 1961. The Board was, at that date, empowered to borrow a further £22,590,089 before reaching the limit of its borrowing powers.

*Revenue, Expenditure, &c.*

The following is a table of the revenue, expenditure, surplus or deficiency, and capital outlay of the Board, during each of the five years 1956-57 to 1960-61 :—

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF  
WORKS : REVENUE, EXPENDITURE, ETC.\*  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
REVENUE					
Water Supply—					
Water Rates and Charges (Including Revenue from Water Supplied by Measure) .. .. .	2,729	3,038	3,273	3,757	4,106
Sewerage—					
Sewerage Rates .. .. .	2,662	2,983	3,275	3,546	3,842
Trade Waste Charges .. .. .	190	198	212	214	231
Sanitary Charges .. .. .	47	51	54	55	82
Metropolitan Farm—					
Grazing Fees, Rents, Pastures, &c. ..	13	11	18	15	11
Balance, Live Stock Account .. ..	148	168	169	259	214
Metropolitan Drainage and Rivers—					
Drainage and River Improvement Rate	443	504	554	608	662
River Water Charges .. .. .	9	10	10	10	10
Total .. .. .	6,241	6,963	7,565	8,464	9,158
EXPENDITURE					
Water Supply—					
Management and Incidental Expenses	482	480	502	537	578
Maintenance .. .. .	713	722	841	907	966
Sewerage—					
Management and Incidental Expenses	441	434	466	513	559
Maintenance .. .. .	477	506	529	565	591
Metropolitan Farm—					
Administrative Expenses .. .. .	15	15	17	23	28
Maintenance .. .. .	297	302	321	369	336
Metropolitan Drainage and Rivers—					
Management and Incidental Expenses	40	43	38	41	34
Maintenance .. .. .	61	59	57	63	66
Main Drainage Works .. .. .	221	252	277	304	331
Pensions and Allowances .. .. .	53	72	75	79	108
Loan Flotation Expenses .. .. .	53	80	68	154	114
Interest (Including Exchange) .. .. .	2,761	3,137	3,607	4,221	4,725

\* Excluding Metropolitan Improvement Fund.

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS :  
REVENUE, EXPENDITURE, ETC.\*—*continued*  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Contribution to—					
Sinking Fund .. .. .	149	171	403	527	388
Loans Redeemed Reserve .. .. .	..	..	..	..	143
Renewals Fund .. .. .	139	136	143	181	192
Superannuation Account .. .. .	58	62	61	70	74
Depreciation .. .. .	7	11	20	22	27
Municipalities .. .. .	17	17	17	17	17
Exchange Reserve .. .. .	90	150	74	..	..
Rates Equalization Reserve .. .. .	150	95	40	(Cr) 63	(Cr) 119
Insurance Account .. .. .	..	200	..	..	..
Total .. .. .	6,224	6,944	7,556	8,530	9,158
Net Surplus (+) or Deficiency (—) ..	17	19	9	(—) 66	..
Capital Outlay at 30th June—					
Water Supply .. .. .	37,254	41,037	45,437	48,733	51,938
Sewerage .. .. .	25,905	28,194	31,556	36,829	41,411
Drainage and River Improvement Works	5,850	6,843	7,772	8,454	8,912

\*Excluding Metropolitan Improvement Fund.

### Town Planning

The purpose of the Planning Scheme prepared by the Board is to guide and co-ordinate the future development of the Melbourne Metropolitan Area in the best interests of the community. The scheme controls the use of land by classifying it into zones and reserved lands. It has been prepared in the form of 163 maps and an ordinance.

The maps show in distinctive colours and notations the various zones and reserved lands in sufficient detail for the effect on individual properties to be ascertained. The ordinance sets out the rules governing the use of land in such zones and reservations.

Since 1st March, 1955, the development of the Melbourne Metropolitan Area has been controlled under an Interim Development Order in accordance with the Planning Scheme.

The planning scheme has been drawn up to provide for a population of 2,250,000 people, a figure which was not expected to be reached until the turn of the century.

However, over the past few years, the rapidly accelerating growth of population, together with the development of new activities and ideas both here and abroad, will bring about the need for modification of the scheme from time to time. This can be done by

amending planning schemes. One such amending scheme to increase the potential population capacity of the Metropolitan Area by 250,000 people has been completed.

Thus the Planning Scheme, whilst controlling Melbourne's development, is flexible enough to enable alterations to be made to meet the changing needs of the community.

### **Further Reference**

A full account of this scheme is given on pages 407 to 410 of the Victorian Year Book 1962.

### *Highways and Bridges*

A complete network of freeways and highways designed to meet the needs of the Melbourne Metropolitan Area for the next 20–30 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 recognized 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 £20 mill. 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, and Hanna and Roy streets (re-named King's Way), South Melbourne.

Construction of the first stage of the South-Eastern Freeway between Batman-avenue, Melbourne, and Loyola-grove, Richmond, has been completed and other projects are in the course of investigation and design.

### *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 will be carried out from time to time as the need arises.

### *Parklands*

Because large areas are reserved in the Planning Scheme for parklands, the Board may, with the consent of local councils, acquire and develop such lands as parks, gardens, and playing fields.

## **Water Supply and Sewerage in Country Towns**

### *Water Supply*

When the State Rivers and Water Supply Commission was constituted in 1905, it was given general control over water supply to 111 towns with 261,000 persons.

From works managed directly by the Commission, 75,000 people were supplied in fifteen centres, including the mining towns of Bendigo and Castlemaine and the seaport of Geelong. The other 96 towns were served by local authorities, a quarter in the Wimmera-Mallee Waterworks Trust Districts, a similar number along the route from Melbourne to Wodonga, and the rest concentrated in Ballarat 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.

Control of town water supply by Trusts has been satisfactory. They have never had to contend with the problems of irregular revenue and divided control of headworks experienced by the Irrigation and Waterworks Trusts which controlled rural water supply prior to 1906. The Commission has always encouraged this form of control and, in general, acts only in a supervisory capacity. It has retained its own direct management only where essential.

The Commission system serving the largest population is the Mornington Peninsula System, which dates back to 1916, when supply was given to Flinders Naval Base. It now serves towns throughout the Mornington Peninsula and in the Dandenong district. The Commission has retained control over the Coliban system serving the Bendigo-Castlemaine area, which provides water for irrigation as well as for a town supply.

These two systems contain two-thirds of the population of about 208,000 served directly by the Commission. Other important groups include nearly 40 small towns in the Wimmera and Mallee and twenty in the irrigation areas, but the majority of the urban population in these areas is served by local authorities taking a bulk supply from the Commission.

Local authorities controlling town water supplies now number 167 and serve 187 cities and towns with a combined population of 540,000. As the Commission serves only about 208,000 people—and only 60,000 outside the Mornington Peninsula and Coliban Systems—it is clear that local control is predominant. Furthermore, whereas the Commission provides direct supplies to few more towns than it did twenty years ago, the number served by Trusts has increased by 60 per cent. in the same period.

In addition to their functions as water supply authorities, three local authorities are also responsible for sewerage systems. A brief description of each of these authorities is given below.

*Geelong Waterworks and Sewerage Trust*

The Trust was constituted as the Geelong Municipal Waterworks Trust on 25th 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 (chairman). Provision was also made for a commissioner to be elected by the ratepayers of the Shire of Corio, thus making a total of seven commissioners instead of five as formerly.

The amount of loans which may be raised is limited to £6,500,000 for water supply, £5 mill. for sewerage works, and £420,000 for sewerage installations to properties under deferred payments conditions. The expenditure on these services to 30th June, 1961 was—water supply, £4,293,190; sewerage, £1,988,368; and sewerage installation, £395,159 of which £89,690 was outstanding. The revenue for the year ended 30th June, 1961, was £423,446 on account of waterworks and £206,251 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 30th June, 1961, the amount so appropriated was £450,113 and of this sum £260,735 had been used to redeem loans which have matured from time to time.

At the 30th June, 1961, the population supplied was estimated by the Trust at 98,650, the number of buildings within the drainage area was 23,552, and the number of buildings within sewered areas was 20,606.

For some years, the Trust has been engaged on an expansion programme which will involve a total loan expenditure of approximately £6 mill. and which, for the current and several succeeding years, will require an annual borrowing of at least £1 mill.

The principal work in this construction programme is the building of a large dam on the Upper Barwon River at an estimated cost of £2,500,000. Work on this project was commenced in 1960.

This expansion programme, both for water supply and sewerage works, has been made necessary by the past and expected future growth of population of Geelong.

*Water Supply*

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 4,356 mill. gall.

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 in extent and comprises the head waters of the Barwon River and its tributaries. There is one storage reservoir and six service basins. The total storage of the reservoir and service basins of the Barwon System is 4,280 mill. gall. The Trust is required to supply up to 700 mill. gall. per year to the State Rivers and Water Supply Commission's Bellarine Peninsula System.

### *Sewerage*

The sewerage system consists of a main outfall sewer 4 feet by 3 ft. 3 in. to the ocean at Black Rock, a distance of about 9 miles from Geelong, and 234.78 miles of main and reticulation sewers. The outfall sewer is laid on a gradient of 1 in 2,500, and was designed to take the discharge from a contributing population of 120,000. The sewerage area, which is 10,559 acres, includes the Cities of Geelong, Geelong West, and Newtown and Chilwell, and suburban areas in the Shires of Corio, South Barwon, and Bellarine.

### *Latrobe Valley Water and Sewerage Board*

The Latrobe Valley Water and Sewerage Board was constituted on the 1st 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 the Gas and Fuel Corporation of Victoria; and one member appointed by the Governor in Council as a Government nominee.

### *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 industrialized area, particularly around the towns of Morwell and Traralgon.

The Board has constructed a pumped water supply scheme from the Tyers River, and is in process of converting this to a gravitation scheme, including the construction of a major storage on the upper Tyers River. The capacity of this storage will be approximately 7,000 mill. gall., and water will be conveyed from the storage, a distance of approximately 10 miles, by a pipe-line 60 inches in diameter.



The capital cost of construction of waterworks was £3,642,479 to the 30th June, 1961. The liabilities amounted to £4,020,129 at 30th June, 1961, including loans, due to the Government, totalling £3,915,059. The income for the year 1960-61 was £128,121, and expenditure during the year amounted to £107,946, including interest charges amounting to £36,832. Redemption payments to 30th June, 1961, amounted to £53,206.

The Board does not strike a rate, but charges consumers, including local water supply authorities, by measure.

Water supplied during the year ended 30th June, 1961, totalled 3,076 mill. gall.

#### *Sewerage*

The Board has constructed an outfall sewer some 50 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, and gasification wastes, together with small quantities of domestic sewage.

The capital cost of sewerage construction works to the 30th June, 1961, was £2,342,931.

The scheme is financed by Government loan, the liabilities on account of loans at the 30th June, 1961, amounting to £2,482,557. Income during 1960-61 amounted to £109,693 and expenditure, which included £53,623 interest on loans, amounted to £122,533. Redemption payments to 30th June, 1961, amounted to £80,419.

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.

#### *Ballarat Water Commissioners*

The local governing body by the name of "The Ballarat Water Commissioners" was constituted on the 1st July, 1880, by the *Waterworks Act* 1880.

The water supply district of the Ballarat Water Commissioners embraces an area of approximately 65 square 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, which is responsible for a reticulated supply to the township of Buninyong. The total estimated population supplied is 58,000. The works comprise seven reservoirs, which have a total storage capacity of 5,606 mill. gall. The catchment area is 24,182 acres. The Commissioners supply water to 19,872 ratepaying tenements, of which 12,483 are connected to the sewers.

For the year 1961, the total consumption was 2,090 mill. gall. including 202 mill. gall. supplied to Lake Wendouree, on which important rowing and other aquatic sports are held.

The average per capita consumption for the year 1961 was 98·8 gall. per day. Approximately 83 per cent. of the properties supplied are metered and, to reduce leakage losses and wastage to a minimum, the Commissioners have planned to meter at least 90 per cent. of the properties supplied.

To 31st December, 1961, the capital cost of construction was £2,641,780, and loans outstanding (including private loans) were £1,577,031. During 1961, revenue amounted to £173,925, and expenditure to £173,762.

#### *Ballarat Sewerage Authority*

The Ballarat Sewerage Authority was constituted under the provisions of the *Sewerage Districts Act 1915*, by Order in Council dated 30th November, 1920, which provides that the members of the Water Commissioners shall be the Sewerage Authority.

The Ballarat Sewerage District embraces the City of Ballarat, portions of the Shires of Ballarat, Bungaree, and Grenville, and the Borough of Sebastopol.

At 31st December, 1961, there were 17,982 assessments in the sewerage district, and 14,454 in declared sewerage areas, where 12,483 tenements were connected.

Construction is financed by debenture issue loans from various financial institutions. The liabilities on account of loans secured for construction at 31st December, 1961, amounted to £1,261,787; redemption payments at that date totalled £314,787. Revenue during 1961 amounted to £132,910, and expenditure, which included £74,912 on interest and redemption, was £126,808. During 1961, 208 contracts were completed under the Deferred Payments System, the amount outstanding at 31st December being £77,829.

#### **Further References**

A description of the system operated by the Ballarat Sewerage Authority will be found on pages 395–396 of the Victorian Year Book 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 67 local sewerage authorities which have been constituted (including the Geelong Waterworks and Sewerage Trust, the Latrobe Valley Water and Sewerage Board, and the Ballarat Sewerage Authority), 38 authorities have systems in operation. A further eleven authorities have systems under construction, but are not yet operating.

In the following table, particulars are shown in respect of all country sewerage systems which are in operation, or in course of construction (with the exception of those controlled by the State Electricity Commission), for each of the years 1956 to 1960 :—

**VICTORIA—COUNTRY SEWERAGE AUTHORITIES :  
POPULATION SERVED, PROPERTIES CONNECTED,  
INCOME, EXPENDITURE, ETC.**

Particulars	1956	1957	1958	1959	1960
No. of Systems in Operation ..	33	36	38	38	39
No. of Systems under Construction	4	4	3	7	11
Estimated Population Served (At End of Year) .. ..	305,605	323,008	339,609	354,756	369,951
No. of Properties Connected to Sewers (At End of Year) ..	78,438	84,031	89,574	94,747	100,397
	£'000				
Income—					
Rates .. .. .	626	726	818	916	1,036
Other .. .. .	147	169	295	344	434
Total .. .. .	773	895	1,113	1,260	1,470
Expenditure—					
Working Expenses .. .. .	315	355	402	465	538
Other .. .. .	463	548	698	789	855
Total .. .. .	778	903	1,100	1,254	1,393
Loan Account—					
Receipts .. .. .	1,311	2,012	1,597	2,175	2,839
Expenditure .. .. .	1,422	2,224	1,569	1,797	2,376
Loan Liability (At End of Year) ..	6,072	7,942	9,171	11,008	13,637

**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 1960–61, contributions by municipalities were equivalent to 1·68d. in the £1 of the annual value of property amounting to £76,909,840, while fire insurance companies contributed at a rate of £15 19s. 2d. for every £100 of fire insurance premiums paid on insured property. Premiums received in the Metropolitan Fire District in 1959 amounted to £6,752,425.

Particulars of revenue, expenditure, and loan indebtedness of the Metropolitan Fire Brigades Board for each of the five years 1956-57 to 1960-61 are as follows :—

**VICTORIA—METROPOLITAN FIRE BRIGADES BOARD :  
REVENUE, EXPENDITURE, ETC.  
(£'000)**

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
<b>REVENUE</b>					
Contributions—					
Municipal .. .. .	394	345	447	486	539
Insurance Companies .. .. .	787	689	893	972	1,078
Receipts for Services .. .. .	122	141	139	141	193
Interest and Sundries .. .. .	118	120	131	198	118
Total .. .. .	1,421	1,295	1,610	1,797	1,928
<b>EXPENDITURE</b>					
Salaries .. .. .	806	870	963	1,076	1,133
Administrative Charges, &c. .. .. .	231	301	281	340	245
Partially-paid Firemen and Special Service Staff Allowances .. .. .	84	85	88	94	105
Plant—Purchase and Repairs .. .. .	102	120	127	147	141
Interest .. .. .	3	4	8	12	15
Repayment of Loans .. .. .	9	8	8	10	9
Superannuation Fund .. .. .	32	35	39	59	72
Motor Replacement Reserve .. .. .	13	14	15	20	22
Pay-roll Tax .. .. .	24	26	28	31	33
Miscellaneous .. .. .	6	6	5	7	10
Total .. .. .	1,310	1,469	1,562	1,796	1,785
Net Surplus (+) or Deficit (—)	(+111)	(—)174	(+48)	(+1)	(+143)
Loan Indebtedness (At 30th June) .. .. .	93	119	191	271	322

The following table shows particulars of the number of fire stations operated by the Metropolitan Fire Brigades and the number of staff employed at 30th June in each of the years 1957 to 1961 :—

**VICTORIA—METROPOLITAN FIRE BRIGADES BOARD :  
NUMBER OF FIRE STATIONS AND STAFF EMPLOYED**

Particulars	At 30th June—				
	1957	1958	1959	1960	1961
Fire Stations .. .. .	42	43	44	44	45
Staff Employed*—					
Fire Fighting .. .. .	773	824	824	883	924
Special Service and Partially Paid Firemen .. .. .	87	93	93	93	103

\* Excluding clerical staff.

**Further References**

An outline of the functions and activities of the Metropolitan Fire Brigades Board will be found on page 397 of the Victorian Year Book 1961.

**Country Fire Authority**

The history of the development of Victoria from its earliest times is threaded with the recurring disasters of widespread bushfires. By 1928, there were 106 brigades in Victoria when the Bush Fire Brigades Association was formed to secure necessary powers for the effective prevention and extinction of bushfires. The Bush Fire Brigades Act was passed in 1933, establishing the Bush Fire Brigades Committee with which the brigades could now be registered.

In the towns of Victoria, the fire service had its beginnings in the "Bucket Brigades" of the early 1850's. The first organized fire brigades were Geelong and Sandhurst No. 1 (Bendigo) in 1854 and Ballarat in 1856, all formed at public meetings. Brigades had to rely mainly on their own efforts until the establishment of the two boards (metropolitan and country) in 1890, when the Government, municipalities, and insurance companies were named as contributors.

In April, 1945, the Country Fire Authority took complete control of fire-fighting and fire prevention in the country area of Victoria and the Country Fire Brigades Board and the Bush Fire Brigades Committee ceased to exist.

At the inception of the Authority, there were 185 urban fire brigades and 727 rural fire brigades. The registered members of rural fire brigades numbered 35,000 volunteers, and equipment was estimated to be worth £100,000. Today, there are 206 urban fire brigades with 5,631 members (including 101 on extended leave) comprising 3,856 active and 1,775 reserve volunteers. Rural brigades now number 1,035 with 97,090 volunteer members.

During the seventeen years the Authority has been in existence, the fire services in the three larger provincial Cities of Ballarat, Bendigo, and Geelong have been placed under permanent officer control and the staff of permanent firemen has increased considerably. Because of the population increase in places where the demands on the volunteer service began to press too heavily, permanent officers have been appointed in charge of volunteer brigades. There are now 37 permanent fire officers and 53 firemen in the Authority service with permanent officers at Dandenong, Springvale, Morwell, North Geelong, Frankston, Doveton, Mildura, Warrnambool, and Shepparton. Permanent Regional Officers administer 21 Fire Control Regions with rural fire districts.

As from October, 1950, the municipalities were relieved of their contributions, their one-third being provided from the Municipalities Assistance Fund. From January, 1954, the Government ceased to

contribute, the responsibility for its one-third being transferred to the insurance companies. Whereas the Government, municipalities, and insurance companies each provided one-third of the Authority revenue when it was created in 1944, in 1962 the insurance companies contribute two-thirds of the revenue, the remaining one-third being provided from the Municipalities Assistance Fund. Annual expenditure has grown from £75,688 in the first year to £555,721 in 1961.

Since its inception, the Authority has raised 34 loans, representing a total of £1,099,000, which has been used for the provision of buildings and equipment. In August, 1951, the limit of borrowing was raised from £200,000 to £500,000, and was further increased to £1,000,000 in October, 1955.

In December, 1959, statutory provision was made for the formation of groups of rural fire brigades, and, after the gazettal of regulations in November, 1960, the first groups were formed, there being 59 by the end of 1961.

Particulars of revenue, expenditure, surplus, and loan expenditure and indebtedness of the Country Fire Authority, for each of the years 1956-57 to 1960-61, 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	1956-57	1957-58	1958-59	1959-60	1960-61
<b>REVENUE</b>					
Statutory Contributions—					
State Government ..	142	166	175	182	201
Insurance Companies ..	285	333	351	365	402
Other .. .. .	28	26	26	23	23
Total .. .. .	455	525	552	570	626
<b>EXPENDITURE</b>					
Salaries and Wages ..	163	172	187	208	230
Depreciation .. .. .	18	23	25	28	30
Insurance .. .. .	12	19	18	21	18
Interest .. .. .	29	31	32	34	36
Maintenance .. .. .	88	95	89	91	78
Motor Replacement Fund ..	36	40	44	49	54
Other .. .. .	81	92	94	95	109
Total .. .. .	427	472	489	526	555
Net Surplus .. .. .	28	53	63	44	71
Loan Expenditure .. .. .	134	70	111	131	93
Loan Indebtedness (At 30th June) .. .. .	628	673	686	691	719

**VICTORIA—COUNTRY FIRE AUTHORITY : NUMBER OF  
FIRE BRIGADES, PERSONNEL, AND MOTOR VEHICLES**

Particulars	At 30th June—				
	1957	1958	1959	1960	1961
<b>Fire Brigades—</b>					
Urban .. .. .	200	203	203	205	206
Rural .. .. .	1,026	1,028	1,033	1,031	1,035
<b>Personnel—</b>					
Professional .. .. .	95	97	102	109	109
Volunteer .. .. .	95,678	98,307	99,477	100,865	102,620
<b>Motor Vehicles—</b>					
Transport .. .. .	42	43	44	45	46
Fire Service .. .. .	765	804	819	833	859

**Further References**

An outline of the functions of the Country Fire Authority will be found on pages 399–400 of the Victorian Year Book 1961.

**Local Government and Semi-Government Bodies—**

**New Money Loan Raisings**

In the following statement, particulars are given of the new money loan raisings, during each of the years 1955–56 to 1959–60, 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	Year Ended 30th June—				
	1956	1957	1958	1959	1960
<b>LOCAL GOVERNMENT</b>					
Due to Government .. .. .	76	131	113	420	295
Due to Public Creditor .. .. .	3,304	4,402	5,266	5,160	7,000
<b>Total Local Government .. .. .</b>	<b>3,380</b>	<b>4,533</b>	<b>5,379</b>	<b>5,580</b>	<b>7,295</b>
<b>SEMI-GOVERNMENTAL, &amp;c.</b>					
Due to Government* .. .. .	14,282	15,182	12,161	13,999	10,932
Due to Public Creditor .. .. .	31,645	38,948	36,357	36,010	45,450
<b>Total Semi-Governmental, &amp;c. .. .. .</b>	<b>45,927</b>	<b>54,130</b>	<b>48,518</b>	<b>50,009</b>	<b>56,382</b>
<b>ALL AUTHORITIES</b>					
Due to Government .. .. .	14,358	15,313	12,274	14,419	11,227
Due to Public Creditor .. .. .	34,949	43,350	41,623	41,170	52,450
<b>Total .. .. .</b>	<b>49,307</b>	<b>58,663</b>	<b>53,897</b>	<b>55,589</b>	<b>63,677</b>

\* Including the following advances by the Commonwealth Government under the Commonwealth-State Housing Agreement :—£10,800,000 in 1955–56, £8,400,000 in 1956–57, £8,400,000 in 1957–58, £7,560,000 in 1958–59, and £7,560,000 in 1959–60.

**State Development and Regional Planning**

A full statement on this subject is contained on pages 419 to 424 of the Victorian Year Book 1962.

# Part 6

## WAGES, EMPLOYMENT, AND PRICES

### *Industrial Conditions*

#### **Industrial Arbitration**

##### *General*

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.

Under Commonwealth law there are special tribunals to determine the industrial conditions of employment in the public service of the Commonwealth and in the stevedoring industry, and there is a joint Commonwealth and State tribunal for the New South Wales coal mining industry.

##### *Commonwealth-State Relations in Industrial Arbitration*

The relation between the State and Commonwealth systems of industrial arbitration rests upon the distribution of legislative powers between the Commonwealth and the component States. The powers of the Commonwealth in regard to industrial arbitration are as defined in the Commonwealth of Australia Constitution Act; all residual powers remain with the States. The Commonwealth Constitution Act provides that if a State law is inconsistent with a valid Commonwealth law, the latter prevails and the State law becomes inoperative in so far as it is inconsistent. An award of the Commonwealth Court of Conciliation and Arbitration\* has been held to be a Commonwealth law, and, in certain circumstances, awards of the Commonwealth industrial tribunal override those made by State tribunals.

The Commonwealth jurisdiction is limited by the Constitution Act to "conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State". In interpreting the law, the High Court of Australia has decided 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.

Notwithstanding these limitations of the Commonwealth jurisdiction in industrial matters, the Commonwealth system has gradually become predominant in the sphere of industrial arbitration throughout Australia.

---

\* Now Commonwealth Conciliation and Arbitration Commission.



Its influence extended, in the first place, with the gradual adoption of the principle of federation in trade unionism and in political organization, 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, &c., than those awarded under State legislation. In many cases, also, the organizations 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, have adopted the Commonwealth wage standards as the basis of State awards and agreements. In Victoria, for instance, the basic wages determined by the Commonwealth Conciliation and Arbitration Commission have been adopted for State awards and agreements by the Wages Boards.

### *Wages Boards in Victoria*

(1) *General.*—In each State, industrial tribunals have been established to regulate and arbitrate in industrial matters. In Victoria this function is carried out by Wages Boards which are set up for specific industries or occupations. A General Wages Board operates for industries where there is no special Wages Board.

The Wages Board method of fixing wages and of settling the conditions of employment had its origin in Victoria and was incorporated in an Act of Parliament introduced in 1896. A Board may be appointed for any trade or branch of it. 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. However, under the provisions of the *Factories and Shops Act* 1934, this qualification was modified to permit a paid officer of any corporation, public body, or association of employers being nominated as one of the members to represent employers and, if such officer is appointed, then one of the representatives of the employees on that Board shall likewise be an officer of the trade union concerned.

The *Labour and Industry Act* 1958 requires that every Wages Board shall, in determining wages rates or piecework prices, take into consideration relevant awards of, or agreements certified by, the Commonwealth Conciliation and Arbitration Commission.

The *Labour and Industry Act* 1958 gives Wages Boards the same powers relating to wages and conditions of labour as 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 :—

- (a) work days and hours of work ;
- (b) pay wages and reward ;

- (c) privileges, rights, and duties of employers and employees ;
- (d) the mode terms and conditions of employment or non-employment ;
- (e) the relations of employers and employees ;
- (f) the employment or non-employment of persons of either sex or age ;
- (g) the demarcation of functions of any employees or class of employees ; and
- (h) questions of what is fair and right in relation to any industrial matter, having regard to the interest 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 organization, association, or body.

The determinations of a Wages Board are decided by a majority vote of the members except that where a majority view cannot be obtained the chairman can decide. Witnesses may be called by the Wages Boards which, however, are not to disclose the financial position or trade secrets of an informant without his consent. A lawyer is not to be a member of a Wages Board and is not to appear as Counsel before a Board. Otherwise, the Boards are free to determine their own procedures which are usually informal.

(2) *Board of Reference and Appeals Court.*—A Wages Board has power to set up a Board of Reference to deal with any dispute of fact (but not of law) which may arise concerning a determination. The Board of Reference consists of the chairman of the Wages Board and a maximum of two employer and two employee representatives—one of each must be a member of the Wages Board. The decision of the Board of Reference has the same force and effect as a Wages Board determination.

Appeals against the determination of a Wages Board or against the decision of a Board of Reference may be made to the Industrial Appeals Court. Such appeals must be made by the employer's or employee's organization or by a majority of the employer or employee representatives on the Board concerned. In addition, any person may apply to the Supreme Court to have a determination quashed on grounds of illegality.

The Industrial Appeals Court is appointed for a term of five years and consists of a president—a County Court judge—and two lay members, one representing the employers and one the employees. The Court has all the powers of the Wages Board and may amend the whole or any part of a Board's determination. The Court may also hear appeals relating to contraventions of the Act or of a Wages Board or Court determination. The Court's decisions are final and are not subject to further appeal.

The decisions of a Wages Board and of the Industrial Appeals Court are legally binding, and to this end provision is made for inspection, enforcement, and prosecution of breaches.

On 31st December, 1961, there were 232 Wages Boards existing or authorized.

(3) 1960 *Amendment*.—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 authorizes the Minister to refer, under appropriate circumstances, the determination of a Wages Board to the Court.

In both cases the Act provides that the Court when dealing with such matters shall consider whether the determination appealed against or referred, detrimentally affects the public interest or restricts reasonable competition in the particular trade.

#### *Commonwealth Industrial Court and Commonwealth Conciliation and Arbitration Commission*

The *Conciliation and Arbitration Act 1904–1961* defines an industrial dispute to be dealt with under that Act 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 organization is entitled to submit to the Commission under section 11A of the *Public Service Arbitration Act 1920–1960* or an application or matter which the Public Service Arbitrator has refrained from hearing, or from further hearing, or from determining under section 14A 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 Conciliation and Arbitration Act was extensively amended by an Act assented to on 30th June, 1956. 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 under the Act and the Commonwealth Conciliation and Arbitration Commission to handle the functions of conciliation and arbitration. Further amendments have since been incorporated.

The Commonwealth Industrial Court is composed of a Chief Judge and not more than three other Judges. The Commonwealth Conciliation and Arbitration Commission comprises a president, not less than two deputy presidents, a senior commissioner, not less than five commissioners and a number of conciliators. Judges of the Commonwealth Courts 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.

The jurisdiction of the Commonwealth Industrial Court shall be exercised by not less than two Judges except in the following circumstances. A single Judge may exercise the jurisdiction of the Court with respect to the dismissal or injury of an employee on account of industrial action, interpretation of awards, questions concerning eligibility of membership of an organization, disputes between an organization and its members and a prescribed matter of practice or procedure. A single Judge may refer a question of law for the opinion of the Court constituted by not less than two Judges. The Court is a Superior Court of Record with the same power to punish contempts of its power and authority as is possessed by the High Court. In general, decisions of the Industrial Court are final; however, an appeal lies to the High Court but only when the latter grants leave to appeal. The Act provides for the registration of associations of employees and employers and for inquiries to be held concerning disputed elections in organizations and certain powers in connexion therewith are, by the Act, given to the Industrial Court. Provision is also made for the Commission to exercise the powers of the Court with regard to an application for cancellation of registration of an organization. Any such change of jurisdiction must be notified by proclamation. This provision could be used if the powers of the Court in this regard were declared, in whole or in part, to be invalid.

The Commonwealth Conciliation and Arbitration Commission is empowered to prevent or settle industrial disputes by conciliation or arbitration, and to make suggestions and to do such things as appear right and proper for (a) effecting a reconciliation between parties to industrial disputes; (b) preventing and settling industrial disputes by amicable agreement; and (c) preventing and settling, by conciliation or arbitration, industrial disputes not prevented or settled by amicable agreement. The Commission may exercise its powers of its own motion or on the application of a party.

The President may assign a Commissioner to deal with industrial disputes relating to particular industries, or members of the Commission to deal with a particular industrial dispute. However, subject to the approval of the President, it is the duty of the Senior Commissioner to organize and allocate the work of the Commissioners and Conciliators.

When an industrial dispute occurs or is likely to occur, a Commissioner shall take steps for the prompt prevention or settlement of that dispute by conciliation or, if in his opinion conciliation is unlikely to succeed or has failed, by arbitration. A Commissioner may arrange with the Senior Commissioner for a Conciliator to assist the parties to reach an amicable agreement and shall do so if the parties so request. If an agreement is reached, a memorandum of its terms shall be made in writing, and may be certified by the Commission. A certified memorandum shall have the same effect as an award.

The Commission in Presidential Session, that is, the Commission constituted by at least three presidential members nominated by the President and not otherwise, is empowered to deal with making awards, or certifying agreements, in so far as they concern standard hours, basic wages, and long service leave.

Upon application by a party to an industrial dispute, a Commissioner shall consult with the President as to whether in the public interest the dispute or part of it should be dealt with by a Commission consisting of not less than three members nominated by the President, at least one of whom shall be a presidential member and one, where practicable, the Commissioner concerned. The President may direct the Commission to hear the dispute or a part of the dispute. However, after consideration the Commission may refer the dispute or a part of it back for determination by the Commissioner originally dealing with the dispute. The Commission will then hear and determine any part of the dispute it has not referred back to the Commissioner.

An appeal against the decision of a Commissioner shall be heard by not less than three members nominated by the President, of whom at least two are presidential members of the Commission. However, an appeal will not be heard unless the Commission considers it is necessary as a matter of public interest.

Provision is also made in the Act for a presidential member of the Commission to deal with industrial matters in connexion with the Maritime Industries, Snowy Mountains Area, and Stevedoring Industry, except in those matters for which the Act requires that the Commission shall be constituted by more than one member.

### **Standard Hours of Work**

#### *General*

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 recognized 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 8th September, 1947, granted the reduction to 40 hours from the start of the first pay period in January, 1948. In Victoria, the Wages Board

met and 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\*. 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.

### *Average 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 following tables relate to all industrial 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.

### VICTORIA—WEIGHTED AVERAGE STANDARD WEEKLY HOURS OF WORK : ADULT MALES : INDUSTRIAL GROUPS

Industrial Group‡	Hours of Work			Index Numbers (Base : Australia : 1954 = 100†)		
	At End of Quarter—			At End of Quarter—		
	31st March, 1939	31st March, 1948	31st December, 1961	31st March, 1939	31st March, 1948	31st December, 1961
Mining and Quarrying ..	44.34	40.52	40.00	111.0	101.4	100.1
Manufacturing ..	44.19	40.05	39.99	110.6	100.2	100.1
Building and Construction ..	44.18	40.00	40.00	110.6	100.1	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 Public Authority (n.e.i.) and Community and Business Services ..	45.47	40.11	40.00	113.8	100.4	100.1
Amusement, Hotels, Personal Service, &c. ..	42.75	38.93	38.93	107.0	97.4	97.4
	45.35	40.04	40.00	114.7	100.2	100.1
All Industrial Groups‡ ..	44.46	40.03	39.97	111.3	100.2	100.0

\* Commonwealth Arbitration Reports, Vol. 77, page 505.

† Base : Weighted average for Australia 1954=100.

‡ Excludes Rural and Shipping and Stevedoring.

VICTORIA—WEIGHTED AVERAGE STANDARD WEEKLY HOURS OF WORK : ADULT FEMALES : INDUSTRIAL GROUPS\*

Industrial Group	Hours of Work	Index Numbers (Base : Australia : 1954 = 100†)
Engineering, Metal Works, &c. .. .. .	39·87	100·5
Textiles, Clothing, and Footwear .. .. .	40·00	100·8
Food, Drink, and Tobacco .. .. .	40·00	100·8
Other Manufacturing .. .. .	39·94	100·7
All Manufacturing Groups .. .. .	39·97	100·8
Transport and Communication .. .. .	37·94	95·6
Wholesale and Retail Trade .. .. .	40·00	100·8
Public Authority (n.e.i.) and Community and Business Services .. .. .	39·25	98·9
Amusement, Hotels, Personal Service, &c. .. .. .	39·94	100·7
All Industrial Groups .. .. .	39·81	100·4

\* The above weighted average standard weekly hours and index numbers are applicable to 31st March, 1951, and to the end of each subsequent quarter to 31st December, 1961, as there has been no change in weighted average standard hours for females during this period.

† See footnotes on previous page.

### 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 following tables give statistics of the numbers of industrial disputes and workers involved, and numbers of working days lost. The figures are given as averages over a period of years and annual totals are shown from 1957 onwards. Particulars of all disputes in progress during the year are included in the annual figures whether the dispute commenced in that year or was in progress at the beginning of the year. Consequently, details of "the number of disputes" and "workers involved" in disputes which commenced in any year and were still in progress during the following year will be included in the figures for both years.

### VICTORIA—INDUSTRIAL DISPUTES\*

Period	Number of Disputes	Number of Workers Involved			Number of Working Days Lost
		Directly	Indirectly†	Total	
<b>Ten Year Averages—</b>					
1932-41 .. .. .	15	7,248	476	7,724	74,277
1942-51 .. .. .	31	30,388	2,023	32,411	254,823
1952-61 .. .. .	64	46,095	1,422	47,517	88,375
<b>Five Year Averages—</b>					
1952-56 .. .. .	56	47,608	2,048	49,656	111,857
1957-61 .. .. .	72	44,581	797	45,378	64,893
<b>Annual Totals—</b>					
1957 .. .. .	47	8,728	453	9,181	13,444
1958 .. .. .	66	45,594	1,124	46,718	99,855
1959 .. .. .	60	31,134	1,107	32,241	35,890
1960 .. .. .	98	86,002	2	86,004	102,805
1961 .. .. .	91	51,447	1,300	52,747	72,471

\* Refers only to disputes involving a stoppage of work of ten man-days or more.

† Persons thrown out of work at the establishments where the stoppages occurred but not themselves parties to the disputes.

## VICTORIA—INDUSTRIAL DISPUTES\* : INDUSTRIAL GROUPS

Year	Mining and Quarrying	Manufacturing	Building and Construction	Transport		Other Groups	All Groups	
				Stevedoring	Other			
NUMBER OF DISPUTES								
1957	..	..	19	7	14	6	1	47
1958	..	..	27	11	16	8	4	66
1959	..	..	31	3	18	7	1	60
1960	..	..	28	20	36	10	4	98
1961	..	..	44	19	23	3	2	91
WORKERS INVOLVED								
1957	..	..	1,967	1,347	5,090	727	50	9,181
1958	..	..	5,836	1,637	38,048	783	414	46,718
1959	..	..	8,090	252	10,788	13,007	104	32,241
1960	..	..	7,584	4,032	41,065	29,241	4,082	86,004
1961	..	..	31,438	8,178	9,532	554	3,045	52,747
WORKING DAYS LOST								
1957	..	..	8,622	1,441	1,212	2,154	15	13,444
1958	..	..	32,858	17,390	44,481	4,585	541	99,855
1959	..	..	25,410	1,169	4,962	4,032	317	35,890
1960	..	..	8,736	13,044	60,819	15,040	5,166	102,805
1961	..	..	34,367	24,044	10,624	376	3,060	72,471
ESTIMATED LOSS IN WAGES								
(£)								
1957	..	..	29,894	4,433	4,246	6,945	58	45,576
1958	..	..	112,468	52,592	155,688	17,960	1,638	340,346
1959	..	..	94,143	5,632	18,137	12,853	675	131,440
1960	..	..	33,227	63,265	243,209	42,425	14,991	397,117
1961	..	..	130,397	118,705	42,506	2,457	10,680	304,745

\* Refers only to disputes involving a stoppage of work of ten man-days or more.

## Labour Organizations

## Registration

(1) *Under Trade Union Acts.*—The Commonwealth Year Book of 1953 (No. 39, p. 448) gives some information on the registration of trade unions under the Trade Union Acts. In general, this section indicates that the available information is inadequate for statistical purposes.

(2) *Under Victorian State Industrial Legislation.*—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.

(3) *Under the (Commonwealth) Conciliation and Arbitration Act.*—Under Part VIII. of the *Conciliation and Arbitration Act 1904–1961*, 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. Under the Public Service Arbitration Act an association of less than 100 employees may be registered as an organization, provided that its members comprise at least three-fifths of all persons engaged in that industry in the Service. Such Public



Service organizations 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 1961, the number of employers' organizations registered under the provisions of the Conciliation and Arbitration Act was 64. The number of unions of employees registered at the end of 1961 was 154, with a membership of 1,529,315 representing 81 per cent. of the total membership of all trade unions in Australia.

#### Particulars Regarding Trade Unions

(1) *Types*.—The trade unions in Australia are very diverse in character, and range from the small independent association to the large interstate organization which, in its turn, may be a branch of an international body. Broadly speaking, there are four distinct classes of labour organizations: (a) the local independent; (b) the State; (c) the interstate; and (d) the Australasian or international. However, a number of variations occur from each of these classes and the schemes of organization of interstate or federated unions vary greatly in character. In some unions, the State organizations are bound together under a system of unification with centralized control, while in others the State units are practically independent and self-governing, the federal bond being loose and existing only for one or two specified purposes.

(2) *Number, Membership, and Proportion of Wage and Salary Earners*.—Returns showing membership by States as at 31st December each year are obtained for all trade unions and employee organizations. The affairs of single organizations 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 current estimates of wage and salary earners in employment do not include employees engaged in rural industry or females in private domestic service, the percentages have been calculated on figures obtained by adding to the end-of-year estimates the number of employees in rural industry and females in private domestic service recorded at the Census of 30th June, 1954. 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		
		Male	Female	Total	Male	Female	Total
1957 .. ..	162	356,223	86,817	443,040	%	%	%
1958 .. ..	161	355,272	88,878	444,150	57	34	50
1959 .. ..	159	369,169	92,145	461,314	58	34	51
1960 .. ..	157	381,147	98,097	479,244	58	35	51
1961 .. ..	156	385,797	100,963	486,760	60	37	53

(3) *Classification in Industrial Groups.*—The following table shows the number of unions and membership classified by industrial groups at the end of each of the years 1960 and 1961 :—

## VICTORIA—TRADE UNIONS : INDUSTRIAL GROUPS

Industrial Group	1960		1961	
	No. of Unions	No. of Members	No. of Unions	No. of Members
Agriculture, Grazing, &c. ..	2	10,066	2	9,962
Manufacturing—				
Engineering, Metal Works, &c. ..	10	74,744	10	76,007
Textiles, Clothing, and Footwear ..	5	50,451	5	47,374
Food, Drink, and Tobacco ..	14	23,022	14	23,059
Sawmilling, Furniture, &c. ..	3	11,202	3	10,455
Paper, Printing, &c. ..	6	17,463	6	17,389
Other Manufacturing ..	15	33,540	15	30,148
Total Manufacturing ..	53	210,422	53	204,432
Building and Construction ..	10	35,001	10	39,015
Railway and Tramway Services ..	5	27,686	5	25,920
Road and Air Transport ..	7	16,731	7	17,710
Shipping and Stevedoring ..	7	7,624	7	7,628
Banking, Insurance, and Clerical ..	10	26,756	10	28,022
Wholesale and Retail Trade ..	3	17,614	3	17,074
Public Administration * ..	37	76,887	37	82,949
Amusement, Hotels, Personal Service, &c. ..	8	15,259	8	15,218
Other Industries† ..	15	35,198	14	38,830
Total .. ..	157	479,244	156	486,760

\* Includes Communication and Municipal, &c.

† Includes Mining and Quarrying and Professional Services.

*Central Labour Organizations*

Delegate organizations consisting of representatives from a group of trade unions have been established in each of the capital cities and in a number of industrial centres elsewhere. 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 central organizations exist, the majority of the local unions are affiliated with the central organization, which is usually known as the Labour or the Trades Hall Council.

The table below shows the number of metropolitan and district or local labour councils, together with the number of unions and branches of unions affiliated with them for Victoria at the end of each of the years 1959 to 1961 :—

## VICTORIA—CENTRAL LABOUR ORGANIZATIONS

Organization	1959	1960	1961
Number of Councils .. ..	9	9	9
Number of Unions and Branch Unions Affiliated .. ..	284	289	278

The figures given in the preceding table concerning the number of unions 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.

A central labour organization, now called the Australian Council of Trade Unions, came into being during 1927. The Council was created to function on behalf of the trade unions of Australia, and was founded at an All-Australian Trade Union Congress held in Melbourne in May, 1927. The A.C.T.U. consists of affiliated unions and affiliated Metropolitan and/or State Labour Councils and Provincial Councils. The Metropolitan or State Labour Council in each State is the State Branch of the A.C.T.U. and has the right to appoint one representative to act on the executive of the Council. In addition to the representatives of the State Branches of the A.C.T.U. six delegates are elected by and from Congress, one from each of the following industry groups of unions :—Building, Food and Distributive Services, Manufacturing, Metal, Services and Transport. To this Executive are added the four officers, namely, President, two Vice-Presidents and Secretary, who are elected by and from the Australian Congress of Trade Unions.

The objectives of the A.C.T.U. are the socialization of industry, i.e., production, distribution, and exchange, and the utilization of the resources of Australia for the benefit of the people—ensuring full employment, with rising standards of living, security, and full cultural opportunities for all. The methods to be adopted are the closer organization of the workers by the transformation of the Australian trade union movement from a craft to an industrial basis, by grouping of unions in their respective industries, and by the amalgamation of unions in order to establish one union in each industry ; the consolidation of the Australian Labour Movement with the object of unified control, administration, and action ; the centralized control of industrial disputes ; educational propaganda among unions ; and political action to secure satisfactory working class legislation.

The A.C.T.U. was the first interstate body in Australia with authority to deal with industrial matters of an interstate character affecting the trade union movement generally. It is also the body responsible for submitting to the Commonwealth Government the names of persons suitable for selection as the Australian workers' delegate to the annual International Labour Conference.

Between the trade union and the central organization of unions may be classed certain State or district councils organized on trade lines and composed of delegates from separate unions whose members' interests are closely connected because of their occupations. Delegate councils of bakers, bread carters, and mill employees, or of unions connected directly or indirectly with the iron, steel, or brass trades, or with the building trades, may be so classed.

## Industrial Safety

### *Introductory*

Industrial accidents first began to occur in large numbers during last century when the revolution in industrial techniques began to make possible large-scale mechanical production with the factory as the production unit. Conditions in some factories were so unsafe and unhealthy that they gave rise to demands for social reform through remedial legislation. This was the course of events in Great Britain and the early Victorian legislation followed the British pattern—Factories Acts prescribing certain minimum physical standards and requirements in factories, and providing for the appointment of Government inspectors to ensure that those requirements were met.

The first Factories Act dealing with industrial safety in Victoria was that of 1885, which provided for the registration of factories and required that they be supplied with adequate ventilation, sanitation, and fire escapes, &c. It also provided that dangerous machinery should be guarded and that Inspectors of Factories and Shops be appointed. Subsequently, a Department of Labour was established and much additional legislation enacted. 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.

### *Safety Regulation and Inspection*

The most important Acts and Regulations touching industrial safety are set out below, with reference to the administrative authority responsible in each case.

(1) *Department of Labour and Industry.* Under the *Labour and Industry Act 1958*, the Minister has a general responsibility for measures relating to industrial safety, health, and welfare. The Act and Regulations require that factory building plans be approved by the Department and that factories be registered; for these purposes standards of accommodation, ventilation, lighting, sanitation, fire escapes, fire services and such like are prescribed. The use of certain dangerous or injurious processes, or the employment of females or children thereon, is prohibited. Dangerous parts of machinery used in factories or in building construction, and of stationary power-driven machinery used on any land, are to be guarded and in some cases specific guards are prescribed. The use or operation of certain types of equipment is restricted. First-aid equipment is to be maintained and lost-time accidents are to be reported to the Department and are subject to investigation. Offenders against the law are liable to be prosecuted. The field work is carried out by the Factories and Shops Inspectorate.

The installation and use of mechanical lifting gear is subject to particular detailed control under the *Lifts and Cranes Act 1958*, and a Lifts and Cranes Inspectorate has been established for the purpose.

(2) *Department of Mines.* The safe working of mines (including quarries and sand pits) and mining machinery is the subject of regulation under the *Mines Act* 1958, and inspection by the Mines and Machinery Inspectorate. The *Boilers Inspection Act* 1958, requires the certification of steam boilers and air and gas receivers, regulates their use, and provides for regular inspection by the Boilers and Pressure Vessels Inspectorate.

(3) *Department of Chief Secretary.* The *Workers Compensation Act* 1958, establishes the Workers Compensation Board and the State Accident Insurance Office (both referred to on pages 450 to 452 and 712–713 of this Year Book). The *Explosives Act* 1958, regulates the manufacture, transport, storage, and sale of explosives and provides for the investigation of explosions. There is an Explosives Inspectorate for this purpose.

(4) *Department of Health.* Under the *Health Act* 1958, the Division of Industrial Hygiene is concerned with the regulation of the use of poisonous and deleterious substances, the control of harmful gases, &c., and generally with the medical and chemical aspects of industrial health.

(5) *Department of Local Government.* Under the *Local Government Act* 1958, the Uniform Building Regulations prescribe standards of building construction, some of which relate to safety, and other regulations prescribe conditions for the storage of inflammable oils. These are administered by municipal councils. The *Local Government (Scaffolding Inspection) Act* 1960, established a Scaffolding Regulations Committee to supervise the inspection of scaffolding by municipal inspectors, specifications for scaffolding and gear being prescribed by regulation under the Act.

(6) *State Electricity Commission.* Under the *State Electricity Commission Act* 1958, there are Electric Wiring Rules regulating electrical installations, which are subject to supervision by S.E.C. inspectors. Also, certain types of equipment are subject to approval by the Electrical Approvals Board.

#### *Safety Promotion and Education* *Governmental Authorities*

Legislative regulation and inspection aim at securing minimum safety conditions in particular fields. Promotional and educational activities aim at inducing all concerned to strive for maximum safety conditions. The Department of Labour and Industry and other governmental authorities have pursued such activities for many years, but in recent years they have been given much more prominence.

Following the report in 1958 of the Board of Inquiry appointed by the Government to inquire into industrial accidents, the Government decided to establish within the Department of Labour and Industry a small unit (the Industrial Safety Bureau) through which the Department's safety promotional, advisory, and educational services could be developed. The Bureau was established in 1960 and now provides a technical reference library, a lecture and film service, a safety training service, and other facilities. This work is done in conjunction with the Factories and Shops Inspectorate.

*The Industrial Safety Advisory Council Act 1960*, provided for the appointment of a representative council to act in a consultative capacity to the Minister. The Council was established at the end of 1960; one result of its work during 1961 was the establishment by the building industry of a safety training programme for that industry.

In 1960 the Education Department established a Technical Schools Safety Advisory Committee and the following year launched an industrial safety programme in all technical schools.

#### *Voluntary Agencies*

For some years the Standards Association of Australia, through its Safety Standards Co-ordinating Committee, has been engaged in the production of standards in the safety field. Standards published in 1960 included those on Woodworking Machinery and Respiratory Protection, and in 1961 that on Industrial Safety Helmets.

The National Safety Council has been active for some years in industrial safety promotional work and during 1960 greatly expanded these activities, following the formation of an advisory committee of industrialists. The Council now provides services such as posters, lectures, training courses, plant surveys, &c.

The Safety Engineering Society was established in Victoria some years ago as an association of professional safety officers, and branches have now been formed in several States.

The Department of Labour and Industry has sponsored the formation of District Safety Groups in major industrial areas of Melbourne. A group has existed in Footscray for some years; during 1960 groups were established in Port Melbourne-South Melbourne, Richmond-Collingwood, and Dandenong districts; during 1961, a group was established in the northern suburbs.

#### *Industrial Safety Conventions*

The first industrial safety convention in Melbourne was held in 1956. The Government then undertook the sponsorship of such conventions as a standing responsibility and further conventions were held in Melbourne in 1958 and in 1960, and in Geelong in 1961. The 1960 convention lasted for 2½ days at the University of Melbourne; 38 sessions were held and 2,528 delegates attended one or more sessions. Also during 1961, the Education Department held a convention for technical school principals, and the Commonwealth Government held a national convention in Canberra.

#### **Industrial Accidents**

In order to obtain, for the first time, official statistics on industrial accidents in Victoria, the Regulations under the Workers Compensation Act were amended in 1957 to require insurers to submit to the Government Statist a report on each claim for workers compensation when the claim closed, or at the expiry of three years if the claim was still unclosed at the end of that time. It was decided to restrict the collection in the initial years to fatal cases, and to those in which the worker was incapacitated for a period of one week or more.

The tables which follow in this section have been confined to accidents involving males and provide a summary of the results of the collection during the years 1957-58 to 1959-60. Similar information in respect of females is available but has not been included in this Year Book because of the small number involved—3,519 non-fatal accidents to females in 1959-60. Because of the method of collection used, the tables are also subject to certain restrictions and qualifications which may be summarized as follows:—

- (a) Although the term "Industrial Accident" is used, the collection actually represents claims for workers compensation, and is subject to the limitations expressed by the Workers Compensation Act, e.g., persons in Commonwealth employment are excluded from the provisions of the Act.
- (b) The Act excludes from the definition of "Worker" any person employed whose remuneration exceeds £2,000 per annum. Although some employers do insure against liability for employees whose income exceeds that amount, it is not mandatory to do so, and consequently some employees in this category will not be included in the tabulations.
- (c) Self-employed persons are also excluded from the provisions of the Act, and consequently industrial accidents occurring to them will not appear in the statistics. This is likely to have greatest effect when considering figures for rural industries.
- (d) The Act provides for compensation for injury arising on the journey to or from employment, or during a recess period. Although reports of such claims have been received, they are excluded from the tables.
- (e) The 1946 Amendment to the Act, which provided compensation for any injury (or disease) arising out of or in the course of employment, removed to a large degree the necessity of proving a causal connexion between the employment and the injury (or disease), and as a result many more disease claims were made compensable. In an effort to provide, as reliably as possible, statistics on "accidents", i.e., those events about which some specific preventive or remedial action may be taken, all disease claims have been excluded from the tables.
- (f) It is realized that the most desirable tabulations would analyze accidents by year of occurrence but this, of course, would mean that figures would be at least three years in arrears. At a later date it is intended to analyze the relationship between the date of occurrence and the date of reporting, so that approximate conversions from one tabulation to the other can be made by research workers.

The following table shows the number of fatal and non-fatal industrial accidents to males in each industry group for each of the years 1957-58 to 1959-60 :—

VICTORIA—NUMBER OF INDUSTRIAL ACCIDENTS TO MALES, BY INDUSTRY GROUP

Industry Group	Number of Accidents					
	1957-58		1958-59		1959-60	
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal
Primary .. .. .	2	1,918	2	1,836	4	1,873
Mining .. .. .	1	432	2	438	1	259
Manufacturing .. .. .	8	15,004	4	14,156	7	13,944
Electricity .. .. .	1	285	..	373	1	406
Building .. .. .	1	3,632	..	4,209	6	4,096
Transport and Communication .. .. .	..	1,717	..	1,757	1	1,701
Commerce .. .. .	3	3,166	2	3,241	3	3,334
Public Authorities .. .. .	1	1,024	1	1,271	..	1,215
Amusements .. .. .	1	672	1	634	..	723
Other .. .. .	3	3,376	3	4,429	4	5,188
Total .. .. .	21	31,226	15	32,344	27	32,739

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 1957-58 to 1959-60 :—

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)		
	1957-58	1958-59	1959-60	1957-58	1958-59	1959-60
Primary .. .. .	8,416	8,136	9,746	168	145	204
Mining .. .. .	3,125	2,070	1,320	66	52	44
Manufacturing .. .. .	63,762	53,567	52,518	1,544	1,706	1,288
Electricity .. .. .	1,098	1,365	1,459	21	23	25
Building .. .. .	14,655	17,461	17,201	331	381	442
Transport and Communication .. .. .	7,349	6,457	6,384	146	118	128
Commerce .. .. .	11,001	11,438	11,684	231	207	250
Public Authorities .. .. .	4,150	5,271	4,826	81	101	96
Amusements .. .. .	4,030	3,075	3,366	63	54	56
Other .. .. .	14,889	16,589	19,631	339	318	436
Total .. .. .	132,475	125,429	128,135	2,990	3,105	2,969



The following table shows the number of non-fatal industrial accidents to males, by accident factor and industry group, for the year 1959-60 :—

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES : INDUSTRY GROUP BY ACCIDENT FACTOR, 1959-60

Industry Group	Accident Factor								Total	
	Machinery	Vehicles	Electricity, &c.*	Harmful Substances	Falls	Stepping on Objects†	Falling Objects‡	Handtools§		Other and Unspecified
Primary .. ..	164	119	38	7	332	71	726	219	197	1,873
Mining .. ..	20	13	3	..	38	4	156	23	2	259
Manufacturing ..	2,369	172	513	105	2,334	691	6,505	989	266	13,944
Electricity ..	14	12	15	4	114	19	170	44	14	406
Building .. ..	296	108	78	15	1,109	228	1,767	413	82	4,096
Transport and Communication ..	80	114	4	1	489	77	849	51	36	1,701
Commerce .. ..	222	123	62	13	684	165	1,391	568	106	3,334
Public Authorities ..	56	79	26	3	299	65	537	107	43	1,215
Amusements .. ..	35	18	42	4	174	37	198	46	169	723
Other .. ..	281	359	129	8	1,473	252	2,109	382	195	5,188
Total .. ..	3,537	1,117	910	160	7,046	1,609	14,408	2,842	1,110	32,739

\* Includes explosions, flames and hot substances.

† Includes striking against objects.

‡ Includes strain in handling, struck by objects.

§ 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 1959-60 :—

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES : INDUSTRY GROUP BY SITE OF INJURY, 1959-60

Industry Group	Site of Injury									Total
	Head	Eye	Neck	Trunk	Arm	Hand	Leg	Foot	Un-specified	
Primary .. ..	71	44	13	403	272	476	417	172	5	1,873
Mining .. ..	12	6	3	70	28	65	44	31	..	259
Manufacturing ..	349	366	78	3,410	1,565	4,887	1,726	1,556	7	13,944
Electricity .. ..	12	7	5	129	63	82	73	35	..	406
Building .. ..	149	78	34	1,078	505	1,056	722	465	9	4,096
Transport and Communication ..	70	20	17	555	230	270	349	185	5	1,701
Commerce .. ..	95	62	16	840	412	1,160	504	241	4	3,334
Public Authorities ..	23	25	12	405	165	285	196	104	..	1,215
Amusements .. ..	44	6	12	166	124	169	153	48	1	723
Other .. ..	221	122	36	1,563	563	970	1,155	554	4	5,188
Total .. ..	1,046	736	226	8,619	3,927	9,420	5,339	3,391	35	32,739

The following table shows the number of non-fatal accidents to males by industry group and type of injury, for the year 1959-60 :—

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES : INDUSTRY GROUP BY TYPE OF INJURY, 1959-60

Industry Group	Type of Injury									
	Contusions, &c.	Burns	Bone Fractures	Dislocations	Sprains and Strains	Amputations	Concussion	Internal Injury	Other and Unspecified	Total
Primary ..	897	49	312	21	531	25	25	7	6	1,873
Mining ..	116	4	55	2	76	3	2	..	1	259
Manufacturing ..	6,569	707	1,938	96	4,232	259	78	22	43	13,944
Electricity ..	157	21	53	5	166	1	2	..	1	406
Building ..	1,872	118	601	36	1,390	49	21	2	7	4,096
Transport and Communication	706	7	242	15	700	7	16	3	5	1,701
Commerce ..	1,652	88	367	42	1,118	26	25	5	11	3,334
Public Authorities	472	30	177	18	490	18	4	3	3	1,215
Amusements ..	254	49	178	11	206	3	12	4	6	723
Other ..	2,126	150	689	62	2,034	42	56	12	17	5,188
Total ..	14,821	1,223	4,612	308	10,943	433	241	58	100	32,739

The table which follows shows the number of non-fatal industrial accidents to males, by accident factor and site of injury, for the year 1959-60 :—

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES : ACCIDENT FACTOR\* BY SITE OF INJURY, 1959-60

Accident Factor	Site of Injury									
	Head	Eye	Neck	Trunk	Arm	Hand	Leg	Foot	Un-specified	Total
Machinery ..	96	160	9	193	294	2,462	159	164	..	3,537
Vehicles ..	137	5	17	217	173	189	253	119	7	1,117
Electricity, &c. ..	90	38	5	33	156	269	116	195	8	910
Harmful Substances	16	42	1	6	21	43	12	19	..	160
Falls ..	228	4	93	1,931	1,170	477	2,723	406	14	7,046
Stepping on Objects	88	13	7	138	309	366	448	239	1	1,609
Falling Objects ..	270	270	73	5,588	1,355	3,754	1,118	1,978	2	14,408
Handtools ..	40	71	4	291	310	1,648	264	214	..	2,842
Other and Un-specified ..	81	133	17	222	139	212	246	57	3	1,110
Total ..	1,046	736	226	8,619	3,927	9,420	5,339	3,391	35	32,739

\* For footnotes see page 448.

The table which follows shows the age groups of males involved in non-fatal industrial accidents, by accident factor, for the year 1959-60 :—

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES : ACCIDENT FACTOR\* BY AGE GROUP, 1959-60

Accident Factor	Age Group (Years)						Total
	Under 20	20-29	30-39	40-49	50-59	60 and over	
Machinery .. .. .	440	1,013	822	667	417	178	3,537
Vehicles .. .. .	102	298	292	206	163	56	1,117
Electricity, &c. .. .. .	90	281	220	185	94	40	910
Harmful Substances .. .. .	10	40	40	43	20	7	160
Falls .. .. .	412	1,540	1,811	1,620	1,148	515	7,046
Stepping on Objects .. .. .	121	392	428	341	227	100	1,609
Falling Objects .. .. .	898	3,404	3,906	3,254	2,184	762	14,408
Handtools .. .. .	339	866	765	482	286	104	2,842
Other and Unspecified .. .. .	139	310	245	201	145	70	1,110
Total .. .. .	2,551	8,144	8,529	6,999	4,684	1,832	32,739

\* For footnotes see page 448.

### Workers Compensation

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*.

Since 1946, compensation has been payable for injuries arising out of or in the course of employment, thus removing from the worker the onus of proof of a causal connection between the employment and the injury.

As the law now stands, all workers whose remuneration does not exceed £2,000 a year, excluding overtime, are included, and such workers are also protected whilst travelling to and from work and

during recess periods. Injuries also include the aggravation or acceleration of diseases which in themselves are unassociated with the employment, in addition to employment diseases. The extent of the benefits is seen from the following summary :—

- (1) Where death results from the injury: if the worker leaves a widow or any children under sixteen years of age or any dependant wholly dependent on his earnings—the sum of £2,240 plus £80 for each such child. If the worker leaves dependants only partially dependent on his earnings, the amount of compensation shall be such sum (not exceeding £2,240) as is awarded by the Workers Compensation Board.
- (2) Where total incapacity for work results from the injury : the compensation for total incapacity of an adult worker is a weekly payment during incapacity of £8 16s. in respect of the worker plus £2 8s. for his wife or relative standing in *loco parentis* to the children if the wife or relative is wholly or mainly dependent on the earnings of the worker, plus 16s. for each dependent child under sixteen years of age.

The total weekly payment in respect of the worker, his wife and children is limited to his average weekly earnings or £12 16s. per week whichever is the lesser and the whole amount payable is limited to £2,800 unless the Workers Compensation Board otherwise determines.

- (3) Costs of medical, hospital, and other services : in addition to compensation payable for death or for incapacity, the employer is liable to pay the reasonable costs of all medical, hospital, and other treatment services necessitated through the injury, to an unlimited amount.

### *Compulsory Insurance*

It is obligatory on 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. The number of approved insurance companies at 30th June, 1961, was 129.

Insurers, and employers for whom a certificate of a Scheme of Compensation is in force, are required to furnish a statistical return to the Government Statist annually, and the following table shows

details of Workers Compensation business transacted during each of the years 1956-57 to 1960-61 :—

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	
1956-57 ..	674,345	10,115	512	164,579	6,502	7,362
1957-58 ..	698,177	12,443	586	174,168	7,374	9,266
1958-59 ..	741,000	13,253	578	184,902	7,765	11,045
1959-60 ..	812,146	13,670	669	186,136	8,540	12,099
1960-61 ..	919,189	14,461	573	193,598	9,030	12,756

The amount paid in claims during 1960-61, viz., £9,030,256, was allocated as follows :—

A. Under Workers Compensation Act—

(a) Compensation—

	£	£
1. Weekly Compensation ..	3,421,220	
2. Lump Sum—Death ..	1,245,614	
3. Lump Sum—Maim ..	1,247,153	
	<u>        </u>	5,913,987

(b) Medical, &c., Services—

1. Doctor .. ..	1,190,307	
2. Hospital .. ..	607,956	
3. Chemist or Registered Nurse ..	75,414	
4. Ambulance .. ..	44,195	
5. Other Curative, &c., Services ..	124,410	
	<u>        </u>	2,042,282

(c) Legal Costs, &c. .. .. 445,951

B. Under Other Acts and at Common Law, Damages, &c. .. ..

628,036

Total ..          9,030,256

Figures for premiums and claims in this table differ somewhat from those shown on pages 708 to 710 of the Finance section of the Year Book. In that section 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.

### Apprenticeship Commission

Under the *Apprenticeship Act 1928*, which was proclaimed on 8th May, 1928, an Apprenticeship Commission was appointed to administer the Act and to supervise apprenticeship in trades proclaimed as apprenticeship trades.

The proclaimed apprenticeship trades and the number of probationers and apprentices employed under the Act on 30th June in each of the years 1957 to 1961 are shown in the following table. These figures are extracted from the Annual Reports of the Apprenticeship Commission of Victoria.

#### VICTORIA—NUMBER OF PROBATIONERS AND APPRENTICES EMPLOYED\*

Trade	1957	1958	1959	1960	1961
<b>BUILDING TRADES</b>					
Plumbing and Gasfitting .. ..	1,745	1,788	1,800	1,785	1,860
Carpentry and Joinery .. ..	2,236	2,323	2,329	2,324	2,153
Painting, Decorating, and Signwriting ..	303	346	380	368	340
Plastering .. ..	58	75	74	60	55
Fibrous Plastering .. ..	235	256	280	285	263
Bricklaying .. ..	125	149	131	122	126
Total Building, &c. ..	4,702	4,937	4,994	4,944	4,797
<b>METAL TRADES</b>					
Engineering .. ..	2,693	2,763	2,808	3,038	3,083
Electrical .. ..	2,163	2,157	2,126	2,125	2,290
Motor Mechanic .. ..	2,433	2,356	2,413	2,477	2,557
Moulding .. ..	105	123	121	105	103
Boilermaking and/or Steel Construction	354	408	436	459	527
Sheet Metal .. ..	202	226	234	245	269
Electroplating .. ..	12	13	12	13	7
Aircraft Mechanic .. ..	93	86	82	71	81
Radio Tradesman .. ..	146	157	208	224	227
Instrument Making .. ..	57	58	61	66	81
Silverware and Silverplating .. ..	12	14	10	4	5
Vehicle Industry .. ..	603	688	820	878	972
Refrigeration Mechanic .. ..	37	46	64	81	100
Total Metal Trades ..	8,910	9,095	9,395	9,786	10,302
<b>FOOD TRADES</b>					
Breadmaking and Baking .. ..	53	45	55	59	54
Pastrycooking .. ..	85	87	85	88	82
Butchering and/or Small Goods Making ..	738	808	881	851	765
Cooking .. ..	27	23	23	34	37
Total Food Trades ..	903	963	1,044	1,032	938
<b>MISCELLANEOUS</b>					
Bootmaking .. ..	413	486	442	374	387
Printing .. ..	1,114	1,185	1,265	1,332	1,436
Hairdressing .. ..	812	865	1,027	1,299	1,430
Dental Mechanic .. ..	28	26	28	26	28
Watchmaking .. ..	31	31	34	26	23
Furniture .. ..	487	502	511	559	513
Total Miscellaneous ..	2,885	3,095	3,307	3,616	3,817
Total .. ..	17,400	18,090	18,740	19,378	19,854

\* At 30th June.

**Factories and Shops***Labour Legislation*

The earliest attempt at regulating the conditions of labour in Victoria was made by the passing of an Act dated 11th 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 horse-power is in use or in which two or more persons are engaged in any manufacturing process. In some circumstances, one or more persons constitutes 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 formerly included in the Factories and Shops Acts has been revised and amended from time to time and the most important of the amendments have been noted in earlier editions of the Victorian Year Book. It has now been consolidated in the *Labour and Industry Act 1958*.

*Closing Hours of Shops*

The trading hours for shops under the Labour and Industry Acts in both metropolitan and country areas are generally between 8 a.m. and 6 p.m., Mondays to Fridays, and 8 a.m. and 1 p.m. on Saturdays. Certain shops are permitted certain extensions to their hours of trading and, in some cases, to operate during certain hours on Sundays. These are booksellers and newsagents; butchers; bread, pastry, and confectionery; cooked meat (other than tinned meat); fish and oyster; flowers; fruit and vegetables; hairdressers and tobacconists; motor oil, motor spirit, and accessories; motor car and motor cycle; and chemists.

However, because some shops' Wages Boards have fixed penalty rates for work done, for example, before 9.5 a.m. and after 5.30 p.m., these times are the effective trading hours for many shops, particularly within the Metropolitan Area.

The first seven classes of shops above, with the exception of butchers' shops, belong to the category known as Fifth Schedule Shops and in these shops the following kinds of foods, &c., may be sold without involving any modification of trading hours: non-intoxicating beverages, butter, eggs, milk, cream, tea, coffee, tobacco, cigarettes, cigarette papers, matches, toilet soap, shaving soap, razor blades, and powders and tablets for relief of pain.

*Wages***Basic Wage***Wage Determinations in Victoria*

In all States, including Victoria, the basic wage is determined in two ways. Firstly, for industries which extend beyond the boundaries of any one State, the basic wage is determined by the Commonwealth Conciliation and Arbitration Commission. Secondly, industrial tribunals, which in Victoria are Wages Boards, are set up for industries

which do not extend beyond the State boundary\*. 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. In general, these Boards have adopted a basic wage in determining the rate of wage to be paid.

#### *Commonwealth Basic Wage Determinations*

(1) *Awards 1907 to 1953.*—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 was 7s. per day or £2 2s. per week for Melbourne, and by virtue of the fact that it had been determined in connexion with H. V. McKay's Sunshine Harvester Works it became popularly known as the "Harvester Wage".

In 1913, the Court took cognizance of the Retail Price Index compiled by the Commonwealth Statistician covering food, groceries, and the rents of all houses ("A" Series), and thereafter the basic wage was adjusted in accordance with variations disclosed by that index.

An amount known as the "Powers three shillings" was added in 1922 to the weekly rate of wage for the purpose of securing to the worker, during a period of rising prices, the full equivalent of the "Harvester" standard. The system of making regular quarterly adjustments of the basic wage was also instituted in that year.

In 1931, in view of the depressed financial conditions prevailing, the Court reduced all wages under its jurisdiction by 10 per cent.

In consequence of continued applications from organizations of employees for the cancellation of the order providing for the 10 per cent. reduction, the Court in its judgment of 5th May, 1933, transferred the basis of fixation and adjustment of wages to a new set of index numbers, the "D" Series. This award was made applicable only to workers who had suffered the full 10 per cent. reduction.

The judgment of the Arbitration Court relative to the Basic Wage Inquiry of 1934 ordered a vital change in the method of calculating the basic wage. The "D" Series was superseded by the "C" Series as the measure for assessment and adjustment of the basic wage. The 10 per cent. reduction of wages—mentioned above—was removed.

As a result of the Basic Wage Inquiry of 1937, the Arbitration Court prepared and issued its own series of retail price index numbers based on and directly related to the Commonwealth Statistician's "C" Series Index. The new series was known as the "Court" Index. Provision was also made for the addition of a "fixed loading" known as a "Prosperity" loading of 6s. for Melbourne and 5s. for the six capitals' basic wage.

Applications by organizations of employees for an increase in the basic wage prescribed by awards of the Arbitration Court were considered at the Basic Wage Inquiry of 1940–41. The Court was

---

\* For further information on industrial arbitration see "Industrial Conditions" page 431.



of the opinion that the application should not be dismissed but should stand over for further consideration because of the uncertainty of the economic outlook during war-time. The hearing was not resumed until 1946.

Pending the hearing and final determination of the claims which had already been lodged or which might in the near future be lodged, the Court delivered judgment on its "Interim Inquiry" on 13th December, 1946. An increase of 7s. a week was granted in the "needs" portion of the basic wage then current, the rate for the six capital cities as a whole being increased from 93s. to 100s. a week. For automatic quarterly adjustments a new "Court" index was adopted.

The Arbitration Court, as a result of the Basic Wage Inquiry of 1949-50, decided to increase the basic wage by 20s. per week. At the same time the "prosperity" loading was incorporated in the new wage at a uniform amount of 5s. throughout Australia. As a result, the basic wage payable in Melbourne was increased by 19s. per week as from the first full pay period after 1st December, 1950. The female basic wage was increased to 75 per cent. of the male rate.

Following the hearing of the Basic Wage and Standard Hours Case, the Arbitration Court decided, on 12th September, 1953, to discontinue the automatic adjustment to the basic wage. The last quarterly wage adjustment made was based on the Court Series Index Numbers for June quarter, 1953, and became payable as from the first full pay period in August, 1953.

(2) *Awards 1956 to 1959.*—In the Basic Wage Inquiry of 1956, the Court's judgment on 26th May, 1956, increased the adult male basic wage by 10s. (females 7s. 6d.) a week, payable from the beginning of the first pay period in June. In this judgment the Court took the view that "so long as the assessment of the basic wage is made as the highest which the capacity of the economy can sustain, the automatic adjustment of that basic wage upon price index numbers cannot be justified, since movements in the index have no relation to the movements in the capacity of the economy"\*. The Court also considered the period over which the capacity of the economy should be assessed, and concluded: "that a yearly assessment of the capacity of Australia for the purpose of fixing a basic wage would be most appropriate"†.

The Commonwealth Conciliation and Arbitration Commission's judgment, delivered on 29th April, 1957, granted a uniform increase of 10s. a week in the basic wage for adult males (7s. 6d. females) to come into effect from the first pay period to commence on or after 15th May, 1957.

On the 12th May, 1958, the Commission delivered judgment on the 1958 Basic Wage Inquiry increasing the basic wage for adult males by 5s. as from the first pay period starting on or after 21st May, 1958.

---

\* Commonwealth Arbitration Reports, Vol. 84, page 175.

† 84 C.A.R., page 177.

The Commission's judgment on the 1959 inquiry, delivered on 5th June, 1959, refused to reduce the basic wage in the Pastoral Award, refused to restore automatic quarterly adjustments, and increased the basic wage of adult males by 15s. per week (females 75 per cent.) as from the first pay period starting on or after 11th June, 1959.

(3) *Basic Wage Inquiry*, 1960.—The Commonwealth Conciliation and Arbitration Commission considered an application by the Amalgamated Engineering Union (Australian Section) and others seeking the restoration of the automatic quarterly adjustments and an increase in the amount of the basic wage. The application was in both respects refused by the Commission.

Dealing with the application for restoration of quarterly adjustments, the Commission determined that, bearing in mind the interest of employees, employers, and the public generally, it would be preferable to fix a just and reasonable basic wage knowing that it would be effective for the ensuing year and then be reviewed, rather than fix a basic wage for an undefined period and adjust the money amounts of the wage automatically in accordance with movements in a price index.

The Commission decided that the basic wage should not be increased bearing in mind the substantial increases in both basic and secondary wages received by employees under Federal awards during the previous twelve months.

Particulars of the judgments from 1956 to 1960 are reported in more detail in the Victorian Year Book 1962, pages 440 to 443.

(4) *Basic Wage Inquiry*, 1961.—In the 1961 inquiry the Commonwealth Conciliation and Arbitration Commission considered two applications. First, the Amalgamated Engineering Union and Others applied for an increase of 52s. in the basic wage and re-introduction of automatic quarterly adjustments based on the "C" Series Index. Second, the Metal Trades Employers Association sought to increase the ordinary working hours per week from 40 to 42 with a concomitant increase in weekly wages and to effect other consequential variations.

The Commission issued its judgment on the 4th July, 1961, announcing an increase of 12s. in the basic wage for adult male employees covered by Federal Awards. The applications for an increase in standard hours of work and the restoration of automatic quarterly adjustments were both refused. The Commission then adjourned any further hearing on the basic wage until February, 1962, limiting the issue to why the money wages fixed by the result of the decision should not be adjusted in accordance with any change in the Consumer Price Index.

In dealing with the question of automatic adjustments, the Commission indicated that although the Consumer Price Index would enable the fixing of a standard which is more likely to be properly maintainable than recent past standards, the application of this index should always be subject to Commission control. The Commission

will assume each year that the effect of movements in the Consumer Price Index should be reflected in the basic wage unless persuaded to the contrary by those seeking to oppose the change.

The basic wage as now fixed is considered to have taken into account productivity increases up to June, 1960. The increase of 12s. granted reflects price increases during the past year.

The Commission considers a review of the economy generally and, in particular, of productivity increases could more properly take place at longer periods of time, say, every three or four years.

(5) *Basic Wage Inquiry, 1962.*—In Melbourne on the 20th February, 1962, the Commission, after hearing brief submissions from interested parties, announced there would be no alteration in the amounts of the existing basic wages until further order of the Commission. It also adjourned until February, 1963, its consideration whether the basic wage should be adjusted in accordance with changes in the Consumer Price Index.

A table of basic weekly rates of wage is shown below:—

MELBOURNE—BASIC WEEKLY WAGE RATES FIXED BY  
COMMONWEALTH CONCILIATION AND ARBITRATION  
COMMISSION\*

(Adult Males)

Payable from—	Amount	Payable from—	Amount	Payable from—	Amount
	<i>s. d.</i>		<i>s. d.</i>		<i>s. d.</i>
1907 .. ..	42 0	1925—		1931—	
1911 .. ..	45 6	February ..	84 0	February ..	70 2 <sup>†</sup>
1914 .. ..	50 6	May .. ..	85 6	May .. ..	68 5
1915 .. ..	53 0	August ..	87 0	August ..	65 8
1916 .. ..	61 6	November ..	87 6	November ..	63 5
1917 .. ..	63 0	1926—		1932—	
1918 .. ..	62 0	February ..	87 6	February ..	63 5
1919 .. ..	65 0	May .. ..	88 6	May .. ..	63 11
1920 .. ..	71 0	August ..	92 0	August ..	63 0
1921 .. ..	86 0	November ..	89 0	November ..	61 8
1922—		1927—		1933—	
February ..	80 6	February ..	88 6	February ..	60 4
May .. ..	78 0	May .. ..	87 6	May .. ..	63 4 <sup>‡</sup>
August ..	81 0	August ..	87 0	August ..	62 5
November ..	82 6	November ..	90 0	November ..	62 10
1923—		1928—		1934—	
February ..	82 0	February ..	89 6	February ..	63 4
May .. ..	81 6	May .. ..	88 0	May .. ..	64 0 <sup>§</sup>
August ..	87 6	August ..	87 6	June .. ..	64 0
November ..	91 6	November ..	86 0	September ..	64 0
1924—		1929—		December ..	64 0
February ..	87 6	February ..	86 0	1935—	
May .. ..	85 6	May .. ..	89 6	March .. ..	66 0
August ..	85 0	August ..	90 0	June .. ..	66 0
November ..	84 6	November ..	90 0	September ..	66 0
		1930—		December ..	66 0
		February ..	90 0	1936—	
		May .. ..	86 0	March .. ..	66 0
		August ..	85 6	June .. ..	66 0
		November ..	83 0	September ..	66 0
				December ..	69 0

For footnotes see following page

MELBOURNE—BASIC WEEKLY WAGE RATES FIXED BY COMMONWEALTH  
CONCILIATION AND ARBITRATION COMMISSION\*—*continued*  
(Adult Males)

Payable from—	Amount	Payable from—	Amount	Payable from—	Amount
	<i>s. d.</i>		<i>s. d.</i>		<i>s. d.</i>
<b>1937—</b>		<b>1944—</b>		<b>1950—</b>	
March ..	69 0	February ..	97 0	February ..	134 0
June ..	69 0	May ..	97 0	May ..	137 0
July ..	72 0	August ..	98 0	August ..	140 0
September ..	73 0	November ..	58 0	November ..	143 0
October ..	76 0			December ..	162 0**
December ..	77 0				
<b>1938—</b>		<b>1945—</b>		<b>1951—</b>	
March ..	77 0	February ..	98 0	February ..	170 0
June ..	77 0	May ..	98 0	May ..	177 0
September ..	78 0	August ..	58 0	August ..	189 0
December ..	79 0	November ..	98 0	November ..	199 0
<b>1939—</b>		<b>1946—</b>		<b>1952—</b>	
March ..	79 0	February ..	98 0	February ..	209 0
June ..	81 0	May ..	98 0	May ..	212 0
September ..	81 0	August ..	99 0	August ..	224 0
December ..	80 0	November ..	99 0	November ..	228 0
<b>1940—</b>		December ..	106 0¶	<b>1953—</b>	
February ..	81 0			February ..	229 0
May ..	82 0	<b>1947—</b>		May ..	232 0
August ..	84 0	February ..	107 0	August ..	235 0
November ..	84 0	May ..	107 0		
<b>1941—</b>		August ..	108 0	<b>1956—</b>	
February ..	86 0	November ..	109 0	June ..	245 0
May ..	87 0				
August ..	87 0	<b>1948—</b>		<b>1957—</b>	
November ..	88 0	February ..	113 0	May ..	255 0
<b>1942—</b>		May ..	115 0		
February ..	89 0	August ..	117 0	<b>1958—</b>	
May ..	92 0	November ..	120 0	May ..	260 0
August ..	94 0				
November ..	97 0	<b>1949—</b>		<b>1959—</b>	
<b>1943—</b>		February ..	123 0	June ..	275 0
February ..	98 0	May ..	125 0		
May ..	98 0	August ..	128 0	<b>1961—</b>	
August ..	99 0	November ..	130 0	July ..	287 0††
November ..	98 0				

\* Prior to 30th June, 1956, the Commonwealth Court of Conciliation and Arbitration; † 10 per cent. "cut" operated; ‡ "D" series introduced; § "C" series introduced and 10 per cent. "cut" ceased to operate; || "Prosperity" loading (3s.) added; ¶ Interim basic wage adjustment of 13th December, 1946; \*\* Court decision (12th October, 1950); †† The 1962 Basic Wage Inquiry resulted in no change.

NOTE.—The system of making regular quarterly adjustments was instituted in 1922 and was discontinued after the August, 1953, adjustment. From this date the principal variations occurred between the wages determined by State Wages Boards and those determined by the Conciliation and Arbitration Commission. Previously the Wages Boards had followed the Federal awards to a large extent. The State Wages Board awards concerned were:—1953, Nov.—Dec. 237s.; 1954, Feb. 238s., May 237s., Aug. 236s., Nov. 234s.; 1955, Feb. 235s., May 237s., Aug. 240s., Nov. 246s.; 1956, Feb. 251s., May 256s., Aug. 263s. Automatic quarterly adjustments to Wages Board awards were stopped by amendment to the Factories and Shops Act proclaimed 17th October, 1956. The Commonwealth awards of June, 1959, and July, 1961 were followed by the State Wages Boards.

### 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 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 and followed that Court's system of adjusting the basic wage in accordance with variations in retail price index numbers.

(2) *Basic Wage outside Metropolitan Area.*—Prior to 1934, the basic wage for Victoria differed only slightly from that for Melbourne. In its judgment in that year, the Court made special reference to the basic wage payable in industries outside the Metropolitan Area, and it ruled that, except in certain specified districts where the cost of living appeared to be correctly indicated by the local "All Items" Index Numbers, or where known circumstances indicated that the general rule should not apply, the basic wage for provincial places should be a constant three shillings per week less than that for the metropolitan district in the same State. However, from the 1st January, 1961, this "3s. country differential" was eliminated from Commonwealth awards.

(3) *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 repeated by the *Labour and Industry Act 1953* which replaced the *Factories and Shops Act 1928–1953*. Then an amendment to this new Act, proclaimed on 17th 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.\*

### Wage Margins

#### 1954 Judgment†

General principles of marginal rate fixation had previously been enunciated by the Court in the Engineers' Case of 1924, the Merchant Service Guild Case of 1942, and the Printing Trades Case of 1947, and the Court adopted these in so far as they were applicable to current circumstances.

"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 particular laborious nature, or the disabilities attached to its performance."

\* For details of quarterly adjustments made in Victoria during this period refer to "Note" at foot of Basic Wage table, page 459.

† Extracts from the judgment were set out in some detail in Labour Report No. 46, pages 101 to 108.

In a judgment delivered on 5th November, 1954, the Court made an order re-assessing the marginal structure in the Metal Trades Award by raising the current amount of margin to two and a half times the amount of the margin that had been current in 1937. However, in cases in which the result of that calculation produced an amount less than the existing margin, the existing margin was to remain unaltered. In effect, this decision increased the margin of a fitter from 52s. a week to 75s. a week, increased similarly margins of other skilled occupations, and made no increase in margins of what may generally be described as the unskilled or only slightly skilled occupations under the Metal Trades Award.

#### *1959 Judgment\**

On the 27th November, 1959, the Commonwealth Conciliation and Arbitration Commission delivered a unanimous judgment in the case presented by the Australian Council of Trade Unions for increased margins in the Metal Trades Award. The Commission awarded increases of 28 per cent. on the current margins to apply from the beginning of the first full pay period in December, 1959.

#### *Professional Engineers' Cases*

After a hearing lasting two and a half years, the Commonwealth Conciliation and Arbitration Commission issued its judgment in the Professional Engineers Case (No. 1) on the 15th June, 1961. In its Determination 19 of 1961 the Commission prescribed a national minimum salary for Professional Engineers of £2,200 per annum to be received by graduates after four years' and diplomates after five years' experience.

Subsequently the Conciliation and Arbitration Commission heard claims by the Professional Officers Association (Commonwealth Public Service), the Association of Professional Engineers, the Association of Architects, Engineers, Surveyors and Draughtsmen of Australia, the Public Service Board and Others. On 15th June, 1962, the Commission delivered its judgment in the Professional Engineers Case No. 2.

The judgment recorded findings on the nature of the duties of Professional Engineers as defined by Classes 1 to 5 in the salary determinations of the Commonwealth Public Service Board and by Grades A to C of the salary scales of the Snowy Mountains Authority. On the basis of these definitions the Commission decided "that the salary scales fixed in the course of their engineering reorganization by

---

\* See judgment, dated 27th November, 1959, by Commonwealth Conciliation and Arbitration Commission.

the Public Service Board for Classes 2 to 5 in the Commonwealth Public Service, and by the Snowy Mountains Authority for its Grades B and C are lower than they should be”.

The Commission prescribed scales of annual standard salaries ranging from £1,400 in Class 1, 1st year, which remained as prescribed in Determination 19 of 1961, to £3,858 in the highest category of Class 5. The increases granted ranged from £85 per annum at the lowest scale of Class 2 to £720 per annum at the highest scale of Class 5. The Snowy Mountains Authority salary grades were correspondingly increased.

### **Further References**

Particulars of the judgments on Wage Margins are presented in greater detail on pages 446 to 449 of the Victorian Year Book 1962.

### **Rates of Wage**

#### *General*

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 = 100·0, 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 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, &c., the rates in the more important centres are taken.

The new index numbers are based on the occupation structure of 1954 and cover sixteen 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, &c., 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 31st March, 1939, for adult males and 31st March, 1951, for adult females. Using the industry and occupation weights determined by the sample surveys, the various wage rates were combined to give weighted averages for each industrial group for Australia, and weighted averages for industrial groups for each State. These weighted averages are shown in the following tables, in shillings and pence, and as index numbers. The indexes are designed to measure movements in prescribed minimum rates of "wages" as distinct from "salaries". Consequently, awards, &c., relating solely or mainly to salary earners are excluded.

#### MINIMUM WEEKLY WAGE RATES : ADULT MALES\*

Date	Rates of Wage†		Index Numbers (Australia 1954=100‡)			
	Victoria	Australia	Victoria	Australia		
	<i>s.</i>	<i>d.</i>				
31st December, 1952 .. ..	270	8	273	2	95·8	96·7
31st December, 1953 .. ..	278	7	280	2	98·6	99·2
31st December, 1954 .. ..	284	10	286	10	100·9	101·6
31st December, 1955 .. ..	295	7	297	0	104·7	105·2
31st December, 1956 .. ..	309	7	313	0	109·6	110·8
31st December, 1957 .. ..	316	0	317	5	111·9	112·4
31st December, 1958 .. ..	319	8	322	11	113·2	114·3
31st December, 1959 .. ..	344	2	344	8	121·9	122·0
31st December, 1960 .. ..	349	11	355	0	123·9	125·7
31st March, 1961 .. ..	350	2	356	8	124·0	126·3
30th June, 1961 .. ..	350	6	357	11	124·1	126·7
30th September, 1961 .. ..	362	2	365	11	128·2	129·6
31st December, 1961 .. ..	362	1	365	8	128·2	129·5

\* Weighted average minimum weekly wage rates, all groups, shown as rates of wage and in index numbers—excludes rural.

† The amounts shown should not be regarded as actual current averages, but as indexes expressed in money terms, indicative of trends.

‡ Base—weighted average weekly wage rate for Australia, 1954=100.



MINIMUM WEEKLY WAGE RATES\* : INDUSTRIAL GROUPS :  
ADULT MALES, 31ST DECEMBER, 1961

Industrial Group	Rates of Wage†		Index Numbers (Australia 1954=100‡)	
	Victoria	Australia	Victoria	Australia
	<i>s. d.</i>	<i>s. d.</i>		
Mining and Quarrying § ..	362 2	424 0	128·2	150·1
Engineering, Metal Works, &c. ..	359 2	361 6	127·2	128·0
Textiles, Clothing, and Footwear..	350 9	352 0	124·2	124·6
Food, Drink, and Tobacco ..	372 8	363 0	132·0	128·5
Sawmilling, Furniture, &c. ..	351 1	356 5	124·3	126·2
Paper, Printing, &c. ..	396 8	390 3	140·5	138·2
Other Manufacturing ..	355 9	358 9	126·0	127·0
All Manufacturing Groups ..	360 11	361 9	127·8	128·1
Building and Construction ..	368 8	366 3	130·5	129·7
Railway Services ..	338 1	357 8	119·7	126·6
Road and Air Transport ..	358 5	363 4	126·9	128·6
Shipping and Stevedoring    ..	357 2	356 3	126·5	126·1
Communication ..	395 10	397 1	140·2	140·6
Wholesale and Retail Trade ..	368 5	367 4	130·5	130·1
Public Administration and Professional ..	354 6	357 10	125·5	126·7
Amusement, Hotels, Personal Service, &c. ..	339 10	348 2	120·3	123·3
All Industrial Groups ..	362 1	365 8	128·2	129·5

\* Weighted average minimum weekly wage rates shown as rates of wage and in index numbers—excludes rural.

† The amounts shown should not be regarded as actual current averages, but as indexes expressed in money terms, indicative of trends.

‡ Base—weighted average weekly wage rate for Australia, 1954=100.

§ For mining, the average rates of wage on which index numbers are based are those prevailing at the principal mining centres in each State.

|| 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.

MINIMUM WEEKLY WAGE RATES : ADULT FEMALES\*

Date	Rates of Wage†		Index Numbers (Australia 1954=100‡)	
	Victoria	Australia	Victoria	Australia
	<i>s. d.</i>	<i>s. d.</i>		
31st December, 1952 .. ..	195 9	193 7	98·3	97·2
31st December, 1953 .. ..	201 4	198 9	101·1	99·8
31st December, 1954 .. ..	200 9	199 2	100·8	100·0
31st December, 1955 .. ..	210 5	206 11	105·7	103·9
31st December, 1956 .. ..	220 3	217 3	110·6	109·1
31st December, 1957 .. ..	225 0	221 3	113·0	111·1
31st December, 1958 .. ..	227 6	225 8	114·3	113·4
31st December, 1959 .. ..	241 3	242 2	121·2	121·6
31st December, 1960 .. ..	246 7	251 8	123·9	126·4
31st March, 1961 .. ..	246 8	252 7	123·9	126·9
30th June, 1961 .. ..	246 8	254 5	123·9	127·8
30th September, 1961 .. ..	255 10	261 0	128·5	131·1
31st December, 1961 .. ..	256 7	261 2	128·9	131·2

\* † ‡ See footnotes to table on page 463.

MINIMUM WEEKLY WAGE RATES\* : INDUSTRIAL GROUPS :  
ADULT FEMALES, 31ST DECEMBER, 1961

Industrial Group	Rates of Wage†		Index Numbers (Australia 1954=100‡)	
	Victoria	Australia	Victoria	Australia
	<i>s. d.</i>	<i>s. d.</i>		
Engineering, Metal Works, &c. ..	254 11	258 5	128·0	129·8
Textiles, Clothing, and Footwear..	248 1	249 6	124·6	125·3
Food, Drink, and Tobacco ..	250 6	256 0	125·8	128·6
Other Manufacturing ..	253 3	257 3	127·2	129·2
All Manufacturing Groups ..	250 4	253 8	125·7	127·4
Transport and Communication ..	265 7	269 10	133·4	135·5
Wholesale and Retail Trade ..	270 10	273 10	136·0	137·5
Public Administration and Professional .. ..	265 2	266 6	133·2	133·9
Amusement, Hotels, Personal Service, &c. .. ..	247 9	254 7	124·4	127·9
All Industrial Groups ..	256 7	261 2	128·9	131·2

\* † ‡ See footnotes to table on page 464.

**Average Weekly Wage Earnings**

*Average Weekly Total Wages Paid and Average Earnings : All Industries*

The following figures are derived from employment and wages recorded on pay-roll tax returns and from other direct collections. Pay of members of the armed forces is not included. Corresponding figures for each quarter are published in the Monthly Review of Business Statistics and the Monthly Bulletin of Employment Statistics in which a seasonally adjusted index will also be found. Quarterly figures of average weekly earnings are also published in the Victorian Monthly Statistical Review.

**AVERAGE WEEKLY TOTAL WAGES PAID AND AVERAGE EARNINGS\***

Period	Average Weekly Total Wages Paid		Average Weekly Earnings per Employed Male Unit †	
	Victoria	Australia	Victoria	Australia
	£'000		£	
1949-50 .. ..	6,600	22,737	10·08	9·66
1950-51 .. ..	8,223	28,540	12·05	11·55
1951-52 .. ..	10,171	35,697	14·48	14·13
1952-53 .. ..	10,816	38,154	15·71	15·45
1953-54 .. ..	11,767	41,148	16·64	16·26
1954-55 .. ..	12,901	44,739	17·59	17·13
1955-56 .. ..	14,144	48,896	18·78	18·28
1956-57 .. ..	14,925	51,644	19·70	19·16
1957-58 .. ..	15,510	53,349	20·22	19·67
1958-59 .. ..	16,240	55,519	20·69	20·19
1959-60 .. ..	18,123	61,268	22·28	21·76
1960-61 .. ..	19,204	65,362	23·32	22·86

\* Includes salaries.

† Total wages divided by total civil employment expressed in male units. Male units represent total male employment plus a proportion of female employment based on the approximate ratio of female to male earnings. The same ratio has been used in each State and because the average ratio of female to male earnings may vary between States precise comparisons between average earnings in different States cannot be made on the basis of the figures above.

**Incidence of Industrial Awards, &c.**

The table below indicates the approximate proportions of Victorian employees covered by awards, determinations, and registered agreements under Commonwealth and State jurisdictions. The proportions not so covered (including those working under unregistered industrial agreements) are also shown. The figures summarize part of the data obtained from a survey of the Australian wage structure in April, 1954.

The estimates shown in the table relate to Victoria and were derived from returns collected from :—

- (i) A stratified random sample of those private employers and local government authorities who paid pay-roll tax, and
- (ii) practically all Commonwealth and State Governmental bodies.

Because of coverage difficulties, employees on rural holdings and in private households were excluded altogether from the survey.

The term "Awards, &c.," means awards, determinations, and registered agreements under the jurisdiction of the Conciliation and Arbitration Court\*, Wages Boards, Conciliation Commissioners, and similar statutory authorities.

**VICTORIA—INCIDENCE OF AWARDS, ETC. : APRIL, 1954**

Males				Females			
Number Covered by Estimates	Not Covered by Awards, &c.	Covered by Commonwealth Awards, &c.	Covered by State Awards, &c.	Number Covered by Estimates	Not Covered by Awards, &c.	Covered by Commonwealth Awards, &c.	Covered by State Awards, &c.
'000	%	%	%	'000	%	%	%
509·3	13·2	59·4	27·4	194·0	7·1	47·7	45·2

\* Now Commonwealth Conciliation and Arbitration Commission.

*Employment and Unemployment***Control of Employment***State Department of Labour and Industry*

The State Department of Labour and Industry deals generally with Wages Boards, the Apprenticeship Commission, registration and inspection of factories and shops, and licensing of servants' registry offices and tobacco sellers. The Labour and Industry Act which was passed in 1953 revised and consolidated the Factories and Shops Acts and provided for the administration by the Department of certain additional Acts (concerning boiler inspection and Sunday trading). It also extended the activity of the Department in several new directions—especially in providing for the Department to encourage "the establishment, development and expansion of industries

throughout Victoria” and the “prevention and mitigation of unemployment”. The new Act includes a description of the general powers and duties of the Minister which do not appear in the previous legislation. These comprise control of the following :—

- (1) Conditions of employment generally, including wages, hours of work, rest periods, and holidays ;
- (2) establishment of employment offices and the prevention and mitigation of unemployment ;
- (3) the employment of women, children, and young persons, including vocational guidance and training and apprenticeship ;
- (4) industrial safety, health, and welfare including the control of dangerous methods and materials, the guarding of machinery, the prevention of accidents, the control and regulation of the industrial aspects of noxious trades, industrial lighting and ventilation, and the provision of amenities;
- (5) industrial relations, including the prevention and settlement of industrial disputes ;
- (6) training of persons for industrial services ;
- (7) initiation and direction of research and the collection, preparation, publication, and dissemination of information and statistics relating to any of the matters referred to in this section ; and
- (8) encouragement of the establishment, development, and expansion of industries throughout Victoria.

#### *Commonwealth Department of Labour and National Service*

At the federal level, the Commonwealth Department of Labour and National Service is responsible for the supervision and regulation of industrial relations, the regulation and control of stevedoring operations through the Australian Stevedoring Industry Board, the administration of the re-instatement and apprenticeship provisions of the *Re-establishment and Employment Act* 1945–59, and the control of Commonwealth industrial training schemes.

#### *Commonwealth Employment Service*

The Commonwealth Employment Service was established under section 47 of the *Re-establishment and Employment Act* 1945. The principal functions of the Service are to help people seeking employment or a change of employment, to engage labour and to assist in obtaining a high and stable level of employment in the Commonwealth.

The Commonwealth Employment Service is a decentralized service operating within the Employment Division of the Department of Labour and National Service. The Employment Division and other elements are under the control of a Departmental Regional Director responsible to the Permanent Head of the Department. In the State of Victoria, the Regional Office Headquarters are located in Melbourne and there are eighteen District Employment Offices in the Metropolitan Area and fourteen in various country centres. In addition, there are also four part-time officers and a number of agents in country towns who work in conjunction with the District Employment Officer responsible for the area in which the part-time offices and agencies are located.

In assisting persons to obtain employment and to engage labour, the Commonwealth Employment Service provides specialist facilities for those with physical and mental handicaps, older workers, rural workers, young people and, through its Higher Appointments Office, for persons with professional and technical qualifications.

It assists in the administration of the unemployment and sickness benefits provisions of the *Social Services Act* 1947–1960 and of the re-employment allowance provisions of the *Re-establishment and Employment Act* 1945–59 for certain classes of discharged members of the Forces. All persons who wish to claim unemployment benefits or re-employment allowances are required to register at a District Employment Office, which is responsible for certifying whether or not suitable employment can be offered to them.

In this State and, in fact, all States, with the exception of New South Wales, vocational guidance is provided free of charge by a staff of qualified psychologists. Whilst vocational guidance is available to all, it is provided particularly for young people and the physically handicapped.

The Service 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 Service arranges for them to move to their initial employment and for their admission, if necessary, to Commonwealth-controlled hostels.

Since 1951, the Service has been responsible for recruiting experts for the Colombo Plan and the United Nations Expanded Programme of Technical Assistance. The principal spheres in which experts have been supplied are agriculture, education, engineering, geology, health, and economic and scientific research and development. The Service also arranges training in industry for Colombo Plan and United Nations people who come to Australia for such training.

In association with its placement activities, the Service 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 Commonwealth Employment Service.

Particulars of the major activities of the Service during the five years ended 30th June, 1962, are given in the following table :—

#### VICTORIA—COMMONWEALTH EMPLOYMENT SERVICE

Activity, &c.	1957-58	1958-59	1959-60	1960-61	1961-62
Applications for Employment* ..	157,412	167,993	174,102	219,027	232,770
Number Placed in Employment ..	65,568	73,083	84,277	89,099	82,552
Number of Vacancies Notified ..	94,949	108,016	130 671	131,310	124,478
Vacancies at 30th June .. ..	5,530	7,081	11,590	3,841	5,951

\* Includes unemployed persons and persons already in employment who are seeking improved positions.

### Employment Statistics

#### Total Occupied Persons

(1) *Australia*.—The total number of occupied persons in Australia is obtained from the results of each population census, supplemented by data concerning Australian defence personnel serving outside Australia, who, in accordance with usual census procedure, are not recorded in the census. The figures shown on page 470 are derived from the 1933, 1947, and 1954 Censuses. The information from the 1961 Census was not available at the time of printing.

(2) *Victoria*.—The figures in the next table are divided into three categories :—(a) defence forces ; (b) all persons fully occupied as employers, or as self-employed in businesses or on farms ; and (c) wage and salary earners employed, or occupied as casual part-time, intermittent, or seasonal workers. “ Unemployed ” persons are excluded (see page 474).

All unpaid “ helpers ” in non-rural industry have been included with wage and salary earners. Male unpaid “ helpers ” in rural industry have been included with employers and self-employed persons, as the majority of these are considered to be sons or other close relatives of farmers working in *de facto* partnership, or as learners with the farm owner. Unpaid female “ helpers ” on farms are fairly numerous. Generally, they are occupied mainly in home duties, and, with all other women occupied in unpaid home duties, have been excluded from the category of occupied persons.

## VICTORIA—TOTAL OCCUPIED PERSONS

('000)

At 30th June—	Defence Forces*	Employers and Self-employed			Wage and Salary Earners			Total Occu- pied Civilians	Total Occu- pied Persons (In- cluding Defence Forces) †	
		Rural Industry	Other In- dustries	Total	Rural Industry	Other In- dustries	Total			
MALES										
1933	..	2.2	78.6	71.0	149.6	44.4	288.1	332.5	482.1	484.3
1947	..	15.9	77.5	80.6	158.1	28.3	462.2	490.5	648.6	664.5
1954	..	†15.0	75.6	91.5	167.1	27.2	569.7	596.9	764.0	779.0
FEMALES										
1933	..	..	5.2	18.6	23.8	0.8	148.1	148.9	172.7	172.7
1947	..	0.4	4.3	18.2	22.5	1.9	‡200.1	202.0	224.5	224.9
1954	..	0.8	5.6	19.7	25.3	1.4	225.6	227.0	252.3	253.1
PERSONS										
1933	..	2.2	83.8	89.6	173.4	45.2	436.2	481.4	654.8	657.0
1947	..	16.3	81.8	98.8	180.6	30.2	662.3	692.5	873.1	889.4
1954	..	15.8	81.2	111.2	192.4	28.6	795.3	823.9	1,016.3	1,032.1

\* Includes those serving outside Australia.

† Excludes approximately 3,000 males undergoing full-time National Service training at the time of the Census. With the exception of full-time students, these persons have been included in the figures of occupied civilians.

‡ Includes females in private domestic service—30,200 in 1933, 10,900 in 1947, and 7,900 in 1954.

§ Includes an estimate of 12,200 part-time workers not classified as wage earners at the Census.

NOTE.—Information from 1961 Census was not available at time of printing.

During the fourteen years from 1933 to 1947, the number of persons actually occupied at work in Victoria increased by 232,400, or by an average of 16,600 persons per annum, and during the seven years from 1947 to 1954, the increase amounted to 142,700 or 20,400 per annum. Practically all of the increase in the number of occupied persons during the years 1947 to 1954 was due to the growth of the total available work force. During the previous intercensal period (1933 to 1947) the increase in the number of persons occupied comprised approximately 100,000 who had been unemployed in 1933 and an increase of approximately 130,000 in the total available work force.

The total numbers of employers, self-employed, and wage and salary earners of both sexes classified at the Census as engaged in agricultural, pastoral, and dairying industries (excluding female "helpers"—see above) declined from 129,000 in 1933 to 112,000 in 1947 with a further slight decline to 109,800 in 1954.

The number of male employers and self-employed in industries other than rural declined from 19.8 per cent. of occupied civilian males in these industries in 1933 to 14.8 per cent. in 1947, and to 13.8 per cent. in 1954. The corresponding number of female employers and self-employed declined from 11.2 per cent. of all

occupied females in non-rural industries in 1933 to 8·3 per cent. in 1947, with a further drop to 8 per cent. in 1954. The increase in the numbers of employers and self-employed in non-rural industries during the years 1947 to 1954 averaged only 1,800 a year. The average increase during the same period in the number of wage and salary earners in these industries was 19,000 a year.

The occupied population of Victoria (including defence forces, but excluding unemployed, pensioners, retired, persons of independent means, and dependants) increased from 1947 to 1954 by 16 per cent.

#### *Wage and Salary Earners in Civilian Employment*

(1) *General*.—Monthly estimates of the number of wage and salary earners in civilian employment (excluding employees in the rural industry and female private domestics) are obtained from three main sources :—

- (a) Monthly employment in factories as shown at annual factory censuses ;
- (b) current monthly returns of governmental bodies ; and
- (c) current monthly pay-roll tax returns.

These sources are supplemented by other direct records of monthly employment (e.g., hospitals) and by estimates for employees not otherwise covered. Pay-roll tax returns at present are lodged by all employers paying more than £200 a week in wages, other than certain Commonwealth Government bodies, religious and benevolent institutions, public hospitals, and other similar organizations exempted under the *Pay-roll Tax Assessment Act 1941–1960*.

All figures in this series of tables are compiled on an establishment or enterprise basis, and therefore do not cover exactly the same area of industry as do the industry tabulations of the Censuses of 1947 and 1954 which are based on the returns of individual employees.

The purpose of these estimates of employment is to measure, as nearly as may be with available data, current trends in employment in the defined field.

(2) *Victoria: Industrial Groups*.—The following table shows total male and female wage and salary earners in civilian employment (excluding employees in rural industry, female private domestics, persons on the paid strength of the defence forces and National Service trainees in camp) subdivided to show the extent of employment provided by government bodies and by private employers respectively. Principal industrial groups shown in the table include both private



employees and government employees, if any. The manufacturing employment figures published in this table comprise (a) the series showing actual monthly employment in factories as recorded at successive annual censuses of factories to June, 1961, with interim estimates for subsequent months, and (b) estimates of the number of employees in industrial establishments outside the scope of the definition of a factory and persons employed by factory proprietors but engaged in selling and distribution. Industry groups here are not identical in coverage with census groups.

**VICTORIA—WAGE AND SALARY EARNERS IN CIVILIAN  
EMPLOYMENT: INDUSTRIAL GROUPS\***  
(’000)

Industrial Group	June, 1957	June, 1958	June, 1959	June, 1960	June, 1961	Decem- ber, 1961	March, 1962
<b>MALES</b>							
Mining and Quarrying ..	4.6	4.6	4.6	4.7	4.9	4.9	4.8
Manufacturing, &c.,† ..	265.0	267.5	273.8	288.0	276.6	280.8	285.9
Building and Construction ..	50.6	50.8	50.7	50.7	51.9	47.1	47.3
Transport‡ ..	56.4	55.7	56.0	55.2	58.4	56.2	55.8
Communication ..	18.5	19.2	19.9	20.1	20.6	20.8	21.2
Property and Finance ..	19.4	20.0	20.9	22.3	23.3	23.3	24.1
Retail Trade ..	37.9	38.9	39.1	40.2	39.4	40.7	40.0
Wholesale and Other Commerce ..	43.1	44.3	45.0	46.4	46.8	48.2	47.3
Public Authority Activity, n.e.i. ..	28.9	29.4	29.5	29.3	29.5	29.9	29.8
Health ..	6.8	6.9	7.0	7.1	7.3	7.4	7.4
Education ..	13.8	14.5	15.7	16.8	17.4	17.5	18.6
Personal Service§ ..	17.0	17.0	16.8	17.4	17.4	17.6	17.4
Other   ..	24.0	24.1	24.4	25.2	25.9	26.1	26.5
Total ..	586.0	592.9	603.4	623.4	619.4	620.5	626.1
Government¶   ..	162.7	166.1	169.3	168.9	174.9	174.8	176.2
Private ..	423.3	426.8	434.1	454.5	444.5	445.7	449.9
Total ..	586.0	592.9	603.4	623.4	619.4	620.5	626.1
<b>FEMALES</b>							
Mining and Quarrying ..	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Manufacturing, &c.,† ..	96.6	97.1	100.0	108.6	98.7	103.2	108.8
Building and Construction ..	1.4	1.5	1.5	1.7	1.8	1.7	1.8
Transport‡ ..	5.8	5.8	6.0	6.4	6.6	6.4	6.4
Communication ..	5.6	5.5	5.6	5.5	5.5	5.6	5.6
Property and Finance ..	12.6	13.2	13.9	15.2	16.1	15.7	16.5
Retail Trade ..	32.8	34.4	34.9	36.3	35.7	37.5	36.0
Wholesale and Other Commerce ..	12.8	13.1	13.4	14.2	14.4	14.2	14.4
Public Authority Activity, n.e.i. ..	7.4	7.5	7.8	7.7	8.0	8.1	8.1
Health ..	23.0	23.7	25.4	26.0	27.1	27.0	27.6
Education ..	14.7	15.3	16.5	17.8	19.0	18.6	20.7
Personal Service§ ..	15.6	15.4	15.3	15.5	15.0	14.9	14.5
Other   ..	12.0	11.9	12.4	13.1	13.5	13.2	13.5
Total ..	240.4	244.5	252.8	268.1	261.5	266.2	274.0
Government¶   ..	42.1	43.1	45.2	46.6	48.6	48.1	50.9
Private ..	198.3	201.4	207.6	221.5	212.9	218.1	223.1
Total ..	240.4	244.5	252.8	268.1	261.5	266.2	274.0

For footnotes see next page.

VICTORIA—WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT :  
INDUSTRIAL GROUPS\*—*continued*  
(’000)

Industrial Group	June, 1957	June, 1958	June, 1959	June, 1960	June, 1961	Decem- ber, 1961	March, 1962
PERSONS							
Mining and Quarrying ..	4.7	4.7	4.7	4.8	5.0	5.0	4.9
Manufacturing, &c.† ..	361.6	364.6	373.8	396.6	375.3	384.0	394.7
Building and Construction	52.0	52.3	52.2	52.4	53.7	48.8	49.1
Transport‡ ..	62.2	61.5	62.0	61.6	65.0	62.6	62.2
Communication ..	24.1	24.7	25.5	25.6	26.1	26.4	26.8
Property and Finance ..	32.0	33.2	34.8	37.5	39.4	39.0	40.6
Retail Trade ..	70.7	73.3	74.0	76.5	75.1	78.2	76.0
Wholesale and Other Commerce ..	55.9	57.4	58.4	60.6	61.2	62.4	61.7
Public Authority Activity, <i>n.e.i.</i> ..	36.3	36.9	37.3	37.0	37.5	38.0	37.9
Health ..	29.8	30.6	32.4	33.1	34.4	34.4	35.0
Education ..	28.5	29.8	32.2	34.6	36.4	36.1	39.3
Personal Service§ ..	32.6	32.4	32.1	32.9	32.4	32.5	31.9
Other   ..	36.0	36.0	36.8	38.3	39.4	39.3	40.0
Total ..	826.4	837.4	856.2	891.5	880.9	886.7	900.1
Government¶ ..	204.8	209.2	214.5	215.5	223.5	222.9	227.1
Private ..	621.6	628.2	641.7	676.0	657.4	663.8	673.0
Total ..	826.4	837.4	856.2	891.5	880.9	886.7	900.1

\* Excludes rural wage earners, female private domestics, personnel in Defence Forces, and National Service Trainees in camp.

† Includes employees engaged in selling and distribution, who are outside the scope of the factory employment figures as defined and published in Part 8 of the Year Book.

‡ Includes road transport; shipping and stevedoring; rail and air transport.

§ Includes hotels, restaurants, hairdressing, and other personal services (except female private domestics).

|| Includes forestry, fishing, and trapping; law and order; religion and social welfare; other professional; amusement, sport, and recreation.

¶ Includes employees of Commonwealth, State, semi-government, and local government authorities.

Government Employees

The following table includes all employees of government authorities in services such as railways, tramways, banks, post office, air transport, education, broadcasting, television, police, public works, factories and munitions establishments, migrant hostels, &c., as well as administrative employees :—

VICTORIA—CIVILIAN EMPLOYEES OF GOVERNMENT  
AUTHORITIES  
(’000)

Date	Commonwealth			State and Semi- Government			Local Government			Total		
	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
June, 1957	50.3	15.2	65.5	99.2	25.1	124.3	13.2	1.8	15.0	162.7	42.1	204.8
June, 1958	51.7	15.0	66.7	100.9	26.2	127.1	13.5	1.9	15.4	166.1	43.1	209.2
June, 1959	52.7	15.3	68.0	102.9	27.9	130.8	13.7	2.0	15.7	169.3	45.2	214.5
June, 1960	52.3	14.9	67.2	102.5	29.7	132.2	14.1	2.0	16.1	168.9	46.6	215.5
June, 1961	52.9	15.1	68.0	107.3	31.4	138.7	14.7	2.1	16.8	174.9	48.6	223.5
March, 1962	53.7	15.2	68.9	107.5	33.4	140.9	15.0	2.3	17.3	176.2	50.9	227.1

## Unemployment

### Census

The total of persons "unemployed" has been recorded only at the dates of the various censuses. Before the 1947 Census, persons who were "unemployed" were requested to furnish particulars of the cause and duration of unemployment, but from 1947 onwards, the inquiry was broadened to include all persons (usually engaged in industry, business, trade, profession, or service) who were out of a job and "not at work" at the time of the census for whatever reason, including any not normally associated with unemployment. This change in the form of the questionnaire probably resulted in some variation in response. The following table sets out the number of persons recorded within these categories at the Censuses of 1933 to 1961. The percentage of "unemployed" at each date to all wage and salary earners, comprising those estimated to be in employment and those unemployed, is also shown.

### VICTORIA—UNEMPLOYMENT (ALL CAUSES): AT DATE OF CENSUS

At 30th June—	Wage and Salary Earners Unemployed ('000)			Proportion of Wage and Salary Earners Unemployed (Per Cent.)		
	Males	Females	Persons	Males	Females	Persons
1933* .. .. .	98·7	21·1	119·8	22·9	12·5	20·0
1947† .. .. .	13·9	4·2	18·1	2·7	2·0	2·5
1954† .. .. .	9·7	3·0	12·7	1·6	1·3	1·5
1961† .. .. .	38·0	13·9	51·9	‡	‡	‡

\* As recorded at the Census. In addition, there were considerable numbers of youths and young women of working age who had never been employed and were "not at work" at the time of the Census.

† Persons in the work force who were "not at work" at the time of the Census.

‡ Not available

### VICTORIA—CAUSES OF UNEMPLOYMENT : AT DATE OF CENSUS

At 30th June—	Unable to Secure Employment	Temporarily Laid Off	Illness	Accident	Industrial Dispute	Other	Total
MALES							
1933 .. .. .	89,549	*	5,627	1,279	600	1,696	98,751
1947† .. .. .	2,737	2,417	3,294	674	69	4,748‡	13,939
1954† .. .. .	1,884	852	2,922	649	81	3,287‡	9,675
1961† .. .. .	25,561	3,535	3,865	1,654	263	3,113§	37,991
FEMALES							
1933 .. .. .	16,467	*	3,261	145	31	1,136	21,040
1947† .. .. .	350	581	1,106	93	8	2,079‡	4,217
1954† .. .. .	596	336	994	72	5	998‡	3,001
1961† .. .. .	8,630	1,479	1,775	276	134	1,605§	13,899
PERSONS							
1933 .. .. .	106,016	*	8,888	1,424	631	2,832	119,791
1947† .. .. .	3,087	2,998	4,400	767	77	6,827‡	18,156
1954† .. .. .	2,480	1,188	3,916	721	86	4,285‡	12,676
1961† .. .. .	34,191	5,014	5,640	1,930	397	4,718§	51,890

\* Not available.

† Persons in the work force who were "not at work" at the time of the Census.

‡ The majority of these persons were resting between jobs or changing jobs.

§ Includes 541 males, 250 females, and 791 persons, as appropriate, whose reasons for not being at work were "not stated".

*Persons Receiving Unemployment Benefit*

The number of persons receiving unemployment benefit in Victoria, as stated by the Department of Social Services, is given in the following table :—

**VICTORIA—NUMBER OF PERSONS RECEIVING  
UNEMPLOYMENT BENEFIT\***

Year					Males	Females	Persons
1957-58	..	..	..	..	3,765	1,362	5,127
1958-59	..	..	..	..	3,793	1,950	5,743
1959-60	..	..	..	..	2,871	1,396	4,267
1960-61	..	..	..	..	3,627	1,257	4,884
1961-62	..	..	..	..	11,666	3,117	14,783

\* Average of monthly figures for financial year. For definition, benefits, &c., see pages 286-287.

*Prices***Retail Price Indexes**

Retail price index numbers for Australian cities are compiled by the Commonwealth Statistician, the aim being to measure the degree of change in prices for a selected field taken as a whole.

In compiling the retail price indexes, the price of each item is multiplied by its quantity "weight" and then by its appropriate population or household "weight." The sum of these products for all items at any given date represents an "aggregate expenditure." The "aggregate expenditures" for successive periods are converted into an index by representing the aggregate of a selected or "base" period by an appropriate number (e.g., 100 or 1,000), and calculating index numbers for all periods to such base by the proportions which their aggregates bear to the aggregate of the base period.

The list of items must be a selected list because it is impossible in practice to obtain at regular intervals prices of all goods and services entering into household expenditure. Considerable difficulty is often experienced in ensuring that the selected items are always a true sample. Some items which it would be desirable to include must be excluded because comparative prices cannot be accurately ascertained for them at different times. Similarly many items of small aggregate or individual importance are excluded.

The lists used are simply selected items combined in certain proportions for the purpose of measuring price variations, and are representative of the fields covered, the proportions approximating to those in average consumption so far as can be ascertained. It must be emphasized that retail price indexes are designed to measure the extent of changes in price levels only. While they may be used to indicate the effect of price change on cost of living, they do not measure the absolute cost of living nor the extent of changes in the cost of living. They measure, as nearly as may be, the proportionate change in the aggregate cost of specified quantities and qualities of the selected list of items included in the index.

Retail price indexes are sometimes used as a measure of change in the "purchasing power of money." Strictly speaking, such a measure relates only to purchasing power over the list of items of the index combined in their specified proportions. The validity of its use in any broader sense or in dealing with a particular problem is a question for judgment by prospective users on the facts of the case and in the light of the definition of the index. It is impossible to compile a single general measure that will show, for all purposes and in all classes of transactions, the change in the value of money from one time to another.

Retail price indexes are sometimes used by industrial tribunals and other authorities for the adjustment of wages. These authorities themselves decide, however, what use (if any) they make of available indexes or whether they desire the Commonwealth Statistician to compile a special index or adapt an existing index to suit their purposes. It is not the practice for the Commonwealth Statistician to express any view as to whether such tribunals should use retail price indexes in their deliberations. In the normal course of his duties, the Commonwealth Statistician compiles and publishes various price indexes, states what they measure, explains how they are constructed, and gives evidence or public information when required. His function in this regard is frequently misunderstood. It is sometimes erroneously supposed that certain basic wages are determined by ascertaining the aggregate cost of the list of items included by the Statistician in a retail price index, or by calculating separate components of the wage from the aggregate cost of the items in separate groups of such an index. The actual position is briefly as follows :—

- (1) Tribunals determine a basic wage in the light of relevant evidence, presented by the parties, usually covering a wide range of economic conditions. This may or may not include evidence on changes in price levels.
- (2) In some cases it may be provided by statute or by judgment of the tribunal that the total wage thus determined shall be adjusted for price change in ratio to the overall movement in a specified retail price index.

*Previous Retail Price Indexes*

Due to changes in the pattern of household expenditure and in the modes of living, it becomes desirable from time to time to compile a new index with a list of items and weights more representative of current usage than those of the previous index. Five series of retail price indexes have been compiled at various times in Australia by the Commonwealth Statistician prior to 1960. Each of these was continued until changed conditions required the compilation of indexes more directly relevant to current conditions. The respective indexes were :—

- (1) The "A" Series Index (covering food, groceries, and house rents) which was first compiled in 1912 with the year 1911 as base = 1,000. It was discontinued in June, 1938 ;
- (2) the "B" Series Index (covering food, groceries, and rent of 4 and 5 roomed houses) which was first compiled in 1925 and continued until the December Quarter, 1953 ;
- (3) the "C" Series Index (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking, and some other miscellaneous items) which was first compiled in 1921. It was used by the Commonwealth Court of Conciliation and Arbitration for purposes of quarterly wage adjustments from May, 1934 to August, 1953. Some State tribunals continued to use or consider it in their proceedings until it was discontinued. It was last issued on its original basis for December Quarter, 1960 ;
- (4) the "D" Series Index, derived by combining the "A" and "C" Series Indexes, which was used by the Commonwealth Court of Conciliation and Arbitration from May, 1933 to May, 1934 and then discontinued ; and
- (5) the Interim Index (covering food and groceries, rent of 4 and 5 roomed houses, clothing, household drapery, household utensils, fuel, lighting, fares, smoking, certain services, and some other miscellaneous items) which was first compiled in 1954 with the year 1952-53 as base = 100. As its title indicated, it was constructed as a transitional index. Its compilation was discontinued following its replacement by the Consumer Price Index in June Quarter, 1960.

*Consumer Price Index*

The title "Consumer Price Index" does not imply that the new Index differs in definition or purpose from its predecessors. This title is adopted in conformity with world trends in naming indexes of retail prices (including prices of services, accommodation, &c.) and their weighing according to patterns of consumption.

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 Index is designed only to measure the proportionate change in prices as combined in the individual groups in the Index. This is a basic principle of all price indexes, and failure to grasp it gives rise to misconceptions concerning price indexes and their uses.

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.

The Index has been compiled for each quarter from September Quarter, 1948, and for each financial year from 1948-49. "All Groups" index numbers, and Group index numbers for each of the five major Groups, are compiled and published regularly for six State capital cities separately and combined. The reference base for each of these indexes is : Year 1952-53 = 100·0. The separate city indexes measure price movements within each city individually. They enable comparisons to be drawn between cities as to differences in degree of price movement, but not as to differences in price level. Similarly, the separate group indexes measure price movements of each group individually, and compare the degree of price change in the different groups. The Index for the six capital cities combined is a weighted average of price movement in the individual cities.

Changes in the pattern of expenditure of wage earner households since 1950 have been such as to render it necessary to construct the index with additional items and changes in weighting patterns at intervals (rather than on the basis of a list of items and set of weights which remain unchanged throughout the period). Four new series for short periods (namely, from the September Quarter of 1948 to the June Quarter, 1952, from the June Quarter of 1952 to the June Quarter of 1956, from the June Quarter of 1956 to the March Quarter of 1960 and from the March Quarter of 1960 onwards) were therefore constructed and linked to form a continuous retail price index series. At times of linking, the weighting pattern has been altered and, in addition, new items that had become significant in household expenditure have been introduced.

The principal changes are :—

- (1) The introduction of private motoring (June Quarter, 1952) and of television (March Quarter, 1960) ;
- (2) altered proportions of houses under the various modes of occupancy (June Quarters, 1952 and 1956) ; and
- (3) changes in weights of fuel and fares (June Quarters of 1952 and 1956) and of private motoring (June Quarter, 1956).

It is envisaged that future links will be made in the index when significant changes in the pattern of household expenditure render it necessary to do so.

The sets of weights used for the different periods covered by the index have been derived from analyses of statistics of production and consumption ; the Censuses of 1947 and 1954 ; the Censuses of Retail Establishments of 1948-49, 1952-53, and 1956-57, and the continuing Survey of Retail Establishments ; from information supplied by manufacturing, commercial, and other relevant sources ; and from special surveys.

The principal ways in which the Consumer Price Index differs from the Interim Retail Price Index are :—

- (1) The list of items has been expanded to include :—
  - (i) Home ownership—price of new house ; rates and charges payable to local government authorities (including water and sewerage authorities) ; and repairs and maintenance of houses ;
  - (ii) weekly payments for houses let by State Housing authorities ;
  - (iii) household appliances such as refrigerators, washing machines, and television sets ;
  - (iv) private motoring ; and
  - (v) beer and other additional items.
- (2) It is constructed as a series of linked indexes with significant changes in composition and weighting effected at June Quarter, 1952, June Quarter, 1956, and March Quarter, 1960. (This linking has not affected the level of the Index at the time of changes.)

Consumer Price Index Numbers for Melbourne are shown in the following table :—

**MELBOURNE—CONSUMER PRICE INDEX NUMBERS**  
(Base of Each Index : Year 1952-53 = 100)

Year Ended 30th June—	Food	Clothing and Drapery	Housing	Household Supplies and Equipment	Miscel- laneous	All Groups
1953 .. ..	100·0	100·0	100·0	100·0	100·0	100·0
1954 .. ..	104·4	100·6	102·9	101·2	99·9	102·0
1955 .. ..	103·9	101·2	105·4	100·6	99·7	102·0
1956 .. ..	112·2	102·8	113·8	101·6	108·3	108·1
1957 .. ..	117·8	104·9	122·8	105·2	117·8	114·0
1958 .. ..	114·3	108·4	127·3	106·2	118·8	114·4
1959 .. ..	116·1	109·6	129·4	109·2	122·2	116·6
1960 .. ..	120·8	110·7	135·8	110·9	125·5	120·0
1961 .. ..	130·2	112·8	151·2	112·5	129·2	125·9
1962 .. ..	127·8	114·0	157·5	114·1	129·3	126·3



## Retail Prices of Food

The average retail prices of various food and grocery items in Melbourne are shown in the following table. The figures represent the means of the monthly prices as at the 15th day of each month in the years shown.

MELBOURNE—AVERAGE RETAIL PRICES OF SELECTED COMMODITIES\*  
(Pence)

Item	Unit	1939	1945	1950	1955	1961
<b>Groceries—</b>						
Bread† .. .. .	2 lb.	5.40	5.55	8.50	14.63	18.29
Flour—Plain .. .. .	2 lb.	4.25	4.25	5.72	11.14	14.22
„ —Self-Raising .. .. .	2 lb.	7.48	7.40	9.98	18.10	22.76
Tea .. .. .	1 lb.	27.74	27.00	36.50	84.53	78.75
Sugar .. .. .	1 lb.	4.00	4.00	5.00	9.00	11.00
Tapioca, Seed .. .. .	1 lb.	3.09	6.88	7.88	12.87	12.82
Jam, Plum .. .. .	1½ lb.	8.40	11.25	16.68	27.18	30.57
Golden Syrup .. .. .	2 lb.	7.14	7.33	9.54	19.00	22.49
Oats, Flaked .. .. .	1 lb.	3.56	3.79	6.37	9.42	11.06
Raisins, Seeded .. .. .	1 lb.	10.43	13.09	18.80	28.38	33.42
Currants .. .. .	1 lb.	8.76	10.58	14.86	22.66	29.08
Apricots, Dried .. .. .	1 lb.	15.52	18.00	25.17	58.07	62.25
Peaches, Canned .. .. .	29 oz.	9.43	13.26	20.25	33.12	33.89
Pears, Canned .. .. .	29 oz.	10.02	14.20	21.53	35.07	33.70
Potatoes .. .. .	7 lb.	17.70	8.40	24.08	40.99	67.34
Onions .. .. .	1 lb.	3.53	2.62	4.02	9.13	11.48
Soap .. .. .	1 lb.	6.97	7.11	11.39	18.02	21.70
Kerosene .. .. .	quart	5.15	6.43	7.34	8.24	8.80
<b>Dairy Produce—</b>						
Butter, Factory .. .. .	1 lb.	19.50	20.50	26.35	50.93	58.13
Cheese, Mild .. .. .	1 lb.	13.41	16.28	18.50	34.13	42.19
Eggs, New Laid§ .. .. .	1 doz.	19.17	26.00	39.61	66.88	71.19
Bacon, Rashers .. .. .	1 lb.	19.90	22.78	44.06	71.54	94.80
Milk—Condensed .. .. .	tin	9.33	10.27	14.63	22.41	24.28
„ —Fresh† .. .. .	quart	7.15	7.43	11.45	18.00	18.92
<b>Meat—</b>						
Beef—Sirloin .. .. .	1 lb.	10.77	13.69	21.28	40.34	59.18
„ —Rib .. .. .	1 lb.	8.66	11.53	18.21	39.77	58.60
„ —Steak—Rump .. .. .	1 lb.	15.63	21.06	30.62	54.46	94.92
„ — „ —Chuck .. .. .	1 lb.	7.05	10.12	15.48	33.88	48.44
„ —Sausages .. .. .	1 lb.	5.48	8.15	13.47	20.21	26.21
„ —Corned Silverside .. .. .	1 lb.	8.95	12.54	20.37	39.56	57.46
„ —Corned Brisket .. .. .	1 lb.	6.85	9.35	14.51	29.11	43.44
Mutton—Leg .. .. .	1 lb.	7.74	11.37	15.41	25.79	27.94
„ —Forequarter .. .. .	1 lb.	4.63	6.57	9.39	16.47	20.37
„ —Loin .. .. .	1 lb.	7.37	9.54	14.22	23.86	28.50
„ —Chops, Loin .. .. .	1 lb.	8.37	10.64	15.12	25.16	28.82
„ —Chops, Leg .. .. .	1 lb.	8.65	11.60	15.78	27.52	32.35
Pork—Leg .. .. .	1 lb.	12.62	15.95	33.58	52.96	62.78
„ —Loin .. .. .	1 lb.	12.91	16.80	34.49	54.03	64.31
„ —Chops .. .. .	1 lb.	13.30	17.65	35.12	54.54	64.37

\* In some cases the averages are price relatives.

† Delivered.

§ Extra Large Grade as from April, 1961.

### Wholesale Price Indexes

The main wholesale price index compiled by the Commonwealth Statistician is the Wholesale Price (Basic Materials and Foodstuffs) Index which extends back to 1928 and is issued monthly.

Prices used in this Index are in the main obtained directly from manufacturers and merchants, and, with a few important exceptions, from Melbourne sources. Commodities are priced in their primary or basic form wherever possible, with the price of imported goods being taken on an ex-bond (or into factory) basis. The list of items is divided into seven main groups, each being subdivided into goods which are mainly imported and those which are mainly home produced.

The Index is constructed on the simple aggregative fixed-weights formula. The weights are based on estimates of the average annual consumption of the commodities in Australia during the period 1928-29 to 1934-35, inclusive. Changes in usage, changes of category as between "imported" and "home produced" for some commodities, and changes in the industrial structure have affected the validity of some of the weights in the Index.

During 1956, supplies and prices of potatoes and onions fluctuated violently and dominated the movement of the "Foodstuffs and Tobacco", "Goods Principally Home Produced" and "Total All Groups" sections. In order to provide a representative measure of the general trend in wholesale prices, the Index shown in the following table has been reconstructed as from the base period (average three years ended June, 1939 = 100) by omitting potatoes and onions.

Index numbers for each group of commodities and for all groups combined for the Index of wholesale prices of basic materials and foodstuffs are given in the following table :—

#### WHOLESALE PRICE (BASIC MATERIALS AND FOODSTUFFS) INDEX NUMBERS

(Base of Each Group : Average of Three Years Ended June, 1939 = 100)

Period	Basic Materials							Foodstuffs and Tobacco*	Basic Materials and Foodstuffs		
	Metals and Coal	Oils, Fats, and Waxes	Textiles	Chemicals	Rubber and Hides	Building Materials	Total		Goods Principally Imported†	Goods Principally Home Produced*	Total All Groups*
1951-52	343	220	577	314	298	370	321	276	288	300	297
1952-53	392	234	607	350	224	404	350	293	292	331	319
1953-54	388	222	566	323	191	363	332	308	271	339	319
1954-55	391	214	510	314	246	372	330	315	277	340	322
1955-56	404	220	456	317	328	415	345	325	292	352	334
1956-57	409	241	520	344	302	463	367	324	311	357	344
1957-58	398	238	437	349	280	453	355	325	301	355	339
1958-59	392	231	362	327	293	423	340	332	283	358	336
1959-60	395	225	403	331	379	431	347	348	281	375	348
1960-61	399	222	387	331	341	439	346	372	278	394	360

\* During 1956 these indexes were reconstructed from July, 1936, by excluding potatoes and onions.

† Represents only such imported commodities as are included in the Wholesale Price Index and does not measure changes in prices of all imports.

## 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 shown:—

## MELBOURNE—WHOLESALE PRICES

Item	Unit	1939	1945	1950	1955	1961
		<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
<b>Agriculture—</b>						
Wheat ..	bushel	2 7·56	3 11·25	6 9·13	14 0·83	15 4·50
Barley—						
English ..	„	3 1·06	6 0·19	7 3·50	15 2·97	14 8·63
Cape ..	„	2 10·06	5 3·19	6 6·50	13 0·00	12 6·50
Oats, Milling ..	„	2 10·44	4 1·75	6 10·56	8 4·75	6 10·29
Maize ..	„	5 2·94	8 4·00	12 3·44	15 4·00	20 3·00
		<i>£ s. d.</i>	<i>£ s. d.</i>	<i>£ s. d.</i>	<i>£ s. d.</i>	<i>£ s. d.</i>
Bran ..	ton	4 19 6	6 0 0	11 5 8	21 11 0	21 5 0
Pollard ..	„	4 19 8	6 0 0	11 5 8	21 11 0	22 5 0
Flour (First						
Quality) ..	„	12 16 6	12 17 6	17 14 7	32 17 6	39 19 7
Chaff ..	„	4 17 3	9 9 4	12 0 6	17 18 4	18 6 3
Potatoes ..	„	15 12 10	7 10 0	23 12 4	34 11 10	54 6 2
Onions ..	„	21 11 2	14 12 6	21 17 6	48 18 8	59 4 3
<b>Dairy and Farm- yard Produce—</b>						
Butter ..	lb.	1 5·00	1 5·88	1 11·75	3 11·41	4 7·25
Bacon ..	„	1 0·81	1 3·50	2 2·00	4 0·50	5 0·67
Ham ..	„	1 5·44	1 6·50	2 9·00	4 6·50	5 7·00
Cheese (Matured)	„	1 2·44	1 4·50	1 7·00	3 0·42	3 4·00
Honey ..	„	0 4·94	0 7·50	0 7·50	0 11·25	1 2·23
Eggs* ..	dozen	1 4·13	1 10·25	2 11·19	4 11·54	5 1·67
<b>Butchers' Meat—</b>						
Beef, Prime ..	100 lb.	<i>£ s. d.</i> 1 14 0	<i>£ s. d.</i> 2 11 1	<i>£ s. d.</i> 4 11 3	<i>£ s. d.</i> 7 9 10	<i>£ s. d.</i> 9 11 7
		<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Mutton ..	lb.	0 3·31	0 5·32	0 9·20	0 10·96	0 11·03
Veal ..	„	0 4·31	0 5·84	0 8·94	1 9·05	2 3·50
Pork ..	„	0 7·13	0 9·69	1 10·57	2 6·51	2 7·72
Lamb ..	„	0 6·25	0 8·75	1 4·00	2 2·07	1 9·45

\* Extra Large Grade as from April, 1961.

## Further Reference

*Labour Report*, Commonwealth Bureau of Census and Statistics  
(Canberra)

# Part 7

## PRIMARY PRODUCTION

### *Land Settlement and Irrigation*

#### **Land Utilization**

##### *Introduction*

The climatic conditions of Victoria (for details see pages 49 to 64) and especially the 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 pages 488 and 498).

The pattern of land use is more or less clearly defined in each of the statistical districts (see map on page 508). 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 area 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 utilization. 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 used for agricultural production is 7·6 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 fat lamb production. The principal crop grown is wheat and about 1 mill. acres is sown to this crop each year. In addition, some 300,000 acres of oats, and 150,000 acres of barley are usually grown. Yields from cereal crops vary widely, according to seasonal conditions. The average district yield per acre for wheat in recent years has been 18 bushels.

The lack of suitable pasture species has been a problem in pasture development and, in the past, grazing has been provided largely by native pastures, green cereal crops, and crop stubbles. More recently, wider use has been made of dry land lucerne and medics in rotation with crops, with benefit to both crop production and grazing. The district carries about 1·8 mill. sheep and produces about 16 mill. lb. of wool as well as a substantial number of early fat lambs for the Melbourne market.

Irrigation areas located close to the River Murray, which marks the northern boundary of the State, produce most of the State's (and Australia's) dried vine fruits and citrus.

#### *Wimmera District*

The Wimmera occupies the central western part of the State and has an area of 7·4 mill. acres, of which 6·1 mill. acres is used for agricultural purposes. Rainfall in the north is about 14 in. per year, increasing to 25 in. in the south. The Grampian Range in the south of the district has 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 fat 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. About 700,000 acres are sown to wheat each year, the average yield being close to 24 bushels per acre. Other major crops are oats (200,000 acres), and barley (60,000 acres). In recent years the development of suitable strains of medics and clovers has encouraged the inclusion of a pasture phase in crop rotations.

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. The district carries over 4 mill. sheep and

produces more than 40 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 River Murray in the north. The total area of the district is 6.3 mill. acres, of which 5.5 mill. acres is 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 in. in the north-west and increases to 25 in. 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 a number of different farming enterprises is carried out.

Wheat growing is an important industry. The area sown averages about 320,000 acres, and because of climatic and soil differences yields vary widely across the area, the district average being 24 bushels per acre. As in the other major wheat-producing districts, oat crops are an important feature in rotations and for grazing. In the Northern District over 200,000 acres of oats are sown each year.

The district carries over 4 mill. sheep, largely on wheat farms, and emphasis is on fat 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 areas 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. There are about 330,000 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.

### *North-Central District*

This district includes much of the Central Highlands area and the rainfall is generally over 30 in., but on the northern slopes it is as low as 22 in. 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 area north-east of Ballarat and fruit 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. The district carries over 2 mill. sheep and about 66,000 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 in. in the north-western corner of the district to well over 60 in. 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 some 9,000 acres of tobacco and small quantities of hops are grown in these areas. The district carries about 150,000 dairy cattle, mainly along the river valleys.

Fat 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 2 mill. sheep.

The North-Eastern District is an important beef cattle breeding and fattening area, and over 200,000 head are 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 inch rainfall belt, but an area north and east of the Otways is influenced by a rain shadow effect and the average annual rainfall is 20 to 25 in. In the Otway Ranges the average annual rainfall is as high as 70 in. The soils of the district vary considerably in type and fertility. The great bulk of the plains area consists of basaltic soils. 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 6·6 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 are oats which are used as a fodder crop, cut for hay, or harvested for grain which is used very largely to feed stock. The more fertile soils produce both potatoes and onions, and some 60 per cent. of the State's onion acreage is grown in the district. 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, carrying about 9 mill. sheep. Almost half the total sheep population is Merino, and the fine wool breeds—Merino, Polwarth, and Corriedale—make up more than three-quarters of the total sheep population. There are relatively few crossbreds, and fat 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 carries close to 300,000 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 are produced in the district, which carries close to 400,000 dairy cattle.

### *Central District*

Rainfall varies from 20 in. in the rain shadow area, north of Geelong, to more than 50 in. 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 about 40,000 acres are grown—mainly on the plains to the west. Potatoes are grown in the Romsey—Ballarat area and market gardening is important close to Melbourne, Geelong, and Bacchus Marsh.

The district carries about 2·3 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. There are just under 300,000 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 3·7 mill. acres and the bulk of settlement is south of a line between Dandenong and Bairnsdale. Rainfall varies from just under 25 in. in the rain shadow area near Maffra and Sale to 60 in. and above in the highlands. Average annual rainfall over the most part of the settled areas is 30 to 40 in., and climatically the district is well suited to 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 specialty 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 inch 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 460,000 dairy cattle. Pig raising is associated with dairy farming, and there are about 60,000 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. However, in the 22-30 inch rainfall area near Sale, fat lamb production on improved pastures is a major enterprise. In the foothills, fine-woolled sheep and beef cattle are carried.

#### Alienation of Land

The total area of the State is approximately 56,245,760 acres. On 31st December, 1960, this comprised :—

	Acres
Lands alienated in fee-simple .. ..	31,431,316
Lands in process of alienation .. ..	1,434,365
Crown lands .. ..	23,380,079
	<hr/>
Total .. ..	56,245,760
	<hr/>

The Crown lands comprise :—

	Acres
Permanent forests (under Forests Act) ..	4,860,056
Timber reserves (under Forests Act) ..	709,777
State Forest and timber reserves (under Land Act)	151,499
Water reserves .. ..	316,261
Reserves in the Mallee .. ..	410,000
Other reserves .. ..	551,388
Roads .. ..	1,643,284
Water frontages, beds of rivers, lakes, &c., un- sold land in cities, towns, and boroughs ..	3,845,921
Land in occupation under—	
Perpetual leases .. ..	1,093,349
Leases of former agricultural college lands	30,244
Other leases and licences .. ..	1,935
Temporary grazing licences and leases ..	*5,986,713
Unoccupied .. ..	3,779,652
	<hr/>
Total .. ..	23,380,079
	<hr/>

\* In addition, 75,587 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 1956 to 1960. 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 Ended 31st December—	Area of Crown Lands Sold			Crown Lands Alienated in Fee-simple	
	Absolutely, at Auction, &c.	Conditionally to Selectors	Total	Area	Purchase Money
	acres	acres	acres	acres	£
1956.. ..	3,475	4,901	8,376	96,010	130,775
1957.. ..	2,070	1,120	3,190	123,726	141,545
1958.. ..	5,480	23,763	29,243	51,396	151,672
1959.. ..	30,972	51,075	82,047	123,202	310,895
1960.. ..	3,740	38,532	42,272	129,939	281,173

### Transfer of Land Act and Assurance Fund

Information on these topics will be found on pages 451–452 of the Victorian Year Book 1961.

### Soil Conservation Authority

#### Functions

The Authority is responsible for the mitigation and prevention of soil erosion; promotion of soil conservation; and the determination of land use to achieve these objectives.

To perform these functions, the Authority conducts surveys and investigations into the nature and extent of soil erosion. 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.

It co-ordinates the policies and activities of Government departments and public authorities for the alienation and use of Crown lands and has powers to remove stone, gravel, and soil. The Act provides wide powers for soil conservation works with penalties for failure to comply. Grants and loans to assist in the carrying out of approved specific projects may be made to any Government department, public authority or private individual on such terms as the Authority may decide.

The Chairman of the Authority is also Chairman of the Land Utilization Advisory Council, which operates under the same Act. The Council consists of the Director of Agriculture, Secretary for Lands, Chairman of the Forests Commission and the Chairman of the State Rivers and Water Supply Commission. The Secretary of the Authority is also Secretary of the Land Utilization Advisory Council.

The Council's functions are to make recommendations to the Authority on the constitution and definition of catchment areas and to advise the Minister and the Authority concerning policy of all land use in any catchment area.

After consultation with the Land Utilization Advisory Council, the Authority determines the most suitable use in the public interest of all lands in catchment areas, and which lands should be permanently used for forests, pasture, agriculture, and other purposes.

### *Soil Conservation Competitions*

The Soil Conservation Authority of Victoria conducts a series of six competitions annually as part of its responsibility to encourage soil conservation throughout the State.

Each soil conservation competition circulates around four districts so that every landholder has an opportunity to compete for the honour of being the winner every fourth year.

The conditions of entry are simple. Any property worked as a farm unit is eligible and the principal awards are made for the "best effort towards soil conservation, having regard to the erosion hazard on each competing property". The best farm is therefore not necessarily the winner, although many of the best farmers in the State compete.

The oldest of the competitions has been conducted annually for over twenty years, and the newest is in its second year.

Every property entered is visited by the judge, who is a qualified District Conservation Officer. The basis of judging is the general farm lay-out which should be designed to ensure permanent production consistent with soil types, topography, aspects, water supply, and efficiency in farm operations. General farming practices are examined closely and the results are observed. Judging is carried out in the autumn, a time when it is difficult to conceal the effects of incorrect land use.

There is intense competition to win a Hanslow Cup which the winner holds only for one year. The awards are made at Field Days following a tour of inspection of the property when the winning features are explained by Soil Conservation Authority officers and the owner of the property.

Field Days are an important soil conservation event in the rural calendar, and attendances of over 500 are common. They have had considerable influence in encouraging correct land use and in many

districts improved farming practices have been adopted widely, following field days on winning properties where their benefits have been demonstrated.

### **Further References**

Further information about the Authority is set out on pages 62 to 65 of the Victorian Year Book 1962, and pages 452 to 454 of the Victorian Year Book 1961.

### **Land Utilization Advisory Council**

The activities of this Council are described on pages 473-474 of the Victorian Year Book 1962.

### **Destruction of Vermin and Noxious Weeds**

The control of vermin and noxious weeds in Victoria is conferred by the *Vermin and Noxious Weeds Act* 1958, which gives the Department of Crown Lands and Survey wide powers of enforcement.

Action against the rabbit pest is being taken along three main lines: by myxoma virus, by poison, and by the fumigation and destruction of burrows and places of harbour.

The disease myxomatosis is introduced into the rabbit by inoculation and has achieved a good rate of mortality. Field days are organized by the Department at which rabbits are inoculated with the virus and released to spread the disease, mainly through the agency of the mosquito. Departmental scientists are engaged in experiments ascertaining the virulence of various strains of myxoma virus and in investigating other avenues of biological research.

A recent State-wide campaign using the poison sodium fluoroacetate, known as "1080", met with considerable success, an innovation being the distribution of poisoned baits by aircraft. This aerial baiting is particularly suited to the rougher type of country where the usual method of distribution by poisoned trail is unsatisfactory. The poison "1080" is a very deadly one, necessitating the strictest control and supervision of the preparation of the poisoned baits. The medium of conveyance of the poison is, in the main, oats, though carrots and apples are also used. Landholders are fully advised of the deadly nature of the poison and of the required precautions.

The close co-operation of the landowner is an essential requirement for the success of a campaign and, to this end, advisory committees have been formed throughout the State. The function of these committees, of which the local departmental inspector is a member, is to meet in consultation at regular intervals and discuss methods of approach to the problems of vermin control.

Noxious weeds present a great threat to the agricultural land of the State and continuous scientific research is being carried out in an endeavour to combat this menace. Some 75 plants have been

declared, by proclamation under the Act, to be noxious weeds for the whole of Victoria, with the exception of the Metropolitan Area where the responsibility for control rests with the municipalities. In addition, some 50 plants have been declared noxious weeds for certain specified areas of the State. The weeds Ragwort, Skeleton Weed, St. John's Wort, and Cape Tulip are among those most difficult to control, and constant vigilance and action are required to prevent their spreading. An interesting project currently in progress is an effort to destroy under-water growth.

Employees in the field number approximately 825, the number varying to some extent according to seasonal conditions. Departmental machinery and equipment may be hired to landowners at moderate charges, and advances may be made to assist farmers in carrying out the work of vermin and weed destruction.

### **Soldier Settlement**

#### *Soldier Settlement Commission*

Prior to 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.

An Agreement was finally concluded between the Commonwealth and the various States in 1945 on this matter. This Agreement provided that Victoria, New South Wales, and Queensland, would act as principal States, and that Western Australia, South Australia, and Tasmania would act as agents for the Commonwealth Government.

In 1945, the Victorian Government completed an Agreement with the Commonwealth Government. The State Parliament ratified the Agreement and also passed legislation constituting the Soldier Settlement Commission which was to have three full-time members and was given the necessary authority to appoint staff.

Soldier settlement in all States has now reached the closing-down stages and the achievements of Victoria in this form of land settlement have been most satisfactory.

Under the Victorian legislation, soldier settlement was carried out under two separate schemes. Firstly, there was the general settlement scheme where the Soldier Settlement Commission acquired freehold land or Crown land for subdivision and development into holdings for application by ex-servicemen and such holdings were allocated on a competitive basis, having regard to the merits of all the applicants.

Secondly, there was the Single Unit Farm Scheme where ex-servicemen were granted loans up to a maximum of £9,000 to assist them in the purchase of existing farms of their own choosing. Under this scheme 2,883 ex-servicemen were granted loans amounting to £12,006,650.

Up to the 30th June, 1961, the Commission had purchased 1,193,171 acres of alienated land at a cost of £19,542,329, and had also set apart under the Soldier Settlement Act, 51,536 acres of Crown lands. The total area of 1,244,707 acres was dealt with as follows :—

VICTORIA—SOLDIER SETTLEMENT COMMISSION : LAND ALLOCATION, 1945 TO 1961

Particulars	Area
	acres
Allocated for General Settlement purposes covering 3,048 farms	1,180,669
Sold or disposed of as unsuitable for settlement purposes for reasons such as over-capitalized homestead areas or appropriation for public purposes .. .. .	64,038
Total .. .. .	1,244,707

The Soldier Settlement Act made provision for the Commission to make advances where required to both general settlers and Single Unit Farm settlers to assist them in the purchase of stock, plant and equipment. For this purpose £5,880,405 has been advanced to settlers, and of this amount, £4,923,269 has been repaid.

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.

*Summary*

With soldier settlement in its final stages, the following summary sets out the position in Victoria as at the 30th June, 1961 :—

VICTORIA—RURAL REHABILITATION OF EX-SERVICEMEN, 1945 TO 1961

Act	Number of Ex-Servicemen
<i>Soldier Settlement Act—</i>	
Number allotted a holding under the general subdivisional scheme	3,048
Number allotted a holding under the general subdivisional scheme but for various reasons such as ill health, death, compulsory forfeiture, &c., have relinquished the holdings granted to them .. .. .	226
Number granted Single Unit Farm loans .. .. .	2,883
<i>Commonwealth Re-Establishment and Employment Act 1945—</i>	
Number granted agricultural loans for purchase of land ..	548
Number granted agricultural loans for purchase of stock, plant, &c., to work properties .. .. .	979
Total .. .. .	7,684

**Other Land Settlement***General*

The *Land Settlement Act* 1959, extended the functions of the 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 ineligible for soldier settlement.

The scheme, generally, is based on the same principles as the general scheme for soldier settlement—the main difference 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.

Generally speaking, 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.

*Tenure*

After a settler is allocated a holding, he may, in the first instance, be employed by the Commission on wages and he may be granted a temporary lease of his holding. It has been necessary to provide for a wide range of contingencies in the temporary lease stage to cover a wide range of circumstances, such as the allocation of a more or less ready-made farm as compared with a farm where considerable developmental work is still required. The minimum period for a temporary lease is one year and the maximum period is five years. A settler under temporary lease will be required to pay such rent as the Commission thinks fit and reasonable, taking into account differing circumstances, particularly those connected with production.

When a farm has been developed to a stage where the settler of average efficiency can successfully carry on, provision is made for the grant of a purchase lease. This purchase lease provides for the determination of a capital liability on which the settler pays 5 per cent. per annum, which includes interest at 4 per cent. per annum on the liability from time to time outstanding. This means that in about 41 years a settler would freehold his farm although it can be freeholded earlier if larger amounts are paid against the capital liability. The purchase lease is not negotiable for a period of six years, but this six-year period may be reduced by up to three years if the settler has been in occupation under temporary lease up to three years. In determining the capital liability under the lease, the Commission

is required to have regard to market values of the holdings, but to disregard any abnormality in seasonal or economic conditions which may affect current market value.

### *Settlers' Credit Account*

Under the Act settlers will be encouraged to make additional payments in excess of those required under the lease. These excess payments would earn interest in a special credit account at a rate equal to long-term bond rates for the time being applicable (at present  $5\frac{3}{8}$  per cent. per annum).

### *Advances to Settlers*

Advances may be made to settlers for stock, plant, seasonal requirement, living and working expenses, and for permanent improvements. Interest at the rate of 4 per cent. per annum is charged on the amount of the advance from time to time outstanding, and the repayment of the advance with interest is made over such period and in such manner as is determined by the Commission in any particular case.

### *Developmental Projects*

Up to the 30th June, 1961, the land being developed for allocation under this Scheme has been on three developmental projects. These are Heytesbury near Cobden, Yanakie on Wilson's Promontory, and the East Goulburn Project in the Parish of Dunbulbalane.

The progress of each of these projects at the 30th June, 1961, is shown below:—

#### *Heytesbury*

Total area cleared to 30/6/61	..	41,914 acres
Total area ploughed to 30/6/61	..	38,850 acres
Total area sown to pasture to 30/6/61		34,411 acres

Sixty-four new farmhouses have been constructed whilst a further 43 are under construction. Fencing, water-points, and shedding have been provided on the same scale and over 60 miles of new roads have been constructed with a further 30 miles under construction.

At the 30th June, 1961, 56 settlers were in occupation of their holdings and engaged in dairying activities, and further blocks were reaching the stage of development necessary before being made available for application.

#### *Yanakie*

At 30th June, 1961, a total of 5,050 acres had been sown to pasture including 300 acres of a rich peat swamp area on which considerable drainage works have been undertaken to allow its development into improved pasture land. A further 760 acres of the swamp have been rotary-hoed preparatory to sowing in the 1961-62 season when the balance of the swamp (500 acres) will be rotary-hoed. The development of this area gives promise of very rich land but naturally its development has taken longer than the higher ground around the swamp.



Eight settlers are in occupation of their holdings on which new houses and all essential improvements have been effected, and these settlers have commenced dairying activities.

#### *East Goulburn*

This project will provide for 80 soft fruit orchards and approximately 100 dairy farms, all under irrigation.

At the 30th June, 1961, 72 orchards had been planted to a basic area of 17 acres peaches, 5 acres pears and 3 acres apricots, in all a total of 1,800 acres. The remaining eight orchards have been planted to various areas of these kinds of fruit totalling 142 acres, making the total area planted to 30th June, 1961, 1,942 acres over the 80 orchards. To complete the overall target of 2,000 acres, an average planting of 7½ acres per block over eight blocks will be required in 1962.

Of the first orchards planted in 1958, 22 have now been allocated to applicants and all these settlers are in occupation of their holdings.

At 30th June, 1961, development of nine holdings for dairying under irrigation had been completed. An initial area of 65 acres on each of these had been ploughed, graded, checkbanked and sown to permanent pasture mixture, houses were under construction and contracts let for the erection of dairies and other shedding.

Applications have been called for these holdings under the provisions of the *Land Settlement Act* 1959 and the successful applicants will occupy their holdings during the Spring of 1961.

Work has been commenced for the development of a further fourteen holdings for dairying under irrigation and their sowing in 1962.

In addition to the above developmental work, the Commission, as at the 30th June, 1961, has erected 41 houses and a further fifteen are under construction.

It has also erected 34 miles of fencing and excavated 22 dams.

#### *Conclusion*

The demand for all holdings allotted to date has been exceedingly keen and 62 holdings allocated during the 1960-61 financial year attracted over 3,000 applications.

### **Water Supply and Land Settlement**

#### *History*

For practical purposes, the history of water supply in Victoria can be taken up in the early 1880's when the miners who had left the goldfields to settle on the northern plains began to realize, 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 90 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 attack on the water supply problem was

apparent and in 1905, the Water Act was passed. This revolutionary Act, which has since provided the basis for practically all of Australia's water supply development, had three main features :—

- (1) It abolished all but one of the trusts 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 ; and
- (3) it vested in the Crown the right to the use of the water in all of the State's rivers, streams, &c., thus avoiding the litigation which has clouded the history of water supply in the U.S.A.

### *Irrigation*

One of the Commission's most important functions is to promote the development of irrigation, and at 30th June, 1961, it had spent on this work about £70 mill. or 60 per cent. of its total capital expenditure on water supply and conservation generally.

Most irrigation is carried out in districts directly controlled by the Commission, although there is an increasingly large proportion of "private diverters", i.e., irrigators who are licensed to take water from streams, lakes, &c., but who do not come within the boundaries of an irrigation district.

A feature of the districts is the system of "water rights" in operation. Under this system a certain quantity of water is assigned to each district and allotted to the lands 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, but they can also buy water in excess of the water right in the great majority of seasons.

This method assures irrigators of a definite quantity of water each year, and the Commission can rely on fairly constant revenue to meet its costs of operation. Since water usage varies greatly from year to year according to the weather, paying solely in accordance with water used would bring in widely fluctuating returns.

Another 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 block instead of limiting the allocation of water to a portion of each block. This has meant that Victorian irrigation is predominantly devoted to dairying, fruit and vegetables rather than sheep-raising. The advantage of intensive irrigation is that much higher returns are available from a given quantity of water and, consequently, a much bigger rural population can be supported.

The use of the water of the River Murray is shared equally with New South Wales after certain quantities have been reserved for the use of South Australia. This vital principle was established after many years of controversy by the River Murray Agreement of 1915, under which a Commission comprising representatives of the three States and the Commonwealth was formed to administer the Agreement. The four parties share equally the cost of all works on the River Murray.

Major storages devoted principally to irrigation are shown in the following table:—

VICTORIA—MAJOR IRRIGATION STORAGE SYSTEMS

River	Name	Capacity	Principal System or District Served
		acre-feet	
Goulburn ..	Eildon Reservoir .. ..	2,750,000	Goulburn-Loddon
	Goulburn Weir .. ..	20,700	Goulburn-Loddon
	Waranga Reservoir .. ..	333,400	Goulburn-Loddon
Loddon ..	Cairn Curran .. ..	120,600	Goulburn-Loddon
	Tullaroop .. ..	60,000	Diverter
Murray ..	Hume .. ..	1,250,000*	Murray
	Murray River Weirs .. ..	111,420*	Murray
Macalister ..	Glenmaggie .. ..	154,300	Macalister (Gippsland)
Pykes Creek ..	Pykes Creek .. ..	19,400	Bacchus Marsh
Werribee ..	Melton .. ..	15,500	Werribee
	Total .. ..	5,047,480†	

\* Victoria's half share of River Murray storages under the River Murray Agreement. When completed, Hume will have a total capacity of 2,500,000 acre-feet.

† In addition to the storages named, the total includes a system of natural lakes in the Kerang-Swan Hill area and the Coliban River storages used for both irrigation and town supply around Bendigo.

The following table compiled by the Commission shows the total areas of the various irrigation systems and the areas under irrigated culture during 1960-61 :—

VICTORIA—AREAS OF SYSTEMS AND LANDS IRRIGATED,  
1960-61  
(Acres)

System or District	Total Area	Area Irrigated							Total
		Pastures		Lucerne, Sorghum, &c.	Vineyards	Orchards	Market Gardens	Other	
		Native	Sown						
Goulburn-Loddon System ..	1,288,880	18,934	358,661	20,948	218	21,662	3,923	7,861	432,207
River Murray System—									
Torrumbarry System ..	340,975	33,435	180,715	7,680	5,192	983	951	9,392	238,348
Murray Valley Area ..	274,123	1,412	91,722	8,356	29	5,465	535	311	107,830
Pumped Supply* ..	80,754	207	571	677	36,243	2,578	398	916	41,590
Total River Murray ..	695,852	35,054	273,008	16,713	41,464	9,026	1,884	10,619	387,768
Macalister District (Gippsland)	130,933	1,491	47,329	1,218	..	..	144	7	50,189
Werribee-Bacchus Marsh ..	16,327	1,632	4,219	786	..	587	4,326	237	11,787
Other Northern Systems ..	19,735	835	8,860	1,433	..	3,710	746	107	15,691
Other Southern Systems ..	§	..	..	..	..	..	1,114	203	1,317
Private Diversions† ..	§	9,068	62,246	9,013	3,135	5,289	9,598	9,872	108,221
Total .. ..	†2,151,727	67,014	754,323	50,111	44,817	40,274	21,735	28,906	1,007,180

\* Including First Mildura Irrigation Trust (13,722 acres irrigated) supervised by the Commission.

† Area authorized to be irrigated, excludes 37,529 acres irrigated by private diverters in the Torrumbarry Irrigation System.

§ Not available.

† Incomplete.

The most important works under construction are the £15 mill. channel enlargement and remodelling programme in the Goulburn-Loddon Irrigation System. This has been necessitated by the enlargement of Eildon Reservoir and the construction of Cairn Curran and Tullaroop Reservoirs, which have enabled more than twice as much water to be supplied to the System as was previously available. Half of the new channel works have been finished, and at the present rate of progress the programme should be finished in six years, subject to the availability of funds.

An important addition to storage capacity at present under construction, is the enlargement of Eppalock Reservoir on the Campaspe River, from 1,200 to 250,000 acre-feet. This will provide 12,000 acre-feet annually for pumping to the Bendigo Urban Area (at present wholly dependent on the Coliban River storages) and some 55,000 acre-feet, for irrigation and domestic and stock use, along the Campaspe River and in the Goulburn and Torrumbarry Irrigation Systems.

Victoria will also benefit greatly by enlargement works being carried out for the River Murray Commission at Hume Reservoir.

### **Further References**

The history of State irrigation is described on pages 479 to 483 of the Victorian Year Book 1962.

### *Water Supply of the Wimmera-Mallee Region*

#### *Introduction*

The need for an adequate and reliable supply of water has always been the primary consideration in the development of the Wimmera and Mallee regions of north-western Victoria. This need, and the difficulty in meeting it satisfactorily, has resulted in the construction of the most extensive scheme of its kind in the world, and has provided one of the most interesting chapters in the history of Victoria's water supply.

#### *System Today*

The Wimmera-Mallee System has been developed and is operated by the State Rivers and Water Supply Commission. The area served with water extends over some 10,000 square miles, or one-ninth of the total area of Victoria\*, and its annual output of primary products returns the farmers about £30 mill., which is approximately one-tenth of the State's total farm production.

Water is supplied principally from reservoirs in the Grampian Ranges. Of these, Rocklands and Toolondo Reservoirs, the largest and most recently constructed, regulate the flow of the Glenelg River,

---

\* Other areas in the Mallee, served by pumping from the River Murray, are not included in the system referred to in this article.

while Lake Lonsdale, Wartook, Fyan's Lake, Taylor's Lake, and Pine Lake are in the catchment of the Wimmera River.

Individual storage capacities are as follows :—

Name				Acre-feet
Rocklands	..	..	..	272,000
Toolondo	..	..	..	86,000
Lake Lonsdale	..	..	..	53,300
Wartook	..	..	..	23,800
Fyan's Lake	..	..	..	17,100
Taylor's Lake	..	..	..	30,000
Pine Lake	..	..	..	52,000
Others	..	..	..	29,600
				563,800

Average annual requirements of the system are approximately 100,000 acre-feet at headworks, of which about 10,000 acre-feet are needed for supply to 50 cities and towns with a combined population of 60,000 served by urban pipe reticulation.

Each farm is entitled to receive annually 5 acre-feet of water per square mile of the rated property. Rates are levied on the basis of the valuation of each property served, with a minimum amount of rate on each property based on its area. Total revenue from rural lands amounts to approximately £300,000—an average of £45 per farm—while the State bears a similar sum in the form of interest charges on total capital expenditure of £7,500,000.

### *Early History*

The first attempt at water conservation in the Wimmera occurred some time in the 1840's, when the Wilson brothers dammed the Wimmera River to divert water down the Ashens and Yarrambiack Creeks. It was not until the severe drought of 1877, however, that it became apparent that a major water conservation scheme was needed to overcome the water supply problem. An expert investigation resulted in the Water Conservation Act of 1881, which was the first major legislation relating to water supply in Victoria. The Act provided for the establishment of separate local authorities (Trusts) to carry out water supply works using Government funds. The first reservoir to be constructed in the area, Wartook, was completed in 1887, but was proved to be quite inadequate by the severe drought of 1895 to 1902. During those years, practically all the stock in the area commanded by the system had to be transported to the Western District and Gippsland.

The need to co-ordinate the activities of the many Trusts set up under the 1881 Act led to the establishment of the State Rivers and Water Supply Commission, and by 1909, all developmental works were being administered by the Commission. One of the immediate tasks to be faced was the intensification of the programme to replace

inefficient natural carriers with artificial channels, and this project, although not complete at the time, saved the country from disaster in the 1914 drought. Following the 1914 experience, construction of both Fyan's Lake and Taylor's Lake was authorized, and authorization for Pine Lake followed after another very dry year in 1919.

A further dry period began in 1927 and, as an emergency measure, the Waranga Western channel was extended 130 miles from the Loddon River to Beulah East. This relieved the situation in the northern section of the system, but the position in the south was still critical and to overcome this problem the Government authorized the construction of a channel through the Divide to bring water from the Glenelg catchment into the Wimmera catchment.

### *Rocklands Reservoir*

The danger of failure of supplies in drought was virtually removed with the completion in 1953 of Rocklands Reservoir near Balmoral, on the Glenelg River, and the associated Toolondo Storage. These two headworks storages have a combined capacity of well over half of the total capacity available to the system.

Construction of Rocklands was started in 1941, but was suspended in 1942 because of war conditions and not resumed until after the war ended in 1945. Rocklands is the latest of the major concrete dams so far built by the State Rivers and Water Supply Commission.

### *Channel Cleaning*

A major problem in maintenance of the Wimmera-Mallee System, particularly in the Mallee, has always been the removal of sand drift from channels. In 1945-46, expenditure on removing sand was as high as £320,000, whereas expenditure in recent years has averaged £60,000. This tremendous improvement has come about largely by better farming methods and a greater appreciation of the dangers of erosion, partly by the planting of rye corn on channel banks and the ban on fallowing near channels, and partly by development of more efficient means of cleaning channels. A further factor, and one not so readily apparent, has been the amalgamation of holdings in recent years, since this has made sounder crop rotation possible.

### *Flood Protection, River Improvement and Drainage\**

The major flood protection work in Victoria has been the drainage of the Koo-wee-rup Swamp, a depression of 80,000 acres along the seaboard of Westernport Bay, south of the main Gippsland railway. Once useless, this area supports a population of about 4,000 and yields primary production worth approximately £3 mill. annually.

---

\* Drainage works are also needed in most irrigation districts.

Another important area controlled by the Commission is the Carrum Drainage District comprising 30 square miles of low-lying land extending four to five miles inland from Port Phillip Bay and separated from the sea by a broad sand ridge on which are established six bayside towns from Aspendale to Seaford. About 7,000 persons benefit to some degree from flood protection works in this district and construction works, estimated to cost £500,000 over a period of years, are being carried out to bring in further areas and provide still greater assurance against flooding.

A comparatively recent development has been in the field of river improvement—the removal of obstructions and the prevention of erosion and siltation. Under the *River Improvement Act* 1948, provision was made for the formation of local trusts operating under the supervision of the Commission with power to carry out works and levy rates. Nineteen trusts have since been established and are assisted by grants from the Government amounting to about £175,000 annually. In addition, river improvement work is helped by grants from the Rivers and Streams Fund (about £40,000 annually) which comprises mainly licence and permit fees paid for the right to divert water from streams.

A major work recently completed at a cost of about £500,000 is the Lake Corangamite project, north-west of Colac. About 12,500 square miles of private land were flooded between 1952 and 1956 and as there is no outlet from the Lake, it would have been necessary to rely on evaporation for relief by natural agencies. Accordingly, work was undertaken to divert floodwaters, which would otherwise have entered Lake Corangamite, by a channel leading 24½ miles into the Warrambine Creek, which is a tributary of the Barwon River. Besides relieving flooding, this scheme is intended to free a large part of the area around the lake for agricultural use in most years.

### *Spray Irrigation in Agriculture and Dairying*

Spray irrigation in Victoria, for the growing of pastures and fodder crops, is mainly used in connection with private irrigation schemes, and consequently the area irrigated by this method is very small compared with that irrigated by flood systems.

Of the three types of spray irrigation equipment available (low pressure, medium pressure, and high pressure), the medium pressure (35 to 50 pounds per square inch) is the most popular. The normal delivery of water from the spray heads is equal to 20 to 30 points of rain per hour. Various automatic systems have been devised to eliminate the shifting of portable spray lines, which requires three-quarters of an hour's work per acre per irrigation. These automatic systems are more expensive to install and may cost up to £200 per acre compared with a figure around £40 per acre for manually shifted lines.

Some large individual areas of over 100 acres of spray irrigation per farm can be found in Victoria, but the vast majority of private schemes employing this method are of 10 to 20 acres only. This area is generally all that the available water supply can irrigate.

The main crop irrigated is perennial pasture, in which the main species employed (in varying proportions) are perennial ryegrass, cocksfoot, paspalum, white clover and strawberry clover. However, some maize, Japanese millet, saccaline, and cruciferous fodder crops are also grown.

The expense attached to a small private irrigation scheme is high, and consequently efficient utilization of the fodder produced is necessary if the full benefit of the scheme is to be obtained. Rationing of the feed by subdivision, strip grazing or restriction of time allowed for grazing, is usually considered necessary. Using such methods, one acre of irrigated perennial pasture can maintain the lactation of up to four cows throughout the whole of the summer, and this is profitable. The employment of an expensive private irrigation scheme for fodder conservation alone is not by any means as profitable.

## *Agricultural Research, Extension, and Education*

### **Department of Agriculture**

#### *Research*

The high standard of Victoria's agriculture, which produces more than one quarter of Australia's primary produce (measured in terms of value) from less than one-thirtieth of the nation's area, is due in no small measure to the programme of research and advisory services undertaken in recent years.

The Department of Agriculture, which has expanded greatly in recent years, has concentrated on strengthening its existing research stations with new and up-to-date facilities, establishing new research centres, promoting new research projects, and intensifying advisory services.

Recent developments have included a new animal husbandry research laboratory and extensions to the plant breeding laboratory at the State Research Farm, Werribee; considerable additions to the Plant Research Laboratory, Burnley; new buildings at the Biology Branch, Burnley; new laboratories at the Scoresby and Tatura Horticultural Research Stations; and additional research facilities at the Mallee Research Station, Walpeup, Rutherglen Research Station, Tobacco Research Station, Myrtleford, Dairy Research Station, Ellinbank, and the Potato Research Station, Healesville.



Two new research stations—the Pastoral Research Station, Hamilton, and the Irrigation Research Station, Kyabram—have been established and land has been bought adjoining Scoresby and Rutherglen Research Stations to ensure the expansion of research at these stations.

At research centres strategically located in Victoria's rural areas, highly trained scientists are seeking the answers to a wide range of problems which face the primary producer trying to improve the efficiency of his farm. These scientists have already made many notable discoveries which have benefited Victorian agriculture. Outstanding results during the last few years include:—

- (1) Release of the following new plant varieties to growers—

*Wheat*: Olympic, Beacon, and Stockade.

*Oats*: Alpha.

*Medic*: Harbinger.

*Linseed*: Hazeldean and Bonnydoon.

*Flax*: Currong and Standard.

*Tobacco*: Golden Crest.

*Peaches*: Tatura Sunrise, Tatura Dawn, Tatura Sunset, Tatura Aurora.

New varieties of beans, brussels sprouts, cauliflowers and strawberries, have also been made available to farmers.

- (2) A new technique for crossing previously incompatible species of tomatoes. This was done for the first time in the world.
- (3) A new cool storage technique to reduce brown rot damage on peaches.
- (4) Further progress in controlling cool storage rot in Granny Smith apples.
- (5) A storage technique to control black spot in potatoes.
- (6) A cool storage technique to provide high quality pears for the market throughout the year.
- (7) A method of controlling bitter pit of apples.
- (8) Techniques for the eradication of swine plague and the establishment of pneumonia-free piggeries.
- (9) A new method of identifying milk from cows which have been treated with penicillin.
- (10) Field tests for ovine brucellosis.

Extensive progress has also been made in protecting Victoria's horticultural industries from fruit fly, and in eradicating tuberculosis from dairy herds.

#### *Extension*

To speed these research results to the farming community, the Department of Agriculture appoints each year additional trained advisory officers throughout rural Victoria. Recruitment of this

staff has been greatly stimulated by scholarships in agricultural science at Melbourne University, in veterinary science at Sydney and Queensland Universities, and in dairy science at Massey Agricultural College, New Zealand.

These advisory officers use every method of communication to channel technical facts to farmers. Much of their time is taken up with on-the-farm advice, but they also speak at field days and hold discussion group meetings. Their work is also backed by the Department of Agriculture's intensified production of publications, films, and radio services.

The monthly *Journal of Agriculture*, once the Department's only major publication, is now accompanied by the regular industry digests and bulletins. Specially prepared to cater for specific industries (livestock, dairying, potato, horticulture, vegetable and beekeeping) these publications have a total distribution of about 250,000 copies a year. Many advisory pamphlets and bulletins are also available.

Agricultural films produced by the Department and other organizations are screened to farmers by touring mobile projection units. These films are shown to many thousands of primary producers each year. Many favourable comments on the educational value of the Department's farm radio programme—the *Voice of Agriculture*—have been received from primary producers. This programme emanates weekly from every commercial station in rural Victoria. Total broadcasting time is over four hours a week.

Advisory officers have already made considerable use of country television since it began in Victoria.

### **Agricultural Education**

#### *Department of Agriculture*

The Victorian Department of Agriculture through its Division of Agricultural Education has the responsibility for agricultural education at the diploma level in the residential agricultural colleges at Dookie and Longerenong and the non-residential horticultural college at Burnley Gardens.

The main purpose of the colleges is to teach the principles and practice of agriculture and horticulture to those who intend to adopt practical farming or horticulture as a vocation and require a more intimate knowledge of agriculture or horticulture than can be acquired only through practical experience. In addition to achieving this main purpose, the diploma courses also provide a basic training for technical officers who are later employed by government instrumentalities and by firms which manufacture or distribute farmers' requisites or handle farm produce. Some diploma holders engage in teaching agricultural science in schools and others in agricultural journalism. From the horticultural college, some diploma holders proceed to a career in the administration of municipal parks and gardens as well as to such occupations as orchardist, nurseryman, florist, and landscape gardener. Each college offers a diploma course of three years' duration.

Since the completion of new main buildings in 1962, the college at Dookie has accommodation for 260 students, including about 50 second-year University degree students. Longerenong accommodates 70 students. Buildings now being erected will shortly increase the accommodation at Longerenong to 100 students. Burnley Horticultural College has accommodation for 60 diploma students, but also conducts numerous part-time evening classes for persons engaged in horticultural industry and for home gardeners.

As well as training in the vocational subjects, the students are given a good grounding in the related sciences—chemistry, soil science, physics, botany, zoology, entomology, bacteriology, plant pathology and genetics, and in elementary mathematics and agricultural engineering, including surveying. English is taught to Matriculation standard and a good grounding is given in book-keeping and rural economics and management. Students who do well in the diploma course and pass in Matriculation English Expression can, if they so desire, proceed to a degree course in agricultural science and other courses at the University of Melbourne.

Short intensive courses of from one to three weeks' duration in specialized farm subjects are conducted regularly at Dookie Agricultural College for the benefit of members of the farming community. These include a special class each year for country women and a junior young farmers' course.

The Agricultural Education Division is also closely associated with the Royal Agricultural Society of Victoria in the administration and fostering of the Senior Sections of the Young Farmers' Clubs in Victoria and, through a representative Advisory Council, administers an annual government grant for this purpose. The Division also takes a prominent part in the organization of training of visiting Fellows who have been awarded fellowships for training in Australia either through the Colombo Plan or the Food and Agricultural Organization.

#### *Melbourne University School of Agriculture*

The School of Agriculture of the Melbourne University provides a four year degree course for undergraduates leading to the Degree of B.Agr.Sc. and postgraduate work for higher degrees in Agricultural Science. The undergraduate course is based on a first year devoted to pure science subjects; this is followed by three years in which the scientific principles upon which the practice of agriculture is based are presented and the more intensive training is given in those scientific disciplines required by research workers in agriculture. During the second year of the course, the students are in residence at Dookie Agricultural College, where they have the opportunity of combining the advantages of communal college life with close observation and contact with the practice of agriculture.

Research activities at the School of Agriculture cover a wide field including agronomy, agrostology, and animal nutrition and physiology, with basic work in the fields of soil chemistry and agricultural biochemistry as related to both the plant and the animal. Research

into various aspects of agricultural economics and farm management, together with studies of the sociological relationships of the farming community and of the farmer himself, are also undertaken.

The graduates from the School find employment over a wide range of positions. Many join such departments as the Department of Agriculture, the State Rivers and Water Supply Commission and the Soil Conservation Authority. The more academic students after taking postgraduate training go to research positions in the Commonwealth Scientific and Industrial Research Organization or the Universities, but a number with more commercial interests are taking positions in industrial organizations related to agriculture.

## *Farming*

### **Introduction**

#### *Collection of Statistics*

Since the year 1904, police officers have been required to collect agricultural, pastoral, and dairying statistics from land holders in Victoria. Prior to 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.

The rural statistics contained in this chapter are in the main compiled from annual returns of agricultural, pastoral, and dairying production collected from some 70,000 rural holdings in Victoria at 31st March each year. Schedules are distributed to farmers by about 330 local police officers who act as collectors of statistics. 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 visited, and full particulars are obtained of the area occupied, the rural population, the number of persons employed, the area and yield of each kind of crop cultivated, artificial fertilizer usage, numbers of certain items of farm machinery, the number and description of livestock and the quantity of wool clipped.

Data relating to area sown, production, yield per acre, and number of holdings growing crops are for the season ended 31st March, thus including crops which are sown and harvested, or harvested, during the twelve months ended 31st March.

In cases where harvesting of certain crops has not been completed by the 31st March (potatoes fruit, vines, &c.), supplementary collections are made later in the year.

Livestock numbers, farm machinery on rural holdings, and the number of persons working are reported at 31st March, whilst wage and salary payments relate to the twelve months ended 31st March.



### Land Occupied in Different Districts, 1960-61

For the season 1960-61, the number of occupiers of rural holdings was 69,623, the area devoted to agriculture 6,722,521 acres, and the total area occupied 37,934,319 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 the opposite page.

### VICTORIA—LAND IN OCCUPATION IN EACH DISTRICT, SEASON 1960-61

(Areas of 1 acre and upwards)

Statistical District	Total Area of Districts (Acres)	Number of Holdings	Acres Occupied				Total
			For Agricultural Purposes*	For Pasture		Unproductive	
				Sown Grasses, Clover, or Lucerne†	Natural Grasses		
	'000	No.		'000			
Central ..	4,065	14,424	279	1,118	940	333	2,670
North-Central ..	2,930	4,428	90	413	1,375	214	2,092
Western ..	8,775	12,790	282	3,297	2,342	649	6,570
Wimmera ..	7,395	6,094	1,826	1,423	2,178	663	6,090
Mallee ..	10,784	6,284	2,923	523	3,289	847	7,582
Northern ..	6,337	11,558	1,120	1,373	2,711	341	5,545
North-Eastern ..	7,221	5,018	112	709	1,883	941	3,645
Gippsland ..	8,739	9,027	91	1,190	1,185	1,274	3,740
<b>Total ..</b>	<b>56,246</b>	<b>69,623</b>	<b>6,723</b>	<b>10,046</b>	<b>15,903</b>	<b>5,262</b>	<b>37,934</b>
PERCENTAGE OF ABOVE TO AREA OCCUPIED							
Central ..	..	..	10.45	41.87	35.21	12.47	100.00
North-Central ..	..	..	4.30	19.74	65.73	10.23	100.00
Western ..	..	..	4.29	50.18	35.65	9.88	100.00
Wimmera ..	..	..	29.98	23.37	35.76	10.89	100.00
Mallee ..	..	..	38.55	6.90	43.38	11.17	100.00
Northern ..	..	..	20.20	24.76	48.89	6.15	100.00
North-Eastern ..	..	..	3.07	19.45	51.66	25.82	100.00
Gippsland ..	..	..	2.43	31.82	31.68	34.07	100.00
<b>Total ..</b>	<b>..</b>	<b>..</b>	<b>17.73</b>	<b>26.48</b>	<b>41.92</b>	<b>13.87</b>	<b>100.00</b>
PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE							
Central ..	7.23	20.72	4.15	11.13	5.91	6.33	7.04
North-Central ..	5.21	6.36	1.34	4.11	8.65	4.07	5.51
Western ..	15.60	18.37	4.19	32.82	14.73	12.33	17.32
Wimmera ..	13.14	8.75	27.16	14.16	13.70	12.60	16.05
Mallee ..	19.17	9.03	43.48	5.21	20.68	16.10	19.99
Northern ..	11.27	16.60	16.66	13.67	17.05	6.48	14.62
North-Eastern ..	12.84	7.21	1.67	7.06	11.84	17.88	9.61
Gippsland ..	15.54	12.96	1.35	11.84	7.44	24.21	9.86
<b>Total ..</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

\* Excludes area of clover and grasses cut for hay and seed.

† Includes oats and barley sown for grazing and lucerne fed off.

### Size of Holdings Showing Areas Cultivated and Grazed

A detailed cross classification of holdings by size and area of main crops or number of livestock is prepared approximately every five years. The following table shows some of the information, in summary

form, from the last classification of this type taken at 31st March, 1960 :—

VICTORIA—SIZE OF HOLDINGS SHOWING AREAS UNDER WHEAT AND STOCK DEPASTURED, 31st MARCH, 1960

Size of Holdings (Including Crown Lands Held)	Number of Holdings	Area Occupied	Holdings with—				
			Wheat	Sheep	Dairy Cattle	Beef Cattle	Pigs
acres		acres			No.		
1- 99 ..	21,803	841,772	4,352	2,864	11,070	2,271	2,510
100- 199 ..	12,374	1,750,203	3,064	3,927	9,842	2,361	2,670
200- 299 ..	6,499	1,569,717	1,899	3,489	4,782	2,005	1,323
300- 399 ..	5,263	1,780,143	1,005	3,707	3,537	2,050	987
400- 499 ..	3,423	1,523,243	545	2,746	2,267	1,533	523
500- 999 ..	11,287	7,931,505	692	10,134	7,434	5,381	1,413
1,000-1,399 ..	3,737	4,409,447	} 68	3,520	2,464	1,830	439
1,400-1,999 ..	2,477	4,081,603		2,382	1,573	1,243	254
2,000-2,999 ..	1,515	3,635,339	} 9	1,476	} 1,661	779	} 291
3,000-4,999 ..	888	3,292,668		858		457	
5,000 and over ..	512	6,920,890		470	321	343	60
Total ..	69,778	37,736,530	11,634	35,573	44,951	20,253	10,470

Artificial Fertilizers

In 1960-61 artificial fertilizers were used on 2,630,341 acres of wheat; 1,089,629 acres of other cereal crops; 74,821 acres of vegetables; 91,937 acres of orchards; 242,219 acres of other crops; and 9,407,813 acres of pastures. Superphosphate is the main fertilizer used on both crops and pastures and in 1960-61 amounted to 162,340 tons or 81 per cent. of the total artificial fertilizer used on all crops and 519,866 tons or 95 per cent. of that used on pastures.

A summary of the area fertilized, quantity used, and number of holdings on which artificial fertilizers were used is shown below for each of the years 1956-57 to 1960-61 :—

VICTORIA—ARTIFICIAL FERTILIZERS

Year	Crops			Pastures		
	No. of Holdings	Area Fertilized	Quantity Used	No. of Holdings	Area Fertilized	Quantity Used
		'000 acres	'000 tons		'000 acres	'000 tons
1956-57 ..	34,454	2,906	151	41,659	8,729	494
1957-58 ..	41,167	3,690	191	43,234	9,684	548
1958-59 ..	*	4,580	229	40,452	8,925	502
1959-60 ..	40,460	4,079	217	38,327	9,153	523
1960-61 ..	31,774	4,129	199	40,561	9,408	546

\* Not available

*Aerial Agriculture*

One of the earliest applications of an agricultural chemical by an aeroplane occurred in Louisiana, U.S.A., in 1917, when a cotton field was dusted with an insecticide. The first recorded application by aircraft in Australia was in 1929, when a pine forest near Ballarat, Victoria, was treated in an attempt to control the lesser case moth. This method of pest control was not continued, however, and it was not until 1948 that the aerial application of fertilizers and sprays began to be appreciated.

About this time farmers and graziers realized the benefit of using aircraft for pasture improvement and for the control of insects and weeds. Terrain which was too steep or rough for topdressing by ground machinery could now be treated by aircraft, giving the property a natural increase in carrying capacity. The spraying of crops could also be more effectively conducted and the aeroplane is, in fact, the best practicable distributor for the spraying of crops such as tobacco, which cannot be treated without damage by existing ground equipment.

The aerial agriculture industry in Victoria grew rapidly and aircraft are now extensively used for topdressing and 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 agriculture is the dropping of young fish into Victorian lakes and streams. A recent large scale air liberation of fish was conducted by the Department of Fisheries and Wildlife. On each stage flight, an aircraft dropped 33,000 fish and the operation represented a considerable saving over the cost of normal ground liberation.

Since 1956-57, statistical information has been collected by the Department of Civil Aviation and details are shown in the following table :—

## VICTORIA—AERIAL AGRICULTURE

Particulars	Unit	Year Ended 31st March—				
		1957	1958	1959	1960	1961
Total Area Treated (*) (†) ..	acre	230,781	339,019	505,805	616,531	806,592
Topdressed or Seeded ..	„	164,326	253,596	253,489	372,597	580,169
Sprayed or Dusted ..	„	66,455	85,423	155,256	134,561	196,297
Materials Used—						
Superphosphate ..	cwt.	234,900	341,300	317,900	459,520	749,020
Seed .. ..	lb.	4,940	7,240	8,320	24,000	1,624
Aircraft Utilization (Flying Time) ..	hour	(‡)	6,662	6,523	6,622	9,598

(\*) Areas treated with more than one type of material in one operation are counted once only.

(†) Includes 97,660 acres baited for rabbit destruction in 1959, 109,373 acres in 1960, and 29,981 acres in 1961; and 345 acres treated for mosquito eradication in 1961.

(‡) Not collected.



As the demand for aerial agriculture has grown, it has been necessary to provide aircraft capable of lifting greater loads with greater safety than the war surplus machines which were once adequate. Aircraft which are capable of carrying more than a ton of topdressing or spraying material are now used, together with other types with carrying capacities of 8 cwt. to 15 cwt. This latter may be used when the topography of the area under treatment is such that landing strips of suitable dimensions for the larger aircraft are not available, or when greater manoeuvrability is necessary. Modern and expensive aircraft, loading equipment, highly trained aircrews, and loader operators are now part of the aerial agriculture industry.

### Farm Machinery

The number of the principal items of farm machinery on rural holdings at the 31st of March during each of the past five years are given in the table below :—

#### VICTORIA—FARM MACHINERY ON RURAL HOLDINGS

Particulars	Number at 31st March—				
	1957	1958	1959	1960	1961
Milking Machines—Units ..	81,729	83,819	85,608	89,657	92,315
Shearing Machines—Stands ..	34,884	34,955	35,951	37,015	37,926
Tractors—Wheeled Type ..	52,275	55,263	57,818	59,438	62,730
—Crawler Type ..	1,621	1,652	1,684	1,730	1,807
Rotary Hoes .. ..	9,166	8,777	9,429	9,180	9,284
Fertilizer Distributors and Broad- casters .. ..	27,336	26,692	27,290	27,948	29,035
Grain Drills—Combine .. ..	19,363	18,360	19,428	18,517	18,749
—Other .. ..	8,206	8,531	8,525	9,531	9,501
Maize Planters .. ..	1,041	972	1,020	998	*
Headers, Strippers and Harvesters	13,722	13,641	13,507	14,216	13,888
Pick-up Balers .. ..	5,468	6,173	7,073	8,040	8,968
Stationary Hay Presses .. ..	3,077	2,658	2,518	2,465	2,584

\* Not collected.

NOTE.—Details of items which have not been collected since 1955 are published in the Victorian Year Book 1954–58, page 88.

### Further Reference

An article on the mechanization of farming will be found on pages 493 to 495 of the Victorian Year Book 1962.

### Rural Finance Corporation

The Corporation was established in April, 1950. Its objects, which are set out in section 5 of the *Rural Finance Corporation Act 1958*, include the making of advances by way of loan at low rates of interest

to existing or proposed country industries, both primary and secondary. The Corporation is the successor in law to the Farmers' Debts Adjustment Board and is empowered to advance moneys to, or for the benefit of, any farmer for the purpose of carrying into effect a composition or scheme of arrangement between him and his creditors.

Revenue, expenditure, &c., of the Corporation for each of the five years 1956-57 to 1960-61 is given in the following table :—

VICTORIA—RURAL FINANCE CORPORATION : REVENUE,  
EXPENDITURE, ETC.  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
REVENUE					
Interest .. .. .	283	337	381	405	437
Other .. .. .	6	5	7	10	12
Total Revenue ..	289	342	388	415	449
EXPENDITURE					
Administration .. ..	41	47	49	54	58
Interest .. .. .	167	202	250	261	278
Sinking Fund .. .. .	18	23	19	20	20
Other .. .. .	7	8	21	9	16
Total Expenditure ..	233	280	339	344	372
Net Surplus .. .. .	56	62	49	71	77
Loans and Advances Outstanding at 30th June .. .. .	7,559	8,147	8,611	8,731	9,365
Loan Indebtedness to State Government at 30th June ..	6,557	7,223	7,734	7,836	8,323

### *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 1955 and the actual area for each of the following six seasons 1956 to 1961 :—

### VICTORIA—ACREAGE CULTIVATED ANNUALLY

Period or Year (Ended March)	Annual Average Area in Each Decennium, 1856-1955, and Actual Area Each Year 1956-1961, under—		
	Crop*	Fallow	Total Cultivation
	acres	acres	acres
1856-65 .. .. .	325,676	12,146	337,822
1866-75 .. .. .	624,377	57,274	681,651
1876-85 .. .. .	1,306,920	137,536	1,444,456
1886-95 .. .. .	2,109,326	364,282	2,473,608
1896-1905 .. .. .	3,022,914	524,197	3,547,111
1906-15 .. .. .	3,756,211	1,276,148	5,032,359
1916-25 .. .. .	4,594,244	1,852,145	6,446,389
1926-35 .. .. .	5,233,894	2,501,357	7,735,251
1936-45 .. .. .	4,435,645	2,142,953	6,578,598
1946-55 .. .. .	4,635,982	2,311,401	6,947,383
1956 .. .. .	4,542,096	1,982,742	6,524,838
1957 .. .. .	3,637,352	1,879,812	5,517,164
1958 .. .. .	4,051,249	1,644,764	5,696,013
1959 .. .. .	4,790,989	2,187,212	6,978,201
1960 .. .. .	4,482,757	2,180,266	6,663,023
1961 .. .. .	4,504,732	2,217,789	6,722,521

\* Until 1960 the area of crop included pasture cut for hay and seed. For 1961, area of pasture cut for hay and seed is included under pasture.

### 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 1960-61 :—

### VICTORIA—AREA, YIELD, AND GROSS VALUE OF CROPS, 1960-61

Crop	Area	Yield	Gross Value*
Cereals for Grain—	acres		£
Barley—			
2 row .. .. .	293,475	7,391,548 bushels .. ..	3,213,765
6 row .. .. .	15,818	326,836 bushels .. ..	102,519
Maize .. .. .	2,985	171,104 bushels .. ..	136,916
Oats .. .. .	834,920	20,665,818 bushels .. ..	6,478,734
Rye .. .. .	22,895	187,659 bushels .. ..	117,287
Wheat .. .. .	2,671,601	67,586,836 bushels .. ..	48,243,600
Hay—			
Barley and Rye .. .. .	10,595	16,943 tons .. ..	130,741
Lucerne .. .. .	84,061	165,868 tons .. ..	1,794,205
Meadow .. .. .	974,936†	1,767,271 tons .. ..	16,450,235
Oaten .. .. .	180,224	309,647 tons .. ..	2,937,914
Wheaten .. .. .	36,430	78,183 tons .. ..	705,101
Green Fodder .. .. .	101,203		1,035,392
Grey and Other Field Peas .. .. .	13,327	213,454 bushels .. ..	228,483
Grass and Clover Seed .. .. .	29,406†	39,334 cwt. .. ..	440,982

VICTORIA—AREA, YIELD, AND GROSS VALUE OF CROPS, 1960-61—  
*continued*

Crop	Area	Yield	Gross Value*
Industrial Crops—	acres		£
Broom Millet .. .. .	311	{ 1,338 cwt. fibre ..	14,049
Linseed .. .. .	6,179	606 cwt. seed ..	1,000
Hops .. .. .	456	40,508 bushels ..	70,877
Mustard .. .. .	456	6,937 cwt. ..	297,813
Tobacco .. .. .	9,932	560 cwt. ..	3,946
		86,854 cwt. ..	4,225,428
Vegetables—			
Onions .. .. .	3,532	16,286 tons ..	750,406
Potatoes .. .. .	38,672	180,819 tons ..	9,343,013
Other .. .. .	35,295	209,363 tons ..	10,084,347
Stock Fodder—			
Pumpkins .. .. .	399	.. .. .	16,958
Turnips, Beet, &c. ..	20,174	.. .. .	474,089
Vineyards—			
Grapes—			
Table .. .. .	2,361	7,120 tons ..	601,288
Wine .. .. .	4,983	14,093 tons ..	287,095
Drying .. .. .	35,344	299,638 tons producing—	
		45,725 tons of sultanas	6,320,500
		5,278 tons of raisins	671,453
		5,583 tons of currants	734,033
Vines, Unproductive ..	1,961	.. .. .	..
Orchards—			
Productive .. .. .	47,594	.. .. .	12,678,961
Unproductive .. .. .	23,821	.. .. .	..
All Other Crops .. .. .	5,728	.. .. .	4,327,023
Total Crops .. .. .	5,509,074	.. .. .	132,918,153

\* The gross value is based on the wholesale price realized 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 the principal markets.

† These areas which represent pasture cut for hay and seed have been excluded from the "Area under Crop" in the previous table as indicated.

The following table shows the numbers of growers of certain primary products, in each statistical district of the State, for the season 1960-61.

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.

VICTORIA—GROWERS OF CERTAIN CROPS, SEASON 1960-61

Crops Grown	Growers in Each Statistical District								Total
	Central	North-Central	West-ern	Wim-mera	Mallee	North-ern	North-East-ern	Gipps-land	
Grain Crops—									
Wheat .. .. .	364	275	380	3,715	2,866	3,385	441	46	11,472
Oats .. .. .	358	391	992	2,923	1,988	2,737	641	77	10,107
Barley .. .. .	559	79	178	830	1,220	914	119	78	3,977
Maize .. .. .	3	..	2	..	..	1	37	166	209
Green Fodder—									
Maize .. .. .	529	61	277	13	9	30	78	787	1,784
All Other .. .. .	1,059	429	1,433	65	58	375	401	874	4,694
Other—									
Potatoes .. .. .	1,663	448	614	15	18	13	153	526	3,450
Onions .. .. .	284	..	249	6	10	3	3	5	560
Other Vege- tables	1,328	18	201	51	314	602	25	95	2,634
Orchards .. .. .	1,848	152	110	152	1,259	987	175	100	4,783
Vineyards .. .. .	1	1	..	11	2,385	102	24	..	2,524
Grass and Clover Seed	32	58	195	57	8	85	91	15	541
Tobacco .. .. .	..	1	..	..	2	67	329	..	*399

\* Excluding share-farmers.

A summary of the area under cultivation in each statistical district of the State for the season 1960-61 is given in the following table :—

VICTORIA—AREA UNDER CULTIVATION, SEASON 1960-61  
(Acres)

Crop	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-eastern	North-Eastern	Gippsland	
Grain Crops—									
Wheat ..	21,282	15,465	25,531	780,888	1,321,615	464,292	40,315	2,213	2,671,601
Oats ..	13,707	12,832	53,472	235,888	311,593	185,800	19,726	1,902	834,920
Barley ..	37,313	1,700	4,436	61,613	151,502	46,762	3,575	2,392	309,293
Maize ..	125	..	4	..	..	8	202	2,646	2,985
Field Peas ..	7,649	660	4,161	85	245	84	110	333	13,327
All Hay ..	175,113	66,883	340,434	144,717	55,316	252,635	94,196	156,952	1,286,246
Green Fodder ..	20,892	8,636	36,061	2,129	2,829	8,508	6,524	15,624	101,203
Grass and Clover for Seed ..	1,800	2,116	11,891	3,583	800	4,918	3,934	364	29,406
Tobacco ..	..	5	..	..	30	1,490	8,407	..	9,332
Potatoes ..	21,390	6,530	5,613	66	80	52	692	4,249	38,672
Onions ..	1,429	..	2,019	6	14	2	3	59	3,532
All Other Vegetables ..	18,300	49	6,651	167	3,506	5,248	157	1,217	35,295
Vines ..	1	35	..	711	41,768	656	1,478	..	44,649
Orchards ..	24,102	2,553	681	3,939	7,224	30,674	1,730	512	71,415
All Other Crops	8,223	862	12,855	443	22,345	2,380	1,915	7,575	56,598
Total Area under Crop ..	351,326	118,326	503,809	1,234,235	1,918,867	1,003,509	182,964	196,038	5,509,074*
Land in Fallow	71,214	18,752	78,024	690,369	1,023,332	300,666	6,967	28,465	2,217,789
Total Area under Cultivation ..	422,540	137,078	581,833	1,924,604	2,942,199	1,304,175	189,931	224,503	7,726,863

\* See footnote to first table on page 515.

The following table shows the yields, in statistical districts, of the principal crops for the season 1960-61 :—

VICTORIA—YIELDS OF PRINCIPAL CROPS, SEASON 1960-61

Crop	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-eastern	North-Eastern	Gippsland	
Grain Crops—									
Wheat bush.	571,351	371,040	642,429	22,024,420	30,172,558	12,583,881	1,156,138	65,019	67,586,836
Oats ..	385,552	349,451	1,310,550	5,965,581	6,562,425	5,458,568	591,985	41,706	20,665,818
Barley ..	1,230,388	45,643	83,040	1,538,303	3,347,574	1,314,789	79,034	79,613	7,718,384
Maize ..	3,950	..	75	..	..	80	8,185	158,814	171,104
Field Peas ..	127,013	9,055	60,605	2,279	3,860	2,644	1,690	6,308	213,454
All Hay tons	332,590	113,468	608,199	244,548	82,825	438,656	185,530	332,096	2,337,912
Grass and Clover for Seed cwt.	2,715	2,701	15,657	5,429	1,405	7,198	3,808	421	39,334
Tobacco ..	..	18	..	..	173	15,453	71,210	..	86,854
Potatoes tons	96,056	34,294	27,198	235	367	208	2,591	19,870	180,819
Onions ..	6,399	..	9,504	33	89	13	12	236	16,286
Wine Made gall.	*	*	..	*	*	*	*	..	3,020,960
Dried Vine Fruits—									
Raisins tons	..	..	..	..	5,251	27	..	..	5,278
Sultanas ..	..	..	..	..	45,725	..	..	..	45,725
Currants ..	..	..	..	..	5,572	11	..	..	5,583

\* Details for individual districts are confidential.

## 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 for all main crops grown in the State including those mentioned above.

### Wheat

Wheat is the main crop grown in Victoria, occupying approximately 2½ million acres or about half the total acreage under crop. The average annual production is about 44 million bushels, of which 60 per cent. is exported. Only 2 per cent. of the area sown is cut for hay. Grain yield averages 20 bushels per acre, but can be as high as 60 bushels per acre on individual farms in good seasons. The highest yield officially recorded is 78·8 bushels per acre for 50 acres grown at Murtoa in 1960.

The main wheat belt lies in the Mallee, Wimmera, and Northern Districts, where 95 per cent. of the crop is grown. The average annual rainfall varies from 11 inches in the northern Mallee to about 20-22 inches at the southern and eastern boundaries.

Wheat is grown in three major soil types: (1) the high-fertility, self-mulching, grey soils of heavy texture in the southern Wimmera; (2) red-brown earths of varying texture in the northern Wimmera and the Northern District; and (3) solonized brown soils in the Mallee.

Sheep are run on most wheat farms for wool and/or fat lamb production. Wheat crops are generally grown on bare fallow land, seeding taking place from April to June. Superphosphate is applied at seeding to virtually all crops. The crop is harvested in December-January. Diseases are not a major problem, but occasionally some heavy losses can occur due to stem rust and root rots. Weeds are controlled by fallow cultivation and crop spraying.

The wheat varieties grown in Victoria are of the soft white class. The environment does not generally favour the production of wheat of very high baking quality, but recent developments, including the adoption of clover and medic ley rotation systems and the production of high yield, high quality varieties are leading to considerable quality improvement.

Victorian wheat is marketed by the Australian Wheat Board in one grade known as fair average quality (f.a.q.).

### *Agricultural Development in the Mallee during the Last Decade*

During the last ten years, there have been significant changes in the agricultural practices followed by Mallee farmers and in their way of life. A period of prosperity has provided better housing, modern domestic appliances, modern cars, and comparatively good roads.

An appraisal of the Mallee farmers' situation in the post-war period disclosed mounting damage from wind erosion and a degree of property neglect due to the general shortage and cost of rural labour. During the past decade energetic efforts have been made to remedy these ills. Mallee farms are highly mechanized today, and this reduces the demand for seasonal labour. The farmer himself is also acutely conscious of the advantages of practising both soil conservation and fodder conservation.

The results of scientific research are being freely applied to farming practices and these have caused a greater use of sown pastures and a favourable modification of crop rotational practice.

The area sown to medic pastures increased from 77,000 acres in 1951 to 359,000 acres in 1959. Improved soil fertility following the use of medic pastures has produced heavier crops with better quality grain. At the same time, better pastures and longer rotations have enabled the farmer to build up reserves of fodder and support greater stock numbers throughout the year.

In 1951, 1,168,055 acres were sown with wheat. This acreage remained much the same during the first half of the decade, but declined to under 1 mill. acres between 1956 and 1959. In 1960, however, it increased to 1,233,161 acres.

During the decade, there has been a steady upward trend in the average yield of grain per acre. This is due to the farmer's ready acceptance of new cereal varieties—which have been bred specifically by the Department of Agriculture to suit Mallee conditions. This plant breeding work is carried out at the State Research Farm at Werribee, and the Mallee Research Station at Walpeup.

Fodder conservation is mainly in the form of oaten grain stored in vermin proof silos, and oaten or pasture hay baled and stacked by modern machinery.

Higher incomes have enabled the farmer to finance the purchase of more and better machinery. Tractors with greater power and speed, and machinery mounted on rubber wheels make it possible to carry out cultural operations quickly and thus take maximum advantage of favourable soil or weather conditions, while bulk handling equipment for the collection of grain has increased the speed and efficiency of harvesting.

Research and experiments into methods of preventing wind erosion of soils have shown that soil can be kept in place by some modification of traditional farm practices and by the use of special cultivating equipment. These methods are being followed by Mallee farmers.

A less favourable feature of the past decade has been the increasing spread of skeleton weed which so far has not been effectively contained or controlled. Saffron thistle also is strongly established in Mallee areas, but can be controlled by skilled cultural practices and chemical sprays. Nevertheless, its presence adds to the cost of grain production.

Despite these problems, Mallee agriculture has developed tremendously during the past decade and this development has been paralleled by better living amenities, hospitals, and educational facilities.

#### *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. On submissions made by the Board to, and approved by, the Government, 197 country receiving elevators and a shipping terminal have been constructed, the necessary finance being obtained from loans totalling £3,806,015. Repayment of the principal and interest are guaranteed by the Victorian Government.

The Grain Elevators Board first received and shipped Victorian wheat in bulk for the 1939-40 season.

Prior to the introduction of bulk handling by the Grain Elevators Board, many wheat growers had opposed that method of handling their wheat. One season of operation of the Board's bulk handling system in any wheat producing area was sufficient to allay the fears of those growers and prove to them that the bulk handling system not only saved labour on the farms, but materially reduced the over-all handling costs for wheat.

The Board's Geelong Terminal is the most modern and the largest single wheat shipping terminal in the world. Its operation is by push-button remote control with operational indicator lights appearing on a diagram panel of the whole terminal. Wheat can be received from rail trucks at the rate of 1,200 tons per hour and can be shipped from the terminal at the 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 claims that wheat is taken off the farms by the Board in a shorter period and handled at a lower cost per bushel than is achieved by any other wheat bulk handling system in Australia or anywhere throughout the world.

The use of the tractor as well as the introduction of more modern harvesting machinery now permits growers to harvest wheat with moisture considerably in excess of that which was possible when they had to rely on horses to haul their harvesting machines. High moisture content, particularly when associated with high temperatures, can lead to considerable deterioration in wheat in a variety of ways. This deterioration means loss to the industry and necessitates precautions against acceptance at the country receival elevators of wheat with an unduly high moisture content.

Such deterioration is due to various biological causes and may take place at moisture levels much lower than those necessary for germination of the grain. The fact that Victorian wheat is normally harvested and put into storage at a time of the year when temperatures are high, and will remain high for several months, is an added complication



seldom found in other wheat-growing countries. Research is proceeding on the matter. Fortunately, a simple moisture meter, giving an indication of the moisture in a load of grain is available for use at all country receival elevators.

In addition to erecting its own country receival facilities, the Board has leased from country flour millers specified quantities of the storage constructed by millers.

The Grain Elevators Board has under its control storage for 72 mill. bushels of wheat. The largest quantity of wheat delivered to railway stations by Victorian growers in any one season prior to the 1960-61 season was 59,175,593 bushels in 1915-16. A new record was established during the 1960-61 season when 63,009,684 bushels were delivered. Despite very low rainfall during the 1961 wheat-growing period, the deliveries reached 54,680,000 bushels for the 1961-62 season.

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 31st October—				
	1957	1958	1959	1960	1961†
<b>REVENUE</b>					
Australian Wheat Board—Operating and Maintenance Expenses ..	492	480	478	513	704
Australian Wheat Board—Capital Facilities Allowance .. ..	262	312	342	350	368
Interest on Investments .. ..	59	53	63	90	103
Other .. .. .	..	1	1	1	1
<b>Total Revenue .. ..</b>	<b>813</b>	<b>846</b>	<b>884</b>	<b>954</b>	<b>1,176</b>
<b>EXPENDITURE</b>					
Operating and Maintenance Expenses .. ..	310	268	281	291	462
Administration Expenses .. ..	99	119	101	107	128
Depreciation and Renewals .. ..	83	93	96	114	114
Interest on Loans .. ..	167	177	178	188	207
Sinking Fund Charges .. ..	31	31	32	34	42
Appropriations to Reserves .. ..	110	113	131	252*	164
Other .. .. .	4	7	7	7	6
<b>Total Expenditure .. ..</b>	<b>804</b>	<b>808</b>	<b>826</b>	<b>993</b>	<b>1,123</b>
Net Surplus .. .. .	9	38	58	—39	53
Fixed Assets (At 31st October) ..	3,860	4,064	4,229	4,429	4,606
Loan Indebtedness (At 31st October)—					
State Government .. ..	965	955	946	935	924
Public .. .. .	2,808	2,774	2,838	3,195	3,894

\* Including £100,000 appropriated from profits accumulated in previous years.

† Subject to revision.

### *Australian Wheat Board*

The Australian Wheat Board, which is the sole marketing authority for Australian wheat, consists of a Chairman and four other Commonwealth Government appointees, whilst the remaining ten members are representatives of wheat growers in the five main wheat-growing States, each such State being represented by two members.

The current Stabilization Plan, ending with the 1962-63 season, provides for a guaranteed price to growers on up to 100 mill. bushels of exports from each season's wheat. The guaranteed price for wheat of a particular season is an amount equal to the cost of production of wheat of that season as determined in accordance with the Commonwealth Stabilization Act. For season 1960-61, it was fixed at 15s. 2d. per bushel and for season 1961-62, at 15s. 9d. per bushel.

Total deliveries by wheat growers to the Victorian Branch of the Australian Wheat Board during season 1960-61 were 66,886,566 bushels, including 2,728,586 bushels delivered to Victorian controlled receival points in Southern New South Wales. Season 1960-61 opened well, with good April-May rains, ranging from 3 inches in the Mallee to 5 inches in the Wimmera, thus enabling wheat to be sown under ideal conditions. Favourable weather was experienced to October when there was a dry period associated with high temperatures and hot northerly winds. However, with above average rainfall in November, the season finished well, with record deliveries to the Board and a record average yield of approximately 25 bushels per acre.

### *Wheat Standard*

The fair average quality (f.a.q) standard is fixed 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.

The f.a.q. standard method is peculiar to Australia, other countries selling according to sample or fixed grades.

The following table shows the standard determined in Victoria for each of the ten seasons, 1951-52 to 1960-61 :—

#### VICTORIA—WHEAT STANDARD

Season			Weight of Bushel of Wheat, f.a.q.	Season			Weight of Bushel of Wheat, f.a.q.
			lb.				lb.
1951-52	..	..	64	1956-57	..	..	65½
1952-53	..	..	64¾	1957-58	..	..	65½
1953-54	..	..	64½	1958-59	..	..	64
1954-55	..	..	62½	1959-60	..	..	62½
1955-56	..	..	63¾	1960-61	..	..	64½

*Area Sown, Production, and Gross Value*

In the following table the area, production, average yield, and gross value of production of wheat for each of the seasons, 1956-57 to 1960-61 are shown :—

## VICTORIA—WHEAT STATISTICS

Season			Area	Production	Average Yield per Acre	Gross Value
			'000 acres	'000 bushels	bushels	£'000
1956-57	..	..	1,565	35,282	22·54	24,041
1957-58	..	..	1,835	32,134	17·51	22,065
1958-59	..	..	1,810	42,697	23·59	28,274
1959-60	..	..	2,261	38,793	17·16	26,743
1960-61*	..	..	2,672	67,587	25·30	45,855

\* The production and average yield for 1960-61 were records.

*Farmers Growing Wheat for Grain*

The following statement shows the number of farmers engaged in growing wheat for grain :—

## VICTORIA—NUMBER OF HOLDINGS WITH TWENTY OR MORE ACRES OF WHEAT FOR GRAIN

1956-57	1957-58	1958-59	1959-60	1960-61
7,674	8,856	9,074	10,561	10,625

*Wheat Breeding*

The breeding of improved varieties of wheat for cultivation by the Victorian wheat grower is a function of the Victorian Department of Agriculture. The overall objective of the breeding work is to provide the grower with new varieties which will increase yields, reduce losses due to disease and drought and improve the milling and baking quality of the grain which he produces. The increased yields resulting from the introduction of these varieties assist in offsetting increased production costs and assure the grower of a higher monetary return from his crop, while the improved quality of the grain produced ensures a better demand for Victorian wheat both in local and oversea markets.

The Victorian wheat improvement programme is an extremely comprehensive one, involving the co-operation of the wheat breeders with the cereal agronomists, chemists, and plant pathologists of the Department of Agriculture.

New wheat varieties bred by the Department of Agriculture occupy a very large percentage of the Victorian wheat area and have significantly increased local production. This represents an increased monetary return to the wheat grower. In addition, the introduction of these varieties has resulted in a substantial improvement in the quality of the grain produced with a corresponding improvement in the baking quality of the local flour.

Seven new varieties have been released for sowing since 1946 :—

1946—Insignia	1953—Sherpa
1946—Pinnacle	1956—Olympic
1947—Diadem	1957—Beacon
1960—Stockade	

The following table shows the areas under the principal varieties of wheat, including wheat for hay, for the seasons 1958–59, 1959–60, and 1960–61. Varieties are tabulated in order of popularity for the last mentioned season.

#### VICTORIA—PRINCIPAL VARIETIES OF WHEAT SOWN

Variety (In Order of Popularity) Season 1960-61	1958-59		1959-60		1960-61	
	Acres Sown	Percentage of Total Area Sown	Acres Sown	Percentage of Total Area Sown	Acres Sown	Percentage of Total Area Sown
Insignia ..	872,373	47.34	981,765	42.64	1,325,742	48.96
Pinnacle ..	418,237	22.70	574,979	24.97	582,312	21.50
Olympic ..	132,427	7.19	316,148	13.73	384,599	14.20
Sherpa ..	163,889	8.89	163,818	7.11	135,351	5.00
Quadrat ..	121,250	6.58	119,428	5.19	94,646	3.50
Insignia 49 ..	51,097	2.77	64,463	2.80	91,036	3.36
Baldmin ..	17,601	0.96	21,613	0.94	16,342	0.60
Gabo ..	18,519	1.01	7,383	0.32	14,638	0.54
Beacon ..	920	0.05	8,452	0.37	14,638	0.54
Sabre ..	9,698	0.53	8,691	0.38	11,831	0.44
Magnet ..	10,009	0.54	10,472	0.45	7,921	0.29
All Other Varieties ..	26,590	1.44	25,226	1.10	28,975	1.07
<b>Total ..</b>	<b>1,842,610</b>	<b>100.00</b>	<b>2,302,438</b>	<b>100.00</b>	<b>2,708,031</b>	<b>100.00</b>

#### *Wheat Growing in Conjunction with Livestock Grazed*

A table showing the number of holdings in Victoria growing wheat for grain, together with sheep, dairy cattle, beef cattle, and pigs as at 31st March, 1960, appears on page 510.

*Oats*

The area sown to oats in Victoria is about 1·1 mill. acres, of which about 60 per cent. is harvested for grain, 20 per cent. cut for hay, and 20 per cent. grazed completely. Some of the area harvested for grain is also grazed during the winter. The average annual grain production is about 15 mill. bushels (40 lb. per bushel) and the average hay production 325,000 tons. Average grain yield is 20 bushels per acre and average hay yield is 1½ tons per acre.

About 87 per cent. of the area sown for grain is in the Mallee, Wimmera, and Northern Districts. Oat grain is used on farms for stock feeding and is often held in large quantities for this purpose as an insurance against drought losses. Grain is sold on an open market through merchants or through the voluntary oat pool, and prices fluctuate widely according to seasonal conditions and supplies available. Better quality oats may be bought at a premium for milling purposes.

Oaten hay is grown for farm use in all districts and for sale in areas where chaff mills operate (i.e., near Melbourne and Ballarat). About 40 per cent. of the area sown to hay is in the Mallee, Wimmera, and Northern Districts, and 25 per cent. in the Western District.

Most of the oat area grazed 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 completely grazed acreage is in the Mallee District. Most oat crops are grown on stubble land with very little preparation and with a smaller amount of superphosphate (if any) than is used on wheat crops. About 85 per cent. of the area sown to oats is sown to the varieties Algerian, Orient, and Algeribee.

The area harvested (season 1960–61) for hay was 180,224 acres, and for grain 834,920 acres, which produced 309,647 tons of hay, and 20,665,818 bushels of grain respectively. The area of oats sown for grazing purposes amounted to 149,751 acres. The following table shows the area, yield, and gross value of oats for grain for each of the five seasons 1956–57 to 1960–61 :—

## VICTORIA—OATS FOR GRAIN

Season	Area	Production	Average Yield per Acre	Gross Value
	'000 acres	'000 bushels	bushels	£'000
1956–57 .. ..	613	9,555	15·60	3,315
1957–58 .. ..	622	9,528	15·31	5,313
1958–59 .. ..	971	23,339*	24·04	6,820
1959–60 .. ..	673	12,701	18·87	4,797
1960–61 .. ..	835	20,666	24·75	6,479

\* Record production

*Barley*

Barley is sown on about 300,000 acres in Victoria each year, from which about 6 mill. bushels (50 lb. per bushel) of grain are harvested. The average yield is about twenty bushels per acre. Most of the barley sown is two-row or malting type barley, only a very small acreage being sown to the six-row, feed type.

Barley production is centred in two main districts which have favourable soil and climatic conditions for growing good quality grain suitable for malting. The most important area is the south-western Mallee and the adjoining northern Wimmera, where barley is grown on sandy soils usually in association with wheat. In this district, barley is either sown on wheat stubble land or on ley land cultivated in the autumn just before sowing. The variety Prior is almost exclusively sown, usually with superphosphate. The average district yield is about 15 bushels per acre.

The other important area is in southern Victoria between Geelong and Bacchus Marsh. In this district, barley is the main crop and is usually sown on fallowed land with superphosphate. The variety Research is grown here, and the average yield is about 30 bushels per acre. This area is close to the main shipping terminals and growers' freight costs are considerably lower than in the northern areas. Barley is grown less intensively in other districts and the quality is rarely up to malting standard.

Barley is marketed through the Australian Barley Board, which provides an orderly marketing system for the barley produced in Victoria and South Australia. The Board classifies growers' grain, on sample, into three grades—malting, milling, and feed—with a price differential between each grade.

Practically all of the malting grade barley is used in Australia, but most of the milling and feed grades are exported to Europe and Asia.

The following table shows the area, yield, and gross value of barley for each of the five seasons 1956-57 to 1960-61 :—

## VICTORIA—BARLEY PRODUCTION

Season	Area under Crop		Produce		Average per Acre			Gross Value
	Malting (2 row)	Other (6 row)	Malting (2 row)	Other (6 row)	Malting (2 row)	Other (6 row)	Total	
	'000 acres	'000 acres	'000 bushels	'000 bushels	bushels	bushels	bushels	£'000
1956-57 ..	325	20	7,164	385	22.04	18.97	21.86	3,838
1957-58 ..	334	18	5,201	246	15.57	13.91	15.49	3,280
1958-59 ..	343	19	8,174	407	23.80	20.97	23.65	4,165
1959-60 ..	264	14	5,318	274	20.17	19.79	20.15	2,643
1960-61 ..	293	16	7,392	327	25.19	20.66	24.95	3,316

*Maize*

Maize for grain is cultivated mainly in Gippsland. It is grown in Victoria both for grain and for green fodder. The area, yield, and gross value of maize for each of the five seasons, 1956-57 to 1960-61, are given in the following table :—

## VICTORIA—MAIZE PRODUCTION

Season	For Green Fodder	For Grain							
		Area			Production			Average Yield Per Acre	Gross Value
		Hybrid	Other	Total	Hybrid	Other	Total		
acres	acres	acres	acres	bushels	bushels	bushels	bushels	£	
1956-57 ..	6,429	2,214	513	2,727	68,373	12,425	80,798	29·63	66,930
1957-58 ..	8,122	3,459	819	4,278	208,444	33,320	241,764	56·51	158,708
1958-59 ..	7,619	3,135	746	3,881	180,796	22,570	203,366	52·40	136,876
1959-60 ..	9,084	2,981	402	3,383	167,489	12,965	180,454	53·34	131,367
1960-61 ..	11,681	2,742	243	2,985	162,682	8,422	171,104	57·32	136,916

*Rye*

Cereal rye is a minor crop in Victoria, with about 22,000 acres sown to it annually. This acreage, however, is many times greater than the pre-war area of just over 1,000 acres. The average production is about 150,000 bushels (60 lb. per bushel) per year, and the average yield is about 6½ bushels per acre.

Rye is not a cash crop and it is sown mainly for control of sand drift on sandhills in the Mallee District and, to a much lesser extent, for winter grazing in the colder winter districts. Not all of the area sown is harvested, so that the average yield per acre is probably higher than that recorded. The variety sown is almost exclusively South Australian rye. Superphosphate is used as a fertilizer, with a portion of the Mallee area sown with a mixture of superphosphate and ammonium sulphate.

In recent years, European migrants to Australia have created a small demand for rye for human consumption.

The following table shows the area, yield, and gross value of rye for each of the five seasons 1956-57 to 1960-61 :—

## VICTORIA—RYE PRODUCTION

Season	Area	Production	Average Yield per Acre	Gross Value
	acres	bushels	bushels	£
1956-57 ..	19,419	129,729	6·68	94,054
1957-58 ..	17,807	84,975	4·77	72,229
1958-59 ..	27,458	226,320	8·24	114,104
1959-60 ..	22,344	138,438	6·20	88,831
1960-61 ..	22,895	187,659	8·20	117,287

*Hay*

The pattern of hay production in Victoria has changed considerably in the post-war period. More complete mechanization and the virtual disappearance of the working horse have taken the 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 there has been a marked decline in the amount of cereal hay produced.

On the other hand, there have been spectacular increases in the production of other forms of fodder. The annual production of meadow hay has increased from about 400,000 tons to over 1 mill. tons during this period. There has also been a substantial increase in the amount of lucerne hay conserved. Silage has become an important supplement to hay for stock feeding, and silage produced mainly from pasture growth has increased from about 25,000 tons annually to over 300,000 tons in the post-war period.

This increase in fodder conservation has resulted in more efficient utilization of the extra herbage grown as the result of pasture improvement in all districts. Record 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.

Particulars of areas harvested and production of the several kinds of hay appear in the following table :—

VICTORIA—HAY PRODUCTION, 1960-61

Kind	Area	Production	Average Yield per Acre
	acres	tons	tons
Wheaten .. .. .	36,430	78,183	2·15
Oaten .. . . .	180,224	309,647	1·72
Lucerne .. . . .	84,061	165,868	1·97
Barley, Rye, &c. . . . .	10,595	16,943	1·60
Grasses and Clovers .. . . .	974,936	1,767,271	1·81
Total .. . . .	1,286,246	2,337,912	1·82



The following table shows, in respect of each statistical district of the State, the quantity of ensilage made during the 1960-61 season, and the stocks of ensilage and hay held on rural holdings at the 31st March, 1961 :—

VICTORIA—ENSILAGE MADE AND FARM STOCKS OF  
ENSILAGE AND HAY

(Tons)

Statistical District	Ensilage Made, 1960-61	Stocks at 31st March, 1961	
		Ensilage	Hay
Central .. .. .	61,684	43,215	323,334
North-Central .. .. .	6,500	5,722	120,021
Western .. .. .	38,598	32,127	580,206
Wimmera .. .. .	7,731	13,528	315,566
Mallee .. .. .	4,485	15,191	111,968
Northern .. .. .	22,187	29,191	564,048
North-Eastern .. .. .	23,148	25,976	254,807
Gippsland .. .. .	138,865	66,365	370,299
Total .. .. .	303,198	231,315	2,640,249

*Potatoes*

Victoria is the largest producer of potatoes in Australia contributing a little more than 40 per cent. of the total annual requirement. The bulk of the Victorian crop is used within the State for human consumption and seed purposes, the surplus being exported to other States to augment local supplies. Potatoes are generally used as a fresh vegetable, but there is increasing interest in processed forms.

With few exceptions, potatoes are grown in the better soils in higher rainfall areas on and south of the Central Dividing Range, the main districts being Koroit, Beech Forest, Bellarine Peninsula, Ballarat to Trentham, Kinglake, Gembrook, Koo-wee-rup and the Gippsland hill country.

Over the past 20 years there has been a very substantial increase in the volume of potato production in Victoria. This is due, not to greater area, but to improvement in the average yield, which has nearly doubled. Higher yielding varieties now being grown, improved

cultural methods, availability of virus-free seed through certification and approval schemes, and wider use of irrigation have contributed to this improvement. Potato growing has become increasingly mechanized and this has precipitated the trend for production of this crop to pass to specialist growers having larger individual areas.

The following table shows the area, yield, and value of potatoes for each of the five seasons 1956-57 to 1960-61 :—

#### VICTORIA—POTATO PRODUCTION

Season			Area	Production *	Average Yield per Acre	Gross Value
			acres	tons	tons	£'000
1956-57	..	..	39,706	227,307	5.72	5,862
1957-58	..	..	49,846	251,159	5.04	3,326
1958-59	..	..	46,122	259,346	5.62	5,040
1959-60	..	..	48,506	242,548	5.00	5,808
1960-61	..	..	38,672	180,819	4.68	9,343

\* Includes amounts held on farms for seed, stock feed, &c., as follows :—49,755 tons in 1956-57 ; 53,842 tons in 1957-58 ; 42,345 tons in 1958-59 ; 31,951 tons in 1959-60 ; and 23,910 tons in 1960-61.

#### Onions

The principal onion growing areas are in the Central and Western districts. In the season 1960-61 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 1956-57 to 1960-61 :—

#### VICTORIA—ONION PRODUCTION

Season			Area	Production	Average Yield per Acre	Gross Value
			acres	tons	tons	£'000
1956-57	..	..	4,503	26,811	5.95	861
1957-58	..	..	5,368	40,678	7.58	638
1958-59	..	..	3,971	28,456	7.17	1,062
1959-60	..	..	3,994	27,808	6.96	1,012
1960-61	..	..	3,532	16,286	4.61	750

*Linseed*

Linseed oil is one of the chief components of paints, varnishes, and linoleum, and has many other industrial uses. The presscake or meal, which remains after the oil has been extracted from the ground and partly cooked seed, is a valuable stock food.

The following table shows the area, yield, and value of linseed for each of the five seasons 1956-57 to 1960-61 :—

## VICTORIA—LINSEED PRODUCTION

Season			Area	Production	Average Yield per Acre	Gross Value
			acres	bushels	bushels	£
1956-57	..	..	1,143	12,236	10·71	20,236
1957-58	..	..	4,091	45,946	11·23	78,558
1958-59	..	..	8,817	110,779	12·56	193,863
1959-60	..	..	24,850	295,644	11·90	535,089
1960-61	..	..	6,179	39,356	6·37	70,877

*Flax*

Flax is used for linen fibre, flax, tow, linseed (oil and cake), chaff, and winnow refuse for stock feed.

Linen fibre is the long fibre suitable for spinning into threads where strength is required. Fine flax thread is needed for weaving into linen, coarser types for canvas or for fine strong string and cords.

Tow is normally used for padding. The percentage of linen fibre and tow obtained varies with the skill exercised in handling as well as with the variety. Linen fibre usually averages about 10 per cent. and tow 10 per cent. of the straw as delivered from the farm.

The following table shows the area, yield, and value of flax (straw) for each of the five seasons 1956-57 to 1960-61 :—

## VICTORIA—FLAX PRODUCTION

Season			Area	Production (Straw)	Average Yield per Acre	Gross Value
			acres	tons	tons	£
1956-57	..	..	2,196	4,013	1·83	68,553
1957-58	..	..	5,550	9,923	1·79	159,540
1958-59*	..	..	..	..	..	..
1959-60*	..	..	..	..	..	..
1960-61	..	..	430	592	1·38	8,159

\* No production recorded.

*Tobacco*

Tobacco has been grown in Victoria for about 100 years. The history of the industry is punctuated by periods of prosperity alternating with long intervals of recession, and in the period between 1932 and 1948, the tobacco acreage established in Victoria declined from over 12,000 acres to less than 1,000. This contraction indicates the uncertainty then inherent in the industry, and it is only in recent years that it has exhibited any degree of stability.

During the last 40 years, farmers have attempted to produce tobacco in many Victorian districts, but it is only in the north-eastern river valleys and on selected sites in the Murray Valley area that it has proved a profitable commercial venture.

Victorian tobacco-growing activities are directed solely toward the production of flue-cured leaf, which for many years has been demanded almost exclusively by the Australian smoker, and is the type required by the domestic manufacturing industry. The production of this type of tobacco calls for close control over plant growth and nutrition, and is not likely to be successful unless the environment provides conditions falling within precisely defined limits.

The average temperature during the three summer months should approximate 70° to 72° F. without extreme diurnal variation, and a minimum frost-free period of 140 days is essential. In those Victorian areas warm enough to promote normal growth and maturity in tobacco plants, the summer rainfall is neither heavy enough nor sufficiently reliable to ensure satisfactory production. Therefore it is necessary to locate plantations within reach of a reliable water supply which must be of high quality.

Suitable soils are of a sandy or sandy-loam texture to a considerable depth, and must be both friable and well-drained. High fertility is not desirable.

A good deal of manual labour is necessary to handle a tobacco crop, and it is estimated that 500 to 600 man-hours are absorbed by each acre of crop during the course of a season. One man can handle about 7 acres of tobacco in the field, but would require extra assistance at peak periods such as transplanting and harvesting. In Victoria, the bulk of this labour is provided by sharefarmers and only in rare instances is hired labour the sole productive force.

In addition to high labour requirements, much special equipment is needed to produce a crop of tobacco. This includes curing barn accommodation, bulk storage for cured leaf, and spray irrigation equipment. Because of the high capital cost of such installations, and

the high degree of technical skill necessary to produce tobacco of saleable quality, it cannot be regarded as a catch crop, but rather as a permanent system of agriculture towards which the greater part of the farm activities must be directed the whole year around.

For many years the main factor responsible for fluctuating production in the industry has been the fungous disease, blue mould. It has proved to be extremely difficult to achieve positive control of this disease, but recent research work has yielded fungicidal spray programmes which have been largely successful, and a drive towards better farm hygiene is thought to have shown worth-while results during the past several years.

Other tobacco plant diseases cause individual losses from time to time but, by comparison and in the over-all picture, are not of primary importance. On the other hand, recent expansion of production has prompted some re-examination of the question of general leaf quality, which has assumed more importance since production and usage attained their present high level.

The advent of new and inexperienced growers to the industry and the bringing into production of new, and sometimes marginal, lands are factors which militate immediately against leaf quality. These should automatically correct themselves in the time it takes the grower to acquire the necessary technical skills and the land to mellow with use. This assumes that rapid expansion ceases and that further consolidation and stabilization of the industry is achieved around its present level.

Other more enduring problems are posed by the necessity to modify certain leaf characteristics, previously regarded as acceptable, in order to bring them into closer conformity with the types currently demanded, and such considerations set a common objective for various research projects which are being carried out in major producing districts.

Research and extension services have been expanded and largely supported by industry funds since the inception of the Tobacco Industry Trust Account in 1955. Under the auspices of the Department of Agriculture, a Tobacco Research Station has been in operation at Myrtleford for some years, and a Research Sub-station is projected for Gunbower in the Murray Valley in the near future. Such establishments can only be of continuing and increasing benefit to the industry.

The whole of the Victorian tobacco crop, together with that produced adjacent to, but on the New South Wales side of the River Murray, is sold by public auction in Melbourne. The selling season normally extends from early June to the end of September.

The following table shows the area, yield, and gross value of tobacco in each of the five seasons 1956-57 to 1960-61 :—

### VICTORIA—TOBACCO PRODUCTION

Season			Area	Production	Yield per Acre	Gross Value
			acres	cwt. (dry)	cwt. (dry)	£'000
1956-57	..	..	2,935	24,470	8·34	1,376
1957-58	..	..	3,252	32,884	10·11	1,862
1958-59	..	..	4,248	43,617	10·27	2,764
1959-60	..	..	6,424	66,080	10·29	4,146
1960-61	..	..	9,932	86,854	8·74	4,225

#### *Fruit*

Victoria produces one-third of Australia's tree-fruit production, three-quarters of the canned fruit production, and two-thirds of the Commonwealth's dried fruits. Approximately 100,000 acres are devoted to orchards and vineyards.

Fruit producing areas north of the Great Dividing Range have a rainfall which varies from 10 inches per annum in the Mallee to 20 inches to 40 inches per annum. Many orchards in southern areas in this part of the State rely on irrigation. Distribution is mostly by gravity except for small areas of citrus under spray irrigation.

In the south of the State, where apples, pears, plums, cherries, dessert peaches, lemons, and berries are produced, rainfall varies from 20 inches to 40 inches per annum. Many orchards in southern Victoria are irrigated from dams, rivers, or town supplies.

The largest area under a single horticultural crop is the vineyard area at Mildura, Swan Hill, and the War Service Land Settlement area at Robinvale.

Most of the dried fruits production is exported, mainly to the United Kingdom. The pome fruits are next in importance, most of the apples being sold locally or interstate, while most of the pear production is exported to the United Kingdom.

Peaches, pears, and apricots for canning are produced in the Goulburn Valley, where large co-operative canneries are also located.

The total output of 3,439,000 cartons\* of canned fruits for the 1961 season comprised apricots, 96,000 cartons; peaches (including 127,000 cartons of mixed fruits), 985,000 cartons; and pears, 2,358,000 cartons. The gross value of all fruit grown in the season 1960-61 was £12,675,824.

## VICTORIA—FRUIT GROWING

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Growers .. .. .	4,936	5,044	5,065	5,076	4,783
Area .. .. . acres	63,319	66,221	66,746	68,657	71,415
Kind of Fruit—					
Apples .. .. . bushels	2,621,487	3,125,088	2,969,521	3,005,669	3,134,917
Pears .. .. . "	3,432,090	3,730,427	3,279,535	3,582,549	3,704,278
Quinces .. .. . "	39,073	39,941	31,431	19,595	20,563
Apricots .. .. . "	274,780	692,139	291,547	468,055	206,521
Cherries .. .. . "	86,706	74,387	97,872	101,189	90,297
Nectarines .. .. . "	15,289	19,875	18,770	18,896	14,981
Peaches .. .. . "	878,560	1,287,011	1,033,712	1,210,021	955,224
Plums .. .. . "	104,280	157,332	139,579	156,940	106,833
Prunes .. .. . "	25,574	28,878	20,540	26,594	34,642
Lemons .. .. . "	159,153	159,085	162,616	156,217	199,629
Oranges .. .. . "	711,453	796,625	830,115	1,028,711	689,413
Mandarins .. .. . "	14,275	15,773	24,180	20,081	27,095
Grapefruit .. .. . "	53,917	55,900	66,894	67,214	69,844
Figs .. .. . "	6,053	4,414	4,660	3,218	2,273
Passion-fruit .. .. . "	5,026	5,609	4,800	2,197	2,680
Olives .. .. . "	8,181	12,510	12,281	11,741	23,425
Gooseberries .. .. . cwt.	1,382	1,250	953	1,172	703
Loganberries .. .. . "	1,667	2,262	2,458	2,462	2,144
Raspberries .. .. . "	1,733	2,150	2,486	2,862	2,616
Strawberries .. .. . "	6,694	8,211	7,739	6,692	6,531
Youngberries .. .. . "	1,342	1,823	3,383	3,833	4,172
Almonds .. .. . lb.	85,919	121,937	92,838	115,444	74,900
Filberts .. .. . "	7,283	7,827	6,615	6,590	7,244
Walnuts .. .. . "	159,743	137,544	139,660	149,136	148,357

\* Basic export carton containing 24 cases of No. 2½ can size.

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 536-537.

**VICTORIA—DRIED TREE-FRUITS**  
(lb.)

Year Ended 31st March—	Apricots	Peaches	Pears	Prunes	Others	Total
1957 .. .. .	12,499	272	4,481	330,762	2,945	350,959
1958 .. .. .	24,841	2,105	744	401,108	3,686	432,484
1959 .. .. .	72,807	5,122	6,824	355,072	1,183	441,008
1960 .. .. .	38,067	5,417	3,505	460,806	2,429	510,224
1961 .. .. .	33,820	4,510	2,290	368,731	626	409,977

*Orchards*

Information on the number of trees of each variety is collected triennially, the latest figures relating to 1958-59.

The extent of cultivation of each important class of fruit and nuts on holdings of 1 acre and upwards during the seasons 1955-56 and 1958-59 is shown in the following table :—

**VICTORIA—FRUIT TREES, PLANTS, ETC. IN ORCHARDS  
AND GARDENS**

Fruit and Nuts	Number of Trees, Plants, &c.					
	1955-56			1958-59		
	Bearing	Not Bearing	Total	Bearing	Not Bearing	Total
Apples .. .. .	1,529,208	420,365	1,949,573	1,498,638	511,163	2,009,801
Pears .. .. .	1,100,880	236,531	1,337,411	1,124,220	376,722	1,500,942
Quinces .. .. .	25,655	3,709	29,364	21,402	922	22,324
Plums .. .. .	171,634	31,463	203,097	146,136	38,127	184,263
Prunes .. .. .	29,046	9,302	38,348	25,332	6,385	31,717
Cherries .. .. .	121,477	56,480	177,957	117,292	48,813	166,105
Peaches .. .. .	835,511	189,500	1,025,011	540,124	607,039	1,147,163
Apricots .. .. .	376,994	73,458	450,452	312,979	89,970	402,949
Nectarines .. .. .	20,097	3,874	23,971	18,103	5,296	23,399
Oranges .. .. .	370,595	77,325	447,920	372,550	86,824	459,374
Mandarins .. .. .	6,140	5,604	11,744	9,252	9,676	18,928
Grapefruit .. .. .	22,386	2,979	25,365	22,917	1,541	24,458
Lemons .. .. .	106,644	25,608	132,252	89,869	14,704	104,573
Figs .. .. .	5,506	716	6,222	5,840	983	6,823
Raspberries .. .. .	209,451	46,010	255,461	247,970	60,001	307,971
Loganberries .. .. .	108,403	10,675	119,078	138,129	19,001	157,130
Strawberries .. .. .	4,507,904	603,608	5,111,512	6,972,270	405,759	7,378,029
Gooseberries .. .. .	45,302	6,646	51,948	51,762	8,480	60,242
Youngberries .. .. .	*	*	*	127,304	21,600	148,904
Olives .. .. .	17,191	100,952	118,143	60,351	56,568	116,919
Passion-fruit .. .. .	22,803	6,718	29,521	15,950	8,085	24,035
Almonds .. .. .	34,781	9,211	43,992	26,496	4,576	31,072
Walnuts .. .. .	7,702	2,799	10,501	6,549	2,094	8,643
Filberts .. .. .	3,511	1,388	4,899	3,725	458	4,183

\* Not collected.



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 1958-59 :—

VICTORIA—NUMBER OF FRUIT TREES, PLANTS, ETC.,  
SEASON 1958-59

Particulars	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-East-ern	Gipps-land	
Growers Area .. No. acres	2,031 24,116	172 2,483	125 683	150 4,153	1,238 6,272	1,057 27,131	201 1,538	91 370	5,065 66,746
Apples .. trees	1,445,277	185,390	57,446	18,637	12,546	187,477	73,030	29,998	2,009,801
Pears .. "	277,673	60,727	1,533	9,407	3,284	1,145,284	1,064	1,970	1,500,942
Peaches .. "	221,768	2,382	402	19,334	21,886	877,965	2,165	1,261	1,147,163
Apricots .. "	73,072	760	1,354	19,967	51,286	254,741	983	786	402,949
Plums .. "	93,477	6,203	1,184	3,649	12,346	63,024	3,456	924	184,263
Prunes .. "	507	8	936	11,459	7,513	11,207	51	36	31,717
Cherries .. "	138,786	3,581	57	4,614	259	10,442	7,799	567	166,105
Quinces .. "	11,260	639	181	1,490	752	7,786	140	76	22,324
Nectarines .. "	16,125	23	85	444	3,286	2,742	449	245	23,399
Figs .. "	1,539	16	37	65	648	3,816	637	65	6,823
Olives .. "	294	..	1	95,000	19,997	1,524	92	11	116,919
Oranges .. "	443	5	75	161	321,492	133,343	3,704	151	459,374
Mandarins .. "	13	..	..	6	16,398	2,441	64	6	18,928
Grapefruit .. "	325	..	5	22	16,961	6,974	161	10	24,458
Lemons .. "	76,413	81	14	250	8,796	17,959	959	101	104,573
Passion-fruit .. vines	5,220	4	111	6	1,148	5,645	11,331	570	24,035
Strawberries .. plants	7,327,292	100	..	..	25,630	21,252	3,755	..	7,378,029
Raspberries .. bushes	306,201	1,020	..	..	..	750	..	..	307,971
Loganberries .. "	157,127	3	..	..	..	..	..	..	157,130
Gooseberries .. "	58,431	1,507	4	..	..	..	..	300	60,242
Youngberries .. "	148,901	1	..	..	2	..	..	..	148,904
Almonds .. trees	562	62	34	715	16,827	7,598	5,208	66	31,072
Walnuts .. "	561	46	21	180	593	197	6,480	565	8,643
Filberts .. "	307	..	1	..	499	1	3,362	13	4,183

### 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 Murray river 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. The Swan Hill district with slightly lower temperatures and higher rainfall is less suitable than Robinvale and Mildura.

Dried fruits production in these districts for the season 1960-61 amounted to 45,725 tons of sultanas, 5,583 tons of currants, and 5,278 tons of raisins. After dipping and sun drying by the grower, the dried fruit is processed and packed in packing houses. Approximately 74 per cent. of Victorian produce for the season 1960-61 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 specialized industry. The main varieties are Waltham Cross, Purple Cornichon, Ohanez, Sultanas,

and Muscats. Melbourne and Sydney are the main market outlets, but Indonesia, Colombo, and Singapore may grow in importance as export markets.

Grapes for wine production are grown at Rutherglen, Great Western, and Nagambie, mainly without supplementary irrigation. The acreage in these districts is tending to decrease. Increasing quantities of grapes for wine making are now being obtained from the irrigated districts of Mildura and Swan Hill.

A considerable portion of Victorian wine is marketed in Great Britain, New Zealand and Canada.

Particulars of vine production for the five seasons 1956-57 to 1960-61 are given in the following table :—

#### VICTORIA—VINE-FRUIT PRODUCTION

Season	Number of Growers	Area		Produce				
		Bearing	Not Bearing	Grapes Gathered	Wine Made	Dried Fruits		
						Raisins	Sultanas	Currants
		acres	acres	'000 cwt.	'000 gall.	cwt.	cwt.	cwt.
1956-57 ..	2,428	41,741	3,153	4,702	2,369	81,875	919,825	79,070
1957-58 ..	2,467	42,089	2,678	5,188	2,582	122,628	1,012,220	83,063
1958-59 ..	2,494	42,482	2,319	5,041	2,354	116,252	937,878	95,517
1959-60 ..	2,505	42,244	1,885	4,229	2,147	122,258	773,035	66,615
1960-61 ..	2,524	42,688	1,961	5,017	3,021	105,552	914,492	111,660

#### 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 £10 mill. each year to Victoria are harvested from about 35,000 acres.

Most of the vegetables are grown in southern Victoria close to Melbourne. These areas are fairly frost free and also have a well distributed rainfall of from 20 to 35 inches. Soils on which vegetables are grown in southern Victoria vary widely and include sands, sandy loams, clay loams, peat, alluvial peats, and volcanic types. In general, most of these soils require 5 to 12 cwt. of fertilizer per acre for each crop.

The northern portion of the State is warm in summer, but more subject to frost in winter. It contains many areas which are ideal for growing early spring crops and is the home of tomato production, particularly for processing. In this warmer climate, on soils which are mainly reddish sandy loams, vegetables can be planted earlier and mature earlier than in most of the southern districts.

Prior to the season 1942-43, statistics dealing with vegetable growing were collected only from those market gardeners who cropped an area of 1 acre or more. Only the surface area employed for vegetable growing was tabulated and, as a consequence, due to double cropping, the actual area utilized was understated. Furthermore, vegetables grown between trees and vines in orchards and vineyards were not recorded.

From the season 1942-43, however, particulars were obtained of all vegetables grown on areas of 1 acre and upwards, including those grown in orchards and vineyards, and allowance was made for double cropping. These changes, therefore, invalidate any comparison with previous years.

Details of the area, production, and gross value of vegetables are given in the table below for all the more important types, except potatoes and onions which are shown under separate headings on pages 528-529.

VICTORIA—VEGETABLES FOR HUMAN CONSUMPTION,  
1960-61

Type	Area Sown	Production	Gross Value
	acres	tons	£'000
Carrots .. .. .	1,715	19,959	1,813
Parsnips .. .. .	744	7,381	710
Beetroot .. .. .	585	5,983	530
Tomatoes .. .. .	5,453	67,862	1,518
French Beans .. .. .	2,312	3,683	351
Green Peas—Sold in Pod .. .. .	6,590	7,176	542
"    "—Canning .. .. .	5,125	2,762	95
Cabbages .. .. .	1,874	24,424	789
Cauliflowers .. .. .	2,709	32,299	1,209
Brussels Sprouts .. .. .	675	2,266	288
Lettuce .. .. .	2,392	8,641	875
Pumpkins .. .. .	1,883	11,170	429
Other Vegetables .. .. .	3,238	15,757	935
<b>Total .. .. .</b>	<b>35,295</b>	<b>209,363</b>	<b>10,084</b>

*Minor Crops*

There are other crops cultivated in Victoria in addition to those enumerated on pages 515-516. The most important of these are nursery products, cut flowers, mustard, sunflowers, agricultural seeds, and hops.

## Pastoral and Dairying

### *Changing Patterns in Animal Husbandry*

#### *General*

Any change that develops in the breeding, feeding, and management of farm animals has its origin in four basic considerations. These are a better appreciation of the adaptability of certain strains of livestock to particular environments ; an improvement in both the overall quantity and seasonal availability of fodder supplies ; the application in practice of the increasing knowledge of the basic nutritional and reproductive physiology of farm animals ; and a change in public demand for quality in the product and the development of new products.

#### *Environmental Factors*

There is a growing recognition of the importance of environmental adaptability in wool production particularly in a State of many small clips. From the point of view of the national wool clip, one of the awkward consequences of closer settlement is that the decisions as to type of sheep to be run in any area or district are delegated to a relatively large number of independent proprietors. The resultant effect on uniformity and classing of the clip can be most serious, particularly at a time when wool as a fibre is competing with synthetics which can be obtained in large and uniform quantities and at a relatively stable price.

However, during recent years much information has become available about those features of Victoria's environment which determine the breed or strain of sheep which should be run and also significantly affect the volume and types of wool production. There can be no compulsion on the individual in such a matter, but the information now available clearly defines the limits within which he can practise breed selection and the limits within which he can practise sheep husbandry as far as wool production is concerned.

The environmental factors which determine selection are regularity of feed supplies throughout the year, the risks of dust and burr contamination, and the reactions of fleece characteristics to continuous wetting under warm and cool temperatures. With the possible exception of burr, these factors have been features of the Victorian environment since the earliest days of pastoral settlement ; their recognition is no new thing. The useful information now available concerns the reaction of the various strains of Merino and its derivatives to these factors, and the possibility of improving the efficiency of wool production by selection on performance (including fleece weighing within the adapted strain).

#### *Dairy Cattle Husbandry*

The major changes in this field are associated with the development of artificial insemination, the exploitation of improved fodder reserves, and application of results of quite fundamental research in animal physiology to the handling of cattle in the milking shed.

Artificial insemination provides a convenient service in dairy cattle breeding based on better sires than are readily available to individual farmers. Provided the farmers co-operate, it can also serve as a method of progeny testing for selection of more productive strains of the various breeds. However, the heifer progeny of the donor sires must be raised and tested to give this information. Rarely has the industry had a better opportunity to help itself.

Many dairy farmers are specialists with income from pigs and calves and cull cows as their only sideline. In times of beef shortage, the breeding potential of those females surplus to the production of herd replacements becomes of considerable interest to the community, particularly when crossed with a bull of one of the best breeds. This diversification of enterprise is now possible on quite small farms as the cross can be achieved with beef breed semen supplied by the artificial insemination centres. A premium is available for the progeny as a bobby calf, but it is an even better proposition as a good weaner.

Profitability of dairying is largely correlated with the way in which lactation is sustained and this can be markedly affected by herd management. It has been shown that cows which calve well before seasonal growth commences perform better in this regard. Their milk production is flushed twice, once following parturition and later by the spring grass. However, this arrangement of seasonal calving can only be undertaken when fodder reserves are sufficient to provide an adequate ration for the herd in the later stages of pregnancy. One of the effects of the mechanization of fodder conservation has been to provide the reserves to permit a considerable extension of the practice of early calving.

#### *Changes in Production: Beef and Lamb*

The beef-producing industry now appreciates the general demand in Australia and abroad for lean, tender meat. This is really no new development since few people can afford a continuous diet of the self-braising meats, roasts and steaks, on which a significant fat covering is desirable. With most of the other cuts to be used in made-up dishes, fat has been normally removed in course of preparation. The popularity of these dishes appears to be increasing and with it the demand for lightly finished young animals of 1,000–1,250 lb. live weight. This demand is being met by quickly finished animals of local breeding rather than by store cattle of interstate origin finished on Victorian pastures. Producers are being assisted in selecting those strains of cattle and methods of feeding them to meet this demand and by carcass competition at shows, which are judged by measurement of carcass qualities rather than by visual inspection.

The rate of growth of the young beef animal is largely a reflection of the milk supply of the dam, and time of calving in relation to seasonal pasture growth is even more important in beef production than it is in dairying. Few calves can utilize the milk available if their dams calve during the spring flush of growth.

In fat lamb production the value of cross breeding, both in the production of the breeding ewe and the sales lamb, has long been recognized. Although satisfactory sales cattle can be produced from any of the pure beef breeds, cross breeding between them has its place in improved efficiency of production and is gradually developing in the industry. It would, however, be wrong to suggest that standard crossbreds, as far as parent breeds are concerned, are yet being produced.

### *Poultry Production*

In no other animal industry have such dramatic changes occurred in recent years, and the list of these changes is quite impressive. They include :—

- (1) The widespread use of the crossbred between the Australorp and White Leghorn breeds as the hen for commercial egg production ;
- (2) the development of the random sample system of laying test for stud breeders' stock ;
- (3) the concentration of the production of commercial stock by fewer large breeders and hatcheries ;
- (4) the development of the broiler industry ; and
- (5) the use of the random sample test for broiler production.

There is sound experimental evidence to support the change to crossbred hens both for better rearability and increased production of eggs. The random sample test is based on the egg-laying performance of pullets hatched and reared at the test centre from eggs collected at random by the testing authority from breeders' farms. This may well be the shape of things to come in testing the productivity of other farm animals. The application of present knowledge in poultry genetics is easier for the larger breeder whose enterprise may be of a size to justify the employment of his own geneticist, and who can exploit the day-old chick business throughout Australia. The broiler industry has developed on the American pattern. The special broiler strains are produced by large breeding farms and supplied to the operator as day-old chicks to be raised to the broiler stage on prepared mashes and pellets, frequently under contract. In Australia, this industry may experience the problem of shortage of protein concentrates for the special diets.

### *Pig Production*

Mention should be made here of the introduction of the Landrace breed from the Scandinavian countries, via Northern Ireland, and the development of husbandry methods for the control of infectious pneumonia.

Pig testing is receiving wider support and the figures recorded for rate of growth and conversion ratios compare quite favourably with those reported by oversea centres.

*Progress of Stock Breeding in Victoria*

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 at the feet of 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 discovery.

According to early statistical records, there were 26,000 sheep, 100 cattle, and 57 horses in the colony on the 25th May, 1836. On the 1st 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 1st 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 since 1861 to 1951 and the number of livestock on rural holdings for each of the six years 1956 to 1961. Estimates of the small number of livestock not on rural holdings have been excluded from the table for 1957 and successive years. For 1956 these estimates were : horses 22,966 ; dairy cattle 16,155 ; beef cattle 8,301 ; sheep 54,511 ; pigs 4,413.

**VICTORIA—LIVESTOCK**  
( '000 )

Year	Horses (Including Foals)	Cattle*		Sheep	Pigs
		Dairy	Beef		
1861 at 1st March ..	77	722		5,781	61
1871 " " ..	167	721		10,762	131
1881 " " ..	276	1,286		10,360	242
1891 " " ..	436	1,783		12,693	282
1901 " " ..	392	1,602		10,842	350
1911 " " ..	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 31st March ..	186	1,489	727	20,012	237
1956 " " ..	119	1,663	954	23,343	227
1957 " " ..	88	1,704	1,036	25,776	254
1958 " " ..	80	1,708	1,017	27,036	274
1959 " " ..	73	1,637	989	26,871	249
1960 " " ..	68	1,652	937	26,542	280
1961 " " ..	64	1,717	1,147	26,620	319

\* Separate figures for beef and dairy cattle are not available for years prior to 1942-43.

A table showing the sizes of holdings and the numbers of holdings depasturing stock at March, 1960, appears on page 510.

The following table contains particulars of livestock in each statistical district of the State at 31st March, 1961 :—

VICTORIA—DISTRIBUTION OF LIVESTOCK, MARCH, 1961  
(’000)

Particulars	Statistical District								Total
	Central	North-Central	West-ern	Wim-mera	Mallee	North-ern	North-East-ern	Gipps-land	
Horses .. ..	15	4	14	4	3	9	7	8	64
Dairy Cattle—									
Cows in Milk or Dry	182	22	248	17	17	198	92	305	1,081
Springing Heifers ..	15	3	29	3	2	21	17	26	116
Other Heifers for Dairying ..	35	5	47	4	3	43	13	50	200
Calves, under 1 Year—									
Heifer .. ..	36	6	51	5	5	55	21	67	246
Other .. ..	5	2	6	3	2	6	3	5	32
Bulls, 1 Year and over	7	1	10	2	1	8	3	10	42
Total Dairy Cattle	280	39	391	34	30	331	149	463	1,717
Beef Cattle—									
Cows .. ..	80	30	151	16	9	54	97	92	529
Calves, under 1 Year	46	19	87	11	7	44	64	64	342
Bulls, 1 Year and over	4	1	7	1	1	3	4	4	25
Other .. ..	34	16	53	7	4	34	50	53	251
Total Beef Cattle	164	66	298	35	21	135	215	213	1,147
Total All Cattle ..	444	105	689	69	51	466	364	676	2,864
Pigs .. ..	58	9	32	15	18	92	34	60	318
Sheep .. ..	2,289	2,000	8,963	4,221	1,792	4,042	1,785	1,528	26,620

### Fodder Conservation

The practice of fodder conservation is an essential part of livestock production because pastures do not provide a full ration for grazing animals the year round. Each year, in the dry summer and autumn typical of our Mediterranean-type climate, pastures dry off and die, and in the winter they may be extremely slow growing. These regular periods of pasture shortage for the grazing animal must be provided for by mechanically harvesting surplus pasture growth in the usual flush spring season, processing and storing it, and later feeding it back to the animals during the periods of shortage.

In actual fact, of course, much of a farmer's skill is directed towards equating the feed requirements of his livestock to the availability of plant growth. This he does by planning farm activities such as calving or lambing for times when the needs of the mothering of young stock will be met by plenty of good-quality pasture, or he may grow special pastures or crops to provide additional grazing. All these practices, including fodder conservation as the major one, play their part in meeting these more or less regularly recurring periods of pasture shortage.

Unfortunately, it is a feature of Australian agriculture that frequently rains may fail to arrive at the expected time, and the regular seasonal shortage of feed may be easily prolonged into a much more serious



drought. The ever-present risk of drought can only be met effectively by adequate fodder conservation. It is indeed an improvident or careless farmer—even in the most favoured district—who does not plan his fodder reserves to give him some safety margin above the normal seasonal requirements of his stock. Gambling on scraping through each year with a minimum of fodder reserves or relying too heavily on the next harvest always being a good one is the surest way of courting ultimate disaster.

As the growing season in Victorian agricultural areas varies from about five months in the north-west of the State to about nine in the south, fodder conservation is probably the most important single farm practice in maintaining maximum livestock production each year. This is apart altogether from providing against shortages due to drought, fire, flood or pests and diseases.

Fodder conservation in Victoria today refers mainly to the conservation of hay, particularly pasture or meadow hay (see pages 527–528). Cereal grain, particularly oats, is also of great importance. The pattern of fodder reserves has changed considerably since the war years and the drought of 1944–45. At that time, cereal hay predominated, but since then meadow hay production has increased remarkably from about 300,000 tons annually to over 1½ mill. tons in 1960. Cereal hay production has meanwhile declined, while lucerne hay has increased. Silage, although a relatively minor fodder in terms of the nutrients it contributes to Victoria's fodder reserves, has increased spectacularly.

Meadow hay production has expanded with the further development of improved pastures in Victoria, the increase in livestock populations and, probably most importantly, with the development of mechanization. The decline in cereal hay has been associated in part at least with the decline of the horse population. The upsurge of interest in silage has stemmed mainly from developments in mechanization.

Most of the hay made in Victoria is made with the mower, side-delivery rake, and pick-up baler. After mowing, the hay crop dries for a varying time in the swath and is then raked, and completes drying in the windrow before baling. Often the rake is not used until just before the crop is ready for baling, so that the rake may play a very minor part in the drying of the crop. Mechanical aids to drying, such as the hay conditioner (crusher or crimper) or the tedder, are practically absent as yet. Some farmers have developed systems of loose hay handling based on simple, low-cost equipment.

Most silage is made using the mower and buckrake, which provides a very cheap and simple system, although wastage is often high because of open stacking. The flail-type forage harvester is becoming popular because of its simple cutting action and relative cheapness. It consists of swinging knives (rotation on a horizontal shaft) which cut the crop by impact and throw or blow it into an accompanying trailer or truck.

The contribution of mechanization to increased fodder conservation has been a noteworthy one, but there is still much potential. For instance, less than 10 per cent. of our improved pastures are cut for hay, although frequently far more is cut on individual farms.

There is no doubt about the contribution that fodder conservation has made to the productivity of Victorian farms and their stability in dry years, but the challenge in the years ahead is a tremendous one. As the success of fodder conservation on the farm is largely dependent on effective mechanization, the challenge is one for machine and farmer alike.

### *Dairying Industry*

Though faced with the long-term prospect of expanding local markets, both for liquid milk and for dairy products, as the population of this country increases, the Australian dairying industry at present experiences varying fortunes according to the demand in overseas markets and the supply from other countries. In Victoria, however, the demand for good dairying land remains keen.

There is some tendency to sustain competitive land prices by increasing the output of milk or butterfat up to the point at which the farm business gives a satisfactory return. Until the middle of the 1930's, 30-cow hand-milked herds were common, and three milkers were usually needed to milk a herd of this size. In the next decade the introduction of milking machines made it possible for two people to milk 30 to 40 cows. In the late 1940's, dairy farmers in large numbers gave up hand-stripping after machines, and one man could then comfortably milk 40 to 45 cows. Doubling up of machine units also made the task easier. In the past four years the introduction of the herringbone-type milking shed has made it possible for one man to milk up to 60 cows and for two men to milk 80 or more.

Pasture improvement has been the basis of the increased carrying capacity of many farms. In some places potash fertilizers and trace elements have played their part; in others, the use of more superphosphate and better management and grazing of the pastures have sufficed.

With this increase of production has come a greater need to produce and conserve feed to be used at times when pasture production is slack. This is especially true on farms which supply market milk, as they must fulfil a contract every day of the year. Silage making on dairy farms has increased eightfold in recent years, and is still being taken up by more farmers. More crops are grown to fill the summer and winter feed gaps, and some have resorted to water harvesting and spray irrigation to provide green pasture in summer. Light tractors with hydraulic three-point linkage have brought with them the tendency to rely on machinery in preference to employing labour.

Advisory services given by the Department of Agriculture through dairy supervisors, the bi-monthly "Dairyfarming Digest", and other media, have made dairy farmers more conscious of their need to give thought to every side of farm management. More cows are under test than ever before in Victoria. Many artificial breeding groups have been formed, and a co-operative society now conducts the bull farm on which the semen is produced. There has been increased interest in milking methods, milking machine efficiency, and in the use of new and improved dairy detergents.

Refrigeration of milk on the farm and its collection from bulk vats by road tanker have been proved practicable in some districts, and these practices are now being adopted in other areas.

Local markets are changing. More and more country towns are being provided with supplies of pasteurized bottled milk, and the Milk Board has brought several country areas under its jurisdiction. In manufacturing, the trend is towards large versatile factories equipped to change from one type of product to another, according to market prospects. There is a growing local market for various types of cheeses hitherto little known in this country, and cheddar cheese is now exported in blocks wrapped in plastic film. These have several advantages over the traditional cylindrical bandaged cheeses.

The research projects now being financed by the industry levy for research and promotion should benefit the dairying industry greatly in the coming years.

Victoria is the principal milk producing State, and in 1960-61 the Victorian output (599 mill. gall.) represented 45 per cent. of the Australian production.

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 31st March—	Number of Cow-keepers	Number of Dairy Cows*	Estimated Total Production of Milk for All Purposes (Year Ended 30th June)	Gross Value of Dairy Produce†
		'000	'000 gall.	£'000
1957 .. .. .	49,153	1,220	587,199	66,330
1958 .. .. .	48,451	1,235	565,439	65,431
1959 .. .. .	‡	1,204	582,948	65,264
1960 .. .. .	44,124	1,098	594,823	70,471
1961 .. .. .	43,690	1,081	599,482	72,004

\* Includes cows (in milk and dry) and springing heifers.

† Includes subsidy.

‡ Not available.

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 30th June—	Butter*	Cheese*	Condensed Milk	Powdered Full-Cream Milk	Casein
1957 .. ..	200,080	46,068	100,178	24,476	16,345
1958 .. ..	194,596	33,294	96,810	24,854	22,421
1959 .. ..	198,652	39,140	87,288	24,585	23,528
1960 .. ..	201,394	43,152	99,063	23,822	20,086
1961 .. ..	201,447	44,799	87,321	22,396	23,743

\* Including that made on farms.

The following table shows the number of dairy herds in Victoria, grouped, according to size, for each of the five years, 1956 to 1958, 1960 and 1961. Details for 1959 are not available.

VICTORIA—DAIRY HERDS, CONTAINING FIVE COWS OR MORE, GROUPED ACCORDING TO SIZE

At 31st 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	
1956.. ..	6,077	2,817	1,928	3,466	6,892	7,528	1,213	29,921
1957.. ..	6,183	2,916	1,953	3,448	6,893	8,042	1,310	30,745
1958 .. ..	5,889	2,801	1,860	3,215	6,402	8,406	1,464	30,037
1960.. ..	4,304	2,262	1,682	2,971	6,155	8,488	1,397	27,259
1961.. ..	4,213	2,149	1,545	2,738	5,915	8,723	1,549	26,832

The numbers of farmers with less than five cows were:—19,772 in 1956, 18,408 in 1957, 18,414 in 1958, and 16,865 in 1960. These numbers were excluded from the above table as the groups were considered too small to be classed as dairy herds.

#### *Eradication of Tuberculosis*

An article on this subject appears on pages 525–526 of the Victorian Year Book 1962.

#### *Pig Industry*

Between 20,000 and 25,000 tons of pig carcasses are produced in Victoria in a year. Most of them are consumed here. Only a few are exported to other countries. About half the pig meat is used

as fresh pork or for sausages and other meat products. The other half is made into bacon and ham, some of which is canned. Victoria is usually a net importer of pig meat from other States of Australia.

Farmers sell pigs to meat works either directly or through public auction sales. There are adequate facilities for selling pigs in most districts. Pigs are sold for meat as porkers about 4 to 5 months old and yielding dressed carcasses of 60 lb. to 100 lb. ; as baconers, 5 to 7 months old and with dressed carcasses of 120 lb. to 160 lb. ; or as backfatters, yielding carcasses of 200 lb. to 500 lb. after having been discarded from the breeding herd.

Most of the pigs in Victoria are in small herds on dairy farms and mixed farms. The sizes of the herds are related to the quantities of separated milk and other food by-products of the farms. A food supply which is adequate in quality, quantity and cost is the basis of economic pig production. There are few specialized pig farms in Victoria. Their main food supplies are buttermilk and whey from dairy produce factories, and food refuse from eating places and food factories.

Pig prices vary and farmers have practically no control over them. Prices are usually higher in spring when there are fewer pigs in the market, than in autumn when there are more pigs. Seasonal fluctuation in the quantities of milk available for pig feeding is the usual cause of fluctuating supplies of pigs to markets.

Another cause of fluctuation in production and prices of pigs, not so regular but sometimes big enough to cancel the seasonal one, is due to big increases or decreases in pig breeding. As three-quarters of the pig breeders in Victoria have an average of less than three breeding sows each, an addition of one more sow when prices are favourable results in a substantial overall increase.

The number of pigs in Victoria at 31st March, 1961, was 318,523. About 76 per cent. of these are held in the Central, Western, Northern, and Gippsland districts which are so largely devoted to dairying. The following table shows classifications (in statistical districts) of pigs, together with the numbers of pig-keepers :—

VICTORIA—PIGS AND PIG-KEEPERS, 31ST MARCH, 1961

Statistical District	Boars	Breeding Sows	All Other	Total Pigs	Pig Keepers
Central .. ..	1,098	8,713	48,647	58,458	1,446
North-Central .. ..	283	1,564	7,695	9,542	481
Western .. ..	940	5,336	25,872	32,148	1,417
Wimmera .. ..	457	2,294	11,849	14,600	1,008
Mallee .. ..	475	2,799	14,526	17,800	1,003
Northern .. ..	2,019	14,214	76,314	92,547	2,250
North-Eastern .. ..	902	5,314	27,583	33,799	1,250
Gippsland .. ..	1,566	9,370	48,693	59,629	1,931
Total .. ..	7,740	49,604	261,179	318,523	10,786*

\* Of this number 2,608 had herds of under 5 pigs, 1,368 herds of 5 and under 10, 2,019 herds of 10 and under 20, and 4,791 herds of 20 pigs and over.

The following table shows 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 MARCH, 1956

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 ..	529	76	54	34	26	40	30	26	815	14,111	14,926
5-9 ..	573	100	77	23	43	27	20	18	881	6,576	7,457
10-14 ..	349	112	49	27	40	20	9	13	619	2,934	3,553
15-19 ..	222	86	58	15	30	17	11	2	441	1,735	2,176
20-29 ..	363	198	110	62	57	29	16	7	842	2,523	3,365
30-49 ..	473	416	314	196	232	109	39	3	1,782	3,792	5,574
50-99 ..	357	529	580	430	723	617	208	36	3,480	6,541	10,021
100 and over ..	53	85	110	108	225	367	249	58	1,255	2,176	3,431
Total ..	2,919	1,602	1,352	895	1,376	1,226	582	163	10,115	40,388	50,503

### Pastoral Industry

#### Introduction

Sheep-raising provided the motivation and the means of Victoria's permanent settlement. Its progress in a century and a quarter has been affected, more or less profoundly, by the wide vicissitudes of price and season to which it has been subjected. Those short-term changes in the industry's fortunes tend to mask, however, three major periods in its development. The first, lasting until the mid-1870's, was characterized by expansion based on the geographical extension of an exploitative use of natural grasslands; in the second, covering the 50 years before the mid-1920's, the structure of the industry was radically changed; and in the latest, renewed expansion has been achieved by the application of scientific knowledge to farming and sheep-raising techniques.

#### Beginnings

Within eight years of the first small flocks being landed from Van Diemen's Land in 1834 and 1835, there were 1 mill. sheep south of the Murray. Settlement was rapidly extended through the rich grazing areas north and west of Melbourne and, as squatters trekked south from New South Wales, it fanned out from the track blazed by Major Mitchell. Despite the temporary check imposed by drought and depression in the 1840's, by 1851, when Victoria was separated from New South Wales, its sheep industry was nearly as large as that of the parent colony. Six million sheep produced wool and tallow worth nearly £1 mill.; nearly 1,000 sheep and cattle stations had been established on land leased from the Crown; only the drier

parts of the north-west and the rugged mountain and forest country remained unoccupied, and by 1860, even the Mallee was occupied, however sketchily and tentatively, by the squatters' flocks.

Although effective pastoral occupation of the country was restricted to areas with permanent natural water supplies, sheep-raising was an essentially nomadic form of land utilization until the 1850's. Shepherds grazed their flocks within small circles centred on "permanent" shepherd's huts or outstations, regularly moving the hurdles within which the sheep were folded each night. The first substantial building erected on a run was the wool-shed, but shearing was unreliable, sheep-washing primitive, and the sheep vulnerable to disease.

#### *After the Gold-Rushes*

The gold-rushes of the 1850's halted this first phase of expansion, but at the end of the decade the industry entered another period of rapid growth which, by the middle of the 1870's, lifted the sheep population from 6 mill. to nearly 12 mill. This was made possible by the use of a new technology which increased the carrying capacity of the land, extended effective occupation, increased production per sheep and, in the long run, considerably reduced the industry's labour requirements per sheep. The use of fences to enclose runs and form large subdivisions within them, the basis of the new technology, was commenced in the 1850's. Squatters committed themselves to this form of investment for a variety of reasons—protection of their boundaries prominent among them—and it was not until the process was substantially completed, in the 1860's, that the full implications for the utilization of back country and the more intensive exploitation of well-watered properties were recognized. The new technology had important side-effects, too: it encouraged pastoralists to protect their investment by securing freehold titles to their land, and a significant minority, especially in the important Western District, began to cull and select their flocks more carefully.

#### *Development from 1870 to 1920*

In the 50 years after the mid-1870's, the growth of the sheep population was slow and fitful: in 25 of them there were less sheep than there were in 1875. Unlike New South Wales and Queensland, where expansion continued through to the 1890's, Victoria had little land not already used nearly to the limits imposed by current pastoral technology. In addition, the growth of agriculture created complications and problems not encountered in New South Wales until the twentieth century. In these 50 years of relative stagnation in sheep numbers, the structure and nature of the industry were transformed. It ceased to be the preserve of the large squatter; in the place of the relatively few large flocks there gradually emerged a large number of small flocks raised for a variety of purposes and products.

The size of the average Victorian flock depended, broadly, on the average size of sheep-raising properties, and from the 1860's the basis of Victoria's land policy was to substitute the small agricultural holding for the large sheep run. Until the 1880's, however, there was little real decline in the importance of the large flock-owner. In the 1850's and, through dummied selections, in the early 1860's, pastoralists

created many large freehold estates in the Western District and the Wimmera, where two-thirds of the Colony's sheep were then depastured. That the overwhelming proportion of large flocks recorded at the end of the nineteenth century were in those districts is testimony of the protection gained through purchase. Moreover, despite legislative intention, many large holdings were still leased from the Crown in 1879: the average size of the Colony's 701 runs was over 24,000 acres and that of the 438 runs in the well-watered, fertile grazing regions was over 16,000. Subsequent legislation, however, severely limited the size of new runs, reclassified unalienated lands and changed the types of tenure appropriate to each classification, and thereby steadily reduced the area available to the average pastoral lessee.

### *Small Selections*

By contrast, the rate at which small selectors were established was rapid even from the mid-1860's. Many of those selectors ran sheep, and it was that multiplication of small flocks, rather than the elimination of large ones, that changed the industry. By 1906 over 70 per cent. of the flocks in the State were of less than 500 sheep; another 15 per cent. of them were of from 500 to 1,000 sheep; together they accounted for 30 per cent. of the sheep population.

The policy of encouraging small selectors was based on, and associated with, the growth of agriculture. The relations between cultivation and grazing during this period, however, are peculiarly difficult to define. The decline in the size of the average flock, for example, was not directly dependent on agricultural expansion: it was experienced in all districts despite their widely different agricultural histories. Nor were geographical shifts in the location of agriculture and grazing closely connected. In the 1860's and 1870's, the incidence of wheat growing moved from the coastal and central districts to the north and thence, in the 1890's and during the First World War, to the west. Yet during this long period the only significant geographical re-distributions of the sheep population were a slow but steady decline in the relative importance of the Western District and the Wimmera (the main centres of the industry) and a more substantial gain in the relatively lightly populated Gippsland and North-Eastern Districts. Nevertheless, by the beginning of the twentieth century, nearly half the flocks in the State were run on holdings that were used primarily for agricultural purposes.

### *Mixed Husbandry*

Throughout most of the nineteenth century the association of crop-growing and sheep-raising was essentially casual. Small land-holders could not easily rely on a single product; Victoria's soils and climate were generally suited to mixed husbandry. Sheep, raised indifferently for wool and meat, therefore provided a profitable sideline for the wheat grower, as did wheat for the small grazier. Seldom, however, were the reciprocal advances more than dimly perceived; very rarely were the two activities integrated. Yet, as long as wool prices remained at profitable levels, the problem of making small flocks worth while was solved reasonably well by mixed husbandry, and for those not growing crops, by the production of wool and mutton



and perhaps beef for the local market. When wool prices began to fall in the 1880's, the position of the small flock-owners became uncertain; when the fall continued to the depression trough of the 1890's they, and the industry as a whole, were forced to act. There is evidence of a more intelligent approach to mixed farming in some of the better pastoral districts, but the main solution lay in exploiting the opportunities provided by refrigerated ocean transport. During the 1890's, butter production increased three-fold, and in choice localities the association of sheep and dairy cattle became an important type of pastoral enterprise. More significantly, exports of frozen meat, first recorded in the statistics of 1892, grew rapidly in the following twenty years. From the mid-1890's, the value of exporting lamb rather than mutton was appreciated, and the establishment of a profitable fat lamb industry secured the future of the small grazier.

The trend towards a smaller average flock continued through to the first quarter of the twentieth century. Largely dependent, previously, on the multiplication of small flocks, it now also encompassed the accelerated reduction in the number of large flocks. While wheat farmers established their paddocks and their flocks on erstwhile pastoral areas of the Mallee, pastoralists in the richer grazing districts were induced to subdivide large freehold estates, either for sale or for leasing, to meet the expansion of dairying and fat lamb production. As a consequence, in 1910, the average flock contained only 531 sheep—nearly 40 per cent. less than in 1906—and in several years during the following decade the number fell below 500.

#### *Changes in Breeding*

The sizes of flocks and the purposes for which they were run produced a striking change in the breed composition of Victoria's sheep population during these 50 years. The original stock was Merino, but even in the 1860's some graziers were experimenting with long-woolled sheep and by the 1870's and 1880's a number of large flocks consisted of well-bred crossbred sheep of the types now known as Comebacks and Polwarths. The small flock-owner, even more than the large, needed the heavier wool clip and heavier carcass produced by crossbred stock, and his choice was reflected in the increasing proportion of crossbred wool at the Melbourne auctions. By 1908 only about 35 per cent. of Victorian sheep were Merino, 23 per cent. were Comeback, 15 per cent. were fine-woolled and 12 per cent. coarse-woolled crossbreds. (It was not until after the First World War that that distribution was altered.)

#### *Developments from 1920 onwards*

The flexibility derived from the industry's new structure was one of the factors permitting and encouraging a new expansion after the long period of relative stagnation. The new level of sheep numbers established in the late 1920's, attributable to flock increases in the high-rainfall areas, was maintained—even increased slightly—by a shift from wheat growing to sheep-raising in the Mallee and Wimmera in the 1930's. The other factor was the gradual introduction of techniques permitting more intensive grazing. The application of science to pastoral problems assumed an increasing importance in the

inter-war period, especially in the Western District, but its indispensable role in modern grazing was most spectacularly displayed by the great expansion of the industry since 1947. The State's apparent sheep-carrying capacity, lifted from about 12 mill. to 17 mill. in the first phase of twentieth century growth, was raised by a further 10 mill. in the past decade.

#### *Pasture Improvement*

Pasture improvement, in the form of sown grasses, has a long but, for many years, undistinguished history in Victoria (see pages 469 to 472 of the Victorian Year Book 1962). The area sown increased steadily but slowly throughout the nineteenth century, mainly in the choice dairying and fattening regions of the Western, Central, and South Gippsland Districts. Until the end of the century, when the potentialities of high-quality pasture in fat lamb production were recognized, few graziers followed the lead of the small band of experimenters who, from the 1860's, had sown clover and lucerne as sheep pastures. The basis of the modern, sophisticated form of pasture improvement is the combination of superphosphate fertilizer with leguminous pasture species, mainly clovers. It is this combination that has revolutionized twentieth century grazing, for soil fertility is enhanced and an increased quantity of higher-quality pasture is produced. The carrying capacity of a property can be doubled—and more. In the late 1920's and in the 1930's, the area under improved pastures increased significantly, though modestly, in the Western and Central Districts, and accounted for a good deal of the increase in sheep numbers in the Western District in that period. Improvement programmes were interrupted by the scarcity of labour, fertilizers, and farm machinery in the war and immediate post-war periods, but since 1947, progress has been extremely rapid. In recent years, moreover, improvement has not been restricted to the high-rain-fall regions, for the value of fertilizing natural pastures and introducing other grass species in parts of the wheat/sheep belt has been clearly demonstrated.

Pasture improvement corrects the low phosphate and nitrogen content of the soil; the identification and correction—even though partial as yet—of other soil deficiencies, including the minor elements, has also helped lift the State's carrying capacity in the last ten years. In the wheat belt the use of sown grasses and longer systems of rotation has not only directly increased the area available as pasture, but is also increasing soil fertility to the ultimate benefit of both wheat and sheep production. Finally, the partial control of the rabbit, first by means of the myxomatosis virus and more recently by the use of "1080" poison, has had a remarkable effect on the quantity of feed available for stock.

The increase in pasture production has extended the industry's interest in fodder conservation, a practice that has always been more prominent in Victoria than in other States. Although it has traditionally been associated with the creation of drought reserves, it is now being used increasingly to provide supplementary feed in the seasonal periods of slow pasture growth. This purpose, and indeed fodder conservation itself, acquired added importance from the geographical extension of

the fat lamb industry—an industry which places a premium on the maintenance of adequate nutritional levels throughout the whole year. Victoria, of course, is still vulnerable to drought, even though less so than other mainland States. Increased fodder conservation and the creation of additional water storage facilities in the last 40 years, however, assure greater protection in the future. Moreover, the construction of the complex water supply system in the Mallee and Wimmera not only opened some of the more arid areas of the State to effective occupation, but also served to protect them against all but the most severe and prolonged droughts. On the other hand, irrigation—the other major way in which the environment is being altered to serve man more bountifully—has been used less to reduce the impact of the seasons on the industry as a whole than to support specialized fat lamb producers.

### *Economic Factors*

Although pasture improvement is broadly concentrated in the high-rainfall areas, developments in the last three decades have not substantially changed the distribution of sheep within the State. The large increase in the number of sheep in high-rainfall regions and the heavier stocking rates now possible have intensified problems associated with animal health. Footrot and worm infestations are much greater dangers now than at any time during the last century, while sheep grazed on improved pastures are more vulnerable to certain metabolic diseases. Again, science and skilled management can provide the answers, but the need for the combination underlines the changed nature of the industry.

By the 1920's and 1930's, it was evident that long-term legislative objectives and short-term economic pressures had pushed property subdivision beyond its economic justification; too many holdings on which sheep were run were too small. At the same time, the scale of investment in farm machinery, fences, and water facilities required to implement pasture improvement programmes created strong pressures favouring larger farm units. Consequently, in the last three or four decades, there has been a trend rise in the size of the average flock; in 1956 it was the same as it had been exactly half a century before. The change had been produced primarily by an increase in the number of flocks containing between 500 and 2,000 sheep, but the newly acquired flexibility of sheep-raising is reflected in the sporadic increases in the number of smaller flocks in response to short-term economic inducements.

The increased number of sheep in the wetter regions of the State, the increased importance of the fat lamb industry and its geographical extension into the wheat-sheep belt, particularly in the 1930's, provide the main explanation of the continuation of the shift to Crossbred sheep through to the 1940's. In their long search for the most appropriate dual-purpose sheep, Victorian farmers have not, however, been prepared unreservedly to sacrifice wool fineness for carcass size and quality. In the 1920's, Comebacks became more important, both absolutely and, primarily at the expense of long-woolled sheep,

relatively ; since the end of the 1930's they have been progressively displaced by other breeds, notably Polwarths and Corriedales, that are more adequately dual-purpose. The relative importance of the Merino remained broadly unchanged from the beginning of the century until the immediate post-war period. Since 1947, relatively higher prices for Merino wool have produced a significant, though undoubtedly short-term, shift in their favour.

It is clear that the industry's adjustment to, and exploitation of, the new techniques made available to it is far from complete ; it is equally clear that the range of innovations that science can supply is far from exhausted. Pasture improvement, fodder conservation and supplementary feeding, the correction of minor element deficiencies in the soil, clover-ley farming, greater (and perhaps a different) use of irrigated pastures, improved management methods on breeding properties and an increasingly sophisticated genetic approach to breeding—to mention merely the more obvious—have vast potentialities yet untapped. Whether, and to what extent, they are developed depends not only on the grazing community and on the economic implications of increased production, but also, and increasingly, on the wide and complex array of economic inter-relationships with other forms of land use.

### *Sheep Industry*

The world renowned Merino is the most common sheep breed in Victoria. In 1959, the sheep population of this State comprised Merinos 42.4 per cent., Corriedales 13.5 per cent., Polwarths 4.4 per cent., Comebacks 12.7 per cent., Crossbreds 22.2 per cent., and British breeds 4.8 per cent., consisting mainly of Border Leicesters, Dorset Horns, Romneys, and Southdowns.

The Merino is the main wool producing breed and it also plays an important role in the breeding of Comeback and Crossbred sheep. These are produced mainly by crossing the Merinos with Corriedales, Polwarths, and Border Leicesters.

The pure British breeds are mostly run in small stud flocks which produce rams for cross breeding in fat lamb production.

The two main sheep enterprises are wool production and fat lamb production.

Wool is produced mainly in the Western, Wimmera, and Northern districts where both rainfall and topography are ideal for the development of improved pastures. The majority of these flocks breed their own replacements and consist of about one-third breeding ewes and two-thirds wethers which are the best wool producing sheep. Most of the ewes in wool producing flocks lamb in April, May, and June, but in the high rainfall districts there is an increasing trend to lamb down in August, September, and October.

Nearly half of Victoria's total wool production comes from the Western and Southern Wimmera districts and the wools are much sought after by oversea buyers because of their high yield, good colour, soft handling, and freedom from dust and seed.

On the other hand, most of the fat lambs are produced in the Wimmera, Mallee, and Northern districts where fat lamb production has become complementary to cereal production. These lambs are produced mainly from strong crossbred ewes which graze on clover and medic pastures—an important part of the clover ley system of crop rotation. The lambs are usually dropped in the autumn and fattened on the late winter and early spring crop feed. The majority are cashed from August to November. Wool from these areas is poor in quality and contains more seed and vegetable fault than that produced in the higher rainfall districts.

Fat lamb production is also carried on in the South Western, Central and Gippsland districts, where rainfall and country favour the development of highly improved pastures which carry well into the summer.

These lambs are usually dropped later than in the cereal growing districts and, after fattening on spring and summer pastures, the majority are cashed in local markets from November to April.

The wools produced in these areas are mainly fine and strong crossbred types, which have good style and no dust or vegetable fault.

A description of the types and qualities of wool in the wool growing districts of the State appears on pages 534 to 536 of the Victorian Year Book 1962.

The numbers of sheep in Victoria in various years since 1861 are shown in the table on page 542. The distribution of all livestock is shown in the table on page 543.

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 mortality due to 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 dropped to ewes mated, and thus the natural increase from season to season may vary considerably. The following table shows the numbers of ewes mated or intended to be mated, the number actually mated, and lambs marked, in each of the five seasons 1958 to 1962 :—

#### VICTORIA—LAMBING

Season	Ewes Intended for Mating	Ewes Actually Mated	Lambs Marked	Proportion of Lambs Marked to Ewes Mated*
	'000	'000	'000	%
1958 .. .. .	10,794	10,173	8,455	83
1959 .. .. .	11,403	11,232	9,357	83
1960 .. .. .	10,837	10,614	8,630	81
1961 .. .. .	11,516	11,440	9,773	85
1962 .. .. .	11,410	†	†	†

\* Prior to 1958 this proportion was based on farmers' intentions at the beginning of the season.

† Not available at the time of printing.

*Sheep and Lambs in Statistical Districts*

The following tables set out the numbers of rams, ewes, wethers and lambs depastured in each Statistical District of the State at 31st March, 1961, 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 31st MARCH, 1961**  
(’000)

Particulars	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-Eastern	Gipps-land	
Rams ..	27	21	100	43	22	58	24	17	312
Breeding Ewes*	1,049	819	3,709	1,764	1,077	2,311	950	690	12,369
Other Ewes ..	85	65	555	185	19	76	49	53	1,087
Wethers ..	724	764	2,750	1,428	265	789	461	453	7,634
Lambs ..	404	331	1,849	801	409	808	301	315	5,218
Total Sheep and Lambs	2,289	2,000	8,963	4,221	1,792	4,042	1,785	1,528	26,620

\* Includes breeding ewes not mated (853,279 at 31st March, 1961).

**VICTORIA—LAMBING, 1960 SEASON**

Particulars	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-Eastern	Gipps-land	
Ewes Mated ’000	939	726	3,089	1,352	893	2,131	870	614	10,614
Lambs Marked ’000	807	591	2,440	1,042	725	1,782	706	537	8,630
Percentage ..	86	81	79	77	81	84	81	87	81

**VICTORIA—LAMBING FORECAST, 1961 SEASON**  
(As Advised by Farmers at 31st March, 1961)  
(’000)

Breed of Rams Used	Ewes Mated or Intended to be Mated (For Lambing during 1961 Season)								Total
	Statistical District								
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-Eastern	Gipps-land	
Merino ..	141	249	1,458	915	158	317	176	171	3,585
Corriedale or Polwarth ..	201	112	972	206	85	195	113	66	1,950
Shortwool Breeds ..	520	285	511	264	426	1,152	444	281	3,883
Longwool Breeds ..	113	122	390	222	379	573	176	123	2,098
Total	975	768	3,331	1,607	1,048	2,237	909	641	11,516

*Breeds of Sheep*

The method of collecting particulars of breeds was changed considerably in 1950 and, apart from Merinos, all comparison with breeds of previous years is nullified. Merino Comebacks were previously collected as a whole, irrespective of whether they were fine or coarse. The 1950 collection made provision for segregating those “finer than half-bred”, while those not up to that standard were included with other Crossbreds.

Similarly, it cannot be determined if any increase in the numbers of other Pure Breeds (British and Australasian) has occurred as another very important change in method was the substitution of the category "Other Recognized Breeds" in place of the former category "Other Pure Breeds". "Other Pure Breeds" in 1947 numbered 1,407,349, whereas in 1953, "Other Recognized Breeds" numbered 5,220,326. Crossbreds, which numbered 6,923,603 in 1947, dropped to 5,625,483 in 1953, notwithstanding the inclusion of half-bred and coarser Merino Comebacks.

Australasian breeds are the Polwarth and the Corriedale. The Polwarth is a Merino-Lincoln cross (approximately three-quarters Merino and one-quarter Lincoln). It was evolved to meet the conditions of light wool-growing localities found to be too wet and cold for the pure Merino. The Corriedale was evolved by heavily culling the progeny of Lincoln rams and Merino ewes and by judicious mating over several years. The Corriedale is a dual purpose sheep, being favoured by many breeders both for lamb raising and for wool production.

Information on the number of sheep of each breed is collected triennially.

The following table shows the breeds of sheep in Victoria (by districts) at the 31st March, 1959 :—

VICTORIA—BREEDS OF SHEEP, 31ST MARCH, 1959  
(’000)

Statistical District	Merino	Other Recognized Breeds	Merino Comeback (Finer than Half-bred)	Crossbred (Including Half-bred and Coarser Comebacks)	Total
Central .. ..	527	787	306	877	2,497
North-Central .. ..	920	390	258	436	2,004
Western .. ..	4,130	2,747	1,158	813	8,848
Wimmera .. ..	3,052	505	211	416	4,184
Mallee .. ..	636	238	293	536	1,703
Northern .. ..	1,124	792	575	1,678	4,169
North-Eastern .. ..	524	392	311	698	1,925
Gippsland .. ..	496	268	311	520	1,595
Total .. ..	11,409	6,119	3,423	5,974	26,925

Information on the number of rams of each breed is collected annually. The following table shows the breeds of rams in Victoria (by districts) at the 31st March, 1961 :—

VICTORIA—BREEDS OF RAMS, 31ST MARCH, 1961

Statistical District	Merino	Corriedale	Polwarth	Border Leicester	Dorset Horn	South-down	Other	Total
Central .. ..	3,794	3,798	1,823	1,569	8,343	4,718	3,668	27,713
North-Central .. ..	7,117	2,837	393	2,191	4,211	2,458	1,848	21,055
Western .. ..	48,640	18,824	9,290	1,646	7,094	3,728	10,755	99,977
Wimmera .. ..	25,139	5,232	392	3,791	5,663	302	2,195	42,714
Mallee .. ..	3,749	1,827	103	7,495	8,005	151	910	22,240
Northern .. ..	9,435	4,811	611	13,311	22,284	4,665	3,373	58,490
North-Eastern .. ..	4,115	2,117	813	3,605	7,080	2,454	3,471	23,655
Gippsland .. ..	4,173	1,288	340	1,123	3,829	2,558	3,210	16,521
Total .. ..	106,162	40,734	13,765	34,731	66,509	21,034	29,430	312,365

*Production of Wool*

Statistics of wool production are obtained direct from the growers, from fellmongeries and, for wool exported on skins, from the Department of Customs and Excise.

## VICTORIA—SHEEP AND LAMBS SHORN, SEASON 1960-61

Statistical District	Shorn		Wool Clipped (Including Crutchings)		Average	
	Sheep	Lambs	Sheep's	Lambs'	Per Sheep	Per Lamb
	'000		'000 lb.		lb.	
Central ..	2,121	459	20,905	1,380	9·86	3·01
North-Central ..	2,009	393	19,582	1,123	9·75	2·86
Western ..	8,580	2,048	89,288	5,959	10·41	2·91
Wimmera ..	3,966	844	44,003	2,653	11·10	3·14
Mallee ..	1,384	386	15,413	1,164	11·13	3·02
Northern ..	3,722	910	37,062	2,820	9·96	3·10
North-Eastern ..	1,799	380	16,056	1,013	8·93	2·66
Gippsland ..	1,418	402	13,606	1,110	9·60	2·76
Total ..	24,999	5,822	255,915	17,222	10·24	2·96

## VICTORIA—SHEEP SHORN AND WOOL CLIPPED

Season	Shorn		Wool Clipped (Including Crutchings)		Average	
	Sheep	Lambs	Sheep's	Lambs'	Per Sheep	Per Lamb
	'000		'000 lb.		lb.	
1956-57 ..	22,674	6,556	249,945	20,421	11·02	3·12
1957-58 ..	24,832	7,182	240,510	19,487	9·69	2·71
1958-59 ..	25,553	5,821	241,872	15,703	9·47	2·70
1959-60 ..	25,393	6,823	255,341	18,621	10·06	2·73
1960-61 ..	24,999	5,822	255,915	17,222	10·24	2·96

## VICTORIA—WOOL PRODUCTION AND VALUE

Season	Clip	Stripped from and Exported on Skins, &c. (Greasy)	Total Quantity (Greasy)	Gross Value	Average Price Per lb.
				£'000	d.
	'000 lb.				
1956-57 ..	270,366	29,206	299,572	97,659	78·24
1957-58 ..	259,997	36,493	296,490	76,255	61·73
1958-59 ..	257,575	41,269	298,844	59,471	47·76
1959-60 ..	273,961	49,265	323,226	75,814	56·29
1960-61 ..	273,137	48,874	322,011	69,265	51·62



*Wool Marketing System*

Samples of Australian wool, taken to England by McArthur and by Marsden early in the nineteenth century, aroused considerable interest and in 1808 the first commercial consignment of one bale was sold in London. The years following saw regular sales there, the wool being consigned by the grower himself or by speculative or general merchants. However, the round journey of the wool out and the cash home resulted in a long period of uncertainty.

The present system of wool marketing has been built up over more than a century by the efforts of many able and energetic leaders, notably Thomas Sutcliffe Mort who prompted the first Australian auctions held at Sydney in 1843, and Richard Goldsbrough who started the sale of Victorian wool and produce in Melbourne in 1848. Geelong, the third Australian centre, was established in 1857.

On these foundations has been built a marketing system probably unique in world commerce, where a product is sold, in the presence of its grower, to the highest bidder amongst manufacturers and their agents from all over the world. Practically the whole of the Australian clip is sold under this system of local realization, which requires the provision of facilities for receiving, storing and showing the wool, and a closely integrated programme of orderly offering. Each year estimates are made of the quantity of wool available for auction, and the Australian total is divided between Northern, Southern, and Western centres, which each have their resident buyers.

The Commonwealth annual production of almost 5 mill. bales is marketed under the auction system. It is disposed of in the various selling centres of all State capitals and a number of provincial cities. The sales programme in all centres is arranged by the National Council of Wool Selling Brokers of Australia, after consultation with buyers. Later, State allocation committees attend to details such as individual sale dates and the quantities to be offered in each centre at the various sales.

Victorian buyers cover, as well as Melbourne, Geelong, and Ballarat, auctions at Albury, Adelaide, Hobart, and Launceston, and allowing for this, a sales programme for the complete season is prepared. This recognizes the buyer's problems of transport and accommodation and ensures that supplies are evenly spread, not only in quantity, but in type and quality, so that there is a representative selection to meet the varied demand. Thus, by controlling the amount of wool offered, an orderly marketing system is maintained.

*Auction System*

Under the auction system wools are displayed on the show floors of woolbrokers' stores, equipped with sawtooth roofs, giving clear, even lighting. This presentation of the wool under conditions which

promote the interest of the grower, and at the same time retain the confidence of the buyer is the responsibility of the selling broker, and involves strict and thorough attention to detail.

On arrival at the store, each bale is weighed by a sworn weigher, and the weight, brand, and description is marked on the head. The wool is stacked to await its turn of offering, which occurs in rotation according to date of arrival. When the wool is due for sale, a representative portion is taken to the show floor, and there the brokers' wool experts inspect it and arrange it into lots. It is also inspected and valued by buyers, who represent oversea and local wool users. Should any lot need additional attention, it is sent to the required department for treatment. The operation of reclassing, by which skilled classers grade a grower's consignment according to quality, length, colour, &c., and the bulk classing department, where large lots are made from various owners' wools, are important services which the broker provides.

The whole of the offering in each catalogue is valued by the brokers' experts, who keep in the closest touch with the market and its movements. When the auction begins, the auctioneer is accompanied by the wool expert who is able to protect the growers' interests. In this way, the grower exercises control up to the last moment, and may withdraw any lot if the bids do not conform to his ideas of value.

The Wool Exchanges are the hub on which the big business of wool revolves. Bidding is vocal, buyers advancing their prices by  $\frac{1}{4}$ d.,  $\frac{1}{2}$ d., or even more until limits are reached and the lot falls to the bid of the last caller. The sale is conducted with great rapidity, and in approximately two hours 850 lots will possibly have been sold, as on a normal market it takes on an average only eight seconds to dispose of an individual lot or line of wool. Although about 5 mill. bales are disposed of in the various centres of the Commonwealth during the course of a season, with proceeds representing millions of pounds, disputes are few. This is a remarkable and gratifying feature of the auctions, which it will be seen are based on the confidence, goodwill, and mutual trust of all parties.

At the fall of the auctioneer's hammer, the ownership of the lot passes from the woolgrower to the woolbuyer, but the woolbroker still performs some service by storing it in his warehouse until it is required by the buyer. If the wool is to go overseas it is dumped, or compressed tightly and held by metal bands. The broker then has it delivered to the ship, or the local mill, and at that point marketing ends, and wool enters the process of manufacture.

### *Wool-growing Districts*

A description of the main wool-growing districts in Victoria will be found on pages 534 to 536 of the Victorian Year Book 1962.



productivity is the annual harvest of honey taken from many species of eucalyptus in all parts of the State. Today, Victoria ranks second among the States in its apicultural activities.

With an average registration of some 1,250 apiarists and some 300–400 large commercial operators, Victoria's honey production averages about 7 mill. lb. per annum. Colony yields are relatively good and range between 180 and 240 lb. per colony per annum.

Eucalyptus species provide the bulk of the honey crop—up to 95 per cent. of the total—with the balance made up of clover and one or two minor species of ground flora.

The industry is, of necessity, migratory, whole apiaries with the necessary plant being moved by road transport from one part of the State to another following the flowering of the eucalyptus species in the forests. 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 thousands of colonies are hired out to fruit and seed growers to ensure profitable sets of fruit and seed.

Marketing is the great problem of the industry. Violent fluctuations in the annual honey crop are, in the absence of any organized marketing arrangements, attended by similar fluctuations in the prices of produce and, in some cases, considerable carry-over from one season to the next.

Governmental interest in the industry is authorized by the *Bees Act* 1958 and extends to disease control, advisory services and research into problems of apiculture.

Prior to the season 1936, the statistics of honey and beeswax were based on returns received from apiarists who were permanent occupiers of holdings of 1 acre and upwards. As a consequence, production was understated because of the exclusion of (a) hives on areas of less than 1 acre, and (b) travelling beekeepers who were not occupiers of rural holdings. Commencing with the season 1935–36, all beekeepers were required to furnish returns. The collection was further revised in 1958 to exclude apiarists with less than five hives. Particulars relating to apiculture for the five years 1957–1961 are given in the following table :—

#### VICTORIA—BEE-HIVES, HONEY, AND BEESWAX

Season Ended 31st May—	Beekeepers*	Hives	Production		Gross Value	
			Honey	Beeswax	Honey	Beeswax
	No.	No.	lb.	lb.	£	£
1957 ..	1,341	101,736	8,215,350	89,749	590,478	28,888
1958 ..	1,086	104,265	5,884,381	67,431	429,069	20,721
1959 ..	1,145	100,953	7,624,037	85,743	532,094	24,383
1960 ..	1,217	104,767	9,660,937	113,526	599,480	29,091
1961 ..	1,184	105,685	8,389,817	104,690	524,364	26,173

\* Apiarists with 20 hives and over numbered 814 in 1957, 779 in 1958, 771 in 1959, 818 in 1960, and 822 in 1961.

## Primary Industries Other than Farming

## Forestry

## Forest Estate

The extent of Victoria's forest estate is shown in the section "Alienation of Land" on page 488 of this volume and further information will be found on page 513 of the Victorian Year Book 1961.

## Forests Output

The following table summarizes the total output of all species for the years under review :—

VICTORIA—FORESTS OUTPUT  
(’000 Cubic Feet)

Year Ended 30th June—	Sawn Timber*	Fuel Timber†	Pulpwood†	Miscellaneous†
1957 .. .. .	23,905	15,223	7,024	4,823
1958 .. .. .	22,670	12,300	7,061	6,160
1959 .. .. .	23,843	10,790	7,410	4,430
1960 .. .. .	23,703	9,481	7,529	5,359
1961 .. .. .	22,274	10,942	8,398	4,806

\* These figures are estimates of sawn timber obtained from the recorded volumes of logs cut.

† Volumes estimated from recorded quantities in various units (e.g., tons, cunits, lineal feet, &c.).

The miscellaneous group in the preceding table includes such diverse items as telephone and electric supply poles, bridge piles and beams, fencing timbers, railway sleepers and mining timbers. So many factors, including temporary influences such as the recent introduction of full-length preservation of non-durable species of poles, fluctuations in market conditions for agricultural and pastoral produce, railway construction projects, &c., influence the demand for these items that output trends are obscured in the collective totals, but by and large, the demand for wood products is being well sustained.

Traditionally, Victoria is not, and does not appear likely to be, an exporting State as far as wood products are concerned. It is more likely that the problem in the future will be meeting the ever-increasing home demand for all types of wood products except wood fuel.

Although there has been a slight improvement in the output of firewood, it should not be interpreted as indicating any return to favour of this fuel. Having regard to the alternative sources of heating and power which are becoming available, decline in its use must be expected to continue.

Part of the low grade wood released by this decline will be available to meet the increasing demand from the cellulose and fibre industries. This has been emphasized by the opening, during the year, of a new hardboard factory at Bacchus Marsh.

*Softwood Plantations*

Experimental plantings of softwoods began in Victoria in 1880, and the first commercial plantations were established in 1910. In 1925, there were 4,555 acres of State plantations and the planting programme then began to accelerate rapidly until by 1935 the area had increased to 38,360 acres. The main areas were at Bright, Ovens and Stanley in the north-east, the Otways, and at Ballarat and Creswick. More recent extensions of State plantations have been in the south-west, and in the south Gippsland hills on abandoned settlement areas. The total area of State plantations at 30th June, 1961, was 50,724 acres.

*Pinus radiata* has proved itself adaptable to all sites available, makes rapid growth, is hardy and relatively immune from insect and fungous attack, and produces a good quality utility timber. The area planted to *Pinus radiata* comprises 35,900 acres. Many of the areas originally planted with other conifers are now being converted to this species.

Present stands are principally 17 to 29 years old. Relatively small areas have been clear felled and either replanted or naturally regenerated, the bulk of the timber utilized to date being from thinnings in the form of logs for peeling and sawing, and pulpwood for paper manufacture.

The output from State plantations is summarized below :—

**VICTORIA—OUTPUT OF SOFTWOOD LOGS AND  
PULPWOOD**  
(’000 Super. ft.)

Year Ended 30th June—	Saw Logs and Peeling Logs (H.L.V.).*	Pulpwood Equivalent (H.L.V.).*
1957 .. .. .	17,916	8,765
1958 .. .. .	17,736	6,627
1959 .. .. .	19,505	9,195
1960 .. .. .	22,319	10,763
1961 .. .. .	23,017	13,114

\* Hoppus Log Volume, which expresses the content of timber in a log. It is approximately 78·5 per cent. of true volume.

Privately owned softwood plantations were estimated to comprise 58,100 acres at 30th June, 1960, 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.

In the foreseeable future the requirements for softwood timber for the rapidly expanding economy of Victoria will greatly exceed the yield of existing plantations. There will be a strong demand for softwood for general utility purposes and for use as raw material for the large mills and factories of the wood-fibre industry. In particular the modern pulp and paper mills require large areas of well-managed plantations to ensure a steady supply of raw material.

In order to meet the rising demand for softwood, a long-term planting programme has been initiated which will greatly increase the extent of State plantations. An extensive examination of State forest has been made to locate and classify areas suitable for planting. Detailed soil and vegetation surveys are in progress on the more promising sites. There are many parts of the State where climate and soil are well adapted to the growth of timber, and areas suitable for large plantations have already been selected in the north-east and south-west regions of the State, and in South Gippsland. It is planned to establish a 40,000-acre plantation of *P. radiata* on the Koetong Plateau in the north-east, commencing with 1,000 acres to be planted in 1962.

In addition to the four main nurseries maintained by the Forests Commission for distributing trees to State Schools and farmers throughout the State, and a number of small nurseries attached to existing plantations, three new nurseries have been established for propagation of the large quantities of planting stock which will be required in the Lower Glenelg, Myrtleford, and Tallangatta districts.

### *Fire Protection*

Because of its climate, vegetation, and topography, Victoria is recognized as one of the most fire prone areas in the world. Many disastrous fires have occurred since the first were recorded in 1851; 71 lives were lost in fires in 1939 (see pages 494-495 of the Victorian Year Book 1938-39), and 51 in 1944.

The Forests Commission is responsible for the prevention and suppression of fires in all State Forests, National Parks, and all alienated lands within 1 mile of the boundaries of State Forests and National Parks (except in the Mallee, lands under control of the Melbourne and Metropolitan Board of Works, and some urban fire districts). This sphere of responsibility is designated the Fire Protected Area.

The territorial units for fire protection are the 55 forest districts in the State. During the summer, fires are detected by an interlocking system of fire towers and lookouts augmented by aerial patrols. Communication is by radio and telephone. Each forest district holds a supply of fire equipment and reserves are held in Melbourne and selected country centres. In the event of major fires, men and equipment are transferred between districts as required.

The Commission maintains communications and fire research sections, and operates a radio laboratory and an equipment workshop for the development of maintenance and repair of radios and fire equipment.

The main features of forest fire legislation are the prohibition of the lighting of fires in State Forests and National Parks except with the permission of the Authorities or in accordance with strict rules ; power for the Minister of Forests to prohibit the use of fire or to suspend forest operations in areas threatened with acute fire danger ; and provision for the construction of dugouts, shelters and safety zones for the protection of human life within the fire protected area.

### Telecommunications

The radio system consists of 34 fixed stations situated in major forest centres, 302 mobile and portable equipments in field use and a central station at Melbourne. Four automatic repeating stations and a mobile emergency station are provided to strengthen fire protection links during summer.

### Forest Fires

The causes of fires attended by Forests Commission personnel in the period 1957-58 to 1960-61 were as follows :—

#### VICTORIA—CAUSES OF FOREST FIRES

Cause	Number of Fires—			
	1957-58	1958-59	1959-60	1960-61
Grazing Interests .. ..	15	6	8	2
Landowners, Householders, &c. ..	139	103	141	101
Deliberate Lighting .. ..	76	62	91	44
Sportsmen, Campers, Tourists ..	76	33	58	59
Licensees and Forests Workers ..	25	18	19	18
Smokers .. .. .	53	43	65	59
Lightning .. .. .	29	59	100	187
Tractors, Cars, Trucks, Locomotives, Stationary Engines .. ..	42	39	33	47
Children .. .. .	26	19	27	30
Sawmills .. .. .	12	13	20	10
Miscellaneous Known Causes ..	80	39	107	80
Unknown Origin .. .. .	54	31	59	25
Total .. .. .	627	465	728	662



The areas of State forest burnt in the years 1957-58 to 1960-61 were—

1957-58	..	..	218,072*	acres
1958-59	..	..	250,515*	„
1959-60	..	..	1,201,433*	„
1960-61	..	..	144,939*	„

\* 1957-58 includes 156,644 acres of non-commercial forest area ; 1958-59 includes 106,624 acres of non-commercial forest area ; 1959-60 includes 1,065,850 acres of non-commercial forest area ; 27,850 acres of National Parks were burnt in 1960 ; 1961 includes 118,996 acres of non-commercial forest area.

### Laboratory Research

Studies involving the number of viable seeds per capsule and per unit weight of seed and chaff of Victorian eucalypts have been continued. Further progress has been made in longevity studies of stored Victorian eucalypt seeds, and similar work has been started with seeds of *Pinus radiata*. Research has been carried out to determine the influence of temperature and seed moisture content on germination of dodder laurel (*Cassytha melantha*). Other trials have been initiated to determine the longevity of dodder seeds when stored under and on the surface of the field seed-bed.

### Field Research

Studies of flowering habits and of seed and litter which fall under stands of red ironbark (*Eucalyptus sideroxylon*) have been continued. A comprehensive study of flowering, natural seedfall, germination, and establishment of seedlings has been commenced in riverain forests of river redgum (*E. camaldulensis*). This programme also includes investigation of the effects of inundation and of grazing by animals on establishment and form of seedlings.

Further trial plantings and natural regeneration experiments have been carried out with various eucalypt species and hybrids. Measurements and other relevant data from experimental plots throughout the State have been recorded regularly.

Intensive research is in progress to determine the optimal rates of thinning for re-growth stands of mountain ash (*Eucalyptus regnans*) and alpine ash (*E. delegatensis*) of various ages, site qualities and stand densities.

Certain fungicides and insecticides have been used in trials to isolate an effective animal repellent for application to seedlings to reduce losses to vermin in the first year after planting out.

Tree breeding work with the plantation species *Pinus radiata* has been commenced in recent years. Improvement of the type of tree to be grown in the future is sought in all the aspects which influence the

yield and quality of the final product, i.e., vigour, trunk straightness, branch development, presence or absence of cone holes, wood quality, and freedom from disease.

A survey of Victorian plantations has been undertaken following which the most outstanding trees have been vegetatively propagated in large numbers by grafting. Progeny and clonal trials designed to assess the quality of these selected trees have been commenced. Controlled cross pollination will be undertaken between selected trees with a view to combining particular tree characters in "pedigreed" progeny.

Large scale production of seed from selected parent trees will be achieved in a "seed orchard"—an area isolated from the pollen of other specimens of the pine, in which many grafted plants of the superior trees have been established. Each grafted plant is genetically identical to the original tree from which the scion was collected. Cross pollination between the superior parent trees in the seed orchard gives rise to seed which should be genetically superior to seed obtained by normal collection methods.

Grafting of the required number of plants from the sixteen best Victorian trees has been undertaken for use as parental stock in the seed orchard. Planting of the first 15 acres will be completed in 1962. The first yield of seed for plantation use may be expected by 1965–66.

Various pathological and entomological investigations have also been carried out.

### **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 is located at Snobs Creek, near Eildon. A wildlife research centre is in the process of being established 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.

#### *Introduced Fish in Victorian Waters*

Long before the Government played an active part in the control and development of Victorian freshwater fisheries, at least ten exotic species of fish had been introduced into various waters of the State by private fish enthusiasts.

Today, game fishermen of Victoria would undoubtedly claim unqualified success for two of these introductions: the European Brown Trout, which was first released in 1866, and the Californian Rainbow Trout which followed some 30 years later.

Two other salmonoid introductions, the Atlantic Salmon in 1865, and the Quinnat Salmon in 1877, failed to adapt to local conditions although the Quinnat Salmon does very well in one lake where a fishery is maintained by stocking. All other introduced species (English Perch, Tench, Roach, Mosquito Fish and two species of Carp) have thrived, and one or more are now represented in almost every fresh water of the State. With the exception of English Perch, which meets a very real need in a number of areas, none of these exotics is popular with the average angler. All successfully introduced species have made some impact on the native fisheries but this has been more marked in those waters in which the environment has been altered by water conservation, flood control and other activities.

Apart from legislation in 1879 proclaiming a close season for trout fishing, Government interest and participation in trout acclimatization dates from about 1906. In that year, trout were hatched by departmental officers at the Zoological Gardens, and in subsequent years, at a number of small country hatcheries, usually with the cooperation of local angling interests. The largest hatchery of that era was constructed by the Department at Studley Park in Melbourne, and the annual output from this establishment, and from the small country hatcheries, together with trout purchased from the Ballarat and Geelong Societies, rapidly accelerated the spread of trout to suitable waters in Victoria.

By 1940, the Department was issuing more than 10,000 trout angling licences annually to fishermen who claimed, with some justification, that Victorian trout fishing was equal to and, in some localities, better than any in the world. There was considerable pressure for greatly increased trout stocking which could not be met from existing hatcheries, and plans were soon laid for a very large hatchery and research station at Snobs Creek near Eildon Reservoir. Native fish as well as trout were to receive attention at this station which was to augment and ultimately replace the Studley Park establishment.

The Snobs Creek Freshwater Fisheries Research Station and Hatchery was officially opened in 1960, and with trout production from this establishment now at a level of 2 mill. yearling fish annually, research staff are carrying out a careful appraisal of existing and potential trout fisheries to determine which waters must be stocked to maintain good fishing. Approximately 200 streams and lakes in the State are now stocked with trout and 97,000 inland angling licences were sold during the 1961-62 fishing season to fishermen, the majority of whom went after the wily trout.

*Marine Fisheries*

One role of the Department is the management of the marine fisheries and research into the biology and ecology of important species of marine fish. Fisheries and Wildlife Officers are stationed permanently at key points along the coast and patrol vessels are maintained at a number of centres.

Fish production in Victoria is low compared with world production, but management and the development of new methods are directed to raising the catch. Specialized techniques, including the use of aerial spotting, echo sounders and radar for locating fish, and two-way radio have been introduced by the industry. A cannery has been established to utilize certain fish species for which the fresh fish market demand is limited.

The Department provides scientific advice on fisheries management, and technological information on the development of new gear and fishing methods.

The Commonwealth Fisheries Office in the Department of Primary Industry is associated with the Department in the management of the commercial fisheries through complementary legislation. The Commonwealth controls fishing in the extra-territorial waters, and certain State officers are empowered to police the Federal Act. There is close co-operation with the C.S.I.R.O. Division of Fisheries and Oceanography and there is an annual Interstate Federal Fisheries Conference.

*Fisheries Statistics*

The statistics of production shown below are in terms of recorded weight. 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 certain particulars about the fishing industry in Victoria for the years 1956-57 to 1960-61 :—

**VICTORIA—FISHERIES : MEN AND BOATS EMPLOYED :  
QUANTITY AND GROSS VALUE OF TAKE**

Year Ended 30th June—	Number of Men	Boats Employed		Value of Nets and Other Plant	Recorded Production*			
		Number	Value		Fish		Crayfish	
					Quantity	Value	Quantity	Value
			£'000		£'000	'000 lb.	£'000	'000 doz.
1957.. ..	930	703	685	166	12,244	1,203	1,164	176
1958.. ..	937	699	732	171	11,233	1,099	1,230	186
1959.. ..	929	690	1,002	215	9,864	1,185	1,294	231
1960.. ..	897	657	1,165	198	12,748	1,726	1,500	300
1961.. ..	1,002	714	1,207	220	12,140	1,559	2,069	483

\* Includes catch by Victorian fishermen in Tasmanian waters.

**Further References**

An article describing wildlife in relation to other natural resources will be found on pages 544 to 546 of the Victorian Year Book 1962.

Department of Fisheries and Wildlife—*Fisheries Contribution*; *Fisheries Circular*; *Fauna Contribution*; *Wildlife Circular*; *Miscellaneous Paper*; *General Circular*; and *Newsletter (Monthly)*.

**Mining***Mining Development in Victoria*

Mining has played a most important role in the history and development of Victoria. The discovery of gold in payable quantities was the event which had the greatest effect upon the history of the State. The search for gold first attracted migrants in large numbers and led to their permanent settlement. In September, 1851, a great alluvial goldfield was found at Ballarat and this discovery was followed by very rich gold strikes at Bendigo, Castlemaine, Stawell, Maryborough and other places. The revolutionary effect of this first gold rush was such that, from the start of the rush until 1858, the population rose from 70,000 to nearly 500,000. In the peak year of 1856, Victoria produced 3 mill. ounces and in the first gold decade it exported over 23 mill. ounces.

The gold mining industry was in large measure responsible for determining the pattern of the inland cities, towns, and roads.

The emphasis today is, however, not on gold but on the fuel mineral—brown coal—from which is derived most of the energy indispensable to industrial expansion.

*Coal*

The most important mining events in the past few years have been the increase in the brown coal production to 16,279,168 tons in 1961, and the proposal of the State Electricity Commission to extend its already huge developments. Yallourn and Morwell are now among the world's major coal developments for electricity generation and the manufacture of briquette fuel. The area deposits are undoubtedly amongst the largest in the world.

The most extensive of Victoria's deposits of tertiary brown coal exist in the Latrobe Valley, 90 miles east of Melbourne. Tests have proved that here exist reserves of over 17,000 mill. tons of brown coal suitable for open-cut exploitation. The deposits have shaped the destiny of the Victorian economy since the end of the First World War.

Private producers are making some contribution to the amount of coal won. Roughly, this production was 2 per cent. of the total produced (371,928 tons in 1961), but the proportion is likely to increase through the development of newly discovered brown coal fields on the western side of Port Phillip Bay. These deposits will complement the eastern side deposits and are of comparatively easy access to the main points of consumption. They will particularly benefit the fast growing city of Geelong and will supply power for the aluminium refining plant to be erected there.

Bituminous coal was mined during 1961 at Jumbunna, Kilcunda, Korumburra, Mirboo North, and Wonthaggi, and brown coal at Bacchus Marsh, Morwell, Thorpdale, Yan Yan Gurt (near Winchelsea), Yallourn, and Yallourn North.

### Mineral Production

The mineral production of the State, as recorded by the Mines Department, from lands occupied under the Mines Act (excluding stone raised in quarries, and salt) for the year 1961, and the aggregate mineral production up to 31st December, 1961, are shown in the following table :—

### VICTORIA—MINERAL PRODUCTION

Minerals	During 1961		Total to 31st December, 1961	
	Quantity	Value	Quantity	Value
Precious Metals—	fine oz.	£	fine oz.	£
Gold .. .. .	26,229	469,450(†)	73,704,196	337,078,452
Silver .. .. .	573	226	1,719,207	272,587
Other Minerals—	ton	£	ton	£
Antimony Ore .. .. .	2	400	36	5,440
Bauxite .. .. .	3,539	14,008	73,843	171,349
Coal, Black .. .. .	66,363	359,457	22,088,913	25,088,162
Coal, Brown .. .. .	16,279,168	7,721,671	218,779,249	57,688,121
Copper Concentrate .. .. .	2	66	*	*
Copper Ore .. .. .	50	1,650	*	*
Diatomaceous Earth .. .. .	507	6,367	15,889	172,835
Fire Clay .. .. .	25,584	23,432	*	*
Fluorspar .. .. .	$\frac{1}{2}$	7	4,155 $\frac{1}{2}$	18,248
Gypsum .. .. .	80,223	79,655	1,199,262	959,703
Kaolin and Other White Clays	516,454	515,164	*	*
Limestone .. .. .	1,243,154	594,614	16,138,944	*
Limonite .. .. .	690	4,449	*	*
Tin Concentrates .. .. .	..	..	18,915	1,468,089

† Includes gold subsidy (£63,036) paid during 1961.

\* Not available.

The following table shows the average annual production and value of black and brown coal for each of the five year periods from 1921 to 1955 and the production and value for each of the years 1956 to 1961 :—

## VICTORIA—COAL PRODUCTION AND VALUE\*

Period	Black Coal		Brown Coal	
	Production	Value	Production	Value
	tons	£'000	tons	£'000
1921-1925 .. .. .	520,705	592	258,094	62
1926-1930 .. .. .	668,177	893	1,515,592	193
1931-1935 .. .. .	472,030	444	2,445,215	256
1936-1940 .. .. .	324,903	284	3,608,751	356
1941-1945 .. .. .	286,277	409	5,010,555	526
1946-1950 .. .. .	156,290	361	6,648,430	1,202
1951-1955 .. .. .	143,535	795	8,728,116	3,593
1956 .. .. .	118,827	668	10,559,801	4,644
1957 .. .. .	111,569	556	10,740,989	5,227
1958 .. .. .	108,359	528	11,643,629	5,418
1959 .. .. .	87,715	455	13,040,717	6,123
1960 .. .. .	77,995	418	14,982,990	6,845
1961 .. .. .	66,363	359	16,279,168	7,722

\* Value of output at the mine.

## 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. The value of quarry products may vary from that shown on page 577 which is on an industry basis. It is realized that there is considerable quarry production unrecorded due mainly to contractors who, requiring material from a source adjacent to the work for which they are suppliers, open up quarries for that purpose or exploit stone outcrops, mine tailings, &c. This work is usually only of a temporary nature.

## VICTORIA—CONSTRUCTION MATERIALS\*

Year Ended 31st December—	Number of Returns	Main Kinds of Stone Extracted—				Approximate Value of All Quarry Products†
		Bluestone	Sandstone	Granite	Limestone	
		cub. yds	cub. yds.	tons	tons	£
1955 ..	141	2,644,392	117,082	179,964	27,464	3,931,657
1956 ..	142	3,240,699	113,241	215,609	39,826	4,738,013
1957 ..	133	3,416,132	191,232	204,590	61,495	4,952,773
1958 ..	132	3,852,012	146,016	173,096	63,230	5,202,993
1959 ..	121	4,556,604	162,091	215,227	35,129	5,841,988
1960 ..	126	5,423,000	175,287	266,181	69,060	6,581,290

\* Since 1952-53, limestone quarried for the manufacture of cement, lime, &c., has not been included in this table. It will be found in "Mineral Production" on page 573.

† Wholesale selling value of all quarry products (including sand and river gravel), exclusive of delivery charges.

## Value of Production

## General

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 1 acre.

A detailed account of the period covered for individual rural industries is given on page 507. Except in the case of mining and quarrying, statistics for the non-rural industries refer to the year ended 30th June. Statistics for mining and quarrying relate to the year ended 31st December of the first year shown.

## Gross Value

Gross value is defined as the value placed on recorded production at the wholesale price realized 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, &c., is included in manufacturing production.

VICTORIA—GROSS VALUE OF PRIMARY PRODUCTION  
(£'000)

Industry	1956-57	1957-58	1958-59	1959-60	1960-61
Agriculture .. ..	86,141	88,198	101,058	92,411	132,918
Pastoral .. ..	149,880	137,854	134,015	160,138	139,414
Dairying* .. ..	66,330	65,431	65,264	70,471	72,004
Poultry and Bees ..	21,464	23,266	22,263	24,691	27,290
Trapping .. ..	3,588	3,621	3,862	3,749	3,156
Forestry .. ..	13,134	14,109	15,441	16,969	16,314
Fisheries .. ..	1,381	1,294	1,433	2,045	2,064
Mining .. ..	11,891	12,728	13,694	14,935	16,267
Total Primary Industries	353,809	346,501	357,030	385,409	409,427

\* Includes Subsidy—1956-57, £6,286,000; 1957-58, £6,696,000; 1958-59 £6,223,000; 1959-60, £6,204,000; 1960-61, £6,710,000.



*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	1956-57	1957-58	1958-59	1959-60	1960-61
<b>Agriculture—</b>					
Barley .. ..	2,829	2,710	3,375	2,042	2,364
Maize .. ..	60	130	114	113	106
Oats .. ..	2,307	4,072	4,716	3,573	4,910
Wheat .. ..	19,778	18,460	23,567	22,421	40,721
Onions .. ..	685	425	894	842	628
Potatoes .. ..	4,797	2,222	3,874	4,966	8,313
Other Vegetables ..	9,954	9,219	8,217	8,703	9,410
Hay and Straw ..	14,358	16,331	17,789	13,836	20,854
<b>Fruit—</b>					
Orchards ..	8,364	9,422	7,884	7,914	10,084
Vineyards ..	6,498	8,106	8,342	6,188	7,236
Other Crops ..	3,317	3,836	6,679	8,532	9,850
<b>Total ..</b>	<b>72,947</b>	<b>74,933</b>	<b>85,451</b>	<b>79,130</b>	<b>114,476</b>
<b>Pastoral—</b>					
Wool .. ..	89,652	68,520	51,786	67,758	61,095
Sheep, Slaughtered ..	17,341	20,865	22,375	27,766	23,655
Cattle, Slaughtered ..	30,969	36,004	45,623	49,891	40,963
<b>Total ..</b>	<b>137,962</b>	<b>125,389</b>	<b>119,784</b>	<b>145,415</b>	<b>125,713</b>
<b>Dairying—</b>					
<b>Whole Milk Used for—</b>					
Butter .. ..	29,481	29,027	28,522	30,829	30,796
Cheese .. ..	3,921	2,973	3,650	4,329	4,742
Condensing, Con- centrating, &c. ..	6,085	6,520	5,979	6,667	6,070
Human Consump- tion and Other Purposes ..	12,050	12,243	12,744	13,122	13,552
Subsidy Paid on Whole Milk for Butter and Cheese ..	6,286	6,696	6,223	6,204	6,710
Pigs, Slaughtered ..	5,936	5,459	5,540	6,460	7,177
<b>Total ..</b>	<b>63,759</b>	<b>62,918</b>	<b>62,658</b>	<b>67,611</b>	<b>69,047</b>
<b>Poultry and Bees—</b>					
Eggs .. ..	14,349	15,516	13,545	15,493	17,839
Poultry .. ..	4,932	5,589	6,533	6,765	6,895
Honey and Beeswax	506	268	408	428	319
<b>Total ..</b>	<b>19,787</b>	<b>21,373</b>	<b>20,486</b>	<b>22,686</b>	<b>25,053</b>

VICTORIA—LOCAL VALUE OF PRIMARY PRODUCTION—*continued*  
(£'000)

Produce	1956-57	1957-58	1958-59	1959-60	1960-61
Trapping, &c.					
Rabbits and Hares ..	2,387	2,501	2,717	2,560	2,310
Rabbit and Hare Skins, &c. ..	946	786	845	932	635
Total ..	3,333	3,287	3,562	3,492	2,945
Forestry—					
Sawmills .. ..	7,828	7,617	7,468	8,015	7,307
Hewn Timber .. ..	1,007	1,300	998	1,426	1,358
Firewood .. ..	3,280	4,030	5,454	5,913	6,036
Bark for Tanning .. ..	163	120	128	86	58
Other .. ..	19	21	15	36	36
Total ..	12,297	13,088	14,063	15,476	14,795
Fisheries—					
Fish .. ..	1,026	937	1,062	1,495	1,347
Crayfish .. ..	150	158	199	260	420
Oysters .. ..	2	6	1	1	2
Other .. ..	..	3	3	15	18
Total ..	1,178	1,104	1,265	1,771	1,787
Mining—					
Gold .. ..	653	736	694	585	471
Coal—					
Black .. ..	668	556	528	455	418
Brown .. ..	4,644	5,227	5,418	6,123	6,845
Other Metals and Minerals .. ..	1,188	1,256	1,851	1,930	2,007
Quarrying .. ..	4,738	4,953	5,203	5,842	6,526
Total ..	11,891	12,728	13,694	14,935	16,267
Total Primary Industries	323,154	314,820	320,963	350,516	370,083

*Net Value of Production*

The ultimate aim of the valuation of production is to arrive at the sum available for distribution among those concerned in each class of industry. These include :—

- (1) Workers in all grades of industry ;
- (2) proprietors (including landlords) of any of the instruments of production concerned ; and
- (3) providers of capital including debenture holders and mortgagees.

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, kerosine, other oils, dips, sprays, and other costs. Details for primary industries and manufacturing are shown in the table below :—

**VICTORIA—NET VALUE OF PRODUCTION**  
(£'000)

Division of Industry	1956-57	1957-58	1958-59	1959-60	1960-61
<b>Rural—</b>					
Agriculture .. .. .	63,802	64,971	73,661	68,912	104,031
Pastoral .. .. .	129,883	115,970	110,392	135,630	116,181
Dairying .. .. .	47,933	46,153	44,382	47,469	50,947
Poultry .. .. .	12,506	14,042	12,572	14,636	17,011
Bee-farming .. .. .	506	268	408	428	319
<b>Total Rural .. .. .</b>	<b>254,630</b>	<b>241,404</b>	<b>241,415</b>	<b>267,075</b>	<b>288,489</b>
<b>Non-rural .. .. .</b>	<b>26,265</b>	<b>27,423</b>	<b>29,877</b>	<b>32,840</b>	<b>32,685</b>
<b>Total Primary .. .. .</b>	<b>280,895</b>	<b>268,827</b>	<b>271,292</b>	<b>299,915</b>	<b>321,174</b>
<b>Manufacturing .. .. .</b>	<b>528,031</b>	<b>566,476</b>	<b>608,947</b>	<b>686,501</b>	<b>700,511</b>
<b>Total All Industries .. .. .</b>	<b>808,926</b>	<b>835,303</b>	<b>880,239</b>	<b>986,416</b>	<b>1,021,685</b>

# Part 8

## MANUFACTURING INDUSTRY

### *Modern Management Techniques in Manufacturing Industry*

#### **Introduction**

The ever increasing complexity and rate of change in the industrialized world is demanding from each community a continuing improvement in its capacity to understand and in its skill to apply the techniques of management, particularly as they concern manufacturing.

Before the First World War the purchasing public and authorities in Australia gave little encouragement to locally made products. The free traders were a group deprecating local manufacture and arguing with some justification in the last century that Australia's function was to supply primary products to European countries and balance the trade by importing their manufactures.

Ability to import largely ceased as the First World War entered its third year, and it was realized that Australia must plan to produce and manufacture her essential products. In this Victoria, in large measure, was able to give a lead, because already by the mid-1890's the following manufacturing activities had been firmly established: clothing manufacture, iron founding, boot and shoe manufacture, printing, tanning and fellmongering, coach making, sawmilling, joinery works, and breweries—each employing more than 1,000 persons. Other notable industries which had shown marked development and which at the time had employed more than 500 persons were woollen mills, butter and cheese factories, flour mills, biscuit making, jam making, aerated water making, agricultural implement making, and gas works. These key manufacturing industries played a fundamental part in Victoria's early economy. Many were family owned and managed, and their success depended on practical experience and skills rather than planned organization and methods.

The Tariff Board established after the First World War was an expression of national policy in building local manufacturing. About the mid-1920's, the impact of modern industrialization began to be felt in Victoria. Electricity and the internal combustion engine then began rapidly to replace steam driven units and horses.

### **Introduction of Modern Management Techniques**

The increasing demand for mechanization resulted in American companies manufacturing in Victoria mass-produced standard products requiring accurate and consistent components made from guaranteed materials. This called for production planning, organization of operations, and staff training, in accordance with the systems started in America by Ford and others. American industry had developed and enunciated teachable principles underlying the various departmental functions essential to effective modern management.

At the outbreak of the Second World War, General Motors had organized in their plant at Fisherman's Bend a staff training section for the teaching of management techniques in their own works, and also to assist their sub-contractors in Australia. Similar procedures were also being established by other American companies in Australia. The Second World War not only largely cut Australia's oversea supplies, but also made her a main source of supply for the allied armies east of Suez. To meet the demands of a big and diverse programme of munitions production, the Commonwealth Government organized training of large numbers of skilled operatives in the workshops and laboratories of the technical colleges.

### **Beginning of Management Training**

Effective supervision of this type of labour obviously called for well-trained foremen. Realizing this, the Department of Technical Education in Melbourne joined with a number of leaders in the engineering industry in beginning a training course at the Royal Melbourne Technical College (now the Royal Melbourne Institute of Technology) to develop suitable tradesmen into foremen, by giving them some education and training in the techniques of supervision and management.

General Motors passed over all their relevant information and made available their senior training officer to organize the course of lectures for the first year. Applications to attend the course greatly outnumbered teaching capacity. Additional lecturers were trained in the course and multiple groups were set up the next year and in succeeding years. Many of the students on completing the course asked for a second year, and in due time for still a third year, covering more advanced management practices. From Melbourne the courses in supervision and management spread to the technical colleges in other capital cities and to New Zealand.

From this small beginning in applying management techniques to industry as well as a centralized direction from the Department of Munitions which required modern methods in its own factories and in those of its contractors, grew the Australian Institute of Management. This body became the forerunner of the many other activities for improvement in management practices by planned staff training and executive development that have been established since the war in industry, business, and administration throughout Australia.

### Growth of Interest in Management

From the end of the Second World War to 1950 was a period of re-organization and extension of existing factories, building new works, and bringing them into production. The following table shows subsequent industrial growth :—

#### VICTORIA—FACTORY ACTIVITY

Year	Number of Factories	Employment	Value of Output	Balance Sheet Valuation of Land, Buildings, Plant and Machinery	Value Added during Manufacture
	No.			£ mill.	
1950-51 ..	13,504	316,792	675	208	276
1960-61 ..	17,173	387,430	1,646	819	701
Increase ..	27·2%	22·3%	143·9%	293·8%	154·0%

Except for a short period in 1952-53, there was little unemployment during this decade, but great shortage of experienced staff and of skilled work people. This called forth great improvement in the field of personnel management and the establishment by industrial companies of in-works training schemes (Training Within Industry, &c.).

### Development of Executives

Formal staff training, as described above, commenced in 1940 at the Royal Melbourne Technical College (later the Royal Melbourne Institute of Technology). Training for more senior management staff by lecture and discussion group methods at the Institute of Management was developed in 1942, and this was followed by conferences and courses organized for the development of executives. The growth of students enrolling in management courses at the Royal Melbourne Institute of Technology, and of membership of the Melbourne Division of the Australian Institute of Management is shown in the following figures at five year intervals from 1945 to 1960 :—

#### VICTORIA—ENROLMENTS FOR MANAGEMENT TRAINING

Institution	1945	1950	1955	1960
Royal Melbourne Institute of Technology : Student Enrolments for Management Courses .. .. .	798	866	1,223	1,300
Members Melbourne Division of Australian Institute of Management .. .. .	972	1,470	1,599	2,764

[Sources : Royal Melbourne Institute of Technology and Australian Institute of Management.

In 1960 the Melbourne Division organized 33 day conference and lecture series for executives, and 108 staff training courses attended by 3,110 delegates. The operating expenses of the Division were over £60,000. The equivalent figure for 1950 was £13,250.

Since the beginning of courses at the Management School of the Royal Melbourne Institute of Technology, some 30,000 students in Victoria have enrolled for subjects, and year by year, members continue to increase. The Royal Melbourne Institute of Technology continues to assist technical colleges to establish similar courses; Geelong, Ballarat, Footscray, Swinburne, Moorabbin, and Dandenong, have already established them by this means.

Higher management training has been assisted by the establishment of the Administrative Staff College at Mt. Eliza and the Summer Vacation School for Executives at the Melbourne University (see Victorian Year Book 1961, pages 204-5, 213) These provide for extended residential courses where selected senior executives live together while undergoing intensive courses on the Harvard or Henley Staff College systems. Applications for enrolments exceed the places available.

### In-works Training Schemes

An increasing number of industries and Government departments have set up their own internal training organizations employing full-time specialist staff. These staffs co-operate with the Institute of Management and other kindred bodies to the mutual advantage of all concerned in bettering management methods.

### Summary

The table below shows, at intervals between 1901 and 1960-61, the development of manufacturing industry:—

#### VICTORIA—SUMMARY OF FACTORY DEVELOPMENT

Year	Factories	Employment*	Salaries and Wages Paid†	Value of—			
				Materials and Fuel Used	Production‡	Output	Land, Buildings, Plant and Machinery
	No.	No.	£'000	£'000	£'000	£'000	£'000
1901 .. ..	3,249	66,529	§	§	§	§	12,298
1920-21 .. ..	6,532	140,743	21,377	67,585	38,423	106,008	35,493
1940-41 .. ..	9,121	237,636	52,295	120,348	89,001	209,349	92,050
1950-51 .. ..	13,504	316,792	163,207	399,373	275,660	675,033	207,587
1952-53 .. ..	15,154	310,759	210,878	502,113	358,033	860,146	282,690
1953-54 .. ..	15,533	331,277	236,036	577,190	408,315	985,505	339,268
1954-55 .. ..	15,861	346,648	262,750	648,433	452,223	1,100,656	412,671
1955-56 .. ..	16,053	355,185	286,944	709,444	491,948	1,201,392	473,216
1956-57 .. ..	16,232	355,204	296,608	748,110	528,031	1,276,141	533,584
1957-58 .. ..	16,426	357,143	310,540	811,221	568,685	1,379,906	579,820
1958-59 .. ..	16,527	362,979	324,336	822,094	610,969	1,433,063	646,940
1959-60 .. ..	16,979	381,514	370,181	923,113	688,389	1,611,502	730,827
1960-61 .. ..	17,173	387,430	387,221	945,941	700,511	1,646,452	818,669

\* Average employment over whole year, including working proprietors.

† Excludes drawings of working proprietors.

‡ Value of output less value of materials, &c.

§ Not available.

NOTE.—A graph showing the distribution of the components of value of output for the years 1951-52 to 1960-61 is shown on page 594.

## Manufacturing Activity

### General

#### *Factory and Wages Board Legislation*

The first Factories Act in Victoria was passed in 1873. Since then many other Acts dealing with the subject have been placed upon the statute-book. They have been consolidated in the *Labour and Industry Act* 1958. Under the Act registration of factories is compulsory and certain conditions relating to lighting, ventilation, fire escape, and sanitation must be fulfilled before registration is granted. The Act requires that departmental approval of plans be obtained before the commencement of the building of any factory premises or alteration or addition to it.

The general provisions of factory legislation, including Wages Boards, are further referred to on pages 432 to 434, 454-455, and 459-460.

#### *Decentralization of Manufacturing Industries: Division of State Development*

Early in the Second World War, steps were taken by State Governments to encourage the establishment of new manufacturing industries in country towns in Victoria and to develop existing country secondary industries. Legislation was passed in 1944 to enable Crown lands to be made available to industries, both for the erection of new factories and for the provision of housing for their employees.

A Decentralization Fund was established from which advances have been made to finance new industries. Assistance was granted in meeting freight charges on raw materials and finished goods, as well as in other ways. In 1949, a war-time explosives factory at Ballarat was purchased and the buildings were either leased or sold to individual industries, some of which have since purchased additional Crown land in the area on which to extend their plants.

Prior to 1950, many of the plants established throughout the State were of the annexe type or branches of existing metropolitan industries. However, more recently, greater success has been achieved in the development of complete units in country centres based on suitable sites for permanent operation.

The promotion and assistance of this development is one of the functions of the Division of State Development of the Premier's Department, further reference to which is made on page 419 of the Victorian Year Book 1962.

In addition, the Rural Finance Corporation was constituted by Parliament in 1950, to make advances for the development of both primary and secondary industry in rural areas. In March, 1962, the Rural Finance Corporation was amalgamated with the Soldier Settlement Commission and became the Finance Branch of the Rural Finance and Settlement Commission. Loans made to secondary industries as at 30th June, 1961, amounted to £3,295,880.



*Commonwealth Department of Trade*

The functions of this Department include the development of secondary industries, the protection of secondary industry (including tariff protection which is administered through the Tariff Board) and as part of its policy of promoting external trade, the promotion of exports of the products of secondary industry.

*Customs and Excise Tariffs and Bounties on Manufacture*

The Tariff Board, appointed by the Commonwealth Government, examines proposals for amending the tariff and makes recommendations relating to the necessity for new, increased, or reduced duties and, where necessary, advises regarding the necessity for granting bounties. It takes into consideration the effect of any changes on manufacturing industry in Australia.

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards.

**Scientific Research and Standardization***Commonwealth Scientific and Industrial Research Organization*

The function of this Organization is to initiate and conduct research in connexion 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 standardization 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 acts as the national standardizing organization 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.

*National Association of Testing Authorities*

This Association organizes national testing facilities throughout Australia to serve private and governmental needs. Laboratories may register voluntarily for tests within their competence and the Association ensures the maintenance of their standards of testing. It is expected that there will be general acceptance of certificates of tests issued in the name of the Association by the registered laboratories.

**Definitions in Factory Statistics**

The statistics dealing with factories have been compiled from returns supplied annually by manufacturers under the authority of the Commonwealth Census and Statistics Act and the Victorian 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, &c., of their employees, the value of premises and equipment and of factory stocks, the horse-power of machinery, the value, and, in many cases, the quantities of raw materials and fuel used, and quantities and values of principal articles produced. The returns obtained from manufacturers 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, &c., 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 annual comparisons of manufacturing production.

The concept of value added prevents this double counting, gives a truer picture of the relative economic importance of industries, and also provides a good basis for estimating and comparing productive efficiency in manufacturing.

### Classification of Factories

#### *General*

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 the year 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, still obtains.

It should be noted that where a factory, engaged in the production of such goods as would entitle it to classification in more than one sub-class of industry, is unable to give separate production costs, &c., for such activities, it is classified to the predominant activity of such factory.

The classes and sub-classes in the current classification of factories are as follows :—

### CLASSIFICATION OF FACTORIES

#### CLASS I.—TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS

Coke Works  
Briquetting and Pulverized Coal  
Carbide  
Lime, Plaster of Paris, and Asphalt  
Fibrous Plaster and Products  
Marble, Slate, &c.  
Cement, Portland  
Asbestos Cement Sheets and Mouldings  
Other Cement Goods  
Other

#### CLASS II.—BRICKS, POTTERY, GLASS, ETC.

Bricks and Tiles  
Earthenware, China, Porcelain, and Terracotta  
Glass (Other than Bottles)  
Glass Bottles  
Other

#### CLASS III.—CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE

Industrial and Heavy Chemicals and Acids  
Pharmaceutical and Toilet Preparations  
Explosives (Including Fireworks)  
White Lead, Paints, and Varnish  
Oils, Vegetable  
Oils, Mineral  
Oils, Animal  
Boiling-down, Tallow-refining  
Soap and Candles  
Chemical Fertilizers  
Inks, Polishes, &c.  
Matches  
Other

#### CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES

Smelting, Converting, Refining, Rolling of Iron and Steel  
Foundries (Ferrous)  
Plant, Equipment, and Machinery, &c.  
Other Engineering  
Extracting and Refining of Other Metals; Alloys  
Electrical Machinery, Cables, and Apparatus  
Construction and Repair of Vehicles (10 groups)  
Ship and Boat Building and Repairing, Marine Engineering (Government and Other)  
Cutlery and Small Hand Tools  
Agricultural Machines and Implements

#### CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES—*continued.*

Non-Ferrous Metals—  
Rolling and Extrusion  
Founding, Casting, &c.  
Iron and Steel Sheets  
Sheet Metal Working, Pressing, and Stamping  
Pipes, Tubes, and Fittings—Ferrous  
Wire and Wire Netting (Including Nails)  
Stoves, Ovens, and Ranges  
Gas Fittings and Meters  
Lead Mills  
Sewing Machines  
Arms and Ammunition (Excluding Explosives)  
Wireless and Amplifying Apparatus  
Other Metal Works

#### CLASS V.—PRECIOUS METALS, JEWELLERY, PLATE

Jewellery  
Watches and Clocks (Including Repairs)  
Electroplating (Gold, Silver, Chromium, &c.)

#### CLASS VI.—TEXTILES AND TEXTILE GOODS (NOT DRESS)

Cotton Ginning  
Cotton Spinning and Weaving  
Wool—Carding, Spinning, Weaving  
Hosiery and Other Knitted Goods  
Silk, Natural  
Rayon, Nylon, and Other Synthetic Fibres  
Flax Mills  
Rope and Cordage  
Canvas Goods, Tents, Tarpaulins, &c.  
Bags and Sacks  
Textile Dyeing, Printing, and Finishing  
Other

#### CLASS VII.—SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR)

Furriers and Fur-dressing  
Woolscouring and Fellmongery  
Tanning, Currying, and Leather-dressing  
Saddlery, Harness, and Whips  
Machine Belting (Leather or Other)  
Bags, Trunks, &c.

#### CLASS VIII.—CLOTHING (EXCEPT KNITTED)

Tailoring and Ready-made Clothing  
Waterproof and Oilskin Clothing  
Dressmaking, Hemstitching  
Millinery  
Shirts, Collars, and Underclothing  
Foundation Garments

CLASS VIII.—CLOTHING (EXCEPT KNITTED)—*continued.*

Handkerchiefs, Ties, and Scarves  
Hats and Caps  
Gloves  
Boots and Shoes (Not Rubber)  
Boot and Shoe Repairing  
Boot and Shoe Accessories  
Umbrellas and Walking Sticks  
Dyeworks and Cleaning, &c.  
Other

## CLASS IX.—FOOD, DRINK, AND TOBACCO

Flour-milling  
Cereal Foods and Starch  
Animal and Bird Foods  
Chaffcutting and Corncrushing  
Bakeries (Including Cakes and Pastry)  
Biscuits  
Sugar-mills  
Sugar-refining  
Confectionery (Including Chocolate and Icing Sugar)  
Jam, Fruit, and Vegetable Canning  
Pickles, Sauces, and Vinegar  
Bacon Curing  
Butter Factories  
Cheese Factories  
Condensed and Dried Milk Factories  
Margarine  
Meat and Fish Preserving  
Condiments, Coffee, and Spices  
Ice and Refrigerating  
Salt  
Aerated Waters, Cordials, &c.  
Breweries  
Distilleries  
Wine-making  
Cider and Perry  
Malting  
Bottling  
Tobacco, Cigars, Cigarettes, and Snuff  
Dehydrated Fruit and Vegetables  
Ice Cream  
Sausage Casings  
Arrowroot  
Other

## CLASS X.—SAWMILLS, JOINERY, BOXES, ETC., WOOD TURNING AND CARVING

Sawmills  
Plywood Mills (Including Veneers)  
Bark Mills  
Joinery  
Cooperage  
Boxes and Cases  
Woodturning, Woodcarving, &c.  
Basketware and Wickerware (Including Sea-grass and Bamboo Furniture)  
Perambulators (Including Pushers and Strollers)  
Wall and Ceiling Boards (Not Plaster or Cement)  
Other

## CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.

Cabinet and Furniture Making (Including Billiard Tables and Upholstery)  
Bedding and Mattresses (Not Wire)  
Furnishing Drapery  
Picture Frames  
Blinds

## CLASS XII.—PAPER, STATIONERY, PRINTING, BOOKBINDING, ETC.

Newspapers and Periodicals  
Printing—  
Government  
General, Including Bookbinding  
Manufactured Stationery  
Stereotyping, Electrotyping  
Process and Photo Engraving  
Cardboard Boxes, Cartons, and Containers  
Paper Bags  
Paper-making  
Pencils, Penholders, Chalks, and Crayons  
Other

## CLASS XIII.—RUBBER

Rubber Goods (Including Tyres Made)  
Tyre Retreading and Repairing

## CLASS XIV.—MUSICAL INSTRUMENTS

Gramophones and Gramophone Records  
Pianos, Piano-Players, and Organs  
Other

## CLASS XV.—MISCELLANEOUS PRODUCTS

Linoleum, Leather-cloth, Oil-cloth, &c.  
Bone, Horn, Ivory, and Shell  
Plastic Moulding and Products  
Brooms and Brushes  
Optical Instruments and Appliances  
Surgical and Other Scientific Instruments and Appliances  
Photographic Material (Including Developing and Printing)  
Toys, Games, and Sports Requisites  
Artificial Flowers  
Other

## CLASS XVI.—HEAT, LIGHT, AND POWER

Electric Light and Power  
Gas Works

## Factories According to Class of Industry

The following table contains a summary of factories by class of industry in Victoria during the year ended 30th June, 1961 :—

## VICTORIA—FACTORIES BY CLASSES, 1960-61

Class of Industry	Factories	Employment*	Salaries and Wages Paid†	Materials and Fuel Used	Value of—		
					Production	Output	Land, Buildings, Plant and Machinery
		No.			£'000		
I. Treatment of Non-metalliciferous Mine and Quarry Products ..	457	6,977	8,202	22,544	18,040	40,584	30,621
II. Bricks, Pottery, Glass, &c. ..	181	6,569	7,150	9,665	12,491	22,156	10,402
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	362	15,443	18,274	107,299	55,471	162,770	84,928
IV. Industrial Metals, Machines, Conveyances ..	6,522	157,202	169,925	276,461	265,003	541,464	251,723
V. Precious Metals, Jewellery, Plate ..	242	2,087	1,965	2,122	3,234	5,356	2,312
VI. Textiles and Textile Goods (Not Dress) ..	806	40,395	33,987	82,394	59,033	141,427	56,441
VII. Skins and Leather (Not Clothing or Footwear)	260	3,992	3,652	10,483	5,990	16,473	5,466
VIII. Clothing (Except Knitted)	2,580	45,462	33,537	55,091	54,794	109,885	32,227
IX. Food, Drink, and Tobacco	2,052	38,361	36,863	208,262	80,733	288,995	104,708
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving ..	1,396	15,623	15,165	32,076	25,375	57,451	20,431
XI. Furniture of Wood, Bedding, &c. ..	630	6,309	5,527	11,609	9,781	21,390	6,895
XII. Paper, Stationery, Printing, Bookbinding, &c. ..	967	25,228	27,854	62,363	54,156	116,519	55,207
XIII. Rubber ..	163	7,359	7,993	22,812	15,449	38,261	14,056
XIV. Musical Instruments ..	26	216	213	206	291	497	333
XV. Miscellaneous Products	463	11,261	10,757	23,478	19,723	43,201	18,014
Total, Classes I. to XV. ..	17,107	382,484	381,064	926,865	679,564	1,606,429	693,764
XVI. Heat, Light, and Power	66	4,946	6,157	19,076	20,947	40,023	124,905
GRAND TOTAL ..	17,173	387,430	387,221	945,941	700,511	1,646,452	818,669

\* Average employment over whole year, includes working proprietors.

† Excludes drawings of working proprietors.

“Industrial Metals, Machines, and Conveyances” with 157,202 persons or 41 per cent. of the total employment in factories during 1960-61, employed considerably more persons than any other class of industry. Next in order of employment was “Clothing” with 45,462 or 12 per cent., followed by “Textiles and Textile Goods” and “Food, Drink, and Tobacco” with 40,395 and 38,361 respectively or 10 per cent. of the total.

The total value of production (added value) in 1960-61 was £700,511,000. Of this amount the metals group contributed £265,003,000 which represented 38 per cent. of the total. The food group followed with £80,733,000 or 12 per cent., and next in order were textiles with £59,033,000, chemicals, dyes, &c., £55,471,000, paper £54,156,000, and clothing £54,794,000—each with approximately 8 per cent.

The next table shows the number of factories in Victoria during the years 1956-57 to 1960-61 classified according to industry :—

VICTORIA—NUMBER OF FACTORIES IN INDUSTRIAL CLASSES

Class of Industry	1956-57	1957-58	1958-59	1959-60	1960-61
I. Treatment of Non-metalliferous Mine and Quarry Products ..	445	442	450	449	457
II. Bricks, Pottery, Glass, &c. ..	161	159	160	176	181
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	345	350	361	367	362
IV. Industrial Metals, Machines, Conveyances ..	5,818	5,971	6,018	6,414	6,522
V. Precious Metals, Jewellery, Plate ..	273	266	265	248	242
VI. Textiles and Textile Goods (Not Dress) ..	740	748	754	811	806
VII. Skins and Leather (Not Clothing or Footwear) ..	297	289	275	272	260
VIII. Clothing (Except Knitted) ..	2,512	2,516	2,442	2,416	2,580
IX. Food, Drink, and Tobacco ..	1,999	2,022	2,178	2,104	2,052
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving ..	1,387	1,407	1,382	1,404	1,396
XI. Furniture of Wood, Bedding, &c. ..	700	704	665	664	630
XII. Paper, Stationery, Printing, Book-binding, &c. ..	864	884	892	948	967
XIII. Rubber ..	146	151	158	164	163
XIV. Musical Instruments ..	30	28	25	25	26
XV. Miscellaneous Products ..	430	411	431	446	463
Total, Classes I. to XV. ..	16,147	16,348	16,456	16,908	17,107
XVI. Heat, Light, and Power ..	85	78	71	71	66
GRAND TOTAL	16,232	16,426	16,527	16,979	17,173

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 1951-52 to 1960-61 :—

VICTORIA—FACTORIES CLASSIFIED ACCORDING TO NUMBER OF PERSONS EMPLOYED DURING PERIOD OF OPERATION

Year	Number of Factories Employing, on the Average, Persons Numbering—							
	Under 4	4	5 to 10	11 to 20	21 to 50	51 to 100	Over 100	Total
1951-52 .. ..	4,789	1,267	3,714	2,141	1,720	585	542	14,758
1952-53 .. ..	5,325	1,292	3,699	2,156	1,613	556	513	15,154
1953-54 .. ..	5,474	1,251	3,841	2,179	1,660	572	556	15,533
1954-55 .. ..	5,672	1,250	3,826	2,206	1,717	600	590	15,861
1955-56 .. ..	5,693	1,229	3,915	2,260	1,754	608	594	16,053
1956-57 .. ..	5,854	1,247	3,918	2,252	1,705	638	618	16,232
1957-58 .. ..	6,077	1,254	3,862	2,268	1,721	621	623	16,426
1958-59 .. ..	6,062	1,320	3,876	2,261	1,725	643	640	16,527
1959-60 .. ..	6,030	1,403	4,003	2,401	1,816	659	667	16,979
1960-61 .. ..	6,176	1,350	4,083	2,365	1,832	693	674	17,173

VICTORIA—AVERAGE NUMBER OF PERSONS EMPLOYED  
ACCORDING TO SIZE OF FACTORY DURING PERIOD OF  
OPERATION

Year	Average Number Employed (Including Working Proprietors)—							Total
	Under 4	4	5 to 10	11 to 20	21 to 50	51 to 100	Over 100	
1951-52 .. ..	9,640	5,068	25,739	31,472	53,922	41,016	158,701	325,558
1952-53 .. ..	10,478	5,168	25,691	31,718	50,820	39,165	149,348	312,388
1953-54 .. ..	10,725	5,004	26,824	32,035	52,602	40,617	165,447	333,254
1954-55 .. ..	11,070	5,000	26,885	32,151	53,410	41,620	178,132	348,268
1955-56 .. ..	11,116	4,916	27,408	33,006	55,581	42,758	181,907	356,692
1956-57 .. ..	11,730	4,988	27,444	33,219	53,729	44,427	180,976	356,513
1957-58 .. ..	11,748	5,016	27,252	33,341	54,254	43,358	183,921	358,890
1958-59 .. ..	12,314	5,280	27,604	33,184	54,311	44,817	187,467	364,977
1959-60 .. ..	12,005	5,612	27,991	35,216	57,905	45,866	198,664	383,259
1960-61 .. ..	12,315	5,400	29,047	34,962	58,167	48,251	200,879	389,021

The increase in numbers of small factories and in the persons employed in large factories is of particular interest.

The relative importance of large and small factories is illustrated in the above table. In 1960-61, 7,526 factories employing four or less employees had a total employment of 17,715 persons. Expressed in terms of percentages, 44 per cent. of factories—those employing four or less persons—employed less than 5 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 Repairing.

The relative and absolute increases in the number of small factories using power other than manual, i.e., those employing less than four hands, 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 1960-61, this figure had increased to 6,176, i.e., 36·0 per cent. of the total. This increase is believed to be due not so much to an increase in the number of small factories as 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 following table also shows that, in 1960-61, factories employing less than four persons constituted 36·0 per cent. of the total number of factories and accounted for only 2·3 per cent. of the total Value of Production. The table also shows that Value of Production per person employed is lowest in the smallest factories and in general rises as size increases.



VICTORIA—NUMBER OF FACTORIES : PERSONS EMPLOYED  
AND VALUE OF PRODUCTION ACCORDING TO SIZE OF  
ESTABLISHMENT, 1902 AND 1960-61

Average Number of Persons Employed during Period of Operation	1902				1960-61							
	Factories		Persons Employed*		Factories		Persons Employed*		Value of Production			
	No.	%	No.	%	No.	%	No.	%	£'000	%	Per Person Employed	
												£
Under 4 ..	525	13·1	1,636	2·2	6,176	36·0	12,090	3·1	15,963	2·3	1,320	
4 .. ..	398	9·9	1,603	2·2	1,350	7·9	5,366	1·4	7,909	1·1	1,474	
5-10 .. ..	1,629	40·7	11,303	15·5	4,083	23·8	28,682	7·5	46,134	6·6	1,608	
11-20 .. ..	726	18·1	10,562	14·5	2,365	13·8	34,655	8·9	58,020	8·3	1,674	
21-50 .. ..	467	11·7	14,361	19·6	1,832	10·7	57,805	14·9	101,570	14·5	1,757	
51-100.. ..	148	3·7	10,238	14·0	693	4·0	48,016	12·4	87,766	12·5	1,828	
101-200 ..	110	2·8	23,360	32·0	377	2·2	53,269	13·7	96,721	13·8	1,816	
201-500 ..					200	1·1	60,102	15·5	121,077	17·3	2,015	
Over 500 ..					97	0·5	87,445	22·6	165,351	23·6	1,891	
Total ..	4,003	100·0	73,063	100·0	17,173	100·0	387,430	100·0	700,511	100·0	1,801	

\* Average employment over the whole year, includes working proprietors.

NOTE.—A graph showing Number of Factories and Value of Production by size groups in 1960-61 is shown on page 594.

A general indication of the geographical disposition of factories in the State is shown in the next table where secondary industry in Victoria for 1960-61 is classified according to statistical divisions :—

VICTORIA—FACTORIES IN STATISTICAL DIVISIONS, 1960-61

Statistical Division	Factories	Employment*	Salaries and Wages Paid†	Value of—			
				Materials and Fuel Used	Production	Output	Land, Buildings, Plant and Machinery
	No.	No.	£'000	£'000	£'000	£'000	£'000
Metropolitan ..	12,182	314,108	317,919	728,758	563,847	1,292,605	558,912
Central ..	1,105	22,020	21,844	73,836	41,152	114,988	61,553
North-Central ..	380	5,044	4,231	7,929	8,500	16,429	8,712
Western ..	1,003	14,492	12,779	34,362	22,198	56,560	24,239
Wimmera ..	384	2,302	1,744	5,076	3,151	8,227	2,626
Mallee ..	302	2,271	1,784	3,747	2,907	6,654	5,934
Northern ..	780	10,284	9,183	40,298	16,283	56,581	23,017
North-Eastern ..	454	5,034	4,324	10,935	9,019	19,954	38,539
Gippsland ..	583	11,875	13,413	41,000	33,454	74,454	95,137
Total ..	17,173	387,430	387,221	945,941	700,511	1,646,452	818,669

\* Average employment over the whole year, includes working proprietors.

† Excludes drawings of working proprietors.

Factories in the Metropolitan Area constituted 71 per cent. of the total number in Victoria in 1960-61, 81 per cent. of the persons employed, and 80 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 map opposite page 114.

The number of factories and persons employed therein in each statistical division are shown in the following table :—

VICTORIA—NUMBER OF FACTORIES AND PERSONS EMPLOYED IN EACH STATISTICAL DIVISION : CLASSIFIED ACCORDING TO SIZE OF FACTORY, 1960-61

Size of Factory (Persons)	Statistical Division									Total
	Metro-politan	Central	North-Central	West-ern	Wim-mera	Mallee	North-ern	North-Eastern	Gipps-land	
NUMBER OF FACTORIES										
Under 5 ..	4,716	623	227	548	256	184	471	256	245	7,526
5-10 ..	2,922	246	79	256	82	70	159	98	171	4,083
11-20 ..	1,852	118	37	92	30	24	69	60	83	2,365
21-50 ..	1,535	59	22	59	13	16	46	30	52	1,832
51-100 ..	583	28	9	22	2	8	20	5	16	693
101-500 ..	494	26	5	22	1	..	13	4	12	577
501 and over..	80	5	1	4	..	..	2	1	4	97
Total ..	12,182	1,105	380	1,003	384	302	780	454	583	17,173
NUMBER OF PERSONS EMPLOYED										
Under 5 ..	11,062	1,425	497	1,267	538	427	1,101	556	583	17,456
5-10 ..	20,745	1,705	555	1,728	528	464	1,066	699	1,192	28,682
11-20 ..	27,431	1,667	520	1,300	420	331	975	834	1,177	34,655
21-50 ..	48,503	1,888	683	1,795	389	545	1,544	906	1,552	57,805
51-100 ..	40,356	1,986	603	1,642	*	504	1,318	*	1,121	48,016
101-500 ..	94,219	6,330	*	*	*	..	*	928	2,930	113,371
501 and over..	71,792	7,019	*	*	..	..	*	*	3,320	87,445
Total ..	314,108	22,020	5,044	14,492	2,302	2,271	10,284	5,034	11,875	387,430

\* Not available for publication.

The above table shows that in 1960-61 there were 674 factories each employing more than 100 persons with a total employment of 200,816 persons in Victoria. Of these 574 (166,011 persons) were located in the Metropolitan Area and 31 (13,349 persons) in the Central Statistical Division which includes Geelong. The balance, 69 factories (21,456 persons) were distributed over the remainder of the State, principally in the Western (26 factories and 6,760 persons) and Gippsland (16 factories and 6,250 persons) Statistical Divisions.

VICTORIA—FACTORIES : VALUE OF OUTPUT, 1951-52 TO 1960-61

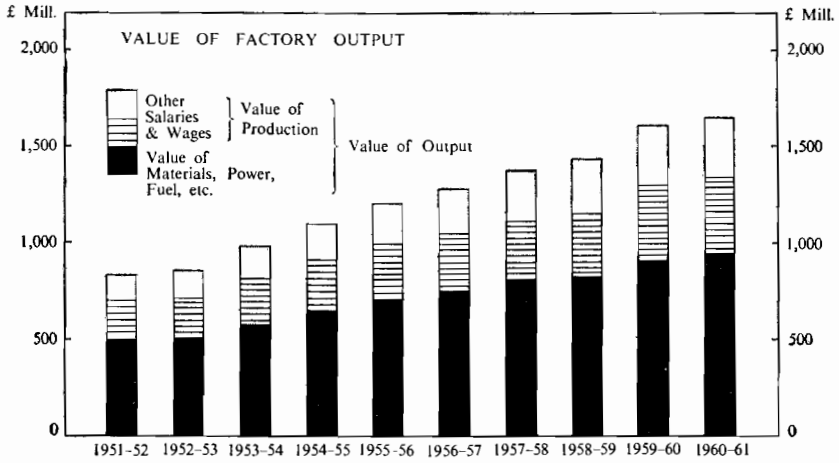


FIGURE 13. Graph showing value of output of factories.

VICTORIA—FACTORIES : NUMBER OF FACTORIES, AND VALUE OF PRODUCTION CLASSIFIED ACCORDING TO AVERAGE NUMBER OF PERSONS EMPLOYED

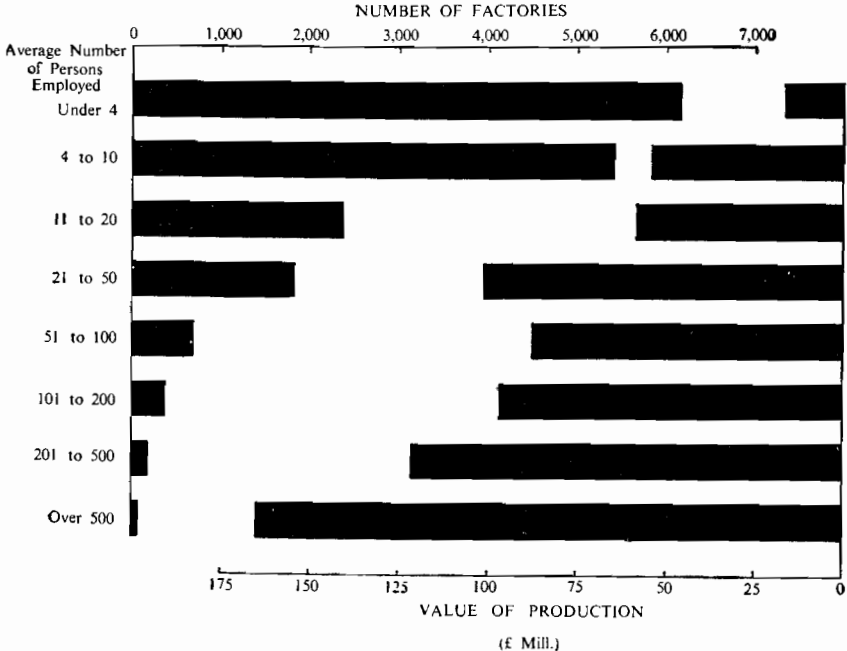
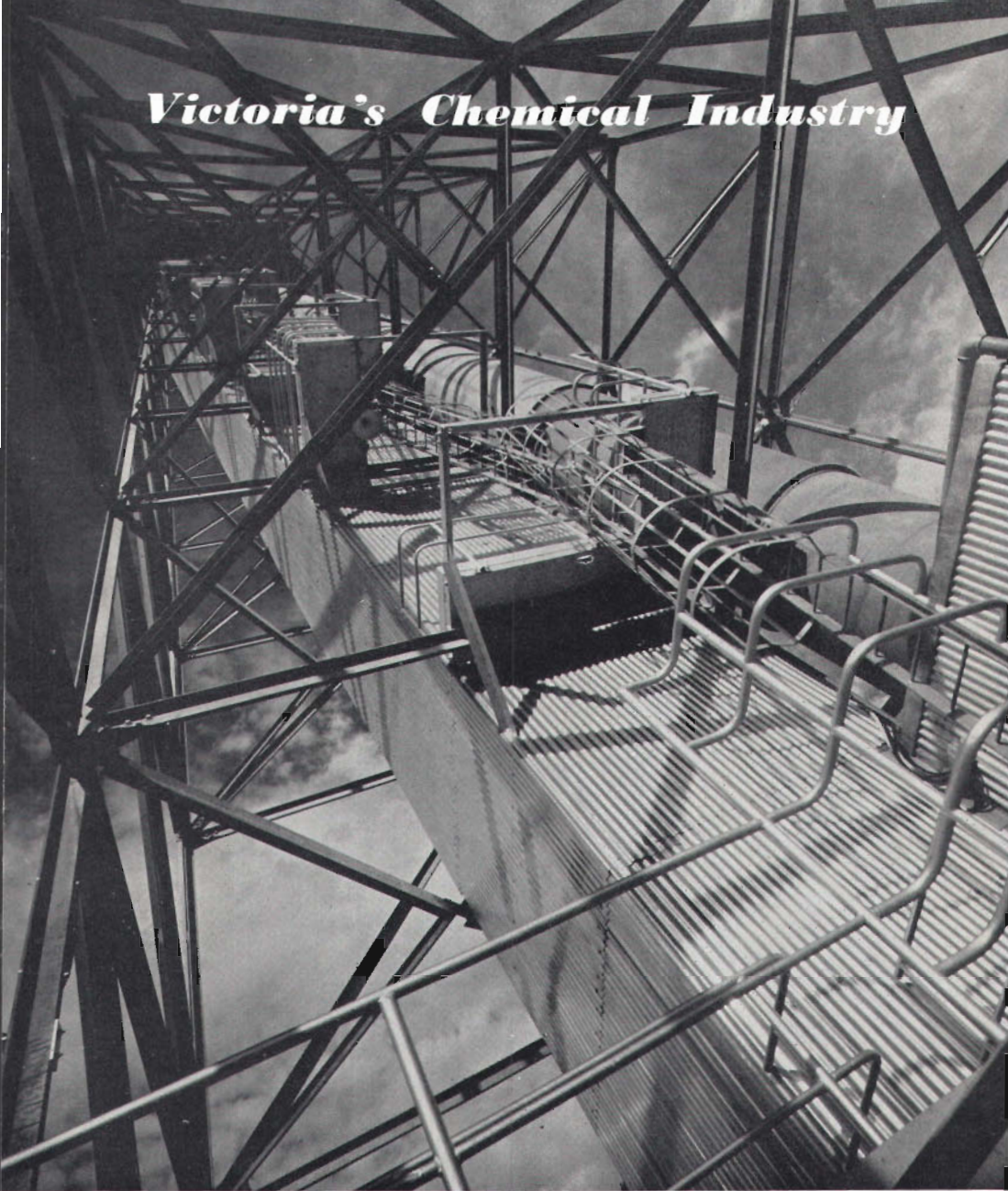


FIGURE 14. Graph showing number of factories and value of production classified according to average number of persons employed.

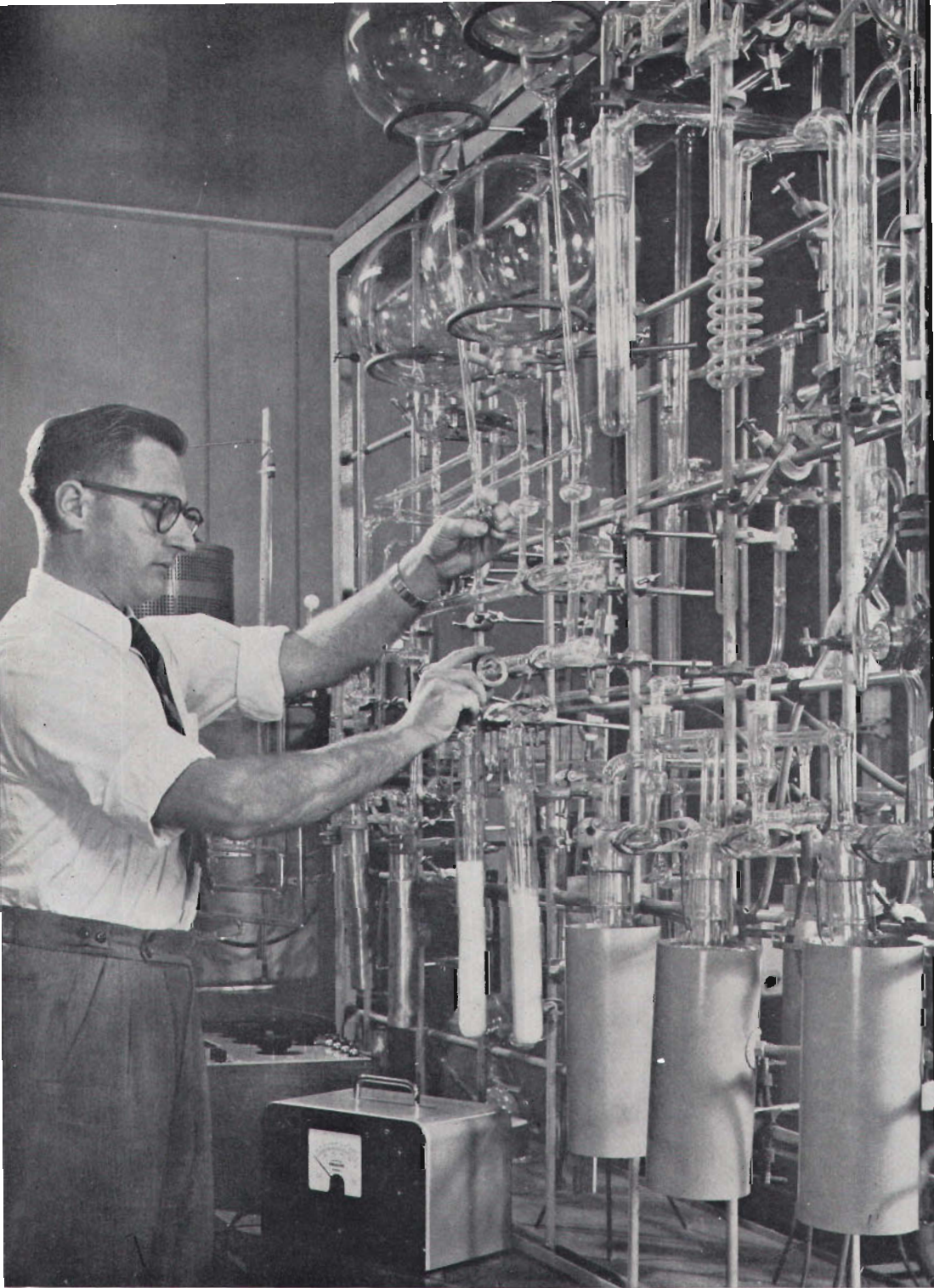
# *Victoria's Chemical Industry*



P.C.I.A.N.Z.

Production of lead shot for sporting ammunition and industrial purposes is carried on at this 180 feet high shot tower at Deer Park, Melbourne, constructed in 1960.

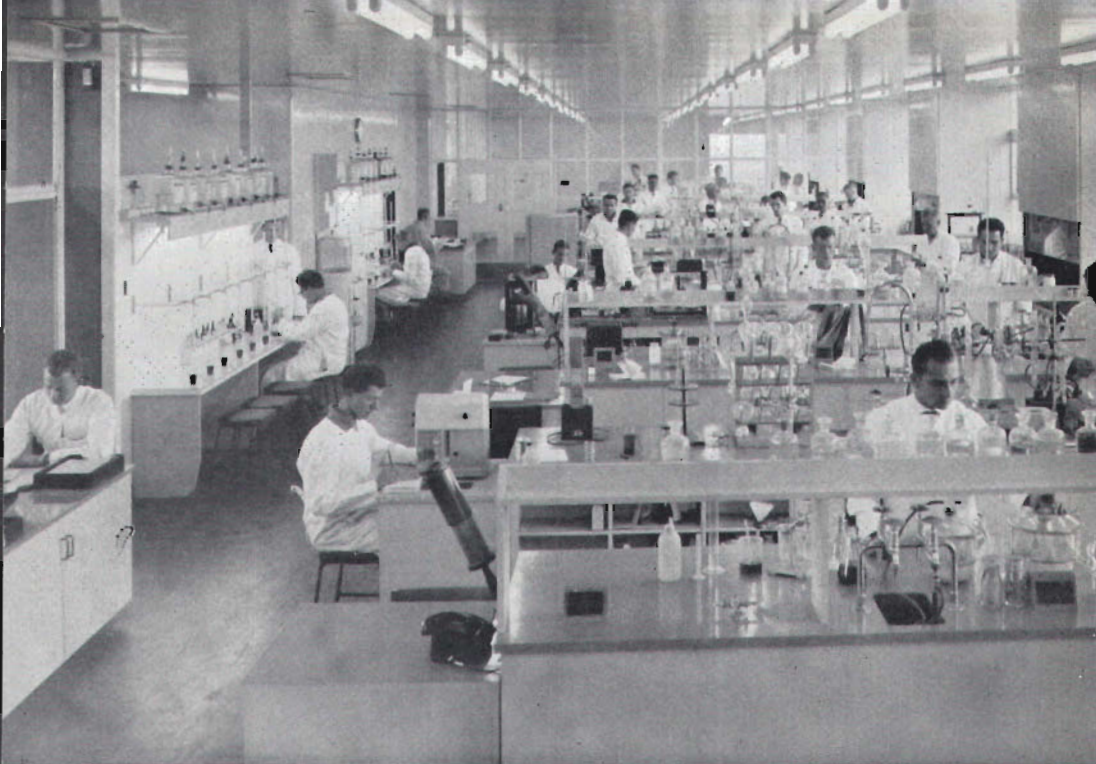




[I.C.I.A.N.Z.]

Scientist at the Melbourne central research laboratory of a large industrial firm, prepares high-vacuum equipment used in the study of hydrocarbonoxidation, and reactions involving thermal decompositions. Industrial laboratories in Victoria carry out basic as well as applied research, supplementing the much greater quantity of study performed by the C.S.I.R.O. and other Government institutions.



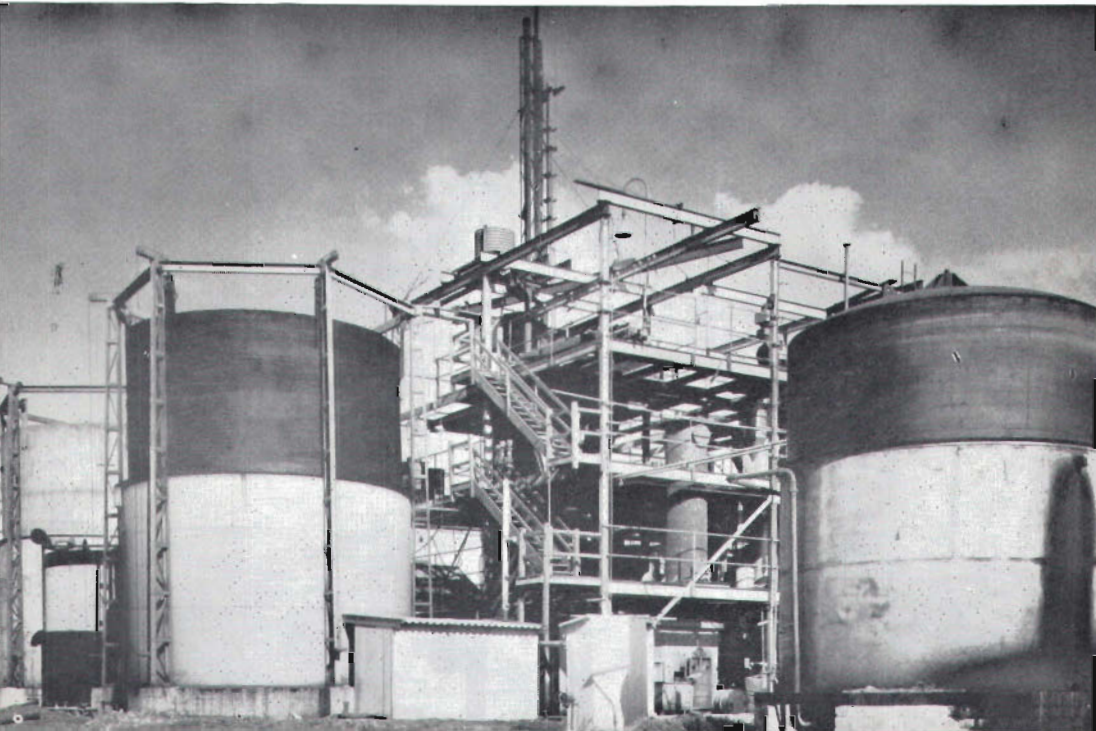


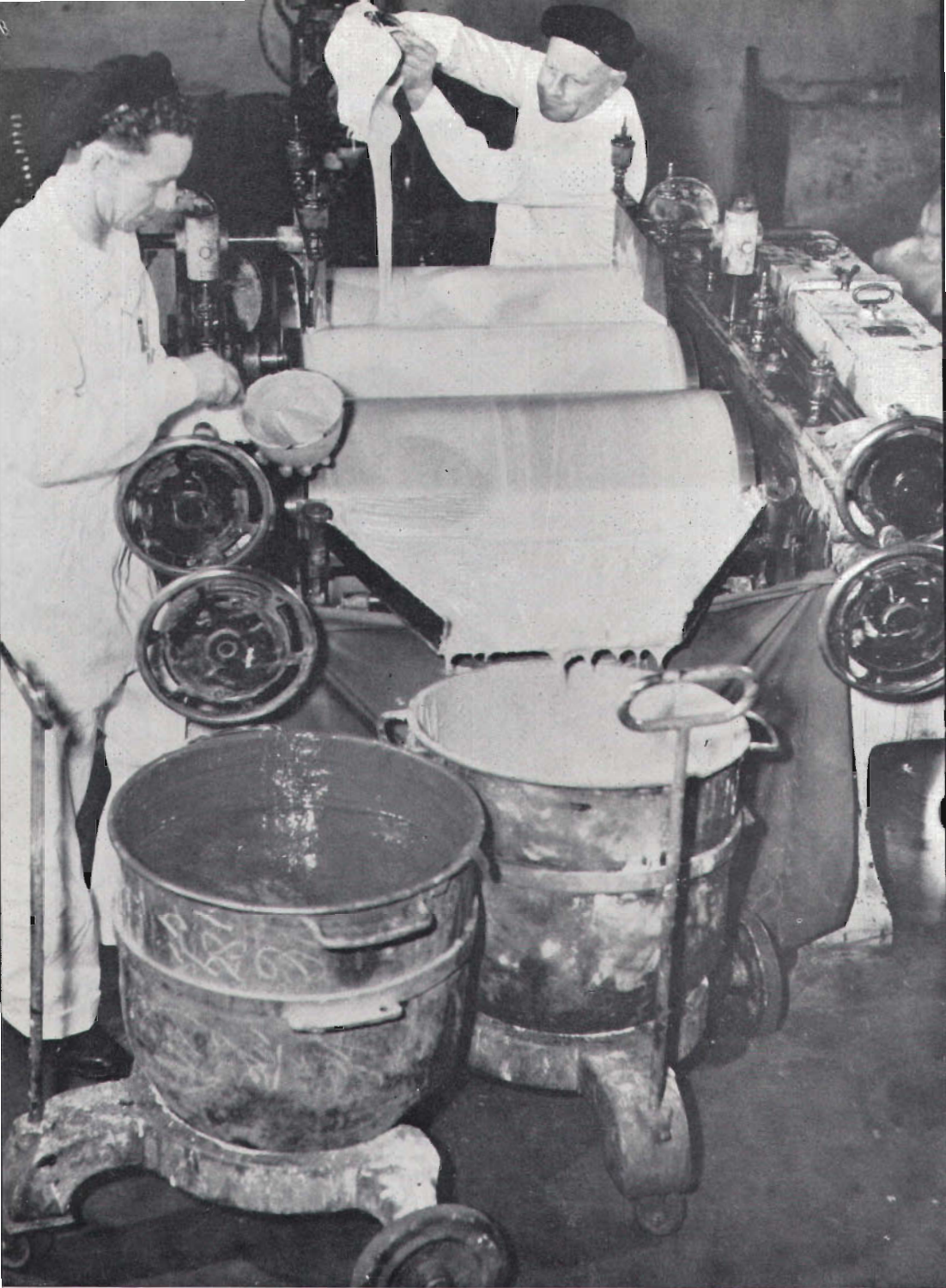
[Monsanto Chemicals (Aust.)]

*Above* : Chemicals manufacturing necessarily demands strict quality control, and this laboratory has been planned to meet the most exacting demands of production requirements.

*Below* : Experimental plant for coal gasification at Fishermen's Bend.

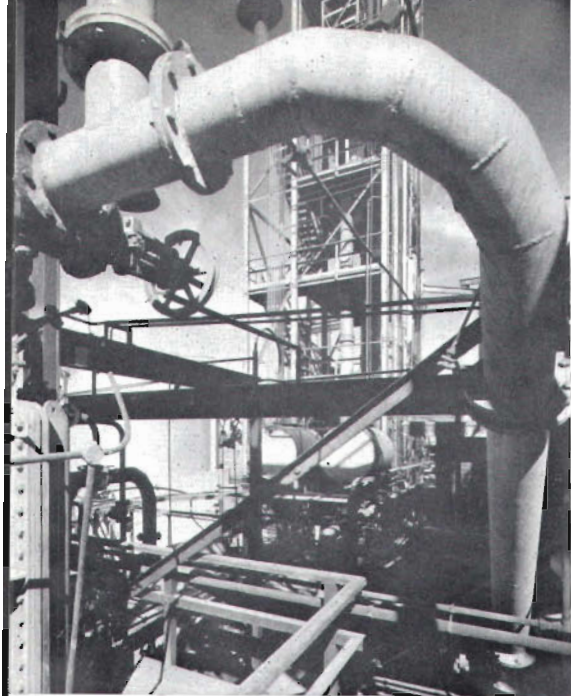
[C.S.I.R.O.]





[I.C.I.A.N.Z.]  
Colourful pigment pastes, used in the making of vinyl coated fabrics, are finely ground in a triple roll mill at a Melbourne factory. The pigments are later blended with the PVC compound which forms the coating on the woven base cloth.



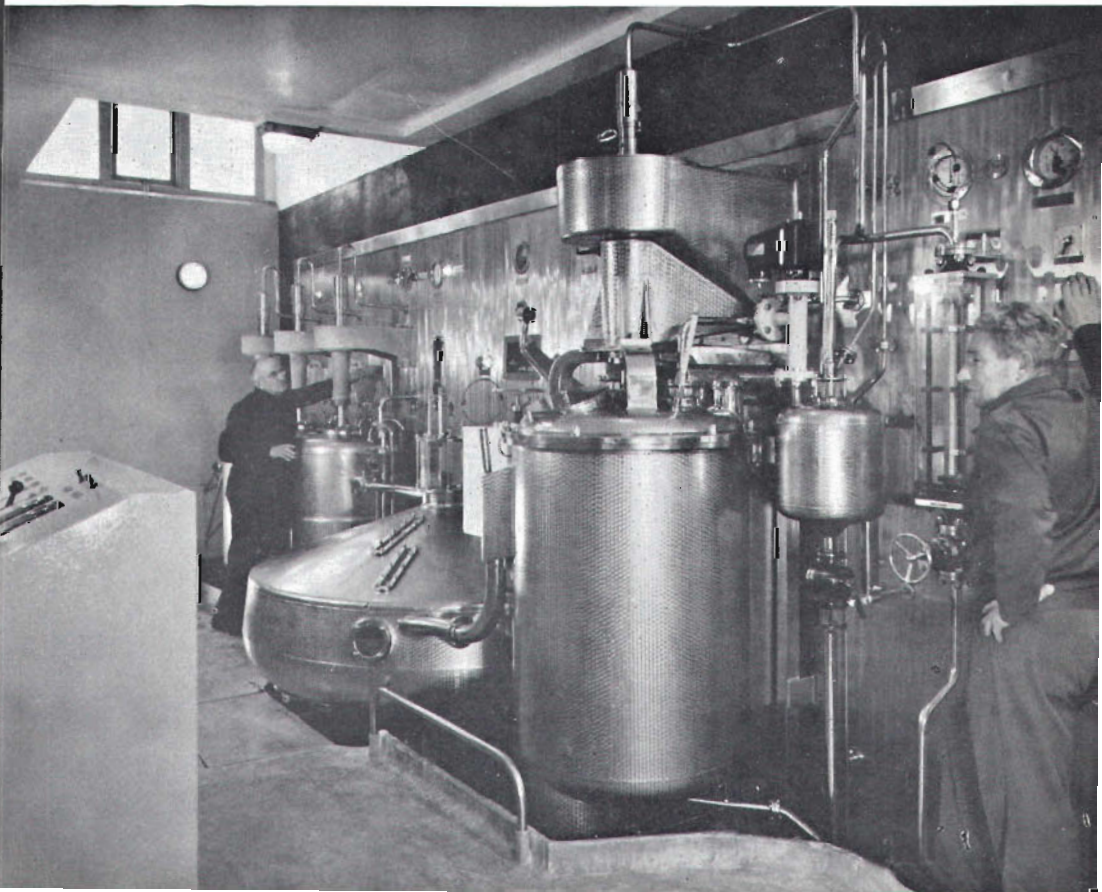


*Left:* Equipment for the production of Diphenylamine at a large factory in Yarraville. Significant for the manufacture of D.D.T. ammonia, and other equally important commodities. Diphenylamine is only one of the many complex organic chemicals manufactured in Victoria by the chemical industry.

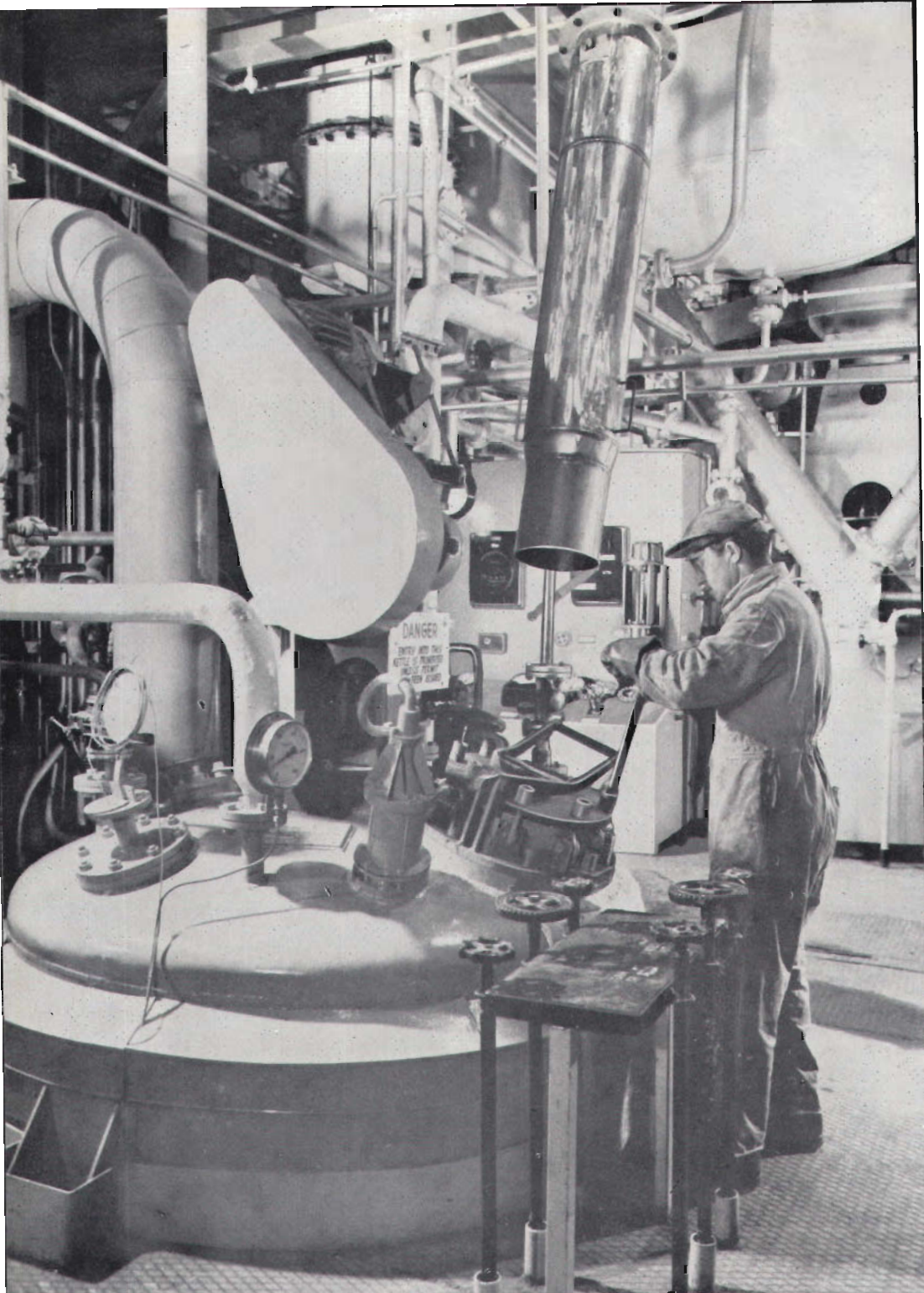
[I.C.I.A.N.Z.]

*Below:* This Biazzi plant at Deer Park is the largest in the world. Installed in 1956, it allows, with great safety, the continuous production of nitroglycerine, as opposed to the traditional "batch" process. Explosives produced by the plant are widely used in national developmental works, such as the Snowy Mountains Scheme.

[I.C.I.A.N.Z.]

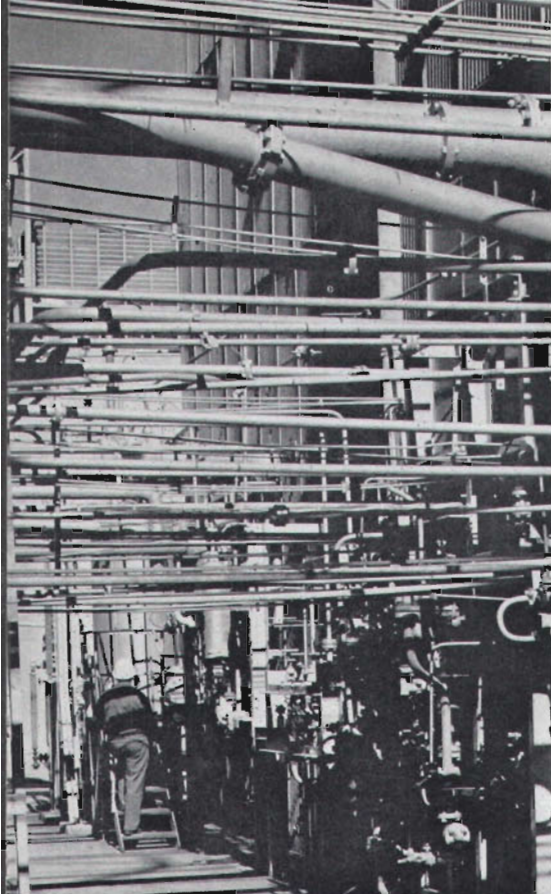






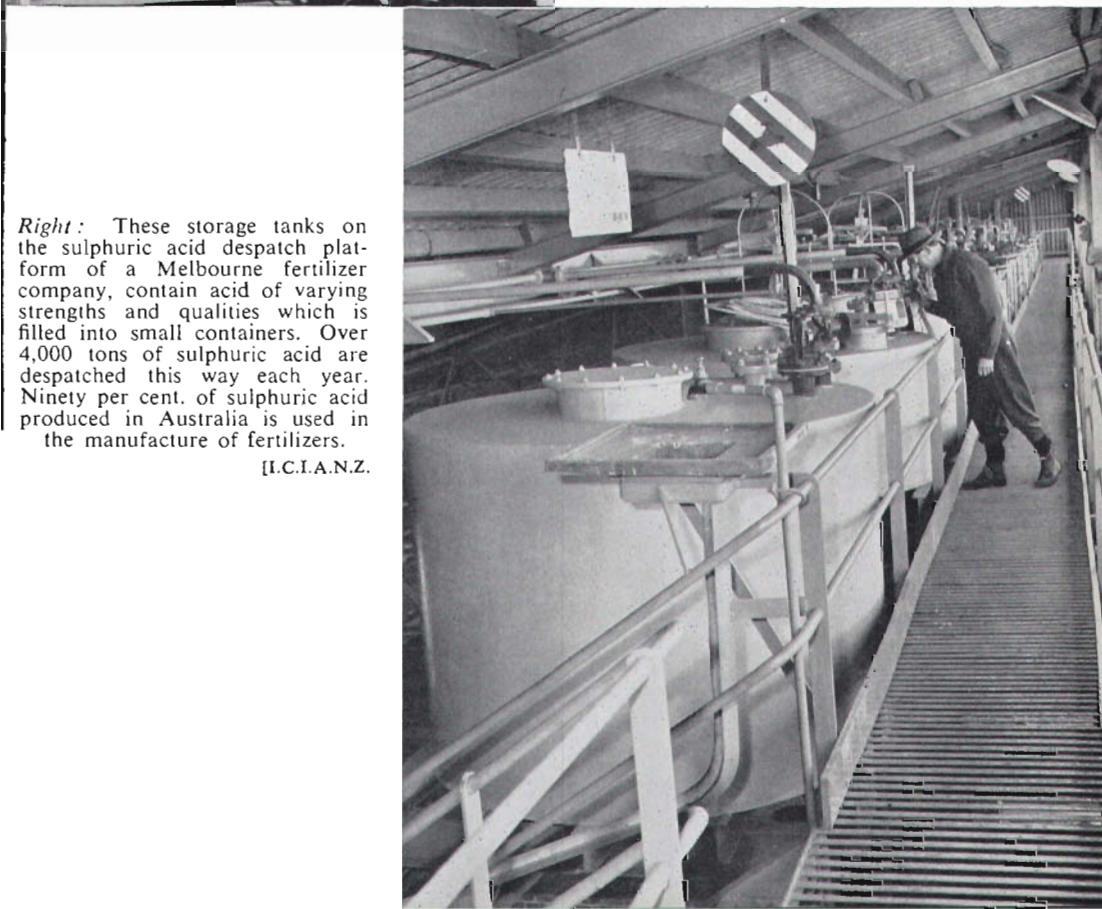
[Monsanto Chemicals (Aust.)

Part of the kettle section of the phenolic resin manufacturing unit at a large Victorian plant. These resins are mainly used in moulding powders for the plastics industry.



*Left:* Maze of pipes illustrates the complexity of chemical manufacture. This view is of a synthetic ammonia plant at Deer Park, which uses the Haber process to "fix" atmospheric nitrogen for use in the manufacture of nitric acid, ammonia, fertilizers, and commercial explosives.

[I.C.I.A.N.Z.]



*Right:* These storage tanks on the sulphuric acid despatch platform of a Melbourne fertilizer company, contain acid of varying strengths and qualities which is filled into small containers. Over 4,000 tons of sulphuric acid are despatched this way each year. Ninety per cent. of sulphuric acid produced in Australia is used in the manufacture of fertilizers.

[I.C.I.A.N.Z.]





Australian farmers used about 2½ million tons of superphosphate in 1960-61, spending £20 million on topdressing alone. This giant fertilizer storage shed in Melbourne has a capacity of 3,000 tons. Both superphosphate and mixed fertilizers are stored here for up to a month until they have matured.

[I.C.I.A.N.Z.]

It should be noted that Castlemaine and Maryborough are included 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 counted as factory employees 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) foremen and overseers ; (v) workers in factory (skilled and unskilled) ; and (vi) carters (excluding delivery only), messengers, and persons working regularly at home.

The figures showing average employment in factories represent the equivalent average number of persons employed, including working proprietors, over a full year of 52 weeks. This method is used for all purposes except where factories are classified according to size (see pages 590-591), where the average number of persons employed is the average over the period of operation.

The following table shows the average number of persons employed in factories in each industrial class in Victoria for the year 1956-57 to 1960-61 :—

**VICTORIA—PERSONS EMPLOYED IN FACTORIES.**

Class of Industry	1956-57	1957-58	1958-59	1959-60	1960-61		
					Males	Females	Persons
I. Treatment of Non-ferrous Mine and Quarry Products ..	6,398	6,341	6,522	6,564	6,632	345	6,977
II. Bricks, Pottery, Glass, &c. ..	5,652	5,660	5,846	6,460	5,831	738	6,569
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	16,653	16,996	17,392	16,231	12,168	3,275	15,443
IV. Industrial Metals, Machines, Conveyances ..	131,299	134,221	139,115	150,843	136,932	20,270	157,202
V. Precious Metals, Jewellery, Plate ..	2,605	2,469	2,150	1,980	1,676	411	2,087
VI. Textiles and Textile Goods (Not Dress) ..	37,945	38,078	37,500	41,073	16,545	23,850	40,395
VII. Skins and Leather (Not Clothing or Footwear) ..	4,724	4,649	4,559	4,413	2,820	1,172	3,992
VIII. Clothing (Except Knitted) ..	47,093	45,764	45,783	45,260	13,874	31,588	45,462
IX. Food, Drink, and Tobacco ..	37,542	37,310	37,383	38,830	26,725	11,636	38,361
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving ..	15,093	14,815	15,092	15,759	14,718	905	15,623
XI. Furniture of Wood, Bedding, &c. ..	6,312	6,550	6,492	6,531	4,984	1,325	6,309
XII. Paper, Stationery, Printing, Bookbinding, &c. ..	21,619	22,113	22,846	24,305	18,592	6,636	25,228
XIII. Rubber ..	6,848	6,932	7,207	7,282	5,858	1,501	7,359
XIV. Musical Instruments ..	293	269	247	233	182	34	216
XV. Miscellaneous Products ..	10,313	10,357	9,863	10,767	7,231	4,030	11,261
Total, Classes I. to XV. ..	350,389	352,524	357,997	376,531	274,768	107,716	382,484
XVI. Heat, Light, and Power ..	4,815	4,619	4,982	4,983	4,907	39	4,946
GRAND TOTAL ..	355,204	357,143	362,979	381,514	279,675	107,755	387,430

The dominance of four classes, namely, Class IV.—Industrial Metals, Machines, and Conveyances; Class VI.—Textiles and Textile Goods (Not Dress); Class VIII.—Clothing (Except Knitted); and Class IX.—Food, Drink, and Tobacco with 73 per cent. of factory employment should be noted.

Twenty-eight per cent. of factory workers in 1960–61 were females. They exceeded males in Class VI.—Textiles and Textile Goods (Not Dress) with 59 per cent. and in Class VIII.—Clothing (Except Knitted), with 69 per cent. of the Class total.

Of the total females employed, 29 per cent. were in Class VIII.; 22 per cent. in Class VI.; 19 per cent. in Class IV.—Industrial Metals, Machines, and Conveyances; and 11 per cent. in Class IX.—Food, Drink, and Tobacco.

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 1951–52 to 1960–61:—

#### VICTORIA—NATURE OF EMPLOYMENT IN FACTORIES

Year	Working Proprietors	Managerial and Clerical Staff	Chemists, Draftsmen, &c.	Foremen and Overseers	Workers in Factories (Skilled and Unskilled)	Carters (Excluding Delivery Only) and Messengers, &c.	Total
1951–52.. ..	12,851	32,846	4,019	13,866	258,251	2,310	324,143
1952–53.. ..	13,392	32,722	4,098	13,639	244,866	2,042	310,759
1953–54.. ..	13,722	33,789	4,299	14,193	262,916	2,358	331,277
1954–55.. ..	14,053	36,262	4,590	14,862	274,741	2,140	346,648
1955–56.. ..	14,056	38,287	5,511	15,262	279,848	2,221	355,185
1956–57.. ..	13,967	40,279	5,585	15,498	277,507	2,368	355,204
1957–58.. ..	13,934	40,951	5,751	16,262	278,110	2,135	357,143
1958–59.. ..	13,704	42,960	6,152	17,264	280,772	2,127	362,979
1959–60.. ..	13,401	45,913	6,677	18,060	295,423	2,040	381,514
1960–61.. ..	13,223	48,010	7,112		319,085		387,430

During the ten years reviewed in the previous table, the proportion of foremen, skilled and unskilled workers in factories and carters declined from 85 per cent. to 82 per cent., managerial and clerical staffs increased from 10 per cent. to 12 per cent., and chemists, draftsmen, &c., increased from 1 per cent. to 2 per cent.

In 1960–61 there was an average of 387,430 persons employed in factories and of these 3·4 per cent. were working proprietors; 14·2 per cent. comprised managerial, clerical, and professional staff; and the balance, 82·4 per cent., consisted of persons engaged as foremen, workers in the processes of manufacture, sorting and packing.

The following table shows the nature of employment in factories in 1960-61, according to the class of industry :—

VICTORIA—NATURE OF EMPLOYMENT IN FACTORIES BY CLASSES OF INDUSTRY, 1960-61

Class of Industry	Working Proprietors	Managerial and Clerical Staff	Chemists, Draftsmen, &c.	All Other Workers	Total
I. Treatment of Non-metalliferous Mine and Quarry Products ..	280	836	110	5,751	6,977
II. Bricks, Pottery, Glass, &c. ..	75	595	52	5,847	6,569
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	103	2,666	1,168	11,506	15,443
IV. Industrial Metals, Machines, Conveyances .. ..	4,799	22,657	3,990	125,756	157,202
V. Precious Metals, Jewellery, Plate .	219	205	6	1,657	2,087
VI. Textiles and Textile Goods (Not Dress) .. ..	579	3,510	251	36,055	40,395
VII. Skins and Leather (Not Clothing or Footwear) .. ..	253	348	24	3,367	3,992
VIII. Clothing (Except Knitted) ..	2,520	2,918	28	39,996	45,462
IX. Food, Drink, and Tobacco ..	1,855	5,099	566	30,841	38,361
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving ..	987	1,739	39	12,858	15,623
XI. Furniture of Wood, Bedding, &c.	567	689	5	5,048	6,309
XII. Paper, Stationery, Printing, Book-binding, &c. .. ..	632	3,686	220	20,690	25,228
XIII. Rubber .. ..	58	1,086	227	5,988	7,359
XIV. Musical Instruments .. ..	11	34	..	171	216
XV. Miscellaneous Products .. ..	271	1,618	275	9,097	11,261
Total, Classes I. to XV. ..	13,209	47,686	6,961	314,628	382,484
XVI. Heat, Light, and Power ..	14	324	151	4,457	4,946
GRAND TOTAL .. ..	13,223	48,010	7,112	319,085	387,430

Although "All Other Workers" constitute 82·4 per cent. of the total numbers employed in factories, the percentage varies from 75 per cent. in Class III. to 89 per cent. in Class II. Class III. also has the highest percentage of managerial and clerical and research workers, 25 per cent., compared with the Victorian average of 14 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 V.—Precious Metals and Jewellery, where working proprietors comprise 10 per cent. of the total number employed ; Class X.—Sawmills, Joinery, &c., 6 per cent. ; and Class XI.—Furniture of Wood, Bedding, &c., 9 per cent. The average for Victoria is 3 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 1952 to 1961 :—

**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
1952 ..	2,981	16,417	199,303	218,701	1,911	13,051	65,530	80,492
1953 ..	2,972	17,890	200,533	221,395	2,432	13,546	67,056	83,034
1954 ..	3,093	18,778	211,311	233,182	2,527	14,180	74,260	90,967
1955 ..	2,908	19,417	220,582	242,907	2,381	14,316	76,863	93,560
1956 ..	2,888	19,815	223,462	246,165	2,338	14,549	78,054	94,941
1957 ..	2,966	20,446	222,402	245,814	2,480	14,571	77,282	94,333
1958 ..	2,705	21,584	223,776	248,065	2,408	14,900	77,392	94,700
1959 ..	2,595	22,203	229,285	254,083	2,535	15,774	79,213	97,522
1960 ..	2,573	23,013	242,436	268,022	2,664	16,449	87,003	106,116
1961 ..	2,707	21,948	230,989	255,644	2,586	14,531	79,069	96,186

The numbers of males and females employed in factories, and the proportions of the average male and female population working in factories in 1960–61 and earlier years are shown in the following tables :—

**VICTORIA—EMPLOYMENT OF MALES AND FEMALES IN  
FACTORIES**

Year Ended 30th June—	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
1919 ..	81,357	1,188	40,992	550	122,349	855
1929 ..	104,648	1,195	51,920	586	156,568	889
1939 ..	136,218	1,470	65,613	692	201,831	1,076
1949 ..	208,184	1,996	83,822	781	292,006	1,380
1956 ..	258,006	1,995	97,179	764	355,185	1,385
1957 ..	258,119	1,937	97,085	743	355,204	1,345
1958 ..	259,404	1,901	97,739	728	357,143	1,319
1959 ..	263,847	1,888	99,132	720	362,979	1,308
1960 ..	275,315	1,918	106,199	750	381,514	1,338
1961 ..	279,675	1,919	107,755	750	387,430	1,339

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		
	1958-59	1959-60	1960-61	1958-59	1959-60	1960-61
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	323	317	345	5.0	4.8	4.9
II. Bricks, Pottery, Glass, &c. .. .. .	553	699	738	9.5	10.8	11.2
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	3,983	3,533	3,275	22.9	21.8	21.2
IV. Industrial Metals, Machines, Conveyances .. .. .	16,732	19,328	20,270	12.0	12.8	12.9
Plant, Equipment and Machinery	2,548	3,107	3,027	10.3	11.2	11.1
Electrical Machinery, Cables, and Apparatus .. .. .	3,499	3,878	3,783	25.5	25.8	25.1
Sheet Metal Working .. .. .	2,069	2,290	2,176	20.5	21.2	20.2
Wireless and Amplifying Apparatus .. .. .	1,459	1,545	1,340	40.2	40.3	39.1
V. Precious Metals, Jewellery, Plate .. .. .	364	352	411	16.9	17.8	19.7
VI. Textiles and Textile Goods (Not Dress) .. .. .	21,314	23,969	23,850	56.8	58.4	59.0
Cotton Spinning and Weaving	2,021	2,053	1,970	51.9	52.7	55.9
Wool-Carding, Spinning, Weaving	5,916	6,399	5,932	53.8	54.7	54.0
Hosiery and Other Knitted Goods	10,790	12,411	12,756	70.6	73.3	74.0
VII. Skins and Leather (Not Clothing or Footwear) .. .. .	1,090	1,147	1,172	23.9	26.0	29.4
VIII. Clothing (Except Knitted) .. .. .	31,755	31,756	31,588	69.4	70.2	69.5
Tailoring and Ready-Made Clothing .. .. .	6,963	7,592	7,885	86.1	73.0	73.1
Dressmaking, Hemstitching .. .. .	7,280	7,535	7,202	88.5	87.1	86.8
Boots and Shoes (Not Rubber)	5,769	5,896	6,182	51.4	53.4	53.4
Dyeworks and Cleaning, &c. .. .. .	1,970	1,599	1,453	52.7	50.0	48.8
IX. Food, Drink, and Tobacco—	10,395	11,243	11,636	27.8	29.0	30.3
Bakeries (Including Cakes and Pastry) .. .. .	1,458	1,510	1,539	24.1	25.1	25.7
Confectionery (Including Chocolate and Icing Sugar) .. .. .	1,673	1,700	1,787	54.7	54.8	55.9
Jam, Fruit, and Vegetable Canning	1,549	1,723	1,668	40.7	42.0	40.8
Tobacco, Cigars, Cigarettes .. .. .	943	976	1,171	49.2	47.4	50.9
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. .. .	823	860	905	5.5	5.5	5.8
XI. Furniture of Wood, Bedding, &c. .. .. .	1,116	1,282	1,325	17.2	19.6	21.0
XII. Paper, Stationery, Printing, Book-binding, &c. .. .. .	5,712	6,295	6,636	25.0	25.9	26.3
XIII. Rubber .. .. .	1,469	1,528	1,501	20.4	21.0	20.4
XIV. Musical Instruments .. .. .	38	33	34	15.4	14.2	15.7
XV. Miscellaneous Products .. .. .	3,431	3,815	4,030	34.8	35.4	35.8
XVI. Heat, Light, and Power .. .. .	34	42	39	0.7	0.8	0.8
Total Classes Only .. .. .	99,132	106,199	107,755	27.3	27.8	27.8

In Class XVI.—Heat, Light and Power, the percentage of females to total persons employed is at its lowest, 0.8 per cent. In Class VIII.—Clothing (Except Knitted), females predominate and comprise 70 per cent. of the total number of persons employed. Within Class VIII., in the Dressmaking sub-class, 87 per cent. of the total employed are females. In Class IV.—Industrial Metals, Machines, and Conveyances, females constitute 13 per cent. of the persons employed. In 1938-39 only 6 per cent. of the persons employed in Class IV. were females.



*Child Labour in Factories*

The Labour and Industry Act of Victoria debarb the employment of female children under the age of fifteen years unless special permission is granted by the Chief Inspector of Factories on the grounds of poverty or hardship.

The Victorian Education Act makes daily attendance at school compulsory between the ages of six and fourteen years.

These provisos contribute to the very low incidence of child labour in this State.

**Salaries, Wages, and Other Costs***Salaries and Wages*

The next table gives comprehensive information regarding salaries and wages paid in the various classes of industry in Victoria in 1960-61. Amounts paid to managers, clerical staff, chemists, and draftsmen, &c., are shown separately from those paid to foremen, overseers, workers in the factory, &c. 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.

**VICTORIA—SALARIES AND WAGES PAID IN FACTORIES,  
1960-61**

(Excludes Drawings of Working Proprietors)

(£'000)

Class of Industry	Managers, Clerical Staff, Chemists, Draftsmen, &c.		All Other Employees		Total		
	Males	Females	Males	Females	Males	Females	Persons
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,111	176	6,864	51	7,975	227	8,202
II. Bricks, Pottery, Glass, &c. ..	718	133	5,974	325	6,692	458	7,150
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	4,713	928	11,360	1,273	16,073	2,201	18,274
IV. Industrial Metals, Machines, Conveyances ..	29,834	5,452	126,538	8,101	156,372	13,553	169,925
V. Precious Metals, Jewellery, Plate ..	223	69	1,485	188	1,708	257	1,965
VI. Textiles and Textile Goods (Not Dress) ..	3,463	1,338	15,449	13,737	18,912	15,075	33,987
VII. Skins and Leather (Not Clothing or Footwear) ..	445	90	2,503	614	2,948	704	3,652
VIII. Clothing (Except Knitted) ..	2,492	1,254	10,867	18,924	13,359	20,178	33,537
IX. Food, Drink, and Tobacco ..	5,220	1,671	24,239	5,733	29,459	7,404	36,863
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving ..	1,946	382	12,683	154	14,629	536	15,165
XI. Furniture of Wood, Bedding, &c. ..	679	216	4,075	557	4,754	773	5,527
XII. Paper, Stationery, Printing, Bookbinding, &c. ..	4,104	1,138	19,419	3,193	23,523	4,331	27,854

VICTORIA—SALARIES AND WAGES PAID IN FACTORIES,  
1960-61—*continued*  
(Excludes Drawings of Working Proprietors)  
(£'000)

Class of Industry	Managers, Clerical Staff, Chemists, Draftsmen, &c.		All Other Employees		Total		
	Males	Females	Males	Females	Males	Females	Persons
XIII. Rubber .. .. .	1,245	293	5,713	742	6,958	1,035	7,993
XIV. Musical Instruments .. .. .	35	10	156	12	191	22	213
XV. Miscellaneous Products .. .. .	1,825	530	6,404	1,998	8,229	2,528	10,757
Total, Classes I. to XV. .. .. .	58,053	13,680	253,729	55,602	311,782	69,282	381,064
XVI. Heat, Light, and Power .. .. .	674	19	5,451	13	6,125	32	6,157
GRAND TOTAL .. .. .	58,727	13,699	259,180	55,615	317,907	69,314	387,221

Of the total amount of salaries and wages paid in Victoria in 1960-61—£387,221,000—the Industrial Metals, &c., group was responsible for £169,925,000 or 44 per cent., Food, Drink, &c., £36,863,000 or 10 per cent., and Clothing, &c., £33,537,000 or 9 per cent.

The total amount of salaries and wages paid in industry in Victoria in each of the years 1951-52 to 1961-62 is shown below under similar headings to those in the preceding table. The average per employee is also shown.

VICTORIA—SALARIES AND WAGES PAID IN FACTORIES  
(Excludes Drawings by Working Proprietors)

Year	Salaries and Wages Paid to—				Total Salaries and Wages Paid to—		
	Managers, Clerical Staff, Chemists, Draftsmen, &c.		All Other Employees				
	Males	Females	Males	Females	Males	Females	Persons
<b>TOTAL AMOUNT PAID</b> (£'000)							
1951-52 .. .. .	23,286	5,833	140,402	33,065	163,688	38,898	202,586
1952-53 .. .. .	25,725	6,343	146,172	32,638	171,897	38,981	210,878
1953-54 .. .. .	27,875	6,877	162,698	38,586	190,573	45,463	236,036
1954-55 .. .. .	31,735	7,836	181,642	41,537	213,377	49,373	262,750
1955-56 .. .. .	37,312	8,946	197,472	43,214	234,784	52,160	286,944
1956-57 .. .. .	40,159	9,963	201,428	45,058	241,587	55,021	296,608
1957-58 .. .. .	43,363	10,347	209,979	46,851	253,342	57,198	310,540
1958-59 .. .. .	46,587	11,190	219,028	47,531	265,615	58,721	324,336
1959-60 .. .. .	53,793	12,828	248,885	54,675	302,678	67,503	370,181
1960-61 .. .. .	58,727	13,699	259,180	55,615	317,907	69,314	387,221
<b>AVERAGE PER EMPLOYEE</b> (£)							
1951-52 .. .. .	962	461	709	433	737	437	651
1952-53 .. .. .	1,052	513	760	478	793	483	679
1953-54 .. .. .	1,108	532	800	507	834	511	713
1954-55 .. .. .	1,178	563	855	524	891	530	790
1955-56 .. .. .	1,292	570	910	538	955	547	841
1956-57 .. .. .	1,326	640	934	566	982	578	869
1957-58 .. .. .	1,405	654	969	586	1,023	598	905
1958-59 .. .. .	1,439	668	996	593	1,053	606	929
1959-60 .. .. .	1,557	711	1,084	637	1,146	649	1,006
1960-61 .. .. .	1,610	734	1,116	640	1,183	657	1,035

## Power, Fuel, and Light Used

The following table shows the cost of power, fuel, light, water and lubricating oil used during the five years 1956-57 to 1960-61 :—

**VICTORIA—COST OF POWER, FUEL, AND LIGHT USED IN  
FACTORIES**  
(£'000)

Class of Industry	1956-57	1957-58	1958-59	1959-60	1960-61
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	1,991	2,028	2,236	2,710	2,779
II. Bricks, Pottery, Glass, &c. .. .. .	1,961	1,974	2,043	2,215	2,296
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	6,196	6,355	6,384	6,642	6,020
IV. Industrial Metals, Machines, Conveyances .. .. .	6,212	6,963	7,742	8,950	9,584
V. Precious Metals, Jewellery, Plate .. .. .	136	142	143	146	158
VI. Textiles and Textile Goods (Not Dress) .. .. .	2,158	2,367	2,424	2,668	2,550
VII. Skins and Leather (Not Clothing or Footwear) .. .. .	469	469	495	457	404
VIII. Clothing (Except Knitted) .. .. .	933	905	967	937	953
IX. Food, Drink, and Tobacco .. .. .	5,651	5,747	5,951	6,126	6,131
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. .. .	649	663	782	850	809
XI. Furniture of Wood, Bedding, &c. .. .. .	111	121	133	136	131
XII. Paper, Stationery, Printing, Bookbinding, &c. .. .. .	1,705	1,792	1,927	2,141	2,173
XIII. Rubber .. .. .	983	1,088	1,166	1,265	1,267
XIV. Musical Instruments .. .. .	13	11	11	9	8
XV. Miscellaneous Products .. .. .	506	568	606	913	1,002
Total Classes I. to XV. .. .. .	29,674	31,193	33,010	36,165	36,265
XVI. Heat, Light, and Power .. .. .	10,707	11,569	10,368	10,975	12,936
GRAND TOTAL .. .. .	40,381	42,762	43,378	47,140	49,201

The next table gives in detail for each of the years 1956-57 to 1960-61 information dealing with the cost of each type of fuel used. The costs of water and lubricating oil are also shown separately.

**VICTORIA—COST OF ITEMS OF POWER, FUEL, AND LIGHT  
USED IN FACTORIES**  
(£'000)

Commodity	1956-57	1957-58	1958-59	1959-60	1960-61
Coal—					
Black .. .. .	2,738	2,834	3,009	2,678	2,398
Brown .. .. .	7,540	7,882	7,582	7,805	6,511
Brown Coal Briquettes .. .. .	1,696	1,737	1,464	2,356	7,029
Coke .. .. .	861	759	651	635	588
Wood .. .. .	637	563	560	548	514
Fuel Oil .. .. .	12,388	12,990	11,895	12,428	10,196
Tar (Fuel) .. .. .	257	241	164	179	143
Electricity .. .. .	10,841	11,970	13,910	15,827	17,067
Gas .. .. .	986	1,082	1,120	1,307	1,316
Other (Charcoal, &c.) .. .. .	321	356	629	708	601
Water .. .. .	1,314	1,485	1,543	1,725	1,895
Lubricating Oils .. .. .	802	863	851	944	943
Total .. .. .	40,381	42,762	43,378	47,140	49,201

In 1960-61 electricity, fuel oil, briquettes, and brown coal represented 35, 21, 14, and 13 per cent., respectively of the total cost of power, fuel, and light.

Particulars of the quantities of the various fuels used in factories over the five year period 1956-57 to 1960-61 are given below :—

VICTORIA—QUANTITIES OF FUELS USED IN FACTORIES

Commodity	Unit of Quantity	1956-57	1957-58	1958-59	1959-60	1960-61
Coal—						
Black .. ..	'000 tons	408	453	483	427	387
Brown .. ..	'000 tons	9,058	9,127	10,582	11,746	10,921
Brown Coal						
Briquettes .. ..	'000 tons	347	357	305	510	1200
Coke .. ..	'000 tons	98	77	57	50	47
Wood .. ..	'000 tons	324	266	275	282	274
Fuel Oil .. ..	'000 gall.	227,292	239,172	219,738	241,433	214,895
Tar Fuel .. ..	'000 gall.	4,985	4,550	3,018	3,412	13*

\* '000 tons

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" include the value of containers, &c., the cost of tools replaced, and repairs to plant.

VICTORIA—COST OF MATERIALS USED IN FACTORIES  
(£'000)

Class of Industry	1956-57	1957-58	1958-59	1959-60	1960-61
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	11,639	12,370	13,800	15,671	19,765
II. Bricks, Pottery, Glass, &c. .. ..	5,054	5,102	5,254	7,055	7,369
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	90,825	98,261	100,164	105,314	101,278
IV. Industrial Metals, Machines, Conveyances .. ..	175,401	202,772	213,429	249,955	266,877
V. Precious Metals, Jewellery, Plate .. ..	3,156	2,871	1,984	1,995	1,964
VI. Textiles and Textile Goods (Not Dress) .. ..	71,068	77,985	67,531	83,004	79,844
VII. Skins and Leather (Not Clothing or Footwear) .. ..	12,570	11,129	10,649	12,089	10,079
VIII. Clothing (Except Knitted) .. ..	47,648	48,160	49,765	53,113	54,138
IX. Food, Drink, and Tobacco .. ..	174,978	183,714	182,920	194,821	202,131
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. ..	24,513	26,946	27,430	31,647	31,267
XI. Furniture of Wood, Bedding, &c. .. ..	8,974	10,123	10,133	11,632	11,479
XII. Paper, Stationery, Printing, Book-binding, &c. .. ..	42,933	46,425	51,225	58,057	60,190
XIII. Rubber .. ..	15,455	17,415	17,876	22,128	21,545
XIV. Musical Instruments .. ..	305	251	226	199	198
XV. Miscellaneous Products .. ..	16,815	18,556	19,930	23,121	22,476
Total, Classes I. to XV. .. ..	701,334	762,080	772,316	869,801	890,600
XVI. Heat, Light, and Power .. ..	6,395	6,379	6,400	6,172	6,140
GRAND TOTAL .. ..	707,729	768,459	778,716	875,973	896,740

## Value of Output and Production

Value of factory output by classes of industry in each of the years 1956-57 to 1960-61 is shown in the following table :—

VICTORIA—VALUE OF FACTORY OUTPUT  
(£'000)

Class of Industry	1956-57	1957-58	1958-59	1959-60	1960-61
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	24,734	26,220	29,341	34,055	40,584
II. Bricks, Pottery, Glass, &c. ..	14,750	15,844	16,946	21,149	22,156
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	144,750	155,389	163,734	172,312	162,770
IV. Industrial Metals, Machines, Conveyances .. ..	361,874	408,199	435,371	511,662	541,464
V. Precious Metals, Jewellery, Plate ..	6,314	6,436	5,290	5,268	5,356
VI. Textiles and Textile Goods (Not Dress) .. ..	123,493	130,872	123,508	146,274	141,427
VII. Skins and Leather (Not Clothing or Footwear) .. ..	19,007	17,607	17,344	18,971	16,473
VIII. Clothing (Except Knitted) .. ..	95,936	97,411	100,813	106,650	109,885
IX. Food, Drink, and Tobacco .. ..	245,863	260,893	259,773	282,559	288,995
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. ..	45,216	49,640	50,860	57,492	57,451
XI. Furniture of Wood, Bedding, &c. ..	17,224	19,308	19,837	21,973	21,390
XII. Paper, Stationery, Printing, Book-binding, &c. .. ..	80,931	90,058	99,012	112,965	116,519
XIII. Rubber .. ..	29,035	31,959	34,582	38,010	38,261
XIV. Musical Instruments .. ..	651	699	596	533	497
XV. Miscellaneous Products .. ..	32,643	35,107	37,440	42,699	43,201
Total, Classes I. to XV. ..	1,242,421	1,345,642	1,394,447	1,572,572	1,606,429
XVI. Heat, Light, and Power .. ..	33,720	34,264	38,616	38,930	40,023
GRAND TOTAL .. ..	1,276,141	1,379,906	1,433,063	1,611,502	1,646,452

In the next table the value of production in Victoria is given according to the various classes of industry for each of the last five years :—

VICTORIA—VALUE OF PRODUCTION OF FACTORIES  
(£'000)

Class of Industry	1956-57	1957-58	1958-59	1959-60	1960-61
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	11,104	11,822	13,305	15,674	18,040
II. Bricks, Pottery, Glass, &c. ..	7,735	8,768	9,649	11,879	12,491
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	47,729	50,772	57,186	60,355	55,471
IV. Industrial Metals, Machines, Conveyances .. ..	180,261	198,464	214,200	252,757	265,003
V. Precious Metals, Jewellery, Plate ..	3,022	3,423	3,163	3,127	3,234
VI. Textiles and Textile Goods (Not Dress) .. ..	50,267	50,520	53,553	60,602	59,033
VII. Skins and Leather (Not Clothing or Footwear) .. ..	5,968	6,009	6,200	6,425	5,990
VIII. Clothing (Except Knitted) .. ..	47,355	48,347	50,081	52,600	54,794
IX. Food, Drink, and Tobacco .. ..	65,234	71,433	70,902	81,612	80,733
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. ..	20,054	22,031	22,648	24,995	25,375
XI. Furniture of Wood, Bedding, &c. ..	8,139	9,063	9,571	10,205	9,781
XII. Paper, Stationery, Printing, Book-binding, &c. .. ..	36,293	41,841	45,860	52,767	54,156
XIII. Rubber .. ..	12,597	13,457	15,540	14,617	15,449
XIV. Musical Instruments .. ..	333	437	359	325	291
XV. Miscellaneous Products .. ..	15,322	15,983	16,904	18,665	19,723
Total, Classes I. to XV. ..	511,413	552,370	589,121	666,605	679,564
XVI. Heat, Light, and Power .. ..	16,618	16,315	21,848	21,784	20,947
GRAND TOTAL .. ..	528,031	568,685	610,969	688,389	700,511

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 586.

### 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, &c., in each class of manufacturing industry during the year 1960–61 are given in the following tables :—

#### VICTORIA—FACTORY COSTS AND OUTPUT, 1960–61 (£'000)

Class of Industry	Costs of—			Balance between Value of Output and Specified Costs‡	Value of Output
	Materials Used*	Fuel, Light, and Power Used†	Salaries and Wages Paid		
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	19,765	2,779	8,202	9,838	40,584
II. Bricks, Pottery, Glass, &c. . . . .	7,369	2,296	7,150	5,341	22,156
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	101,278	6,020	18,274	37,198	162,770
IV. Industrial Metals, Machines, Conveyances .. .. .	266,877	9,584	169,925	95,078	541,464
V. Precious Metals, Jewellery, Plate .. . . .	1,964	158	1,965	1,269	5,356
VI. Textile and Textile Goods (Not Dress)	79,844	2,550	33,987	25,046	141,427
VII. Skins and Leather (Not Clothing or Footwear) .. .. .	10,079	404	3,652	2,338	16,473
VIII. Clothing (Except Knitted) .. . . .	54,138	953	33,537	21,257	109,885
IX. Food, Drink, and Tobacco .. . . .	202,131	6,131	36,863	43,870	288,995
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. . . .	31,267	809	15,165	10,210	57,451
XI. Furniture of Wood, Bedding, &c. . . . .	11,479	131	5,527	4,253	21,390
XII. Paper, Stationery, Printing, Book-binding, &c. . . . .	60,190	2,173	27,854	26,302	116,519
XIII. Rubber .. . . .	21,545	1,267	7,993	7,456	38,261
XIV. Musical Instruments .. . . .	198	8	213	78	497
XV. Miscellaneous Products .. . . .	22,476	1,002	10,757	8,966	43,201
Total, Classes I. to XV. .. . . .	890,600	36,265	381,064	298,500	1,606,429
XVI. Heat, Light, and Power .. . . .	6,140	12,936	6,157	14,790	40,023
GRAND TOTAL .. . . .	896,740	49,201	387,221	313,290	1,646,452

\* Includes containers, tools replaced, and material used in repairs to plant.

† Includes cost of lubricants and water.

‡ Balance available to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, &c., as well as drawings by working proprietors and profit.

VICTORIA—PERCENTAGE OF SPECIFIED COSTS OF  
PRODUCTION, ETC., TO VALUE OF OUTPUT OF FACTORIES,  
1960-61

(Per Cent.)

Class of Industry	Specified Costs of Production			Balance between Value of Output and Specified Costs‡	Total
	Materials Used*	Fuel, Light, and Power Used†	Salaries and Wages Paid		
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	48·7	6·8	20·2	24·3	100·0
II. Bricks, Pottery, Glass, &c. ..	33·2	10·4	32·3	24·1	100·0
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	62·2	3·7	11·2	22·9	100·0
IV. Industrial Metals, Machines, Conveyances .. ..	49·3	1·7	31·4	17·6	100·0
V. Precious Metals, Jewellery, Plate ..	36·7	2·9	36·7	23·7	100·0
VI. Textiles and Textile Goods (Not Dress) .. ..	56·5	1·8	24·0	17·7	100·0
VII. Skins and Leather (Not Clothing or Footwear) .. ..	61·2	2·4	22·2	14·2	100·0
VIII. Clothing (Except Knitted) ..	49·3	0·9	30·5	19·3	100·0
IX. Food, Drink, and Tobacco ..	69·9	2·1	12·8	15·2	100·0
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. ..	54·4	1·4	26·4	17·8	100·0
XI. Furniture of Wood, Bedding, &c. ..	53·7	0·6	25·8	19·9	100·0
XII. Paper, Stationery, Printing, Book-binding, &c. .. ..	51·6	1·9	23·9	22·6	100·0
XIII. Rubber .. ..	56·3	3·3	20·9	19·5	100·0
XIV. Musical Instruments .. ..	39·8	1·6	42·9	15·7	100·0
XV. Miscellaneous Products .. ..	52·0	2·3	24·9	20·8	100·0
Total, Classes I. to XV. ..	55·4	2·3	23·7	18·6	100·0
XVI. Heat, Light, and Power .. ..	15·3	32·3	15·4	37·0	100·0
GRAND TOTAL .. ..	54·5	3·0	23·5	19·0	100·0

For footnotes see page 605.

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 II., the sum paid in wages represents 32·3 per cent. and the cost of raw materials 33·2 per cent. of the values of the finished articles, whilst, in Class IX., the expenditure on wages amounts to 12·8 per cent. and that on raw materials to 69·9 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 1951-52 to 1960-61 :—

VICTORIA—SPECIFIED COSTS OF PRODUCTION, ETC., AND VALUE OF OUTPUT OF FACTORIES

(£'000)

Year Ended 30th June—	Specified Costs of Production			Balance between Value of Output and Specified Costs‡	Total Value of Output
	Materials Used*	Fuel, Light, and Power Used†	Salaries and Wages		
1952.. ..	477,617	21,990	202,586	131,774	833,967
1953.. ..	476,487	25,626	210,878	147,155	860,146
1954.. ..	548,111	29,080	236,036	172,278	985,505
1955.. ..	616,665	31,768	262,750	189,473	1,100,656
1956.. ..	674,846	34,598	286,944	205,004	1,201,392
1957.. ..	707,729	40,381	296,608	231,423	1,276,141
1958.. ..	768,459	42,762	310,540	258,145	1,379,906
1959.. ..	778,716	43,378	324,336	286,633	1,433,063
1960.. ..	875,973	47,140	370,181	318,208	1,611,502
1961.. ..	896,740	49,201	387,221	313,290	1,646,452

For footnotes see page 605.

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 Ended 30th June—	Specified Costs of Production			Balance between Value of Output and Specified Costs‡	Total
	Materials Used*	Fuel, Light, and Power Used†	Salaries and Wages		
1952.. ..	57·3	2·6	24·3	15·8	100·0
1953.. ..	55·4	3·0	24·5	17·1	100·0
1954.. ..	55·6	2·9	24·0	17·5	100·0
1955.. ..	56·0	2·9	23·9	17·2	100·0
1956.. ..	56·2	2·9	23·9	17·0	100·0
1957.. ..	55·5	3·2	23·2	18·1	100·0
1958.. ..	55·7	3·1	22·5	18·7	100·0
1959.. ..	54·4	3·0	22·6	20·0	100·0
1960.. ..	54·4	2·9	23·0	19·7	100·0
1961.. ..	54·5	3·0	23·5	19·0	100·0

For footnotes see page 605.



### Land, Buildings, Plant, and Machinery

The following statement shows the value of land and buildings used in connexion with the various classes of manufacturing industries for the years 1956-57 to 1960-61 :—

#### VICTORIA—FACTORIES : VALUE OF LAND AND BUILDINGS (£'000)

Class of Industry	1956-57	1957-58	1958-59	1959-60	1960-61
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	3,937	4,365	5,212	9,743	10,788
II. Bricks, Pottery, Glass, &c. ..	3,401	3,603	4,051	5,018	5,824
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	24,964	28,851	29,873	28,094	30,831
IV. Industrial Metals, Machines, Conveyances .. ..	85,848	95,603	106,642	126,411	146,160
V. Precious Metals, Jewellery, Plate ..	1,704	1,721	1,581	1,551	1,781
VI. Textiles and Textile Goods (Not Dress) .. ..	20,803	22,475	26,671	28,657	31,793
VII. Skins and Leather (Not Clothing or Footwear) .. ..	2,859	2,806	3,001	3,821	3,815
VIII. Clothing (Except Knitted) ..	15,329	16,516	18,609	20,391	23,534
IX. Food, Drink, and Tobacco ..	39,343	43,318	46,878	52,057	56,590
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. ..	6,976	7,590	8,379	10,482	12,717
XI. Furniture of Wood, Bedding, &c.	3,709	4,490	4,818	5,306	5,674
XII. Paper, Stationery, Printing, Book-binding, &c. .. ..	15,578	17,362	19,696	23,801	27,126
XIII. Rubber .. ..	3,927	4,680	4,979	5,171	6,664
XIV. Musical Instruments .. ..	150	183	229	283	248
XV. Miscellaneous Products .. ..	5,372	5,851	6,378	8,734	9,901
Total, Classes I. to XV. ..	233,900	259,414	286,997	329,520	373,446
XVI. Heat, Light, and Power .. ..	15,816	18,143	22,836	24,215	27,305
GRAND TOTAL .. ..	249,716	277,557	309,833	353,735	400,751

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. The totals shown in the tables consequently do not represent the actual amount of capital invested in industry.

Where land and buildings, &c., and plant and machinery, &c., are rented by the occupiers of factories, their capital value has been computed by capitalizing 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 1956-57 to 1960-61 :—

VICTORIA—FACTORIES : VALUE OF PLANT AND MACHINERY  
(£'000)

Class of Industry	1956-57	1957-58	1958-59	1959-60	1960-61
I. Treatment of Non-metalliferous Mine and Quarry Products ..	6,174	6,569	8,315	16,976	19,833
II. Bricks, Pottery, Glass, &c. ..	3,054	3,005	3,286	3,888	4,578
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	48,540	51,435	58,002	54,094	54,097
IV. Industrial Metals, Machines, Conveyances ..	62,505	69,561	83,490	89,797	105,563
V. Precious Metals, Jewellery, Plate ..	625	588	540	490	531
VI. Textiles and Textile Goods (Not Dress) ..	17,948	19,420	21,696	23,278	24,649
VII. Skins and Leather (Not Clothing or Footwear) ..	1,479	1,407	1,490	1,476	1,651
VIII. Clothing (Except Knitted) ..	7,234	6,850	7,501	7,840	8,694
IX. Food, Drink, and Tobacco ..	35,587	38,525	39,848	43,938	48,118
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving ..	5,401	5,237	6,684	7,000	7,713
XI. Furniture of Wood, Bedding, &c. ..	1,129	1,189	1,271	1,276	1,220
XII. Paper, Stationery, Printing, Book-binding, &c. ..	21,124	20,925	22,064	25,146	28,082
XIII. Rubber ..	4,202	4,603	4,529	6,598	7,392
XIV. Musical Instruments ..	114	106	72	73	84
XV. Miscellaneous Products ..	4,510	5,246	5,064	6,973	8,114
Total, Classes I. to XV. ..	219,626	234,666	263,852	288,843	320,319
XVI. Heat, Light, and Power ..	64,242	67,597	73,255	88,249	97,599
GRAND TOTAL ..	283,868	302,263	337,107	377,092	417,918

Motive power classified in the tables which follow relates to the "rated horse-power" 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 HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE IN FACTORIES\*, 1960-61

Class of Industry	Steam		Internal Combustion			Water	Motors Driven by Electricity		Total without Duplication
	Reciprocating	Turbine	Gas	Petrol or Other Light Oils	Heavy Oils		Purchased	Own Generation	
I. Treatment of Non-metalliferous Mine and Quarry Products	1,246	23,500	..	931	..	..	63,127	13,390	88,804
II. Bricks, Pottery, Glass, &c. ..	1,045	..	..	298	..	..	37,723	10	39,066
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	7,139	14,695	1,680	2,019	..	50	106,593	10,356	132,176
IV. Industrial Metals, Machines, Conveyances ..	1,841	12	..	6,391	..	..	497,111	1,435	505,355
V. Precious Metals, Jewellery, Plate ..	30	..	..	..	..	..	3,994	..	4,024
VI. Textiles and Textile Goods (Not Dress) ..	36	..	..	415	..	..	103,863	85	104,314

\*For footnote see next page.

VICTORIA—TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE IN FACTORIES\*, 1960-61—*continued*

Class of Industry	Steam		Internal Combustion			Water	Motors Driven by Electricity		Total without Duplication
	Reciprocating	Turbine	Gas	Petrol or Other Light Oils	Heavy Oils		Purchased	Own Generation	
VII. Skins and Leather (Not Clothing or Footwear) .. .. .	770	95	..	302	..	..	17,475	670	18,642
VIII. Clothing (Except Knitted) .. .. .	109	..	..	179	..	..	27,056	..	27,344
IX. Food, Drink, and Tobacco .. .. .	4,327	1,555	..	3,819	..	830	205,053	3,327	215,584
X. Sawmills, Joinery, Boxes, &c., Wood Turning and Carving .. .. .	5,243	16	66	25,725	..	10	101,083	2,269	132,143
XI. Furniture of Wood, Bedding, &c. .. .. .	..	..	..	10	..	..	14,204	..	14,214
XII. Paper, Stationery, Printing, Book-binding, &c. .. .. .	650	23,500	..	315	..	..	86,420	24,502	110,885
XIII. Rubber .. .. .	..	..	..	295	..	..	64,167	30	64,462
XIV. Musical Instruments .. .. .	..	..	..	..	..	..	326	..	326
XV. Miscellaneous Products .. .. .	225	..	..	183	..	..	32,870	..	33,278
Total, Classes I. to XV. .. .. .	22,661	63,373	1,746	40,882	..	890	1,361,065	56,074	1,490,617
XVI. Gas Works .. .. .	2,646	959	12	1,171	..	..	13,068	65	17,856
GRAND TOTAL .. .. .	25,307	64,332	1,758	42,053	..	890	1,374,133	56,139	1,508,473

\* Includes gas works, but excludes central electric stations.

The total rated horse-power in reserve or idle during 1960-61 and not included above was 185,569.

Motors driven by purchased electricity comprised approximately 91 per cent. of the total horse-power used in factories other than central electric stations in 1960-61, while steam turbines were next in demand with 4 per cent.

A comparison over the ten year period 1951-52 to 1960-61 of the total rated horse-power used to drive engines and electric motors ordinarily in use in factories is given in the table which follows:—

VICTORIA—TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE IN FACTORIES\*

Year	Steam		Internal Combustion			Water	Motors Driven by Electricity		Total without Duplication
	Reciprocating	Turbine	Gas	Petrol or Other Light Oils	Heavy Oils		Purchased	Own Generation	
1951-52 .. .. .	24,929	41,149	1,642	17,544	20,922	1,261	891,480	39,184	998,927
1952-53 .. .. .	23,626	41,224	1,616	18,807	22,318	1,269	933,703	38,616	1,042,563
1953-54 .. .. .	24,516	42,467	1,680	23,950	19,629	1,317	976,138	75,070	1,089,697
1954-55 .. .. .	23,983	49,397	2,084	24,849	17,985	1,241	1,045,472	46,739	1,165,011
1955-56 .. .. .	24,757	57,185	1,864	27,650	18,428	1,288	1,122,883	54,145	1,254,055
1956-57 .. .. .	22,905	67,270	1,764	27,750	14,330	1,079	1,190,000	60,433	1,325,098
1957-58 .. .. .	21,749	60,317	3,508	30,453	12,721	1,118	1,195,521	67,246	1,325,387
1958-59 .. .. .	21,332	71,394	2,857	31,677	9,627	919	1,251,303	53,810	1,389,109
1959-60 .. .. .	27,100	64,060	1,756	42,654	..	890	1,323,214	52,746	1,459,674
1960-61 .. .. .	25,307	64,332	1,758	42,053	..	890	1,374,133	56,139	1,508,473

\* Includes gas works, but excludes central electric stations.

The following table shows the total rated horse-power for each year from 1951-52 to 1960-61 for engines and electric motors in reserve or idle. It includes engines which are used only occasionally, or during periods of breakdown to own engines or power supply.

**VICTORIA—TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS IN RESERVE OR IDLE IN FACTORIES\***

Year	Rated Horse-power of Engines, &c., in Reserve or Idle			Year	Rated Horse-power of Engines, &c., in Reserve or Idle		
	Purchased Electricity	All Other Types	Total		Purchased Electricity	All Other Types	Total
1951-52	84,760	57,480	142,240	1956-57	111,049	63,011	174,060
1952-53	86,488	62,723	149,211	1957-58	117,976	72,190	190,166
1953-54	90,317	64,998	155,315	1958-59	123,644	76,888	200,532
1954-55	96,493	67,787	164,280	1959-60	115,721	76,109	191,830
1955-56	98,660	59,227	157,887	1960-61	130,431	72,777	203,208

\* 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 1960-61 are given in the following table :—

**VICTORIA—POWER EQUIPMENT INSTALLED IN CENTRAL ELECTRIC STATIONS, 1960-61**

Particulars	Capacity of Engines and Generators					
	Steam Turbine	Internal Combustion			Water	Total
		Gas	Petrol or Other Light Oils	Heavy Oils		
Engines Installed Rated H.P.	1,590,129	236	18,728	35,230	445,700	2,090,023
Generators Installed—						
Kilowatt Capacity—						
Total Installed .. kW.	1,174,725	155	12,868	26,107	332,515	1,546,370
Effective Capacity .. kW.	1,139,600	135	11,805	24,622	316,515	1,492,677
Horse-power Equivalent—						
Total Installed .. H.P.	1,574,699	208	17,249	34,996	445,730	2,072,882
Effective Capacity .. H.P.	1,527,614	181	15,824	33,005	424,283	2,000,907

Similar information to that shown in the preceding table, but giving a comparison over the years 1956-57 to 1960-61 is shown below :—

**VICTORIA—POWER EQUIPMENT INSTALLED IN CENTRAL ELECTRIC STATIONS**

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Central Electric Stations .. .. No.	53	51	44	44	41
Engines Installed .. .. Rated H.P.	1,568,721	1,565,409	1,786,817	1,832,183	2,090,023
Generators Installed—					
Kilowatt Capacity—					
Total Installed .. .. kW.	1,163,030	1,160,196	1,309,751	1,366,355	1,546,370
Effective Capacity .. .. kW.	1,093,568	1,087,053	1,276,788	1,320,441	1,492,677
Horse-power Equivalent—					
Total Installed .. .. H.P.	1,558,460	1,554,663	1,755,066	1,830,916	2,072,882
Effective Capacity .. .. H.P.	1,465,381	1,456,651	1,710,896	1,770,028	2,000,907

## Principal Factory Products

## Annual Quality and Value

The next table lists the principal articles of manufacture in Victoria during 1960-61, irrespective of the sub-class of industry in which production took place. Due to the limited number of producers it is not permissible under statute to publish particulars regarding some articles of manufacture which would otherwise appear below.

VICTORIA—PRINCIPAL ARTICLES MANUFACTURED,  
1960-61

Article	Unit of Quantity	Quantity	Value
			£'000
Acid—Sulphuric .. .. .	ton	319,625	*
Aerated and Carbonated Waters	'000 gall.	21,778	5,412
Beer† (Excluding Waste) .. .. .	'000 gall.	..	..
Biscuits .. .. .	'000 lb.	58,002	6,315
Blankets .. .. .	pair	484,253	2,921
Bolts and Nuts .. .. .	..	..	4,074
Paperboard Boxes and Cartons‡	..	..	16,540
Boxes and Cases—Wooden .. .. .	..	..	1,836
Bread—2 lb. Loaves .. .. .	'000	205,920	14,085
Bricks—Clay .. .. .	'000	289,109	6,043
Briquettes—Brown Coal .. .. .	ton	1,806,619	5,865
Butter .. .. .	ton	89,356	36,217
Cakes, Pastry, Pies, &c. .. .. .	..	..	9,506
Cans, Canisters, Containers—			
Metal .. .. .	..	..	16,434
Plastic .. .. .	..	..	985
Cheese .. .. .	ton	19,978	4,829
Cigarettes .. .. .	'000,000	8,657	18,469
Cloth Piece Goods Woven—			
Woollen or Predominantly			
Woollen .. .. .	'000 sq. yd.	8,259	5,099
Worsted or Predominantly			
Worsted .. .. .	'000 sq. yd.	5,803	*
Confectionery—			
Chocolate Base .. .. .	'000 lb.	29,158	6,977
Other without Chocolate .. .. .	'000 lb.	37,096	4,618
Electrical Appliances—			
Portable Tools .. .. .	..	..	1,341
Regulating, Starting, and			
Controlling .. .. .	..	..	5,135
Electricity Generated .. .. .	mill. kWh.	6,556	*
Fibrous Plaster Sheets .. .. .	'000 sq. yd.	7,658	2,537
Flour, Plain—Wheaten (Incl. sharps)	short ton	453,292	*
Footwear: Boots, Shoes, and			
Sandals§—			
Men's and Youths' .. .. .	'000 pair	2,790	7,570
Women's and Maids' .. .. .	'000 pair	8,277	17,305
Children's .. .. .	'000 pair	1,810	1,990
Slippers .. .. .	'000 pair	7,587	4,305
Fruit: Preserved—			
Peaches .. .. .	'000 lb.	39,844	2,438
Pears .. .. .	'000 lb.	110,487	6,803
Furniture and Office Equipment—			
Metal .. .. .	..	..	5,153
Wooden .. .. .	..	..	11,593
Gas—Town .. .. .	mill. cu. ft.	18,097	*
Ice .. .. .	ton	85,313	363
Ice Cream .. .. .	'000 gall.	4,098	2,203
Jams, Fruit Spreads, Fruit Butters,			
&c... .. .	'000 lb.	38,352	2,472

For footnotes see page 613

VICTORIA—PRINCIPAL ARTICLES MANUFACTURED,  
1960-61—continued

Article	Unit of Quantity	Quantity	Value
			£'000
Leather—			
Dressed and Upper from Hides	..	..	3,664
Sole and Belting .. ..	..	..	1,926
Machinery : Industrial—			
Conveyor (and Appliances)	..	..	2,409
Hoists, Cranes, Lifting ..	..	..	1,791
Food Processing and Canning	..	..	2,409
Metal Working .. ..	..	..	3,580
Mining .. ..	..	..	1,976
Pumping (Including Pumps) ..	..	..	3,778
Malt—Barley .. ..	'000 bushels	6,456	6,585
Mattresses—All Types .. ..	No.	409,929	2,631
Meat—Canned .. ..	'000 lb.	58,204	7,363
Medicines, &c. (Proprietary) ..	..	..	7,602
Milk—			
Condensed .. ..	'000 lb.	89,209	5,806
Powdered : Full Cream .. ..	'000 lb.	22,396	*
Paints (Not Water) and Enamels	'000 gall.	3,737	6,862
Pipes—Concrete (Excluding Agriculture)	..	..	2,510
Pollard .. ..	short ton	93,869	*
Ropes and Cables (Excluding Wire)	cwt.	69,603	1,150
Sauce—Tomato .. ..	'000 pint	15,990	1,929
Sausage Casings—Sheep and Lamb	cwt.	1,960	1,493
Shirts (Men's and Boys') .. ..	doz.	821,737	*
Sinks—Stainless Steel .. ..	No.	75,254	954
Soap and Detergents—			
Household and General			
Washing .. ..	cwt.	846,732	7,144
Personal Toilet .. ..	cwt.	103,527	1,456
Socks and Stockings—Men's and			
Children's .. ..	'000 doz. pair	1,874	*
Stockings—Women's .. ..	'000 doz. pair	2,074	7,576
Soup—Tomato .. ..	'000 pint	23,055	1,701
Steam, Gas, and Water Fittings,			
Valves, &c. (Non-Ferrous) ..	..	..	5,628
Steel : Structural—Fabricated ..	ton	98,603	14,665
Tiles : Roofing—			
Cement .. ..	'000	18,437	753
Terra Cotta .. ..	'000	15,947	835
Timber Produced from Logs—			
Australian .. ..	'000 sup. ft.	321,823	*
Trailers and Semi-trailers .. ..	No.	3,761	1,484
Transformers, Chokes, &c. .. ..	..	..	2,859
Tyres Retreaded and Recapped ..	No.	695,266	3,459
Underwear : Knitted Garments—			
Men's and Boys' .. ..	'000 doz.	780	*
Women's and Girls' .. ..	'000 doz.	1,589	*
Vegetables Canned or Bottled¶ ..	'000 lb.	34,103	2,464
Window Frames—Metal .. ..	..	..	3,761
Wool—Scoured or Carbonized ..	'000 lb.	52,888	*
Wool Tops .. ..	'000 lb.	17,957	*

\* Quantity only available.

† As recorded by Department of Customs and Excise.

‡ Includes composite wood and paperboard butter boxes.

§ Excluding wholly of rubber.

|| Value of gas sold.

¶ Including pickled vegetables.

*Monthly Production Statistics*

Statistics of monthly production had their origin in the wartime controls of rationed goods when details of piece goods, footwear, and foodstuffs were collected by the Departments immediately concerned with the war effort. In 1948, the Commonwealth Bureau of Census and Statistics opened a permanent Branch Office in Melbourne. Many new collections were then undertaken and those previously administered by other Departments were transferred to this Office. Since then the range of commodities for which monthly production statistics are available has been expanded to provide statistics of value to government as indicators of business activity. The various monthly production series derived from the collections were also found to be of value to the business community and requests were made for dissections of existing collections and the introduction of new items. The forms used are subject to annual review to keep abreast of technical developments and new demands.

At present, although the list of items published includes only a small proportion of all the items produced in factories, it nevertheless relates directly to items accounting for possibly up to 35 per cent. of the total value of factory output.

A service is provided to persons who complete monthly production returns and to others interested in monthly production. Australian totals of commodities which they produce are made available to them within a few weeks of the month to which they relate. A list of the subjects included in these "Production Summaries" follows:—

## AUSTRALIA—PRODUCTION SUMMARIES

Ref. No.	Subject	Ref. No.	Subject
2	Chemicals, &c.	22	Floor Coverings
3	Plastics and Synthetic Resins and Plasticisers	24	Men's, Youths', and Boys' Outer Clothing
4	Paints and Pigments	25	Foundation Garments
6	Soap, Detergents, and Glycerine	27	Gloves (Other than Rubber) and Felt Hats
7	Internal Combustion Engines	28	Footwear (Excluding Sandshoes, Goloshes, and Gum, &c., Boots of Rubber)
8	Lawn Mowers	29	Biscuits, Ice Cream, and Confectionery
8A	Storage Batteries	32	Perambulators (Including Pushers and Strollers)
9	Electric Motors, Electrical Appliances, Wireless, Television, &c.	34	Radios, Television, and Cabinets
10	Motor Bodies and Trailers	35	Mattresses
10A	Assembly of Motor Vehicle Chassis	36	Preserved Milk Products
11	Pedal Cycles	38	Canned Fish
12	Meters	39	Jams and Preserved Fruit and Vegetables
13	Building Fittings	40	Cereal Breakfast Foods, Other Cereal Products, and Flour Milling
14	Cotton Goods	41	Margarine
15	Woolscouring, Carbonizing, and Fellingmongering	42	Malt and Beer
16	Woolen and Worsted Carding, Combing, and Spinning	43	Stock and Poultry Meals (Other than Cereal)
17	Wool Weaving	45	Gramophone Records
18	Hosiery	47	Aerated Waters, Cordials and Syrups, and Concentrated Cordial Extract
19	Men's and Youths', Boys', Women's and Maids', Girls', Infants' and Babies' Wear, Shirts, Cardigans, Pyjamas, Underclothing, &c.	48	Sports Goods
20	Rayon and Synthetic Fibre Woven Fabrics	49	Building Materials
21	Paper and Paper Board	51	Hides and Skins Used in Tanneries
		54	Flour Milling
		55	Butter and Cheese
		56	Canned Meat

In addition, Australian totals for a greater range of commodities than that issued in the Production Summaries are published in the monthly Bulletin of Production Statistics. Victorian figures are published in the Victorian Monthly Production Bulletin.

*Individual Industries***Introductory**

Particulars on pages 590–591 give a general view of the size of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this book, to give a detailed account of each industry, particular industries dealt with are of special importance because of the employment they provide for labour and capital or for other features of special interest. Where there are only one or two establishments in a particular industry in the State, details of activities are not published, but are combined with some other factory group so that operations of individual concerns will not be disclosed.

**Chemical Industry in Victoria***Introduction*

The products of the chemical industry are mainly complex and technical, produced for the exacting requirements of other industries rather than for general sale. It is a relatively small employer of labour and the complexity of its processes does not yield itself to simple explanation. For this reason it is not surprising that the centenary of Victoria's chemical industry in 1962 (based on the date of the first manufacture of sulphuric and nitric acid) has not gained very wide publicity.

Yet, for Victoria, the significance of the centenary is considerable ; for the growth of chemical manufacture has paralleled, and frequently led, the move towards more complex and more efficient production which has brought Victoria to its present position in Australian manufacturing industry.

A modest beginning to meet the demands of a growing colony for mining explosives and agricultural fertilizers ; later development with spurts of sudden growth to meet the national needs of two world wars ; and expansion into scientific maturity—these are the stages of the growth of Victoria's chemical industry.

The accepted yardstick by which the economic strength of a community is measured—production of such chemicals as sulphuric acid, nitrogen, caustic soda and chlorine—may be enlarged to include newer materials as yet little known.

The chemical industry in Victoria has always been subject to the pressure of economic necessity, both from competition of imports and the cost of local production. First were the economics of demand—the manufacturer's worry whether the population of the tiny colony was sufficient to generate enough demand for his specialized products. Next were the economics of transport, both of raw materials and finished goods, in a country with marked problems of distance between centres of population. Then came the economics of skill—the problem



of training or getting skilled technical staff for an industry which each year became more complex. Finally—and this is a problem which in the industry's second century may perhaps be the most important of all—there were the economics of size. With the growing complexity and capital cost of modern chemical processes, will a new project be economically viable even with a nation of twenty, rather than ten million people?

### *Agriculture*

In 1872, sulphuric acid to treat bones was first used for the manufacture of superphosphate, a product directly needed by the Colony's developing agriculture. Since then, the fertilizer industry has always formed a major section of chemical industry in Victoria.

This initial service to primary industry, later greatly expanded by the manufacture of arsenical dips, dusts and sprays, as well as copper sulphate, formed a base upon which the chemical industry of the day could supply the needs of Victorian manufacturing firms in their first steps towards local production.

Today, superphosphate manufacture still uses sulphuric acid—but to treat rock phosphate from Ocean Island, Nauru, and Christmas Island. Fertilizers are supplied mixed with trace elements such as copper, zinc, and cobalt; they are treated with insecticides to reduce crop and pasture damage; nitrogen and potash are added to meet the special needs of different soils. Production in 1960–61 was 868,000 tons. Today the farmer and grazier have become practised and skilful users of many other chemicals for the protection of both crops and stock—chemicals which were, in many cases, not even discovered twenty years ago.

### *Mining*

As agriculture developed, mining also maintained a place of equal importance in early Victoria. Commercial explosives based on nitroglycerine were first manufactured in 1874.

Today, "contact" plants have largely replaced the original "chamber" process for manufacture of sulphuric acid. A new source of supply since 1958 has been by-product sulphur from oil refining, added to the standard methods of roasting imported sulphur or local pyritic ores. In 1960–61, Victoria produced about 319,000 tons.

Nitroglycerine is made by automatic processes at Deer Park in Victoria. The original reaction of sulphuric acid with Chilean nitrate of soda for making nitric acid was replaced by synthetic ammonia plants at Deer Park which convert nitrogen from the air to ammonia and thus to nitric acid. Nitric acid is not used solely, of course, to make nitroglycerine or ammonium nitrate blasting agents. Nitrocellulose for coated fabrics, lacquers, and explosives and lead nitrate for ore refining, are also important uses.

### *Wartime Expansion*

Until 1914, the chemical industry continued with its greatest emphasis on service to agriculture. But the shortages of war made necessary a wider range of local production—not least the commercial exploitation of a new process to make salicylic acid and aspirin—and the chemical industry began on a new phase of expansion. The Government Explosives Factory at Maribyrnong, established in 1907, helped to fulfil the great demand for military propellants and explosives.

The increasing complexity of the industry makes it necessary for this article to confine description to fertilizer manufacture, the production of pharmaceuticals, and that of chemicals proper. But the growth of other branches of the industry—the production of paints and varnishes, inks and polishes, vegetable and mineral oils, soaps, detergents—has been no less striking.

In 1918, basic chemical manufacture expanded further with the first plant to manufacture caustic soda and chlorine at Yarraville. Using electric power and salt from the Mallee, Geelong, and South Australia, output has risen steadily since then. Both chemicals are basic to the manufacture of many other chemicals. Caustic soda and other alkalis, for instance, are used in practically every industry and especially the manufacture of glass and soap. Chlorine and hydrochloric acid are the basic chemicals for selective weedkillers, insecticides, disinfectants, bleaches, and water-softening chemicals.

Steady growth of the industry through the 1920's and 1930's ran parallel with increasing population. What is more, there occurred something of a technological revolution in chemical engineering and basic research throughout the world. The industry was ready for expansion. The Second World War, like its predecessor, increased the demand for locally-produced chemicals—not only as basic materials of military strength, but to supply civilian demand for previously imported materials. Nitrobenzene, aniline, carbamite, phosphorus, phosphoric acid and phosphates, synthetic ammonia, methanol, formaldehyde, potassium chlorate, synthetic phenol, DDT, sulphur drugs, penicillin—these and other complex chemicals were successfully produced for an Australia in wartime isolation.

Most have continued in time of peace for different purposes. Aniline, for instance, was needed for explosives manufacture in war-time; in peace it provides the basic starting point for phenothiazine, the sheep drench used by graziers throughout Australia, as well as for complex chemicals used in the manufacture of tyres and other rubber goods. Phosphorous, electrothermally produced, is used for matches and for fireworks. Yet its main uses are for phosphoric acid and phosphates for food phosphates, plasticisers, and detergent powders.

### *Post-war Growth*

After 1945, the chemical industry began an expansion in size and complexity which could hardly have been foreseen a generation before.

Plastics materials had begun modestly with phenol formaldehyde resins in 1928, and nitrocellulose-coated leathercloth in the same year. Newer and more dramatic materials in plastics have taken the leading part in developments since 1945. Urea formaldehyde production began in 1947; polystyrene in 1953; and the production of fabrics coated with polyvinyl-chloride in 1947.

In 1961, a new group of industries at Altona introduced to Victoria the production of polyvinyl-chloride, polyethylene, styrene monomer, carbon black, and synthetic rubber. This group of plants operates as a series of satellites round a central plant in which the gases used as raw materials for all (mainly ethylene and butadiene), are derived and purified from an imported petroleum base. The word "petrochemical", as applied to this group, refers particularly to the source of the basic chemical "building blocks" from which more complex chemicals are made.

The use of imported oil products as chemical raw materials, however, does illustrate the importance of cost to the industry. While they are freely available at a price advantage, there is little possibility of the use of the great local brown coal deposits for the same purpose. These deposits in the Latrobe Valley and at Anglesea are potentially useful for production of petroleum, benzene, and other organic chemicals—and have been widely exploited for the generation of electricity, gas, and fuel briquettes.

Proximity to raw materials, water supply, facilities for transport and effluent disposal, and distance from the consumer are factors in selecting sites for chemical industry. Thus, the large chemical factories of Victoria are situated close to Melbourne, Geelong, or Ballarat.

Basic raw materials (salt and soda ash from South Australia, calcium carbide from Tasmania, ethyl alcohol from Queensland, ilmenite and bauxite from Western Australia) come to Victoria. So do materials for further processing; New South Wales, for instance, provides phthalic anhydride, beta-naphthol and benzene, polyvinyl-chloride, and polyethylene.

New developments outside the Altona complex include the production of synthetic organic pigments for the first time in Australia (at Laverton in 1962); chlorosulphonic acid; horticultural sprays and dusts; liquid sulphur dioxide; and the sulphonation of refinery by-products to produce detergent chemicals.

### *Industrial Gases*

Industrial gases are also produced in Victoria. Oxygen, nitrogen and argon are produced by fractional distillation of liquefied air. Oxygen is used for oxy-acetylene welding and cutting operations, in glass working and for medical purposes. Nitrogen is used as a blanketing agent to prevent fires and oxidation and in many metal working applications as well as in the electronics and electrical industries. Argon is used in metal working, welding, and together with nitrogen it is used to fill incandescent lamps and fluorescent luminous tubes.

Acetylene, used with oxygen for metal cutting and welding, is produced from calcium carbide. Hydrogen is obtained by hydrolysis of water and as a by-product of the electrolytic caustic soda-chlorine processes. It is used for brazing and welding, in the electronics industry, as a cooling medium for large electric generating equipment, for the hydrogenation of vegetable oils to make margarine, and for the manufacture of hydrochloric acid and aniline.

Other important gases manufactured in Victoria are nitrous oxide for anaesthetics and carbon dioxide which is used in fire extinguishers and in its solid form ("dry ice") as a cooling agent.

#### *Economic Position*

Basically, then, Victoria's chemical industry today consists of a breadth of production and scale which could not have been foreseen even twenty years ago. It is important, however, to note that this development has been made largely without the protection of high tariff barriers. In view of the economies of large-scale production, especially notable in modern chemical engineering, the local producer must strive always to remain highly efficient.

Applied research and method study has improved efficiency both in production and distribution; bulk handling of liquid and solids is extensively practised; advanced techniques of instrument control have allowed most newer chemical processes to be operated continuously rather than by the older "batch" system. In addition, close attention to safety measures has avoided the potential hazards associated with some chemical materials, and some Victorian chemical factories have established records for freedom from accidents to workers.

Particulars of the pharmaceutical and toilet preparation industry are given below:—

#### VICTORIA—PHARMACEUTICAL AND TOILET PREPARATIONS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	59	59	57	58	56
Number of Persons Employed ..	2,537	2,665	2,748	3,026	3,002
Salaries and Wages Paid £'000	2,202	2,376	2,577	3,058	3,118
Value of Power, Fuel, &c., Used					
£'000	192	241	601	606	616
Value of Materials Used £'000	6,006	6,499	6,591	7,912	7,336
Value of Production .. £'000	5,468	5,945	6,786	7,722	7,554
Value of Output .. £'000	11,666	12,685	13,978	16,240	15,506
Value of Land and Buildings £'000	3,881	5,224	4,780	5,457	5,828
Value of Plant and Machinery £'000	1,432	1,706	2,811	2,999	3,330
Horse-power of Engines Ordinarily in Use .. H.P.	9,234	8,738	9,504	9,863	10,522

Production in this sub-class of industry includes proprietary medicines, cosmetics, creams and lotions, hair preparations, &c.

Mineral oil treatment has now become a most important industry in Victoria particularly in relation to the refining of petroleum. Details of the industry for years 1956-57 to 1960-61 are shown below :—

## VICTORIA—MINERAL OILS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	19	18	18	17	19
Number of Persons Employed ..	1,485	1,443	1,459	1,476	1,397
Salaries and Wages Paid £'000	1,762	1,799	1,863	2,099	2,055
Value of Power, Fuel, &c., Used					
£'000	4,163	4,058	3,476	3,776	3,230
Value of Materials Used £'000	45,835	46,129	45,732	51,482	49,632
Value of Production .. £'000	15,537	17,444	19,275	19,888	16,250
Value of Output .. £'000	65,535	67,631	68,483	75,146	69,112
Value of Land and Buildings £'000	7,171	7,263	7,635	5,576	5,356
Value of Plant and Machinery £'000	30,310	28,999	32,691	31,717	29,474
Horse-power of Engines Ordinarily in Use .. H.P.	53,258	49,029	44,799	47,233	48,130

The growth of this industry can be gauged from the fact that in 1938-39 it gave employment to only 164 persons and the total horse-power of engines used was 817, while 1,397 persons were employed in 1960-61 and the horse-power of engines used totalled 48,130.

The industrial and heavy chemical industry expanded considerably during the five year period 1956-57 to 1960-61 as the particulars below indicate :—

## VICTORIA—INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	69	74	79	83	83
Number of Persons Employed ..	2,308	2,723	3,035	3,276	3,188
Salaries and Wages Paid £'000	2,754	3,171	3,554	4,105	4,194
Value of Power, Fuel, &c., Used					
£'000	640	706	826	949	791
Value of Materials Used £'000	9,408	10,104	10,115	11,119	10,439
Value of Production .. £'000	6,925	6,873	9,269	11,948	10,884
Value of Output .. £'000	16,973	17,683	20,210	24,016	22,114
Value of Land and Buildings £'000	2,127	4,333	4,679	4,848	5,870
Value of Plant and Machinery £'000	3,781	6,344	7,103	7,794	9,623
Horse-power of Engines Ordinarily in Use .. H.P.	19,296	22,531	26,834	26,596	26,130

## Details of Industries\*

Outstanding expansion has taken place in Industrial Metals, Machines, and Conveyances, &c., which is by far the largest of the sixteen classes into which secondary industry is divided. This development was accelerated by the necessity of meeting war requirements. Victoria now produces a very wide field of goods including motor vehicles, construction and earth-moving equipment, precision instruments, aircraft, &c., and many other types of manufactures which in earlier years were not attempted.

The relative importance of the principal sub-classes within this industry is shown in the following table :—

VICTORIA—CLASS IV : INDUSTRIAL METALS, MACHINES,  
AND CONVEYANCES : INDIVIDUAL INDUSTRIES, 1960–61

Particulars	Number of Factories	Persons Employed	Salaries and Wages Paid	Value of—						Horse-power of Engines Ordinarily in Use
				Power, Fuel, and Light	Materials Used	Production	Output	Land and Buildings	Plant and Machinery	
				(£'000)						
Foundries (Ferrous) ..	99	2,719	3,228	455	3,240	4,596	8,291	2,233	1,618	10,772
Plant, Equipment and Machinery, &c. ..	742	27,359	31,190	1,378	52,510	51,881	105,769	25,557	16,511	99,002
Other Engineering ..	961	11,889	12,976	456	15,052	20,600	36,108	11,250	7,003	37,102
Electrical Machinery, Cables, and Apparatus ..	385	15,100	16,010	870	32,132	26,021	59,023	13,907	8,814	37,871
Tramcars and Railway Rolling Stock	22	6,989	7,011	220	6,250	9,477	15,947	2,351	1,465	24,369
Motor Vehicle Construction and Assembly	15	13,814	17,337	1,504	19,426	29,339	50,269	13,842	14,498	51,500
Motor Repairs	2,435	17,429	15,134	472	15,035	22,726	38,233	24,314	4,279	18,126
Motor Bodies..	503	8,044	8,892	324	11,480	11,041	22,845	5,910	5,833	14,194
Motor Accessories ..	91	6,134	6,178	408	9,404	10,199	20,011	4,434	6,369	17,835
Aircraft ..	16	6,321	7,536	277	5,503	9,074	14,854	5,260	3,240	17,553
Agricultural Machines and Implements ..	117	5,749	6,106	452	9,818	8,606	18,876	3,554	3,057	19,891
Non-ferrous Metals—										
Founding, Casting, &c. ..	182	4,056	4,276	310	7,316	7,084	14,710	3,303	2,284	12,474
Sheet Metal Working—										
Pressing and Stamping ..	430	10,757	11,352	579	26,107	20,168	46,854	10,667	7,051	30,305
Wire and Wire Working (Including Nails)	69	2,902	3,249	216	10,527	6,086	16,829	3,127	2,068	8,496
Wireless and Amplifying Apparatus ..	72	3,431	3,373	106	8,740	4,392	13,238	2,300	1,397	2,566
Other Sub-classes	383	14,509	16,077	1,557	34,337	23,713	59,607	14,151	20,076	104,734
<b>Total, Class IV.</b>	<b>6,522</b>	<b>157,202</b>	<b>169,925</b>	<b>9,584</b>	<b>266,877</b>	<b>265,003</b>	<b>541,464</b>	<b>146,160</b>	<b>105,563</b>	<b>506,790</b>

Further particulars of certain of the industries listed in the table above are given on pages 622 to 624.

\* Other than the Chemical Industry.

As production in some factories in this class is variable, the classification may vary from year to year, since each factory is classified according to the predominant item of production. Under these circumstances comparability may be disturbed.

The table which follows combines particulars for two sub-classes of manufacture : Electrical Machinery, Cables, &c., and Wireless and Amplifying Apparatus, respectively :—

#### VICTORIA—ELECTRICAL MACHINERY, CABLES, AND APPARATUS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	417	409	439	498	457
Number of Persons Employed ..	13,562	15,394	17,361	18,862	18,531
Salaries and Wages Paid £'000	11,357	13,639	16,239	18,832	19,383
Value of Power, Fuel, &c., Used					
£'000	504	672	903	984	976
Value of Materials Used £'000	22,255	31,765	37,696	41,476	40,872
Value of Production .. £'000	16,657	20,827	24,432	28,608	30,413
Value of Output .. £'000	39,416	53,264	63,031	71,068	72,261
Value of Land and Buildings £'000	8,856	10,084	12,543	15,096	16,207
Value of Plant and Machinery £'000	5,405	7,326	9,612	12,233	10,211
Horse-power of Engines Ordinarily in Use .. H.P.	24,743	30,993	40,213	40,339	40,337

The principal items of production in these industries were : electric and telephone cables, electric apparatus and equipment, and domestic appliances such as refrigerators, washing machines, wireless and television sets, and parts for these.

The next table shows the activities of government controlled railways and tramways workshops :—

#### VICTORIA—TRAMCARS AND RAILWAY ROLLING STOCK

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	22	22	22	22	22
Number of Persons Employed ..	7,580	7,554	7,391	7,214	6,989
Salaries and Wages Paid £'000	6,554	6,487	6,429	6,862	7,011
Value of Power, Fuel, &c., Used					
£'000	204	229	222	221	220
Value of Materials Used £'000	5,417	5,168	5,479	6,136	6,250
Value of Production .. £'000	8,878	8,603	8,683	8,706	9,477
Value of Output .. £'000	14,499	14,000	14,384	15,063	15,947
Value of Land and Buildings £'000	1,918	2,064	2,138	2,215	2,351
Value of Plant and Machinery £'000	1,075	1,108	1,429	1,426	1,465
Horse-power of Engines Ordinarily in Use .. H.P.	23,005	23,416	22,881	24,104	24,369

The work performed in this sub-class of industry was for the most part in maintenance and replacement of rolling stock.

In the following table the particulars of the motor industry as a whole have been presented by aggregating the following sub-classes : Motor Vehicle Construction and Assembly, Motor Bodies, Motor Repairs, and Motor Accessories. It should be noted, however, that the manufacture of particular parts may be included in other sub-classes of industry.

## VICTORIA—MOTOR VEHICLES

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	2,656	2,751	2,756	2,899	3,044
Number of Persons Employed ..	36,406	37,080	38,212	40,548	45,421
Salaries and Wages Paid £'000	30,520	32,502	34,762	41,245	47,541
Value of Power, Fuel, &c., Used £'000	1,513	1,744	1,920	2,095	2,708
Value of Materials Used £'000	39,308	43,829	42,450	44,692	55,345
Value of Production .. £'000	45,270	52,454	59,182	67,070	73,305
Value of Output .. £'000	86,091	98,027	103,552	113,857	131,358
Value of Land and Buildings £'000	21,198	31,851	36,325	42,146	48,500
Value of Plant and Machinery £'000	16,539	17,222	17,311	18,793	30,979
Horse-power of Engines Ordinarily in Use .. H.P.	76,472	79,776	87,777	81,936	101,655

The relative importance of each sub-class of the motor vehicle industry is shown in the following table for 1960-61 :—

## VICTORIA—MOTOR VEHICLES : SUB-CLASSES, 1960-61

Particulars	Motor Vehicle Construction and Assembly	Motor Repairs	Motor Bodies	Motor Accessories	Total
Number of Factories .. ..	15	2,435	503	91	3,044
Number of Persons Employed ..	13,814	17,429	8,044	6,134	45,421
Salaries and Wages Paid £'000	17,337	15,134	8,892	6,178	47,541
Value of Power, Fuel, &c., Used £'000	1,504	472	324	408	2,708
Value of Materials Used £'000	19,426	15,035	11,480	9,404	55,345
Value of Production : £'000	29,339	22,726	11,041	10,199	73,305
Value of Output .. £'000	50,269	38,233	22,845	20,011	131,358
Value of Land and Buildings £'000	13,842	24,314	5,910	4,434	48,500
Value of Plant and Machinery £'000	14,498	4,279	5,833	6,369	30,979
Horse-power of Engines Ordinarily in Use .. H.P.	51,500	18,126	14,194	17,835	101,655

The information in the above table indicates that while motor repair workshops accounted for 80 per cent. of the number of factories and 38 per cent. of the persons employed, factories engaged in construction and assembly predominated with 51 per cent. of the total horse-power in use.



Agricultural Machinery and Implements are the subject of the next table :—

**VICTORIA—AGRICULTURAL MACHINES AND IMPLEMENTS**

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	97	100	91	108	117
Number of Persons Employed ..	5,060	5,299	5,761	5,910	5,749
Salaries and Wages Paid £'000	4,668	5,085	5,802	6,246	6,106
Value of Power, Fuel, &c., Used £'000	345	385	422	437	452
Value of Materials Used £'000	6,447	7,742	8,892	10,596	9,818
Value of Production .. £'000	7,622	8,672	8,992	8,851	8,606
Value of Output .. £'000	14,414	16,799	18,306	19,884	18,876
Value of Land and Buildings £'000	2,454	2,731	2,709	2,869	3,554
Value of Plant and Machinery £'000	2,726	2,649	2,525	2,797	3,057
Horse-power of Engines Ordinarily in Use .. H.P.	20,970	20,821	20,399	20,537	19,891

Particulars relating to founding and casting of non-ferrous metals are shown in the next table :—

**VICTORIA—NON-FERROUS METALS: FOUNDRY, CASTING, ETC.**

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	155	153	178	178	182
Number of Persons Employed ..	3,359	3,430	3,959	3,989	4,056
Salaries and Wages Paid £'000	2,895	3,113	3,661	4,054	4,276
Value of Power, Fuel, &c., Used £'000	222	249	290	309	310
Value of Materials Used £'000	4,378	4,816	6,171	7,343	7,316
Value of Production .. £'000	4,974	4,920	6,483	6,778	7,084
Value of Output .. £'000	9,574	9,985	12,944	14,430	14,710
Value of Land and Buildings £'000	2,005	2,187	2,142	2,582	3,303
Value of Plant and Machinery £'000	1,492	1,378	1,548	1,687	2,284
Horse-power of Engines Ordinarily in Use .. H.P.	9,449	9,372	10,789	10,927	12,474

Articles produced in this industry include steam, gas and water fittings, aluminium window frames, slide fasteners, and furniture fittings, &c.

Sheet metal working and allied manufacturing activities are the subject of the table which follows :—

**VICTORIA—SHEET METAL WORKING, PRESSING, AND STAMPING**

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	359	363	396	427	430
Number of Persons Employed ..	8,022	8,493	10,098	10,802	10,757
Salaries and Wages Paid £'000	7,066	7,825	9,380	10,887	11,352
Value of Power, Fuel, &c., Used £'000	344	405	544	705	579
Value of Materials Used £'000	16,639	20,051	22,287	24,964	26,107
Value of Production .. £'000	12,413	12,931	15,828	20,108	20,168
Value of Output .. £'000	29,396	33,387	38,659	45,777	46,854
Value of Land and Buildings £'000	5,744	5,916	8,018	9,791	10,667
Value of Plant and Machinery £'000	3,945	5,062	5,673	6,466	7,051
Horse-power of Engines Ordinarily in Use .. H.P.	20,420	23,700	30,688	32,414	30,305

Packers' cans, canisters and containers, building fittings, namely, baths, sinks, hot water services, and refrigeration and air-conditioning equipment are amongst the items produced in this sub-class of industry.

Wool carding, spinning, and weaving is the subject of the next table :—

## VICTORIA—WOOL CARDING, SPINNING, AND WEAVING

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	84	88	87	81	82
Number of Persons Employed ..	12,013	12,055	10,995	11,691	10,985
Salaries and Wages Paid £'000	8,925	9,065	8,475	9,604	9,064
Value of Power, Fuel, &c., Used					
£'000	812	811	798	858	777
Value of Materials Used £'000	24,716	25,218	20,295	25,506	22,053
Value of Production .. £'000	14,674	13,432	14,047	14,508	13,565
Value of Output .. £'000	40,202	39,461	35,140	40,872	36,395
Value of Land and Buildings £'000	5,533	5,543	6,579	6,509	6,628
Value of Plant and Machinery £'000	6,264	6,583	6,386	6,679	6,496
Horse-power of Engines Ordinarily in Use .. H.P.	42,803	41,081	43,084	42,117	39,724

Victorian woollen mills are responsible for more than half the total Australian woollen mill production. The full range of activities in these factories is covered from the scouring of greasy wool to the weaving of cloth.

Particulars of the hosiery, &c., industry for the last five years are given below :—

## VICTORIA—HOSIERY AND OTHER KNITTED GOODS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	429	427	438	482	476
Number of Persons Employed ..	15,224	15,039	15,285	16,938	17,238
Salaries and Wages Paid £'000	10,521	10,658	10,979	13,146	13,271
Value of Power, Fuel, &c., Used					
£'000	491	514	549	573	581
Value of Materials Used £'000	22,112	24,541	21,820	27,695	28,713
Value of Production .. £'000	18,997	17,969	20,846	23,798	24,484
Value of Output .. £'000	41,600	43,024	43,215	52,066	53,778
Value of Land and Buildings £'000	6,666	7,320	8,240	9,486	10,877
Value of Plant and Machinery £'000	5,504	5,766	6,529	6,581	7,250
Horse-power of Engines Ordinarily in Use .. H.P.	13,555	14,227	15,560	15,643	16,185

Factories in Victoria contribute more than two-thirds of the total production of knitted goods in Australia. Amongst the more important articles produced are socks and stockings, knitted underwear, cardigans, and pullovers.

Information in the next table deals with industries associated with the manufacture of clothing, except waterproof clothing, knitted goods, and boots and shoes. The figures shown represent for each of the past five years the sum of the statistical sub-classes of industry mentioned below—tailoring and ready-made clothing, dressmaking, millinery, shirts, underclothing, foundation garments, handkerchiefs, ties, scarves, hats and caps, and gloves.

VICTORIA—CLOTHING (DRESS), EXCLUDING WATERPROOF CLOTHING, KNITTED GOODS, AND BOOTS AND SHOES

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	1,565	1,569	1,481	1,455	1,379
Number of Persons Employed ..	29,358	28,496	28,310	28,456	28,012
Salaries and Wages Paid £'000	17,946	18,002	18,127	19,664	19,859
Value of Power, Fuel, &c., Used					
£'000	358	362	389	392	396
Value of Materials Used £'000	31,918	32,084	31,257	32,712	31,289
Value of Production .. £'000	28,606	29,058	29,472	31,416	31,582
Value of Output .. £'000	60,882	61,504	61,118	64,520	63,267
Value of Land and Buildings £'000	9,651	10,515	11,769	13,072	14,542
Value of Plant and Machinery £'000	2,725	2,791	2,906	2,752	2,829
Horse-power of Engines Ordinarily in Use .. H.P.	10,840	11,008	11,599	10,629	11,560

In the following table the industries combined in the preceding table are shown in detail for 1960-61 :—

VICTORIA—CLOTHING (DRESS), EXCLUDING WATERPROOF CLOTHING, KNITTED GOODS, AND BOOTS AND SHOES :  
SUB-CLASSES, 1960-61

Particulars	Tailoring and Ready-made Clothing	Dress-making	Millinery, Hats and Caps	Shirts, Underclothing	Foundation Garments	Handkerchiefs, Ties, and Gloves	Total
Number of Factories .. ..	569	522	70	150	34	34	1,379
Number of Persons Employed ..	10,788	8,296	885	5,557	1,921	565	28,012
Salaries and Wages Paid £'000	8,045	5,674	623	3,781	1,318	418	19,859
Value of Power, Fuel, &c., Used							
£'000	171	108	21	62	26	8	396
Value of Materials Used £'000	13,864	6,874	840	6,736	2,002	973	31,289
Value of Production .. £'000	12,611	9,054	1,047	6,178	2,059	633	31,582
Value of Output .. £'000	26,646	16,036	1,908	12,976	4,087	1,614	63,267
Value of Land and Buildings £'000	5,543	4,711	712	1,967	1,257	352	14,542
Value of Plant and Machinery							
£'000	1,266	678	76	550	212	47	2,829
Horse-power of Engines Ordinarily in Use .. .. H.P.	3,994	2,594	913	2,784	1,093	182	11,560

Tailoring and ready-made clothing, and dressmaking together represented 79 per cent. of the factories, 68 per cent. of employment, and 57 per cent. of the horse-power in use ; shirts and underclothing contributed 11 per cent., 20 per cent., and 24 per cent. respectively.

Manufacture of boots and shoes (not rubber) is the subject of the next table :—

VICTORIA—BOOTS AND SHOES (NOT RUBBER)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	222	221	215	196	205
Number of Persons Employed ..	11,136	11,092	11,231	11,040	11,569
Salaries and Wages Paid £'000	7,974	8,005	8,328	8,911	9,501
Value of Power, Fuel, &c., Used £'000	134	143	156	167	183
Value of Materials Used £'000	12,028	12,641	14,786	16,385	17,996
Value of Production .. £'000	11,170	11,935	12,731	13,691	15,430
Value of Output .. £'000	23,332	24,719	27,673	30,243	33,609
Value of Land and Buildings £'000	2,023	2,276	2,915	3,035	3,437
Value of Plant and Machinery £'000	2,081	2,281	2,684	2,914	3,581
Horse-power of Engines Ordinarily in Use .. H.P.	7,115	7,072	7,433	7,883	7,338

A feature of this industry is the large proportion of females it employs. Numbering 6,182, they represented 53 per cent. of the total employed in 1960-61.

The details shown above relate generally to footwear made of leather. They are exclusive of the operation of boot repairers. Footwear is also produced in the rubber and plastic moulding industries.

The second most important industrial class in Victoria is Class IX.—Food, Drink, and Tobacco. The relative importance of its principal sub-classes is shown in the following table. Victoria leads the other States in the production of butter, condensary products, cheese, canned meat, confectionery, jams and preserved fruit. It also produces a third of Australia's flour and biscuits and a quarter of its bacon and ham.

VICTORIA—CLASS IX. : FOOD, DRINK, AND TOBACCO :  
INDIVIDUAL INDUSTRIES, 1960-61

Particulars	Number of Factories	Persons Employed	Salaries and Wages Paid	Value of—					Horsepower of Engines Ordinarily in Use	
				Power, Fuel and Light	Materials Used	Production	Output	Land and Buildings		Plant and Machinery
				£'000						
Flour Milling ..	33	1,321	1,440	250	19,456	3,537	23,243	2,281	1,645	15,242
Cereal Foods and Starch ..	23	1,344	1,317	258	6,272	2,798	9,328	1,601	2,093	11,692
Bakeries ..	1,118	5,989	4,483	785	13,436	9,698	23,919	8,323	4,841	11,928
Biscuits ..	22	2,040	1,750	181	3,669	2,785	6,635	1,489	1,363	4,606
Confectionery ..	87	3,198	2,636	265	7,670	4,833	12,768	2,469	2,677	15,951
Jam, Fruit, and Vegetable Canning	35	4,093	4,015	403	18,212	9,026	27,641	7,405	5,792	19,882
Butter Factories ..	95	3,134	3,465	892	34,642	7,243	42,777	4,160	5,659	29,444
Cheese Factories ..	18	801	915	121	9,165	2,368	11,654	1,938	1,861	4,348
Condensed and Dried Milk Factories ..	17	1,646	1,726	527	12,368	3,667	16,562	1,561	1,485	11,103
Condiments, Coffee, Spices ..	66	1,243	1,150	127	4,987	2,749	7,863	2,739	1,059	5,426
Ice and Refrigerating Aerated Waters, Cordials, &c. ..	119	1,106	1,200	482	357	2,188	3,027	3,700	1,850	27,213
Tobacco, Cigars Cigarettes, Snuff	102	1,278	1,201	104	3,855	3,302	7,261	2,554	1,539	3,723
Other Sub-classes ..	7	2,299	2,251	112	16,633	5,791	22,536	1,785	2,849	4,708
	310	8,869	9,314	1,624	51,409	20,748	73,781	14,585	13,405	53,781
Total, Class IX.	2,052	38,361	36,863	6,131	202,131	80,733	288,995	56,590	48,118	219,047

Bakeries which make bread, pastry, and cakes, &c., are the subject of the table which follows :—

VICTORIA—BAKERIES (INCLUDING CAKES AND PASTRY)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	1,052	1,075	1,253	1,146	1,118
Number of Persons Employed ..	5,694	5,472	6,043	6,006	5,989
Salaries and Wages Paid £'000	3,618	3,605	3,820	4,238	4,483
Value of Power, Fuel, &c., Used £'000	661	668	745	779	785
Value of Materials Used £'000	10,682	10,884	12,081	12,919	13,436
Value of Production .. £'000	8,824	7,845	9,032	10,110	9,698
Value of Output .. £'000	20,167	19,397	21,858	23,808	23,919
Value of Land and Buildings £'000	5,728	5,923	7,041	7,706	8,323
Value of Plant and Machinery £'000	3,325	3,470	3,753	4,189	4,841
Horse-power of Engines Ordinarily in Use .. H.P.	7,493	8,001	8,030	8,677	11,928

From 1958-59 the figures include operations of a number of smaller bakehouses which had not been included previously in the statistical collection.

In the following table two sub-classes of industry are combined, namely, Jam, Fruit, and Vegetable Canning ; and Pickles, Sauces, and Vinegar :—

VICTORIA—JAM, FRUIT, AND VEGETABLE CANNING :  
PICKLES, SAUCES, AND VINEGAR

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	60	63	60	56	55
Number of Persons Employed ..	4,965	4,903	4,425	4,748	4,755
Salaries and Wages Paid £'000	4,321	4,462	4,002	4,609	4,657
Value of Power, Fuel, &c., Used £'000	481	472	468	485	502
Value of Materials Used £'000	20,747	22,054	19,829	21,270	21,177
Value of Production .. £'000	9,229	10,407	8,440	10,069	10,269
Value of Output .. £'000	30,457	32,933	28,737	31,824	31,948
Value of Land and Buildings £'000	5,633	6,085	6,858	7,249	8,005
Value of Plant and Machinery £'000	5,297	5,617	5,451	6,025	6,299
Horse-power of Engines Ordinarily in Use .. H.P.	*	*	*	20,513	21,466

\* Comparable figures not available.

Female employment is strongly represented in the canning industry which, to a great extent, operates in country areas near the orchards and gardens from which fruit and vegetables used for processing are gathered. Seasonal conditions influence greatly the quantity of goods produced.

Three sub-classes of industry, namely, butter, cheese, condensed and processed milk have been combined in the figures shown below, as some factories producing butter are also engaged in the production of

cheese and condensed products and are unable to render separate returns in respect of these activities.

### VICTORIA—BUTTER, CHEESE, CONDENSED AND PROCESSED MILK FACTORIES

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	131	131	127	131	130
Number of Persons Employed ..	5,620	5,417	5,452	5,677	5,581
Salaries and Wages Paid £'000	5,381	5,345	5,465	5,906	6,106
Value of Power, Fuel, &c., Used					
£'000	1,598	1,532	1,528	1,604	1,540
Value of Materials Used £'000	51,561	50,558	51,382	55,757	56,175
Value of Production .. £'000	10,567	11,617	11,799	13,681	13,277
Value of Output .. £'000	63,726	63,707	64,709	71,042	70,992
Value of Land and Buildings £'000	5,836	6,233	6,763	7,185	7,659
Value of Plant and Machinery £'000	7,031	7,524	7,995	8,351	9,004
Horse-power of Engines Ordinarily in Use .. H.P.	41,094	42,537	39,310	43,287	44,895

Almost all of this industry is to be found in country areas. The particulars in the above table relate only to factory production. There is also a comparatively small amount of butter and cheese made on farms. Further reference to the Dairying Industry will be found on pages 545 to 547.

Details of the operation of the following sub-classes of industry are given below, namely, Sawmills, Joinery, Boxes and Cases, Wood Turning and Carving, and Cabinet and Furniture Making :—

### VICTORIA—SAWMILLS, WOODWORKING, FURNITURE, ETC.

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	1,840	1,874	1,816	1,843	1,814
Number of Persons Employed ..	19,028	18,819	18,991	19,558	19,218
Salaries and Wages Paid £'000	15,003	15,664	16,158	17,904	18,434
Value of Power, Fuel, &c., Used					
£'000	705	724	794	900	839
Value of Materials Used £'000	28,237	31,340	31,715	36,693	36,459
Value of Production .. £'000	24,658	27,339	28,170	30,644	30,606
Value of Output .. £'000	53,600	59,403	60,679	68,237	67,904
Value of Land and Buildings £'000	8,955	10,107	11,009	13,377	15,039
Value of Plant and Machinery £'000	5,942	5,782	5,892	6,121	6,566
Horse-power of Engines Ordinarily in Use .. H.P.	136,919	132,941	133,058	138,532	138,805

The following table shows the particulars of the individual industries combined in the preceding table, for 1960-61 :—

VICTORIA—SAWMILLS, WOODWORKING, FURNITURE, ETC.:  
INDIVIDUAL INDUSTRIES, 1960-61

Particulars	Sawmills	Joinery	Boxes and Cases	Wood Turning and Wood Carving	Furniture Making, &c.	Total
Number of Factories .. ..	506	655	75	99	479	1,814
Number of Persons Employed .. ..	6,697	6,318	717	1,117	4,369	19,218
Salaries and Wages Paid .. £'000	6,619	6,176	649	1,038	3,952	18,434
Value of Power, Fuel, &c., Used .. £'000	523	159	23	36	98	839
Value of Materials Used .. .. £'000	16,125	11,237	1,151	1,288	6,658	36,459
Value of Production .. .. £'000	11,554	9,820	988	1,715	6,529	30,606
Value of Output .. .. £'000	28,202	21,216	2,162	3,039	13,285	67,904
Value of Land and Buildings .. .. £'000	4,423	5,174	538	797	4,107	15,039
Value of Plant and Machinery .. .. £'000	3,399	1,683	306	388	790	6,566
Horse-power of Engines Ordinarily in Use .. H.P.	85,275	28,827	7,380	5,528	11,795	138,805

The activities combined in the above table embrace general milling, re-sawing, moulding and planing, turning, the manufacture of floorboards, weatherboards, boxes and cases, tool handles, toys, &c.

The newspaper and periodicals industry is the subject of the following table :—

VICTORIA—NEWSPAPERS AND PERIODICALS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	111	106	128	133	128
Number of Persons Employed ..	3,348	2,924	3,317	3,633	3,765
Salaries and Wages Paid .. £'000	3,300	2,951	3,471	4,063	4,652
Value of Power, Fuel, &c., Used .. £'000	119	115	135	144	159
Value of Materials Used .. .. £'000	7,563	7,268	8,660	9,549	9,672
Value of Production .. .. £'000	5,727	5,224	6,173	6,922	7,656
Value of Output .. .. £'000	13,409	12,607	14,968	16,615	17,487
Value of Land and Buildings .. £'000	1,616	1,517	2,350	2,955	3,124
Value of Plant and Machinery .. £'000	2,795	1,791	2,212	2,750	3,122
Horse-power of Engines Ordinarily in Use .. H.P.	10,484	9,862	10,020	11,171	12,018

Some "job" printing is included in this industry, but where newspapers, periodicals, &c., are printed for the proprietor by an outside firm, such particulars are included under "Printing, General" below.

General printing (including bookbinding) is the subject of the following table :—

### VICTORIA—PRINTING, GENERAL (INCLUDING BOOKBINDING)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	537	549	539	563	581
Number of Persons Employed ..	7,964	8,381	8,515	8,619	9,034
Salaries and Wages Paid £'000	6,681	7,461	7,718	8,520	9,378
Value of Power, Fuel, &c., Used					
£'000	200	228	247	268	300
Value of Materials Used £'000	8,932	10,436	11,180	11,590	12,483
Value of Production .. £'000	11,888	13,304	14,217	15,445	16,754
Value of Output .. £'000	21,020	23,968	25,644	27,303	29,537
Value of Land and Buildings £'000	5,132	5,982	6,433	7,789	8,937
Value of Plant and Machinery £'000	5,587	6,109	6,155	6,653	7,384
Horse-power of Engines Ordinarily in Use .. H.P.	12,554	13,108	13,357	14,825	15,289

The above table does not include particulars of the operations of Government printing establishments.

Particulars relating to the manufacture of cardboard boxes, cartons, and containers are detailed in the next table :—

### VICTORIA—CARDBOARD BOXES, CARTONS, AND CONTAINERS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	49	52	51	57	62
Number of Persons Employed ..	2,007	2,125	2,297	2,820	3,029
Salaries and Wages Paid £'000	1,598	1,748	2,024	2,616	2,876
Value of Power, Fuel, &c., Used					
£'000	67	81	93	115	117
Value of Materials Used £'000	5,485	6,138	7,214	9,080	9,814
Value of Production .. £'000	3,542	4,318	4,660	6,131	6,502
Value of Output .. £'000	9,094	10,537	11,967	15,326	16,433
Value of Land and Buildings £'000	1,373	1,784	2,414	2,875	3,830
Value of Plant and Machinery £'000	1,505	1,676	1,744	2,250	2,844
Horse-power of Engines Ordinarily in Use .. H.P.	4,179	4,358	4,643	6,140	6,329



The following table gives particulars of rubber goods manufacture :—

### VICTORIA—RUBBER GOODS (INCLUDING TYRES MADE)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	54	54	56	52	49
Number of Persons Employed ..	6,182	6,254	6,529	6,566	6,632
Salaries and Wages Paid £'000	5,982	6,280	6,669	7,433	7,318
Value of Power, Fuel, &c., Used £'000	901	991	1,056	1,153	1,152
Value of Materials Used £'000	14,088	15,910	16,418	20,557	19,877
Value of Production .. £'000	11,327	12,001	14,066	12,974	13,666
Value of Output .. £'000	26,316	28,902	31,540	34,684	34,695
Value of Land and Buildings £'000	3,211	3,735	3,759	3,834	5,057
Value of Plant and Machinery £'000	3,757	4,028	3,855	5,966	6,676
Horse-power of Engines Ordinarily in Use .. H.P.	53,254	55,214	60,379	61,154	61,676

Tyres and tubes, shoes, soles and heels, hose, toys, belting, sponge and foam rubber are amongst the wide range of articles produced in the above-mentioned industry.

Plastic moulding and products are the subject of the next table :—

### VICTORIA—PLASTIC MOULDING AND PRODUCTS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	147	145	152	154	157
Number of Persons Employed ..	4,891	5,006	5,267	5,567	5,754
Salaries and Wages Paid £'000	3,918	4,342	4,934	5,726	5,890
Value of Power, Fuel, &c., Used £'000	304	353	440	492	482
Value of Materials Used £'000	9,613	10,876	13,797	16,310	14,386
Value of Production .. £'000	7,562	8,819	10,653	10,922	11,298
Value of Output .. £'000	17,479	20,048	24,890	27,724	26,166
Value of Land and Buildings £'000	2,718	2,958	3,261	4,388	4,905
Value of Plant and Machinery £'000	2,844	3,381	3,740	4,449	5,397
Horse-power of Engines Ordinarily in Use .. H.P.	19,136	20,694	20,781	22,412	24,070

Introduced as a new sub-class in 1945-46, plastic moulding now contributes substantially to the secondary production of the State. A wide variety of articles is produced, including plastic film and sheet, household accessories, garden hose, piping and tubing, toys, &c.

The following table shows particulars of the operations of electricity generating stations :—

### VICTORIA—ELECTRIC LIGHT AND POWER

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	53	51	44	44	41
Number of Persons Employed ..	3,186	3,247	3,398	3,470	3,476
Salaries and Wages Paid £'000	3,534	3,599	3,851	4,218	4,261
Value of Power, Fuel, &c., Used £'000	10,513	11,153	9,971	10,472	12,412
Value of Materials Used £'000	605	677	600	700	818
Value of Production .. £'000	13,824	13,706	18,529	17,977	16,784
Value of Output .. £'000	24,942	25,536	29,100	29,149	30,013
Value of Land and Buildings £'000	15,114	17,444	22,949	21,184	23,336
Value of Plant and Machinery £'000	57,017	63,659	70,244	74,548	83,969
Total Installed Horse-power of Engines Used to Drive Generators* .. .. H.P.	1,568,721	1,565,409	1,786,817	1,832,183	2,090,023

\* Excludes engines using electricity generated in own works.

Because of the extension of services by the State Electricity Commission to areas previously served by other authorities or individuals, the number of electric light and power factories has decreased considerably in recent years.

The above particulars refer only to electric light and power generation by central electric stations in Victoria and do not include details of distribution, &c. They are compiled from factory returns submitted in accordance with the Commonwealth Census and Statistics Act and the Victorian Statistics Act.

Included in the above figures are those of the State Electricity Commission of Victoria which supplies practically all of the electricity generated.

#### State Electricity Commission of Victoria

##### Powers

By the 1918 Act and subsequent amending Acts this authority—known since 1921 as the State Electricity Commission of Victoria—is vested with power to erect, own, and operate electrical undertakings; acquire existing electricity undertakings; supply electricity retail to individual consumers or in bulk to any corporation or public institution; establish brown coal open cuts; own and operate briquette works; and develop the State's water-power resources for electricity generation. Incidental to its main operations, the Commission owns and operates the tramway systems in Ballarat and Bendigo.

The Commission is the controlling authority for all electricity 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.

### State Generating System

The State system generates 99 per cent. of all the electricity produced in Victoria for public supply. The system serves about 97 per cent. of the population through a supply network covering more than three-quarters of the populated area of the State. Electricity generated in, and purchased for this system totalled 6,577 million kilowatt-hours in 1960-61, nearly four-fifths of Victoria's electricity being generated from brown coal used either in its raw state or in the form of briquettes. During 1960-61, hydro-stations produced over 13 per cent. of the State's electricity for public supply.

The following table shows the predominant part taken by the State Electricity Commission in the generation of 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—ELECTRICITY GENERATED, POWER STATIONS, AND SOURCE OF POWER, 1960-61

Source	Source T = Thermal* H = Hydro	Output Million kWh.
State Electricity Commission—		
Yallourn Power Station and Briquette Factory ..	T	2,952
Morwell Power Station and Briquette Factory ..	T	701
Newport Power Station .. ..	T	1,325
Spencer-street Power Station (M.C.C.) .. ..	T	242
Richmond Power Station .. ..	T	75
Provincial Thermal Power Stations .. ..	T	278
Total S.E.C. Thermal Generation ..	T	5,573
Eildon—Rubicon .. ..	H	342
Kiewa .. ..	H	341
Cairn Curran .. ..	H	2
Total S.E.C. Hydro Generation .. ..	H	685
Snowy Mountain Scheme .. ..	H	43
Hume .. ..	H	133
Interchange with New South Wales .. ..	..	143
Total S.E.C. .. ..	T and H	319
Other Available for Public Supply .. ..	T	44
Total Available for Public Supply .. ..	T and H	6,621
Electricity Generated in Factories .. ..	T	253
Cumulative Total .. ..	T and H	6,874

\* Includes Internal Combustion.

Inclusive of generator capacity available to the Victorian system from outside the State, the total installed capacity of the State generating system at 30th June, 1961, was 1,682,133 kilowatts. Except for 24,550 kilowatts of plant in the Mildura sub-region, all power stations are interconnected. The largest power station in this interconnected system is Yallourn, which alone generates almost half Victoria's electricity. The transmission and distribution system at 30th June, 1961, comprised 34,557 miles of high and low voltage power lines, including 1,014 miles of underground cables, sixteen terminal stations and almost 27,100 distribution sub-stations.

*Hydro-power Available from Interstate Sources*

Victoria is entitled to one-third of the electricity from the Snowy Mountains scheme—after the Commonwealth has taken the power it needs for the Australian Capital Territory and within the Snowy Mountains area. Electricity generated by the Snowy Mountains Hydro-electric Authority became available to Victoria from 10th November, 1959, via a new 330,000-volt transmission line connecting with the Victorian system at Dederang. Victoria also shares (with New South Wales) the electricity generated at Hume Power Station on the River Murray.

*Consumers Served*

At 30th June, 1961, the State system served 906,638 consumers in Victoria (712,421 retail and the remainder—194,217—through eleven metropolitan councils which buy electricity in bulk). In addition, bulk supply was given to several New South Wales municipalities and irrigation settlements bordering the River Murray. The State system supplies all the Melbourne Metropolitan Area and over 1,650 other centres of population. Rural electrification is now more than four-fifths completed and 46,838 farms were supplied at the end of the year by the State Electricity Commission. Outside the State system there were 18,190 other consumers served by local country undertakings.

*New Construction*

Inclusive of the substantial output to which Victoria is entitled from the Snowy Mountains hydro-electric scheme, the capacity of Victoria's State generating system will be more than doubled between 1961 and 1971. At Yallourn a 240,000 kilowatt extension (Yallourn "E") was completed in 1962. Next to be commissioned after Yallourn "E" will be the new Hazelwood Power Station south of Morwell. It will burn brown coal from the Morwell open cut. Beginning with one turbo-generator (200,000 kilowatts) in 1964, the Commission plans to complete the power station to its ultimate capacity of 1,200,000 kilowatts in 1971.

The new brown coal burning power station built as part of the Morwell power and fuel project is now nearly complete. The installed capacity of the power station was 110,000 kilowatts at 30th June, 1961. An additional 60,000 kilowatt turbo-generator was due to be in service late in 1962. Now in full production, the Morwell briquette factories have an annual capacity of 1,300,000 tons of briquettes.

The main 220,000 volt transmission system has been greatly extended to reinforce existing links between generating stations and main distribution centres. The 220,000 volt ring grid around central Victoria was completed early in 1962. The final section (Colac-Terang) of a 220,000 volt spur line from Geelong (temporarily operating at 66,000 volts) was also completed early in 1962, and another 220,000 volt spur line from Bendigo to Red Cliffs (near Mildura) was due to be completed in the latter months of 1962.

VICTORIA—STATE ELECTRICITY COMMISSION : INCOME,  
EXPENDITURE, SURPLUS, ETC.  
(£'000)

Particulars	1958-59	1959-60	1960-61
INCOME			
Electricity Sales—			
Domestic .. .. .	13,303	14,587	16,019
Commercial .. .. .	5,984	6,535	7,353
Industrial .. .. .	10,717	11,893	12,646
Bulk .. .. .	9,847	11,058	11,707
Traction .. .. .	2,052	1,980	1,971
Public Lighting and Miscellaneous .. .. .	493	551	601
Briquette Sales .. .. .	2,169	2,975	4,386
Brown Coal Sales .. .. .	721	747	557
Tramways Income .. .. .	101	100	101
Miscellaneous Income .. .. .	25	28	39
<b>Total Income .. .. .</b>	<b>45,412</b>	<b>50,454</b>	<b>55,380</b>
EXPENDITURE			
Operation and Maintenance (Including Fuel)	19,174	21,392	22,966
Administrative and General Expenses .. .. .	3,338	3,778	4,194
General Services, &c. .. .. .	1,823	2,217	2,531
Depreciation .. .. .	5,894	7,668	10,403
Interest .. .. .	10,769	11,854	12,974
Loan Flotation Expense .. .. .	365	400	400
Deferred Interest, &c., Written Off .. .. .	3,200	2,250	1,250
Miscellaneous Expenditure .. .. .	426	435	442
<b>Total Expenditure .. .. .</b>	<b>44,989</b>	<b>49,994</b>	<b>55,180</b>
Surplus .. .. .	423	460	220
Fixed Assets (Depreciated) at 30th June .. .. .	245,660	263,318	286,356
Capital Liabilities at 30th June .. .. .	245,486	265,001	282,256

### *Briquetting of Victorian Brown Coal*

#### *Introduction*

The production of brown coal briquettes by the State Electricity Commission of Victoria commenced at Yallourn in 1924 with a small plant of 360 tons per day capacity.

With major additions at Yallourn in 1931 and 1944 and the commissioning of a new plant at Morwell in 1959-60, briquetting has developed in less than four decades into an important State industry with an annual output of about 2 mill. tons.

#### *Raw Material*

The raw brown coal used for briquetting is obtained from portion of the extensive Latrobe Valley deposits. The raw coal has a soft earthy texture and disintegrates comparatively rapidly when exposed.

Moisture content is high—63 to 70 per cent.—and calorific value low, but ash content is also low. A typical proximate analysis on a dry basis would be Fixed Carbon 47·17 per cent., Volatiles 50·80 per cent., and Ash 2·03 per cent.

Economically, therefore, direct usage of raw brown coal as a fuel is limited to within a short radius of its source, a condition that can be overcome by up-grading the raw coal into briquettes. This in turn is rendered possible by the low winning cost of the raw coal and by its property, when dried, of self-binding under pressure.

### *Process*

The process employed at Yallourn and Morwell is basically similar and the various stages in sequence of coal flow are:—

- (1) Reduction of the raw coal by crushing, milling, and screening to produce a balanced fine coal up to a maximum of 8-mm. grain size ;
- (2) drying of the fine coal to an end moisture content of 16 to 17 per cent. in rotating tubular driers heated by steam ;
- (3) conveying and treatment of the hot coal to promote after-evaporation, pre-oxidation, cooling and equalizing of moisture span ;
- (4) pressing of the cooled coal into the required briquette shapes ; and
- (5) handling of the finished briquettes to despatch points or storage.

These sections are served by electro-filter and/or mechanical dusting systems for the removal and disposal of the fine dust generated during processing.

The steam used to heat the drying drums is produced at high pressure and is passed through back-pressure turbo-alternators prior to use in the driers where it is condensed and re-cycled to the boilers.

### *Plants*

The State Electricity Commission operates briquetting works at Morwell and Yallourn. The modern Morwell plant has more than twice the capacity of Yallourn ; unit plant sizes are larger ; and it possesses some variations in detailed plant layout which improve control and flexibility. The following is a brief description of the Morwell plant.

Incoming raw coal passes through cog-roll crushers to double-shaker fine screens (up to 8 mm.) and over-size lumps are re-circulated through swing hammer mills. Approximately 2.6 tons of moist coal are required per ton of briquettes produced. Major plant units are arranged for parallel flow and are on one main floor, thus minimizing outage losses and giving good supervision.

The driers are arranged in four groups of six and have a total heating surface of about 53,280 square metres (Yallourn 24,960)—or approximately 63,200 and 29,800 square yards, respectively. Output rates vary from about 150 to 170 tons per drier-day, depending on initial coal moisture and the steam pressure employed ; the latter normally varies between 28 and 35 p.s.i.

The hot, dry coal is then subjected to screening out and reduction of over-size lumps, secondary evaporation, partial stabilization and cooling, and is then conveyed to the press hoppers. All dried coal-handling plant is enclosed and under slight negative—or suction—air pressure to promote pre-oxidation and similar reactions, and to avoid dust egress into the works.

Now at an optimum of about 15 per cent. moisture, the cooled coal is compressed to the desired format in four-stamp, electrically-driven extrusion presses which are arranged in four groups of five, i.e., 80 10-in. stamps in all. The finished briquettes are push-conveyed along fixed open-framed launders on to a belt conveyor system which handles them to the points of storage or despatch.

Briquettes are manufactured in different types to meet special requirements—with one type for automatic firing and another for hand firing in industrial furnaces and a household type for domestic use.

Limited quantities of household briquettes are also available ready packed in packages of 36 briquettes. The packages are the product of an experimental, semi-automatic, wrapping machine installed at the Yallourn Works.

When finally used by a consumer, the briquettes have an equilibrium moisture content of approximately 13 per cent. and a net calorific value of some 9,000 B.T.U.'s per pound (roughly three times that of the raw coal), and a gross calorific value of 9,600 B.T.U.'s per pound.

Because of the fire and/or explosion hazards peculiar to the industry, careful thought must be given to all phases of plant layout and detailed design and, in subsequent operation, keen supervision and good management are essential.

In addition, squads of selected operators are especially trained to handle all foreseeable emergency conditions.

#### *Marketing Division*

The four major uses of briquette fuel in Victoria are electricity generation in steam power stations at centres distant from the coal fields, industrial consumption, domestic consumption, and gas manufacture on site in the Latrobe Valley for piping to Melbourne and other centres both in the Latrobe Valley and *en route* to Melbourne.

Large-scale use of briquette fuel at power stations in Melbourne and provincial cities has greatly reduced purchases of fuel oil and interstate black coal by the State Electricity Commission of Victoria.

Industrial consumption of briquettes, already large, is being fostered by continued research to improve handling and combustion techniques.

While about 86 per cent. of Victoria's industrial activity is located in the metropolitan and central areas, the briquetting industry offers a substantial inducement towards industrial decentralization in the Latrobe Valley. For those industries requiring heat and steam, the

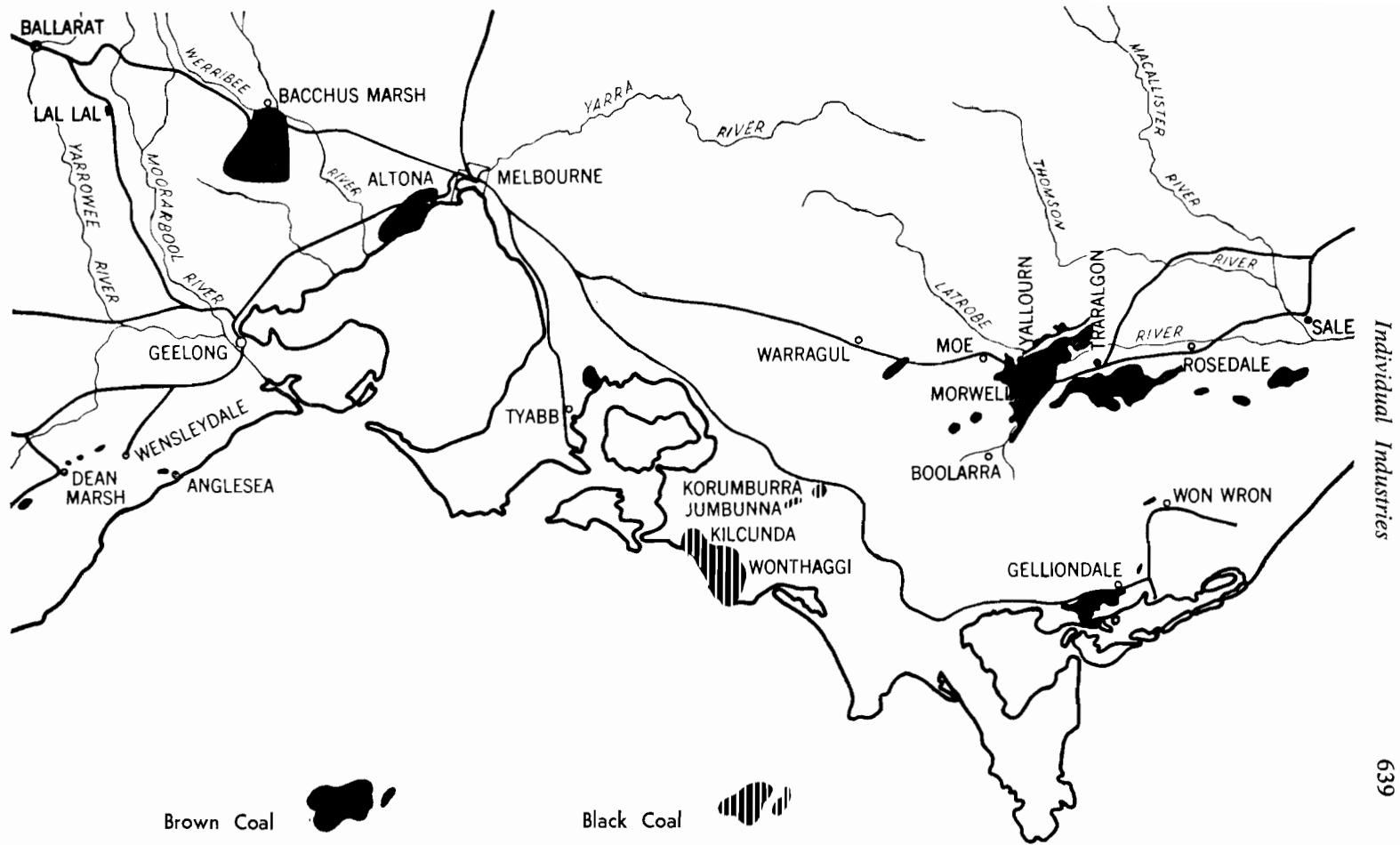


FIGURE 15. Map showing coal deposits in Victoria.



ready availability of briquette fuel from the Morwell and Yallourn factories greatly reduces transport charges, which form an important component in briquette fuel costs at centres distant from the Latrobe Valley.

In the domestic field, factors of importance have been the growth in popularity of central heating, the low operating cost of briquette hot water systems, development of briquette packaging, and progressive improvement in appliances for space heating, water heating, and cooking.

All the brown coal briquettes required for gas manufacture by the Lurgi process in the Morwell works of the Gas and Fuel Corporation of Victoria are delivered by belt conveyor direct from the State Electricity Commission's Morwell factories about 1 mile away. The Morwell gas works produce about 27 per cent. of Melbourne's gas requirements.

A pilot plant at Morwell is producing char (hard coke) from briquettes, and this is expected to prove more suitable for iron smelting than coke obtained from outside Victoria, since it contains very few impurities and possesses greater heating power with a relatively low ash content.

#### Further References

An outline of the history of the State Electricity Commission of Victoria will be found on pages 580 to 583 of the Victorian Year Book 1961 and an article on Brown Coal Production on pages 606 to 611 of the Victorian Year Book 1962.

In the next table particulars relating to gas works are shown :—

#### VICTORIA—GAS WORKS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	32	27	27	27	25
Number of Persons Employed ..	1,626	1,372	1,584	1,513	1,470
Salaries and Wages Paid £'000	1,833	1,738	1,796	1,789	1,896
Value of Power, Fuel, &c., Used £'000	195	416	397	503	524
Value of Materials Used £'000	5,791	5,702	5,800	5,471	5,323
Value of Production .. ..	2,792	2,609	3,319	3,807	4,163
Value of Output .. ..	8,778	8,727	9,516	9,781	10,010
Value of Land and Buildings £'000	3,009	3,349	3,284	3,031	3,969
Value of Plant and Machinery £'000	14,142	12,554	13,332	13,701	13,630
Horse-power of Engines Or- dinarily in Use .. .. H.P.	16,166	16,106	17,048	16,797	17,856

The particulars appearing in the above table are compiled from factory returns received under the authority of the Commonwealth Census and Statistics Act and the Victorian Statistics Act. They relate to production and are exclusive of particulars of distribution, &c.

Appropriate details relating to the Gas and Fuel Corporation of Victoria are included in the table on page 643. The following is a brief review of the activities of the Corporation.

*Gas and Fuel Corporation of Victoria**Formation of the Corporation*

The Gas and Fuel Corporation of Victoria came into being, by Act of Parliament, on 6th December, 1950. It was formed by the merger of two Gas Companies which supplied adjoining areas—The Metropolitan Gas Company of Melbourne and The Brighton Gas Company Limited. Three directors are appointed by the preference shareholders, whilst the chairman and three other directors are appointed by the Government. Further capital is raised by means of loans, the Government guaranteeing the repayment of principal and payment of interest.

*Operations Division*

This division, the largest, is responsible for the manufacture and distribution of gas both from the metropolitan and country works, using black coal and refinery products as raw materials, and also the Morwell plant utilizing brown coal in the form of briquettes.

For the year ended 30th June, 1961, the Corporation issued 14,417 mill. cubic feet of gas with a heat content of 75·8 mill. therms. Of this, 34·5 per cent. was produced by carbonizing 256,268 tons of black coal, 26·5 per cent. by gasifying 123,709 tons of briquettes, 8·4 per cent. was produced from 35,169 tons of coke, and 869,753 gallons of oil in water gas and oil gas plants, and the remaining 30·6 per cent. was a mixture of refinery and liquid petroleum gases.

The Corporation's Lurgi high pressure gasification plant on the brown coalfields at Morwell is now producing approximately 27 per cent. of the requirements of the Metropolitan Area, and supplies those towns along the 103 mile pipe-line route covering Morwell, Traralgon, Trafalgar, Warragul, Frankston, Mt. Eliza, and Mornington, through Dandenong to Springvale.

Two major projects have been recently undertaken ; one to supply gas by pipe-line to the lower Dandenong Ranges where mains have been laid to carry supplies of Lurgi gas to the areas of Fern Tree Gully, Boronia, Bayswater, Croydon, and Lilydale. The reticulation of town gas has also been undertaken on the western side of the City. This project will supply the vast petrochemical industry complex, the associated housing estates, and ultimately will extend to the Laverton area. The gas supplied is a controlled blend of liquid petroleum gas from the Corporation's Altona installation.

*Development Division*

In the post-war years, tremendous advances have taken place in techniques for gas production. The Gas and Fuel Corporation has a staff of scientists in constant liaison with research establishments in Britain, Europe, and the United States, to ensure that the Corporation is informed of all advances made in gas making techniques throughout the world.

At West Melbourne, a reconstruction programme costing approximately £5 mill., which includes an Onia Gegi oil gasification plant, is taking place. It produces town gas from heavy residual fuel oil by a process developed in France and England in the last decade, and when completed, the works will have a capacity of 55 mill. cubic feet of gas per day.

Yet another major development currently taking place, which is a new technique, is the refrigerated storage of liquified petroleum gases. Liquified petroleum gases are by-products of the operation of oil refineries and, apart from their use as bottled gas, they provide raw materials for the production of the additional quantities of town gas required to meet peak loads.

The Corporation has constructed at Derrimut two refrigerated storage tanks in which some 3 mill. gall. of liquified petroleum gas are stored and these are maintained at a temperature of minus 46° C., the temperature at which the gases remain liquid at atmospheric pressure. The installation, together with pipe-lines from the refinery to the plant and from there to West Melbourne, cost approximately £1,250,000.

*Commerce and Finance Division*

The planning and recommending of financial and sales policies are the responsibilities of this division. Sales functions include not only the selling of gas, appliances and by-products, but also market research, accounting, sales promotion, publicity and advertising. The turnover on the sale of appliances alone exceeds £2,250,000 per annum.

In addition to the sale of town gas, which is reticulated, another gas is sold in steel bottles to homes in the country where normal piped supplies are not available. This gas is Propane, which is liquified under pressure and marketed in bottles and cylinders. By this means, the Corporation is bringing to country homes throughout Victoria, an amenity which is available in the City.

VICTORIA—GAS AND FUEL CORPORATION : REVENUE,  
EXPENDITURE, ETC.  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
<b>REVENUE</b>					
Sales—					
Gas .. .. .	7,604	8,244	9,361	10,065	10,459
Residual Products and Appliances	*1,574	*1,206	*1,166	4,138	4,191
Income from General Investments	3	3	1	..	..
Profit on Sale of Freeholds ..	..	..	..	..	29
<b>Total Revenue .. ..</b>	<b>9,181</b>	<b>9,453</b>	<b>10,528</b>	<b>14,203</b>	<b>14,679</b>
<b>EXPENDITURE</b>					
Gas—					
Manufacture .. .. .	6,080	6,256	6,534	6,444	6,446
Transmission .. .. .	91	134	163	207	205
Distribution .. .. .	2,344	2,515	2,792	2,938	3,223
Residual Products, Appliances and Gas Promotional Expenses ..	..	..	..	3,322	3,594
Management .. .. .	231	263	307	376	474
Planning, Research and Develop- ment .. .. .	56	68	181	243	308
Superannuation and Retiring Al- lowances .. .. .	94	96	129	184	210
Long Service Leave .. .. .	64	68	78	48	79
Contingency Reserve .. .. .	25	..	25	25	..
Other Costs .. .. .	38	46	99	80	71
<b>Total Expenditure .. ..</b>	<b>9,023</b>	<b>9,446</b>	<b>10,308</b>	<b>13,867</b>	<b>14,610</b>
<b>Net Surplus .. .. .</b>	<b>158</b>	<b>7</b>	<b>220</b>	<b>336</b>	<b>69</b>
Fixed Assets less Depreciation and Amortization at 30th June ..	27,877	30,213	31,537	33,146	37,432
Capital Liabilities at 30th June—					
State Government .. .. .	11,837	11,959	12,040	12,099	12,147
Other .. .. .	18,541	21,316	23,696	26,050	28,053

\* Profit on Sales of Residual Products, Appliances, &c. only.

### *Australian Gas Association*

The Australian Gas Association formally came into being in 1962. It was formed by the amalgamation of The National Gas Association of Australia and The Australian Gas Institute. Seven Association committees are appointed by the Board of Management to serve the gas industry. They are concerned with management, industrial and commercial gas, residential gas, operating procedures, accounting, statistics, and advertising. Many aspects of the Association's work are conducted in and from Victoria.

Among these is the work of the Technical Department which is concerned with maintaining high standards for gas appliances. The Technical Officer is Chairman of the Appliance Approval Requirements Committee, which compiles requirements for gas appliances regarding safety, durability, and efficiency. These requirements are constantly being reviewed to keep them up to date with modern trends. The Technical Department recently issued a new general code defining gas flexibility requirements for all domestic appliances which will ensure their suitability throughout the Commonwealth. It has also issued a revised code for gas cookers. Now under revision is a code for room heaters and a code for commercial cookers. Special codes for gas incinerators and clothes dryers are being prepared.

Appliance prototypes undergo strict laboratory tests and the results are evaluated by the Technical Department of the Association, which co-ordinates, whenever necessary, the views of the Physical Testing Officers in all States. The Technical Department's workshop in Melbourne provides any member of the Association with assistance on problems pertaining to the technical aspects of combustion, the development of new appliances or the improvement of existing appliances and equipment.

### Government Factories

In 1938-39, Government factories numbered 127 and employed 12,958 persons. These factories expanded considerably as a result of war activities and reached their peak of employment in 1942-43 when 50,831 persons were working in 158 factories. Comparative particulars for the last five years are shown in the following table :—

#### VICTORIA—GOVERNMENT FACTORIES AND WORKSHOPS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Number of Factories .. ..	150	143	147	157	168
Number of Persons Employed ..	29,448	28,482	28,988	29,326	30,542
Salaries and Wages Paid £'000	27,364	26,910	28,039	31,172	33,910
Value of Power, Fuel, &c., Used					
£'000	11,857	12,469	11,704	12,577	14,543
Value of Materials Used £'000	27,086	29,076	27,517	30,468	32,416
Value of Production .. £'000	44,681	44,176	51,466	51,528	54,517
Value of Output .. £'000	83,624	85,721	90,687	94,573	101,476
Value of Land and Buildings £'000	36,173	39,238	45,983	49,693	57,719
Value of Plant and Machinery £'000	91,135	93,831	107,209	121,011	133,110

The above table embraces establishments under the control of the Commonwealth Government in Victoria, State Government, and local government authorities. Such activities as railway and tramway workshops, electric light and gas works, dockyards, printing works and clothing, aircraft and munitions factories, &c., are included.

In relation to the whole of Victorian factories during 1960-61, Government factories absorbed 8 per cent. of employment ; expended 9 per cent. of the salaries and wages paid ; and accumulated 8 per cent. of the value of production.

# Part 9

## FINANCE

### *Public Finance*

#### **Economic Importance of Government Financial Activity**

##### *Financial Transactions*

During the last thirty or so years, 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 are 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-gatherers 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 is another way 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.

*Borrowing and Lending*

Governments acquire funds for their own purposes and for lending to others by borrowing the savings of those with surplus funds. They are also in a position to influence the amount of saving in the community by varying rates of taxation and their own expenditures.

*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 summarize the public authority activity in the State.

Particulars of Commonwealth and State receipts and outlay classified so as to facilitate economic analysis are included in the "Estimates of National Income and Expenditure" presented annually to the Commonwealth Parliament by the Treasurer. The following summary of Victorian governmental transactions represents the Victorian component of Tables IX, X, and XI (Receipts, Outlay, and Net Increase in Indebtedness of Public Authorities) of that document. It is a consolidation (necessarily approximate) of the activities of the major public funds and authorities in the State.

Particulars in the table 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 in the table must 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. 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—STATE, LOCAL, AND SEMI-GOVERNMENTAL  
BODIES : RECEIPTS AND OUTLAY**

(£ Million)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
<b>RECEIPTS</b>					
Taxation—					
Indirect Taxes .. ..	47	52	57	67	72
Less Subsidies .. ..	— 1	— *	— *	— *	— *
Net Indirect Taxes .. ..	46	52	57	67	72
Estate and Gift Duties .. ..	7	8	8	9	12
Total Taxation .. ..	53	60	65	76	84
Surplus of Public Authority Business Undertakings .. ..	16	18	27	27	30
Allowances for Depreciation .. ..	4	7	8	10	13
Rent and Interest Received .. ..	7	9	9	11	11
Grants from the Commonwealth Government .. ..	56	63	67	78	89
Borrowing—					
Advances from the Commonwealth Government (Net of Repayments) .. ..	11	11	11	12	11
Commonwealth Bonds—Australia† .. ..	35	35	33	38	37
Commonwealth Loans—Overseas† .. ..	*	2	6	2	5
Local and Semi-Governmental Securities† .. ..	32	32	28	32	23
Less Increase in Holdings of Commonwealth Bonds and Local and Semi-Governmental Securities .. ..	1	— 4	— 2	— 5	— 4
Other Funds Available (Including Errors and Omissions) .. ..	2	1	— 2	— 1	2
Total Receipts .. ..	217	234	250	280	301
<b>OUTLAY</b>					
Net Purchase of Goods and Services—					
Public Works—					
Railways .. ..	8	8	10	12	13
Roads .. ..	22	27	29	34	37
Other Transport .. ..	4	4	4	4	3
Fuel and Power .. ..	23	29	26	31	31
Water Supply, Sewerage, and Irrigation .. ..	15	14	18	17	18
Forestry, Land Development, &c. .. ..	4	4	4	5	5
Schools, &c. .. ..	7	8	9	11	13
Hospitals .. ..	6	6	6	6	6
All Other (Office Buildings, Plant and Equipment <i>n.e.i.</i> , Court Houses and Penal Establishments, Welfare Institutions, Rental Dwellings, &c.) .. ..	12	13	9	7	5
Total Public Works .. ..	101	113	115	127	131
Increase in Stocks .. ..	— 3	— 2	— 2	— 1	1
Law, Order, and Public Safety .. ..	9	10	11	12	13
Education .. ..	26	29	30	36	44
Health and Welfare .. ..	19	20	21	23	25
Development and Conservation of National Resources .. ..	4	4	5	6	6
All Other .. ..	14	15	16	14	16
Total Net Purchase of Goods and Services .. ..	170	189	196	217	236

\* Under £500,000.

† Net of redemption.



VICTORIA—STATE, LOCAL, AND SEMI-GOVERNMENTAL BODIES :  
RECEIPTS AND OUTLAY—*continued*

(£ Million)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Cash Social Service Benefits ..	1	1	1	1	1
Capital Transfers to Persons ..	*	*	1	1	*
Interest Paid .. ..	32	36	40	45	48
Lending, &c.—					
Net Purchases of Existing Real Assets .. ..	— *	*	— 3	— 5	— 5
Net Advances for Housing ..	7	6	11	12	13
Other Net Advances, &c. ..	*	— *	— 1	— 2	— 1
Increase in Cash and Bank Deposits .. ..	7	2	5	11	9
Total Outlay .. ..	217	234	250	280	301

\* Under £500,000.

### Financial Relations with the Commonwealth

#### *General*

The Federal Constitution enumerates 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, naturalization, immigration, invalid and old 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 enumerated 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.

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 12th 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 1st 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 £7,584,912 per annum which the Commonwealth agreed to contribute for a period of 58 years. Of this amount, Victoria receives £2,127,159 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 or a State may borrow for "temporary purposes" by way of overdraft or fixed deposit, subject to limits fixed by the Loan Council. In addition, the Commonwealth may borrow within 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.

### (3) *Sinking Fund Provisions*

The Financial Agreement also provided for the creation of sinking funds for debt existing at 30th June, 1927, and 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 Commonwealth Bank, the Solicitor-General for the Commonwealth, 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-Government Authorities*

Although they are not legally bound by the Agreement, it was realized at the outset that, in the interests of co-ordinated borrowing, the Loan Council should have some control over the loan raising activities of semi-governmental bodies. In May, 1936, all resolutions passed by the Loan Council in connexion with semi-governmental borrowings were consolidated into one set of rules. This "gentlemen's agreement" provided for the submission of annual loan programmes of semi-governmental (including local government) authorities proposing to raise £100,000 or more in a year; for the consideration of such programmes in conjunction with the loan programme of the Government concerned; and for the fixing of the terms of individual semi-governmental loans coming within the scope of the annual programme.

### (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. This last factor has assumed considerable importance in recent years because of the inability of the loan market to meet governmental capital expenditure

programmes and the consequent need for Commonwealth support. From 1st July, 1951, to 30th June, 1961, the Commonwealth has provided this support from the Australian currency proceeds of overseas loans and from budget surpluses to the extent of £875·1 mill. out of loan programmes amounting to £2,120·8 mill.

### Grants to the States

#### (1) General

The following table shows particulars of amounts paid during each of the years 1956–57 to 1960–61 to Victoria as grants for the several purposes referred to in subsequent paragraphs :—

#### VICTORIA—COMMONWEALTH PAYMENTS TO OR FOR THE STATE\* (£'000)

Particulars	1956–57	1957–58	1958–59	1959–60	1960–61
Financial Agreement—					
Interest on State Debt .. ..	2,127	2,127	2,127	2,127	2,127
Sinking Fund on State Debt† ..	1,054	1,155	1,230	1,367	1,447
Financial Assistance Grant ‡ ..	40,228	43,996	46,475	60,625	67,371
Special Financial Assistance ..	5,826	6,405	8,104	..	..
Additional Financial Assistance ..	..	1,061	..	..	..
Commonwealth Aid Roads ..	5,495	6,264	6,543	8,660	9,183
Tuberculosis Act 1948—Reimbursement of Capital Expenditure ..	120	76	45	26	48
Mental Institutions — Contribution to Capital Expenditure ..	527	545	620	518	84
Coal Mining Industry Long Service Leave .. .. .	1	1	1	§	..
Imported Houses—Grants .. ..	2	..	..	..	..
Grants to Universities .. ..	522	664	1,313	1,422	3,023
Tobacco Industry Assistance ..	5	3	3	..	..
Dairy Industry Extension Grant ..	60	60	80	60	72
Expansion of Agricultural Advisory Services .. .. .	61	69	60	50	60
Total .. .. .	56,028	62,426	66,601	74,855	83,415

\* Excludes subsidies and bounties to primary producers and payments for medical research, social services, &c., also payments under the provisions of the *Rail Standardization (New South Wales and Victoria) Agreement Act, 1958*.

† Paid to National Debt Sinking Fund.

‡ As from 1st July, 1959, the Financial Assistance Grant replaced the Tax Reimbursement Grant and the Special Financial Assistance Grant.

§ Under £500.

#### (2) Financial Agreement

Commonwealth contributions to interest and sinking fund charges on State debt have been described above.

#### (3) Financial Assistance Grant

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 was made for entertainments tax, but this tax is no longer levied by the Commonwealth Government. Although challenged by the States, the system was continued after the war and is still in existence. In 1957, the High Court ruled that while the Commonwealth could not prejudice the rights of the States to levy taxes on incomes, it could make grants to the States conditional on the non-levy of income taxes.

Full particulars of the *States Grants (Income Tax Reimbursement) Act* 1942 and the *States Grants (Tax Reimbursement) Act* 1946–48 may be found in the Official Year Book of the Commonwealth of Australia No. 37, pages 635 to 637, and No. 40, page 696. The allocation of moneys under the original Act was based on the State's own income tax collections prior to the introduction of uniform taxation. From 1946–47, grants under this Act were replaced by grants under the *States Grants (Tax Reimbursement) Act* 1946–48. This Act provided for reimbursement grants of certain specified amounts to be paid to the States during 1946–47 and 1947–48. For 1948–49 and subsequent years, the grants were assessed in accordance with a formula based on increases in population and average wages. Within a few years, heavy additions to the financial needs of the States made necessary the supplementing of the grant calculated on the basis of the formula by a series of special or additional assistance grants, the size of which was largely arbitrary.

The whole question of Commonwealth–State financial relations was reviewed in 1959 and this resulted in the enactment of the *States Grants Act* 1959 (operative until 1964–65). The amount of financial assistance payable to each State during 1959–60 was specified and a formula prescribed for calculating the grant payable in the subsequent years. Under the formula, the amount payable to each State is calculated by expressing the amount of the grant payable to that State in the preceding year on a per capita basis, varying it in a prescribed manner by the increase in average wages for Australia as a whole, and multiplying it by the population of the State in the year of review. To allow for some further improvement in the standard and range of services provided by the States, the formula was adjusted to incorporate a “betterment factor,” the effect of which is to increase by 10 per cent. the average wages component of the formula. Victoria's share for 1961–62 was £73,049,000. It was envisaged that Western Australia and Tasmania would, as a result of this legislation, be the only continuing claimant States under section 96 of the Constitution, although Queensland and South Australia could also, in special circumstances, become claimants under this section.

#### (4) Grants for Road Construction

The Commonwealth has made grants to the States for roads purposes for some considerable time. Particulars of Acts (commencing with the *Main Roads Development Act 1923–25*), under which these payments were made, are given in the annual Commonwealth Finance Bulletin—Part 1, Public and Private Finance (issued by the Commonwealth Statistician).

The *Commonwealth Aid Roads Act 1954* provided for payment to the States, for five years from 1st July, 1954, of an amount equivalent to 7d. a gallon on all petrol (except aviation spirit) entered for home consumption and which was subject to customs or excise duties as specified in certain Customs Tariff Items. Out of this amount, the following allocations were made to the States for construction and maintenance of roads and the purchase of roadmaking plant :—

- (a) 60 per cent. of the amount, less £900,000 per annum, for expenditure on roads, and
- (b) 40 per cent. of the amount for expenditure on roads in rural areas other than highways, trunk, or main roads.

The States were entitled to spend from the Commonwealth road grants up to £1 mill. per annum on works connected with transport by road or water. Five per cent. of the grants was payable to Tasmania and the remainder was divided among the other five States, three-fifths according to population and two-fifths according to area. In addition, the Commonwealth could spend each year £800,000 on strategic roads and £100,000 on the promotion of road safety practices. An amendment to the Act increased the allocation for road safety purposes to £150,000 a year from 1st July, 1955, and the allocation to the States from 7d. to 8d. a gallon from 1st July, 1956. The grant was further supplemented by the *Commonwealth Aid Roads (Special Assistance) Act 1957* under which an extra £3 mill. was appropriated for each of the years 1957–58 and 1958–59. Of this amount, £2,950,000 was made available to the States and £50,000 to the Commonwealth.

The *Commonwealth Aid Roads Act 1959* established a new scheme of Commonwealth assistance which superseded the Acts mentioned above. Under the new scheme which is to operate for a period of five years, the Commonwealth will make available to the States a total amount of up to £250 mill. for the construction, reconstruction, maintenance, and repair of roads. Of this amount, £220 mill. will be payable as basic grants, which will increase from £40 mill. in 1959–60 to £48 mill. in 1963–64, and which will be distributed

each year among the States on the basis that Tasmania will receive 5 per cent. and that, of the remainder, one-third will be shared by the other States in proportion to their respective populations at the date of the last preceding census, one-third in proportion to their respective areas, and one-third in proportion to the number of motor vehicles registered in those States at 31st December preceding the year of payment.

The balance of £30 mill. takes the form of matching assistance. The amount available for this purpose will increase from £2 mill. in 1959–60 to £10 mill. in 1963–64. Each State may participate in the matching assistance for each year, up to the share of the assistance for which it is eligible. Its share is determined by allocating the amount of matching assistance available each year in the same proportions in which the basic grant for that year is distributed. Up to this limit, each State qualifies for £1 of matching assistance for every £1 by which the amount it allocates in that year from its own resources for roads is greater than the amount so allocated in 1958–59. In 1961–62, Victoria will receive about £10·1 mill. by way of basic grant and matching assistance.

(5) *Tuberculosis Hospitals — Reimbursement of Capital Expenditure*

Under the *Tuberculosis Act* 1948 the Commonwealth undertook to reimburse the States for capital expenditure on buildings, furnishings, equipment, and plant for the diagnosis, treatment, and control of tuberculosis. In addition to recouping capital expenditure, the Commonwealth also contributes from the National Welfare Fund to maintenance expenditure incurred by the States (the amount paid to Victoria for 1960–61 was £1,074,214), and reimburses administration expenses.

(6) *Mental Institutions—Contribution to Capital Expenditure*

The *States Grants (Mental Institutions) Act* 1955 provides for financial assistance to the States for capital expenditure on mental institutions to a maximum amount of £10 mill. Each State is entitled to recover one-third of its expenditure on buildings and equipment incurred on or after 1st July, 1955.

(7) *Coal Mining Industry—Long Service Leave*

In the States in which coal miners have been awarded long service leave by industrial tribunals, the State Governments concerned have agreed to reimburse employers for the costs they incur in granting this leave. The Commonwealth, in turn, has agreed to reimburse the States for the amounts paid and related administrative costs. In order to provide the funds required for these purposes, the Commonwealth imposed an excise duty on coal.

(8) *Imported Houses—Grants*

The Commonwealth pays a subsidy to the States for houses imported by a State or a housing authority of a State after 12th October, 1949. The amount of the subsidy is the amount by which the cost of imported houses exceeds the cost of building comparable houses from local materials, with a limit of £300 per house. There have been no imports of houses under this scheme since 1956–57.

(9) *Grants to Universities*

Payments to the States for universities were first introduced in 1951–52 under the *States Grants (Universities) Act* 1951 and were continued under similar legislation passed in 1953, 1955, 1956, and 1957. Following on the Commonwealth's acceptance of the main recommendations of the Committee on Australian Universities, the provisions of the 1957 Act relating to financial assistance for 1958 were superseded by the *States Grants (Universities) Act* 1958, which operated from 1st January, 1958.

This legislation authorized the Commonwealth to make payments of up to £21·4 mill. to the States for universities over the three calendar years 1958 to 1960, inclusive, where certain conditions are satisfied. These payments include increased contributions towards the current expenses of universities, new grants for capital works and equipment, and emergency grants.

As recommended by a Committee on Australian Universities, an Australian Universities Commission was appointed, under the authority of the *Australian Universities Commission Act* 1959, to inquire into and make recommendations on the subject of Commonwealth financial assistance to the States for universities in 1961 and subsequent years.

The main financial recommendations in the Commission's first report of 25th October, 1960, were incorporated in the *States Grants (Universities) Act* 1960. This legislation provides for total Commonwealth payments to the States for universities of up to £42 mill. over the three calendar years 1961, 1962, and 1963, compared with £21·4 mill. for the previous three-year period. The legislation carries on the principle of grants for capital works and equipment introduced in the 1958 legislation.

(10) *Tobacco Industry Assistance*

The Commonwealth makes a grant for tobacco research of up to £15,000 per annum, paid to the tobacco producing States on a £1 for £1 basis.

(11) *Dairy Industry Extension Grant*

The Commonwealth provides financial assistance to promote improved farm practices in the dairy industry.



(12) *Expansion of Agricultural Advisory Services*

These payments were introduced in 1952-53 to encourage the expansion of agricultural advisory services by the State Departments of Agriculture and to promote increased farm efficiency.

In addition to the grants mentioned above, Victoria also benefited under the *Railway Standardization (New South Wales and Victoria) Agreement Act 1958*. Under this Act, the Commonwealth financed the construction of a standard gauge rail link between Albury and Melbourne. Each of the two States is to repay 15 per cent. of the total cost, by instalments, over a period of 50 years. Expenditure by the Commonwealth to 30th June, 1961, amounted to £10,485,274.

**Revenue and Expenditure***General*

The financial transactions of the State of Victoria are concerned with (a) Consolidated Revenue, (b) Trust 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.

In the following tables, details of Consolidated Revenue and Expenditure are shown for each of the years 1956-57 to 1960-61. The figures are not comparable, in all cases, with those shown in issues of the Year Book prior to 1961 (No. 75), in which the Public Revenue and Expenditure of certain special funds were added to Consolidated Revenue and Expenditure, while recoups by the Treasury to the Victorian Railways for specified purposes were excluded from the tables.

*Consolidated Revenue Fund*

The following table shows, for each of the years 1956-57 to 1960-61, 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 Ended 30th June—	Revenue	Expenditure	Surplus (+) or Deficit (-)	Accumulated Deficit at End of Each Year (i.e., 30th June)
1957 .. .. .	133,254	137,565	— 4,311	20,802
1958 .. .. .	142,336	145,549	— 3,213	24,015
1959 .. .. .	151,248	153,796	— 2,548	26,563
1960 .. .. .	168,310	167,997	+ 313*	26,563
1961 .. .. .	185,101	184,931	+ 170†	26,563‡

\* Transferred to Surplus Revenue Account.

† Applied, during 1961-62, towards the reduction of the Consolidated Revenue Accumulated Deficit.

‡ Of this amount, £24,685,985 was provided from Loan Fund and £1,877,173 from the Public Account.

*Consolidated Revenue* :—Details of the principal sources of revenue are shown in the following table for each of the years 1956–57 to 1960–61 :—

VICTORIA—CONSOLIDATED REVENUE FUND : REVENUE (£'000)

Source of Revenue	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Taxation* .. .. .	25,433	28,387	30,332	37,829	41,940
Business Undertakings—					
Railways .. .. .	37,463	35,948	38,142	39,032	42,624
Harbours, Rivers, and Lights ..	503	543	575	613	708
Water Supply, Sewerage, Irrigation, and Drainage .. .. .	3,186	3,893	4,001	4,115	4,453
Electricity Supply (Interest and Recoups of Sinking Funds, &c.)	2,216	2,431	2,654	2,941	3,411
State Coal Mine .. .. .	500	476	414	367	366
Other .. .. .	525	484	472	450	433
Total .. .. .	44,393	43,775	46,258	47,518	51,995
Lands—					
Sales .. .. .	169	111	167	247	174
Rents .. .. .	334	393	422	520	558
Forestry .. .. .	2,294	2,227	2,033	2,342	2,309
Other .. .. .	130	122	179	170	222
Total .. .. .	2,927	2,853	2,801	3,279	3,263
Interest <i>n.e.i.</i>	4,571	5,075	5,585	6,236	6,662
Commonwealth Grants—					
Financial Agreement Act .. .. .	2,127	2,127	2,127	2,127	2,127
Financial Assistance† .. .. .	40,228	43,996	46,475	60,625	67,371
Special Financial Assistance .. .. .	5,826	7,467‡	8,104	..	..
Total .. .. .	48,181	53,590	56,706	62,752	69,498
Commonwealth National Welfare Fund Payments—					
Tuberculosis—					
Maintenance Expenditure .. .. .	842	1,295	1,060	1,114	1,112
Pharmaceutical Benefits—					
Mental Institutions .. .. .	8	19	32	29	31
Total .. .. .	850	1,314	1,092	1,143	1,143
Fees and Fines .. .. .	1,302	1,764	1,895	2,043	2,351
All Other § .. .. .	5,597	5,578	6,579	7,510	8,249
Grand Total .. .. .	133,254	142,336	151,248	168,310	185,101

\* For details of total taxation collections see page 659.

† As from 1st July, 1959, the Financial Assistance Grant replaced the Tax Reimbursement Grant and the Special Financial Assistance Grant.

‡ Includes £1,061,169 additional financial assistance.

§ Includes repayments of advances by Housing Commission under the Commonwealth-State Housing Agreement.

*Expenditure from Consolidated Revenue* :—The principal items of expenditure during each of the years 1956–57 to 1960–61 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	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>Public Debt Charges—</b>					
Interest .. .. .	16,789	19,157	20,844	23,469	25,290
Exchange .. .. .	480	492	597	715	809
Debt Redemption .. .. .	3,686	4,169	4,689	5,301	5,749
Other .. .. .	125	100	86	161	144
<b>Total .. .. .</b>	<b>21,080</b>	<b>23,918</b>	<b>26,216</b>	<b>29,646</b>	<b>31,992</b>
<b>Business Undertakings—</b>					
Railways .. .. .	37,154	35,932	35,908	37,098	39,899
Harbours, Rivers, and Lights .. .. .	494	568	464	510	647
Water Supply, Sewerage, Irrigation, and Drainage .. .. .	3,054	3,305	3,433	3,703	3,837
State Coal Mine .. .. .	753	724	607	560	572
Other .. .. .	364	262	255	259	264
<b>Total .. .. .</b>	<b>41,819</b>	<b>40,791</b>	<b>40,667</b>	<b>42,130</b>	<b>45,219</b>
<b>Social Expenditure—</b>					
<b>Education—</b>					
State Schools .. .. .	22,334	24,822	27,242	31,013	34,951
Technical Schools* .. .. .	1,670	1,708	1,778	1,998	2,237
Universities .. .. .	874	939	1,037	1,185	1,653
Libraries, Art Galleries, &c. .. .. .	551	608	651	679	760
Agricultural Education, Research, &c. .. .. .	519	547	580	637	742
Other .. .. .	59	55	57	57	68
Public Health and Recreation .. .. .	1,671	1,879	2,056	2,204	2,263
<b>Charitable—</b>					
<b>Hospitals—</b>					
General .. .. .	11,893	12,619	13,155	14,900	15,758
Mental .. .. .	5,046	5,474	6,114	6,665	7,073
Child Welfare .. .. .	758	970	1,123	1,309	1,443
Other .. .. .	223	185	404	411	472
<b>Law, Order, and Public Safety—</b>					
Justice .. .. .	1,566	1,745	1,901	2,135	2,361
Police .. .. .	5,899	6,426	6,742	7,232	7,844
Penal Establishments .. .. .	831	907	917	1,000	1,143
Public Safety .. .. .	7	8	7	8	14
<b>Total .. .. .</b>	<b>53,901</b>	<b>58,892</b>	<b>63,764</b>	<b>71,433</b>	<b>78,782</b>
<b>All Other Expenditure—</b>					
Public Works <i>n.e.i.</i> .. .. .	1,389	1,555	1,572	1,856	1,894
Lands and Survey .. .. .	1,152	1,250	1,363	1,519	1,621
Agriculture .. .. .	2,440	2,240	2,382	1,966	2,064
Forestry .. .. .	2,013	1,969	1,822	2,060	2,120
Legislature and General Administration .. .. .	4,342	4,591	4,794	5,005	6,247†
Pensions and Superannuation .. .. .	3,602	3,823	4,116	4,463	4,830
Pay-roll Tax .. .. .	1,539	1,633	1,713	1,847	2,067
Interest and Sinking Fund Reserve Account .. .. .	..	..	..	..	1,300
Miscellaneous† .. .. .	4,288	4,887	5,387	6,072	6,795
<b>Total .. .. .</b>	<b>20,765</b>	<b>21,948</b>	<b>23,149</b>	<b>24,788</b>	<b>28,938</b>
<b>Grand Total .. .. .</b>	<b>137,565</b>	<b>145,549</b>	<b>153,796</b>	<b>167,997</b>	<b>184,931</b>

\* Maintenance grants, &c.

† Includes interest and repayments of advances under the Commonwealth-State Housing Agreement. In the 1961 issue of the Year Book these amounts were included with "Social Expenditure—Other Charitable".

‡ Includes £600,000 advanced to State Superannuation Board.

## Taxation

## General

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 pages 648-649, the Commonwealth Government alone exercises the right to impose customs and excise duties and taxation on personal and company incomes. Sales and pay-roll taxes are other important sources of taxation revenue exploited by the Commonwealth exclusively. 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. The principal item of Victorian taxation which finds its way to special funds is motor taxation which is credited to a number of funds as set out on page 660.

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 1956-57 to 1960-61 :—

VICTORIA—TAXATION COLLECTIONS  
(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Motor—					
Registration Fees and Taxes ..	6,240	7,953	8,192	8,839	9,170
Drivers' Licences ..	416	439	570	904	514
Other ..	2,597	3,041	3,363	4,213	4,800
Total Motor ..	9,253	11,433	12,125	13,956	14,484
Probate and Succession Duties ..	7,005	8,065	7,839	9,413	11,531
Stamp Duties <i>n.e.i.</i> ..	5,249	6,253	8,485	12,471	12,557
Land ..	4,170	4,607	4,661	5,854	6,706
Income (Arrears) ..	9	4	3	*	3
Liquor ..	2,515	2,817	2,908	2,994	3,218
Tattersall Duty ..	2,979	2,835	2,849	2,966	3,257
Racing ..	2,175	2,405	2,320	2,630	2,841
Entertainments (Excl. Racing Admission Tax)	1,410	1,505	1,370	1,142	1,057
Licences <i>n.e.i.</i> ..	258	253	285	287	292
Grand Total ..	35,023	40,177	42,845	51,713	55,946
Paid to Consolidated Revenue ..	25,433	28,387	30,332	37,829	41,940
Paid to Special Funds ..	9,590	11,790	12,513	13,884	14,006
Per Head of Population	£13/6/10	£14/19/0	£15/11/7	£18/6/10	£19/6/9

\* Under £500.

*Motor Taxation*

The principal source of motor taxation is the amount collected by the Motor Registration Branch of the Police Department by way of fees for the registration of motor vehicles and for the issue of drivers' licences and owners' certificates. In addition, the Transport Regulation Board's charges for the issue of licences, &c., and the amount collected under the provisions of the Commercial Goods Vehicles Act, are included in motor taxation.

A further item of taxation, introduced as from 16th November, 1959, is the amount collected under the authority of the *Motor Car (Insurance Surcharge) Act 1959*, from a surcharge of £1 imposed on each third-party insurance premium. The tax collected is paid to Consolidated Revenue.

With the exception of amounts collected under the Motor Car (Insurance Surcharge) Act, fees collected by the Motor Registration Branch are not paid to Consolidated Revenue, but are credited to various funds as directed by the Motor Car Act and other Acts. Costs of collection are apportioned between the participating funds (other than Consolidated Revenue) with the exception that, in respect of amounts credited to the Level Crossings Fund, the relevant costs of collection are borne by the Country Roads Board Fund.

The amounts of motor taxation credited to the several accounts during the year 1960-61 were as follows :—

	£'000	£'000
Consolidated Revenue—		
Motor Car Third-Party Insurance Tax		882
Country Roads Board Fund—		
Motor Registration Fees .. .. .	9,170	
Drivers' Licence Fees (half) .. .. .	257	
Drivers' Test Fees .. .. .	39	
Owners' Certificates (two-thirds) .. .. .	592	
Road Charges — Commercial Goods Vehicles Act .. .. .	2,255	
	—	12,313
Level Crossings Fund—		
Owners' Certificates (one-third) .. .. .		296
Municipalities Assistance Fund—		
Drivers' Licence Fees (half) .. .. .		257
Transport Regulation Fund—		
Motor Omnibus Registration Fees .. .. .	6	
Licences, &c. .. .. .	306	
Permits .. .. .	346	
	—	658
Motor Car (Hospital Payments) Fund—		
Deductions from Third Party Insurance Premiums .. .. .		78
Total Motor Taxation, 1960-61 .. .. .		<u>14,484</u>

*Probate Duties*

The *Administration and Probate Act 1958* 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 situated 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.

The following is a brief summary of the rates applicable to estates passing to beneficiaries in the various categories. The rates were effective from 1st December, 1958. For rates prior to that date, see the Victorian Year Book 1952–53 and 1953–54 and previous issues.

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
					pence in £			
	£							
	Does not exceed	£	but does not exceed	£				
Exceeds	600	1,500	1,500	5,000	Nil	Nil	Nil	Nil
"	1,500	"	"	5,000	Nil	Nil	12	18
"	5,000	"	"	6,500	18	24	24	24
"	6,500	"	"	10,000	30	36	36	42
"	10,000	"	"	15,000	18	24	30	42
"	15,000	"	"	25,000	24	30	42	48
"	25,000	"	"	30,000	30	36	48	48
"	30,000	"	"	35,000	42	48	48	48
"	35,000	"	"	45,000	48	54	60	60
"	45,000	"	"	55,000	54	66	72	90
"	55,000	"	"	60,000	60	72	72	90
"	60,000	"	"	65,000	72	72	78	90
"	65,000	"	"	75,000	84	84	90	90
"	75,000	"	"	85,000	90	90	96	102
"	85,000	"	"	94,667 (a)	90	..	..	..
"	85,000	"	"	97,166 (b)	..	96	..	..
"	85,000	"	"	113,840 (c)	..	..	102	..
"	85,000	"	"	116,625 (d)	..	..	..	108
When the final balance exceeds (a), (b), (c), or (d), then the whole of the final balance is subject to a duty of					£22 10s. per £100	£25 per £100	£30 per £100	£33 per £100

The amount of probate duty assessed in Victoria during each of the five years to 1960–61 was as follows :—1956–57, £7,213,556 ; 1957–58, £8,143,299 ; 1958–59, £7,911,320 ; 1959–60, £9,872,406 ; 1960–61, £11,794,274.

### Commonwealth Estate Duty

The Commonwealth Government also levies probate and succession duties. The amount of duty collected throughout Australia during each of the five years to 1960–61 was :—1956–57, £12,712,152 ; 1957–58, £13,773,826 ; 1958–59, £13,308,744 ; 1959–60, £13,752,610 ; 1960–61, £14,806,953.

### Land Tax

The *State Land Tax Act* 1928 provided for a tax on the unimproved value of land. 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. Thus tax is levied on land even if built on or otherwise improved, at a rate, for every £1 of unimproved value, declared for each year by Act of Parliament.

The *Land Tax (Exemptions and Rates) Act 1953*, provided for a rate of tax of one penny in the pound on the unimproved value of land not exceeding £8,750, and for a graduated increase in the rate to reach 7d. in the pound at an unimproved value of £85,000.

The *Land Tax (Exemptions and Rates) Act 1961*, reduced the rates of tax payable, for the assessment year 1962, on land used chiefly for primary production. Under the new scale, the tax will be one penny in the pound on the unimproved value of land up to £15,000. On the excess over £15,000, a progressive rate will apply, commencing at 1½d. in the pound and reaching a maximum of 4½d. in the pound at an unimproved value of £70,000.

Land used chiefly for primary production is exempted from land tax if the unimproved value of such land is not more than £3,000. A partial exemption is allowed up to £6,000.

Under the provisions of the *Land Tax (Exemptions and Rates) Act 1958*, the exemption in respect of land not used chiefly for primary production was £1,250, with a partial exemption to £1,500. These exemptions were increased to £1,450 and £1,632 respectively by the *Land Tax (Exemptions and Rates) Act 1961*.

The following table shows particulars, in specified groups of unimproved values of holdings, of Land Tax assessments for 1960 :—

VICTORIA—ANALYSIS OF STATE LAND TAX  
ASSESSMENTS, 1960

(Based on Unimproved Values at 31st December, 1959)

Unimproved Values of Holdings—	Number of Taxpayers	Total Unimproved Values*	Tax Payable
£		£'000	
1,251 to 1,500 .. ..	23,007	31,642	88
1,501 „ 2,000 .. ..	27,531	47,477	197
2,001 „ 3,000 .. ..	21,555	52,038	206
3,001 „ 4,000 .. ..	15,604	53,780	148
4,001 „ 5,000 .. ..	9,637	42,639	142
5,001 „ 6,000 .. ..	6,809	36,853	140
6,001 „ 7,000 .. ..	4,886	30,902	127
7,001 „ 8,000 .. ..	3,515	25,979	106
8,001 „ 8,750 .. ..	1,880	15,490	63
8,751 „ 10,000 .. ..	2,608	23,792	101
10,001 „ 15,000 .. ..	5,073	59,840	299
15,001 „ 20,000 .. ..	2,026	33,576	205
20,001 „ 25,000 .. ..	1,014	22,621	156
25,001 „ 30,000 .. ..	583	15,972	123
30,001 „ 35,000 .. ..	403	13,239	114
35,001 „ 40,000 .. ..	264	9,912	92
40,001 „ 50,000 .. ..	283	12,520	132
50,001 „ 75,000 .. ..	414	25,329	331
75,001 „ 100,000 .. ..	170	14,846	253
100,001 „ 150,000 .. ..	165	19,447	419
150,001 „ 200,000 .. ..	77	13,443	392
200,001 and over .. ..	170	95,645	2,541
Total .. ..	127,674	696,982	6,375

\* Of land not exempted from land tax.

In the following table, details are shown of the assessments made during each of the years 1956 to 1960 :—

## VICTORIA—STATE LAND TAX ASSESSMENTS

Year	Number of Taxpayers	Total Tax Payable	Average Tax Payable per Taxpayer	Total Unimproved Values*
		£'000	£ s. d.	£'000
1956 .. .. .	89,816	3,433	38 4 4	438,324
1957 .. .. .	98,808	3,944	39 18 3	478,797
1958 .. .. .	115,317	4,630	40 3 1	543,793
1959 .. .. .	105,606	5,443	51 10 9	615,229
1960 .. .. .	127,674	6,375	49 18 8	696,982

\* Of land not exempted from land tax.

*Stamp Duties*

The *Stamps Act* 1958 imposes a stamp duty on a considerable number of legal and commercial documents. The rates of duty vary with the nature of the document or the type of transaction which such a document records. In certain instances, a document of a particular kind must be brought into existence for the purpose of stamping. Various exemptions are provided according to the nature of the individual document.

The rates of duty payable in 1961 on the principal dutiable classes were as follows :—

<i>Document</i>	<i>Duty Payable</i>
RECEIPTS .. .. .	.. .. . 3d.
BILLS OF EXCHANGE—	
Payable on demand (cheque, &c.)	.. .. . 3d.
Others (including promissory notes)	not above £25 .. 6d.
	to £50 .. .. 1s.
	to £75 .. .. 1s. 6d.
	to £100 .. .. 2s.
	for extra £50 or part 1s.
SHARE TRANSFERS—On sale for full value—Based on consideration }	to £10 .. .. 9d.
	above £10 .. .. ¾%
TRANSFER OF REAL PROPERTY—Based on consideration }	to £3,500—12s. 6d. for £50
	above £3,500—15s. for £50
LEASES AND ASSIGNMENTS OF LEASES ..	Variable scale according to nature
	%
GIFTS AND SETTLEMENTS .. .. .	up to £1,000 .. 2
	over £1,000 to £5,000 3
	" £5,000 " £10,000 4
	" £10,000 " £25,000 5
	" £25,000 " £50,000 6
	" £50,000 " £100,000 8
	" £100,000 .. 10
INSURANCE—Based on premium income	.. .. . 5
INSTALMENT PURCHASE (Including hire purchase) .. .. .	Scale based on .. 2



In addition, stamp duty is also appropriated to funds for cattle and swine compensation (see Victorian Year Book 1928–29, page 80).

The Act also provides for the collection, by way of stamp duty, of certain imposts on betting, principally through a turnover tax on bookmakers' holdings and a tax on betting tickets. The duty collected in connexion with these taxes is included under the heading "Racing Taxation" in the tables shown on pages 659 and 666 of this Year Book.

### Liquor Tax

The Licensing Court 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 Licensing Court are paid into the Licensing Fund. After payments have been made to municipalities and the Police Superannuation Fund, and costs for compensation, administration, &c., have been met, the excess of receipts is transferred each year from the Licensing Fund to Consolidated Revenue.

The following table shows the amount of liquor tax paid into the Licensing Fund during each of the years 1956–57 to 1960–61 :—

### VICTORIA—LIQUOR TAX

(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Licences—					
Victuallers .. .. .	2,050	2,295	2,340	2,378	2,510
Spirit Merchants and Grocers ..	316	353	381	425	493
Australian Wine .. .. .	15	15	16	16	13
Others .. .. .	7	8	7	7	15
Club Certificates .. .. .	94	111	127	129	146
Permits—Extended Hours, &c. ..	33	35	37	39	41
<b>Total .. .. .</b>	<b>2,515</b>	<b>2,817</b>	<b>2,908</b>	<b>2,994</b>	<b>3,218</b>

### 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 allocations of this revenue between the Hospitals and Charities Fund and the Mental Hospitals Fund are shown for each of the years 1956-57 to 1960-61 :—

**VICTORIA—TATTERSALL LOTTERIES:  
SUBSCRIPTIONS, ETC.  
(£'000)**

Year Ended 30th June—	Subscriptions to Consultations	Duty Paid to Consolidated Revenue	Allocated to—	
			Hospitals and Charities Fund	Mental Hospitals Fund
1957 .. ..	9,250	2,979	2,701	278
1958 .. ..	8,950	2,835	2,461	374
1959 .. ..	8,750	2,849	2,400	449
1960 .. ..	9,300	2,966	2,539	427
1961 .. ..	10,400	3,257	3,134	123

### *Racing Taxation*

The principal sources of revenue from racing taxation are turnover tax on bookmakers' holdings, the percentage received from investments on the totalizator, stamp duty on betting tickets, and tax on admissions to race meetings.

In Victoria, a deduction of 12 per cent. is made from all on-course investments on the totalizator at horse races (including trotting), and at dog races. In the case of city racing clubs, the percentage derived from doubles and quinella investments is divided—4 per cent. being paid to revenue and 8 per cent. to the club, while from win and place investments, 7 per cent. is paid to revenue and 5 per cent. to the club. In respect of country race meetings, 2 per cent. of the 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 was allowed on racecourse totalizators. The Totalizator Agency Board, appointed under the Act, conducts the off-course betting scheme which came into operation on 11th March, 1961.

From off-course investments on the totalizator, 12 per cent. is deducted and allocated as follows :—3 per cent. to Consolidated Revenue ; 1 per cent. to the Totalizator Agency Board Trust Account (held at the State Treasury) ; and 8 per cent. to the Totalizator Agency Board, to be expended in terms of the Act.

Government receipts from the totalizator, including fractions and unclaimed dividends, are specially appropriated to the Hospitals and Charities Fund.

The following table shows particulars of investments on the totalizator, investments with licenced bookmakers and the amount of tax collected from racing for each of the years 1956–57 to 1960–61 :—

**VICTORIA—TOTALIZATOR INVESTMENTS, INVESTMENTS  
WITH LICENSED BOOKMAKERS, AND TOTAL RACING  
TAXATION**  
(£'000)

Year Ended 30th June—	Totalizator Investments		Invest- ments with Licensed Book- makers†	Racing Taxation			
	On- course	Off- course *		Total- ator	Book- makers' Turnover	Other‡	Total
1957 .. ..	11,573	..	52,715	847	975	353	2,175
1958 .. ..	11,740	..	64,250	830	1,187	388	2,405
1959 .. ..	11,532	..	62,150	767	1,154	399	2,320
1960 .. ..	13,198	..	71,600	884	1,321	425	2,630
1961 .. ..	13,855	1,443	78,585	957	1,453	431	2,841

\* The off-course totalizator commenced operations on 11th March, 1961.

† Estimated.

‡ Includes admission tax, stamp duty on betting tickets, and club and bookmakers' licences, &c.

### *Entertainments Tax*

A tax payable on admissions to entertainments was levied by the Victorian Government up to 31st August, 1943, when legislation was passed making the Commonwealth Government the sole authority for levying this tax. In 1953, the Commonwealth vacated this field of taxation and the Victorian Government re-imposed a tax on entertainments as from 8th October, 1953, under the provisions of the *Entertainments Tax Act 1953*.

The *Entertainments Tax (Reduction) Act 1959*, reduced the rates of tax payable as from 9th November, 1959. The reduced rates were reflected in the overall tax payable for 1959-60 and, because the amended schedules completely exempted several of the lower categories, the number of taxable admissions was correspondingly reduced.

The *Entertainments Tax (Reduction) Act 1960*, provided, as from 16th January, 1961, for a reduction in the rates of tax payable on live artist entertainments and for a rebate of tax, in certain circumstances, in respect of cinematograph entertainments and entertainments for charitable purposes.

In the following table, the number of taxable admissions and the amount of tax payable, are shown for each of the years 1958-59 to 1960-61 according to the various classes of entertainments :—

**VICTORIA—ENTERTAINMENTS TAX : NUMBER OF TAXABLE ADMISSIONS AND TAX PAYABLE**

Class of Entertainment	1958-59		1959-60		1960-61	
	Number of Taxable Admissions	Tax Payable	Number of Taxable Admissions	Tax Payable	Number of Taxable Admissions	Tax Payable
	'000	£'000	'000	£'000	'000	£'000
Admissions Taxable at Reduced Rates—						
Theatres .. .. .	1,228	86	1,500	108	1,198	65
Sport .. .. .	731	29	513	23	798	32
Miscellaneous .. .. .	401	25	335	21	336	22
Periodical or Season Ticket ..	3	*	3	*	2	*
Admissions Taxable at Full Rates—						
Motion Pictures .. .. .	21,507	1,000	16,672	845	15,057	798
Racing (Horse, Trotting, Dog) ..	2,184	230	2,407	249	2,386	246
Dancing and Skating .. .. .	1,734	116	1,687	105	1,717	103
Miscellaneous .. .. .	299	32	368	34	216	23
Periodical or Season Ticket ..	247	34	156	22	214	30
<b>Total .. .. .</b>	<b>28,334</b>	<b>1,552</b>	<b>23,641</b>	<b>1,407</b>	<b>21,924</b>	<b>1,319</b>

\* Under £500.

*Commonwealth Income Tax and Social Services Contribution*

Uniform taxation on incomes throughout Australia was adopted in 1942 when the Commonwealth Government became the sole authority levying this tax.

With the introduction of Social Services Contribution from 1st January, 1946, the levy of taxation on the incomes of individuals was divided into two separate taxes—Income Tax and Social Services Contribution. Both taxes were based upon the same definitions of assessable income and both were assessed and collected concurrently. Company income was not subject to Social Services Contribution except with regard to the undistributed income of private companies. The two taxes have since been merged into a single levy known as "Income

Tax and Social Services Contribution”, and this title now refers to the tax imposed on the incomes of both individuals and companies. It first applied to the tax imposed on incomes derived by individuals during the year ended 30th June, 1951, and by companies during the year ended 30th June, 1950.

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.

Expenses incurred in earning income and losses incurred in previous years are allowable deductions.

For the income year 1961–62, Income Tax and Social Services Contribution is payable on the incomes of individuals commencing at a taxable income of £105. However, certain limitations apply to the tax payable by aged persons, over 65 years of age in the case of a male and 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 benefits fund payments, education expenses, &c., 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 .. .. .	143
Parent or parent-in-law .. .. .	143
Child under sixteen years of age—	
One child .. .. .	91
Other children .. .. .	65 each dependant
Student child 16 to 21 years of age ..	91 each dependant
Invalid relative not less than sixteen years of age .. .. .	91 each dependant
Housekeeper or daughter-housekeeper ..	143

The following table shows the rates of Income Tax and Social Services Contribution for individuals for the income year 1961-62:—

AUSTRALIA—RATES OF INCOME TAX AND SOCIAL SERVICES CONTRIBUTION FOR INDIVIDUALS, 1961-62\*

Total Taxable Income—		Tax and Contribution on Amount in Column 1	Tax and Contribution on Each £1 of Balance of Income
Column 1 Exceeding—	Column 2 Not Exceeding—		
£	£	£ s. d.	d.
Nil	100	Nil	1
100	150	0 8 4	3
150	200	1 0 10	7
200	250	2 10 0	11
250	300	4 15 10	15
300	400	7 18 4	20
400	500	16 5 0	26
500	600	27 1 8	30
600	700	39 11 8	34
700	800	53 15 0	38
800	900	69 11 8	42
900	1,000	87 1 8	46
1,000	1,200	106 5 0	52
1,200	1,400	149 11 8	59
1,400	1,600	198 15 0	65
1,600	1,800	252 18 4	71
1,800	2,000	312 1 8	77
2,000	2,400	376 5 0	85
2,400	2,800	517 18 4	92
2,800	3,200	671 5 0	99
3,200	3,600	836 5 0	105
3,600	4,000	1,011 5 0	111
4,000	4,400	1,196 5 0	117
4,400	5,000	1,391 5 0	124
5,000	6,000	1,701 5 0	132
6,000	8,000	2,251 5 0	139
8,000	10,000	3,409 11 8	145
10,000	16,000	4,617 18 4	152
16,000	—	8,417 18 4	160

\* A rebate of 5 per cent. is deductible from the amount of tax and contribution calculated by reference to the table.

Income Tax and Social Services Contribution is payable on the whole of a person's taxable income if that income exceeds £104.

A deduction is available to individuals who reside in certain remote areas of the Commonwealth or its Territories. The areas are divided into two Zones—A and B. A resident of Zone A is allowed a deduction of £270 plus one-half of the deductions allowable for dependants. A resident of Zone B is allowed a deduction of £45 plus one-twelfth of the deductions allowable for dependants. "Resident" for this purpose means a person who resides, whether continuously or not, in the relevant area for more than one-half of the year of income.

A deduction of £270 plus one-half of the deductions allowable for dependants, is allowable to members of the Defence Forces who serve in certain specified overseas localities for a period of more than one-half of the year of income. A proportionate deduction is allowed if the service is of less duration than one-half of the year.

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 and Social Services Contribution assessed during 1959-60 (based on incomes received during 1958-59). The particulars are classified according to grades of actual income and relate only to individuals resident in Victoria.

**VICTORIA—INCOME TAX AND SOCIAL SERVICES  
CONTRIBUTION : INDIVIDUALS, 1959-60\***

Grade of Actual Income†	Taxpayers	Taxable Income			Net Income Tax and Social Services Contribution Assessed
		Salaries and Wages	Other	Total	
£	No.	£'000			
105- 199 ..	47,686	5,844	1,185	7,029	59
200- 299 ..	53,047	9,828	2,501	12,329	228
300- 399 ..	66,612	17,341	3,901	21,242	666
400- 499 ..	72,678	23,317	5,919	29,236	1,256
500- 599 ..	86,761	35,078	7,490	42,568	2,337
600- 699 ..	87,425	40,734	8,608	49,342	3,165
700- 799 ..	88,004	45,239	9,780	55,019	3,936
800- 899 ..	106,905	62,462	10,484	72,946	5,663
900- 999 ..	112,417	71,814	10,545	82,359	6,881
1,000-1,099 ..	101,252	68,413	10,846	79,259	7,092
1,100-1,199 ..	79,860	58,426	9,954	68,380	6,575
1,200-1,299 ..	59,198	45,837	9,671	55,508	5,749
1,300-1,399 ..	44,273	35,403	8,907	44,310	4,856
1,400-1,499 ..	32,963	27,628	8,195	35,823	4,185
1,500-1,999 ..	78,753	69,496	32,599	102,095	13,764
2,000- 2,999 ..	37,358	33,701	38,096	71,797	13,013
3,000- 3,999 ..	11,620	11,796	21,961	33,757	8,131
4,000- 4,999 ..	5,156	5,959	13,986	19,945	5,747
5,000- 9,999 ..	6,334	10,025	27,342	37,367	13,907
10,000-14,999 ..	933	2,527	7,625	10,152	4,802
15,000-19,999 ..	253	990	2,994	3,984	2,089
20,000-29,999 ..	133	604	2,265	2,869	1,609
30,000-49,999 ..	54	330	1,496	1,826	1,090
50,000 and over	28	144	2,201	2,345	1,478
<b>Total ..</b>	<b>1,179,703</b>	<b>682,936</b>	<b>258,551</b>	<b>941,487</b>	<b>118,278</b>

\* Includes 6,339 taxpayers, resident in Victoria, who derived income from more than one State.

† Actual Income is defined briefly as "Gross income, including exempt income, less expenses incurred in gaining that income".

**Company Tax**

The following table shows the rates of Income Tax and Social Services Contribution payable by companies for the financial year 1961-62 (income year 1960-61) :—

**AUSTRALIA—RATES OF INCOME TAX AND SOCIAL SERVICES CONTRIBUTION PAYABLE BY COMPANIES, 1961-62**

Type of Company	Rate per £1 of Taxable Income—	
	Up to £5,000	Balance
	s. d.	s. d.
Private .. .. .	5 0*	7 0*
Non-private—		
Co-operative .. .. .	6 0	8 0
Life Assurance—		
Mutual .. .. .	5 0	7 0
Other Life Assurance—		
Resident—		
Mutual Income .. .. .	5 0	7 0
Other Income .. .. .	7 0†	8 0
Non-resident—		
Mutual Income .. .. .	5 0	7 0
Dividend Income .. .. .	6 0†	8 0
Other Income .. .. .	7 0‡	8 0
Non-profit§—		
Friendly Society Dispensary .. .. .	6 0	6 0
Other .. .. .	6 0	8 0
Other—		
Resident .. .. .	7 0	8 0
Non-resident—		
Dividend Income .. .. .	6 0	8 0
Other Income .. .. .	7 0¶	8 0
All Companies—		
Interest   (Section 125) Rate per £ .. .. .		8s. 0d.

\* Further tax at 10s. in the £ payable on undistributed amount.

† Maximum income subject to this rate is £5,000 less mutual income.

‡ Maximum income subject to this rate is £5,000 less the sum of mutual income and dividend income.

§ Incomes not exceeding £104 are exempt from tax. Where the taxable income does not exceed £260, the tax may not exceed one-half of the amount by which the taxable income exceeds £104.

¶ Maximum income subject to this rate is £5,000 less dividend income.

|| Interest paid to non-residents. If the non-resident is not a company, tax is paid only on interest in excess of £104.

**Pensions and Gratuities****General**

During the year 1960-61, the State Government expended a sum of £4,904,652 on pensions, gratuities, &c. Of this amount, £4,959 was spent on pensions of a non-contributory nature.



The following table shows particulars of expenditure on pensions for each of the years 1956-57 to 1960-61 :—

VICTORIA—GOVERNMENT EXPENDITURE ON PENSIONS,  
GRATUITIES, ETC.  
(£)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>Non-contributory Pensions, &amp;c.—</b>					
Railways .. .. .	6,224	3,511	2,367	1,708	795
Judges .. .. .	2,981	4,276	3,019	2,883	2,776
Public Service .. .. .	4,296	2,470	1,955	1,094	767
Education Department .. .. .					
Officers Transferred to Commonwealth Service .. .. .	194	..	..	..	..
Various Allowances, &c. .. .. .	571	705	642	623	621
<b>Total Non-contributory Pensions, Gratuities, &amp;c. .. .. .</b>	<b>14,266</b>	<b>10,962</b>	<b>7,983</b>	<b>6,308</b>	<b>4,959</b>
<b>Contributory Pensions—</b>					
Police Superannuation Fund .. .. .	78,640	86,019	95,998	92,111	76,846
Police Pensions Fund .. .. .	758,700	782,000	785,750	852,250	869,650
<b>Superannuation Fund—</b>					
Railways .. .. .	1,614,730	1,709,112	1,842,786	1,967,956	2,126,203
Other .. .. .	1,126,412	1,222,712	1,366,424	1,521,403	1,703,184
<b>Total Superannuation Fund .. .. .</b>	<b>2,741,142</b>	<b>2,931,824</b>	<b>3,209,210</b>	<b>3,489,359</b>	<b>3,829,387</b>
Coal Mine Workers Pensions Fund .. .. .	67,625	66,640	70,339	71,228	79,466
Parliamentary Contributory Retirement Fund .. .. .	17,796	18,632	28,576	27,016	29,087
Married Women Teachers' Pensions Fund .. .. .	..	10,433	12,379	14,472	15,126
Public Service Act .. .. .	..	..	131	136	131
<b>Total Contributory Pensions .. .. .</b>	<b>3,663,903</b>	<b>3,895,548</b>	<b>4,202,383</b>	<b>4,546,572</b>	<b>4,899,693</b>
<b>Grand Total .. .. .</b>	<b>3,678,169</b>	<b>3,906,510</b>	<b>4,210,366</b>	<b>4,552,880</b>	<b>4,904,652</b>

### *Police Superannuation Fund*

Pensions are payable out of this Fund to those who joined the police force prior to 25th November, 1902.

The Fund is maintained by an annual subsidy of £2,000 from Consolidated Revenue ; by a moiety of the fines inflicted by the Court of Petty Sessions ; by transfers from the Licensing Fund under the provisions of the Licensing Act; and, should the foregoing sources prove insufficient, by a further grant in aid from Consolidated Revenue. Police contributions to the Fund ceased in 1940-41.

During the year 1960-61, the total receipts of the Fund from all sources amounted to £76,846, while pension payments totalled £26,041. The balance in the Fund at 30th June, 1961, was £356,202 of which £306,125 was invested in Commonwealth Government securities.

### *Police Pensions Fund*

This Fund was established by the *Police Pensions Act* 1923 which came into operation on 1st January, 1924, and applied to all members who joined the police force on or after 25th November, 1902. The *Police Regulation Act* 1958, consolidating the law dealing with the police force in Victoria, was passed in September, 1958, and a further amending Act was passed in December, 1958.

Under the provisions of these Acts, the Fund provides pensions on retirement, either at maximum ages, which vary according to rank, or on account of ill health. Widows are entitled to proportionate pensions, and allowances are paid for children up to sixteen years of age.

Each year the Government Actuary is required to certify what amount should be appropriated from Consolidated Revenue to ensure the solvency of the Fund.

The number of contributors to the Fund at 30th June, 1961, was 3,988 males and 58 females.

The receipts of the Police Pensions Fund during 1960–61 amounted to £1,542,396, comprising deductions from pay, £216,665; special appropriation from Consolidated Revenue, £869,650; interest on investments, £452,037; and other receipts, £4,044. During the year, £614,766 was paid in pensions, £18,715 in gratuities, and £22,913 represented deductions from pay returned. The balance in the Fund at 30th June, 1961 was £10,976,228. Of this amount £10,690,145 was invested in government and semi-government securities.

### *Superannuation Fund*

On 24th November, 1925, legislation was enacted by the Victorian Parliament making provision, on a contributory basis, for superannuation benefits for public servants, teachers, railway employees, and employees of certain statutory bodies.

An Act consolidating the Superannuation Acts was passed in September, 1958, and amending Acts were passed in November, 1958 and 1959. The principal provisions of these Acts are as follows:—

- (1) The maximum age for retirement is 65 years for males, while female officers may contribute on the basis of retirement at age 60 or age 65.
- (2) The amount (units) of pension for which an officer may contribute is regulated by salary and varies from two units (£104 pension) to 36 units (£1,638 pension).
- (3) Officers are required to pay fortnightly contributions to the Fund according to the age next birthday at which they become entitled to contribute for each unit of superannuation.
- (4) A pension according to the number of units for which contributions were paid is payable to a "normal" contributor who attains the maximum age for retirement, or who retires on account of ill health.
- (5) The widow of a deceased contributor or pensioner is entitled to five-eighths of the rate of pension for which the officer was contributing, or five-eighths of the pension being drawn (as the case may be) at date of death, subject to a minimum of £65 per annum.

- (6) A pension of £52 per annum is payable in respect of each child of a deceased contributor or pensioner until the age of sixteen years, provided that, if both parents are deceased, this amount is increased to £104.

A further amending Act—*The Superannuation (Additions to Pensions) Act 1960*—increased pensions to certain pensioners to whom pensions became payable prior to 1st January, 1956, to the widows of such pensioners, and to the widows of certain contributors or pensioners who died before that date.

The following table shows particulars of the Superannuation Fund for each of the years 1956–57 to 1960–61 :—

VICTORIA—STATE SUPERANNUATION FUND

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
	£'000				
<b>Income—</b>					
Contributions—					
Officers .. .. .	2,599	2,600	2,615	2,845	3,005
Consolidated Revenue*	2,729	2,918	3,191	3,598	3,818
Interest .. .. .	932	1,123	1,286	1,464	1,641
Other .. .. .	11	11	6	7	610†
<b>Total .. .. .</b>	<b>6,271</b>	<b>6,652</b>	<b>7,098</b>	<b>7,914</b>	<b>9,074</b>
<b>Expenditure—</b>					
Pension Payments .. .. .	3,456	3,729	4,101	4,650	4,936
Lump Sum Payments .. .. .	2	3	5	2	6
Contributions Refunded .. .. .	152	161	207	273	710
Other .. .. .	‡	‡	1	1	‡
<b>Total .. .. .</b>	<b>3,610</b>	<b>3,893</b>	<b>4,314</b>	<b>4,926</b>	<b>5,652</b>
<b>Balance in Fund at 30th June .. .. .</b>	<b>24,018</b>	<b>26,777</b>	<b>29,561</b>	<b>32,549</b>	<b>35,971</b>
<b>Contributors at End of Year—</b>			No.		
Males .. .. .	34,140	36,013	37,021	37,173	36,051
Females .. .. .	5,408	5,889	6,020	6,182	6,610
<b>Total .. .. .</b>	<b>39,548</b>	<b>41,902</b>	<b>43,041</b>	<b>43,355</b>	<b>42,661</b>
<b>Pensioners at End of Year—</b>					
Ex-employees—					
Males .. .. .	7,309	7,533	7,713	7,939	8,087
Females .. .. .	1,133	1,145	1,176	1,226	1,274
Widows .. .. .	5,533	5,648	5,825	6,064	6,220
Children .. .. .	529	526	523	547	585
<b>Total .. .. .</b>	<b>14,504</b>	<b>14,852</b>	<b>15,237</b>	<b>15,776</b>	<b>16,166</b>

\* These figures do not agree with those shown on page 672, as the latter include Consolidated Revenue's share of pensions accrued at the end of each year.

† Includes £600,000 advance from State Treasury (to be repaid).

‡ Under £500.

*Coal Mine Workers Pensions Fund*

This Fund was established under the *Coal Mine Workers Pensions Act* 1942. The *Coal Mines Act* 1958 consolidated the law relating to coal mines and coal mine workers, and, together with the amending Acts of December, 1958 and November, 1959, defined contributions and benefits in connexion with the Coal Mine Workers Pensions Fund. The annual contribution to the Fund is fixed by the Government Actuary after an actuarial examination once in every three years. The Treasurer of Victoria is required to make a payment of three-sevenths of this amount. The mine workers and the mine owners pay one-seventh and three-sevenths respectively. A pension is payable to a mine worker on attaining the maximum age for retirement which, in most cases, is 60 years, provided certain conditions as to length of service in the mining industry are satisfied. A pension is also payable to those qualified mine workers who are totally or partially incapacitated by an injury arising out of, and in the course of, their employment as mine workers. A widow of a pensioner, or a widow of a mine worker whose death was due to an injury as a mine worker, is entitled to pension until death or remarriage. Allowances to children under age sixteen are also provided under the Act.

During 1960-61, the Government contributed £41,467 to the Fund, and the State Coal Mine (as owners) £37,999.

*Parliamentary Contributory Retirement Fund*

This Fund was established under authority of the *Parliamentary Contributory Retirement Fund Act* 1946 to provide pensions for ex-members of the Victorian Parliament. Current legislation affecting this Fund is embodied in the *Constitution Act Amendment Act* 1958. This Act is included in the Consolidated Statute Law of Victoria.

Members contribute to the Fund an amount of £6 per fortnight. Any further sums required to pay pensions, &c., are paid from Consolidated Revenue.

Every person who has ceased to be a member and has served as a member for at least fifteen years, or for at least three Parliaments, is entitled to be paid out of the Fund a pension at the rate of the basic wage payable in Melbourne.

Provision is also made for payments of certain sums to ex-members who do not fulfil the conditions necessary for a pension, and the payment of a pension to the widow of a deceased member or ex-member at a rate equivalent to the amount that would have been paid or was being paid to the deceased.

All payments out of the Fund are subject to the approval of trustees appointed to administer the Fund.

During the year ended 30th June, 1961, receipts of the Fund amounted to £44,543, made up of contributions from members, £15,456, and Special Appropriations from Consolidated Revenue, £29,087. Pensions and lump sum payments from the Fund amounted to £44,543.

#### *Married Women Teachers' Pensions Fund*

This Fund was established under the provisions of the *Teaching Service (Married Women) Act 1956* and came into operation on 1st July, 1957. This Act was repealed in 1958 and included in the *Teaching Service Act 1958* which consolidated all laws relating to the teaching service in the Education Department.

The Act provides, *inter alia*, for retirement benefits for married women who are permanently employed in the teaching service and not eligible to contribute to the Superannuation Fund. A deduction of 5 per cent. is made from the salary of each contributor and paid into the Fund together with a similar amount from Consolidated Revenue. On reaching the retiring age (60 or 65 at her option), a pension is payable according to the amount accumulated to her credit (including interest).

Receipts for 1960–61 amounted to £34,176, consisting of teachers' contributions, £15,336; contribution from Consolidated Revenue, £15,126; and interest on investments, £3,714. Payments from the Fund during the year totalled £4,148, made up of lump sum payments, £838, and refunds of contributions, &c., £3,310. The balance in the Fund at 30th June, 1961, was £106,107 of which £106,099 was invested in government and semi-government securities.

#### **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 specified 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 1960–61, the debits of all trust funds or accounts amounted to £155,359,975, while credits totalled £161,461,774.

At 30th June, 1961, the liability of the State on account of all trust funds or accounts amounted to £50,284,455. Of this total, £22,045,746 was invested in Commonwealth Stock or other securities, and cash advanced totalled £3,716,369. The balance—£24,522,340—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. The figures in the following table represent all such expenditure whether the loans have been repaid or are still in existence. The table shows the details for each of the years 1957-58 to 1960-61 and the total to 30th June, 1961.

VICTORIA—EXPENDITURE FROM LOAN FUND AND ON  
ACCOUNT OF LOAN  
(£'000)

Expenditure on—	Year Ended 30th June—				Total to 30th June, 1961
	1958	1959	1960	1961	
<b>Public Works—</b>					
Railways*—					
As Reduced .. ..	7,049	7,432	7,814	7,564	142,778†
Transferred .. ..	..	..	..	..	29,135
Country Roads .. ..	739	116	234	375	22,006
Bridges .. ..	845	1,265	1,092	1,067	4,873
Harbours and Rivers .. ..	290	397	450	471	5,225
Water Supply—					
Country .. ..	6,960	7,903	7,194	8,095	125,733‡
Metropolitan .. ..	..	..	..	..	3,143
Sewerage .. ..	500	482	636	523	4,340
Electricity Supply .. ..	3,200	3,500	6,500	6,750	67,439§
Gas and Fuel Corporation .. ..	150	110	90	80	12,319
Public Buildings—					
Schools .. ..	7,858	9,040	11,305	12,750	86,074
Hospitals .. ..	5,900	6,090	5,752	5,980	57,844
Other .. ..	1,564	1,643	1,611	2,206	16,168
Immigration .. ..	..	..	..	35	275
Municipal Endowment .. ..	..	..	..	..	698
Municipalities, Loans, Grants, &c.	283	369	490	510	4,154
Housing .. ..	330	517	610	536	12,379
Unemployment Relief .. ..	..	..	..	..	13,147
Other Public Works .. ..	299	259	212	277	4,421
<b>Primary Production—</b>					
Land Settlement .. ..	..	..	2,817	1,136	45,524
Soldier Settlement .. ..	3,599	3,646	634	702	59,213
Wire Netting Advances .. ..	3		2	3	1,050

\* Reduced under the authority of the Railways (Finances Adjustment) Act of 1936.

† Includes expenditure of £1,804,420 transferred to State Electricity Commission.

‡ Includes expenditure of £176,870 transferred to State Electricity Commission.

§ Excludes expenditure mentioned in the two preceding notes.

|| Under £500 (credit).

VICTORIA—EXPENDITURE FROM LOAN FUND AND ON ACCOUNT OF  
LOAN—*continued*

(£'000)

Expenditure on—	Year Ended 30th June—				Total to 30th June, 1961
	1958	1959	1960	1961	
<b>Primary Production (<i>continued</i>)—</b>					
Settlers' Advances—					
Cultivation .. ..	..	..	..	..	2,621
Other .. ..	..	..	..	..	120
Bulk Handling of Wheat .. ..	..	..	..	..	1,404
Forestry .. ..	617	637	662	764	18,210
Mining <i>n.e.i.</i> .. ..	22	75	67	106	924
Mining—State Coal Mine .. ..	..	..	..	..	353
Primary Products—Advances to Companies .. ..	..	..	..	..	331
Cool Stores—Advances to Com- panies .. ..	..	..	..	..	658
Drought, Flood, &c., Relief .. ..	121	113	30	50	1,388
Destruction of Vermin and Nox- ious Weeds .. ..	80	57	610	640	2,054
Other Primary Production .. ..	<i>Cr.</i> 2	77	127	131	508
Other Purposes .. ..	931	693	552	954	14,479
<b>Total Works Expenditure .. ..</b>	<b>41,338</b>	<b>44,421</b>	<b>49,491</b>	<b>51,705</b>	<b>760,988</b>
<b>In Aid of Revenue .. ..</b>	<b>4,315</b>	<b>3,000</b>	<b>2,546</b>	<b>..</b>	<b>28,562</b>
<b>Grand Total .. ..</b>	<b>45,653</b>	<b>47,421</b>	<b>52,037</b>	<b>51,705</b>	<b>789,550</b>

The figures in the table above do not include discounts and flotation expenses, nor have they been adjusted on account of premiums received. The net aggregate outlay on these items to 30th June, 1961, was £7,058,708.

### Public Debt

#### General

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, and land settlement.

A notable feature of the public debt of the State is that more than 90 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 raised in London are shown in sterling which has been converted to Australian currency at the mint par of exchange prevailing on 1st July, 1927, viz., £1A. = £1Stg. Loans raised in New York and Canada have been converted to Australian currency at \$4.8665 to £1, while loans raised in Switzerland have been converted to Australian currency at 1,000 Swiss francs to £102 1s. 10d. Repayment, when made, will be in sterling, dollars, or francs, as the case may be, at rates of exchange then current.

Advances made by the Commonwealth Government to Victoria, under the Commonwealth-State agreements relating to housing and soldier settlement, are not included in the public debt statements in this Year Book. The total of such advances owing at 30th June, 1961, was £135,705,967, of which £128,660,447 was for housing, and £7,045,520 for soldier settlement. 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 1956-57 to 1960-61. Separate particulars are shown for loans raised in Australia and London, while loans raised in New York, Canada, and Switzerland are grouped under one heading :—

### VICTORIA—STATE PUBLIC DEBT : SUMMARY OF TRANSACTIONS

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
DEBT MATURING IN AUSTRALIA (£A'000)					
Debt Outstanding at 1st July .. .. .	397,577	439,555	475,104	508,186	546,438
New Debt Incurred—					
Commonwealth Government Loan Flotations	83,941	107,911	64,485	67,899	97,070
Domestic Raisings .. .. .	805	700	745	1,099	660
Less Conversion and Redemption Loans ..	37,870	67,804	27,106	24,574	54,202
Total New Debt Incurred .. .. .	46,876	40,807	38,124	44,424	43,528
Repurchases and Redemptions from National Debt Sinking Fund .. .. .	4,898	5,258*	5,042	6,172	6,911
Net Increase in Debt .. .. .	41,978	35,549	33,082	38,252	36,617
Debt Outstanding at 30th June .. .. .	439,555	475,104	508,186	546,438	583,055

Footnotes on next page.



**VICTORIA—STATE PUBLIC DEBT : SUMMARY OF TRANSACTIONS—  
continued**

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
<b>DEBT MATURING IN LONDON</b>					
(£ Stg.'000)					
Debt Outstanding at 1st July .. ..	44,705	38,760	38,572	41,253	41,223
New Debt Incurred—					
Commonwealth Government Loan Flotations .. ..	..	..	16,042	..	620
Less Conversion and Redemption Loans .. ..	5,801†	..	12,720	..	601
Total New Debt Incurred .. ..	- 5,801	..	3,322	..	19
Repurchases and Redemptions from National Debt Sinking Fund .. ..	144	188	641‡	30	72§
Net Increase in Debt .. ..	- 5,945	- 188	2,681	- 30	- 53
Debt Outstanding at 30th June .. ..	38,760	38,572	41,253	41,223	41,170
<b>DEBT MATURING IN NEW YORK, CANADA, AND SWITZERLAND</b>					
(£'000)					
Debt Outstanding at 1st July .. ..	3,431	3,504	4,537	5,573	6,461
New Debt Incurred—					
Commonwealth Government Loan Flotations .. ..	1,014	1,090	1,081	1,083	3,262
Less Conversion and Redemption Loans .. ..	890	..	..	..	..
Total New Debt Incurred .. ..	124	1,090	1,081	1,083	3,262
Repurchases and Redemptions from National Debt Sinking Fund .. ..	51	57	45	195	144
Net Increase in Debt .. ..	73	1,033	1,036	888	3,118
Debt Outstanding at 30th June .. ..	3,504	4,537	5,573	6,461	9,579¶
<b>TOTAL</b>					
(£'000)					
Debt Outstanding at 1st July .. ..	445,713	481,819	518,213	555,012	594,122
New Debt Incurred—					
Commonwealth Government Loan Flotations .. ..	84,955	109,001	81,608	68,982	100,952
Domestic Raisings .. ..	805	700	745	1,099	660
Less Conversion and Redemption Loans .. ..	44,561	67,804	39,826	24,574	54,803
Total New Debt Incurred .. ..	41,199	41,897	42,527	45,507	46,809
Repurchases and Redemptions from National Debt Sinking Fund .. ..	5,093	5,503*	5,728‡	6,397	7,127§
Net Increase in Debt .. ..	36,106	36,394	36,799	39,110	39,682
Debt Outstanding at 30th June .. ..	481,819	518,213	555,012	594,122	633,804

\* Includes £330,870 discount expenses on conversion loans met from National Debt Sinking Fund.

† Debt repatriated to Australia.

‡ Includes £161,508 discount expenses on conversion loans met from National Debt Sinking Fund.

§ Includes £19,433 discount expenses on conversion loans met from National Debt Sinking Fund.

|| Includes New York, £1,090,106, Canada, £872,085, and Switzerland, £1,299,831.

¶ Includes New York, £7,406,966, Canada, £872,085, and Switzerland, £1,299,831.

Particulars concerning the due dates of loans outstanding at 30th June, 1961, 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 30TH JUNE, 1961  
(£'000)

Due Date (Financial Year)	Amount Maturing in—					Total
	Australia	London	New York	Canada	Switzerland	
1961-62 ..	39,886	..	649	..	..	40,535
1962-63 ..	102,837	..	..	..	..	102,837
1963-64 ..	23,530	..	..	..	..	23,530
1964-65 ..	65,420	..	..	..	..	65,420
1965-66 ..	45,101	1,859	..	..	..	46,960
1966-67 ..	40,327	5,681	843	..	..	46,851
1967-68 ..	46,090	8,343	..	..	..	54,433
1968-69 ..	55,277	..	..	..	..	55,277
1969-70 ..	17,018	8,640	543	..	..	26,201
1970-71 ..	19,750	..	244	..	..	19,994
1971-72 ..	131	..	890	..	..	1,021
1972-73 ..	19,547	6,441	1,035	..	..	27,023
1973-74 ..	143	..	..	..	..	143
1974-75 ..	13,125	..	..	..	..	13,125
1975-76 ..	20,715	310	..	..	1,300	22,325
1976-77 ..	163	..	..	..	..	163
1977-78 ..	171	..	..	..	..	171
1978-79 ..	178	9,586	1,029	..	..	10,793
1979-80 ..	25,694	..	1,084	..	..	26,778
1980-81 ..	20,748	..	1,090	872	..	22,710
1981-82 ..	15,052	..	..	..	..	15,052
1982-83 ..	9,074	..	..	..	..	9,074
1983-84 ..	..	310	..	..	..	310
Not Yet Fixed ..	3,078	..	..	..	..	3,078
Total ..	583,055	41,170	7,407	872	1,300	633,804

The following table shows details of the amount of loans outstanding in Australia, London, New York, Canada, and Switzerland, and the amount of debt per head of population at the end of each of the years 1956-57 to 1960-61 :—

VICTORIA—PUBLIC DEBT : LOANS OUTSTANDING IN  
AUSTRALIA, LONDON, NEW YORK, CANADA, AND  
SWITZERLAND

At 30th June—	Amount of Loans Maturing in—					Total Debt	
	Australia	London	New York	Canada	Switzerland	Amount	Per Head of Population
			£'000			£'000	£ s. d.
1957 ..	439,555	38,760	3,504	..	..	481,819	181 7 10
1958 ..	475,104	38,572	4,537	..	..	518,213	190 12 6
1959 ..	508,186	41,253	5,573	..	..	555,012	199 4 5
1960 ..	546,438	41,223	6,461	..	..	594,122	207 18 6
1961 ..	583,055	41,170	7,407	872	1,300	633,804	216 6 0

In the subsequent tables, "interest payable" does not include the cost of paying interest overseas. Particulars of exchange paid in each of the years 1956-57 to 1960-61 are shown on page 684.

The following table shows the rates of interest which were payable on the public debt at 30th June, 1961, and the portions of the debt at each rate in Australia, London, New York, Canada, and Switzerland respectively :—

**VICTORIA—RATES OF INTEREST ON PUBLIC DEBT AT  
30TH JUNE, 1961  
(£'000)**

Rate of Interest	Amount Maturing in—					Total
	Australia	London	New York	Canada	Switzerland	
per cent.						
6·0 ..	..	620	..	..	..	620
5·75 ..	..	..	..	872	..	872
5·5 ..	..	16,027	..	..	..	16,027
5·375 ..	20,553	..	..	..	..	20,553
5·25 ..	53,021	..	2,174	..	..	55,195
5·0 ..	139,804	..	1,919	..	..	141,723
4·75 ..	37,203	..	1,035	..	..	38,238
4·5 ..	165,529	..	244	..	1,300	167,073
4·25 ..	7,966	..	..	..	..	7,966
4·0 ..	37,442	..	..	..	..	37,442
3·875 ..	702	..	..	..	..	702
3·75 ..	16,001	..	543	..	..	16,544
3·625 ..	107	..	..	..	..	107
3·5 ..	5	5,681	843	..	..	6,529
3·4875 ..	*	..	..	..	..	*
3·375 ..	..	..	649	..	..	649
3·25 ..	8,636	8,640	..	..	..	17,276
3·125 ..	90,951	..	..	..	..	90,951
3·1 ..	277	..	..	..	..	277
3·0 ..	1,098	10,202	..	..	..	11,300
2·7125 ..	124	..	..	..	..	124
2·5 ..	2	..	..	..	..	2
2·325 ..	628	..	..	..	..	628
1·0 ..	3,006	..	..	..	..	3,006
Total ..	583,055	41,170	7,407	872	1,300	633,804
Average Rate of Interest %	4·42	4·14	4·62	5·75	4·50	4·41

\* £500.

Particulars of the amount of interest payable on loans outstanding in Australia, London, New York, Canada, and Switzerland, the average rate of interest, and the amount of interest payable per head of population are shown in the following table for each of the years 1956-57 to 1960-61 :—

VICTORIA—INTEREST PAYABLE ON THE PUBLIC DEBT

At 30th June—	Annual Interest Payable in—					Total Interest Payable—		
	Aus- tralia	London	New York	Canada	Switzer- land	Amount	Per Head of Popula- tion	Average Rate Per Cent.
			£'000			£'000	£ s. d.	—
1957 ..	17,306	1,282	141	..	..	18,729	7 1 0	3.89
1958 ..	19,275	1,276	191	..	..	20,742	7 12 7	4.00
1959 ..	20,938	1,690	244	..	..	22,872	8 4 2	4.12
1960 ..	23,055	1,689	291	..	..	25,035	8 15 3	4.21
1961 ..	25,774	1,704	342	50	59	27,929	9 10 8	4.41

The following table shows the capital liability of the State at 30th June, 1961, in respect of its various public works and services. The apportionment of the State's equity in the National Debt Sinking Fund is also shown.

VICTORIA—SUMMARY OF CAPITAL LIABILITY UNDER THE VARIOUS WORKS AND SERVICES, TOGETHER WITH THE APPORTIONMENT OF THE STATE'S EQUITY IN THE NATIONAL DEBT SINKING FUND AT 30TH JUNE, 1961 (£'000)

Works or Services	Liability	Deduction on Account of National Debt Sinking Fund	Net Liability
Railways*—			
As Reduced .. .. .	141,974	16,368	125,606
Transferred .. .. .	30,840	8,124	22,716
Country Waterworks .. .. .	123,180	11,306	111,874
Electricity Supply .. .. .	70,684	6,732	63,952
Land Settlement .. .. .	26,448	8,735	17,713
Soldier Settlement .. .. .	39,163	2,725	36,438
Grain Elevators Board .. .. .	1,072	148	924
Housing Commission .. .. .	2,026	191	1,835
Country Roads .. .. .	17,685	3,461	14,224
Public Works, Buildings, &c. .. .. .	191,213	8,108	183,105
Gas and Fuel Corporation of Victoria (Including Shares) .. .. .	12,338	599	11,739
Forests .. .. .	14,956	1,067	13,889
Unemployment Relief .. .. .	11,961	2,649	9,312
Rural Finance Corporation .. .. .	8,632	310	8,322
In Aid of Revenue .. .. .	24,771	6,496	18,275
Unapportioned .. .. .	925	..	925
	717,868	77,019	640,849
Deduct—Exchange Premiums .. .. .	8,054	..	8,054
Total .. .. .	709,814	77,019†	632,795

\* The Railways (Finances Adjustment) Act provided for the reduction of railway loan liability by the sum of £30 mill. on 1st July, 1937, and for the transfer of that amount to the "Reduction of Railway Loan Liability Account".

† Includes cash at credit of National Debt Sinking Fund at 30th June, 1961, and discount expenses on conversion loans met from the Fund.

The interest and expenses associated with the public debt of Victoria during each of the years 1956-57 to 1960-61 are shown in the following table. Interest on loans raised in Canada and Switzerland during 1960-61 did not become payable until after the end of the fiscal year.

VICTORIA—INTEREST AND EXPENSES OF PUBLIC DEBT  
(£'000)

Year Ended 30th June—	Interest Paid on Loans in—		Interest Paid on Temporary Loans	Commission on Payment of Interest in London, Expenses of Conversion Loans, &c.	Exchange on Payment of Interest in London†	Total‡
	London*	Melbourne				
1957 ..	1,447	15,342	14	111	480	17,394
1958 ..	1,424	17,733	21	79	492	19,749
1959 ..	1,587	19,257	13	73	597	21,527
1960 ..	1,936	21,533	11	150	715	24,345
1961 ..	2,007	23,283	22	122	809	26,243

\* Including interest paid on loans raised in New York—£121,795 for 1956-57; £141,740 for 1957-58; £218,499 for 1958-59; £245,294 for 1959-60; £318,454 for 1960-61.

† Includes exchange paid in respect of loans raised in New York—£142,865 for 1956-57; £163,830 for 1957-58; £254,002 for 1958-59; £283,563 for 1959-60; £377,036 for 1960-61.

‡ Includes £2,127,159 contributed each year by the Commonwealth in accordance with the provisions of the "Financial Agreement", see page 649.

*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 States were to make annual contributions to the Fund for this purpose. The intention was to extinguish, within a period of 58 or 53 years, debt incurred by the States for normal works and services. The longer period applies to the debt existing at 30th June, 1927, and to this the State contributes 5s. per £100 and the Commonwealth 2s. 6d. per £100 per annum, whilst the shorter period applies to loans raised after 30th June, 1927, the State and the Commonwealth each contributing 5s. per £100 per annum.

The first of the following tables gives a summary of Victorian transactions in the National Debt Sinking Fund for each of the years 1956-57 to 1960-61, and the remaining tables show details of receipts and expenditure together with particulars of face value of securities repurchased and redeemed during the same period:—

VICTORIA—NATIONAL DEBT SINKING FUND: SUMMARY OF TRANSACTIONS  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Balance at 1st July .. ..	584	255	60	128	186
Receipts .. ..	4,751	5,333	5,933	6,669	7,209
Expenditure .. ..	5,080	5,528	5,865	6,611	7,181
Balance at 30th June .. ..	255	60	128	186	214

VICTORIA—NATIONAL DEBT SINKING FUND : RECEIPTS  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Contributed under Financial Agreement—					
Victoria .. .. .	3,681	4,164	4,647	5,247	5,696
Commonwealth .. .. .	1,054	1,155	1,230	1,367	1,447
Interest from Victoria on Cancelled Securities .. .. .	4	3	1	3	7
Total Contributions under Financial Agreement .. .. .	4,739	5,322	5,878	6,617	7,150
Interest on Investments .. .. .	7	6	13	1	6
Special Contributions by Victoria .. .. .	5	5	42	53	53
Total .. .. .	4,751	5,333	5,933	6,669	7,209
Total to Date .. .. .	54,551	59,884	65,817	72,486	79,695

VICTORIA—NATIONAL DEBT SINKING FUND : SECURITIES  
REPURCHASED AND REDEEMED  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Australia—					
Face Value £ (A.) .. .. .	4,898	4,928	5,042	6,172	6,911
Net Cost £ (A.) .. .. .	4,829	5,221	5,020	6,162	6,801
London—					
Face Value £ (Stg.) .. .. .	144	187	480	30	53
Net Cost £ (A.) .. .. .	145	189	752	35	77*
New York—					
Face Value £ (\$4,8665 = £1) .. .. .	51	57	45	195	144
Net Cost £ (A.) .. .. .	106	118	93	414	303
Total—					
Face Value £ .. .. .	5,093	5,172	5,567	6,397	7,108
Net Cost £ (A.) .. .. .	5,080	5,528	5,865	6,611	7,181
Total to Date—					
Face Value £ .. .. .	52,086	57,258	62,825	69,222	76,330
Net Cost £ (A.) .. .. .	54,296	59,824	65,689	72,300	79,481

\* Includes £19,433 discount on conversion loans in London.

*Private Finance***Commonwealth Banking Legislation***General*

Under section 51 of the Commonwealth Constitution, the Commonwealth Parliament has power to legislate with respect to "banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money". The principal Commonwealth Acts at present in force relating to banking are :—

- (a) The *Banking Act* 1959, which provides for the regulation of banking and for the protection of the currency and the public credit of the Commonwealth;
- (b) the *Reserve Bank Act* 1959, which provides for the constitution and management of the Reserve Bank of Australia, and the management of the Australian note issue; and
- (c) the *Commonwealth Banks Act* 1959, which provides for the constitution and management of the Commonwealth Banking Corporation, Commonwealth Trading Bank of Australia, Commonwealth Savings Bank of Australia, and Commonwealth Development Bank of Australia.

The *Banking Act* 1959, which replaced the *Banking Act* 1945–1953, was assented to on 23rd April, 1959, and came into operation on 14th January, 1960. It applies to all banks (except State banks trading in their own State) operating in Australia or the Territories of the Commonwealth. Apart from the replacement of the Special Accounts provisions of the previous Act with a system of Statutory Reserve Deposits and a recasting of the relevant parts of the Act to make provision for the regulation of savings bank business, the provisions of the Act, which are summarized below, are essentially the same as those contained in the previous Act. The main provisions of the Act are as follows :—

- (1) *Authority to Carry on Banking Business.* Banking business can only be carried on by a body corporate in possession of an authority in writing granted by the Governor-General. A company which is not a bank, but which conducts some banking business, may be granted an exemption from some or all of the provisions of the Act.
- (2) *Protection of Depositors.* Provision is made for the banks to supply to the Reserve Bank such information relating to their financial position as required. If it appears that a bank may be unable to meet its obligations or is about to suspend payments, the Reserve Bank may assume control of and carry on the business of that bank.

- (3) *Statutory Reserve Deposits.* Each trading bank is required to maintain a Statutory Reserve Deposit Account with the Reserve Bank and to have on deposit in that account such percentage of its Australian deposits (known as the Statutory Reserve Deposit Ratio) as is determined from time to time by the Reserve Bank. On giving one day's notice, the Reserve Bank may vary this ratio provided it is not increased above 25 per cent. and, on giving 45 days' notice, the Reserve Bank may increase the ratio above 25 per cent. A ratio remains in force until it is replaced by another ratio, provided that any ratio above 25 per cent. cannot remain in force for longer than a period of six months and for succeeding periods of three months unless the Reserve Bank gives notice of an extension at least 45 days before the end of each period. The same ratio is to apply to all banks except certain prescribed banks. Interest is to be paid on Statutory Reserve Deposit Accounts at a rate determined from time to time by the Reserve Bank with the approval of the Treasurer. The Reserve Bank is required to inform the trading banks at least once in every quarter of its expected policy with respect to Statutory Reserve Deposit Ratios.
- (4) *Mobilization of Foreign Currency.* All banks may be required to transfer to the Reserve Bank a proportion (determined by the Reserve Bank) of their excess receipts of foreign currency in respect of their Australian business during any period.
- (5) *Advances.* The Reserve Bank may determine a general policy to be followed by banks in making advances.
- (6) *Special Provisions with respect to Savings Banks.* A savings bank shall at all times maintain in prescribed investments an amount that, together with cash on hand in Australia, is not less than the amount on deposit in Australia with the savings bank. The prescribed investments are: deposits with the Reserve Bank, deposits with or loans to other banks, Commonwealth or State securities, securities issued or guaranteed by a Commonwealth or State authority, loans guaranteed by the Commonwealth or a State, loans for housing or other purposes on the security of land, and loans to authorized dealers in the short-term money market on the security of securities issued by the Commonwealth.



A savings bank must hold at least 70 per cent. of its depositors' funds in cash, deposits with the Reserve Bank, Commonwealth or State securities and securities issued by or guaranteed by a Commonwealth or State authority, and must hold at least 10 per cent. in deposits with the Reserve Bank, in Treasury Bills and Seasonal Securities. A savings bank may not accept deposits from a profit-making body unless that body is acting in a trustee capacity for a non-profit-making beneficiary, nor allow cheques to be drawn on savings bank accounts other than by local government authorities, friendly societies, &c., and companies acting in the above capacity.

- (7) *Foreign Exchange.* The Governor-General may make regulations for the control of foreign exchange including the fixing of rates of exchange.
- (8) *Gold.* Provision is made for the mobilization and control of gold if it is necessary for the protection of the currency or the public credit of the Commonwealth.
- (9) *Interest Rates.* The Reserve Bank may, with the approval of the Treasurer, make regulations for the control of rates of interest payable to or by the banks or other persons in the course of banking business carried on by them.
- (10) *Other.* Other provisions of the Act relate to the supply of statistics and other information by banks, the settlement of clearing balances between banks, investigations of the accounts of banks by the Commonwealth Auditor-General, and restrictions on the use of the words "bank" or "savings bank" in relation to a business. Although a bank may be required to supply information relating to its financial stability and information needed for the determination of banking policy, it cannot be required to disclose details relating to the account of an individual customer.

#### *Australian Banking during 1961*

The beginning of 1961 witnessed a lower level of economic activity than had obtained during the preceding two years. By 1959, the level of activity in some sectors of the economy had become greater than could be sustained, even in serving Australia's rising population and high living standards. Attempts through the banking system, under the leadership of the Treasury and Reserve Bank, to reduce the tempo by contracting credit had been frustrated, largely because overdraft limits granted during the expansionary phase in 1959 were being increasingly utilized as business optimism gained strength.

Despite official warnings from February, 1960, including the cautionary August Budget, the business community generally saw no evidence that the boom might collapse until there were signs of a slowdown about September, notably a sharp reversal of rising stock exchange prices. This was followed about a month later by renewed emphasis by the Commonwealth Treasurer on the need to curtail credit, and specific measures (see *Victorian Year Book* 1962, pages 654–656) to enforce such a policy through the banking and “fringe” banking institutions were introduced.

As the tide of confidence turned, a marked decline occurred in motor registrations, in the number of houses commenced, and in hire-purchase borrowing. Bank advances were falling and deposits rising at the end of 1960 and early 1961, as business hesitated to spend up to the overdraft authorities available, paid off existing debt, or accumulated creditor funds where possible. The banks’ contraction of credit was also directed to check advances available for imports, in order to protect the nation’s balance of payments overseas, after the heavy imports which flowed in when restrictions were lifted early in 1960. This was partly countered by importers buying on extended credit terms (in effect, borrowing overseas). The Reserve Bank set a target for trading banks to reduce aggregate advances by the end of March.

Interest rates had been raised as part of the November policy—overdraft rates  $\frac{1}{2}$  per cent. to an average of 6 per cent. (maximum 7 per cent.), term deposits by varying amounts to 4 per cent. for three to eleven month terms and  $4\frac{1}{2}$  per cent. for twelve months, and savings bank rates by  $\frac{1}{4}$  per cent. to  $3\frac{1}{4}$  per cent. This had reinforced the check to borrowing and encouraged the community to leave funds on deposit rather than spend, although the real effects of higher cost of money and higher rewards for saving were of minor significance. A selective lending policy was still being followed by the banks in favour of housing and exports, and against import, hire-purchase, or speculative propositions.

The volume of credit was contracting and the overstrain on resources soon ceased, easing inflationary pressures. Unemployment appeared in some sectors, including the building and the motor industry. A difficulty was that stocks, built up to match the boom turnovers of 1960, checked the resumption of ordering from manufacturers. The credit squeeze increased merchants’ anxiety to minimize stock holdings, because they were under pressure to improve their liquidity, while uncertain of the level of future turnovers.

The stock position was aggravated by heavy imported inventories, accumulated during the new-found import freedom of 1960, some of which displaced domestic products, which had long been protected by import restrictions. This was a further threat to Australian manufacturers' sales and employment. Imports were slow to contract, despite the adequate stocks, but the balance of payments was upheld early in 1961 by buoyant exports and continued capital inflow. By June, imports showed the year-awaited decline to £75 mill. for the month, compared with a monthly average of £94 mill. from June, 1960 to March, 1961. Payment for imports was being deferred, but to an unknown extent and for an unknown period, constituting an indeterminate discount on the level of oversea funds. An International Monetary Fund loan of £78 mill. also augmented oversea funds.

With deposits and advances falling, and unemployment causing general concern, official banking policy was changed by mid-1961 to encourage lending, especially for housing, exports, and development. The Statutory Reserve Deposit Ratio was reduced to 12½ per cent. in July (compared with 17½ per cent. in April) releasing more cash for the banks to lend, while their L.G.S. ratio (cash and Government securities) also exceeded the conventional minimum.

Following the Commonwealth deficit budget in August, 1961, deposits increased in the September Quarter (they had fallen in the September Quarter, 1960). The balance of payments was now favourable, although the capital inflow had slowed down and the extent to which payments for imports were in arrears was still uncertain. Imports declined to £67 mill. in September.

While the aggregate of overdraft limits granted to bank customers continued to increase, actual advances continued to decline, as business confidence proved recalcitrant and unemployment increased. High bank liquidity was matched by that of the hire purchase companies, where outstanding debts declined, although funds were easy to borrow.

This situation continued until the end of the year, when numerous school leavers augmented the numbers unemployed despite absorption of some workers in slowly recovering factory industries. After the December election, the Federal Government formulated a recovery plan, taking steps in February, 1962, to stimulate employment by higher public works expenditure, tax reductions, additional protection for some domestic manufacturers against import competition, and other measures.

In the banks, liquidity was high, but actual advances were little more than half the total overdraft limits available. The large volume of unused limits was of concern to the banks because recovery of confidence was essential for restoration of full employment, high incomes and national development, but an uncontrolled resurgence of optimism, expressed in rapid utilization of limits for internal expansion or higher imports, could conceivably embarrass the banking system and initiate another tendency toward inflation and over-activity before corrective measures could be implemented.

### Further References

An outline of the history of banking in Victoria and a description of the currency will be found on pages 625 to 628 of the Victorian Year Book 1961.

### Trading Banks

The following table shows the number of branches and agencies, in Victoria, conducted by individual trading banks at 30th June, 1959 to 1961 :—

#### VICTORIA—TRADING BANKS : NUMBER OF BRANCHES AND AGENCIES

Bank	At 30th June—					
	1959	1960	1961	1959	1960	1961
	Branches			Agencies		
Commonwealth Trading Bank of Australia .. .. .	80	82	85	28	35	53
Private Trading Banks—						
Australia and New Zealand Bank Ltd. .. .. .	173	173	178	68	75	81
Bank of Adelaide .. .. .	1	1	1	..	..	..
Bank of New South Wales .. .. .	127	131	139	18	16	13
Commercial Bank of Australia Ltd. .. .. .	147	151	153	67	71	70
Commercial Banking Co. of Sydney Ltd. .. .. .	97	103	107	34	33	35
English, Scottish, and Australian Bank Ltd. .. .. .	130	134	135	57	49	47
National Bank of Australasia Ltd. .. .. .	202	211	214	97	97	100
Total Private Trading Banks	877	904	927	341	341	346
Total Trading Banks .. .. .	957	986	1,012	369	376	399
Metropolitan Area .. .. .	478	493	515	131	137	160
Remainder of State .. .. .	479	493	497	238	239	239

The following tables show particulars of the averages of deposits with, and advances by trading banks (all of which are cheque-paying banks) in Victoria during the month of June, 1961, and for the months of June of the preceding four years. The monthly averages are obtained by recording the amounts of deposits and advances at the close of business on Wednesday of each week.

**VICTORIA—TRADING BANKS : AVERAGES OF DEPOSITS  
AND ADVANCES, MONTH OF JUNE, 1961**  
(£'000)

Bank	Deposits			Loans, Advances, and Bills Discounted
	Not Bearing Interest	Bearing Interest	Total	
Commonwealth Trading Bank of Australia .. .. .	41,020	22,205	63,225	33,334
Private Trading Banks— Australia and New Zealand Bank Ltd. .. .. .	71,637	28,489	100,126	49,394
Bank of Adelaide .. .. .	1,591	562	2,153	1,980
Bank of New South Wales .. .. .	43,693	21,382	65,075	44,004
Commercial Bank of Australia Ltd. .. .. .	52,445	27,180	79,625	45,995
Commercial Banking Co. of Syd- ney Ltd. .. .. .	27,887	16,189	44,076	22,860
English, Scottish, and Australian Bank Ltd. .. .. .	51,823	20,475	72,298	39,070
National Bank of Australasia Ltd.	73,234	49,429	122,663	63,783
Total ..	363,330	185,911	549,241	300,420

**VICTORIA—TRADING BANKS : AVERAGES OF DEPOSITS  
AND ADVANCES, MONTH OF JUNE, 1957 TO 1961**  
(£'000)

Month of June	Deposits			Loans, Advances, and Bills Discounted
	Not Bearing Interest	Bearing Interest	Total	
1957 .. .. .	372,810	114,563	487,373	244,625
1958 .. .. .	364,318	136,527	500,845	268,814
1959 .. .. .	369,429	146,970	516,399	254,767
1960 .. .. .	403,840	156,329	560,169	290,960
1961 .. .. .	363,330	185,911	549,241	300,420

A classification of persons and authorities in receipt of trading bank advances for each of the years 1957–58 to 1960–61 is given in the following table. Business advances are classified according to the main industry of borrower.

A classification of bank deposits is available only on a Commonwealth basis, and is to be found in the Commonwealth Finance Bulletin, Part I (issued by the Commonwealth Statistician).

VICTORIA—TRADING BANKS: CLASSIFICATION OF ADVANCES  
(£'000)

Classification	At End of June—			
	1958	1959	1960	1961
Resident Borrowers—				
Business Advances—				
Agriculture, Grazing, and Dairying .. ..	43,701	43,804	44,342	41,789
Manufacturing .. ..	64,463	60,749	86,505	89,278
Transport, Storage, and Communication .. ..	4,915	5,064	4,805	4,039
Finance .. ..	26,901	21,291	26,425	28,516
Commerce .. ..	59,684	51,366	62,556	65,093
Building and Construction .. ..	7,510	7,886	8,981	8,006
Other Businesses .. ..	16,313	17,062	20,338	19,622
Unclassified .. ..	1,814	2,528	2,158	2,392
Total Business Advances ..	225,301	209,750	256,110	258,735
Advances to Public Authorities ..	5,086	4,045	2,991	3,046
Personal Advances .. ..	39,717	41,031	44,401	38,260
Advances to Non-Profit Organizations .. ..	4,009	3,746	4,481	4,709
Total Advances to Resident Borrowers .. ..	274,113	258,572	307,983	304,750
Non-Resident Borrowers .. ..	80	87	67	120
Grand Total .. ..	274,193	258,659	308,050	304,870

The following table shows, for each of the years 1951–52 to 1960–61, the average weekly amounts debited by cheque paying banks to customers' accounts. Particulars relate to the operations of trading banks transacting business in Victoria (as set out in the table on pages 691–692) together with the Bank of New Zealand, and the Comptoir National d'Escompte de Paris (all of which are cheque paying banks) and, in addition, the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank (prior to 14th January, 1960, Industrial Finance and Mortgage Bank Departments of the Commonwealth Bank). Debits to Australian Government accounts at city branches are excluded from the table.

VICTORIA—CHEQUE PAYING BANKS: AVERAGE WEEKLY DEBITS TO CUSTOMERS' ACCOUNTS, 1951–52 TO 1960–61  
(£'000)

Year Ended 30th June—	Average Weekly Debits	Year Ended 30th June—	Average Weekly Debits
1952 .. ..	142,358	1957 .. ..	195,455
1953 .. ..	131,998	1958 .. ..	207,059
1954 .. ..	154,885	1959 .. ..	224,728
1955 .. ..	176,147	1960 .. ..	264,561
1956 .. ..	185,369	1961 .. ..	282,936

### Reserve Bank of Australia

The corporate identity of the Reserve Bank of Australia traces back through the name Commonwealth Bank of Australia, to the *Commonwealth Bank Act* 1911 of the Federal Parliament. Since 14th January, 1960, the legislation bearing on its constitution, powers, and functions is the *Reserve Bank Act* 1959 and the *Banking Act* 1959.

It is the central bank of Australia and Territories of the Commonwealth, and its principal responsibilities are the conduct of Government and other central bank accounts; bank credit policy supervision; exchange control and foreign exchange; the conduct of Commonwealth Government and Territorial inscribed stock registries; the Australian Note Issue; and seasonal advances through the Rural Credits Department to statutory authorities and co-operative associations for the marketing of primary produce.

Details of the Bank's net profits, for each of the years 1956-57 to 1960-61, after deducting amounts written off bank premises and amounts provided for contingencies, are shown in the following table:—

#### AUSTRALIA—RESERVE BANK OF AUSTRALIA\*: NET PROFITS (£'000)

Department	Commonwealth Bank†			Reserve Bank	
	1956-57	1957-58	1958-59	1959-60	1960-61
Central Banking ..	8,741	10,103	4,200	5,381	6,705
Note Issue .. ..	10,053	12,593	10,935	10,516	12,930
Rural Credits ..	195	184	227	322	434
Total ..	18,989	22,880	15,362	16,219	20,069

\* Prior to 14th January, 1960 Commonwealth Bank of Australia.

† Excluding net profits of Mortgage Bank Department and Industrial Finance Department. From 14th January, 1960, the functions of these departments were assumed by the Commonwealth Development Bank of Australia.

### Commonwealth Banking Corporation

The Commonwealth Banking Corporation was established under the *Commonwealth Banks Act* 1959, and came into being on 14th January, 1960. The Corporation is the controlling body for the Commonwealth Trading Bank of Australia, Commonwealth Savings Bank of Australia, and Commonwealth Development Bank of Australia. Each of the constituent banks has its own statutory functions and responsibilities, and its separate identity within the framework of the Corporation. Apart from controlling the operations of its three constituent banks, the Corporation also engages staff and makes them available as required by those banks.

The Commonwealth Banking Corporation Board consists of three *ex officio* members, viz., the Managing Director, the Deputy Managing Director, and the Secretary to the Commonwealth Treasury, plus eight members, who include the Chairman and Deputy Chairman, appointed from private enterprise other than the private banking industry.

The Commonwealth Trading Bank of Australia was established in 1953, when it took over the general banking division of the Commonwealth Bank of Australia (the Commonwealth Bank of Australia commenced general banking activities in July, 1913).

The Commonwealth Trading Bank carries out all types of general banking business and, at June, 1961, deposits within Australia totalled £282 mill., representing 16·5 per cent. of deposits with all major Australian trading banks. Total assets exceeded £360 mill., outstanding advances to customers totalled £148 mill., and customers' accounts numbered 719,000.

The Commonwealth Savings Bank of Australia was established in July, 1912. It is the largest savings bank in Australia, holding more than half of the nation's total savings bank deposits.

At the end of June, 1961, amounts on deposit with the Savings Bank within Australia, totalled £822 mill., and it was conducting 5,450,000 active accounts. The Savings Bank's depositors' balances are widely invested in the development of Australia. Apart from advances, mainly for housing, of £148 mill. outstanding in June, 1961, investments in Commonwealth Government securities totalled approximately £493 mill., and local and semi-government securities amounted to approximately £95 mill.

Since 1946, £220 mill. has been provided for housing purposes, assistance having been provided for 120,000 homes, of which 108,000 were new dwellings.

The Commonwealth Development Bank of Australia commenced operations on 14th January, 1960, taking over the assets and liabilities of the Industrial Finance and Mortgage Bank Departments of the former Commonwealth Bank of Australia.

The main function of the Development Bank is to provide finance for purposes of primary production, and for the establishment or development of industrial undertakings, particularly small undertakings, where, in the opinion of the Bank, the granting of assistance is desirable, and finance would not otherwise be available on reasonable and suitable terms and conditions.



The primary role of the Development Bank is, therefore, to supplement, but not to replace, the sources of finance available to primary producers and industrial undertakings through other institutions.

The amount of deposits (averages for month of June), the amount of advances, and the number of accounts current at 30th June are shown in the following table for each of the years 1956-57 to 1960-61 :—

**AUSTRALIA—COMMONWEALTH TRADING BANK OF  
AUSTRALIA : DEPOSITS, ADVANCES, AND NUMBER  
OF ACCOUNTS**

At 30th June—			Deposits Repayable in Australia (Averages for Month of June)			Advances	Number of Accounts
			Bearing Interest	Not Bearing Interest	Total		
			£ mill.				'000
1957..	..	..	48	146	194	106	549
1958..	..	..	63	152	215	118	591
1959..	..	..	73	160	233	129	641
1960..	..	..	80	191	271	147	680
1961..	..	..	104	178	282	148	719

In the following table, some particulars of the activities of the Commonwealth Savings Bank throughout Australia are shown for each of the years 1956-57 to 1960-61 :—

**AUSTRALIA—COMMONWEALTH SAVINGS BANK OF  
AUSTRALIA : NUMBER OF ACTIVE ACCOUNTS,  
AMOUNT AT CREDIT OF DEPOSITORS, LOANS  
AND ADVANCES OUTSTANDING, ETC.**

At 30th June—			Number of Active Accounts	Amount at Credit of Depositors	Loans and Advances Outstanding	Commonwealth and Other Securities Held
			'000	£ mill.		
1957	..	..	5,049	721	111	549
1958	..	..	5,141	734	119	551
1959	..	..	5,265	765	127	555
1960	..	..	5,370	807	136	586
1961	..	..	5,450	822	148	589

Advances by the Commonwealth Development Bank to primary and secondary industries, outstanding in Australia at 30th June, 1961, were as follows:—

**AUSTRALIA—COMMONWEALTH DEVELOPMENT BANK  
OF AUSTRALIA : ADVANCES TO PRIMARY AND  
SECONDARY INDUSTRIES OUTSTANDING  
AT 30TH JUNE, 1961**

Primary Industries				Secondary Industries			
Type of Industry			Advances Outstanding	Type of Industry			Advances Outstanding
			£'000				£'000
Sheep .. .. .			6,054	Chemical Products ..			1,997
Cattle .. .. .			769	Electrical Manufacturing..			576
Dairying .. .. .			2,066	Food Processing ..			588
Wheat and Other Grain				Engineering .. .. .			1,379
Crops .. .. .			844	Other Manufacturing ..			2,507
Fruit .. .. .			353	Transport .. .. .			1,541
Miscellaneous .. .. .			668	Miscellaneous .. .. .			1,686
Total .. .. .			10,754	Total .. .. .			10,274

### State Savings Bank of Victoria

#### *General*

The Bank, an autonomous body constituted under Victorian statutes, operates within Victoria under direction of Commissioners (appointed by the Government), who exercise control through a general manager. It has a Savings Bank Department which accepts interest-bearing savings deposits, invests those moneys in trustee securities and in short term mortgage loans, and provides some general banking services, e.g., separate non-interest bearing cheque accounts, fixed deposit, and safe deposit facilities. It also conducts a Credit Foncier Department which, by issuing debentures, obtains funds to make long-term mortgage loans to finance the erection or purchase of homes and farms.

At 30th June, 1961, the Bank's 387 branches, 13 sub-branches and 619 agencies throughout the State held, on behalf of 2½ mill. depositors, balances totalling £308 mill.

#### *Investment of Funds*

Virtually the whole population of the State benefits from the assistance the Bank gives to semi-governmental and municipal authorities. Under the provisions of the State Savings Bank Act, the Commissioners may at their discretion lend the funds of the Bank in securities of, or guaranteed by, the Victorian or Commonwealth Governments as well as invest in securities issued by authorities constituted under Victorian Statutes.

Under these provisions, the Bank has for many years lent considerable sums to help finance the developmental projects of semi-governmental authorities throughout the State. Electricity and gas

supply, water storage and reticulation, sewerage installations, provision of port and harbour facilities, construction of streets and the provision of parks, gardens, and swimming pools, are but a few examples of public works that have been made possible through loan money provided by the Bank. At 30th June, 1961, outstanding loans to semi-governmental and municipal authorities totalled nearly £97 mill.

A considerable portion of the Bank's funds is allotted to housing and, at 30th June, 1961, housing loans outstanding totalled £89,538,717, made up of £12,329,504 advanced to 4,098 borrowers by the Savings Bank Department; £66,221,750 advanced to 37,726 individual borrowers by the Credit Foncier Department; and £10,987,463 lent to Co-operative Housing Societies. Since the Credit Foncier Department was established by legislation in 1896, it has advanced £158 mill. to approximately 140,000 borrowers. In the same period, the Savings Bank Department has made over 16,000 separate loans totalling £27 mill., and £18 mill. has been lent to Co-operative Housing Societies on the security of 8,800 properties. The Bank has given direct assistance to over 160,000 Victorians to purchase their homes. In addition, it has lent substantial amounts to the Home Finance Trust.

#### *Special Services*

Established in 1912, the State Savings Bank's school bank system has given generations of Victorian children an introduction to money management. At 30th June, 1961, banks were established at 2,470 schools, and the total balances held on behalf of 478,637 students were £2,956,730. In 1957, a student-operated bank was established at Macleod High School as an experiment. As the name implies, this type of bank is staffed by the students themselves. The Macleod experiment was successful, and the student-operated bank movement has found such favour with school authorities that at 30th June, 1961, 129 such banks were established at secondary schools.

The Bank accepts account payments due to the Gas and Fuel Corporation and to specified electric supply authorities. During the financial year 1960-61, 2,439,834 such payments amounting to £11,009,458 were received.

Full facilities are provided at all branches for the acceptance of cash or conversion applications for Commonwealth Government loans and for public loans floated by semi-governmental authorities within Victoria. Through its Safe Custody Department the Bank holds, free of charge, on behalf of its customers, bonds and debentures issued or guaranteed by the Commonwealth and Victorian Governments, or those in which the Bank may itself invest.

The total assets of the Bank at 30th June, 1961, were as follows :—

			£
Savings Bank Department	..	..	329,102,944
Credit Foncier Department	..	..	66,699,117
			<hr/>
Total	..	..	395,802,061
			<hr/>



Details of transactions in the Credit Foncier Department are shown below :—

**VICTORIA—STATE SAVINGS BANK : CREDIT FONCIER  
TRANSACTIONS**

Particulars	Year Ended 30th June—				Total to 30th June, 1961
	1958	1959	1960	1961	
<b>Stock and Debentures—</b>					
Issued .. .. £'000	12,800	22,200	26,250	29,250	383,095*
Redeemed .. .. £'000	10,000	15,000	16,000	23,000	319,595
Outstanding at 30th June £'000	39,800	47,000	57,250	63,500	63,500
<b>Pastoral or Agricultural Property—</b>					
Advanced .. .. £'000	78	60	78	49	12,909
Repaid .. .. £'000	68	64	69	58	12,446
Outstanding at 30th June £'000	467	463	472	463	463
Loans Current, 30th June No.	560	515	481	447	447
<b>Dwelling or Shop Property—</b>					
Advanced .. .. £'000	7,084	11,456	15,280	11,727	126,459
Repaid .. .. £'000	3,764	4,276	4,865	4,851	60,834
Outstanding at 30th June £'000	41,154	48,334	58,749	65,625	65,625
Loans Current, 30th June No.	27,863	30,632	34,258	36,740	36,740
<b>Housing Advances—</b>					
Advanced .. .. £'000	†	..	..	..	9,840
Repaid .. .. £'000	69	59	48	37	9,708
Outstanding at 30th June £'000	276	217	169	132	132
Loans Current, 30th June No.	934	781	643	538	538
<b>Country Industries—</b>					
Advanced .. .. £'000	..	..	..	..	195
Repaid .. .. £'000	1	1	..	..	193
Outstanding at 30th June £'000	3	2	2	2	2
Loans Current, 30th June No.	2	2	1	1	1
<b>Total Transactions—</b>					
Advanced .. .. £'000	7,162	11,516	15,358	11,776	149,403
Repaid .. .. £'000	3,902	4,400	4,982	4,946	83,181
Outstanding at 30th June £'000	41,900	49,016	59,392	66,222	66,222
Loans Current, 30th June No.	29,359	31,930	35,383	37,726	37,726

\* Including conversion loans, and £2,637,300 stock inscribed in exchange for debentures.

† Under £500.

The net profit of the Credit Foncier Department for the year ended 30th June, 1961, after making provision for bad and doubtful debts, was £51,050. This sum was added to General Reserve, which amounted to £2,020,690 at 30th June, 1961. There are provisions for depreciation and long service leave amounting to £265,000.

#### Further References

An outline of the history of the State Savings Bank of Victoria will be found on pages 630 to 632 of the Victorian Year Book 1961.

### Commonwealth Savings Bank in Victoria

The Savings Bank Department of the Commonwealth Bank commenced business on 15th July, 1912. The following table shows the business transacted in Victoria during each of the years 1951-52 to 1960-61 :—

#### VICTORIA—COMMONWEALTH SAVINGS BANK

Year Ended 30th June—	Number of Accounts—			Deposits	Withdrawals	Interest Added	Amount at Credit of Depositors at 30th June
	Opened	Closed	Remaining Open at End of Period*				
	'000			£'000			
1952 ..	116	68	554	79,227	71,956	1,222	76,485
1953 ..	112	68	583	82,328	75,077	1,401	85,137
1954 ..	107	69	605	90,606	83,140	1,571	94,174
1955 ..	120	78	629	104,653	96,063	1,833	104,597
1956 ..	123	87	649	113,443	109,957	2,132	110,216
1957 ..	113	87	656	115,010	113,290	2,606	114,542
1958 ..	112	87	667	120,264	119,758	2,757	117,805
1959 ..	129	98	686	131,071	129,342	3,043	122,577
1960 ..	134	98	703	149,201	143,915	3,380	131,243
1961 ..	143	106	724	159,716	160,975	3,688	133,672

\* Inoperative accounts have been excluded, i.e., those with balances of £1 or over inoperative for seven years or more and those with balances under £1 inoperative for two years or more. At 30th June, in each of the undermentioned years the number of inoperative accounts was as follows :—1952, 220,538 ; 1953, 231,681 ; 1954, 244,800 ; 1955, 259,584 ; 1956, 272,629 ; 1957, 285,222 ; 1958, 295,337 ; 1959, 303,722 ; 1960, 318,122 ; 1961, 331,300.

### Total Deposits, &c., in Savings Banks

The next table shows, for each of the years 1951-52 to 1960-61, the aggregate amount on deposit in Victoria in the State Savings Bank, the Commonwealth Savings Bank, and the private savings banks. Also shown is the amount of deposits per head of population.

#### VICTORIA—SAVINGS BANKS : DEPOSITS

At 30th June—	Amount at Credit of Depositors—				Deposits per Head of Population
	State Savings Bank*	Commonwealth Savings Bank	Private Savings Banks	Total	
	£'000				£
1952 .. ..	224,347	76,485	..	300,832	128·3
1953 .. ..	234,834	85,137	..	319,971	133·6
1954 .. ..	245,607	94,174	..	339,781	138·6
1955 .. ..	260,151	104,597	..	364,748	144·9
1956 .. ..	264,317	110,216	11,644	386,177	148·9
1957 .. ..	266,276	114,542	30,751	411,569	154·9
1958 .. ..	272,807	117,805	43,019	433,631	159·5
1959 .. ..	281,296	122,577	54,581	458,454	164·6
1960 .. ..	298,136	131,243	70,242	499,621	174·9
1961 .. ..	308,306	133,672	75,552	517,530	176·6

\* Including School Bank and Deposit Stock Accounts.

### Royal Mint, Melbourne Branch

#### Present Functions

For many years, the major activity of the Melbourne Mint has been the production of coin for the Commonwealth Government. All the silver coin and a large part of the bronze is produced in Melbourne—Perth Mint supplying the balance of the bronze. The present silver alloy consists of 500 silver, 400 copper, 50 nickel, and 50 zinc parts per 1,000. The bronze consists of copper, tin, and zinc.

To meet the demands of a rising population and an expanding economy, an average of 66,074,000 pieces were minted in each of the five years to 31st December, 1961. The Melbourne Mint was originally designed for a production of 5 million sovereigns per annum.

The original functions of purchase and refining have continued, though their importance has been relatively reduced by the decrease in gold production. However, in 1961, 252,316 ounces of rough gold containing 118,317 ounces of fine gold were treated. Deposits are usually the product of Victoria, New South Wales, Queensland, South Australia, and Northern Territory, with a large and increasing number of small parcels from New Guinea.

Gold and silver, in various forms and alloys, are prepared and supplied to manufacturers and others. Medals of gold, silver, or bronze are struck for various bodies.

The following table shows, for each of the years 1957 to 1961, the quantity of gold received at the Mint; where the gold was produced; its mint coinage value; and the gold bullion issued during the same periods:—

#### VICTORIA—ROYAL MINT: GOLD RECEIVED AND ISSUED

Particulars	1957	1958	1959	1960	1961
<b>GOLD RECEIVED (Gross Weight)</b>					
Produced in Victoria .. .. oz.	56,441	50,691	43,882	32,465	31,542
"  "  New South Wales .. .. "	25,485	12,438	5,906	5,844	5,090
"  "  Queensland .. .. "	42,956	38,188	44,340	36,579	39,117
"  "  South Australia and Northern Territory .. .. "	71,581	62,572	59,386	59,939	59,733
"  "  Western Australia .. .. "	7	609	1	1	26
"  "  Tasmania .. .. "	214	211	119	316	494
"  "  New Zealand .. .. "	2,637	2,644	3,438	2,108	6,995
"  "  Elsewhere .. .. "	48,598	53,138	75,172	84,554	109,319
Total .. .. "	247,919	220,491	232,243	221,806	252,316
Mint Coinage Value .. .. £	690,106	612,070	541,726	490,573	502,577
<b>GOLD ISSUED</b>					
Bullion—Quantity .. .. oz. std.	177,289	156,589	137,412	129,416	127,743
—Mint Value .. .. £	690,321	609,719	535,050	503,912	497,398

The number of deposits received during 1961 was 1,713. The average composition of these deposits was gold 468·9, silver 447·6, and base 83·5 in every 1,000 parts.

The value of gold shown in the above table is calculated on the normal mint price of £3 17s. 10½d. per ounce standard (22 carat), which is equivalent to approximately £4 4s. 11½d. per ounce fine (24 carat). By arrangement with the Commonwealth Bank, the Mint

also pays a premium on all gold lodged at the Mint for sale to the Bank. During 1961, depositors were paid a premium of 267·84377 per cent., thereby making the actual price of gold £15 12s. 6d. per ounce fine.

In the following table, particulars of the coinages and the issue of silver and bronze pieces for the requirements of the Commonwealth Treasury are given for each of the years 1957 to 1961 :—

**VICTORIA—ROYAL MINT : SILVER AND BRONZE COINS  
ISSUED  
(‘000)**

Denomination of Coins	1957	1958	1959	1960	1961
<b>Silver Pieces—</b>					
2s.    ..    ..    ..	9,278	8,972	3,500	15,760	9,452
1s.    ..    ..    ..	12,668	7,412	10,876	14,512	32,000
6d.    ..    ..    ..	13,752	17,944	11,728	18,592	9,152
3d.    ..    ..    ..	26,704	11,248	19,888	19,600	34,000
Total Silver Pieces    ..	62,402	45,576	45,992	68,464	84,604
<b>Bronze Pieces—</b>					
1d.    ..    ..    ..	..	10,013	1,618	507	..
½d.    ..    ..    ..	..	..	10,166	1,027	..
Total Bronze Pieces    ..	..	10,013	11,784	1,534	..

### Further References

An historical outline of the Royal Mint is given on page 635 of the Victorian Year Book 1961.

### Life Insurance

#### *General*

The business of life insurance in Victoria, both ordinary and industrial, is regulated by the Commonwealth Life Insurance Act which came into operation in 1946. This Act replaced existing Commonwealth and State Acts and resulted in uniform life insurance legislation throughout Australia.

Some minor amendments to the original Act have become necessary over the years but, in general, it has proved to be very satisfactory. It deals, *inter alia*, with registration of companies, deposits which are required before they can be registered to carry on business, and statutory funds of the life companies.



The Life Insurance Act also deals with accounts and actuarial investigations, documents to be furnished to the Commissioner and investigations which he may make if he has any doubts concerning matters connected with a company's business. If his investigation satisfies him that it is necessary or proper for him to do so, he may apply to the Court for an order that the company be placed under judicial management or that its business be wound up. There is provision for an appeal to the High Court against such a decision.

Other sections of the Act deal with provisions relating to policies including surrender values and non-forfeiture conditions, payment of policy moneys and protection of policies, and contain the various schedules which the companies are required to submit to the Commissioner.

The Life Insurance Act permits investment of funds in such manner as the company thinks fit, subject only to its own Memorandum or Articles of Association. However, in this connexion, it is appropriate to mention the circumstances under which amendments to the Income Tax and Social Services Contribution Assessment Act, assented to on 15th May, 1961, made certain concessions to life insurance companies in the assessment of income tax. These concessions were made dependent upon the investment by companies of not less than 30 per cent. of their funds in public authority securities, including not less than 20 per cent. in Commonwealth securities.

The following table shows, for each of the years 1956 to 1960, particulars of life insurance policies in force in both the ordinary and industrial departments of the companies :—

#### VICTORIA—LIFE INSURANCE: POLICIES IN FORCE

Particulars	1956	1957	1958	1959	1960
Ordinary Business— ..					
Number of Policies ..	909,596	943,549	976,227	1,009,971	1,110,074
Sum Insured £'000	646,421	749,252	857,569	993,079	1,188,640
Annual Premiums ..	21,929	24,471	27,203	30,012	33,687
Industrial Business—					
Number of Policies ..	1,163,876	1,131,825	1,102,774	1,069,764	1,032,245
Sum Insured £'000	96,990	98,744	100,390	101,424	104,505
Annual Premiums ..	4,694	4,727	4,759	4,757	4,831

In 1960, the average amount of policy held in the ordinary and in the industrial departments was £1,071 and £101 respectively.

The succeeding table contains summarized information in relation to the new business written by all life insurance companies during each of the five years 1956 to 1960 :—

**VICTORIA—LIFE INSURANCE : NEW POLICIES ISSUED**

Particulars	1956	1957	1958	1959	1960
<b>Ordinary Business—</b>					
Number of Policies ..	80,501	83,711	84,686	90,939	123,850
Sum Insured £'000	110,923	145,541	156,501	193,872	273,734
Annual Premiums ..	3,446	4,101	4,351	4,715	5,845
<b>Industrial Business—</b>					
Number of Policies ..	56,911	58,682	53,457	52,804	51,275
Sum Insured £'000	8,860	9,357	8,978	9,343	11,532
Annual Premiums ..	415	437	418	435	512

Sums assured under new policies issued during 1960 averaged £2,210 in the Ordinary Department and £225 in the Industrial Department.

The following table gives particulars of the policies which were discontinued during each of the years 1958 to 1960 :—

**VICTORIA—LIFE INSURANCE : POLICIES DISCONTINUED**

Cause of Discontinuance	1958		1959		1960	
	Number of Policies	Sum Insured	Number of Policies	Sum Insured	Number of Policies	Sum Insured
	<b>ORDINARY BUSINESS</b>					
		£'000		£'000		£'000
Death .. ..	5,002	3,157	4,989	3,483	5,653	4,000
Maturity or Expiry ..	13,018	7,878	13,799	8,743	16,070	10,640
Surrender .. ..	22,294	22,074	25,906	24,337	43,786	33,082
Lapse .. ..	9,858	11,531	10,536	15,020	14,811	20,891
Other * .. ..	1,836	3,544	1,965	6,779	31,457	9,560
Total .. ..	52,008	48,184	57,195	58,362	111,777	78,173
	<b>INDUSTRIAL BUSINESS</b>					
		£'000		£'000		£'000
Death .. ..	4,532	271	4,515	280	4,583	307
Maturity or Expiry ..	44,286	2,199	45,472	2,369	51,358	2,622
Surrender .. ..	19,802	2,585	21,367	2,980	20,358	2,976
Lapse .. ..	13,978	2,286	14,085	2,661	12,105	2,540
Other * .. ..	90	9	375	19	390	6
Total .. ..	82,508	7,332	85,814	8,309	88,794	8,451

\* Includes net loss or gain resulting from transfers, cancellations of, and alterations to, policies, &c.

**Further References**

Recent trends in life insurance are described on pages 667–668 of the Victorian Year Book 1962.

## Fire, Marine, and General Insurance

### *Organization*

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.

To-day, in Victoria, over 200 companies, many with oversea affiliations, provide a range of policies and services comparable with those available in other countries. Organization of the market can be summarized 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
- (6) Local representatives of oversea re-insurance companies.

Most of the companies are members of the Fire, Accident, and Marine Underwriters' Associations in each State, and these "Tariff" companies, as they are known, issue uniformly based policies but compete amongst themselves for business. Additional competition is provided by other components of the market which, as a whole, is strong and resilient.

### *Fire Protection Encouraged*

The Fire and Accident Underwriters' Association in each State employ a staff of surveyors who are primarily engaged in advising the public, through member companies, on fire protection principles and practices. The Survey Departments maintain close contact with similar bodies in Britain, U.S.A., and Canada to ensure that the latest information is available.

Fire protection devices, such as automatic sprinkler installations, must be installed in accordance with the rules and regulations of the Underwriters' Associations to qualify for the premium reductions the companies allow for the improvement of risks in this way.

### *Types of Insurance Cover Provided*

The types of insurance cover issued by underwriters in Victoria are many and varied, including amongst others:—

All Risks	Motor Vehicle (Physical Damage)
Baggage	Motor Vehicle—Third Party
Boiler Explosion	(Compulsory)
Burglary	Personal Accident
Cash in Transit	Plate Glass
Crop (Fire and Hail)	Pluvius
Fidelity Guarantee	Public Liability
Fire and Loss of Profits	Tourists and Travellers Personal
Houseowners and House-	Accident
holders	Wool ("Sheep's Back to Store")
Live Stock	Workers Compensation (Compul-
Marine	sory)

### *Compulsory Covers*

The Victorian Government, as is the case with other State Governments, legislates as to Workers Compensation and Motor Vehicle (Third Party) insurances. All employers are compelled to

insure their employees against physical injury or death 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.

### *Marine Insurance*

A substantial amount of the Marine insurance business transacted in the Commonwealth of Australia is underwritten by insurers licensed by the Victorian Government to carry on Marine insurance business in Victoria.

The majority of these insurers are members of the Marine Underwriters and Salvage Association of Victoria Ltd. which was established in 1869, some of its main objects being to "obtain information with respect to the state of vessels owned in, trading to, or otherwise connected with Australian ports, their condition when loading, the quantity and nature of cargo taken on board, the mode of stowing cargo and the state in which cargo is discharged, and the investigating by all lawful means of the cause of loss or damage or injury to vessels and cargoes".

The Association also maintains a well-equipped salvage depot in the charge of a Salvage Officer. His services and the salvage gear are available to non-members as well as member companies.

Although the term "marine" connotes the insurance of vessels and cargoes engaged in a marine venture, the changing pattern of the transport of goods within the Commonwealth now brings transit by road, rail, and air, as well as by sea, within the operations of the marine insurer.

### *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 30th June, or for the immediately preceding accounting periods of the insurers concerned. Since the accounting years of many insurers end on dates other than 30th 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 show details of fire, marine, and general insurance business transacted in Victoria during each of the years 1956-57 to 1960-61 :—

**VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE :**  
**TOTAL REVENUE : CLASS OF BUSINESS**  
(£'000)

Class of Business	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>PREMIUMS (LESS RETURNS, REBATES AND BONUSES)</b>					
Fire .. .. .	8,933	9,432	9,284	9,628	10,051
Householders' Comprehensive ..	2,251	2,564	2,935	3,315	3,709
Sprinkler Leakage .. .. .	38	23	28	26	28
Loss of Profits .. .. .	1,036	992	1,151	1,266	1,272
Hailstone .. .. .	166	177	301	254	392
Marine .. .. .	2,452	2,410	2,664	2,572	3,044
Motor Vehicles (Other than Motor Cycles) .. .. .	11,577	12,849	12,764	14,377	15,484
Motor Cycles .. .. .	45	40	52	59	29
Compulsory Third Party (Motor Vehicles) .. .. .	5,142	5,361	5,703	6,009	6,482
Employers' Liability and Workmen's Compensation * .. .. .	10,053	12,312	13,110	14,081	15,315
Personal Accident .. .. .	1,194	1,521	1,786	1,838	2,089
Public Risk, Third Party .. .. .	520	573	650	755	899
General Property .. .. .	72	102	120	113	147
Plate Glass .. .. .	159	207	218	232	249
Boiler .. .. .	17	22	22	36	31
Live Stock .. .. .	76	92	73	80	77
Burglary .. .. .	695	808	860	892	967
Guarantee .. .. .	69	78	96	143	141
Pluvius .. .. .	29	30	24	25	29
Aviation .. .. .	241	111	196	60	75
All Risks .. .. .	322	397	461	497	509
Television .. .. .	†	†	867	1,153	758
Others .. .. .	496	663	595	707	647
<b>Total Premiums .. .. .</b>	<b>45,583</b>	<b>50,764</b>	<b>53,960</b>	<b>58,118</b>	<b>62,424</b>
<b>INTEREST, DIVIDENDS, RENTS, &amp;C. (NET OF EXPENSES)</b>					
Investments .. .. .	1,161	1,399	1,725	2,420	2,871
<b>TOTAL REVENUE</b>					
<b>Grand Total .. .. .</b>	<b>46,744</b>	<b>52,163</b>	<b>55,685</b>	<b>60,538</b>	<b>65,295</b>

\* See references pages 450 to 452.

† Included with "Others". This class of business was first transacted in 1956-57.

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE :  
TOTAL EXPENDITURE: CLASS OF BUSINESS  
(£'000)

Class of Business	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>GROSS CLAIMS (LESS AMOUNTS RECOVERABLE)</b>					
Fire .. .. .	2,812	2,668	2,584	2,902	4,005
Householders' Comprehensive ..	383	470	539	669	782
Sprinkler Leakage .. ..	9	17	3	17	14
Loss of Profits .. .. .	257	135	132	224	301
Hailstone .. .. .	92	155	291	139	253
Marine .. .. .	1,178	1,267	1,003	1,087	1,534
Motor Vehicles (Other than Motor Cycles) .. .. .	8,067	8,473	8,725	9,948	12,036
Motor Cycles .. .. .	23	21	22	28	21
Compulsory Third Party (Motor Vehicles) .. .. .	4,034	4,705	5,618	5,356	5,715
Employers' Liability and Workmen's Compensation .. .. .	8,021	8,676	9,366	9,639	10,340
Personal Accident .. .. .	449	538	623	787	923
Public Risk, Third Party .. ..	201	343	308	368	406
General Property .. .. .	120	122	24	125	73
Plate Glass .. .. .	102	109	122	148	174
Boiler .. .. .	1	6	1	2	16
Live Stock .. .. .	40	41	39	35	39
Burglary .. .. .	369	383	432	524	550
Guarantee .. .. .	11	9	24	25	37
Pluvius .. .. .	21	12	8	16	43
Aviation .. .. .	44	31	72	31	122
All Risks .. .. .	152	188	231	299	343
Television .. .. .	*	*	431	694	614
Others .. .. .	156	234	257	354	339
Total .. .. .	26,542	28,603	30,855	33,417	38,680
<b>OTHER EXPENDITURE</b>					
Contributions to Fire Brigades ..	1,020	1,069	1,169	1,291	1,416
Commission and Agents' Charges ..	4,913	5,373	5,549	5,937	6,154
Expenses of Management .. .. .	6,391	7,210	7,928	8,794	9,831
Taxation .. .. .	1,799	1,751	2,426	3,036	2,693
Total .. .. .	14,123	15,403	17,072	19,058	20,094
<b>TOTAL EXPENDITURE</b>					
Grand Total .. .. .	40,665	44,006	47,927	52,475	58,774

\* Included with "Others". This class of business was first transacted in 1956-57.

The percentage of claims to premium income for each of the years 1956-57 to 1960-61 in respect of the various classes of insurance was as follows :—

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE :  
PERCENTAGE OF CLAIMS TO PREMIUM INCOME

Class of Business	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Fire .. .. .	31·48	28·28	27·84	30·14	39·84
Householders' Comprehensive ..	17·01	18·35	18·38	20·19	21·08
Sprinkler Leakage .. .. .	23·65	70·67	9·42	63·39	50·31
Loss of Profits .. .. .	24·83	13·60	11·45	17·67	23·64
Hailstone .. .. .	55·40	87·45	96·45	54·74	64·47
Marine .. .. .	48·05	52·55	37·63	42·25	50·39
Motor Vehicles (Excl. Motor Cycles)	69·68	65·94	68·36	69·20	77·73
Motor Cycles .. .. .	51·57	53·71	41·60	47·65	73·40
Compulsory Third Party (Motor Vehicles) .. .. .	78·45	87·76	98·50	89·14	88·17
Employers' Liability and Workmen's Compensation .. .. .	79·79	70·47	71·44	68·45	67·52
Personal Accident .. .. .	37·61	35·36	34·86	42·80	44·17
Public Risk, Third Party .. .. .	38·61	59·88	47·40	48·78	45·17
General Property .. .. .	165·70	119·69	19·74	111·16	49·89
Plate Glass .. .. .	64·31	52·69	55·84	63·71	69·73
Boiler .. .. .	4·91	26·53	6·37	6·59	52·49
Live Stock .. .. .	52·44	45·06	53·74	43·73	50·27
Burglary .. .. .	53·18	47·13	50·29	58·79	56·88
Guarantee .. .. .	15·61	11·06	25·02	17·42	26·24
Pluvius .. .. .	72·75	39·67	34·97	63·74	148·28
Aviation .. .. .	18·44	28·33	36·77	51·59	162·78
All Risks .. .. .	47·05	47·42	50·04	60·01	67·37
Television .. .. .	*	*	49·72	60·19	81·04
Others .. .. .	31·39	35·25	43·15	50·03	52·37
All Classes .. .. .	58·23	56·34	57·18	57·50	61·96

\* Included with "Others". This class of business was first transacted in 1956-57.

*Motor Car (Third Party Insurance)*

The *Motor Car (Third Party Insurance) Act 1939* which came into force on 22nd 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.

The number of vehicles insured during each of the years 1956–57 to 1960–61 is shown in the following table :—

**VICTORIA—MOTOR CAR (THIRD PARTY INSURANCE) :  
NUMBER OF MOTOR VEHICLES INSURED**

Class of Motor Vehicle	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>MOTOR VEHICLES USUALLY GARAGED WITHIN A RADIUS OF 20 MILES OF THE POST OFFICE, ELIZABETH-STREET, MELBOURNE</b>					
Private .. .. .	266,190	285,887	302,145	336,684	362,032
Business .. .. .	33,277	36,723	37,753	43,298	46,746
Light Goods .. .. .	37,881	39,751	40,068	42,112	42,192
Heavy Goods .. .. .	18,436	19,507	18,522	20,298	20,993
Miscellaneous .. .. .	8,130	8,365	8,812	9,633	10,255
Motor Cycles .. .. .	13,544	12,914	12,701	12,145	10,704
Visiting Motor Cars .. .. .	538	887	931	1,815	2,268
<b>Total .. .. .</b>	<b>377,996</b>	<b>404,034</b>	<b>420,932</b>	<b>465,985</b>	<b>495,190</b>

**MOTOR VEHICLES USUALLY GARAGED OUTSIDE A RADIUS OF 20 MILES OF THE POST OFFICE,  
ELIZABETH-STREET, MELBOURNE**

Private .. .. .	204,431	216,679	222,154	239,699	250,147
Business .. .. .	7,684	8,507	9,190	10,318	11,125
Light Goods .. .. .	51,025	51,504	50,368	52,589	51,752
Heavy Goods .. .. .	32,575	32,497	31,926	33,639	34,656
Miscellaneous .. .. .	29,418	33,208	34,728	37,729	39,784
Motor Cycles .. .. .	10,536	10,218	8,924	8,134	6,744
Visiting Motor Cars .. .. .	78	60	81	151	100
<b>Total .. .. .</b>	<b>335,747</b>	<b>352,673</b>	<b>357,371</b>	<b>382,259</b>	<b>394,308</b>
<b>Grand Total .. .. .</b>	<b>713,743</b>	<b>756,707</b>	<b>778,303</b>	<b>848,244</b>	<b>889,498</b>

*State Motor Car Insurance Office*

The State Motor Car Insurance Office was established under the *Motor Car (Third Party Insurance) Act 1939* (now embodied in the *Motor Car Act 1958*), 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 24th 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 1960–61 represented 5·4 per cent. of comprehensive and 26·6 per cent. of third party premiums received in Victoria.



The following table shows the trading results for each of the five years 1956–57 to 1960–61 :—

**VICTORIA—STATE MOTOR CAR INSURANCE OFFICE :**  
**PREMIUMS RECEIVED, CLAIMS PAID, ETC.**  
(£'000)

Year Ended 30th June—	Premiums Received Less Reinsurances, Rebates, &c.	Additional Unearned Premium Provision	Claims Paid and Outstanding	Expenses	Underwriting Profit
1957 ..	1,541	103	1,222	109	107
1958 ..	1,812	135	1,365	122	190
1959 ..	1,967	54	1,751	134	28
1960 ..	2,153	102	2,018	145	112*
1961 ..	2,568	219	2,242	164	57*

\* Loss

*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, after providing for the necessary reserves, are refunded as bonuses to policy holders.

The Office has made steady progress during 47 years of operation and for the year ended 30th June, 1961, its premium income represented 19·3 per cent. of the total premiums received by all insurance companies on account of Employers' Liability and Workmen's Compensation Insurance.

The following table shows the trading results for each of the five years 1956–57 to 1960–61 :—

**VICTORIA—STATE ACCIDENT INSURANCE OFFICE :**  
**PREMIUMS RECEIVED, CLAIMS PAID, ETC.**  
(£'000)

Year Ended 30th June—	Premiums Received Less Reinsurances, Rebates, &c.	Additional Unearned Premium Provision	Claims Paid and Outstanding	Expenses	Underwriting Profit
1957 ..	2,011	234	2,078	148	449*
1958 ..	2,462	72	1,918	155	317
1959 ..	2,656	62	2,005	167	422
1960 ..	2,606	— 172	2,251	242	285
1961 ..	2,950	187	2,137	188	438

\* Loss

The accumulated funds at 30th June, 1961, were:—General Reserve, £1,500,000; Building and Other Reserves, £31,420; and Bonus Equalization Reserve, £682,346.

### Building Societies

The provisions of the *Building Societies Act 1874* made it compulsory for building societies to effect registration. Subsequent legislation is contained in the *Building Societies Act 1958*, which consolidated the law in relation to building societies up to that year, and the *Building Societies Act 1960*.

Up to 31st December, 1961, the number of societies that had been registered was 199. Of these there were 32 societies still operating in 1961.

### VICTORIA—BUILDING SOCIETIES, 1961

Particulars	Permanent Societies	Starr-Bowkett Societies	Total All Societies
Number of Societies .. .. .	31	2	32*
„ „ Shareholders .. .. .	5,536	4,283	9,819
„ „ Borrowers .. .. .	15,345	963	16,308
Transactions during the Year—		£'000	
Income—			
Interest on Loans and Investments ..	1,278	46	1,324
Other .. .. .	136	4	140
Total .. .. .	1,414	50	1,464
Expenditure—			
Working Expenses .. .. .	234	23	257
Interest .. .. .	844	14	858
Taxation .. .. .	136	†	136
Total .. .. .	1,214	37	1,251
Loans and Advances Paid .. .. .	4,442	217	4,659
Loans and Advances Repaid .. .. .	2,990‡	231	3,221‡
Deposits Received .. .. .	5,309	40	5,349
Deposits Returned .. .. .	5,029	35	5,064
Assets—			
Loans on Mortgage .. .. .	19,705	954	20,659
Other Advances .. .. .	96	14	110
Properties in Possession or Surrendered ..	551	..	551
Commonwealth Loans (Including Accrued Interest) .. .. .	205	..	205
Other Assets .. .. .	435	4	439
Total .. .. .	20,992	972	21,964
Liabilities—			
Share Capital—			
Permanent Investing Shares .. .. .	2,705	..	2,705
Terminating Investing Shares .. .. .	2,065	552	2,617
Borrowers' Shares (Including Accrued Interest)	90	..	90
Due to Mortgagees (Including Accrued Interest)	8,767	..	8,767
Due to Depositors (Including Accrued Interest)	5,081	281	5,362
Bank Overdrafts .. .. .	362	25	387
Reserve Funds .. .. .	1,232	46	1,278
Other Liabilities .. .. .	690	68	758
Total .. .. .	20,992	972	21,964

\* One society has both a Permanent and a Starr-Bowkett branch.

† Under £500.

‡ Includes payments made and interest accrued on borrowers' shares during the year

### Co-operative Organizations

Co-operative organizations operating in Victoria are registered under the provisions of the Companies Act, the Industrial and Provident Societies Act, and the Co-operation Act. They are mainly engaged in the production, marketing, and distribution of goods. A number of co-operative credit societies has been registered in recent years under the Co-operation Act but, because of the nature of their business, they have been excluded from the summary of co-operative organizations given below. References to societies registered under the Co-operation Act are to be found on pages 303 to 305.

For statistical purposes, co-operative organizations have been defined as those producing, manufacturing, marketing, or distributing societies which substantially fulfil the following conditions :—

- (1) Dividend on share capital does not exceed 8 per cent.;
- (2) the greater portion of the business of the society is transacted with its own shareholders ;
- (3) any distribution of surplus, after payment of dividend on share capital, is amongst suppliers and customers, in proportion to the business done with the society ; and
- (4) voting powers are limited.

Societies have been divided into three classes, viz.: (1) Producers', (2) Consumers', and (3) Producers' and Consumers'. Included in the group of Consumers' Societies is a number of Community Advancement Societies registered under the Co-operation Act.

Particulars of co-operative organizations for the year 1960-61 are given in the following table :—

#### VICTORIA—CO-OPERATIVE ORGANIZATIONS, 1960-61

Particulars	Societies—			Total All Societies
	Producers'	Consumers'	Producers' and Consumers'	
Number of Societies .. ..	68	60	12	140
Membership .. .. .	46,552	27,438	7,602	81,592
	£'000			
Purchases .. .. .	19,483	3,851	6,278	29,612
Working Expenses, &c. .. ..	6,186	638	1,055	7,879
Interest on—				
Loan Capital .. .. .	123	30	12	165
Bank Overdraft .. .. .				
Rebates and Bonuses .. .. .	170	89	34	293
Total Expenditure .. .. .	25,962	4,608	7,379	37,949
Sales .. .. .	24,913	4,551	7,433	36,897
Other Income .. .. .	1,549	118	40	1,707
Total Income .. .. .	26,462	4,669	7,473	38,604
Dividend on Share Capital .. ..	237	23	40	300

## VICTORIA—CO-OPERATIVE ORGANIZATIONS, 1960-61—continued

Particulars	Societies—			Total All Societies
	Producers'	Consumers'	Producers' and Consumers'	
	£'000			
<b>Liabilities—</b>				
Share Capital—Paid-up ..	3,943	658	585	5,186
Loan Capital .. ..	596	347	140	1,083
Bank Overdraft .. ..	2,569	235	241	3,045
Accumulated Profits .. ..	580	193	187	960
Reserve Funds .. ..	3,844	233	682	4,759
Sundry Creditors .. ..	2,745	321	513	3,579
Other .. ..	851	140	66	1,057
<b>Total .. ..</b>	<b>15,128</b>	<b>2,127</b>	<b>2,414</b>	<b>19,669</b>
<b>Assets—</b>				
Land and Buildings .. ..	7,951	906	1,461	10,318
Fittings, Plant, and Machinery } .. ..				
Stock .. ..	2,084	654	392	3,130
Sundry Debtors .. ..	3,956	387	462	4,805
Cash in Bank, in Hand, or on De- posit .. ..	336	55	10	401
Profit and Loss Account .. ..	99	45	8	152
Other .. ..	702	80	81	863
<b>Total .. ..</b>	<b>15,128</b>	<b>2,127</b>	<b>2,414</b>	<b>19,669</b>

**Public Trustee**

Under the provisions of the Public Trustee Acts, the Public Trustee is authorized to act as executor of wills, to administer intestate estates, or to act as an agent, attorney, or trustee. He is also authorized to act as custodian of assets under settlements and trusts.

The control of estates of certified patients in mental hospitals is vested in the Public Trustee who is also empowered to assume control of estates of persons who, by reason of mental or physical disability, are certified to be incapable of managing their affairs.

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 1st 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 1956-57 to 1960-61 :—

**VICTORIA—PUBLIC TRUSTEE : COMMON FUND**  
(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
Proceeds of Realizations, Rents, Interest, &c. .. ..	2,488	2,948	3,362	3,261	3,597
Investments, Distributions, Claims, &c. .. ..	2,129	2,505	2,815	3,093	3,138
<b>Cash Variation .. ..</b>	<b>359</b>	<b>443</b>	<b>547</b>	<b>168</b>	<b>459</b>
<b>Balance at 1st July .. ..</b>	<b>3,336</b>	<b>3,695</b>	<b>4,138</b>	<b>4,685</b>	<b>4,853</b>
<b>Balance at 30th June .. ..</b>	<b>3,695</b>	<b>4,138</b>	<b>4,685</b>	<b>4,853</b>	<b>5,312</b>

The numbers of applications for probate and letters of administration (including election to administer), &c., made by the Public Trustee for each of the years 1951-52 to 1960-61 are shown in the following table :—

VICTORIA—APPLICATIONS BY PUBLIC TRUSTEE FOR PROBATE, LETTERS OF ADMINISTRATION, ETC.

Year	No.	Year	No.
1951-52	1,095	1956-57	1,135
1952-53	1,182	1957-58	1,130
1953-54	1,187	1958-59	1,066
1954-55	1,126	1959-60	919
1955-56	1,089	1960-61	1,084

The number of wills (under which the Public Trustee was appointed executor) lodged for safe custody during each of the years 1956-57 to 1960-61 was as follows :—1956-57, 2,561 ; 1957-58, 2,878 ; 1958-59, 2,936 ; 1959-60, 2,938 ; 1960-61, 2,626.

**Trustee Companies**

There are seven Trustee Companies operating in Victoria for the purpose of providing executor, trustee, agent and other fiduciary services. As executors or trustees appointed under wills or other trust instruments, these companies provide the service of permanent corporations for the performance of the duties of such offices. Trustee Companies also accept the office of a trustee or trustees who may desire to be relieved of their duties and responsibilities, while an executor appointed under a will can appoint a company to take his place.

The following table shows some financial details of trustee companies. Particulars have been abstracted from the published statements of accounts of companies which transacted business in Victoria during each of the years, 1958-59 to 1960-61 :—

VICTORIA—TRUSTEES, EXECUTORS, AND AGENCY COMPANIES

Particulars	1958-59	1959-60	1960-61
Number of Companies .. .. .	8	8	7
Income—	£'000		
Commissions, Fees, &c. .. .. .	990	1,087	1,153
Income from Investments .. .. .	149	160	172
Total Income .. .. .	1,139	1,247	1,325
Expenditure—			
Working Expenses .. .. .	985	1,074	1,135
Income Tax .. .. .	59	70	74
Depreciation .. .. .	20	17	21
Total Expenditure .. .. .	1,064	1,161	1,230
Dividend on Share Capital .. .. .	56	58	66

VICTORIA—TRUSTEES, EXECUTORS, AND AGENCY COMPANIES—  
*continued*

Particulars	1958-59	1959-60	1960-61
	£'000		
<b>Liabilities—</b>			
Paid-up Capital .. .. .	531	531	538
Reserve Funds .. .. .	641	641	654
Sundry Creditors .. .. .	70	70	58
Accumulated Profits .. .. .	82	100	109
Other .. .. .	730	812	912
Total .. .. .	2,054	2,154	2,271
<b>Assets—</b>			
Land and Buildings .. .. .	954	993	1,039
Loans on Mortgage .. .. .	106	109	170
Government Loans .. .. .	280	273	268
Guarantee Funds .. .. .	142	142	132
Sundry Debtors .. .. .	81	90	60
Other .. .. .	491	547	602
Total .. .. .	2,054	2,154	2,271

### 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 connexion with the grant of probate or administration.

The *Administration and Probate Act* 1958, Section 6, confers jurisdiction to 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, 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 of each sex in connexion with which probates or letters of administration, &c., were finally completed during each of the years 1957 to 1961. Particulars of estates administered by the Public Trustee are included.

**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	£'000	£'000	£
<b>MALES</b>						
1957 ..	8,258	20,046	33,559	2,749	50,856	6,158
1958 ..	8,659	22,599	38,091	2,894	57,796	6,675
1959 ..	8,657	22,824	33,582	2,124	54,282	6,270
1960 ..	8,860	23,428	42,024	3,108	62,344	7,037
1961 ..	8,818	23,275	46,086	3,214	66,147	7,501
<b>FEMALES</b>						
1957 ..	6,465	10,688	16,640	1,032	26,296	4,067
1958 ..	6,359	11,194	17,641	1,201	27,634	4,346
1959 ..	6,510	12,319	18,759	1,292	29,786	4,575
1960 ..	6,277	11,844	21,772	1,064	32,552	5,186
1961 ..	6,415	12,401	23,493	1,251	34,643	5,400
<b>TOTAL</b>						
1957 ..	14,723	30,734	50,199	3,781	77,152	5,240
1958 ..	15,018	33,793	55,732	4,095	85,430	5,688
1959 ..	15,167	35,143	52,341	3,416	84,068	5,543
1960 ..	15,137	35,272	63,796	4,172	94,896	6,269
1961 ..	15,233	35,676	69,579	4,465	100,790	6,617

The number and value of estates dealt with in each of the years 1959 to 1961 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	1959		1960		1961	
	Number	Net Value	Number	Net Value	Number	Net Value
		£'000		£'000		£'000
<b>MALES</b>						
£						
Under 100 ..	448	19	431	18	461	21
100 – 299 ..	759	142	762	139	721	134
300 – 499 ..	506	198	480	187	530	210
500 – 999 ..	962	698	995	729	957	708
1,000 – 1,999 ..	1,280	1,861	1,264	1,823	1,225	1,893
2,000 – 2,999 ..	905	2,248	907	2,235	892	2,205
3,000 – 3,999 ..	816	2,806	810	2,796	751	2,706
4,000 – 4,999 ..	551	2,476	590	2,621	570	2,548
5,000 – 9,999 ..	1,080	7,620	1,152	8,215	1,129	8,150
10,000 – 14,999 ..	460	5,633	475	5,816	517	6,275
15,000 – 24,999 ..	414	7,972	454	8,627	474	9,403
25,000 – 49,999 ..	350	11,827	383	12,735	400	13,849
50,000 – 99,999 ..	92	6,065	112	7,938	154	10,196
100,000 and over ..	34	4,717	45	8,465	37	7,849
<b>Total Males ..</b>	<b>8,657</b>	<b>54,282</b>	<b>8,860</b>	<b>62,344</b>	<b>8,818</b>	<b>66,147</b>
<b>FEMALES</b>						
£						
Under 100 ..	293	13	243	12	251	13
100 – 299 ..	621	120	628	116	557	106
300 – 499 ..	432	170	408	159	344	135
500 – 999 ..	744	542	690	502	707	524
1,000 – 1,999 ..	1,054	1,550	954	1,392	1,000	1,464
2,000 – 2,999 ..	805	1,975	797	1,968	764	1,887
3,000 – 3,999 ..	635	2,198	624	2,159	685	2,378
4,000 – 4,999 ..	439	1,952	426	1,889	438	1,948
5,000 – 9,999 ..	811	5,666	791	5,578	900	6,285
10,000 – 14,999 ..	305	3,719	275	3,363	327	3,923
15,000 – 24,999 ..	219	4,231	228	4,348	231	4,434
25,000 – 49,999 ..	112	3,761	150	5,022	141	4,775
50,000 – 99,999 ..	30	2,064	45	2,981	50	3,390
100,000 and over ..	10	1,825	18	3,063	20	3,381
<b>Total Females ..</b>	<b>6,510</b>	<b>29,786</b>	<b>6,277</b>	<b>32,552</b>	<b>6,415</b>	<b>34,643</b>
<b>Grand Total ..</b>	<b>15,167</b>	<b>84,068</b>	<b>15,137</b>	<b>94,896</b>	<b>15,233</b>	<b>100,790</b>



## Transfer of Land

### *Torrens System*

The Torrens System of land dealings is embodied in the Transfer of Land Act. This system was conceived in South Australia by Robert Richard Torrens who, as Collector of Customs, was concerned with the complexity of even a simple land dealing of small value compared with the simplicity of transferring the ownership of a valuable ship. He was impressed by the method of recording in shipping registers, ownership of ships and shares.

In 1858, the South Australian Real Property Act was passed and, in the year 1862, Victoria adopted the Torrens System in its Real Property Act. All other States in Australia and various other countries have since copied this system.

Prior to 1862, Victoria had only one system of conveying land, known as general law conveyancing. This system is, in effect, a private arrangement between parties and no registration of any deeds is essential. About 1·8 mill. acres of land in Victoria remain subject to this somewhat complex and uncertain general law system.

The Torrens System aims at five principles—simplicity, certainty, indefeasibility, flexibility, and cheapness—none of which characterizes general law conveyancing. The fundamental principle of the Torrens System is that the title to land and to interests in land (such as interest of mortgagees, transferees, &c.) depends upon registration of written instruments signed by the parties to the respective transactions, not upon the written deeds themselves.

The document of title to land under the Transfer of Land Act (Torrens System) 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. Every time the land is transferred and the transfer is registered, the like guarantee and certification operates for the entry of the name of the new proprietor.

Whenever a mortgage is registered, the land is charged with payment of moneys secured. Certain statutory powers, such as sale or foreclosure, are conferred on the mortgagee in the event of default under the mortgage.

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 investigate any of the entries on the title such as the name of the registered proprietor and the encumbrances affecting, such as easements or mortgages. The certainty of these particulars can be assumed, as, in terms of the Act, they are conclusive.

### *Separate Certificates of Title to Flats*

Individual ownership of flats was first introduced into Victoria shortly after the Second World War when the expression "own your own flat" appeared in real estate advertising.

In the first type of flat ownership, a person became the "owner" of a flat by acquiring shares in a proprietary company which became the registered proprietor on the title to the site of the block of flats, and was formed to control the management of the flats. Each flat "owner", as holder of a group of shares, became entitled to the exclusive occupation of a particular flat under an agreement with the company.

In 1953, a form of real ownership of a flat was introduced when the Office of Titles accepted a subdivision of a block of flats. This was an entirely new form of subdivision embodying a horizontal as well as a vertical division of a building. A separate certificate of title was issued for each lot on the subdivision representing a separate flat and these "stratum titles" show the heights from floor to ceiling level of each flat by reference to the datum for levels adopted by the Melbourne and Metropolitan Board of Works (the high water mark on Port Phillip Bay).

Under this form of ownership evidenced by the issue of a Certificate of Title to each flat, the title for the residual land in the subdivision generally issues in the name of a service company. This comprises the grounds, garden, common stairways, land under the building and above the building, fences, foundations, and outbuildings.

Under stratum title flat ownership, a purchaser of a flat becomes the registered proprietor and the absolute owner in fee-simple of his flat. He can borrow money on the security of mortgage on the title to his flat; he can sell or lease his flat whenever he wishes without any restrictions, or he can dispose of his flat by his will. The flat may be sold on extended terms. (Under the shares in a proprietary company scheme, money cannot be borrowed upon the security of a group of shares).

The service company is responsible for the general maintenance of the block of flats and for the provision of common services. Its shareholders comprise flat owners exclusively.

Each flat owner pays to the service company a service charge and maintenance contribution to cover the services provided by it.

The form of Certificate of Title is simple, and section 98 of the Transfer of Land Act confers a statutory right for each flat to enjoy all necessary easements such as support, supply of water, gas, &c., over other parts of the building.

*Land Transfers, Mortgages, Liens, &c.*

A summary of dealings lodged in the Titles Office under the Transfer of Land Acts is given in the following tables for each of the years 1957 to 1961 :—

**VICTORIA—DEALINGS LODGED AT THE TITLES OFFICE  
UNDER THE TRANSFER OF LAND ACTS**

Year	Number of Transfers	Mortgages*		Number of—			
		Number	Amount	Entries of Executor, Administrator, or Survivor	Plans of Sub-division	Other Dealings	Total Dealings
			£'000				
1957 .. ..	83,596	33,742	83,283	10,557	2,782	49,327	180,004
1958 .. ..	91,939	39,149	96,715	10,256	2,910	55,460	199,714
1959 .. ..	91,519	38,674	108,361	10,392	3,091	62,064	205,740
1960 .. ..	105,327	46,455	157,132	10,554	3,154	68,587	234,077
1961 .. ..	84,207	39,655	125,581	11,923	2,472	66,333	204,590

\* Excluding certain mortgages, principally to trading banks to secure overdrafts on current accounts.

The following table shows the number of titles issued during each of the years 1957 to 1961. In February, 1961, the Titles Office introduced a new system for the issue of certificates of title in the case of land approved for subdivision. Individual certificates are now issued for each lot in the estate at the time the plan of subdivision is approved. Prior to February, 1961, a separate certificate of title for each lot was not issued until a transfer of ownership in respect of such lot was recorded in the Titles Office.

The introduction of this new method is mainly responsible for the large increase in the number of titles issued during 1961, as compared with previous years :—

**VICTORIA—TITLES OF LAND ISSUED**

Year	Number of—			
	Certificates of Title	Crown Grants	Crown Leases	Total Titles
1957 .. ..	34,996	1,131	488	36,615
1958 .. ..	35,796	849	532	37,177
1959 .. ..	34,015	1,137	417	35,569
1960 .. ..	37,441	1,303	503	39,247
1961 .. ..	58,428	1,116	413	59,957

Mortgages, reconveyances, and conveyances registered under the *Property Law Act 1928* are shown in the following table. The *Property Law Act 1958* consolidated the 1928 Act and subsequent amending Acts.

### VICTORIA—DEALINGS UNDER THE PROPERTY LAW ACT

Year	Mortgages*		Reconveyances		Conveyances	
	No.	Amount	No.	Amount†	No.	Amount
		£ '000		£ '000		£ '000
1957 .. ..	907	3,719	964	1,123	3,079	7,459
1958 .. ..	858	2,454	979	649	3,088	10,783
1959 .. ..	886	2,600	996	576	3,074	9,446
1960 .. ..	966	3,254	1,127	624	3,381	11,752
1961 .. ..	939	3,523	1,045	851	2,914	10,810

\* Excluding certain mortgages, principally to trading banks to secure overdrafts on current accounts.

† Excluding repayments designated "Principal and Interest".

The number and amount of stock mortgages, liens on wool, and liens on crops registered during each of the years 1957 to 1961 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 mortgagors of stock secure themselves by a registered release.

### VICTORIA—STOCK MORTGAGES AND LIENS ON WOOL AND CROPS

Security	1957	1958	1959	1960	1961
Stock Mortgages—					
Number .. ..	455	332	368	373	399
Amount .. .. £'000	521	422	371	350	404
Liens on Wool—					
Number .. ..	260	338	366	321	302
Amount .. .. £'000	538	692	785	697	577
Liens on Crops—					
Number .. ..	101	99	131	135	131
Amount .. .. £'000	18	47	49	46	112
Total—					
Number .. ..	816	769	865	829	832
Amount .. .. £'000	1,077	1,161	1,205	1,093	1,093

The following are the numbers and amounts of bills of sale which have been filed in each of the years 1957 to 1961 :—

### VICTORIA—BILLS OF SALE

Security	1957	1958	1959	1960	1961
Bills of Sale—					
Number .. .. .	4,681	5,096	5,388	4,959	4,401
Amount .. .. £'000	5,418	7,303	8,440	9,717	7,714

### Companies

#### General

Registration and operation of companies in Victoria are controlled by the *Companies Act* 1961, which came into operation on 1st July, 1962.

#### Types of Companies

Companies may be incorporated either as limited companies, unlimited companies, or no liability companies. The most numerous are limited companies, namely, companies in which the liability of the members is limited (in the case of companies limited by shares) to the amount (if any) unpaid on their shares, or (in the case of companies limited by guarantee), to a specified amount which the members undertake to pay in the event of the company being wound up. Unlimited companies are companies in which the liability of the members is unlimited. No liability companies, which may be formed only for mining purposes, are companies in which members take no liability for calls on their shares.

Limited companies are divided into public and proprietary companies, the latter being required to have the word "Proprietary" or the abbreviation "Pty." as part of their names. Public companies may be regarded as companies in which the public at large may hold shares; proprietary companies are companies whose membership is limited to 50. The transfer of shares in proprietary companies is restricted, and such companies may not invite the public to subscribe for shares or debentures or to deposit money with the company. Public companies and some proprietary companies are obliged to publish audited accounts, but a class of companies, defined in the Act as "exempt proprietary companies", is excused from this obligation.

#### Foreign Companies

Companies incorporated outside Victoria which have an established place of business, or are carrying on business in Victoria are required to register as "foreign companies".

*Registration Fees*

The following is a summary of the fees for registration payable as from 1st July, 1962 :—

## (1) Companies limited by shares and no liability companies—

Where the nominal capital does not exceed £5,000 .. .. .	£	s.	d.
	20	0	0
Where the nominal capital exceeds £5,000—			
For first £5,000 .. .. .	20	0	0
For every £1,000 of the excess over £5,000 but not exceeding £100,000	1	0	0
For every £1,000 of the excess over £100,000 but not exceeding £500,000	0	10	0
For every £1,000 of the excess over £500,000 .. .. .	0	5	0

## (2) Companies limited by guarantee—

Where the number of members does not exceed twenty .. .. .	5	0	0
Where the number of members exceeds twenty but does not exceed 100 ..	10	0	0
Where the number of members exceeds 100, the above fee of £10 plus 10s. for every 50 members beyond the first 100—maximum fee .. .. .	100	0	0

## (3) Foreign companies—

- (a) Subject to paragraphs (b) and (c) one-half of the appropriate fee shown in paragraph (1) or paragraph (2) above.
- (b) Subject to paragraph (c) where the fee prescribed in paragraph (a) is not applicable .. .. . 100 0 0
- (c) In the case of a corporation authorized by the law of any State or Territory to take in its own name a grant of probate or letters of administration of the estate of a deceased person 50 0 0



*General*

Steady growth was the feature of the Stock Exchange during the year to 30th September, 1961. Turnover of share securities was at a record level; the number of new companies listed was the highest for seven years; the Official List was at an all-time high, both as regards the number of securities and their nominal and market value; and membership increased by 20 to 160.

*Official List*

In the following table, the number of issues (excluding options) and their nominal value are classified according to type of security. Particulars are shown for each of the years ended 30th September, 1958 to 1961.

**MELBOURNE STOCK EXCHANGE—ISSUES LISTED\* AND  
NOMINAL VALUE**

Class of Security	Year Ended 30th September—							
	1958		1959		1960		1961	
	No. of Issues	Nominal Value	No. of Issues	Nominal Value	No. of Issues	Nominal Value	No. of Issues	Nominal Value
	£ mill.	£ mill.	£ mill.	£ mill.	£ mill.	£ mill.	£ mill.	
Commonwealth Loans ..	31	2,970	28	2,956	31	2,964	35	3,076
Semi-Government Loans ..	484	302	539	334	603	339	625	370
Foreign Government Loans ..	7	4	9	5	9	5	9	5
Industrial Company Securities—								
Debentures .. ..	104	69	154	103	231	141	365	191
Unsecured Notes .. ..	148	54	187	76	247	112	292	133
Preference Shares .. ..	366	83	358	84	330	87	316	77
Ordinary Shares .. ..	726	769	764	872	792	966	791	1,139
Mining Company Securities ..	156	80	139	47	131	74	128	80
Total .. ..	2,022	4,331	2,178	4,477	2,374	4,688	2,561	5,071

\* Excludes options.

Commonwealth loan borrowings have shown a marked advance since pre-war years and are now nearly six times the 1939 figure, while semi-government loans have grown nearly ten times over the same period.

Debenture capital has proved a popular method of financing company expansion in recent years, the total of these loans now being £191 mill. compared with only £67 mill. four years ago.

Unsecured notes were first introduced in 1953 as an additional means of raising funds and at once proved popular with investors; in that year there were fourteen issues with a nominal value of £2 mill., but in 1961 there were 292 issues raising £133 mill.

Nominal value of ordinary share capital listed on the Stock Exchange is now £1,139 mill. compared with only £167 mill. in 1939.



There were 61 new companies added to the Official List during the twelve months ended September, 1961, with a nominal capital of £45 mill.; in addition, new capital issues made by companies already on the List amounted to £204 mill. There were 731 commercial and industrial companies and 110 mining companies on the Official List at 30th September, 1961.

### Turnover

The growth in turnover in recent years is shown in the following table. Turnover in Commonwealth loans has decreased sharply due to the introduction of the Official Short-Term Money Market, many of the authorized dealer companies being sponsored by Member Firms of the Stock Exchange. Total loans outstanding in the Short-Term Market throughout Australia rose by £16 mill. to £103·5 mill. during the year ended 30th September, 1961.

### MELBOURNE STOCK EXCHANGE—TURNOVER OF STOCKS AND SHARES

(Mill. Units)

Class of Security	Year Ended 30th September—				
	1957	1958	1959	1960	1961
Commonwealth Loans .. ..	53·6	98·4	181·6	86·5	33·1
Semi-Government Loans .. ..	2·4	3·0	4·4	3·1	2·8
Company Debentures, Unsecured Notes .. ..	1·0	1·4	1·7	1·7	2·2
<b>Total Loan Securities ..</b>	<b>57·0</b>	<b>102·8</b>	<b>187·7</b>	<b>91·3</b>	<b>38·1</b>
Preference Shares .. ..	1·3	1·5	1·8	1·7	1·1
Ordinary Shares, Rights, and Options .. ..	34·3	43·1	71·0	86·6	87·5
Mining .. ..	12·6	8·5	12·4	12·8	12·8
<b>Total Share Securities ..</b>	<b>48·2</b>	<b>53·1</b>	<b>85·2</b>	<b>101·1</b>	<b>101·4</b>

### Conversion to Post-Trading

After a century of trading under the Call Room System, the Stock Exchange introduced "Post-Trading" on 3rd January, 1962. (See Photographic Section). This method brought the Exchange into line with the more modern systems employed overseas and resulted in much more efficient handling of business.

Trading posts were set up in the former Call Room with selected stocks on each post. The advantage of the system is that when the Posts open for the day, any stock can be traded immediately, whereas under the Call Room method securities were dealt in alphabetically. Post-Trading is continuous throughout the day, thus giving investors the convenience of dealing in stocks at any desired time.

### *Probate Noting Service*

The Stock Exchange created this service in July, 1961, and ready acceptance was accorded by listed public companies, 98 per cent. of these having availed themselves of the facilities. At 30th September, 2,092 separate applications for probate noting had been processed. Executors are now able to dispose of securities much earlier than in the past, as they may now have probates covering all company securities in an estate noted on the one day, thereby avoiding the submission of probate documents to individual companies in turn.

### **Instalment Credit for Retail Sales**

An extensive review of instalment credit statistics in relation to financing of retail sales has been made for the purpose of providing a more comprehensive statistical service in this field.

All types of Instalment Credit Schemes in which repayments are made by regular, predetermined instalments are now included in the 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 sale of goods by retail but do not retail goods themselves (called Non-Retail Finance Businesses), information is now 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 even when the retailer sets up a subsidiary company to conduct the financing which was previously done by the retail business itself.

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 1956-57. Because of this, the figures shown below for Retail Businesses are subject to revision. Revisions to data for Non-Retail Finance Businesses also may be necessary from time to time as problems are encountered relating to 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 during recent years in Victoria classified according to type of business and groups of commodities financed :—

**VICTORIA—INSTALMENT CREDIT FOR RETAIL SALES :  
AMOUNTS FINANCED BY COMMODITY GROUPS\*  
(£'000)**

Year Ended 30th June—	Motor Vehicles, Tractors, &c.†	Plant and Machinery ‡	Household and Personal Goods §	Total All Goods
<b>RETAIL BUSINESSES</b>				
1957 .. ..	2,459	358	22,962	25,779
1959   .. ..	3,054	683	37,756	41,493
1960 .. ..	4,227	702	41,235	46,164
1961 .. ..	3,362	548	41,341	45,251
<b>NON-RETAIL FINANCE BUSINESSES</b>				
1957 .. ..	36,039	2,530	9,575	48,144
1959 .. ..	47,951	3,728	13,789	65,468
1960 .. ..	63,999	4,683	11,342	80,024
1961 .. ..	50,788	5,521	9,859	66,168
<b>ALL BUSINESSES</b>				
1957 .. ..	38,498	2,888	32,537	73,923
1959   .. ..	51,005	4,411	51,545	106,961
1960 .. ..	68,226	5,385	52,577	126,188
1961 .. ..	54,150	6,069	51,200	111,419

\* Includes amounts financed on both Hire Purchase and Other Instalment Credit Schemes valued at net cash or list price (excluding hiring charges and insurance).

† Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, motor parts and accessories.

‡ Includes farm machinery and implements, earth-moving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), &c.

§ Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles, and other household and personal goods.

|| Figures for year ended 30th June, 1958, are not available.

The following table shows the balances outstanding in Victoria at the 30th June, 1957 and 1959 to 1961, and the relationship between Retail and Non-Retail Finance businesses in this respect :—

VICTORIA—INSTALMENT CREDIT FOR RETAIL SALES :  
BALANCES OUTSTANDING\*

(£'000)

At 30th June—	Retail Businesses	Non-Retail Finance Businesses	Total All Businesses
1957 .. .. .	21,931	60,042	81,973
1959† .. .. .	42,436	90,000	132,436
1960 .. .. .	53,710	108,641	161,751
1961 .. .. .	60,156	102,192	162,348

\* Includes amounts owing on both Hire Purchase and Other Instalment Credit combined.

† Figures for the year ended 30th June, 1958, are not available.

At 30th June, 1957, of the total balances outstanding in Victoria for all instalment credit £81,973,000—Hire Purchase comprised 94·3 per cent. and Other Instalment Credit 5·7 per cent. The latter has grown steadily since then and at 30th June, 1961, totalled £25,746,000 or 15·9 per cent. of the total instalment credit outstanding balances of £162,348,000. This increase has been continuing.

Cross-classifications of the statistics by type of instalment credit (i.e., Hire Purchase or Other Instalment Credit) and type of business (i.e., Retail Businesses or Non-Retail Finance Businesses) are not available for publication, but much the greater part of Other Instalment Credit is financed by Retail Businesses.

*Retail Hire Purchase Operations in Victoria*

The following table shows the main features of hire purchase operations in Victoria for the years ended 30th June, 1957 and 1959 to 1961.

It should be noted particularly that these statistics cover Hire Purchase Operations by all businesses. In previous issues of this Year Book, statistics have been confined to operations by Non-Retail Finance Businesses only.

## VICTORIA—RETAIL HIRE PURCHASE OPERATIONS

Class of Goods	Year Ended 30th June—			
	1957	1959	1960	1961
<b>NUMBER OF AGREEMENTS MADE</b>				
Motor Vehicles, Tractors, &c. * ..	85,850	107,775	128,625	93,015
Plant and Machinery† ..	8,027	12,078	11,666	10,881
Household and Personal‡	439,158	494,879	494,748	453,145
<b>Total Agreements</b> ..	<b>533,035</b>	<b>614,732</b>	<b>635,039</b>	<b>557,041</b>
<b>VALUE OF GOODS PURCHASED§</b> £'000				
Motor Vehicles, Tractors, &c.* ..	61,248	79,826	99,287	76,329
Plant and Machinery† ..	4,406	6,587	7,725	8,634
Household and Personal‡	29,679	42,332	41,144	36,092
<b>Total Value</b> ..	<b>95,333</b>	<b>128,745</b>	<b>148,156</b>	<b>121,055</b>
<b>AMOUNT FINANCED UNDER AGREEMENTS  </b> £'000				
Motor Vehicles, Tractors, &c.* ..	38,433	50,428	65,509	49,921
Plant and Machinery† ..	2,854	4,302	5,250	5,973
Household and Personal‡	24,566	35,832	34,845	30,654
<b>Total Amount Financed</b> ..	<b>65,853</b>	<b>90,562</b>	<b>105,604</b>	<b>86,548</b>
<b>BALANCES OUTSTANDING AT END OF YEAR ¶</b> £'000				
All Classes of Goods ..	77,261	119,923	143,120	136,602

\* Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, motor parts, and accessories.

† Includes farm machinery and implements, earth-moving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), &c.

‡ Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles, and other household and personal goods.

§ Value at net cash or list price (excluding hiring charges and insurance).

|| Excludes hiring charges and insurance.

¶ Includes hiring charges and insurance.

# Part 10

## TRADE, TRANSPORT, AND COMMUNICATIONS

### *Retail Trade*

#### **Census of Retail Establishments**

##### *General*

Statistics of retail sales have been compiled for the years 1947–48, 1948–49, 1952–53, and 1956–57 from returns supplied by all retail establishments in Australia. A further Census is being taken in respect of the year 1961–62, but the results are not available at the time of going to press.

In general terms, these Censuses have covered the trading activities of establishments which normally sell goods at retail to the general public from shops, rooms, kiosks, and yards. They have been designed principally to cover sales which are for household or personal use. For this reason, sales of farm and industrial machinery and equipment, &c., have been excluded. However, sales of motor vehicles, both new and used, are included.

The latest published Census of Retail Establishments referred to the year ended 30th June, 1957. Its scope and coverage were practically identical with those of the previous Census for the year ended 30th June, 1953. For this reason, it is possible to make a comparison of the results obtained from these Censuses. The first three tables below show this information.

The first table shows the number of establishments selling goods in each of 34 broad commodity groups, the total value of these sales, and the value of sales per head of population. The commodity groups shown are comparable between the two years with two exceptions. These are :—

- (1) The value of sales of all electrical goods was collected as one item in 1952–53, but in 1956–57 particulars were obtained for five separate items. Thus a comparison of the sales figures can be made only by an amalgamation of these items in 1956–57. However, no direct comparison can be made of the number of establishments selling these items.
- (2) In 1956–57, special queries were sent to all establishments which would normally be expected to sell tobacco, cigars, and cigarettes, but which did not report any sales of these items in their returns. As a result of these queries, 652 additional establishments reported sales of these items amounting to £860,000, or 2·9 per cent. of the total sales of tobacco. Most of these sales had originally been reported as sales of groceries or other foodstuff items. As no special queries were made in 1952–53, it is likely that a similar proportion of sales

of tobacco, cigars, and cigarettes was incorrectly reported in that year and consequently would be included in sales of groceries or other items instead of in sales of tobacco, cigars, and cigarettes.

### VICTORIA—CENSUSES OF RETAIL ESTABLISHMENTS : ESTABLISHMENTS AND SALES BY COMMODITY GROUPS\*

Commodity Group†	Number of Establishments‡		Value of Retail Sales			
	1952-53	1956-57	Total		Per Head of Population	
			1952-53	1956-57	1952-53	1956-57
			£'000		£	
<b>Foodstuffs—</b>						
Groceries .. .. .	7,181	8,134	64,727	90,034	27.3	34.1
Butchers' Meat .. ..	2,120	2,589	36,663	50,264	15.5	19.0
Fresh Fruit and Vegetables ..	3,113	3,683	15,854	22,863	6.7	8.7
Bread, Cakes and Pastry .. ..	4,665	6,127	16,940	21,826	7.1	8.3
Confectionery and Ice Cream ..	7,246	8,634	20,289	27,903	8.5	10.6
Other Types of Food .. .. .	2,689	3,952	8,912	13,425	3.8	5.1
<b>Beer, Tobacco—</b>						
Beer, Wine and Spirits .. .. .	2,191	2,119	45,612	63,496	19.2	24.0
Tobacco and Cigarettes .. ..	10,080	13,450	19,967	29,230	8.4	11.1
<b>Clothing, Drapery, Footwear—</b>						
Clothing—Men's and Boys' ..	2,188	2,303	25,964	33,436	10.9	12.7
Clothing—Women's, Girls' and Infants' .. .. .	3,484	3,589	42,914	55,293	18.1	20.9
Drapery, Piece Goods .. .. .	1,699	1,796	17,501	20,989	7.4	8.0
Footwear—Men's and Boys' ..	1,399	1,509	4,779	6,259	2.0	2.4
Footwear—Women's, Girls' and Infants' .. .. .	1,258	1,306	9,058	11,176	3.8	4.2
<b>Hardware, Electrical Goods, Furniture—</b>						
Builders' Hardware and Supplies§	1,472	1,655	16,154	22,079	6.8	8.4
Domestic Hardware and Kitchenware .. .. .	2,428	2,714	14,172	18,217	6.0	6.9
Musical Instruments and Records ..		539		2,768		1.0
Radios and Radiograms .. .. .		1,262		5,023		1.9
Television Receivers, &c. .. ..	1,929	777	20,837	9,848	8.8	3.7
Domestic Refrigerators .. .. .		1,160		7,121		2.6
Other Electrical Goods .. .. .		2,142		10,488		4.0
Furniture (Incl. Mattresses) .. ..	962	1,002	15,078	18,891	6.4	7.2
Floor Coverings .. .. .	666	738	7,734	9,453	3.3	3.6
Business Machines and Equipment ..	80	92	3,751	5,988	1.6	2.3
<b>Other Goods—</b>						
Newspapers, Books and Stationery ..	2,667	3,026	16,497	21,501	6.9	8.1
Chemists' Goods (Incl. Cosmetics) ..	2,394	2,871	14,374	21,281	6.1	8.1
Sporting Requisites and Travel Goods .. .. .	1,062	1,197	3,049	4,292	1.3	1.6
Jewellery, Clocks, &c. .. .. .	1,130	1,254	6,292	7,943	2.6	3.0
Grain, Feed and Fertilizers .. ..	1,066	1,197	11,413	13,682	4.8	5.2
Other Goods .. .. .	2,876	2,997	17,402	19,277	7.3	7.3
<b>Total (Excluding Motor Vehicles) .. .. .</b>			475,933¶	644,046¶	200.6	244.0
<b>Motor Vehicles—**</b>						
Tractors .. .. .	389	395	6,340	7,268	2.7	2.8
<b>Motor Vehicles (Incl. Motor Cycles)—</b>						
New .. .. .	848	847	44,635	68,245	18.8	25.8
Used .. .. .	824	1,068	18,112	37,099	7.6	14.1
Motor Parts and Accessories .. ..	2,252	2,763	15,731	19,728	6.6	7.4
Petrol and Oils .. .. .	2,891	3,536	23,920	35,134	10.1	13.3
<b>TOTAL MOTOR VEHICLES .. .. .</b>			108,738	167,474	45.8	63.4
<b>GRAND TOTAL .. .. .</b>			584,671	811,520	246.4	307.4

\* Table refers to retail establishments with total retail sales of £500 or more.

† Only main commodities descriptive of the particular groupings are shown. For further details see Retail Census Bulletins.

‡ Number of establishments selling goods in each commodity group.

§ Excludes basic building materials, e.g., timber, tiles, joinery, cement.

|| Establishments showing sales in more than one commodity group have been included more than once. The totals of these columns cannot therefore be taken as the number of retail establishments in Victoria. (See table on page 735.)

¶ See footnote || to table on page 735.

\*\* Excludes farm machinery and implements, earthmoving equipment, &c.

The second table shows the number of establishments, the value of retail sales and the value of stocks on hand at 30th June each year. In classifying establishments according to type of business, the description given by the proprietor was used as a guide, but the classification was based mainly on the commodity group in which the largest item of turnover was recorded on the census form.

VICTORIA—CENSUSES OF RETAIL ESTABLISHMENTS :  
ESTABLISHMENTS, SALES, AND STOCKS ACCORDING TO  
TYPE OF BUSINESS\*

Main Type of Business	Number of Establishments		Value of Retail Sales†		Value of Retail Stocks at 30th June—‡		
	1952-53	1956-57	1952-53	1956-57	1953	1957	
					£'000		
Food Stores—							
Grocers .. .. .	5,284	5,202	79,717	109,119	9,863	12,406	
Butchers .. .. .	1,938	2,242	36,728	50,126	201	523	
Fruiters .. .. .	1,845	2,036	16,266	23,203	161	446	
Bakers .. .. .	1,503	1,371	14,444	17,029	210	384	
Confectioners and Milk Bars	2,802	3,128	20,065	31,768	962	1,712	
Cafes .. .. .	345	693	1,222	3,542	67	211	
Fishmongers and Poulterers	421	504	2,537	3,998	13	36	
Other Food Stores .. .. .	521	467	5,023	6,104	148	273	
Hotels, Tobacconists—							
Hotels and Wine Saloons .. ..	1,855	1,844	46,050	65,878	1,560	2,042	
Tobacconists .. .. .	490	373	4,490	3,738	390	360	
Tobacconist and Hairdressers	1,126	1,133	5,368	5,244	255	509	
Clothiers, Drapers—							
Clothiers and Drapers .. .. .	3,967	4,187	114,216	146,707	24,548	32,180	
Footwear Stores .. .. .	621	710	9,679	12,302	2,636	4,272	
Hardware, Electrical Goods, Furniture Stores—							
Domestic and Builders' Hardware	1,209	1,447	24,758	32,871	5,925	8,060	
Electrical Goods, &c. .. .. .	854	1,000	16,273	27,326	3,149	4,816	
Furniture and Floor Coverings	681	691	19,625	25,147	4,344	6,206	
Business Machines .. .. .	47	47	3,646	5,731	923	1,168	
Other Goods Stores—							
Newsagents and Booksellers ..	877	925	14,421	19,196	1,846	2,327	
Chemists .. .. .	1,025	1,174	11,911	17,790	2,291	3,343	
Sports Goods .. .. .	140	178	1,883	3,012	673	754	
Watchmakers and Jewellers ..	509	560	5,130	6,538	2,392	3,199	
Grain and Produce Merchants ..	267	251	11,693	14,272	1,172	1,406	
Cycle Stores .. .. .	232	208	946	1,319	209	282	
Florists and Nurserymen .. ..	371	384	1,979	2,295	110	153	
Other Types of Business .. .. .	1,218	1,145	8,586	10,612	1,450	2,325	
Total (Excluding Motor Vehicle Dealers)	30,148§	31,900§	476,656	644,867	65,498	89,393	
Motor Vehicle Dealers—							
Tractor Dealers .. .. .	57	39	3,397	3,081	915	1,038	
New Motor and Motor Cycle Dealers	} 2,268	2,827	88,025	136,476	10,137	14,216	
Garages and Service Stations ..		219	245	5,675	7,319	1,138	1,693
Motor Parts and Tyre Dealers ..		172	257	10,918	19,777	787	2,190
Used Motor Vehicle Dealers .. ..							
GRAND TOTAL .. .. .	32,864§	35,268§	584,671	811,520	78,475	108,530	

\* Table refers to establishments with total retail sales of £500 or more.

† Total value of all commodities sold by retail.

‡ Total value of all goods held for retail sale (including stocks of materials for use in repairs to customers' goods and foodstuffs for the provision of meals and refreshments).

§ Figures represent total number of retail establishments (as defined) in Victoria. See also footnote || on page 734.

|| Figures differ from those contained in the table on page 734 in that they include retail sales of motor vehicles, etc., made by establishments whose main type of business is other than motor vehicles, and exclude retail sales of goods, other than motor vehicles, made by establishments whose main type of business is motor vehicles.



The third table shows a comparison of the number of retail establishments and the value of retail sales in Statistical Divisions in Victoria for the years 1952-53 and 1956-57 :—

VICTORIA—CENSUSES OF RETAIL ESTABLISHMENTS :  
RETAIL SALES IN STATISTICAL DIVISIONS

Statistical Division	No. of Establishments		Value of Retail Sales	
	1952-53	1956-57	1952-53	1956-57
			£'000	
Metropolitan .. .. .	20,620	22,189	383,214	541,362
Central .. .. .	2,572	2,854	38,796	54,938
North-Central .. .. .	984	1,021	12,013	15,166
Western .. .. .	2,528	2,599	43,764	58,561
Wimmera .. .. .	942	962	14,883	17,599
Mallee .. .. .	810	852	15,947	19,477
Northern .. .. .	2,093	2,204	32,779	43,780
North-Eastern .. .. .	945	994	14,785	20,320
Gippsland .. .. .	1,370	1,593	28,490	40,317
Total .. .. .	32,864	35,268	584,671	811,520

NOTE.—For boundaries of Statistical Divisions, see map opposite page 114.

The table which follows shows, for the year 1956-57, the number of retail establishments and the value of retail sales classified according to total retail sales size, in the Metropolitan Area and the remainder of the State :—

VICTORIA—NUMBER OF RETAIL ESTABLISHMENTS AND  
VALUE OF RETAIL SALES CLASSIFIED ACCORDING TO  
TOTAL RETAIL SALES SIZE, 1956-57\*

Total Retail Sales Size	Number of Retail Establishments			Value of Retail Sales		
	Metropolitan Area	Remainder of State	Total State	Metropolitan Area	Remainder of State	Total State
Under £1,000 .. .. .	556	369	925	402	£'000 265	667
£1,000 and under £3,000 .. .. .	2,350	1,440	3,790	4,648	2,812	7,460
£3,000 and under £5,000 .. .. .	2,466	1,392	3,858	9,785	5,524	15,309
Under £5,000 .. .. .	5,372	3,201	8,573	14,835	8,601	23,436
£5,000 and under £10,000 .. .. .	5,447	2,843	8,290	39,873	20,867	60,740
Under £10,000 .. .. .	10,819	6,044	16,863	54,708	29,468	84,176
£10,000 and under £20,000 .. .. .	5,844	3,538	9,382	82,562	50,190	132,752
Under £20,000 .. .. .	16,663	9,582	26,245	137,270	79,658	216,928
£20,000 and under £50,000 .. .. .	3,892	2,521	6,413	117,213	75,096	192,309
Under £50,000 .. .. .	20,555	12,103	32,658	254,483	154,754	409,237
£50,000 and under £100,000 .. .. .	984	607	1,591	67,471	41,461	108,932
Under £100,000 .. .. .	21,539	12,710	34,249	321,954	196,215	518,169
£100,000 and under £250,000 .. .. .	478	294	772	71,574	42,021	113,595
Under £250,000 .. .. .	22,017	13,004	35,021	393,528	238,236	631,764
£250,000 and over .. .. .	172	75	247	147,834	31,922	179,756
Total .. .. .	22,189	13,079	35,268	541,362	270,158	811,520

\* Table refers to establishments with total retail sales of £500 or more.

Traders were also asked to supply details of the number of persons working at the establishment on the last pay day in June, 1957. They were requested to provide separate details of persons working mainly on retail activities and others engaged on wholesaling, manufacturing, &c. Persons who were normally working in the business but were absent through sickness or on holidays were included in the figures. The following table shows the number of males, females, and the total number of persons working mainly on retail activities on the last pay day in June, 1957, classified according to the main type of business and category of employment :—

VICTORIA—NUMBER OF PERSONS WORKING MAINLY ON RETAIL ACTIVITIES ON THE LAST PAY DAY IN JUNE, 1957

Main Type of Business	Category of Employment					
	Owners	Members of Family *	Paid Employees †	Total		Total
				Full Time	Part Time	
MALES						
Food Stores—						
Grocers .. .. .	4,357	441	5,090	9,146	742	9,888
Butchers .. .. .	2,419	148	4,399	6,742	224	6,966
Fruiterers .. .. .	2,136	196	684	2,746	270	3,016
Bakers .. .. .	1,020	120	1,938	2,947	131	3,078
Confectioners and Milk Bars .. .. .	2,364	389	649	2,556	846	3,402
All Other Food Stores ..	1,535	169	1,184	2,593	295	2,888
Hotels, &c.—						
Hotels, Wine Saloons, &c.	1,502	297	7,307	6,773	2,333	9,106
Clothiers, Drapers, &c.—						
Clothiers and Drapers ..	1,887	106	9,576	10,820	749	11,569
Footwear Stores .. .. .	437	26	635	1,013	85	1,098
Hardware, Electrical Goods, &c.—						
Domestic and Builders' Hardware Stores ..	1,141	89	3,464	4,286	408	4,694
Electrical Goods, Radios and Musical Instrument Stores .. .. .	784	41	1,920	2,592	153	2,745
Furniture and Floor Coverings Stores ..	473	22	2,172	2,591	76	2,667
Other Goods Stores—						
Newsagents and Booksellers .. .. .	846	86	794	1,471	255	1,726
Chemists .. .. .	1,041	46	1,120	1,854	353	2,207
Other .. .. .	3,703	192	4,615	7,968	542	8,510
Total (Excluding Motor Vehicle Dealers, Garages and Service Stations, &c.) .. .. .	25,645	2,368	45,547	66,098	7,462	73,560
Total Motor Vehicle Dealers, Garages and Service Stations, &c. .. .. .	3,286	251	13,414	15,962	989	16,951
Total .. .. .	28,931	2,619	58,961	82,060	8,451	90,511

For footnotes see end of this table on page 739.

VICTORIA—NUMBER OF PERSONS WORKING MAINLY ON RETAIL ACTIVITIES ON THE LAST PAY DAY IN JUNE, 1957—*continued*

Main Type of Business	Category of Employment					
	Owners	Members of Family *	Paid Employees †	Total		
				Full Time	Part Time	Total
<b>FEMALES</b>						
<b>Food Stores—</b>						
Grocers .. .. .	2,694	1,111	4,086	6,107	1,784	7,891
Butchers .. .. .	298	225	781	953	351	1,304
Fruiterers .. .. .	1,014	742	1,506	2,004	1,258	3,262
Bakers .. .. .	805	342	1,913	2,297	763	3,060
Confectioners and Milk Bars .. .. .	2,325	853	2,460	3,701	1,937	5,638
All Other Food Stores ..	890	487	2,478	2,594	1,261	3,855
<b>Hotels, &amp;c.—</b>						
Hotels, Wine Saloons, &c.	1,021	512	6,107	6,364	1,276	7,640
<b>Clothiers, Drapers, &amp;c.—</b>						
Clothiers and Drapers ..	2,572	465	18,869	17,713	4,193	21,906
Footwear Stores .. .. .	233	82	1,091	1,173	233	1,406
<b>Hardware, Electrical Goods, &amp;c.—</b>						
Domestic and Builders' Hardware Stores .. .. .	435	176	1,215	1,398	428	1,826
Electrical Goods, Radios and Musical Instrument Stores .. .. .	183	137	805	895	230	1,125
Furniture and Floor Coverings Stores .. .. .	129	55	793	855	122	977
<b>Other Goods Stores—</b>						
Newsagents and Book-sellers .. .. .	561	232	1,411	1,754	450	2,204
Chemists .. .. .	206	159	2,067	1,883	549	2,432
Other .. .. .	1,021	498	2,673	3,317	875	4,192
<b>Total (Excluding Motor Vehicle Dealers, Garages and Service Stations, &amp;c.) .. .. .</b>	<b>14,387</b>	<b>6,076</b>	<b>48,255</b>	<b>53,008</b>	<b>15,710</b>	<b>68,718</b>
<b>Total Motor Vehicle Dealers, Garages and Service Stations, &amp;c. .. .. .</b>	<b>425</b>	<b>332</b>	<b>2,095</b>	<b>2,357</b>	<b>495</b>	<b>2,852</b>
<b>Total .. .. .</b>	<b>14,812</b>	<b>6,408</b>	<b>50,350</b>	<b>55,365</b>	<b>16,205</b>	<b>71,570</b>
<b>PERSONS</b>						
<b>Food Stores—</b>						
Grocers .. .. .	7,051	1,552	9,176	15,253	2,526	17,779
Butchers .. .. .	2,717	373	5,180	7,695	575	8,270
Fruiterers .. .. .	3,150	938	2,190	4,750	1,528	6,278
Bakers .. .. .	1,825	462	3,851	5,244	894	6,138
Confectioners and Milk Bars .. .. .	4,689	1,242	3,109	6,257	2,783	9,040
All Other Food Stores ..	2,425	656	3,662	5,187	1,556	6,743
<b>Hotels, &amp;c.—</b>						
Hotels, Wine Saloons, &c.	2,523	809	13,414	13,137	3,609	16,746
<b>Clothiers, Drapers, &amp;c.—</b>						
Clothiers and Drapers ..	4,459	571	28,445	28,533	4,942	33,475
Footwear Stores .. .. .	670	108	1,726	2,186	318	2,504
<b>Hardware, Electrical Goods, &amp;c.—</b>						
Domestic and Builders' Hardware Stores .. .. .	1,576	265	4,679	5,684	836	6,520
Electrical Goods, Radios and Musical Instrument Stores .. .. .	967	178	2,725	3,487	383	3,870
Furniture and Floor Coverings Stores .. .. .	602	77	2,965	3,446	198	3,644

For footnotes see end of this table on page 739.

VICTORIA—NUMBER OF PERSONS WORKING MAINLY ON RETAIL ACTIVITIES ON THE LAST PAY DAY IN JUNE, 1957—*continued*

Main Type of Business	Category of Employment					
	Owners	Members of Family *	Paid Employees †	Total		
				Full Time	Part Time	Total
<i>PERSONS—continued</i>						
Other Goods Stores— Newsagents and Book-sellers .. .. .	1,407	318	2,205	3,225	705	3,930
Chemists .. .. .	1,247	205	3,187	3,737	902	4,639
Other .. .. .	4,724	690	7,288	11,285	1,417	12,702
Total (Excluding Motor Vehicle Dealers, Garages and Service Stations, &c.) .. .. .	40,032	8,444	93,802	119,106	23,172	142,278
Total Motor Vehicle Dealers, Garages and Service Stations, &c. .. .. .	3,711	583	15,509	18,319	1,484	19,803
Grand Total .. .. .	43,743	9,027	109,311	137,425	24,656	162,081

\* Includes members of owner's family and friends assisting in the business but not receiving a definite wage for their work.

† Includes friends and relatives who are paid a definite wage.

### 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 40 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 1954-55 to 1960-61 :—

### VICTORIA—VALUE OF RETAIL SALES (£ Mill.)

Commodity Group	Year Ended 30th June—						
	1955	1956	1957	1958*	1959*	1960*	1961*
Groceries .. .. .	79·4	86·3	90·0	92·2	101·8	109·6	122·0
Butchers' Meat .. .. .	43·4	46·1	50·3	49·5	52·6	57·7	64·4
Other Food† .. .. .	73·0	79·8	86·0	89·4	92·5	101·6	108·6
Total Food and Groceries .. .. .	195·8	212·2	226·3	231·1	246·9	268·9	295·0
Beer, Wine and Spirits .. .. .	53·8	59·0	63·5	65·7	68·2	71·2	74·1
Clothing, Drapery and Footwear .. .. .	116·5	121·8	127·2	133·8	139·8	153·8	160·2
Hardware, China, and Glassware‡	37·0	39·1	40·3	41·4	45·6	47·2	48·3
Electrical Goods and Radios .. .. .	26·8	30·0	35·2	43·1	50·5	52·0	49·5
Furniture and Floor Coverings .. .. .	25·8	28·2	28·3	30·8	30·3	36·7	36·3
Other Goods§ .. .. .	104·7	116·7	123·2	124·0	131·5	145·3	154·3
Total (Excl. Motor Vehicles, &c.)	560·4	607·0	644·0	669·9	712·8	775·1	817·7
Motor Vehicles, Parts, Petrol, &c.	146·2	164·6	167·5	188·4	197·4	243·2	240·8
Total .. .. .	706·6	771·6	811·5	858·3	910·2	1,018·3	1,058·5

\* Preliminary figures.

† Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, fish, &c., but excludes some delivered milk and bread.

‡ Excludes basic building materials (e.g., timber, building sheets, tiles, joinery, cement).

§ Includes tobacco, cigarettes, newspapers, books and stationery, chemists' goods, grain and produce, jewellery, &c.

|| Excludes farm machinery and implements, earth-moving equipment, &c.

The total value of retail sales in the Commonwealth in 1960–61 was £3,717 mill. Sales in Victoria represented 28 per cent. of this figure.

## *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 the 1st January, 1901.

The first Commonwealth Customs Tariff was introduced by Resolution on the 8th October, 1901, from which date the uniform duties came into effect throughout Australia. The Tariff Act received assent on the 16th September, 1902. The tariff has been extensively altered since that date, and that at present in operation is the Customs Tariff 1933–61.

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 imports from certain countries of the British Commonwealth. 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.

Australia has three classes of tariff : the British Preferential Tariff, the Intermediate Tariff, and the General Tariff.

#### *British Preferential Tariff*

British Preferential Rates of duty apply to goods, the produce, or manufacture of the United Kingdom, which comply with the conditions affecting the grant of preference, provided that the intended destination of the goods, when originally shipped from the United Kingdom, was

Australia. The British Preferential Tariff has been extended by trade agreements and by tariff legislation to cover all except a small number of commodities imported from Canada, New Zealand, the Territory of Papua, and the Trust Territory of New Guinea. In relation to specified goods, the British Preferential Tariff applies also to Ceylon, Ghana, the Federation of Malaya, Singapore, the Federation of the West Indies, and to most of the British non-self-governing colonies, protectorates, and trust territories.

### *Intermediate Tariff*

The effective application of the Intermediate Tariff dates from the 1st January, 1937, and results from the conclusion of trade agreements with Belgium, Czechoslovakia, and France. Benefits from this tariff apply to countries with which Australia has trade agreements and to countries which accord Australia reciprocal most-favoured-nation tariff treatment as a result of agreements between those countries and the United Kingdom. The tariff has also been extended to countries to which Australia has no formal obligation to accord most-favoured-nation treatment.

The countries and the particular tariff items to which the tariff applies are specified by Customs Proclamation.

### *General Tariff*

The General Tariff applies to all goods other than those to which the British Preferential Tariff, the Intermediate Tariff, or special rates under trade agreements apply.

### *Primage Duty*

In addition to duties imposed by the Customs Tariff 1933-61, *ad valorem* duties at various rates are charged on some goods according to the type of goods and their origin. Goods, the produce or manufacture of New Zealand, Norfolk Island, Fiji, Cocos Islands, Christmas Island (Indian Ocean), the Territory of Papua, and the Trust Territory of 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 Parliament on the formulation and implementation of tariff policy.

*Trade Agreements*

Australia has numerous trade agreements with oversea countries, the principal agreements being outlined below :—

Country	Main Features of Agreement
United Kingdom . .	Dated 1957. 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 British Preferential Tariff treatment with certain specified exceptions as for 1931 agreement plus concessions granted in 1932 and 1937.
New Zealand . .	Dated 1933. Mutual accord of British Preferential Tariff treatment with certain specified exceptions.
Federation of Rhodesia and Nyasaland	Dated 1955. Preference for Australian exports (mainly primary produce). British Preferential Tariff treatment on exports to Australia with exclusive special tariff on unmanufactured tobacco.
Federation of Malaya	Dated 1958. Exchange of British Preferential treatment with special protection for Australia's wheat and flour markets in Malaya, and for Malaya's rubber market in Australia.
Japan . . . .	Dated 1957. Mutual exchange of most-favoured-nation treatment. Japan to accord Australian wool, wheat, barley, and other primary exports a highly preferential treatment.
Federal Republic of Germany	Dated 1959. Import quotas for Australian products. Allows exports of German flour to certain Australian flour markets.
Indonesia . .	Dated 1959. Records desirability of expanding trade between Australia and Indonesia. Gives recognition to importance of flour trade from Australia to Indonesia.

In addition to the above trade agreements, Australia has entered into bilateral trade agreements with the Union of South Africa (now the Republic of South Africa), Brazil, Czechoslovakia, France, Greece, and Switzerland. Summaries of the texts of these agreements have been given in previous issues of the Victorian Year Book. Simple reciprocal most-favoured-nation trade agreements were concluded with Israel in 1951 and Iceland in 1952.

*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 1st January, 1948. There are now 40 contracting parties to the agreement. They comprise most of the world's larger trading nations.

Five 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), wireless valves, and cathode ray tubes (picture tubes) as used in television receiving sets.

### *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 1901-54*.

Since March, 1952, import restrictions have been varied broadly in line with Australia's balance of trade position, and as from February, 1960, only about 10 per cent. of imports have been subject to control.

### *Export Controls*

The Customs Act makes provision for the prohibition, either absolutely, or to a certain place, or unless specified conditions obtain, of the exportation from Australia of certain goods. The *Banking Act 1945-53* makes provision to ensure that the full proceeds of exports are received, in a manner prescribed, into the Australian banking system.

### **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, 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 telegraphic transfer selling rate for £100, Australia on London, was stabilized at £125 10s. in 1931 and since then it has remained unchanged. 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.



### Overseas Trade of Victoria

#### General

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 1956-57 to 1960-61 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 Ended 30th June—	Imports	Exports			Excess of Imports
		Australian Produce	Re-exports	Total	
1957 ..	254,946	253,151	2,601	255,752	806*
1958 ..	282,713	215,106	3,267	218,373	64,340
1959 ..	291,297	216,224	3,327	219,551	71,746
1960 ..	339,349	240,299	3,771	244,070	95,279
1961 ..	399,972	236,351	10,620	246,971	153,001

\* Denotes excess of exports.

That portion of the value of Australian trade handled at Victorian ports for each of the five years 1956-57 to 1960-61 is shown in the following table :—

#### VALUE OF AUSTRALIAN TRADE, AND PORTION HANDLED AT VICTORIAN PORTS

Year Ended 30th June—	Australian Trade			Proportion of Australian Trade Handled at Victorian Ports		
	Imports	Exports	Total	Imports	Exports	Total
		£'000 f.o.b.			%	
1957 ..	718,991	992,906	1,711,897	35.5	25.8	29.8
1958 ..	791,940	817,946	1,609,886	35.7	26.7	31.1
1959 ..	796,599	811,463	1,608,062	36.6	27.1	31.8
1960 ..	926,393	937,681	1,864,074	36.6	26.0	31.3
1961 ..	1,087,577	968,843	2,056,420	36.8	25.5	31.5

*Classification of Oversea Imports and Exports*

The following table shows value of imports and exports for the years 1958-59 to 1960-61 grouped in 21 statistical classes :—

VICTORIA—CLASSIFICATION OF OVERSEA IMPORTS AND EXPORTS

(£'000 f.o.b.)

Classification	Imports			Exports		
	1958-59	1959-60	1960-61	1958-59	1959-60	1960-61
I. Foodstuffs of Animal Origin	2,465	3,222	3,838	52,018	54,759	47,839
II. Foodstuffs of Vegetable Origin	9,965	10,152	10,830	39,972	34,935	47,230
III. Spirituous and Alcoholic Liquors	420	237	453	656	602	586
IV. Tobacco and Preparations thereof	6,059	4,314	5,518	189	32	28
V. Live Animals	103	134	97	32	64	95
VI. Animal Substances	2,307	3,100	3,568	94,591	118,099	105,924
VII. Vegetable Substances and Fibres	7,305	7,567	7,775	132	128	151
VIII. (a) Yarns and Manufactured Fibres	8,348	9,993	13,883	559	829	784
(b) Textiles	26,089	30,494	32,872	308	352	476
(c) Apparel	4,312	5,325	6,953	143	101	167
IX. Oils, Fats and Waxes	36,587	38,119	36,973	8,810	9,390	7,619
X. Pigments, Paints and Varnishes	2,889	2,784	2,965	157	205	315
XI. Rocks, Minerals and Hydrocarbons	2,095	2,302	2,084	468	952	1,499
XII. (a) Metals and Metal Manufactures (Except Electrical Appliances and Machinery)	69,310	78,576	96,754	5,993	7,393	9,751
(b) Dynamo Electrical Machinery and Appliances	8,373	11,402	13,316	868	734	1,067
(c) Machines and Machinery (Except Dynamo Electrical)	35,979	47,449	58,178	2,968	3,842	4,266
XIII. (a) Rubber and Rubber Manufactures	7,392	10,387	10,429	395	420	534
(b) Leather and Leather Manufactures	352	483	681	1,446	1,376	1,087
XIV. Wood and Wicker	3,700	4,215	5,098	210	214	197
XV. Earthenware, Cement, China, Glass, &c.	4,284	5,173	6,230	100	103	225
XVI. (a) Pulp, Paper and Board	11,767	14,633	17,869	221	218	337
(b) Paper Manufactures and Stationery	4,609	4,729	5,795	462	540	583
XVII. Sporting Material, Toys, Jewellery, &c.	2,870	3,629	4,267	251	300	501
XVIII. Optical, Surgical, and Scientific Instruments, &c.	3,758	4,849	5,603	602	832	1,004
XIX. Chemicals, Medicinal and Pharmaceutical Products, &c.	11,651	14,223	17,081	2,899	2,873	2,912
XX. Miscellaneous	18,211	21,739	30,718	5,094	4,774	11,789
Total Merchandise	291,200	339,230	399,828	219,544	244,067	246,966
XXI. Gold and Silver, Bronze Specie	97	119	144	7	3	5
Grand Total	291,297	339,349	399,972	219,551	244,070	246,971

The percentages which the value of the more important classes bore to the total value of merchandise imported during 1960-61 were as follows :—Yarns and manufactured fibres, textiles, and apparel, 13 per cent.; metal manufactures and machinery, 42 per cent.; oils, fats, and waxes, 9 per cent.; paper, paper manufactures, and stationery, 6 per cent.

Victoria's export trade comprises largely agricultural, dairying, and pastoral products which in 1960-61 amounted to 82 per cent. of merchandise exports. Wool alone amounted to 37 per cent.

## Recorded Values of Principal Articles Imported

The following table shows the recorded values of the principal articles imported into Victorian ports for the years 1958-59 to 1960-61 :—

## VICTORIA—PRINCIPAL ARTICLES IMPORTED FROM OVERSEAS

Article and Unit of Quantity	Quantity			Value		
	1958-59	1959-60	1960-61	1958-59	1959-60	1960-61
		'000			£'000 f.o.b.	
Fish .. .. . lb.	15,530	20,852	21,433	1,934	2,500	2,803
Coffee, Raw and Kiln Dried .. lb.	13,529	14,690	13,428	2,011	1,862	1,557
Tea .. .. . lb.	23,005	23,129	22,701	5,450	4,919	4,697
Tobacco, Unmanufactured .. lb.	16,084	11,937	15,121	5,784	3,845	5,067
Cotton, Raw .. .. . lb.	13,825	13,407	12,925	1,725	1,588	1,695
Wool .. .. . lb.	5,208	4,963	5,697	1,088	1,306	1,508
Sisal Fibre .. .. . cwt.	259	346	284	1,217	1,138	1,640
Cotton Yarns—No. 50 Count and Finer .. .. . lb.	3,643	3,675	3,966	1,542	1,406	1,650
Sewing Threads .. .. . lb.	1,282	1,379	1,897	1,079	1,101	1,599
Nylon and Other Polyamides—Yarns Known as Raw .. lb.	603	1,323	1,702	597	1,086	1,468
Corn and Flour Sacks .. doz.	1,034	883	1,103	1,234	1,038	2,047
Cotton Piecegoods—Grey Unbleached .. sq. yd.	16,060	19,442	19,778	1,430	1,556	1,903
Bleached, Printed, Dyed, or Coloured .. sq. yd.	68,141	76,222	77,428	9,790	11,111	11,419
Carpets and Carpeting .. sq. yd.	1,388	1,737	2,121	1,892	2,288	3,032
Petroleum, Crude .. .. . gall.	950,402	1,069,857	1,124,463	26,227	27,756	26,477
Motor Spirit .. .. . gall.	73,852	38,965	53,983	4,055	3,306	2,803
Power Kerosene .. .. . gall.	15,902	19,004	16,310	903	1,006	816
Mineral Lubricating Oil .. gall.	15,487	16,958	18,878	2,065	2,245	2,802
Dyes, Including Organic Pigment Dyestuffs <i>n.e.i.</i> .. lb.	1,775	2,000	1,911	1,229	1,468	1,438
Iron and Steel—Bar and Rod .. cwt.	112	95	422	1,099	1,250	2,380
Plate and Sheet—Plain .. cwt.	145	244	1,557	1,855	1,713	5,913
—Tinned .. cwt.	829	478	797	4,099	2,105	3,891
—Galvanised .. cwt.	61	111	212	265	491	1,006
Beams and Girders .. cwt.	69	187	446	180	503	1,179
Hand Tools .. .. .	..	..	..	1,045	1,300	1,315
Aeroplanes .. .. .	..	..	..	8,236	8,184	2,755
Aircraft Parts .. .. .	..	..	..	3,883	3,567	3,206
Motor Vehicles, Chassis, Bodies, and Parts .. .. .	..	..	..	37,717	45,947	52,667
Radio and Television Equipment .. .. .	..	..	..	690	1,884	1,959
Tractors—Crawler Type .. .. .	..	..	..	1,148	1,498	1,437
—Wheeled Type .. .. .	..	..	..	2,781	4,046	3,950
Tractor Parts .. .. .	..	..	..	2,025	2,401	2,894
Knitting Machines .. .. .	..	..	..	1,120	961	1,419
Bearings, Roller and Ball .. .. .	..	..	..	2,226	2,543	3,460
Crude Rubber (Including Crepe and Latex) .. .. . lb.	38,589	39,800	37,646	4,565	6,548	5,461
Synthetic Rubber (Including Latex) .. .. . lb.	12,647	18,525	22,975	1,393	2,089	2,554
Timber, Undressed—Douglas Fir .. sup. ft.	26,526	32,299	30,417	1,005	1,477	1,402
Crockery .. .. .	61	..	..	1,165	1,108	1,138
Plate Glass, Polished and Patent .. .. . sq. ft.	5,312	6,935	7,084	1,071	1,359	1,408
Pulp for Paper-making .. ton	46	61	66	2,398	3,025	3,477
Newsprinting Paper, Not Glazed, etc. .. .. . ton	65	76	91	4,685	5,487	6,284
Transparent Cellulose .. lb.	4,501	6,426	6,195	1,209	1,717	1,694
Books, Magazines, etc. .. .. .	..	..	..	3,072	3,278	3,772
Rock Phosphate .. .. . ton	498	472	555	1,399	1,305	1,514
Polyethylene (Polythene) Resin .. .. . lb.	3,237	5,936	10,475	619	979	1,523
Polyamide (Nylon, etc.) Resins .. .. . lb.	4,914	6,501	7,303	1,690	2,159	2,446
Army, Navy, and Air Force Stores and Equipment .. .. .	..	..	..	2,363	2,320	1,403
Outside Packages .. .. .	..	..	..	5,380	6,503	7,417
All Other Articles .. .. .	..	..	..	119,662	149,077	192,627
<b>Total Imports</b> .. .. .	..	..	..	<b>291,297</b>	<b>339,349</b>	<b>399,972</b>

NOTE.—In the above table, separate details are shown of articles for which the value of imports amounted to more than £1 mill. in any one of the three years.

## Recorded Values of Principal Exports

The following table shows the recorded values of the principal articles exported to overseas countries from Victorian ports during each of the years 1958-59 to 1960-61 :—

## VICTORIA—PRINCIPAL ARTICLES EXPORTED OVERSEAS

Article and Unit of Quantity	Quantity			Value		
	1958-59	1959-60	1960-61	1958-59	1959-60	1960-61
	'000			£'000 f.o.b.		
<b>Meats Preserved by Cold Process—</b>						
Beef and Veal .. .. lb.	54,600	63,081	41,652	7,295	8,799	5,934
Lamb .. .. lb.	44,638	29,440	34,209	3,737	2,036	3,122
Mutton .. .. lb.	41,854	47,512	50,042	3,692	3,203	4,680
Rabbits and Hares—Skinned lb.	21,598	17,934	13,972	2,261	2,067	1,743
<b>Meats, Tinned—</b>						
Beef or Veal .. .. lb.	42,110	30,387	21,689	4,420	3,269	2,693
Mutton .. .. lb.	6,200	17,079	4,918	621	1,845	543
Sausage Casings—Natural Bundle	1,591	1,625	1,523	1,522	1,189	1,198
<b>Milk and Cream—</b>						
Preserved, Sweetened .. lb.	42,619	49,145	36,998	2,951	3,421	2,463
Dried or in Powdered Form—						
Full Cream .. .. lb.	7,503	7,791	8,224	1,010	1,075	1,377
Skim .. .. lb.	31,384	41,891	29,240	1,210	1,788	1,194
Butter .. .. lb.	106,397	104,898	100,219	15,653	17,872	14,633
Cheese .. .. lb.	16,648	20,933	22,584	2,446	2,839	2,935
Wheat .. .. ton	247	255	665	6,364	6,249	16,333
Barley .. .. ton	96	36	115	2,321	692	2,178
Oats .. .. ton	104	91	121	2,008	2,029	2,370
White Flour—Plain .. cental	3,559	3,497	4,271	5,346	4,867	6,176
Malt .. .. lb.	46,599	41,803	78,051	1,101	989	1,878
<b>Fruit, Fresh—</b>						
Pears .. .. bush.	747	916	839	1,269	1,467	1,479
Dried—Sultanas .. .. lb.	124,073	79,570	90,771	9,043	5,910	5,702
Tinned—Peaches .. lb.	33,545	35,174	19,988	2,368	2,180	1,239
—Pears .. .. lb.	73,228	81,146	80,661	4,996	5,354	5,306
<b>Sheep and Lamb Skins with Wool on</b> .. .. lb.	52,890	71,031	71,950	5,718	9,752	9,166
<b>Wool—</b>						
Greasy .. .. lb.	319,318	339,012	346,581	73,557	91,482	83,841
Washed and Scoured .. lb.	20,250	19,239	20,166	5,309	6,151	5,724
Carbonized .. .. lb.	7,048	5,992	5,135	1,880	1,883	1,472
Wastes .. .. lb.	5,460	4,074	2,987	1,061	849	467
Tallow, Inedible .. .. cwt.	430	752	525	1,713	2,243	1,361
Petroleum and Shale Spirit .. gall.	33,786	2,389	6,416	2,060	276	465
Gas Oil (Solar Oil) .. .. gall.	26,264	51,224	56,915	1,407	3,002	2,893
Residual Oil .. .. gall.	82,117	85,499	71,783	3,312	3,381	2,487
Iron and Steel Scrap .. .. cwt.	1,161	1,161	1,368	891	840	1,098
Aircraft and Parts .. .. ..	..	..	..	1,338	1,078	903
Casein .. .. .. cwt.	165	138	159	1,440	1,223	1,429
Military, Naval, and Air Force Stores and Equipment .. ..	..	..	..	1,083	435	345
All Other Articles .. .. ..	..	..	..	37,148	42,335	50,144
<b>Total Exports</b> .. .. ..	..	..	..	219,551	244,070	246,971

NOTE.—In the above table, separate details are shown of articles for which the value of exports amounted to more than £1 mill. in any one of the three years.

## Trade with Countries

The value of trade with oversea countries from 1958-59 to 1960-61 is shown in the following table :—

VICTORIA—OVERSEA IMPORTS AND EXPORTS :  
COUNTRIES OF ORIGIN AND CONSIGNMENT

(£'000 f.o.b.)

Country	Imports			Exports		
	1958-59	1959-60	1960-61	1958-59	1959-60	1960-61
<b>COMMONWEALTH COUNTRIES—</b>						
United Kingdom .. ..	115,854	126,017	129,421	74,360	65,967	54,678
Borneo (British) .. ..	3,445	4,879	1,608	610	757	756
Canada .. ..	6,569	10,350	15,280	4,380	4,267	4,558
Ceylon .. ..	3,781	4,081	3,682	1,822	2,382	2,514
Hong Kong .. ..	1,317	1,908	2,299	2,298	2,253	2,302
India .. ..	6,132	5,311	7,085	2,722	3,806	3,122
Malaya, Federation of ..	4,361	6,108	5,283	4,066	4,309	3,656
New Zealand .. ..	4,629	6,075	6,082	13,165	14,969	16,353
Pakistan .. ..	899	1,458	1,982	567	644	1,106
Singapore .. ..	131	230	189	3,342	3,887	3,356
South Africa, Union of *	1,414	2,051	2,485	1,678	2,825	3,405
Other Commonwealth Countries ..	7,610	8,142	8,119	8,704	8,570	8,349
<b>Total Commonwealth Countries ..</b>	<b>156,142</b>	<b>176,610</b>	<b>183,515</b>	<b>117,714</b>	<b>114,636</b>	<b>104,155</b>
<b>FOREIGN COUNTRIES—</b>						
<b>Arabian States—</b>						
Kuwait .. ..	3,826	4,542	4,178	336	295	557
Saudi Arabia .. ..	3,166	4,488	7,396	482	359	486
Qatar .. ..	15,317	12,364	7,829	33	37	51
Other Arabian States .. ..	590	128	..	176	65	37
Belgium-Luxembourg .. ..	2,524	3,089	4,292	3,750	4,051	4,444
China, Republic of (Mainland) ..	1,152	1,381	1,298	1,373	2,501	12,186
Czechoslovakia .. ..	807	1,014	1,072	2,271	3,387	1,859
France .. ..	5,766	4,916	6,003	16,072	21,043	16,426
Germany, Federal Republic of ..	20,369	25,793	32,977	6,483	7,796	6,571
Indonesia .. ..	6,068	5,196	4,786	1,159	1,425	2,321
Iran .. ..	1,255	871	5,115	190	651	424
Italy .. ..	4,060	5,049	5,995	11,203	15,735	13,523
Japan .. ..	10,652	14,799	21,674	22,266	29,143	36,426
Mexico .. ..	773	772	799	1,818	1,316	1,930
Netherlands .. ..	5,038	9,321	5,873	2,526	1,355	1,197
Poland .. ..	115	96	194	2,947	2,555	2,707
Sweden .. ..	3,276	3,883	5,263	1,011	800	754
Switzerland .. ..	3,435	3,866	4,495	355	675	396
U.S.S.R. .. ..	373	391	208	47	4,566	2,070
United States of America .. ..	38,269	49,439	82,749	13,985	16,774	22,028
Yugoslavia .. ..	14	29	29	1,982	2,440	2,657
Other Foreign Countries .. ..	8,203	11,192	14,088	11,365	12,462	13,761
<b>Total Foreign Countries ..</b>	<b>135,058</b>	<b>162,619</b>	<b>216,313</b>	<b>101,830</b>	<b>129,431</b>	<b>142,811</b>
<b>All Countries</b> (Transfers of Bullion and Specie)	<b>97</b>	<b>120</b>	<b>144</b>	<b>7</b>	<b>3</b>	<b>5</b>
<b>Grand Total .. ..</b>	<b>291,297</b>	<b>339,349</b>	<b>399,972</b>	<b>219,551</b>	<b>244,070</b>	<b>246,971</b>

\* Republic of South Africa since 1961.

The relative importance of various countries as participants in the trade of Victoria is indicated in the following table. Figures given are exclusive of transfers of bullion and specie.

VICTORIA—OVERSEA IMPORTS AND EXPORTS :  
COUNTRIES OF ORIGIN AND CONSIGNMENT

(Per Cent.)

Country	Imports			Exports		
	1958-59	1959-60	1960-61	1958-59	1959-60	1960-61
<b>COMMONWEALTH COUNTRIES—</b>						
United Kingdom .. .. .	39.79	37.15	32.36	33.87	27.03	22.13
Borneo (British) .. .. .	1.18	1.44	0.41	0.28	0.31	0.31
Canada .. .. .	2.26	3.05	3.82	2.00	1.75	1.85
Ceylon .. .. .	1.28	1.20	0.92	0.83	0.98	1.01
Hong Kong .. .. .	0.45	0.56	0.57	1.05	0.92	0.94
India .. .. .	2.11	1.57	1.78	1.24	1.56	1.26
Malaya, Federation of .. .. .	1.50	1.80	1.32	1.85	1.77	1.48
New Zealand .. .. .	1.59	1.79	1.52	6.00	6.13	6.62
Pakistan .. .. .	0.31	0.43	0.49	0.26	0.26	0.45
Singapore .. .. .	0.05	0.07	0.05	1.52	1.59	1.36
South Africa, Union of* .. .. .	0.49	0.60	0.62	0.76	1.16	1.38
Other Commonwealth Countries .. .. .	2.61	2.40	2.04	3.96	3.51	3.38
Total Commonwealth Countries .. .. .	53.62	52.06	45.90	53.62	46.97	42.17
<b>FOREIGN COUNTRIES—</b>						
<b>Arabian States—</b>						
Kuwait .. .. .	1.32	1.34	1.05	0.15	0.12	0.22
Saudi Arabia .. .. .	1.09	1.32	1.85	0.22	0.15	0.20
Qatar .. .. .	5.26	3.64	1.96	0.02	0.02	0.02
Other Arabian States .. .. .	0.20	0.04	..	0.08	0.03	0.02
Belgium-Luxembourg .. .. .	0.87	0.91	1.07	1.71	1.66	1.80
China, Republic of (Mainland) .. .. .	0.40	0.41	0.32	0.63	1.02	4.93
Czechoslovakia .. .. .	0.28	0.30	0.27	1.04	1.39	0.75
France .. .. .	1.98	1.45	1.50	7.32	8.62	6.65
Germany, Federal Republic of .. .. .	6.99	7.60	8.25	2.95	3.19	2.67
Indonesia .. .. .	2.09	1.53	1.20	0.53	0.58	0.93
Iran .. .. .	0.43	0.26	1.28	0.09	0.27	0.18
Italy .. .. .	1.39	1.49	1.50	5.10	6.45	5.47
Japan .. .. .	3.66	4.36	5.42	10.14	11.94	14.75
Mexico .. .. .	0.26	0.23	0.20	0.83	0.54	0.78
Netherlands .. .. .	1.73	2.75	1.47	1.15	0.55	0.49
Poland .. .. .	0.04	0.03	0.05	1.34	1.05	1.09
Sweden .. .. .	1.12	1.14	1.31	0.46	0.33	0.31
Switzerland .. .. .	1.18	1.14	1.13	0.16	0.28	0.16
U.S.S.R. .. .. .	0.13	0.12	0.05	0.02	1.87	0.84
United States of America .. .. .	13.14	14.57	20.69	6.37	6.87	8.92
Yugoslavia .. .. .	0.01	0.01	0.01	0.90	1.00	1.08
Other Foreign Countries .. .. .	2.81	3.30	3.52	5.17	5.10	5.57
Total Foreign Countries .. .. .	46.38	47.94	54.10	46.38	53.03	57.83
Grand Total .. .. .	100.00	100.00	100.00	100.00	100.00	100.00

\* Republic of South Africa since 1961.

## Customs and Excise Revenue

The next table contains a classification of gross customs duties collected by the Commonwealth in Victoria in each of the three years 1958–59 to 1960–61. 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.

## VICTORIA—GROSS CUSTOMS DUTIES COLLECTED

(£'000)

Classification	1958–59	1959–60	1960–61
I. Foodstuffs of Animal Origin, &c. . . . .	115	161	229
II. Foodstuffs of Vegetable Origin ; Non-alcoholic Beverages, &c. . . . .	659	756	849
III. Spirituous and Alcoholic Liquors . . . . .	670	802	842
IV. Tobacco, Cigars, Cigarettes and Snuff . . . . .	4,898	4,761	5,338
V. Live Animals . . . . .	..	..	..
VI. Animal Substances, not Foodstuffs . . . . .	3	3	2
VII. Vegetable Substances and Fibres, &c. . . . .	51	57	60
VIII. (a) Yarns and Manufactured Fibres . . . . .	221	260	406
(b) Textiles . . . . .	2,773	3,436	4,078
(c) Apparel . . . . .	934	1,310	1,732
IX. Oils, Fats and Waxes—			
Aviation Spirit . . . . .	70	62	115
Motor Spirit and Solvents . . . . .	3,569	2,864	2,922
Aviation Turbine Fuel . . . . .	..	23	26
Diesel Fuel . . . . .	6	7	15
Other Oils, Fats and Waxes . . . . .	487	668	736
X. Pigments, Paints, Varnishes . . . . .	79	99	136
XI. Rocks, Minerals and Hydro-carbons, &c. . . . .	13	24	23
XII. (a) Metals and Metal manufactures—			
Motor Vehicles . . . . .	3,871	4,454	5,292
Other . . . . .	1,469	1,541	2,417
(b) Dynamo Electrical Machinery, Electrical Appliances, &c. . . . .	961	1,188	1,633
(c) Machines and Machinery . . . . .	2,620	3,721	5,003
XIII. (a) Rubber and Rubber Manufactures . . . . .	246	168	238
(b) Leather, Leather Manufactures, &c. . . . .	52	73	110
XIV. Wood and Wicker . . . . .	417	519	645
XV. Earthenware, Cement, China, &c. . . . .	595	715	931
XVI. (a) Pulp, Paper and Board . . . . .	168	268	511
(b) Paper Manufactures and Stationery . . . . .	158	205	316
XVII. Sporting Material, Toys, Jewellery, &c. . . . .	734	880	1,138
XVIII. Optical, Surgical, and Scientific Instruments, &c. . . . .	237	289	421
XIX. Chemicals, Medicinal and Pharmaceutical Products, &c. . . . .	365	481	591
XX. Miscellaneous . . . . .	818	1,108	1,737
Primage and Sundry Duties . . . . .	829	815	951
Total Gross Customs Duties . . . . .	28,088	31,718	39,443

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 1958–59 to 1960–61. 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			
	1958–59	1959–60	1960–61	1958–59	1959–60	1960–61	
	'000			£'000			
Beer .. .. .	gall.	62,464	65,813	68,206	30,711	32,358	33,534
Spirits (Potable) ..	Proof gall.	503	486	512	1,755	1,660	1,752
Tobacco .. .. .	lb.	4,095	3,863	3,528	3,771	3,557	3,249
Cigars and Cigarettes	lb.	12,594	14,509	15,207	20,169	23,049	24,153
Petrol .. .. .	gall.	276,858	320,775	347,472	13,236	15,344	16,621
All Other Articles	.. .. .	..	..	..	2,263	2,617	2,342
<b>Total</b> .. .. .	.. .. .	..	..	..	71,905	78,585	81,651

The overseas trade and the gross revenue collected at Victorian ports during the year 1960–61 are shown in the following table :—

**VICTORIA—OVERSEA TRADE, AND GROSS REVENUE  
COLLECTED AT VICTORIAN PORTS, 1960–61  
(£'000)**

Particulars	Melbourne*	Geelong	Portland	Total
<b>Oversea Trade—</b>				
Imports .. .. .	368,053	30,989	930	399,972
Exports .. .. .	216,147	26,255	4,569	246,971
<b>Total</b> .. .. .	584,200	57,244	5,499	646,943
<b>Gross Revenue—</b>				
Customs .. .. .	37,855	692	896	39,443
Excise .. .. .	79,704	1,379	568	81,651
<b>Total</b> .. .. .	117,559	2,071	1,464	121,094

\* Includes Port of Melbourne, Essendon Airport, and Parcels Post.

## Transport

### Shipping

#### General

Considerable change has taken place in coastal shipping in Australian waters since the Second World War as a result of competition with the newer, speedier motor and air transport systems which have developed rapidly.



With the exception of traffic between Victoria and Tasmania, interstate passenger traffic has dwindled until it is now generally uneconomic to operate coastal passenger ships in Australian waters. However, the Trans-Bass Strait ferry service between Melbourne and Devonport has proved highly successful, and for the year 1960-61, 83,000 passengers (who accompanied 20,000 vehicles) were carried on this route. On other interstate routes, the few travellers wishing to travel by sea are now carried on oversea passenger ships on their normal runs to and from Australian ports.

There has also been considerable falling off in the tonnage of general cargo carried interstate by sea, but, with the introduction of "container" packaging, the fitting out of ships to carry these containers, and mechanical handling facilities at wharves, it is probable that this method of transport will regain a larger share of the transport of general cargo in and around Australia. Altered patterns in Australian industrial development, including the big increase in oil refined in Australia, and the development and re-location of other heavy industries, have assisted the development of bulk carrier ships built in Australian shipyards for Australian conditions. Modern, fast ships of increased capacity and bulk handling terminals have ensured cheap shipment of ores, grains, and similar cargoes and reduced the costly time spent in port.

Shipping statistics, as presented in the following tables, refer to oversea and interstate vessels using Victorian ports, and include the intra-state activities of these vessels except in the table "Shipping with Various Countries".

#### *Vessels Entered and Cleared*

The number of vessels entered and cleared, and their total tonnage in each of the five years 1956-57 to 1960-61 were as follows :—

#### VICTORIA—OVERSEA AND INTERSTATE SHIPPING

Particulars				Year Ended 30th June—				
				1957	1958	1959	1960	1961
Entrances	..	..	No.	2,956	3,075	3,210	3,355	3,404
			'000 net tons	10,814	11,283	12,224	13,277	14,343
Clearances	..	..	No.	2,956	3,049	3,208	3,351	3,412
			'000 net tons	10,827	11,184	12,195	13,269	14,417

#### *Shipping with Various Countries*

The principal countries having shipping communication with Victoria are set out in the following table. The table does not include the intra-state activities of oversea or interstate vessels.

Voyages and tonnages of vessels arriving from or departing to particular countries are recorded against the country of origin or destination, notwithstanding that the same vessel on the same voyage may carry cargo or passengers to or from Victoria from or to several countries. Thus, vessels calling at New Zealand on voyages to and from the United States of America or Canada are not shown in shipping communication with New Zealand, and likewise, vessels calling at ports *en route* to and from the United Kingdom are credited to the United Kingdom only.

## VICTORIA—SHIPPING WITH VARIOUS COUNTRIES

('000 Net Tons)

Country	Year Ended 30th June—				
	1957	1958	1959	1960	1961
VESSELS ENTERED					
COMMONWEALTH COUNTRIES—					
Australian States .. .. .	4,239	4,397	4,848	4,878	5,080
United Kingdom .. .. .	1,498	1,668	1,548	1,747	1,590
Nauru .. .. .	348	343	403	421	324
Borneo (British) .. .. .	329	265	78	241	125
Canada .. .. .	260	268	252	340	441
India, Pakistan, and Ceylon ..	185	141	223	186	193
Singapore, and the Federation of Malaya .. .. .	317	202	273	237	243
New Zealand .. .. .	197	290	301	275	306
Other Commonwealth Countries	131	164	263	274	392
Total Commonwealth Countries	7,504	7,738	8,189	8,599	8,694
FOREIGN COUNTRIES—					
Arabian States .. .. .	701	1,179	1,378	1,508	1,326
Germany, Federal Republic of ..	201	192	385	386	420
Indonesia .. .. .	238	253	202	271	297
Iran .. .. .	324	143	77	56	395
Italy .. .. .	232	217	235	247	231
Japan .. .. .	306	364	379	512	766
Netherlands .. .. .	85	103	146	212	201
United States of America .. ..	445	397	473	526	777
Other Foreign Countries .. ..	347	409	380	525	742
Total Foreign Countries .. ..	2,879	3,257	3,655	4,243	5,155
Grand Total .. .. .	10,383	10,995	11,844	12,842	13,849

VICTORIA—SHIPPING WITH VARIOUS COUNTRIES—*continued*  
(‘000 Net Tons)

Country	Year Ended 30th June—				
	1957	1958	1959	1960	1961
VESSELS CLEARED					
COMMONWEALTH COUNTRIES—					
Australian States .. .. .	5,197	5,067	5,300	5,892	6,098
United Kingdom .. .. .	1,326	1,569	1,556	1,508	1,469
Nauru .. .. .	181	230	232	205	198
Canada .. .. .	145	149	206	308	290
India, Pakistan, and Ceylon..	269	244	195	200	192
Singapore, and the Federation of Malaya .. .. .	302	240	306	289	228
New Zealand .. .. .	253	310	302	354	436
Hong Kong .. .. .	46	94	98	113	131
Other Commonwealth Countries	272	162	196	167	215
Total Commonwealth Countries	7,991	8,065	8,391	9,036	9,257
FOREIGN COUNTRIES—					
Arabian States .. .. .	592	986	1,114	1,356	1,365
Germany, Federal Republic of..	96	137	185	240	276
Indonesia .. .. .	165	187	105	99	124
Iran .. .. .	155	89	112	134	292
Italy.. .. .	281	241	321	313	388
Japan .. .. .	339	417	495	584	692
Netherlands .. .. .	40	75	152	58	119
Poland .. .. .	31	14	78	142	65
United States of America .. ..	238	273	260	308	377
Other Foreign Countries .. ..	424	389	523	463	926
Total Foreign Countries .. ..	2,361	2,808	3,345	3,697	4,624
Grand Total .. .. .	10,352	10,873	11,736	12,733	13,881

The nationalities of vessels which entered or were cleared at Victorian ports during the years 1959–60 and 1960–61 were as follows :—

VICTORIA—NATIONALITY OF SHIPPING  
(‘000 Net Tons)

Nationality	Vessels Entered		Vessels Cleared	
	1959–60	1960–61	1959–60	1960–61
Commonwealth—				
Australian .. .. .	1,987	1,751	2,003	1,787
United Kingdom .. .. .	5,978	6,254	5,982	6,283
New Zealand.. .. .	156	140	162	141
Hong Kong .. .. .	160	158	161	161
Other Commonwealth .. .. .	196	228	187	221
Total Commonwealth .. .. .	8,477	8,531	8,495	8,593

VICTORIA—NATIONALITY OF SHIPPING—*continued*  
(’000 Net Tons)

Nationality	Vessels Entered		Vessels Cleared	
	1959-60	1960-61	1959-60	1960-61
Foreign—				
Danish .. .. .	248	276	259	297
French .. .. .	117	116	126	123
Dutch .. .. .	781	936	766	944
German (Federal Republic) ..	200	274	203	269
Italian .. .. .	586	522	592	514
Japanese .. .. .	371	498	369	479
Liberian .. .. .	370	520	370	519
Norwegian .. .. .	1,085	1,264	1,058	1,291
Swedish .. .. .	308	471	314	451
United States of America ..	261	259	252	269
Panamanian .. .. .	345	284	351	291
Other Foreign .. .. .	128	392	114	377
Total Foreign .. .. .	4,800	5,812	4,774	5,824
Grand Total .. .. .	13,277	14,343	13,269	14,417

*Shipping Entered at Victorian Ports*

Particulars of shipping which entered each principal port of Victoria are given in the following table for the years 1959-60 and 1960-61 :—

VICTORIA—VESSELS ENTERED AT EACH PORT

Class of Vessel	Melbourne		Geelong		Portland	
	1959-60	1960-61	1959-60	1960-61	1959-60	1960-61
	Number					
Oversea—						
Direct .. .. .	267	330	170	186	2	3
Other .. .. .	1,348	1,453	258	276	52	54
Interstate .. .. .	1,128	979	121	113	9	10
Total .. .. .	2,743	2,762	549	575	63	67
	’000 net tons					
Oversea—						
Direct .. .. .	1,674	2,024	1,270	1,412	11	14
Other .. .. .	6,746	7,318	1,350	1,517	295	308
Interstate .. .. .	1,740	1,528	179	203	12	18
Total .. .. .	10,160	10,870	2,799	3,132	318	340

*Cargoes Discharged and Shipped*

The following tables show the tonnage of oversea and interstate cargoes discharged and shipped in Victorian ports during 1959-60 and 1960-61, as well as the tonnage of oversea cargoes discharged and shipped during the years 1958-59 to 1960-61 according to 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	
	1959-60	1960-61	1959-60	1960-61	1959-60	1960-61
<b>DISCHARGED</b>						
<b>Interstate—</b>						
Weight .. ..	1,914	1,625	584	618	21	51
Measure .. ..	490	611	1	*	..	..
<b>Oversea—</b>						
Weight .. ..	2,762	3,020	2,571	2,631	59	56
Measure .. ..	1,152	1,549	76	52	..	..
<b>SHIPPED</b>						
<b>Interstate—</b>						
Weight .. ..	513	550	858	941	*	5
Measure .. ..	536	528	1	1	..	..
<b>Oversea—</b>						
Weight .. ..	734	758	753	1,293	16	56
Measure .. ..	531	515	1	..	..	..

NOTE.—1 Ton Measurement = 40 Cubic Feet.

\* Less than 500 tons

**VICTORIA—OVERSEA CARGOES DISCHARGED AND SHIPPED ACCORDING TO NATIONALITIES OF VESSELS**

(’000 Tons)

Vessels Registered at Ports in—	1958-59		1959-60		1960-61	
	Dis-charged	Shipped	Dis-charged	Shipped	Dis-charged	Shipped
<b>COMMONWEALTH COUNTRIES—</b>						
Australia .. ..	24	35	78	9	6	10
United Kingdom ..	2,162	1,029	2,595	969	3,142	1,028
New Zealand .. ..	78	83	89	91	85	96
Other Commonwealth	42	99	72	87	106	147
<b>Total Commonwealth Countries</b>	<b>2,306</b>	<b>1,246</b>	<b>2,834</b>	<b>1,156</b>	<b>3,339</b>	<b>1,281</b>

VICTORIA—OVERSEA CARGOES DISCHARGED AND SHIPPED ACCORDING  
TO NATIONALITIES OF VESSELS—*continued*  
(’000 Tons)

Vessels Registered at Ports in—	1958-59		1959-60		1960-61	
	Dis- charged	Shipped	Dis- charged	Shipped	Dis- charged	Shipped
FOREIGN COUNTRIES—						
Denmark .. ..	97	48	308	69	277	99
France .. ..	98	3	136	12	136	20
Germany, Federal Republic of ..	129	19	155	22	180	63
Italy .. ..	221	50	258	14	59	25
Japan .. ..	239	89	178	52	88	77
Liberia .. ..	550	14	698	70	1,004	22
Netherlands ..	226	204	165	159	261	189
Norway .. ..	1,272	254	1,107	278	1,192	352
Panama .. ..	411	71	458	97	332	38
Sweden .. ..	259	49	251	37	324	121
United States of America	62	39	58	21	72	34
Other Foreign ..	35	61	14	48	44	301
Total Foreign Countries	3,599	901	3,786	879	3,969	1,341
Grand Total ..	5,905	2,147	6,620	2,035	7,308	2,622

NOTE.—In this table tons measurement have been added to tons weight.

### Principal Ports of Victoria

#### Melbourne

The Port of Melbourne is 10½ square miles in area and comprises 108 berths extending over 12 miles in length. It is the principal port of Victoria. By virtue of its independent administration which was established by Act of Parliament in 1876, the port is one of the old ports of the world, for similar administrations in some of the major world ports were not established until later, for example, in Sydney in 1901, London 1909, Boston and Toronto 1911, and New York 1921.

The port authority for Melbourne is the Melbourne Harbor Trust Commissioners, and the Board consists of a permanent chairman, and five part-time commissioners with specialized knowledge of the trade requirements of the port, consisting of shipping, primary production, importing, exporting, and port labour.

The Port of Melbourne to-day is built closely to the original plan drawn up by the British engineer, Sir John Coode, who came to the Colony in 1878 to advise the newly formed port authority on the establishment of a full-scale port. As a result, the course of the River Yarra was shortened and diverted to a man-made canal which perpetuates the name Coode.

Facilities for shipping and cargo were provided at the foot of the City almost at the doors of the merchants and traders whose businesses were, and still are, dependent on the port's operations. The principal terminal in this category is Victoria Dock, comprising a 21-berth system, now the port's main oversea cargo terminal, particularly for exports. The major proportion of the port's facilities extend from the foot of the City downstream on either side of the Yarra to its mouth. Facilities have also been provided in Hobson's Bay on the shores adjacent to the suburbs of Williamstown and Port Melbourne.

The size and draught of ships coming to the Port of Melbourne is determined by the draught at the narrow entrance to Port Phillip, 36 miles from the port itself, and over which the port authority has no jurisdiction. Depth of the water in the port area ranges from 26 feet to 39 feet.

Ships from more than twenty maritime nations regularly trade in the port, and in any one year the arrival or departure of a ship averages one ship every 90 minutes of the day and night. In recent years, the port has handled the greatest number of passengers on the Australian coast, both to and from overseas, and to and from other Australian States, particularly Tasmania, which is serviced by a vehicular passenger ship operating on a schedule of three round voyages a week.

The volume of cargo is increasing each year as the State as a whole develops, and for the past two years has been about 9½ million tons. As a means of increasing the capacity of the port to handle ships and cargo without actually increasing the port area, large transit sheds, including two with dimensions of 600 feet by 150 feet and a cargo capacity of 17,000 tons have been provided, while certain berths are being specialized to handle specific types of cargo such as steel, phosphate, coal, gypsum, bulk petroleum, timber, container cargo, and petro-chemicals. In line with port policy generally and particularly with the specialization of berths, increased mechanical cargo handling equipment is being provided to speed the flow of cargo through the port.

The following table shows particulars of the financial operations of the Melbourne Harbor Trust for the years 1957 to 1961 :—

VICTORIA—MELBOURNE HARBOR TRUST : REVENUE,  
EXPENDITURE, ETC.  
(£'000)

Particulars	1957	1958	1959	1960	1961
REVENUE					
Wharfage and Tonnage Rates ..	1,883	2,044	2,101	2,492	2,304
Rent of Sheds .. .. .	79	88	94	105	95
Special Berth Charges .. ..	71	94	126	152	148
Rent of Lands .. .. .	131	168	195	221	280
Crane Fees .. .. .	372	419	536	680	648
Other .. .. .	211	208	240	298	316
<b>Total Revenue .. .. .</b>	<b>2,747</b>	<b>3,021</b>	<b>3,292</b>	<b>3,948</b>	<b>3,791</b>
EXPENDITURE					
Administration and General Expenses	189	124	211	217	221
Port Operating Expenses .. ..	541	635	694	792	802
Maintenance—					
Dredging .. .. .	419	136	272	469	654
Harbour .. .. .	21	23	24	32	35
Wharves .. .. .	215	196	227	241	297
Approaches .. .. .	42	29	25	29	32
Railways .. .. .	20	39	34	25	28
Cranes .. .. .	76	82	109	124	125
Other Properties .. .. .	28	38	30	25	45
Interest .. .. .	445	474	535	586	650
Depreciation and Renewals .. ..	219	349	341	502	163
Insurance .. .. .	32	283	35	139	41
Sinking Fund .. .. .	75	130	232	181	261
Payments to Consolidated Revenue and Geelong Harbor Trust .. ..	389	413	424	502	465
Other .. .. .	8	8	9	8	7
<b>Total Expenditure .. .. .</b>	<b>2,719</b>	<b>2,959</b>	<b>3,202</b>	<b>3,872</b>	<b>3,826</b>
<b>Net Surplus (+) or Deficit (—) ..</b>	<b>+28</b>	<b>+62</b>	<b>+90</b>	<b>+76</b>	<b>—35</b>
CAPITAL OUTLAY					
Land and Property .. .. .	21	67	27	65	164
Reclamation .. .. .	1	26	14	15	32
Deepening Waterways .. .. .	137	440	370	115	66
Wharves and Sheds Construction ..	554	567	727	770	622
Wharf Cranes, &c. .. .. .	189	196	65	131	75
Approaches Construction .. .. .	62	64	35	10	26
Floating Plant .. .. .	38	182	175	90	274
Other Works, &c. .. .. .	52	117	45	72	90
<b>Total Capital Outlay .. .. .</b>	<b>1,054</b>	<b>1,659</b>	<b>1,458</b>	<b>1,268</b>	<b>1,349</b>
<b>Loan Indebtedness at 31st December</b>	<b>12,175</b>	<b>12,907</b>	<b>13,833</b>	<b>14,199</b>	<b>14,241</b>

### Geelong

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 feet and a width of 300 feet. Seventeen berths spread over a distance of approximately 5 miles provide the port's wharf facilities.



Minimum water depths are 29 feet at two berths, 32 feet at eleven berths and 36 feet at four berths. Special berths are provided for the handling of steel, coal, grain, phosphatic rock and sulphur, and oil. Coal is discharged from bulk carrying vessels directly to railway trucks. The bulk grain terminal has a 22·5 mill. bushel storage capacity, and is capable of loading ships at the rate of 1,600 tons per hour. The oil wharf is able to accommodate vessels of the supertanker class carrying up to 30,000 tons of oil. The Harbor Trust cool stores have a storage capacity of 900,000 cubic feet. Adequate open coal storage is available. The port has good clearance facilities, there being direct rail loading at six berths and road clearance at all berths.

The Harbor Trust has floating plant which includes six tugs, five hopper barges, one diesel-powered floating crane and several small launches.

Particulars of the financial operations of the Geelong Harbor Trust for the years 1957 to 1961 are shown in the following table :—

VICTORIA—GEELONG HARBOR TRUST : REVENUE,  
EXPENDITURE, ETC.

(£'000)

Particulars	1957	1958	1959	1960	1961
REVENUE					
Wharfage, Tonnage, and Special Berth Rates .. .. .	686	764	770	898	927
Rents, Fees, and Licences .. ..	13	15	16	16	16
Freezing Works and Abattoirs ..	33	25	16	17	17
Contribution by Melbourne Harbor Trust .. .. .	14	..	..	..	..
Other .. .. .	159	193	191	219	255
<b>Total Revenue .. .. .</b>	<b>905</b>	<b>997</b>	<b>993</b>	<b>1,150</b>	<b>1,215</b>
EXPENDITURE					
Management Expenses .. .. .	77	87	95	124	120
Maintenance—					
Wharves and Approaches .. ..	9	10	16	19	23
Harbour .. .. .	27	26	33	41	41
Floating Plant .. .. .	13	11	6	6	8
Other .. .. .	5	2	6	6	6
Interest on Loans .. .. .	157	164	149	141	139
Sinking Fund .. .. .	14	29	29	29	28
Freezing Works and Abattoirs ..	24	9	..	..	..
Depreciation Provision .. .. .	84	128	146	158	166
Other .. .. .	157	162	175	208	224
<b>Total Expenditure .. .. .</b>	<b>567</b>	<b>628</b>	<b>655</b>	<b>732</b>	<b>755</b>
<b>Net Surplus .. .. .</b>	<b>338</b>	<b>369</b>	<b>338</b>	<b>418</b>	<b>460</b>

VICTORIA—GEELONG HARBOR TRUST : REVENUE, EXPENDITURE,  
ETC.—*continued*  
(£'000)

Particulars	1957	1958	1959	1960	1961
<b>CAPITAL OUTLAY (NET)</b>					
Floating Plant .. .. .	8	7	..	28	85
Land and Property .. .. .	160	313	42	34	56
Deepening Waterways .. .. .	937	68	24	..	117
Wharves and Approaches .. .. .	352	318	296	206	425
Other .. .. .	27	18	11	14	22
<b>Total Capital Outlay ..</b>	<b>1,484</b>	<b>724</b>	<b>373</b>	<b>282</b>	<b>705</b>
<b>LOAN INDEBTEDNESS AT 31ST DECEMBER</b>					
State Government .. .. .	214	211	164	150	147
Public .. .. .	2,675	2,675	2,775	2,745	2,650
<b>Total Loan Indebtedness ..</b>	<b>2,889</b>	<b>2,886</b>	<b>2,939</b>	<b>2,895</b>	<b>2,797</b>

### Portland

The Port of Portland, about 200 miles west of Melbourne and 300 miles south-east of Adelaide, has been administered by the Portland Harbor Trust Commissioners since 1951. The port serves an area of about 40,000 square miles in western Victoria and south-east of South Australia.

The harbour, an area of 250 acres of sheltered water, has been developed from a single open sea berth since the inauguration of the Trust. About one-third of the harbour area has been dredged to a depth of 36 feet, enabling ships of 40,000 tons to use the harbour. The harbour is protected by two breakwaters, one 4,200 feet and the other 3,800 feet in length. These leave an entrance about 600 feet wide between their outer extremities.

At the present stage of development, there are two wharves providing berths for three vessels. The three berths are for tankers (the Ocean Pier) and for bulk handling and general cargo at the newly constructed wharf. Water depth alongside each berth is 36 feet ; future development will include the dredging of some areas to 40 feet. Covered storage at the general cargo berth is provided by a transit shed of 60,000 square feet floor area. Oil discharged at the Ocean Pier is pumped to the storage installations at North Portland.

Access to the new wharves is by rail and road. A railway line has been constructed from North Portland to the new wharf, and three tracks have been laid at the bulk handling berth. The Ocean Pier has rail connexions to the Portland railway station. Good road clearance facilities exist at all berths.

The construction of the first stage of the harbour was completed in 1960, at a cost of £6,500,000. A new tanker berth is planned to be completed by 1963. During the year 1960-61, 67 oversea and interstate vessels (340,000 net tons) entered the port, and, in respect of these, 168,000 tons of cargo were handled. In addition, 67,000 tons of cargo were handled by 37 intra-state vessels.

Particulars of the financial operations of the Portland Harbor Trust for the years 1956-57 to 1960-61 are set out in the following table :—

VICTORIA—PORTLAND HARBOR TRUST : REVENUE,  
EXPENDITURE, ETC.

(£'000)

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
<b>REVENUE</b>					
Wharfage Rates .. .. .	20	26	29	36	37
Tonnage Rates .. .. .	3	4	4	5	6
Shipping Services .. .. .	2	3	3	4	6
State Government Grant .. .. .	88	129	144	193	324
Other .. .. .	10	12	10	9	14
<b>Total Revenue .. .. .</b>	<b>123</b>	<b>174</b>	<b>190</b>	<b>247</b>	<b>387</b>
<b>EXPENDITURE</b>					
Administration .. .. .	10	10	12	12	19
Maintenance .. .. .	17	22	20	15	22
Shipping Services .. .. .	5	3	3	3	8
Depreciation .. .. .	1	1	1	1	1
Interest on Loans .. .. .	71	113	158	202	240
Sinking Fund .. .. .	8	13	17	21	24
Other .. .. .	1	5	5	4	3
<b>Total Expenditure .. .. .</b>	<b>113</b>	<b>167</b>	<b>216</b>	<b>258</b>	<b>317</b>
<b>Net Surplus (+) or Deficit (-) .. .. .</b>	<b>+10</b>	<b>+7</b>	<b>-26</b>	<b>-11</b>	<b>+70</b>
<b>Fixed Assets at 30th June .. .. .</b>	<b>2,437</b>	<b>3,500</b>	<b>4,559</b>	<b>5,605</b>	<b>6,439</b>
<b>Loan Indebtedness at 30th June—</b>					
State Government .. .. .	849	1,101	1,354	1,605	1,857
Public .. .. .	1,702	2,552	3,402	4,201	4,625
<b>Total Loan Indebtedness .. .. .</b>	<b>2,551</b>	<b>3,653</b>	<b>4,756</b>	<b>5,806</b>	<b>6,482</b>

### Port Phillip Sea Pilots

Port Phillip's dangerous entrance, and dependence on oversea shipping, means that pilots have played an important part in its development. Records show that before 1839, Queenscliff residents performed piloting duties when requested. Increasing shipping caused the beaches to become strewn with wreckage from ships that came to grief in the treacherous waters of the Rip when endeavouring to enter without a pilot.

The first pilot's licences were issued in 1839 by Sir George Gipps, then Governor of New South Wales, to George Tobin and Thomas Falk Sutton. Mr. Sutton's licence is now framed in the Pilot Office at Williamstown.

By 1841, four licensed pilots were stationed at Queenscliff and another four at Williamstown. Boatmen, and the whaleboats used for boarding ships, were supplied by the Government. These boats were efficient only in fair weather, and as shipping increased, it became obvious that a pilot station outside the Heads was necessary. Pilot cutters sufficiently seaworthy to withstand the Rip's notoriously steep and dangerous seas were also needed.

Several such craft were operating independently by 1851. Melbourne merchants then claimed the service was inefficient and over-expensive. They prevailed upon the newly constituted Government of Port Phillip Colony to take over. The brigantine *Boomerang* and the schooners *Corsair* and *Anonyma* were acquired as pilot cutters. On 29th January, 1853, *Boomerang* established the permanent cruising station outside the Heads.

Then came the gold rush, and with it another tremendous increase in shipping. Under Government control, five cutters and 60 pilots were needed to cope with the traffic. High wages and housing costs at Queenscliff soon made the Pilot Service a financial burden on the community. In 1854, the Government established the Pilot Board of Victoria to formulate and administer rules for conducting the service and collecting pilotage dues.

The pilots took over on a co-operative basis, bought the cutters, and established two separate services, harbour pilots operating from Williamstown and sea pilots from Queenscliff. This system remained almost unchanged until 1956 when the two services amalgamated. All moneys collected were handed over to the pilots after the Board had deducted their expenses and subscriptions to the Pilots' Sickness and Superannuation Fund.

In 1889, the Marine Board of Victoria was constituted by Act of Parliament and Port Phillip Pilots are still administered in this manner by this Board. Regulations regarding appointments to the Pilot Service were tightened. Pilots are now selected from coastal shipmasters having special knowledge of Port Phillip.

Each pilot takes his turn for a week as Pilot-in-Charge of the cutter on station outside the Heads. One pilot is maintained ashore at Williamstown as Secretary-Treasurer, and is always available as an emergency pilot. Thirty-two are now rostered for duty on Port Phillip Bay, at Geelong, Port Melbourne, and in the River Yarra.

The pilot cutters *Boomerang*, *Corsair*, and *Anonyma* of 1854 were the first of a line of famous ships used by the Port Phillip Sea Pilots. Three were then needed to keep one on the outside station at all times and in all weathers.

Steam propulsion superseded sail, and reluctant though the pilots were to acknowledge the fact, steam cutters inevitably replaced the trim little sailing craft. In 1901, the steam cutter *Victoria* was built at Williamstown for the Port Phillip Sea Pilots. A steam yacht, the *Alvina*, was purchased in England the following year to supplement *Victoria*. While one cruised outside the Heads, the other remained anchored off Queenscliff.

By 1925, *Alvina* needed replacing. A First World War prize built as the steam yacht *Komet* for the administrator of German New Guinea, and later commissioned as H.M.A.S. *Una*, was acquired from the Royal Australian Navy and renamed *Akuna*. The diesel-electric *Wyuna*, designed by the pilots and built in Scotland, took over from *Akuna* in 1953; the Williamstown built *Victoria* being retained as relieving ship.

*Wyuna* is generally recognized as being the finest pilot cutter of its type. Diesel-electric machinery enables her to remain continuously on station for six months without refuelling. The inside station at Queenscliff is no longer needed. *Wyuna* calls there every Monday morning to change crew, and at other times as shipping permits. After five months on station, *Wyuna* goes to Williamstown for docking and maintenance repairs and the relieving cutter takes over for four weeks.

By 1956, the 55-year-old *Victoria* had outlived her usefulness. H.M.A.S. *Gladstone*, built at Maryborough, Queensland, as a mine-sweeping corvette in 1943, was acquired as a replacement. *Gladstone* was converted into a pilot cutter at Williamstown, renamed *Akuna II.*, and is now the relieving ship.

The following table shows the number of ships (sailing inwards and outwards) piloted through Port Phillip Heads during the years 1955 to 1960 :—

**VICTORIA—NUMBER OF SHIPS PILOTED THROUGH  
PORT PHILLIP HEADS**

Year			No. of Ships	Year			No. of Ships
1955	..	..	3,271	1958..	..	..	3,311
1956	..	..	3,042	1959..	..	..	3,593
1957	..	..	3,054	1960..	..	..	3,768

### Railways

#### *Standard Gauge Between Melbourne and Sydney*

The standard rail-gauge project between Melbourne and Albury was completed on 3rd January, 1962, when a fast goods train from New South Wales crossed the border into Victoria without the hindrance of the break in gauge which had hampered the carriage of passengers and goods for the last 79 years. The break originally resulted from the junction of the two rail systems of New South Wales and Victoria at Albury in 1883.

The standard gauge railway now links Melbourne with Sydney and South Brisbane and passes through States whose populations comprise more than three-quarters of that of the Commonwealth.

Fast, safe passenger travel in trains built of stainless steel and affording standards of comfort equal to the world's best, make the 596-mile run between Melbourne and Sydney in thirteen hours. These trains, carrying some 198 passengers, cost £1 mill. and consist of fourteen vehicles—roomette and twinette sleepers, dining car, club car, brake-van and power-van.

The abolition of the freight transfer at Albury will reduce Australia's transport bill. Estimates of savings in handling charges will probably be in excess of £800,000 per annum, and the reduction in the number of

immobilized locomotives and rolling-stock will be a further major economy. Income from country and interstate freight will represent at least ten times the income from passengers.

With the standard gauge have come other large-scale improvements such as the new 124-acre freight terminal at Dynon, Victoria. A six-platform agents' depot has been provided, and cranes of 25 tons and 60 tons capacity have been installed. Additional boom barrier installations have been made in metropolitan and country areas for the protection of level crossings, and others have been provided with flashing lights. In addition, about £1 mill. a year is being spent on grade separation projects for the elimination of level crossings.

Terminal-to-terminal haulage will be the main feature of standard gauge freight with an increase in the use of standard, sealed containers and the "flexi-van" system. The "flexi-van" is a container for road and rail transport, embodying a patented means for separating the trailer from the prime mover unit of a semi-trailer vehicle. The trailer unit is then placed on a rail flat car without the use of an overhead crane or other rail-terminal apparatus.

The standard gauge line from Melbourne to Albury is 198 miles long. The estimated cost has been between £12 mill. and £14 mill., and the line used 27,000 tons of 94 lb. to the yard steel rails, 450,000 rail sleepers, and 600,000 cubic yards of ballast; 183 bridges and 320 culverts were constructed; and 2 mill. cubic yards of soil were moved during construction.

#### *Other Recent Railway Developments* *Metropolitan*

The narrow gauge line between Fern Tree Gully and Belgrave has been converted to broad gauge and electrification. The Richmond station project has almost been completed, and additional new stations have been erected on the Frankston and Belgrave lines.

#### *Country*

A further duplication of 2½ miles of railway on the main electrified Gippsland line has been completed at a cost of some £30,000, giving a double track for almost the whole distance from Melbourne to Moe.

#### **Further References**

An historical outline of the Victorian Railways will be found on pages 682 to 685 of the Victorian Year Book 1961.

The succeeding 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 the State. Details of the operations of the road motor services are shown on page 770.

*Total Capital Cost of Railways and Equipment*

The total capital cost of all lines constructed and in course of construction, and of all works, rolling-stock and equipment of the Railways Department as at 30th June of each of the five years 1957 to 1961 is shown in the following table :—

**VICTORIA—TOTAL CAPITAL COST OF RAILWAYS, ETC.  
EQUIPMENT AND ROLLING-STOCK  
(£'000)**

At 30th June—	Railways		Road Motor Services	Total Capital Cost*
	Lines Opened	Lines in Process of Construction		
1957 .. .. .	102,176	530	55	102,876
1958 .. .. .	109,316	592	48	110,060
1959 .. .. .	115,623	769	38	116,713
1960 .. .. .	124,835	527	30	125,623
1961 .. .. .	135,016	709	20	135,935

NOTE.—Total capital cost includes cost of electric tramway equipment, &c. At 30th June, 1961, this amounted to £190,130.

\* Written down in accordance with *Railways (Finances Adjustment) Act 1936*. Particulars are exclusive of the cost of stores and materials on hand and in course of manufacture.

At 30th June, 1961, the capital cost of the broad gauge rolling-stock, after being written down in accordance with the *Railways (Finances Adjustment) Act 1936*, was £43,099,197; of the narrow gauge, £5,430; of the uniform gauge, £308,427; and of the road motor coaches and trucks, £11,955.

*Loan Liability*

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 £141,973,941 (including £52,633,249 non-interest bearing) at 30th June, 1961. After deducting the value of securities purchased by the National Debt Sinking Fund and cancelled (£16,367,535), the total liability on current loans outstanding at that date was £125,606,406. The annual interest payable, calculated at the average rate of 4.41 per cent., was £5,539,242.

Additional funds, which amounted to £18,621,998 at 30th June, 1961, have been provided for railway construction, equipment, stores, &c., out of Consolidated Revenue, the National Recovery Loan, the Uniform Railway Gauge Trust Fund, and other funds. No interest is charged 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 656.

*Railways 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 1956–57 to 1960–61 are shown in the following table :—

**VICTORIA—RAILWAYS STAFF : NUMBERS, SALARIES, ETC.**

Year Ended 30th June—	Number of Employees at End of Year			Salaries, Wages, and Travelling Expenses
	Permanent	Supernumerary and Casual	Total	
				£'000
1957 .. .. .	19,201	11,591	30,792	29,105
1958 .. .. .	19,966	10,002	29,968	29,217
1959 .. .. .	20,391	9,921	30,312	29,657
1960 .. .. .	19,587	9,302	28,889	31,114
1961 .. .. .	17,695	13,319	31,014	32,839

*Railways Traffic*

The mileage and traffic of the railways (exclusive of road motor services) for each of the years 1956–57 to 1960–61 are given in the following table :—

**VICTORIA—RAILWAYS MILEAGE AND TRAFFIC**  
(Excluding Road Motor Services)

Particulars	At 30th June—				
	1957	1958	1959	1960	1961
<b>LINES OPEN FOR TRAFFIC</b>	route miles				
Single Track .. .. .	4,051	4,036	3,963	3,911	3,912
Double Track .. .. .	345	353	358	367	367
Other Multi-track .. .. .	12	12	12	12	12
<b>Total Route Mileage</b>	<b>4,408</b>	<b>4,401</b>	<b>4,333</b>	<b>4,290</b>	<b>4,291</b>
	During Year Ended 30th June—				
Traffic Train Mileage '000	18,544	18,353	18,426	18,282	18,232
Passenger Journeys '000	167,405	167,662	163,484	158,294	149,929
Goods and Livestock Carried '000 tons	9,381	8,892	9,295	9,687	10,977



The tonnage of various classes of goods and the total tonnage of livestock carried by the Victorian Railways for each of the years 1956-57 to 1960-61 are illustrated in the following table :—

VICTORIA—RAILWAYS GOODS AND LIVESTOCK TRAFFIC  
(’000 Tons)

Class of Goods	Quantity Carried				
	1956-57	1957-58	1958-59	1959-60	1960-61
Grain—					
Barley .. .. .	201	189	253	165	248
Wheat .. .. .	1,291	771	1,021	938	1,902
Other .. .. .	207	130	278	199	272
Flour .. .. .	204	186	172	176	192
Fruit—					
Fresh .. .. .	112	110	134	138	119
Dried .. .. .	47	67	71	55	55
Beer .. .. .	113	124	120	119	121
Briquettes .. .. .	569	605	633	920	1,676
Cement .. .. .	343	344	389	475	491
Coal—					
Black .. .. .	267	276	251	290	222
Brown .. .. .	1,643	1,580	1,372	1,243	778
Galvanised Iron .. .. .	63	58	84	92	111
Iron, Steel Bar Rods, &c., Un- prepared .. .. .	52	36	81	229	323
Manures .. .. .	582	702	661	728	712
Petrol, Benzine, &c. .. .. .	163	155	181	200	203
Pulpwood .. .. .	98	128	127	110	106
Pulp and Paper .. .. .	105	107	113	133	130
Timber .. .. .	219	224	245	261	234
Wool .. .. .	158	152	150	151	133
All Other Goods .. .. .	2,499	2,441	2,504	2,658	2,657
Total Goods .. .. .	8,936	8,385	8,840	9,280	10,685
Total Livestock .. .. .	445	507	455	407	292
Grand Total Goods and Livestock .. .. .	9,381	8,892	9,295	9,687	10,977

*Railways Revenue and Expenditure*

The revenue and expenditure of the Railways Department during each of the five financial years 1956-57 to 1960-61 were as follows :—

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE  
(£’000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
REVENUE					
Passenger, &c., Business—					
Passenger Fares .. .. .	11,496	11,203	12,057	12,156	12,169
Parcels, Mails, &c. .. .. .	1,348	1,322	1,340	1,375	1,404
Other .. .. .	64	55	48	46	41
Goods, &c., Business—					
Goods .. .. .	20,592	19,134	20,546	21,159	25,265
Livestock .. .. .	1,269	1,521	1,337	1,397	990
Miscellaneous .. .. .	252	196	246	324	330

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE—*continued*  
(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>REVENUE—<i>continued</i></b>					
<b>Miscellaneous—</b>					
Dining Car and Refreshment Services .. .. .	1,481	1,494	1,508	1,514	1,516
Rentals .. .. .	510	549	589	685	708
Bookstalls .. .. .	309	351	385	400	395
Advertising .. .. .	75	82	82	93	106
Other .. .. .	102	159	109	91	112
<b>Total Revenue .. .. .</b>	<b>37,498</b>	<b>36,066</b>	<b>38,247</b>	<b>39,240</b>	<b>43,036</b>
<b>EXPENDITURE</b>					
<b>Working Expenses—</b>					
Way and Works .. .. .	8,243	8,009	7,766	8,081	8,538
Rolling Stock .. .. .	12,248	11,281	11,210	11,495	12,154
Transportation .. .. .	12,095	12,034	12,140	12,600	13,017
Electrical Engineering Branch ..	1,945	2,008	2,052	1,987	2,070
Stores Branch .. .. .	540	523	527	587	580
Pensions	1,621	1,713	1,845	1,970	2,127
Service Grants and Retiring Gratuities* .. .. .	..	..	..	..	250
Contributions to Railway Renewals and Replacement Fund ..	200	200	200	200	200
Contributions to Railway Accident and Fire Insurance Fund ..	336	371	434	489	483
Pay-roll Tax .. .. .	652	693	700	738	779
Long Service Leave .. .. .	592	579	628	607	559
Other .. .. .	885	941	766	862	904
<b>Total Working Expenses ..</b>	<b>39,357</b>	<b>38,352</b>	<b>38,268</b>	<b>39,616</b>	<b>41,661</b>
<b>Net Revenue .. .. .</b>	<b>-1,859</b>	<b>-2,286</b>	<b>-21</b>	<b>-376</b>	<b>1,375</b>
<b>Debt Charges—</b>					
Interest Charges and Expenses† ..	3,027	3,286	3,472	3,636	3,821
Exchange on Interest Payments and Redemption .. .. .	124	123	147	174	190
Contribution to National Debt Sinking Fund .. .. .	183	187	197	208	211
<b>Net Result for Year ..</b>	<b>-5,193</b>	<b>-5,882</b>	<b>-3,837</b>	<b>-4,394</b>	<b>-2,847</b>
<b>%</b>					
<b>Proportion of Working Expenses to Revenue .. .. .</b>	<b>105·0</b>	<b>106·3</b>	<b>100·1</b>	<b>101·0</b>	<b>96·8</b>

\* Commenced during 1960-61 as a result of a Commonwealth industrial award.

† Including Loan Conversion Expenses.

Revenue for 1960–61 increased by £3,796,000 compared with 1959–60. This was due to increases in passenger fares and freight rates and to an improvement in goods traffic. Total working expenses increased by £2,045,000 as compared with the previous year.

The earnings, expenses charged to railway revenue, and net revenue per average mile of railway worked for each of the five years 1956–57 to 1960–61 were as shown in the following table. This does not take account of the interest paid on railway loans, and other debt charges which are shown in the previous table.

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE PER AVERAGE MILE OPEN (EXCLUDING ROAD MOTOR SERVICES)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Average Number of Miles Open for Traffic .. .. .	4,425	4,402	4,357	4,292	4,290
Gross Revenue* per Mile £	8,444	8,170	8,759	9,133	10,023
Working Expenses† per Mile £	8,840	8,672	8,749	9,213	9,703

\* Excluding recoups by Treasury to offset interest, &c., payments.

† Charged to Railway Revenue.

Road Motor Services

The following table gives, for each of the five years 1956–57 to 1960–61, 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	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Car Mileage .. .. .	406,609	413,914	408,179	371,621	352,661
Passenger Journeys ..	1,732,463	1,916,008	1,778,609	1,571,445	1,372,891
Gross Revenue £	43,206	47,225	46,150	42,263	39,865
Working Expenses ..	87,963	77,262	74,647	74,674	76,497
Interest Charges and Exchange ..	1,325	1,325	211	213	329
Net Loss ..	46,082	31,362	28,708	32,624	36,961
Capital Expenditure at End of Year (Less Depreciation Written Off) .. £	55,090	48,384	37,625	29,819	19,992

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.

## Tramways

*General*

Tramways in Melbourne, Ballarat, and Bendigo at 30th June, 1961, comprised 165 miles of electric lines, of which 143 miles were double and 22 miles single track.

The appended table contains particulars of all tramways in Victoria, other than those under the management of the Victorian Railways Commissioners, for each of the five years 1956–57 to 1960–61 :—

## VICTORIA—TRAMWAYS

Year Ended 30th June—	Track Open at 30th June—		Tram Mileage	Passenger Journeys	Traffic Receipts	Operating Expenses	At 30th June—	
	Double	Single					Rolling Stock	Persons Employed
	miles		'000		£'000		No.	
1957..	143	22	23,088	209,601	6,482	7,395	840	5,315
1958..	143	22	21,649	201,489	6,214	7,184	838	4,997
1959..	143	22	21,158	190,006	7,057	7,239	836	4,950
1960..	143	22	20,585	184,069	7,379	7,531	830	4,664
1961..	143	22	20,140	178,126	7,549	7,642	831	4,876

*Melbourne Tramways, 1930–61*

The Melbourne and Metropolitan Tramways Board was set up in 1919 to take over the cable tramways and the six electric systems other than those owned by the Victorian Railways.

The Board's initial tasks were to co-ordinate them into one and to convert the cable tramways, by then largely worn out, to electric. By 1930, 19·5 miles of double cable tramway track out of the total of 45·9 miles had been converted to electric, and the Board had begun operating motor buses on a small scale. By that time through-running had been established almost throughout the whole system, whereas previously passengers between many areas and the city were obliged to make the first part of their journeys by suburban electric tram and then complete their trips by cable tram.

Conversion continued apace during the 1930's and, with it, modernization. Most noticeable from a passenger point of view was the replacement of the old four-wheel single-truck trams by larger eight-wheel bogie trams, which rode much more smoothly.

On the outbreak of war in 1939, it became impossible to import the steel wire rope cables without which the cable trams could not run; they were not then manufactured in Australia and this hastened the replacement of the remaining cable trams, some of them by buses.

The last cable trams to cease operation, on 26th October, 1940, were from Bourke-street, Melbourne, to Northcote and East Brunswick. Double-deck buses, like London's, took their place. They were never wholly satisfactory or popular. In 1954-55, therefore, they were replaced by electric trams—of much improved design over any previously used in Victoria, especially in the matters of noise reduction and better riding. Two of their features are rubber insert resilient wheels and carbon shoe current collectors in place of the former brass trolley wheels. This latter improvement has now been adopted throughout the Board's system.

Principally because of the high cost of capital construction, there has been little tramway extension in recent years, but the Board has continued to expand its bus operations, chiefly in the Footscray—Sunshine—Deer Park, North Kew, and West Heidelberg areas, followed in July 1961, by its biggest bus expansion yet in taking over the whole of the operations in the Heidelberg—Bulleen—Templestowe—Warrandyte—Ringwood—Mitcham—Blackburn—Box Hill area, covering approximately 50 square miles.

The Melbourne and Metropolitan Tramways Board, like public transport systems the world over, has suffered considerably from the increase in the use of motor cars in the post-war period and from the traffic congestion they cause. Public transport, however, remains essential. That is increasingly realized overseas—and more than 80 per cent. of Melbourne people still rely on it in one form or another.

Details of the revenue and expenditure of the Melbourne and Metropolitan Tramways Board for the years 1957-58 to 1960-61 are shown in the following table :—

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS  
BOARD : REVENUE, EXPENDITURE, ETC.

(£'000)

Particulars	Year Ended 30th June—			
	1958	1959	1960	1961
<b>REVENUE</b>				
Traffic Receipts .. ..	7,265	8,277	8,679	8,883
Miscellaneous Operating Receipts	59	67	66	67
Non-operating Receipts ..	93	167	153	158
<b>Total Revenue ..</b>	<b>7,417</b>	<b>8,511</b>	<b>8,898</b>	<b>9,108</b>
<b>EXPENDITURE</b>				
Traffic Operation Costs ..	3,733	3,714	3,861	3,934
Maintenance of Permanent Way	360	384	408	400
Maintenance of Trams ..	929	983	1,071	1,126
Maintenance of Buses ..	326	315	325	355
Maintenance of Electrical Equipment of Lines and Sub-stations	179	173	168	191
Maintenance of Buildings and Grounds .. ..	90	87	85	97
Electric Traction Energy ..	472	508	503	493
Fuel Oil for Buses ..	113	119	112	103
Bus Licence and Road Tax Fees	25	17	10	10
General Administration and Stores Department Costs ..	438	439	455	453
Pay-roll Tax .. ..	138	139	146	148
Workers' Compensation Payments	151	156	193	195
Depreciation .. ..	667	683	686	695
Non-operating Expenses ..	19	22	24	28
Provisions—				
Fire Damage .. ..	10	19	..	..
Long Service Leave ..	128	112	120	114
Retiring Gratuities ..	219	231	216	198
Accrued Sick Leave ..	17	26	12	3
Public Risk Insurance ..	99	81	74	78
Employee Fidelity ..	1	..	..	..
Interest on Loans ..	398	439	479	484
Loan Repayment ..	135	*	*	*
<b>Total Expenditure ..</b>	<b>8,647</b>	<b>8,647</b>	<b>8,948</b>	<b>9,105</b>
Net Surplus (+) or Deficit (—)	—1,230	—136	—50	+3
Capital Outlay .. ..	524	407	462	608
Loan Indebtedness at 30th June	9,356	9,776	9,867	9,719

\* As a result of a change in financial policy, now deemed part of the provision for depreciation and amortization.

Particulars relating to the tramways systems under the control of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1956-57 to 1960-61 in the following table :—

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD : TRAMWAYS

Year Ended 30th June—	Track Open at 30th June—		Tram Mileage	Passenger Journeys	Traffic Receipts	Operating Expenses	At 30th June—	
	Double	Single					Rolling Stock	Persons Employed
	miles		'000		£'000		No.	
1957..	138	4	22,240	203,323	6,374	7,119	790	5,124
1958..	138	4	20,802	195,350	6,110	6,938	789	4,817
1959..	138	4	20,312	183,835	6,956	6,986	788	4,766
1960..	138	4	19,736	177,868	7,280	7,262	783	4,477
1961..	138	4	19,296	172,055	7,448	7,361	784	4,691

In the next table, the operations of the motor omnibus systems of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1956-57 to 1960-61 :—

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD : MOTOR OMNIBUS SYSTEMS

Year Ended 30th June—	Route Miles	Bus Mileage	Passenger Journeys	Traffic Receipts	Operating Expenses	At 30th June—	
						Rolling Stock	Persons Employed
			'000		£'000	No.	
1957 ..	99	5,907	34,640	1,188	1,645	269	943
1958 ..	99	5,940	34,577	1,154	1,690	269	869
1959 ..	82	5,920	32,242	1,321	1,639	215	849
1960 ..	84	5,836	31,286	1,399	1,662	210	869
1961 ..	85	5,926	30,282	1,435	1,716	209	886

The following tables give an analysis of traffic receipts, operating expenses, &c., for each of the five years 1956-57 to 1960-61 :—

**VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD : TRAMWAYS : TRAFFIC RECEIPTS, OPERATING EXPENSES, ETC., PER MILE, ETC.**

Year Ended 30th June—	Traffic Receipts			Ratio Operating Expenses to Operating Receipts	Operating Expenses per Vehicle Mile	Average Distance per Penny
	Per Vehicle Mile	Per Mile of Single Track Operated	Per Passenger			
	d.	£	d.	%	d.	miles
1957 ..	68·788	22,673	7·524	110·403	76·822	0·373
1958 ..	70·492	21,738	7·506	112·509	80·048	0·373
1959 ..	82·190	24,748	9·081	99·580	82·544	0·297
1960 ..	88·523	25,933	9·823	98·955	88·304	0·263
1961 ..	92·639	26,533	10·390	98·056	91·555	0·263

**VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD : MOTOR OMNIBUS SYSTEMS : TRAFFIC RECEIPTS, OPERATING EXPENSES, ETC., PER MILE, ETC.**

Year Ended 30th June—	Traffic Receipts		Ratio Operating Expenses to Operating Receipts	Operating Expenses per Vehicle Mile	Average Distance per Penny
	Per Vehicle Mile	Per Passenger			
	d.	d.	%	d.	miles
1957 .. ..	48·285	8·233	137·908	66·825	0·402
1958 .. ..	46·647	8·013	146·067	68·283	0·402
1959 .. ..	53·559	9·834	123·374	66·452	0·302
1960 .. ..	57·541	10·733	118·154	68·334	0·273
1961 .. ..	58·120	11·374	118·932	69·512	0·273

*Tramways in Extra-Metropolitan Cities*

The cities, other than the Metropolis, 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 1956-57 to 1960-61 are summarized in the following table:—

**VICTORIA—TRAMWAYS IN EXTRA-METROPOLITAN CITIES**

Year Ended 30th June—	Track Open		Tram Mileage	Passenger Journeys	Traffic Receipts	Operating Expenses	Rolling Stock	Persons Employed
	Double	Single						
	miles		'000		£'000		No.	
1957..	5	18	847	6,278	108	276	50	191
1958..	5	18	847	6,139	104	246	49	180
1959..	5	18	846	6,171	101	253	48	184
1960..	5	18	848	6,201	100	269	48	187
1961..	5	18	844	6,071	101	280	47	185

**Further References**

A brief history of the early development of the Melbourne Tramways is set out on pages 690 to 691 of the Victorian Year Book 1961.

**Motor Vehicles**

*Registrations, Licences, &c.*

Every motor car and motor cycle must be registered with the Chief Commissioner of Police if used on Victorian roads. Trailers (when used for the carriage of passengers or goods for hire or in course of trade), fore-cars, and sidecars drawn by or attached to motor cars or motor cycles must also be registered.

The following is a brief summary of the annual fees payable, at 30th June, 1961, for registration of the various types of motor vehicles and for the licensing of drivers and riders:—

Type of Registration or Licence	Annual Rate
Motor Cycle (without trailer, &c.) ..	£1 10s. 0d.
Motor Cycle (with trailer, &c. attached)	£2 5s. 0d.
Motor Car (private use) .. ..	4s. 6d. for each power-weight unit*
Trailer (attached to motor car) ..	£1 10s. to £6 each, according to the unladen weight and the type of tyres
Motor Car (Omnibus) (operating on specified routes in the Metropolitan Area)	£7 10s. 0d.
Motor Car (used for carrying passengers or goods for hire or in the course of trade)	From 5s. 6d. to 13s. 3d. for each power-weight unit* 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 connexion with their business)	From 3s. 9d. to 8s. for each power-weight unit* 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)	£10 (unless a lower fee would otherwise have been payable.)
Driver or Rider Licence .. ..	10s.

\* The number of power-weight units is that number which is equal to the sum of the horse-power 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 £4 10s. 0d.

The following table shows, for each of the years 1956-57 to 1960-61, the number of motor vehicles registered, the number of drivers' and other licences issued, and the total revenue received at the Motor Registration Branch of the Police Department :—

**VICTORIA—VEHICLES ON THE REGISTER, DRIVERS'  
LICENCES IN FORCE, AND REVENUE RECEIVED**  
(Excluding Commonwealth-owned Vehicles)

Particulars	At 30th June—				
	1957	1958	1959	1960	1961
	<b>VEHICLES ON REGISTER</b>				
Class of Registration—					
Private Vehicles .. ..	522,100	556,550	593,471	646,387	689,664
Commercial Vehicles .. ..	93,735	96,511	99,029	102,982	104,660
Hire Cars .. ..	5,297	5,328	5,302	5,338	5,503
Omnibuses* .. ..	748	770	813	766	792
Primary Producers .. ..	35,480	35,980	36,372	36,762	37,250
Tractors† .. ..	22,145	24,671	27,157	28,819	30,827
Motor Cycles .. ..	25,585	24,308	23,435	21,968	19,274
<b>Total Motor Vehicles .. ..</b>	<b>705,090</b>	<b>744,118</b>	<b>785,579</b>	<b>843,022</b>	<b>887,970</b>
Traction Engines .. ..	4	3	3	2	4
Trailers .. ..	11,203	11,820	12,312	13,120	13,676
	<b>LICENCES IN FORCE</b>				
Drivers' and Riders' Licences .. ..	831,847	879,779	908,343	967,952	1,032,431
Dealers' Licences .. ..	1,229	1,259	1,315	1,328	1,342
	<b>REVENUE</b>				
Total Revenue Received during Year Ended 30th June £'000	7,401	9,226	9,667	11,049	11,269

\* Operating within 8 miles of the G.P.O. Melbourne; all other omnibuses are included with hire cars.

† This heading includes only those tractors registered at the Primary Producer concession rate. Other tractors registered are included under Private Vehicles.

The following table gives details of new registrations, re-registrations, and renewals of registration of motor vehicles for the years 1956-57 to 1960-61 :—

**VICTORIA—NEW REGISTRATIONS, RE-REGISTRATIONS,  
AND RENEWALS OF REGISTRATION OF MOTOR VEHICLES**  
(Excluding Commonwealth-owned Vehicles)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
	<b>NEW VEHICLES REGISTERED</b>				
Private .. ..	47,029	53,530	55,584	73,225	68,543
Commercial and Hire .. ..	9,680	10,904	11,187	12,435	11,446
Primary Producer .. ..	3,858	4,403	3,752	4,043	4,079
Motor Cycles .. ..	1,983	2,296	2,216	2,219	1,336
	<b>RE-REGISTRATION OF USED VEHICLES</b>				
Private .. ..	20,502	20,142	19,188	20,072	28,281
Commercial and Hire .. ..	4,973	4,566	4,592	4,455	4,894
Primary Producer .. ..	3,832	4,295	4,656	3,952	4,449
Motor Cycles .. ..	4,822	3,839	3,545	2,989	2,673
	<b>RENEWALS OF REGISTRATION</b>				
Private .. ..	454,067	482,878	518,699	553,090	599,840
Commercial and Hire .. ..	84,379	86,369	88,552	92,196	94,615
Primary Producer .. ..	49,935	51,953	55,121	57,586	59,549
Motor Cycles .. ..	18,780	18,173	17,674	16,760	15,265

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), and are based on the year ended 31st December. They are not comparable with the previous table.

### VICTORIA—REGISTRATIONS OF NEW MOTOR VEHICLES ACCORDING TO TYPE

(Includes Commonwealth-owned Vehicles Other than Those of the Defence Services)

Year	Motor Vehicles (Excluding Motor Cycles)							Motor Cycles
	Motor Cars	Station Wagons	Utilities	Panel Vans	Trucks	Other	Total	
1957..	43,722	2,037	7,565	3,133	3,684	240	60,381	1,969
1958..	45,903	6,220	7,354	4,488	3,927	301	68,193	2,312
1959..	51,081	10,317	7,320	5,868	4,366	314	79,266	2,145
1960..	60,497	14,817	6,637	3,975	5,213	530	91,669	1,986
1961..	40,832	13,031	5,217	2,782	3,707	509	66,078	903

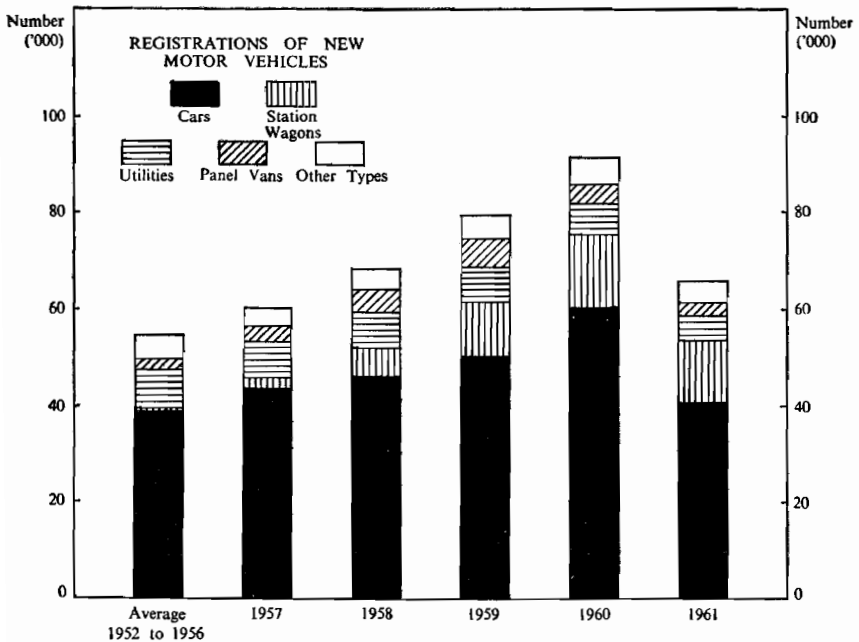


FIGURE 16.—Graph showing new motor vehicle registrations, 1952 to 1961.

VICTORIA—REGISTRATIONS OF NEW MOTOR CARS AND  
STATION WAGONS ACCORDING TO MAKE AND TYPE

(Includes Commonwealth-owned Vehicles Other than Those of the  
Defence Services)

Make	Motor Cars			Station Wagons		
	1959	1960	1961	1959	1960	1961
Austin .. ..	3,010	3,289	1,265	7	44	401
Chevrolet .. ..	609	619	458	..	..	..
Chrysler .. ..	704	671	261	38	5	..
Fiat .. ..	615	1,213	291	1	32	57
Ford .. ..	7,230	9,177	7,442	715	2,150	3,025
Hillman .. ..	1,477	2,178	818	212	1,111	338
Holden .. ..	18,735	19,953	16,777	8,766	10,405	8,270
Humber .. ..	524	499	560	1	4	3
Morris .. ..	3,368	3,914	3,093	9	32	227
Peugeot .. ..	469	620	240	148	157	65
Renault .. ..	333	522	312	..	1	..
Simca .. ..	1,429	2,126	559	..	..	29
Standard .. ..	1,210	640	289	90	486	326
Triumph .. ..	508	2,358	1,375	..	..	..
Vauxhall .. ..	1,792	1,885	1,419	..	..	..
Volkswagen .. ..	6,776	7,784	3,219	160	132	70
Wolseley .. ..	510	749	465	..	..	..
Other .. ..	1,782	2,300	1,989	170	258	220
Total .. ..	51,081	60,497	40,832	10,317	14,817	13,031

VICTORIA—REGISTRATIONS OF NEW MOTOR VEHICLES  
OTHER THAN MOTOR CARS, STATION WAGONS, AND  
MOTOR CYCLES

(Includes Commonwealth-owned Vehicles Other than Those of the  
Defence Services)

Make	1960				1961			
	Utilities	Panel Vans	Other*	Total	Utilities	Panel Vans	Other*	Total
Austin .. ..	85	177	366	628	11	89	273	373
Bedford .. ..	13	113	1,887	2,013	22	104	1,565	1,691
Commer .. ..	..	88	298	386	4	80	176	260
Dodge .. ..	111	57	278	446	81	42	189	312
Ford .. ..	1,182	418	1,065	2,665	1,056	390	585	2,031
Hillman .. ..	..	25	..	25	..	..	..	..
Holden .. ..	3,656	1,853	4	5,513	2,941	1,278	5	4,224
International .. ..	271	35	1,215	1,521	185	41	914	1,140
Land Rover .. ..	412	..	..	412	348	..	..	348
Morris .. ..	110	239	165	514	23	189	95	307
Standard .. ..	361	103	..	464	177	31	1	209
Volkswagen .. ..	200	809	40	1,049	183	522	21	726
Other .. ..	236	58	425	719	186	16	392	594
Total .. ..	6,637	3,975	5,743	16,355	5,217	2,782	4,216	12,215

\* Other vehicles include trucks, omnibuses, ambulances, hearses, milk tankers, petrol tankers, &c.

### Transport Regulation Board

#### General

The Transport Regulation Board is a government authority charged with the task of regulating the operation of road transport in Victoria (see page 698 of the Victorian Year Book 1961). The Board derives its authority from the *Transport Regulation Act 1958* and the *Commercial Goods Vehicle Act 1958*.

Any person operating a vehicle for hire or reward, or in the course of any trade, must, in addition to registering the vehicle as a commercial vehicle, have it licensed by the Transport Regulation Board. Licences issued by the Board are designed to meet the requirements of road transport needs. They may be grouped into two broad categories :—

- (1) Those licences issued at the discretion of the Board ; and
- (2) those licences issued “ as of right ”.

All licences issued to owners of commercial passenger vehicles are issued at the discretion of the Board ; the bulk of licences issued to owners of commercial goods vehicles are issued “ as of right ”. The holder of a discretionary licence must operate the vehicle in a manner set down in the conditions of licence. These conditions of licence are set by the Board. The holder of an “ as of right ” licence must also operate under the terms of his licence, but here the terms of licence are written into the legislation.

During the year ended 30th June, 1961, there were no basic changes in the organization of road transport in Victoria. The number of commercial goods vehicles increased during the year by 4,700 ; approximately three-quarters of this increase was attributable to the increase in the number of “ as of right ” licences.

Operators of commercial passenger services were in a more stable position during this year than they had been for many years. Reductions of service or deletions of service were carried out in a number of areas, but fares generally remained unaltered and most operators had previously adjusted service to meet traffic demands.

During the year, 123 inner area private hire car licences were converted to taxi cab licences, and 72 additional zoned hire car licences were issued in outer metropolitan areas. These changes were brought about to meet changes in public demand and conditions of operations.

The number of permits—temporary authority to operate vehicles outside conditions of licence—issued during the year was 118,859. This was 3,471 permits more than in the previous year.

#### Motor Boats

The *Motor Boating Act 1961* was passed by Parliament in December, 1961. This Act required owners of motor boats to register their boats (there were certain exemptions for boats already registered with Government Authorities) and made provision for regulations as to safety requirements, &c. The Board was named as the registration authority. Registration papers were first issued in January, 1962, and, at the end of April, 1962, 12,954 boats were listed on the register.

Registration fees collected by the Board are paid, less costs of collection, to the Tourist Development Authority for use “ in the provision of facilities for motor boating in Victorian waters ”.

The following table shows the number of passenger vehicle licences and the discretionary goods vehicle licences issued during each year, the number of goods vehicle licences issued "as of right", and brief details of the financial activities of the Transport Regulation Board during the years 1956-57 to 1960-61 :—

**VICTORIA—TRANSPORT REGULATION BOARD : LICENCES ISSUED : SUMMARY OF FINANCIAL OPERATIONS**

Type of Licence	Year Ended 30th June—				
	1957	1958	1959	1960	1961
	No.				
Temporary Licences—					
Commercial Passenger Vehicles .. ..	99	110	116	114	114
Commercial Goods Vehicles .. ..	1,276	308	586	786	1,025
Permanent "Discretionary" Licences—					
Commercial Passenger Vehicles .. ..	5,629	5,430	5,455	5,622	5,773
Commercial Goods Vehicles .. ..	3,699	3,873	4,605	5,861	7,005
Licences Issued "As of Right"—					
To operate for hire or reward within 25 miles of the G.P.O. or P.O.—					
Melbourne .. .. .	9,818	10,127	11,029	12,176	12,607
Ballarat .. .. .	407	436	1,438	1,456	1,465
Bendigo .. .. .	386	391			
Geelong .. .. .	547	566			
Within 20 miles of place of business of the owner; generally outside the radius of 25 miles from the G.P.O. or P.O. Melbourne, Ballarat, Bendigo, and Geelong .. ..	7,823	7,453	7,392	7,991	7,879
Primary Producers (vehicles over 2 tons capacity) .. .. .	11,089	11,466	12,695	14,359	15,131
Commercial Goods Vehicles owned by butter and cheese factories .. .. .	748	683	731	759	811
Commercial Goods Vehicles authorised to carry goods in connexion with the owner's business (50 miles radius—vehicles up to 80 cwt. capacity) .. .. .	24,172	24,313	28,078	35,690	37,370
Commercial Goods Vehicles being used as—					
Carriers of all "Third Schedule" goods .. ..	7,116	7,107	7,757	8,397	8,882
Racehorse Floats .. .. .					
Tank Waggons for carriage of petroleum products .. .. .					
Commercial Travellers' Cars .. .. .					
Additional Licences to Commercial Goods Vehicles to carry passengers .. .. .	113	106	104	87	85
<b>Total Licences Issued .. .. .</b>	<b>72,922</b>	<b>72,369</b>	<b>79,986</b>	<b>93,298</b>	<b>98,147</b>
Financial Transactions—			£'000		
Revenue .. .. .	561	616	623	671	719
Expenditure (including payments to local authorities for road maintenance, comfort stations, and bus shelters) .. .. .	558	543	534	585	638
Balance .. .. .	3	73	89	86	81
Road charges collected and transferred direct to Country Roads Board .. .. .	1,316	1,570	1,836	2,119	2,255

**Traffic Commission**

*General*

The provisions of the Road Traffic Act constituted the Traffic Commission as a full-time body of three members—one member being nominated by the Police Department, one by the Country Roads Board

and one by the Melbourne and Metropolitan Board of Works. The Country Roads Board and the Metropolitan Board of Works members are traffic engineers.

The functions of the Commission are to advise the Governor in Council on the making of Regulations under the Act, for the improvement of traffic conditions, or on any matter about traffic referred to it by the Governor in Council. On the advice of the Commission, the Governor in Council promulgates the Victorian Road Traffic Regulations. These Regulations prescribe rules to be observed by persons driving vehicles upon roads and by pedestrians walking upon roads. By virtue of powers conferred by the Road Traffic Regulations, the Traffic Commission controls the installation of all traffic control devices throughout Victoria.

Any authority erecting a major traffic control item upon a road must obtain the Commission's approval. In this context, major traffic control item means any "Give Way" sign, traffic control signal, pedestrian crossing, school crossing, "Stop" sign or speed limit sign. The Commission delegates its authority regarding erection of all other traffic control items to the local highway authority, but has the residual power to recommend to the Governor in Council that a local authority shall remove or alter any particular device. This particular power has not been exercised as local authorities invariably adopt the Commission's standards.

#### *Accident Reporting*

In order to fulfil its function of advising the Governor in Council regarding the improved safety of traffic conditions, the Commission has instituted a modern system for the recording of Victorian traffic accidents.

Since January, 1958 the Police Department has forwarded the Traffic Commission a comprehensive confidential report on every accident reported. This report lists standard information regarding every accident. Since January, 1960, all report forms are forwarded to the Deputy Commonwealth Statistician who places the information from the forms upon punched cards. The cards and the report forms are then sent to the Traffic Commission. The forms are filed in a location file according to municipality. This makes it possible to obtain readily the complete record of all accidents which have occurred at any intersection or on any length of road in Victoria.

The Commission maintains large scale "Accident Spotting Maps", for the Metropolitan Area and for several of the larger provincial cities. When the year is complete, each map showing the nature and location of all accidents is photographed in colour, the transparency then becoming the permanent record for that year. Additional maps are now being prepared on a scale of 1 mile to 1 inch to cover the whole of Victoria outside the Metropolitan Area, together with further maps on a scale of 400 feet to the inch to cover all towns of more than 1,500 population.

With the aid of the accident spot maps, high accident frequency locations are identified and special studies made to determine if anything can be done to reduce the occurrence of accidents in that location. These studies take the form of drawing collision diagrams, making site inspections, and taking traffic counts.

**Road Traffic Accidents**

The following tables include particulars of all road traffic accidents reported by the Victoria Police which satisfied the following conditions :—

- (1) That the accident occurred on any road, street, lane, thoroughfare, 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) the death of any person within a period of 30 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 165.

**VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES : NUMBER OF PERSONS KILLED OR INJURED**

Year Ended 30th June—	Accidents Involving Casualties	Persons Killed	Persons Injured
<b>METROPOLITAN AREA</b>			
1957 .. .. .	6,472	230	7,908
1958 .. .. .	6,599	216	8,195
1959 .. .. .	7,988	281	10,028
1960 .. .. .	8,035	313	10,166
1961 .. .. .	8,024	367	10,461
<b>REMAINDER OF STATE</b>			
1957 .. .. .	4,332	359	6,212
1958 .. .. .	4,634	355	6,820
1959 .. .. .	4,474	380	6,756
1960 .. .. .	4,232	385	6,429
1961 .. .. .	4,116	406	6,296
<b>VICTORIA</b>			
1957 .. .. .	10,804	589	14,120
1958 .. .. .	11,233	571	15,015
1959 .. .. .	12,462	661	16,784
1960 .. .. .	12,267	698	16,595
1961 .. .. .	12,140	773	16,757



The table which follows provides a description of types of road users killed or injured in road traffic accidents occurring during the years 1958-59 to 1960-61 :—

**VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING  
CASUALTIES : DESCRIPTION OF PERSONS KILLED  
OR INJURED**

Description	1958-59		1959-60		1960-61	
	Killed	Injured	Killed	Injured	Killed	Injured
Pedestrian .. ..	203	2,614	198	2,642	227	2,579
Driver of Motor Vehicle Other than Motor Cycle	200	5,223	221	5,302	260	5,498
Motor Cyclist ..	35	925	31	881	24	715
Passenger (Any Type) ..	173	6,491	197	6,373	207	6,721
Pedal Cyclist .. ..	47	1,464	48	1,332	53	1,145
Other .. .. .	3	67	3	65	2	99
Total .. .. .	661	16,784	698	16,595	773	16,757

Particulars of victims of road traffic accidents during the years 1958-59 to 1960-61 are shown according to age in the following table :—

**VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING  
CASUALTIES : AGE OF PERSONS KILLED OR INJURED**

Age Group (Years)	1958-59		1959-60		1960-61	
	Killed	Injured	Killed	Injured	Killed	Injured
Under 5 .. .. .	17	553	34	580	24	604
5 and under 7 ..	8	372	10	401	8	422
7 and under 17 ..	49	2,148	57	2,260	60	2,176
17 and under 21 ..	71	2,397	77	2,652	88	2,772
21 and under 30 ..	87	3,656	111	3,579	135	3,617
30 and under 40 ..	81	2,648	90	2,481	104	2,526
40 and under 50 ..	74	1,881	76	1,822	82	1,856
50 and under 60 ..	84	1,386	74	1,257	91	1,335
60 and over .. ..	145	1,384	160	1,247	168	1,222
Not Stated .. ..	45	359	9	316	13	227
Total .. .. .	661	16,784	698	16,595	773	16,757

## Civil Aviation

### *Control of Aviation*

Control of aviation in the State is vested in the Commonwealth as prescribed in the *State Air Navigation Act 1958*. The Air Navigation Act and Regulations in respect of Victoria are administered by the Department of Civil Aviation through its Regional Director in Melbourne. The functions of the Department include :—

- (a) The registration and marking of aircraft ;
- (b) the determination of airworthiness requirements for aircraft and the issue of certificates of airworthiness, certificates of type approval, and supervision of aircraft design ;
- (c) the licensing of pilots, navigators, radio operators, flight engineers, and aircraft maintenance engineers, and supervision of the work of licensed personnel ;
- (d) the licensing of airline, aerial work and charter operators, and supervision of their activities ;
- (e) the provision and maintenance of aeronautical communications, navigational aids, aerodromes, and landing grounds ;
- (f) the establishment and operation of air traffic control, aeronautical information, and search and rescue services ; and
- (g) the investigation of aircraft accidents, incidents, and defects.

### *Aerodromes*

The State is served by aerodromes at Melbourne (Essendon), Moorabbin, Ararat, Bacchus Marsh, Ballarat, Bairnsdale, Benalla, Echuca, Hamilton, Mangalore, Kerang, Mildura, Mallacoota, Nhill, Sale, Swan Hill, Shepparton, Warracknabeal, and Warrnambool.

The Melbourne Airport was declared an International Airport in 1950, thus signifying its standard as being comparable with that of the major airports of the world.

International aircraft movements at Melbourne are currently approximately 1,050 per year. Domestic air services operate out of Melbourne to Mildura, Hamilton, Swan Hill, Warracknabeal, and all interstate capitals and important centres.

### *Classification of Flying Activities*

The Air Navigation Regulations place flying activities in the following categories :—

#### *Private Operations*

In this category, aircraft are used for the personal purposes of the owner. There are 89 privately owned aircraft registered in the private category, and about 700 licensed private pilots in Victoria.

#### *Aerial Work Operations*

Aerial survey, spotting, agricultural, advertising, flying training, aerial ambulance, and flying for government purposes are included in this category. Activity is most prevalent in the agricultural field which is separately discussed on pages 511–512, and in flying training operations.

There are eight approved training organizations in the State, operating from nineteen different centres. Hours flown by training organizations in recent years have been 1956-57 : 21,700 ; 1957-58 : 25,400 ; 1958-59 : 25,900 ; 1959-60 : 26,900 ; 1960-61 : 26,000. During the period 1951 to 1961, the Commonwealth has subsidized flying training organizations and has provided aerodromes, taxiways, hangars and other facilities to encourage flying for defence and commercial purposes.

#### *Charter Operations*

These consist of flights for the carriage of passengers or cargo for hire or reward, but not according to fixed schedules or terminals, when the services are conducted for the general public. The following figures of hours flown by Victorian-based charter operators show the extent of this type of operation :—

1957	1958	1959	1960
2,908	2,860	1,825	3,198

There are, at present, 26 Victorian-based operators who are licensed to conduct charter operations.

#### *Regular Public Transport (Airline Services)*

These are the most familiar type of commercial operation. In this category, aircraft are flown on regular services for public passenger or freight transport in accordance with fixed schedules and terminals. A network of regular services is operated from Melbourne Airport by the two major Australian airline companies. The main routes are shown on the accompanying map.

Recent developments in regular services have been the introduction of helicopter services between the City of Melbourne and Melbourne Airport, and the acquisition of a site for development as a major airport at Tullamarine, eleven miles from the City of Melbourne. This has been necessary because of the increase in size and power of aircraft used in airline operations.

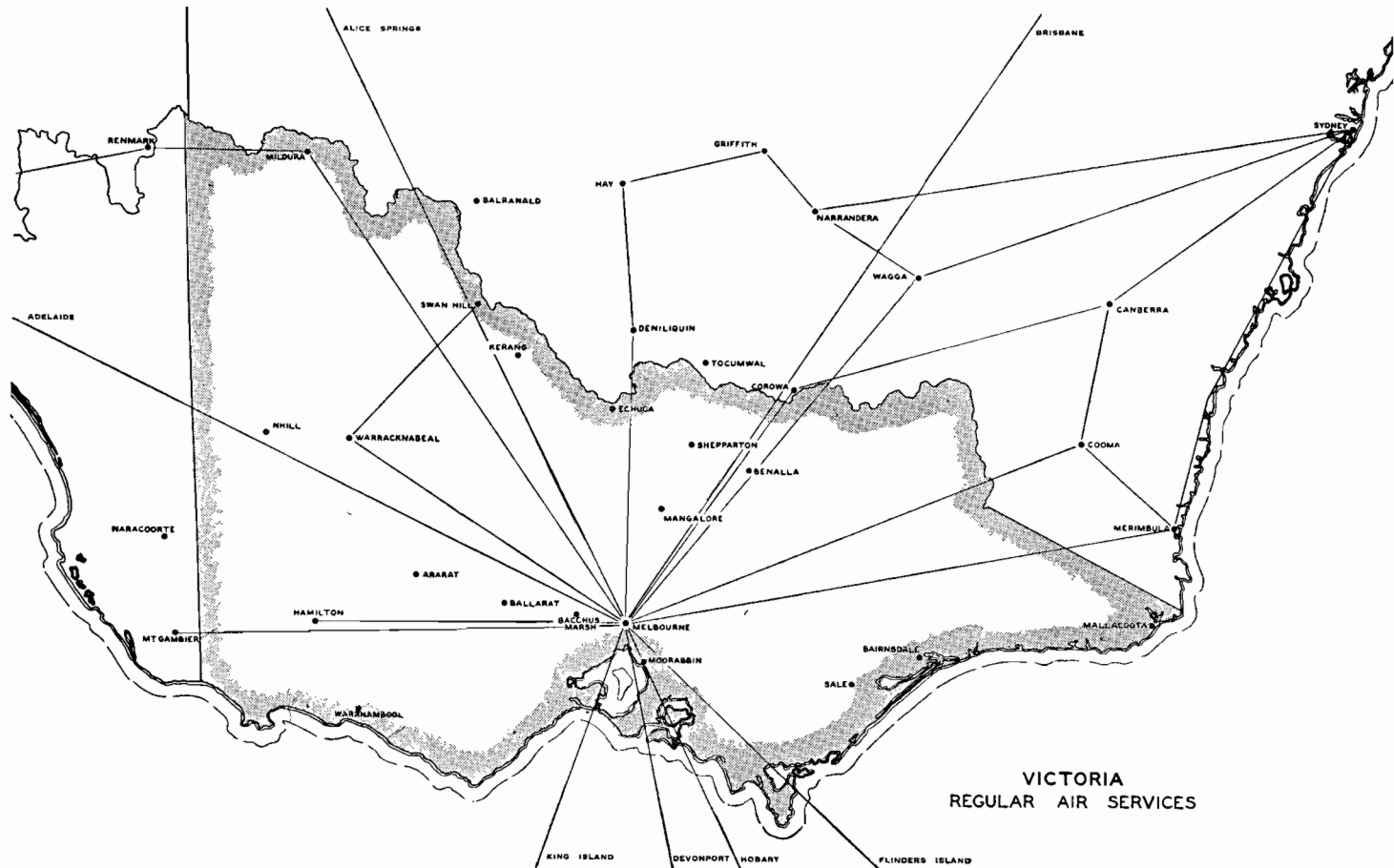
#### *Gliding Clubs*

There are clubs operating at Berwick, Benalla, Beaufort, Mildura, and Geelong. 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 the agency of its Air Traffic Control Organization. This embraces the closely co-ordinated sections of operational control, which concern each individual flight ; airport control which applies to all movements on or within 20 miles of an aerodrome ; and area control which safeguards aircraft whilst flying on main air routes.

In conjunction with Air Traffic Control, the Department maintains a wide range of air navigation aids and a comprehensive search and rescue organization. Navigation aids installed in Victoria are Visual Aural Range at Melbourne, Mangalore, and Avalon ; Non-Directional



VICTORIA  
REGULAR AIR SERVICES

FIGURE 17.—Victoria : regular air services.

Beacons at Mildura, Nhill, Bendigo, Ballarat, Benalla, Mangalore, Wonthaggi, Mallacoota, Melbourne, and Moorabbin; Distance Measuring Equipment at Mallacoota, Mangalore, Melbourne, Mildura, Nhill, Rosebud, and Wonthaggi; and Surveillance Radar, Instrument Landing System, and High Intensity Approach Lighting at Melbourne Airport.

#### Aircraft Parts and Materials

There are 197 organizations in Victoria which have been approved by the Department of Civil Aviation to supply aircraft parts and materials.

#### Statistics

The following table shows particulars for 1960 and 1961 of regular air services operated by Australian-owned airlines and terminating in Victoria :—

#### VICTORIA—REGULAR AIR SERVICES TERMINATING IN VICTORIA OPERATED BY AUSTRALIAN-OWNED AIRLINES

Particulars	Overseas*		Interstate		Intrastate		Total All Services	
	1960	1961	1960	1961	1960	1961	1960	1961
Miles Flown '000	736.3	790.1	19,660.0	16,338.0	102.0	147.4	20,498.3	17,275.5
Paying Passengers '000	19.3	21.9	1,455.5	1,340.7	5.4	6.5	1,480.2	1,369.1
Passenger Miles '000	29,377.6	32,474.0	638,697.9	562,183.8	866.8	1,077.5	668,942.3	595,735.3
Freight—								
Gross Tons ..	359.6	294.4	42,342.6	33,691.0	166.7	161.8	42,868.9	34,147.2
Ton Miles '000	520.1	432.9	17,480.9	13,696.7	26.3	25.2	18,027.3	14,154.8
Mail—								
Gross Tons ..	46.2	58.3	3,490.6	3,417.4	3.2	9.7	3,540.0	3,485.4
Ton Miles '000	71.4	101.8	1,816.2	1,641.2	0.5	1.6	1,888.1	1,744.6

\* Includes Tasman Empire Airways Limited (T.E.A.L.)—Partly Australian-owned to March, 1961.

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 Melbourne Airport activities :—

#### VICTORIA—CIVIL AVIATION

Particulars	1958	1959	1960	1961
Registered Aircraft Owners .. .. .	95	101	109	124
Registered Aircraft .. .. .	257	260	330	279
Student Pilot Licences .. .. .	656	564	582	679
Private Pilot Licences .. .. .	522	559	608	693
Commercial Pilot Licences .. .. .	202	207	190	195
Airline Pilot Licences .. .. .	307	300	305	314
Aircraft Maintenance Engineer Licences .. .. .	506	558	645	648

## MELBOURNE AIRPORT

Particulars	1958-59	1959-60	1960-61
Domestic Aircraft Movements .. .. .	34,467	37,178	38,560
Passengers Embarked .. .. .	474,849	578,158	573,500
Passengers Disembarked .. .. .	472,573	586,998	581,300
International Aircraft Movements .. .. .	2,042	1,128	1,050

**Further References**

An historical survey of civil aviation will be found on page 742 of the Victorian Year Book 1962.

*Communications***Posts, Telegraphs, Telephones, Radio, and Television***General*

Postal, telegraphic, and telephone services are under the control of the Postmaster-General of the Commonwealth of Australia. The Postmaster-General also makes available transmitting and other technical facilities to 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 1942-56*; while, under the same Act, the Australian Broadcasting Commission controls the activities of the National Broadcasting Service and the National Television Service.

The Postmaster-General's Department has developed into the largest business organization in Australia, employing, in Victoria, a staff of about 28,000 persons who provide, operate, and maintain the speedy and intricate systems of communications. Post office facilities are available throughout Victoria at 323 official and 1,912 non-official post offices. In addition to normal postal services, many of these offices transact business on behalf of the Commonwealth Savings Bank and several Commonwealth Government Departments.

*Post Office Activities in 1961**Mail Services*

Progress has been made in the scheme to mechanize progressively the activities of the Mail Exchange Branch by the provision of mechanized mail handling equipment in the City Postmen's Section. An innovation in this section has been the provision of pneumatically operated hoists for the automatic lifting of bags of mails. A new parcel sorting machine with an in-built memory device was also installed in the parcels section to speed the sorting of parcels and their distribution to convenient points for dispatch.

The number of postal articles handled in 1961 increased by 5.5 per cent., as compared with 1960.

*Telephone Expansion*

In the Metropolitan Area the capacity of existing telephone exchanges in the network was increased to a total of 346,000 by the provision of new services for 37,400 subscribers. New Exchanges were established in new buildings at Glenroy, Maribyrnong, Sunshine, and Thomastown, and substantial progress was made with the installation at Kew of a new type of equipment known as the Pentaconta Crossbar Equipment.

In the Victorian country area, progress was continued in the conversion of telephone services from manual operation to automatic. This programme is proceeding along two main directions, namely, the conversion of large manual exchanges to automatic at the principal provincial centres and secondly, the replacement of small manual switchboards at unofficial post offices in more remote areas by small unit type automatic exchanges known as R.A.X.'s (Rural Automatic Exchanges). During 1961, the conversion of the Bendigo area was completed and new exchanges were put into service at Ballarat, Cowes, Swan Hill, and Traralgon. As a result of the year's activities, the number of automatic subscribers in the Victorian country areas was increased from 49,837 to 55,812.

The vital link in the overall improvement of the national communication network is the provision of adequate trunk line channels to link the country areas with each other and the Metropolitan Area. During 1961, a new coaxial trunk cable was laid from Morwell to Melbourne and brought into service with a very large increase in trunk line channels provided.

*Sydney-Melbourne Coaxial Cable*

Early in 1961, the laying of the Victorian portion of the Sydney-Melbourne coaxial cable was commenced. This cable will provide sufficient communication channels between the two capitals and intermediate towns for many years to come.

The cable consists of six coaxial tubes and a number of ordinary telephone wires enclosed in a lead sheath about 1 $\frac{3}{4}$  inches in diameter. One pair of coaxial tubes is capable of carrying 1,260 telephone channels, and a second pair can be equipped to provide a television relay link in each direction between Sydney and Melbourne.

The laying of the 200 miles of cable in this State at a depth of 4 feet was completed in August and the jointing and testing was completed in December. Following the installation of the electronic equipment, the first telephone channels on the cable were operating in April, 1962.

The route of the cable is indicated by 4 feet high yellow topped concrete posts, which may be seen over many miles adjacent to the Hume Highway. Booster or repeater stations have been built at approximately 5 $\frac{1}{2}$  mile intervals along the cable and many of these may also be seen alongside the Highway.

*Radio Australia*

Further expansion at Radio Australia, Shepparton, consisted of the installation of an additional 100 kilowatt transmitter being brought into service in September, 1961. This additional transmitter brought the total number in operation at the station to nine, whilst the tenth transmitter has reached the test stage. Six programmes in six languages are now being broadcast daily.

To enable all ten transmitters to use any of the 36 serials for radiation of programmes at an operating power of 100 kilowatts, a new type of "matrix" aerial switching system is being constructed.

Radio Australia was again adjudged the most popular station broadcasting to South-East Asia, making this the seventh year in succession that the station has received this honour.

*Telegraph Services—Tress*

For some years after the Second World War, the Australian public telegraph service suffered a loss of revenue due mainly to the diversion of traffic to private-wire services and to improved air mail and telephone trunk services, and it incurred heavily increased expenditure which included a large wage component. One reason for the large wage component was the necessity to handle manually a great proportion of the messages a number of times. On an average, each telegram was handled by four operators.

As direct telegraph circuits, even between the more important cities, were not practicable either physically or economically, it was necessary to consider an alternative means of providing a faster and more economical movement of telegrams. To this end, an intensive study of switching techniques used in oversea countries was made. As a result of this study, it was considered that a teleprinter reperforator switching system (TRESS) was best suited to Australian conditions and thorough trials with an experimental system in Melbourne confirmed this view. Accordingly, TRESS was adopted.

TRESS enables telegrams to be transmitted between the teleprinter office of origin and that of destination without the need for intermediate manipulative operations. Under this method, telegrams transmitted from the teleprinter office of origin are received on perforated tape at switching centres, where they are transmitted automatically to the teleprinter office of destination. Each telegram transmitted from a TRESS outstation is prefixed with a start signal followed by a routing symbol and suffixed with a clearing signal. The start signal and routing symbol causes the switching equipment to select the appropriate outgoing line and relay the message automatically to the distant office, while the clearing signal automatically disconnects the equipment from the outgoing line at the end of the message.

TRESS was introduced successfully into the Australian public telegraph service on 14th August, 1959, when the first switching centre was officially cut-over at the Chief Telegraph Office, Adelaide.



Cut-overs in other States were made between August, 1959 and July, 1960. Canberra was connected to the Sydney and Melbourne switching centres on 1st December, 1959.

Establishment of the present network is on the basis of telegraph traffic destined for offices within the State being switched automatically, but, in the case of interstate traffic, two switchings are necessary, the first operation being fully automatic, and the second operation semi-automatic (designated push-button working). This means that, after reaching the appropriate switching centre in the State of destination, each telegram intended for a suburban or country address is given a further prefix by means of push-button equipment operated manually by telegraphists, after which the message is relayed automatically through the TRESS equipment to its destination.

Recent experiments have revealed that it is technically practicable to eliminate the semi-automatic push-button handlings on interstate traffic by introducing an advanced technique known as automatic transit switching.

The principle of automatic transit switching is that two routing codes or symbols would be used, the first representing the switching centre in the State of destination, and the second the office of destination. This could be achieved by using a three-letter code or routing symbol. For example, on a telegram from a South Australian office to Ballarat, Victoria, the sending office would transmit "MBT", the letter "M" representing the proposed transit switching code for telegrams to Victoria, and the letters "BT" representing the routing symbol for Ballarat.

When received in the Adelaide switching centre, the message would be switched to the Melbourne outlet, and, upon receipt at the Melbourne Switching Centre, the two codes would be transposed automatically, the "BT" symbol ensuring that the message would be switched and transmitted to Ballarat in the usual way.

Preliminary engineering and traffic trials with this system have proved successful, and it is anticipated that universal transit switching will be in Commonwealth-wide operation by the end of 1962.

The introduction of TRESS has resulted in an appreciable improvement in the quality of the service provided for users of the telegraph facility, and considerable staff economies have been effected by the elimination of the former intermediate reception and re-transmission operations at Chief Telegraph Offices.

Excellent progress has been made with the conversion of morse offices to TRESS working. In some States all selected offices have been included in the network; in the larger States, however, the tempo of conversion has been slower, due mainly to the magnitude of the task of providing suitable transmission channels.

Of the total of 701 offices at present planned for conversion, 680 have now been included in the TRESS network. In Victoria, 175 offices have been nominated for inclusion in the scheme, and 166 connections had been effected by December, 1961. Conversion of the remaining Victorian offices was completed by the middle of 1962.

*Radio Communications*

Over 8,000 radio communication stations have now been authorized for use in Victoria. These include Overseas Telecommunications Commission stations, aeronautical stations, networks of stations operated by taxi cab companies, newspaper organizations, police departments, forestry officers, and various other enterprises, and privately operated services conducted by fishermen, pleasure craft users, and others. In addition, more than 1,300 amateurs operate experimental stations.

**Further References**

A short history of the Post Office in Victoria will be found on pages 702 to 705 of the Victorian Year Book 1961.

**Post Office Statistics**

*Revenue and Expenditure*

Particulars concerning the revenue and expenditure of the Postmaster-General's Department in Victoria for each of the years 1956-57 to 1960-61 are contained in the following table :—

VICTORIA—POSTMASTER-GENERAL'S DEPARTMENT :  
REVENUE AND EXPENDITURE  
(£'000)

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
<b>REVENUE</b>					
Postage .. .. .	8,337	8,738	9,268	11,140	11,975
Money Order Commission .. .. .	239	246	255	294	301
Poundage on Postal Notes .. .. .					
Private Boxes and Bags .. .. .	54	57	59	63	66
Miscellaneous .. .. .	707	898	1,001	980	1,099
<b>Total Postal .. .. .</b>	<b>9,337</b>	<b>9,939</b>	<b>10,583</b>	<b>12,477</b>	<b>13,441</b>
Telegraphs .. .. .	1,508	1,471	1,539	1,688	1,831
Telephones .. .. .	15,214	16,240	17,540	21,111	23,549
<b>Total Revenue .. .. .</b>	<b>26,059</b>	<b>27,650</b>	<b>29,662</b>	<b>35,276</b>	<b>38,821</b>
<b>EXPENDITURE</b>					
Salaries and Contingencies—					
Salaries and Payments in the Nature of Salary	10,623	11,260	11,560	13,079	13,098
General Expenses .. .. .	1,119	1,236	1,311	1,501	1,654
Stores and Material .. .. .	481	573	654	651	674
Mail Services .. .. .	835	844	875	908	931
Engineering Services (Other than New Works)	8,481	9,002	9,625	10,973	11,217
Rents, Repairs, Maintenance, Fittings, &c. ..	351	440	427	445	508
Proportion of Audit Expenses .. .. .	11	12	14	16	17
New Works—					
Telegraphs, Telephones, and Wireless ..	7,515	8,440	9,620	10,604	10,749
New Buildings, &c. .. .. .	1,103	1,225	1,102	1,153	1,309
<b>Total Expenditure .. .. .</b>	<b>30,519</b>	<b>33,032</b>	<b>35,188</b>	<b>39,330</b>	<b>40,157</b>

## Activities

The number of post offices and telephone offices and the number of the persons employed by the Postmaster-General's Department in each of the five years 1956-57 to 1960-61 were as follows :—

**VICTORIA—POST OFFICES, TELEPHONE OFFICES,  
PERSONS EMPLOYED**

At 30th June—	No. of Post Offices	No. of Telephone Offices	Persons Employed					Total
			Permanent	Temporary and Exempt	Semi- and Non-Official Postmasters and Staffs	Mail Contractors	Other*	
1957	2,316	184	13,639	8,504	2,486	1,097	684	26,410
1958	2,298	185	14,923	7,888	2,425	1,147	682	27,065
1959	2,278	185	15,445	8,146	2,430	1,126	697	27,844
1960	2,257	184	15,806	7,701	2,524	1,164	708	27,903
1961	2,235	174	15,721	8,182	1,923	1,142	762	27,730

\* Includes telephone office-keepers and part-time employees.

Particulars relating to the number of letters, &c., posted and received within Victoria during the years 1956-57 to 1960-61 are as follows :—

**VICTORIA—LETTERS, ETC., POSTED AND RECEIVED  
(‘000)**

Year Ended 30th June—	Letters, Postcards, etc.	Registered Articles (Except Parcels)	Newspapers and Packets	Parcels (Including Those Registered)
<b>POSTED FOR DELIVERY WITHIN THE COMMONWEALTH</b>				
1957 .. ..	392,076	4,188	68,117	4,295
1958 .. ..	421,769	3,835	75,912	4,747
1959 .. ..	442,766	3,684	75,511	5,208
1960 .. ..	442,606	3,238	74,609	4,473
1961 .. ..	481,099	3,111	70,720	4,416
<b>DISPATCHED TO AND RECEIVED FROM PLACES BEYOND THE COMMONWEALTH</b>				
1957 .. ..	21,748	411	13,192	334
1958 .. ..	23,716	417	14,406	378
1959 .. ..	27,633	436	13,655	393
1960 .. ..	31,220	421	13,081	453
1961 .. ..	35,387	484	13,098	442
<b>TOTAL</b>				
1957 .. ..	413,824	4,599	81,309	4,629
1958 .. ..	445,485	4,252	90,318	5,125
1959 .. ..	470,399	4,120	89,166	5,601
1960 .. ..	473,826	3,659	87,690	4,926
1961 .. ..	516,486	3,595	83,819	4,858

The following table shows the total number and value of money orders and postal notes issued and paid in each of the five years 1956–57 to 1960–61 :—

VICTORIA—MONEY ORDERS AND POSTAL NOTES

Year Ended 30th June—	Money Orders				Postal Notes			
	Issued		Paid		Issued		Paid	
	No.	Value	No.	Value	No.	Value	No.	Value
	'000	£'000	'000	£'000	'000	£'000	'000	£'000
1957.. ..	2,113	17,591	2,050	17,534	5,316	2,400	6,655	2,834
1958.. ..	2,316	19,137	2,216	19,335	5,140	2,387	6,340	2,766
1959.. ..	2,606	20,254	2,471	20,671	4,845	2,277	6,133	2,727
1960.. ..	2,537	21,058	2,514	21,132	4,523	2,221	5,917	2,713
1961.. ..	2,445	22,919	2,519	23,100	4,016	2,011	5,467	2,541

Of the money orders issued in 1960–61, 2,317,680 for £22,495,023 were payable in the Commonwealth of Australia, and 127,954 for £423,875 in other countries. The orders paid included 2,477,979 for £22,865,054 issued in the Commonwealth, and 40,845 for £234,977 in other countries.

Telecommunications

The following table gives particulars relating to the telegraph business during each of the five years 1956–57 to 1960–61 :—

VICTORIA—TELEGRAPH BUSINESS

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Number of Telegraph Offices (Including Railway Telegraph Offices) .. ..	2,357	2,330	2,320	2,303	2,294
Telegrams—					
Within the Commonwealth—					
Paid and Collect Telegrams Dispatched—					
Ordinary, Urgent, and Press ..	4,357	4,131	4,050	4,093	3,834
Lettergrams .. ..	13	15	17	13	10
Radiograms .. ..	7	6	6	6	6
Meteorological .. ..	107	124	127	140	147
Unpaid Telegrams Dispatched—					
Service .. ..	144	150	148	145	137
Total .. ..	4,628	4,426	4,348	4,397	4,134
Beyond the Commonwealth—					
Dispatched .. ..	466	452	465	499	488
Received .. ..	522*	527*	427*	428*	430*
Total .. ..	988	979	892	927	918
Total Number of Telegrams Dispatched and Received .. ..	5,616	5,405	5,240	5,324	5,052

\* Estimated figure.

Information relating to the telephone service is given below for the years 1956-57 to 1960-61 :—

### VICTORIA—TELEPHONE SERVICES

Particulars	Year Ended 30th June—				
	1957	1958	1959	1960	1961
Telephone Exchanges .. .. .	1,766	1,775	1,794	1,783	1,764
Public Telephones .. .. .	5,484	5,645	5,939	6,052	6,306
Lines Connected .. .. .	401,414	425,588	450,889	469,750	508,567
Instruments Connected .. .. .	574,565	609,973	646,966	677,468	707,937
Instruments per 1,000 of Population .. .. .	214·9	222·5	229·9	234·3	238·9

The number of radio communication stations authorized in Victoria at 30th June in each of the years 1958 to 1961 is shown in the following table. Figures relate to radio communication (radio-telegraph and radio-telephone) stations only.

### VICTORIA—RADIO COMMUNICATION STATIONS AUTHORIZED

Class of Station	At 30th June—			
	1958	1959	1960	1961
<b>Transmitting and Receiving—</b>				
<b>Fixed Stations* —</b>				
Aeronautical .. .. .	5	7	6	6
Services with Other Countries .. .. .	15	15	15	14
Other .. .. .	124	132	142	153
<b>Land Stations†—</b>				
Aeronautical .. .. .	8	10	9	8
<b>Base Stations—</b>				
Land Mobile Services .. .. .	475	588	690	752
Harbour Mobile Services .. .. .	11	10	15	16
Coast‡ .. .. .	7	10	10	11
Special Experimental .. .. .	30	35	48	60
<b>Mobile Stations§—</b>				
Land Mobile Services .. .. .	4,221	5,109	6,027	6,913
Harbour Mobile Services .. .. .	73	92	105	110
Amateur Stations .. .. .	1,140	1,217	1,258	1,307
<b>Total Transmitting and Receiving .. .. .</b>	<b>6,109</b>	<b>7,225</b>	<b>8,325</b>	<b>9,350</b>
<b>Receiving Only—</b>				
Fixed Stations* .. .. .	185	189	190	191
Mobile Stations§ .. .. .	34	34	34	34
<b>Total Receiving Only .. .. .</b>	<b>219</b>	<b>223</b>	<b>224</b>	<b>225</b>
<b>Grand Total .. .. .</b>	<b>6,328</b>	<b>7,448</b>	<b>8,549</b>	<b>9,575</b>

\* Stations established at fixed locations for communication with other stations similarly established.

† Stations established at fixed locations for communication with mobile stations.

‡ Land stations for communication with ocean-going vessels.

§ Equipment installed in motor vehicles and harbour vessels.

*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 each of the years 1956-57 to 1960-61 are shown below.

Broadcast Listeners' and Television Viewers' Licences are issued at post offices in accordance with the provisions of the *Broadcasting and Television Act 1942-56*, which stipulates that a broadcast or television receiver may not be used unless there is in force a licence which applies to that receiver. A single licence covers any number of receivers operated by the holder or a member of his family, if the sets are ordinarily kept at the address specified on the licence. The fee for a broadcast listener's licence or its renewal is Zone I, £2 15s., Zone II, £1 8s. Zone II is in areas beyond 250 miles of specified broadcasting stations. A television viewer's licence costs £5.

VICTORIA—NUMBER OF BROADCASTING AND TELEVISION LICENCES IN FORCE

Class of Licence	At 30th June—				
	1957	1958	1959	1960	1961
Broadcasting Stations* ..	20	20	20	20	20
Television Stations† ..	2	2	2	2	2
Broadcast Listeners.. ..	554,909	557,960	605,340	606,587	589,437
Television Viewers .. ..	44,986	147,721	270,073	353,091	401,395
Amateur .. .. ..	1,091	1,140	1,217	1,258	1,307

\* Exclusive of eight broadcast stations (including 3 shortwave), operated by the National Broadcasting Service.

† Exclusive of one television station operated by the National Television Service.

**Overseas Telecommunications Commission (Australia)**

The Overseas Telecommunications Commission (Australia) was established in August, 1946, under the Overseas Telecommunications Act, as the national body to operate Australia's overseas cable and radio communications services, and radio communications with ships at sea.

The Commission is responsible for the fulfilment of Australia's obligations under the Commonwealth Telegraphs Agreement which established a partnership between the countries of the British Commonwealth in the telecommunications services which link them, within the broader framework of international co-operation achieved through the International Telecommunication Union, a specialized agency of the United Nations. General co-ordination within the British Commonwealth is achieved through a central advisory body, the Commonwealth Telecommunications Board, comprising representatives of the partner Governments.

The Commission's overseas services are operated through telegraph cable terminals at Sydney and Cottesloe (Western Australia), telegraph cable repeater stations at Cocos Island, Southport (Queensland), and

Norfolk Island, and through three pairs of international radio transmitting and receiving stations in Western Australia, New South Wales, and Victoria. It was through the Fiskville transmitting station and Rockbank receiving station, both in Victoria, that oversea radiotelegraph services were first established in 1927.

The Commission's Head Office and chief operating centre for its cable and radio services is situated in Sydney, while its Melbourne Office, in addition to handling a large proportion of Victorian oversea radiotelegraph traffic, is the Australian terminal for all incoming and outgoing oversea phototelegrams, as well as being the operating point of the Melbourne coastal radio service.

In addition to its international services, the Commission provides radio communication with Australian Territories overseas, including stations in the Antarctic, and operates the coastal radio service for communication with ships at sea in Australian waters, and high-frequency radio services for communication with ships in any part of the world. Certain of the Commission's coastal radio stations in remote locations also perform a dual function in providing a radio communication service with extensive networks of mainland and island outpost stations.

At present, Australia's oversea telegraph services are provided by means of submarine cable as well as radio-telegraph circuits, but all other services are provided only by high-frequency radio facilities. In addition to planning expansion of existing types of radio circuits, the Commission is participating in the construction of a multi-channel telephone cable (with a capacity equivalent to 80 two-way telephone circuits) linking Australia and New Zealand by 1962, and extending via Suva and Hawaii to Vancouver by 1964, from where it will link by micro-wave and other telephone cables with the United Kingdom and Europe.

Foremost among new services introduced by the Commission is the international telex service which provides direct teleprinter communication between the offices of subscribers to Australia's internal telex service and the offices of telex subscribers in 43 oversea countries. Oversea telex calls in 1961 totalled 539,983 paid minutes (as compared with 335,223 paid minutes in the previous year).

Another comparatively recent service is that providing leased radio channels on a continuous basis to customers for communication with their oversea offices. In 1961, these two-way leased circuits operated for a total of 69,014 hours, and one-way circuits for a total of 21,350 hours.

Despite a continued increase in telex and leased services, the volume of oversea telegraph traffic has maintained an upward trend, and in 1961 totalled almost 80 million words.

Radiotelephone calls exchanged between subscribers in the Australian Post Office internal network and oversea subscribers continue to increase substantially, and totalled 574,555 paid minutes in 1961.

A total of 7,175 phototelegrams were handled during 1961, again an increase over the previous year.

Traffic handled by the Commission's coastal radio service during 1961 included a total of almost 15½ million paid words for radio-telegraph messages, and over 77,000 paid minutes for radiotelephone calls.

The following tables give statistics of Australia's oversea cable and radio telegraph services, and oversea radiotelephone services, over a four-year period. Comparable figures for the international telex service cannot be given as this service only commenced at the end of October, 1958.

**AUSTRALIA—OVERSEAS TELECOMMUNICATIONS COMMISSION : OVERSEAS RADIO TELEPHONE SERVICES :**  
**NUMBER OF PAID MINUTES**  
 ('000)

Particulars	Year Ended 31st March—			
	1958	1959	1960	1961
United Kingdom—				
From Australia .. .. .	48	62	67	64
To Australia .. .. .	43	49	53	58
Total .. .. .	91	111	120	122
Other British Commonwealth Countries—				
From Australia .. .. .	74	77	93	110
To Australia .. .. .	82	87	103	132
Total .. .. .	156	164	196	242
Non-British Countries—				
From Australia .. .. .	61	79	101	107
To Australia .. .. .	53	67	86	104
Total .. .. .	114	146	187	211
All Countries—				
From Australia .. .. .	183	218	261	281
To Australia .. .. .	178	203	242	294
Total .. .. .	361	421	503	575



**AUSTRALIA—OVERSEAS TELECOMMUNICATIONS COMMISSION : INTERNATIONAL TELEGRAPH SERVICES (CABLE AND RADIO) : NUMBER OF WORDS TRANSMITTED**  
( '000)

Particulars	Year Ended 31st March—			
	1958	1959	1960	1961
<b>United Kingdom—</b>				
From Australia .. .. .	13,644	15,064	12,806	13,297
To Australia .. .. .	17,886	18,989	17,506	17,963
Total .. .. .	31,530	34,053	30,312	31,260
<b>Other British Commonwealth Countries—</b>				
From Australia .. .. .	8,836	9,301	9,508	10,934
To Australia .. .. .	10,447	10,115	11,111	11,772
Total .. .. .	19,283	19,416	20,619	22,706
<b>Non-British Countries—</b>				
From Australia .. .. .	11,682	12,139	13,453	13,767
To Australia .. .. .	9,563	9,538	10,375	11,352
Total .. .. .	21,245	21,677	23,828	25,119
<b>All Countries—</b>				
From Australia .. .. .	34,162	36,504	35,767	37,998
To Australia .. .. .	37,896	38,642	38,992	41,087
Total .. .. .	72,058	75,146	74,759	79,085

## Appendix A

### *History of Victoria's Early Statistics and Statisticians*

The first statistical survey undertaken by the permanent European settlers of Victoria was that of Edward Henty, held on the shores of Portland Bay on the 19th November, 1834. On that day he had landed in Victoria, after a 34-day passage in the *Thistle* from Launceston, only 350 miles away. In spite of laws and ordinances forbidding unauthorized settlement, Henty had come to Victoria after suffering disappointments in both Western Australia and Tasmania, and when he landed, he made history by being Victoria's first permanent settler.

His first concern on landing was to determine his welfare after his "boisterous passage". The result of his stocktaking disclosed that he had successfully landed 13 heifers, 4 working bullocks, 5 sows, and various items necessary to maintain a small farm. Henty's "Journal", in which he recorded his stocktaking, stated that his friend Camfield and a few workmen had landed with him, and it also gave details of the conditions of the weather and of other items of interest to the settler. In later years the Government was to publish similar information to aid the newcomers and those already settled in the area.

The "Journal" of Edward Henty, the record of Victoria's first statistics, is our only record until June, 1835, when John Batman, an Australian-born citizen, settled on the shores of Port Phillip. Batman's records, with those of Henty, provided Victoria's statistics until the first governmental statistical survey was undertaken.

The first official statistics resulted from the action of His Excellency Sir Richard Bourke, Governor of New South Wales, within whose jurisdiction both Port Phillip and Portland Bay lay. Governor Bourke, realizing that settlement in these two areas was destined to be permanent despite governmental disapproval of unauthorized colonization, took steps to record the progress of such settlement. In 1836 he despatched George Stewart, Esq., a magistrate of Sydney, on the revenue cutter *Royal George* to report on the state of affairs in the infant colony of Port Phillip. Stewart's report stated that the colony comprised a population of 142 males and 35 females, 177 in all, and that in the area there were 26,000 sheep and a number of horses and horned cattle. It is not certain that Stewart's report encompassed the Portland Bay settlement of the Hentys; nevertheless, it provides the first official information concerning the Colony of Victoria as at the 25th May, 1836.

The second census of that area then known as the Port Phillip settlement was carried out on the 8th November, 1836, under orders from Captain Lonsdale who had recently arrived as the first magistrate and government representative for Victoria. The unofficial settlement had, at last, been officially recognized. This census assessed that the population was then only 186 males and 38 females, 224 in all.

APPENDIX A—*continued*

Censuses were conducted at frequent intervals during the following twenty years, and they showed the progress in terms of population growth thus :—

		Males	Females
12th September, 1838	..	3,080	431
2nd March, 1841	.. ..	8,274	3,464
2nd March, 1846	.. ..	20,184	12,695
2nd March, 1851	.. ..	46,202	31,143
26th April, 1854	.. ..	155,876	80,900
29th March, 1857	.. ..	264,334	146,432

The latter censuses were conducted by the Office of the Registrar-General of Victoria, an office set up with the establishment of Victoria as an independent Colony, and later, as a self-governing State. These figures show the phenomenal growth of Victoria's population following the discovery of gold—it increased over 300 per cent. in just over three years, and again almost doubled within the following three years.

During this period moves had been made to record the statistics of Victoria. By March, 1853, the registration of births, deaths, and marriages had been legally endorsed, and the practical application of this legislation had followed as from the 1st July in the same year. The basis of the system which was to be used had its beginnings over three centuries earlier in London, when the city, fearing a recurrence of the Great Plague, commenced the compilation of lists of births and deaths in 1528—the vital statistics of the day. The man who was deputed to plan and implement the system for Victoria was William Henry Archer, a most colourful personality, who at the age of 27 had migrated to the new Colony in 1852.

Archer's early life had been spent in an atmosphere of scholarship and culture. Lord Tennyson and two men who were later to reach high office as churchmen, Cardinals Newman and Wiseman, were amongst his personal friends. In England he had practised as an actuary, and had been assistant to the famous Dr. William Farr (1807–1883), the "vital" statistician of England. For some time, too, he had been assistant to Mr. F. G. Neison, possibly the most eminent statistician and actuary of the day.

Early in 1853 Archer, as Acting Registrar-General of the newly established Registrar-General's Office of Victoria, was commissioned by Captain Lonsdale, then in command of the Colony, to initiate a system of registration of births, deaths, and marriages, as required by the Registration Act then recently passed by Parliament. The system Archer set up replaced the parochial and church registers which were, until then, the only records of Victoria's vital statistics. For the earlier years these church records are Victoria's only records, and due to Archer's foresight they are, in the main, preserved. He impounded, or had copied, all church records of births, deaths, and marriages which preceded records made under the Registration Act, so giving a very complete register from 1837, when Victoria was scarcely two years old as a European settlement. Archer's system was basically the existing English system adapted to meet the needs of the Victorian law, and so

APPENDIX A—*continued*

thorough was its design that it was to be the model followed by statisticians of many other of the English colonies. Archer's list of causes of death, far more comprehensive than any previously published, was a worthy contribution in itself and was probably the factor which gained for him Honorary Membership of the Medical Society of Victoria; his methods were widely acclaimed by statisticians; statistically speaking, the system of registration which he designed placed Victoria well to the forefront. For this effort Archer received the commendation of Governor La Trobe—no mean tribute.

Governor La Trobe set in motion, towards the end of 1853, the registration system: he appointed Major Norman Campbell to the position of Registrar-General of Victoria. Protests came concerning Campbell's appointment over the head of Archer, the man who had designed the system and who had given his efforts to ensure that it would function as required. Despite the public concern, the two men worked in unison, Campbell as Registrar-General, and, serving him, Archer as head of the statistical section of the office—later to be known as the Office of the Government Statist.

Despite the energy with which Archer had toiled to ensure the success of the registration programme, many difficulties beset his path. The indifference and dislike of the people to providing information, the crowding on the goldfields, the lack of communications between the scattered population in the other rural areas of the State, the lack of trained full-time staff, and other such impediments made the collection of statistical data a man-sized undertaking. In an endeavour to reduce the difficulties, mainly by reducing the prejudice to providing statistical information, Archer decided to campaign amongst the public and to obtain the services of reliable reporters. He spent two years travelling through Victoria, journeying mostly on horseback. During his travels he enrolled as helpers 76 Deputy Registrars and 51 Assistant Deputy Registrars, and instructed them in his methods. Many of his enlisted helpers were clerks of the Bench in the various police districts through which Victoria was then administered. These men were familiar with the requirements of the type of factual reporting which Archer demanded. This very necessary qualification was to form the basis on which his statistics would stand or fall. On his journey through Victoria he also explained to the clergy of all denominations what were his aims and he endeavoured to help them to appreciate the use and advantages his statistics could bestow on the community.

In the field of vital statistics (that is, those concerning births and deaths), Archer's methods gave Victoria a very substantial boost. The completeness of his original registration proposals is shown by the very few amendments which have been found necessary after more than a century of operation.

Archer's official reports, based on the principles he enunciated, possessed a logic of presentation and a comprehensiveness which were to be used as models for many years in Victoria's statistical reports. Amongst his better known reports is "Archer's Statistical Notes 1835-1860" in which is given Victoria's history, in statistics, from the

## APPENDIX A—continued

commencement of permanent European settlement until the time when Archer left the statistical section to become Registrar-General of Victoria and Registrar of the Supreme Court. This took place in January, 1859, on the death of Major Campbell.

Mr. Archer, founder of Victoria's statistical system, left the Public Service as a victim of political caprice. On "Black Wednesday", the 9th January, 1878, Graham Berry, Premier of Victoria, involved in a clash between the Upper and Lower Houses of Parliament over the payment of members of Parliament, reduced Government expenditure by dismissing, by proclamation, 137 public servants, amongst whom was Archer. After the close of his Public Service career, Archer practised as a barrister and solicitor in Melbourne. He died in 1909 at the age of 84.

In May, 1857, a young man who had arrived in Victoria from England in 1852, joined Archer's statistical staff as a temporary assistant. His name was Henry Heylen Hayter and he was employed as collector of statistics for the Western Victorian Provinces of Ripon, Dundas, Follett, and Normanby, and for the Pastoral District of the Wimmera. Before many years were to pass, he was to make his mark : so renowned became his statistics that he was called before the House of Commons in England to explain his success.

Following the promotion of Archer to the position of Registrar-General, Hayter was appointed to the position of Assistant Registrar-General on the 1st September, 1859. His salary was £300 a year. This appointment, a routine matter in the history of a Government Department, was of great import to Victoria. Hayter, as a statistician, was to win renown far beyond the shores of Australia for his clear thinking, his knowledge of worldly affairs, and for his lucid exposition of the facts about which he wrote.

Mr. Hayter's first major activity, on his assumption of office, was the re-organization of the statistical office, so that, on occasions when a census would be taken of the people of Victoria, he would have the machinery to carry it out under the very strict and exact statistical conditions which he considered necessary for such an undertaking. His re-organization of the office was perhaps the one act which advanced Victoria's statistics to the standard which was acclaimed by Sir Charles Dilke in his book *Greater Britain*, a personal survey and appraisal of the younger British colonies. Sir Charles, writing of Victoria, commented : "The most economical position which Victoria occupies is easily ascertained, for her statistics are the most perfect in the world. The arrangement is a piece of exquisite mosaic."

In 1870, Hayter was appointed to the Royal Commission which inquired into the Public Service. He carried out his duties as secretary to this very early Victorian Royal Commission alongside his normal daily work as a statistician. The extra duties imposed, together with the enlargement of activities of the statistical branch to cope with the population Census of 1871, were not without effect. In 1872, Hayter, in poor health, was forced to seek leave of absence in order to recuperate from the strain of years of overwork.

APPENDIX A—*continued*

The statistical section of the Registrar-General's Office of Victoria eventually became a separate body. On the 14th May, 1874, Hayter was appointed Government Statist—Victoria's first Government Statist—at a salary of £610 per annum. On the 1st October in that year he published the first *Victorian Year Book*: it referred to the statistics of the previous year, and Hayter announced in its foreword that he intended to honour the name by a yearly digest of statistics. The *Year Book*, as he saw it, was to contain an analysis of, and comments on figures appearing in the Statistical Register. This latter publication had been the principal statistical report until that time; in it the statistics were presented without comment. Hayter was fully aware that people may use the statistics to represent as facts things which did not exist but which suited their own policies. After a few years of publication, the *Year Book* had become so comprehensive in scope that it could be used without reference to its parent, the Statistical Register.

Mr. Hayter nominated a standard of statistical ethics in the preface to the first *Year Book*. He stated his intentions clearly, and his intentions formed the basis upon which the *Year Book* prospered. He wrote, amongst other things:—

“It will be my endeavour in this succession of volumes to record facts with correctness and impartiality; to comment on them only so far as may be necessary to elucidate them properly; to set up no theories except such as may be fairly deducible from the materials before me; and, in drawing inference, to exercise perfect fairness to all sections of the community.”

Hayter's brainchild, the *Year Book*, was to be published for only a very few years before it became known by the title highly complimentary to its founder, of “Hayter”.

The various States, progressing separately, had developed their own systems of keeping statistics, although their statisticians had in 1861 reached some agreement that comparable information was desirable. Due to their different needs, differences in the material presented and in the form of presentation from State to State became so great that a conference of all statisticians was held in Tasmania in 1875. The aim of this conference, at which Mr. Hayter represented Victoria, was to establish a uniform system of statistical reporting throughout Australia, so that comparable statistics for all States would be available. A factor which mitigated against this aim, and one which even today poses certain problems, was the different requirements of the laws of the various States.

By this time Hayter had become somewhat of a legendary figure in the administration of Victoria, and even amongst his fellow statisticians throughout the world. In 1879, when he was in London as secretary to the famous “Berry Embassy”, he was twice examined, at the Bar, by the House of Commons which was intent on learning the secrets of his success, for England's problems demanded an analysis of its statistics as thorough as Hayter's had provided for Victoria.

APPENDIX A—*continued*

The 1881 Census of Victoria was a memorable point in the history of Victoria's statistics. It was the first census of Victoria to be carried out as part of an Australia-wide survey, and, because of the foresight displayed by Hayter and his brother statisticians at their conference in Tasmania, it was one of the first in the world to be successful, where more than one State had participated. Much of its success was due to the efforts of Hayter. In that year, the Social Science Conference, held in Melbourne, also occupied much of Mr. Hayter's time.

The year 1882 brought to Mr. Hayter some worldly recognition. He was created Companion of St. Michael and St. George; by the French he was named an Officer of the Order of Public Instruction. Two years later he was to be honoured by the entitlement to be known as Chevalier of the Order of the Italian Crown.

Mr. Hayter was due to retire from his post as Government Statist at the end of March, 1895—he was 74 years of age and had been granted a pension by a grateful Government, but he was never to receive this recognition of his services. On the 23rd March, one week before he was to retire, he died at his home in Armadale. He had served Victoria well for 35 years as her Statist, and had launched a system of statistical reporting which was then and afterwards to be acclaimed widely.

His assistant, James J. Fenton, who was to carry on the administration of the Statist's Office, had been appointed Assistant Government Statist in 1891. As assistant to Hayter he had leant heavily on the older man. His greatest hour, perhaps, was when he represented Victoria at the first Commonwealth Conference of Statisticians held in Hobart in 1902.

The coming of the Commonwealth had brought in its wake new problems for the statistician. Now, more than ever, it was necessary that comparability of the statistics of the various States be obtained so that Australia-wide statistics could be compiled. Before Federation the various States, as far as trade relationships were concerned, were like foreign countries. Customs barriers closed every border. With the introduction of a uniform customs law after Federation, it was not necessary, for customs purposes, to ascertain statistics of interstate trade. The Commonwealth's assumption of the largest source of revenue of the States, the customs and excise revenue, and the transfer of the postal administration to the Commonwealth Government, were two factors which created great changes with which the statistical world of Australia was forced to keep pace.

As a result of invitations from the Premier of Tasmania, who acted on the suggestion of Mr. T. A. Coghlan, Government Statistician of New South Wales, the first Commonwealth Conference of Statisticians was convened in Hobart in January, 1902. Mr. Coghlan had suggested that, as he and Mr. Fenton were in agreement concerning the uniformity of certain statistics, it was possible that a conference would produce some uniformity between all States. At the conference the possibility of uniformity in all branches of statistics in all States was investigated and discussed. In addition, the conference discussed the implications

## APPENDIX A—continued

of the proposed establishment of a Commonwealth Statistician's Office. In order to avoid duplication of effort the conference decided it would be most economical if the collection of data for both Commonwealth and State use be deputed to the officers of the several existing State bureaux of statistics.

A further article describing the activities of the Commonwealth Bureau of Census and Statistics, and of its Victorian Office, will be published in the Victorian Year Book 1964.

## Appendix B

*Principal Events from 1st July, 1961 to 30th June, 1962*

1961

- July 3* : The Managing Director of the Ford Motor Company of Australia announced an expansion programme expected to cost £15,500,000. The company will spend £10 million on expansion of the Geelong (Vic.) plant, nearly £5 million in Melbourne and £700,000 in Sydney. The headquarters of the Company will be transferred to Broadmeadows in two years.
- July 17* : The Bolte (Liberal-Country Party) Government in Victoria returned with a majority increased by one at the general elections.
- August 3* : Viscount De L'Isle, V.C., sworn in as Governor-General of Australia, at a ceremony in the Senate Chamber at Parliament House. He is Australia's fifteenth Governor-General.
- August 8* : History was made when, for the first time, Melbourne was visited by a Lord Mayor of London (Sir Bernard Waley-Cohen). Historic ceremony marked the special meeting of the City Council to commemorate the visit.
- August 10* : Approval was given by the City Council for the Australia and New Zealand Bank to build a multi-storied sky-scraper on the site between the Town Hall and St. Paul's Cathedral.
- August 28* : Councillor Maurice A. Nathan, C.B.E., elected Lord Mayor of Melbourne, in succession to Councillor Sir Bernard Evans, D.S.O., E.D., who had held the office for two years and did not re-nominate.
- August 30* : It was announced that the National Heart Campaign—a public appeal for funds for a Foundation for research on heart diseases—held in May and June throughout Australia, raised £2,561,863. The Campaign had a target of £1,500,000 and was over-subscribed by 71 per cent.
- October 2* : Death occurred suddenly at his country property near Tallarook (Vic.) of Mr. Essington Lewis, C.H., aged 80, leading Australian industrialist, and for some 30 years General Manager and Chief Executive of the Broken Hill Proprietary Company Ltd.
- October 5* : It was announced that a fortune of £1,640,000 had been bequeathed to charity under the will of the late Mr. Edward Arthur Green, an obscure bachelor of Footscray (Melb.). His gift is one of the largest personal bequests ever made to charity in Australia. Also, the State Government will receive a natural rock formation at Sydenham, near Melbourne, known as the "Organ Pipes".



APPENDIX B—*continued*

- November 2:* Figures issued by the Commonwealth Statistician giving some details of the 30th June Commonwealth Census showed that Australia's population was 10,508,191 at 30th June, 1961—an increase of 1,521,661 during the seven-year intercensal period. Of these, 5,900,884 lived in the capital cities.
- November 6:* A Victorian Supreme Court jury awarded record damages of £38,325 to a twenty-year-old youth who suffered severe brain injuries in a motor accident at Deepdene (a suburb of Melbourne) last year. The amount was the highest ever awarded by a Victorian jury for personal road accident injuries.
- November 7:* A plan for the first and most urgent stage of a £20 million "Life Line" roads programme, involving 350 miles of metropolitan freeways and highways, was released by the Metropolitan Board of Works. The network, made up of 210 miles of existing roads and 140 miles of proposed new roads is designed to meet the needs of the Melbourne Metropolitan Area for the next 20 to 30 years.
- December 7:* Announced that historic Scott's Hotel, Melbourne, had been purchased by the Royal-Globe insurance group for about £150,000, and would be demolished to make way for an office block. Scott's Hotel in Collins-street was built in 1860 (then known as Lamb Inn) on a 126 x 200 feet site which was purchased by a John Smith for £40 in 1837.
- December 8:* A £1 million Roman Catholic College is to be built near Geelong in 1963, on a 300-acre site behind Geelong Grammar School, overlooking Corio Bay. The school will be designed on the American campus style, with separate buildings for various faculties, and separated from the boarding-house.
- December 9:* Australia's first country television station GLV-10 at Traralgon (Vic.) was officially opened and commenced transmissions. It is the first station in Australia to use Australian-made equipment (excepting cameras).
- December 10:* Federal Election held. Final figures issued on 19th December showed that the Government had a majority of two seats, the strength of parties in the House of Representatives being Government 62, Labor Opposition 60.
- December 14:* Plans were announced for the construction of two multi-storied buildings which will further change Melbourne's skyline. One, a fifteen-storied, 220-ft. office block for the Reserve Bank of Australia, will be erected on the corner of Collins and Exhibition streets, and will be completed in 1964. The other will be built in the grounds of the University of Melbourne and will be known as the Howard Florey Laboratory for Experimental Physiology.
- December 14:* The Premier of Victoria (Mr. Bolte) turned the first spadefuls of earth to mark the commencement of construction preparation for the £44 million Aluminium Project of Alcoa Pty. Ltd., at Point Henry near Geelong. Work will begin immediately on levelling the site for the smelting and fabricating plants costing £23 million.
- 1962
- January 3:* The first train (goods train from Sydney) to run on the new Albury-Melbourne Standard Gauge Railway Line, arrived in Melbourne at 11 a.m. today. Its arrival marked the end of 80 years of transfer of goods and passengers at Albury because of the differing rail gauges in New South Wales and Victoria.
- January 4:* Victoria's entire re-forestation programme may have to be reviewed following isolation of a timber-killing wasp in pine trees near Healesville. The insect, a Sirex Wood Wasp, has never before been found in the Australian mainland softwoods, but Forest Commission Officers fear it may have gained a stronghold unnoticed.

## APPENDIX B—continued

- January 14–17 :** Victoria's worst bushfires since 1939 raged for three days in the Dandenong Ranges, east of Melbourne, taking six lives. The fires started at the Basin, and the worst blaze was in the Sassafras–Olinda area. More than 2,000 volunteer and permanent fire-fighters fought the fires which burnt out thousands of acres of timber. Some 470 houses were completely lost, 63 houses damaged together with many outbuildings.
- January 23 :** Work began on a £17 million, 3,000 allotment satellite township at Frankston, known as the Karingal Estate. The 600-acre development site is to be completed within five years and will include a high school, already completed, a technical, and three primary schools.
- February 16 :** Announced that Victoria is to receive about £6,500,000 as the State's share of the £25 million to be provided in the Federal Government's emergency programme to stimulate the economy and reduce unemployment. The £6.5 million will increase Victoria's total funds to nearly £109 million.
- February 26 :** A contract worth £4,300,000 was signed for the initial stage of work on the new National Gallery and Cultural Centre in St. Kilda-road. The first stage will be the excavation of the site and the sinking of 1,300 piles through mud up to 90 feet deep.
- March 29 :** The Premier (Mr. Bolte) opened the £5 million Moondarra Reservoir. The Reservoir, which has been built to provide water for the towns and industries in the Latrobe Valley, will add 7,000 million gallons to present supplies.
- April 7 :** Announced that the Governor of Victoria (Sir Dallas Brooks), whose record thirteen-year term will expire on 18th October, is retiring soon on medical advice.
- April 9 :** The Prime Minister (Mr. Menzies) officially opened the new Coaxial Cable System for trunk telephone services which will revolutionize communications between Canberra, Sydney, and Melbourne. This is the first and major step in the Postmaster-General's Department's aim for a fully automatic subscriber-to-subscriber trunk line service throughout Australia and for instantaneous relay systems for television programmes between towns and cities along the cable route.
- April 12 :** The new Sydney–Melbourne Standard Gauge passenger train, the "Southern Aurora", carrying the Governor-General (Viscount De L'Isle, V.C.), the Prime Minister (Mr. Menzies), and other leading citizens, left Sydney at 10.45 p.m. on the inaugural passenger-train run over the new standard gauge.
- May 1 :** The Minister of Health (Mr. Mack) opened the new wing of the Peter McCallum Clinic which was built and fitted at a cost of £300,000. Housed in the wing is a new 4 million volt £75,000 X-ray machine for treatment of deep-seated tumors and cancers. The clinic is, at the present time, the only one in the English-speaking world with two machines, the first of which was purchased in 1956.
- May 12 :** After a twenty-year search, the foundation stone of Parliament House was located by a former Victorian Government Chief Architect. The stone is part of the fifth column from the north end of the western facade, and was laid by the Governor of the Colony (Sir Henry Brougham Loch) in 1886. It was never marked and had become one of Victoria's lost relics.
- May 31 :** The Deputy Premier (Mr. Rylah), at the official opening of the £2 million first stage of the South-eastern Freeway, unveiled a plaque on the freeway near Punt-road in honour of the late Sir Leslie Morshead. The first part of the freeway—an overpass over Punt-road—is named after Sir Leslie. Later the Minister for Local Government (Mr. Porter) officially opened the freeway which will ultimately link Melbourne with the Latrobe Valley.

APPENDIX B—*continued*

- June 1*: Melbourne's water restrictions were lifted completely by the Metropolitan Board. They were first imposed on December 13, 1961, and tightened on 29th March. The period of water restrictions was the longest since the summer of 1945-46.
- June 4*: The Governor-General (Viscount De L'Isle, V.C.), with Lady De L'Isle and their family, left Australia by air for England, where Lady De L'Isle will undergo special medical treatment following a recent operation in Sydney. They are expected to return at the end of September.
- June 21*: Buckingham Palace and the Acting Prime Minister (Mr. McEwen) simultaneously announced that a Royal Tour of Australia would be made by the Queen and the Duke of Edinburgh during February and March, 1963. The main purpose of the visit is to attend the celebration of the 50th anniversary of the establishment of the National Capital at Canberra.

## Appendix C

*Index of Special Articles in Previous Victorian Year Books*

(Commencing with New Series : Volume 75, 1961)

The following is a list of major articles which have appeared in the new series of *Victorian Year Books* commencing with Volume 75, 1961, and which have been extensively altered or omitted in the current edition to make room for new articles. This list will be revised each year to provide readers with an up-to-date *cumulative* index of special articles.

Contents	Year	Contents	Year
Agriculture, Research in ..	1961	Broadcasting, History of ..	1961
Alfred Hospital Medical Research .. ..	1961	Brown Coal Production : State Electricity Commission of Victoria .. ..	1962
Anti-Cancer Council of Victoria	1962	Building Development in the City of Melbourne in 1960	1962
Architecture in Victoria, Development of .. ..	1962	Bureau of Agricultural Economics .. ..	1961
Assurance, Life .. ..	1962	By-Pass Roads .. ..	1962
Australian Administrative Staff College .. ..	1961	Children's Welfare Department, History of .. ..	1961
Australian College of Education	1961	Commonwealth .. Banking Corporation .. ..	1962
Aviation, Civil .. ..	1962	Co-operative Housing Societies	1961
Baker Medical Research Institute .. ..	1961	Country Roads Board, History of .. ..	1961
Bank of Australia, Reserve ..	1962	"C" Series Retail Price Index	1961
Bank, State Savings of Victoria, History of .. ..	1961	Currency, History of .. ..	1961
Banking Corporation, Commonwealth .. ..	1962	Drama .. ..	1961
Banking, History of .. ..	1961	Education—	
Banking in Victoria during 1960	1962	Australian College of ..	1961
Banks, Cheque-Paying .. ..	1962	History of Catholic ..	1961
Basic Wage Awards, 1956-1959	1961	History of State ..	1961
Basic Wage Inquiry, 1960 ..	1961	in Victoria, 1945-1960,	
Basic Wage Inquiry, 1961 ..	1962	Secondary .. ..	1962
Botanic Gardens, Royal ..	1962		

APPENDIX C—continued

Contents	Year	Contents	Year
Elderly Citizens Clubs ..	1962	Mountain Regions .. ..	1962
Elections, Voting Features at State .. ..	1962	Museum, National .. ..	1961
Electricity Commission, State, History of .. ..	1961	Museum of Applied Science ..	1961
Fairfield Hospital Epidemiological Research Unit ..	1962	Music .. ..	1961
Farming, Mechanization of ..	1962	National Museum .. ..	1961
Fire Brigades Board, Metropolitan .. ..	1961	National Parks .. ..	1961
Flora of Victoria .. ..	1962	National Trust of Australia (Victoria) .. ..	1961
Forestry, Resources, Research, &c. .. ..	1961	Nursing, History of .. ..	1961
Friendly Societies .. ..	1961	Oil Refining Industry .. ..	1961
Gardens, Royal Botanic .. ..	1962	Pastures, Development of Victoria's .. ..	1962
Geelong .. ..	1962	Pastures, Legume, in the Wheat Belt .. ..	1962
Geography, Physical .. ..	1961	Pharmacy, Victorian College of Physical Geography .. ..	1962
Geology .. ..	1961	Planning Scheme, Melbourne and Metropolitan Board of Works .. ..	1962
Gordon Institute of Technology ..	1962	Planning, Regional .. ..	1962
Government Instrumentalities, Victorian .. ..	1962	Planning, Town and Country ..	1961
Governors, List of .. ..	1961	Poliomyelitis .. ..	1962
Health, History of Public .. ..	1961	Post Office in Victoria, History of .. ..	1961
History of Victoria .. ..	1961	Press in Victoria .. ..	1961
Home Finance Trust .. ..	1961	Public Service of Victoria .. ..	1961
Hospitals—		Quarrying .. ..	1961
Fairfield .. ..	1961	Research—	
Geelong .. ..	1962	Agriculture .. ..	1961
Royal Melbourne .. ..	1962	Alfred Hospital Medical ..	1961
Housing, Approved Institutions ..	1961	Scientific and Technical ..	1962
Housing Commission of Victoria .. ..	1961	Retailing in Victoria .. ..	1962
Industrial Development in the Post-War Period .. ..	1962	Roads, By-Pass .. ..	1962
Irrigation .. ..	1962	Royal Mint, Melbourne, History of .. ..	1961
King's Bridge .. ..	1962	St. Vincent's School of Medical Research .. ..	1962
Land Settlement, History of ..	1961	Soil Conservation Authority ..	1961
Law, Function of .. ..	1961	State Electricity Supply, History of .. ..	1961
Legislation, Private .. ..	1962	State Savings Bank, History of ..	1961
Legume Pastures in the Wheat Belt .. ..	1962	Telecommunications, Overseas, History of .. ..	1962
Licensing Act .. ..	1961	Telephone Services .. ..	1962
Life Assurance .. ..	1962	Tourist Development Authority ..	1962
Manufacturing, History of .. ..	1961	Town and Country Planning ..	1961
Melbourne and Metropolitan Board of Works .. ..	1961	Traffic Commission .. ..	1961
Melbourne, Changing Face of ..	1961	Traffic Engineering Progress, Melbourne City Council .. ..	1962
Melbourne City Council .. ..	1961	Tramways, History of Melbourne .. ..	1961
Melbourne Tramways, History of .. ..	1961	Victorian Public Service .. ..	1961
Meteorology, Developments in Metropolitan Fire Brigades Board .. ..	1961	Victorian Railways, History of ..	1961
Mines Department, History of ..	1961	Voting Features at State Elections .. ..	1962
Ministers of the Crown, 1851-1855 .. ..	1961	War Service Homes .. ..	1961
Ministries and Premiers, 1855-1955 .. ..	1961	Wheat Breeding .. ..	1962
Motor Vehicle Industry .. ..	1962	Wildlife in Relation to Natural Resources .. ..	1962

## Appendix D

*List of Maps in Previous Victorian Year Books*

(Commencing with New Series: Volume 75, 1961)

Map	Year	Map	Year
Alpine Regions of Victoria ..	1962	Melbourne and Surrounding Area : Boundary of P.M.G.'s "Extended Local Service Area" .. ..	1962
Annual Rainfall Map ..	1962	Regional Planning Boundaries	1962
Chief Physiographic Divisions of Victoria .. ..	1961	State Electoral Provinces for Legislative Council ..	1962
Coal Deposits Located in Victoria .. ..	1962	State Electoral Districts for Legislative Assembly ..	1962
Counties and Statistical Districts of Victoria .. ..	1962	Statistical Divisions of Victoria (Annually) .. ..	..
Geological Features of Victoria	1961	Vegetation Provinces of Victoria	1962
Melbourne and Surrounding Area as Defined by the Greater Melbourne Plan ..	1962	Zones of Natural Occurrence of Principal Forest Types ..	1962

## Appendix E

*Select Bibliography of Books Published in Victoria*

The following list of books published in Victoria during 1961-62 is not intended to be either complete or 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 publishers and the State Library of Victoria, which receives a copy of every item published in Victoria under the Copyright Act.

- ADAMSON, F., and TURNER, D. W.—Third and Fourth Year Arithmetic. Melbourne, Cheshire, 1961. 298 pages.
- AUSTIN, A. G., *ed.*—Melbourne Studies in Education 1959-1960. Melbourne University Press, 1961. 128 pages.
- AUSTRALIAN COLLEGE OF EDUCATION.—The Challenge to Australian Education, by R. G. Menzies and others. Melbourne, Cheshire, 1961. 75 pages.
- BALL, D. G.—Supervision and Inspection of Primary Schools. Melbourne, Australian Council for Educational Research, 1961. 250 pages (A.C.E.R. Research Series No. 73).
- BARRIE, C.—Design: the part it plays in our lives. Melbourne, Longmans, 1962. 32 pages.

APPENDIX E—*continued*

- BASSETT, F. M.**—The Governor's Lady, Mrs. Philip Gidley King : an Australian historical narrative. Melbourne University Press, 1962. 132 pages (Australian Paperbounds).
- BROWN, D.**—Better Fruit Growing for Australian Gardeners. Melbourne, Lansdowne, 1961. 208 pages.
- BUCKLEY, V. T.**—Henry Handel Richardson. Melbourne, Lansdowne, 1961. 36 pages.
- BURNS, C.**—Parties and People : a survey based on the La Trobe electorate. Melbourne University Press, 1961. 173 pages (Australian Paperbounds).
- BUTLIN, S. J. C. L.**—Australia and New Zealand Bank : the Bank of Australasia and the Union Bank of Australasia Limited, 1828–1951. Melbourne, Longmans, 1961. 459 pages.
- CAMPBELL, H. M., ed.**—Tasmania : the postal history and postal markings. Melbourne, Royal Philatelic Society of Victoria. 203 pages.
- CHISHOLM, A. R.**—Men Were My Mile Stones : Australian Portraits and Sketches. Melbourne University Press, 1962. 146 pages (Australian Paperbounds).
- COLEMAN, P., ed.**—Australian Civilization : a symposium. Melbourne, Cheshire, 1962. 247 pages.
- DAX, E. C.**—Asylum to Community : the development of the mental hygiene service in Victoria, Australia. Melbourne, Cheshire, for the World Federation for Mental Health, 1961. 230 pages.
- DAVIES, A.**—A Sunday Kind of Love and Other Stories. Melbourne, Cheshire, 1961. 159 pages.
- DIMMACK, M.**—A Dictionary of Creative Activities for School Use. Melbourne, Macmillan, 1962. 199 pages.
- DWYER, T. J.**—The Australian Public Relations Handbook : a guide to the principles and practice of public relations in Australia. Melbourne, Ruskin Publishing Pty. Ltd., 1961. 224 pages.
- CLEREHAN, N., ed.**—Best Australian Houses : recent houses built by members of the Royal Australian Institute of Architects. Melbourne, Cheshire, 1961. 704 pages.
- CRISP, L. F.**—Ben Chifley : a biography. Melbourne, Longmans, 1961. 428 pages.
- ENCEL, S.**—Cabinet Government in Australia. Melbourne University Press, 1962. 367 pages.
- HOY, A.**—A City Built to Music : the history of University High School, Melbourne, 1910 to 1960. Melbourne, University High School, 1961. 178 pages.
- HESELTINE, H. P., and TICK, S., comps.**—The Writer in the Modern World : an anthology of twentieth century prose. Melbourne, Cheshire, 1962. 177 pages.
- HOLDEN, W. S.**—Australia Goes to Press. Melbourne University Press, 1962. 297 pages.
- INGLIS, K. S.**—The Stuart Case. Melbourne University Press, 1961. 321 pages.
- JONES, O. W.**—The School Principal : a symposium. Melbourne, Cheshire, 1962. 303 pages.
- KARMEL, P. H., and BRUNT, M.**—The Structure of the Australian Economy. Melbourne, Cheshire, 1962. 154 pages.

APPENDIX E—*continued*

- KIDDLE, M. L.—*West of Sunset*. Melbourne University Press, 1961. 222 pages (Melbourne Paperbacks).
- LEEPER, G. W.—*Introduction to Soil Science*. 3rd ed. Melbourne University Press, 1961. 222 pages.
- LONIE, F. H.—*The Victorian Local Government Handbook*. Melbourne, Law Book Co., 1961. 325 pages (Victorian Local Government Library).
- LUKE, R. H.—*Bush Fire Control in Australia*. Melbourne, Hodder and Stoughton, 1961. 136 pages.
- MACAINSH, N.—*Clifton Pugh*. Melbourne, Georgian House, 1962. 64 pages (Australian Art Monographs).
- MACFADYEN, J., and SMITH, S., eds.—*Essendon Centenary Guide, 1861–1961*. Melbourne, Essendon Gazette, 1961. 67 pages.
- MACPHERSON, J. H., and GABRIEL, C. J.—*Marine Molluscs of Victoria*. Melbourne University Press in association with the National Museum of Victoria, 1962. 475 pages (National Museum of Victoria).
- MARSHALL, R.—*The Gay Provider: the Myer story*. Melbourne, Cheshire, 1961. 282 pages.
- MCLEOD, E.—*Early History of Portarlington and East Bellarine, Indented Head and St. Leonards*. Geelong, The Author, 1962. 46 pages.
- MOLNAR, IMRE.—*A Manual of Australian Agriculture*, edited for the Australian Institute of Agricultural Science. Melbourne, Heinemann, 1961. 870 pages.
- MOORABBIN CITY COUNCIL.—*Moorabbin: a centenary history, 1862–1962*. Moorabbin, The Council, 1962. 96 pages.
- MOUNTFORD, C. P.—*Aboriginal Art*. Melbourne, Longmans, 1961. 32 pages (The Arts in Australia).
- NANKERVIS, F. T.—*Descriptive Economics: the Australian economic structure*. 5th ed. Melbourne, Longmans, 1961. 342 pages.
- PERKINS, J. O. N.—*Britain and Australia: economic relationships in the 1950's*. Melbourne University Press, 1962. 202 pages.
- PRICE, D. H., ed.—*Secondary Education Today: four lectures given at a series arranged by the Victorian Institute of Educational Research, 1959*. Melbourne, Victorian Institute of Educational Research, 1961. 41 pages.
- RADFORD, W. C.—*School Leavers in Australia 1959–1960*. Melbourne, Australian Council for Educational Research. 132 pages (A.C.E.R. Research Series No. 75).
- ROSS, I. C.—*Memoirs and Papers, with some fragments of autobiography*. Oxford University Press, 1961. 240 pages.
- SANDERS, C.—*Psychological and Educational Bases of Academic Performance*. Melbourne, Australian Council for Educational Research, 1961. 105 pages (A.C.E.R. Research Series No. 74).
- SAWER, G.—*Australian Government Today*. Rev. and enl. ed. Melbourne University Press, 1961. 107 pages (Melbourne Paperbacks).
- SCOTT, D., and U'REN, ROBERT.—*Leisure: a social enquiry into leisure activities and needs in an Australian housing estate*. Melbourne, Cheshire, 1962.
- SHIPP, G. P.—*Essays in Mycenaean and Homeric Greek*. Melbourne University Press, on behalf of the Australian Humanities Research Council, 1961. 56 pages.
- SMITH, S. M.—*Henry Lawson*. Melbourne, Lansdowne, 1961. 48 pages (Australian Writers and Their Work).
- SPLATT, W. J.—*Architecture*. Melbourne, Longmans, 1962. 32 pages (The Arts in Australia).

APPENDIX E—*continued*

- STATE CONFERENCE OF SOCIAL WELFARE. *5th Melbourne, 1961.*—Changing Patterns in Social Welfare. Melbourne, Victorian Council of Social Service, 1961. 76 pages.
- STOLLER, A.—The Family Today : its role in personal and social adjustment. Melbourne, Cheshire, for the Victorian Family Council, 1962. 186 pages.
- THOMPSON, J.—On Lips of Living Men. Melbourne, Lansdowne, 1962. 164 pages.
- TROEDEL, C.—The Melbourne Album : comprising a series of elegant, tinted, lithographic views of Melbourne and surrounding districts, lithographed, printed and published by Charles Troedel in 1863, edited by Clive Turnbull. Melbourne, Georgian House, 1961. 92 pages.
- WILKES, G. A.—The Thesis of Paradise Lost. Melbourne University Press, on behalf of the Australian Humanities Research Council, 1961. 42 pages.
- VICTORIAN EMPLOYERS' FEDERATION.—The Health of the Executive in Business, Trade Unions and the Public Service. Melbourne, The Federation, 1961. 64 pages.
- VICTORIA. *Fisheries and Wildlife Department and Imperial Chemical Industries of Australia and New Zealand Ltd.*—Australian Waterfowl. Melbourne, The Department, 1961. 48 pages.

---

## Appendix F

### *Publications Issued by the Victorian Office, Commonwealth Bureau of Census and Statistics*

#### **Printed Publications**

- Victorian Year Book (Price 15s.; postage 3s. 4d.)  
Victorian Pocket Year Book (Price 2s.; postage 5d.)

#### **Mimeographed Publications\***

##### *General*

##### Victorian Monthly Statistical Review

##### *Building*

- Building Approvals (Monthly)  
Building Statistics (Quarterly)  
Building Statistics : Number of New Houses and Flats : Preliminary Estimates (Quarterly)  
Housing and Associated Demographic Statistics, 1921 to 1960 (Non-recurring)

##### *Demography and Social*

- Demographic Statistics  
Divorce Statistics  
Education Statistics  
Estimated Age Distribution of the Population of Victoria  
Estimated Population and Dwellings by Local Government Areas  
Hospital Morbidity Statistics  
Industrial Accident Statistics

---

\* These publications are issued, free of charge, on application.



APPENDIX F—*continued**Factory Production*

Factory Statistics—Preliminary  
 Factory Statistics  
 Production Statistics (Monthly)

*Finance, Local Government, and Transport*

Fire, Marine, and General Insurance Statistics  
 Housing Finance Statistics (Quarterly)  
 Local Government Finance Statistics  
 Mortgages of Real Estate (Quarterly)  
 Motor Vehicle Registrations (Monthly)  
 Road Traffic Accidents Involving Casualties (Quarterly)  
 Road Traffic Accidents Involving Casualties

*Rural*

Agricultural Statistics  
 Apicultural Statistics  
 Apples and Pears in Cool Stores (Monthly : June–December)  
 Citrus Fruit Production  
 Fruit Production  
 Grain and Seed Headers and Harvesters on Rural Holdings (Triennial)  
 Grasses and Clovers Harvested for Seed  
 Livestock : Preliminary Numbers  
 Livestock Statistics  
 Machinery on Rural Holdings  
 Maize Production  
 Oats and Barley : Acreage  
 Onion : Acreage and Production  
 Pick-up Balers and Forage Harvesters on Rural Holdings (Triennial)  
 Ploughs on Rural Holdings (Triennial)  
 Potatoes : Acreage, Production, and Varieties  
 Potatoes : Estimated Acreage  
 Rural Holdings : Classified by Type of Activity (Quinquennial)  
 Rural Statistics  
 Tractors on Rural Holdings (Triennial)  
 Vegetables : Acreage and Production  
 Viticultural Statistics  
 Wheat : Acreage and Varieties  
 Wine and Brandy : Wholesale Sales and Stocks

N.B.—The listed publications are issued ANNUALLY except where otherwise indicated.

## INDEX

NOTE.—Where there is more than one reference to a subject, the chief reference, where such is apparent, is given in bold numerals. Where there are two important references to a subject, both appear in bold print.

	A	<i>Page</i>
Abattoirs .. .. .		401, 402, 403, 405
Aborigines .. .. .		.. 134
Abortion .. .. .		.. 166
Accident Insurance .. .. .		.. 712
Accidents, Fatal .. .. .		165-166
Industrial .. .. .		445-450
Road Traffic .. .. .		782-784
Acid, Sulphuric .. .. .		.. 612
Acids, Industrial .. .. .		.. 620
Acts of Parliament, 1961 .. .. .		81-84
Adoption of Children .. .. .		150-151
Adult Education, Council of .. .. .		225-228
Aerated Waters .. .. .		612, 614, 627
Aerial Agriculture .. .. .		511-512
Aerial Work Operations .. .. .		785-786
Aerodromes .. .. .		.. 785
Age Distribution of Population .. .. .		109, 124
Pensions .. .. .		<b>278-280</b> , 281
Aged, Special Hospitals for the .. .. .		.. 257
Agent-General for Victoria .. .. .		.. 92
Agricultural Advisory Services .. .. .		651, 656
Education .. .. .		505-507
Machinery .. .. .		512, 621, 624
Research .. .. .		503-505
Agriculture, Aerial .. .. .		511-512
Area under Cultivation .. .. .		509-510, 513-516
Crop Yields, Area, and Value .. .. .		514-516
Department of .. .. .		<b>503-506</b> , 522
Government Expenditure on .. .. .		.. 658
Growers of Crops .. .. .		.. 515
Minor Crops .. .. .		.. 538
Principal Crops .. .. .		.. 516
Value of Production .. .. .		575, 576, 578
Air Traffic Control .. .. .		786-788
Aircraft Accidents, Fatal .. .. .		.. 165
Factories .. .. .		.. 621
Licences .. .. .		.. 788
Owners .. .. .		.. 788
Production .. .. .		.. 621
Alfred Hospital .. .. .		265-266, 272-273
Allen, Harry Brookes .. .. .		.. 217
Ambulance Services .. .. .		257, <b>258</b>
Apiculture .. .. .		562-563
Value of Production .. .. .		575, 576, 578
Apprenticeship Commission .. .. .		<b>453</b> , 466
Arbitration, Industrial .. .. .		431-438
Area and Boundaries of Victoria .. .. .		25, <b>26-27</b>
of Australian States and Territories .. .. .		27, 128
of Victoria by Municipalities .. .. .		114-121
Arrest Cases .. .. .		331, 332
Asian Students .. .. .		213, 214, 264-265
Australian Broadcasting Commission .. .. .		.. 186, 187
Control Board .. .. .		185-186
Institute of Management .. .. .		580, 581, 582
Aviation, Civil .. .. .		785-789

		B	Page
Baby Health Centres ( <i>See</i> Infant Welfare)			
Bacon, Prices .. .. .	..	..	482
Baker Medical Research Institute	..	..	217, 231, 271-272
Bakeries .. .. .	..	..	628
Ballarat, Afforestation .. .. .	..	..	391
Agriculture .. .. .	..	..	391-393
Fine Art Gallery .. .. .	..	..	394-395
Historical .. .. .	..	..	389
Industrial Development .. .. .	..	..	389-390
Mineral Resources .. .. .	..	..	393-394
Population, Dwellings, Area .. .. .	..	..	117
Water and Sewerage System .. .. .	..	..	390-391, 424-425
Bandicoots .. .. .	..	..	10-11
Bank Interest .. .. .	..	..	689
Banking Legislation .. .. .	..	..	686-691
Policy 1961, Australian .. .. .	..	..	688-691
Bankruptcies .. .. .	..	..	318
Banks, Cheque Paying .. .. .	..	..	691-693
Commonwealth Banking Corporation .. .. .	..	..	694-697
Development Bank of Australia .. .. .	..	..	695, 696, 697
Savings Bank .. .. .	..	..	694, 695, 696, 701
Trading Bank .. .. .	..	..	691, 692, 694, 695, 696
Private Savings .. .. .	..	..	701
Reserve Bank .. .. .	..	..	694
State Savings Bank .. .. .	..	..	365, 697-700
Trading .. .. .	..	..	691-693
Barley .. .. .	..	..	514, 515, 516, 525, 576
Exports .. .. .	..	..	747
Prices .. .. .	..	..	482
Basic Wage .. .. .	..	..	454-460
Batman, John .. .. .	..	..	105
Bats .. .. .	..	..	19-21
Beekeepers .. .. .	..	..	562-563
Beekeeping, Value of Production .. .. .	..	..	575, 576, 578
Beer Production .. .. .	..	..	612, 614
Bendigo Population, Dwellings, Area .. .. .	..	..	118
Bills of Sale .. .. .	..	..	724
Birth Rates .. .. .	..	..	146
Births, Ages of Parents .. .. .	..	..	146-150
by Sex .. .. .	..	..	146
Ex-nuptial .. .. .	..	..	149-150
General .. .. .	..	..	145
Law Relating to .. .. .	..	..	135-136
Masculinity .. .. .	..	..	146
Multiple .. .. .	..	..	149
Number of .. .. .	..	..	137, 146
Rate per 1,000 of Mean Population .. .. .	..	..	137, 146
Registration of .. .. .	..	..	135
Biscuits .. .. .	..	..	612
Blankets .. .. .	..	..	612
Blood Transfusion Service .. .. .	..	..	310
Boat Registration, Motor .. .. .	..	..	780
Bolts and Nuts .. .. .	..	..	612
Bookmakers .. .. .	..	..	340-341
Boots and Shoes .. .. .	..	..	627
Bootmaking, Apprentices .. .. .	..	..	453
Bounties on Manufacture .. .. .	..	..	584
Boxes and Cases .. .. .	..	..	612, 631
Bran, Prices .. .. .	..	..	482
Bread .. .. .	..	..	612, 628
Bricks .. .. .	..	..	612
Bridges .. .. .	..	..	375-376, 411, 420, 677
Briquettes .. .. .	..	..	612, 633, 634, 635, 636-640, 641

	<i>Page</i>
Broadcasting .. .. .	185-188, 791, 797
Brown Coal .. 572-574, 577, 602, 603, 612, 633, 634, 635, 636-640, 657, 658	
Brownless, Anthony Colling .. .. .	216
Building, Apprentices .. .. .	453
Approvals .. .. .	351
City Buildings .. .. .	345-346
Control .. .. .	373, 377
Costs .. .. .	346
Development in Melbourne, 1961 .. .. .	347-348
Employment .. .. .	359-360, 472, 473
Home Finance Trust .. .. .	366
<i>Local Government Act</i> 1958 .. .. .	348, 349
Materials and Fittings .. .. .	359
Societies .. .. .	713
Statistics, Definitions .. .. .	350
General .. .. .	349-350
Supervision and Control of .. .. .	348
<i>Town and Country Planning Act</i> 1958 .. .. .	348, 349
Trends since 1945 .. .. .	345-347
Buildings, Value of New .. .. .	351-354, 358
Bush Nursing Association, Victorian .. .. .	262-263
Centres .. .. .	257
Butter .. .. .	576, 612, 614, 629
Exports .. .. .	747
Prices .. .. .	482
Production .. .. .	547

## C

Cabinet .. .. .	67-68
Cables and Ropes .. .. .	613
Cancer, Anti-Cancer Council of Victoria .. .. .	270-271
Institute Board .. .. .	267-270
Canning of Food .. .. .	628
Cans .. .. .	612
Cardboard Manufacture .. .. .	612
Casein .. .. .	547
Cases and Boxes, Manufacture .. .. .	612, 631
Cats .. .. .	23
Cattle ( <i>See also</i> Dairying) .. .. .	
Beef .. .. .	540, 542-543
Dairy .. .. .	539-540
Size of Holdings .. .. .	510
Slaughtered .. .. .	562, 576
Census 1961 .. .. .	113-127
Chaff Prices .. .. .	482
Cheese .. .. .	576, 612, 614, 629
Prices .. .. .	482
Production .. .. .	546, 547
Chemical Industry .. .. .	614, 615-620
Chemicals, Wholesale Index Numbers .. .. .	481
Chief Secretary's Department, History of .. .. .	100-104
Child Endowment .. .. .	285-286
Child Health .. .. .	218
Welfare .. .. .	388, 658
Children, Adoption of, and Legitimation of .. .. .	150-151
Children's Courts .. .. .	318-321
Welfare Department, Infant Life Protection .. .. .	296
Maintenance for Children .. .. .	295-296
Reasons for Admissions and Commitments to .. .. .	294
Receipts and Expenditure .. .. .	297
Wards of .. .. .	295

	<i>Page</i>
Church Schools .. .. .	202-205, 207-209
Cigarettes .. .. .	.. 612
Civil Marriages .. .. .	.. 141
Climate of Melbourne .. .. .	54-58
of Victoria .. .. .	24, 67-72
Cloth .. .. .	.. 612
Clothing ( <i>See also</i> Textiles) .. .. .	587-614 pass., 625-626
Consumer Price Index Numbers .. .. .	.. 479
Industry Wage Rates .. .. .	.. 464, 465
Sales .. .. .	.. 734, 735
Cloud, over Melbourne .. .. .	.. 57, 63
Coal .. .. .	572-574, 577, 602, 603, 612, 633, 634, 635, 636-640, 657, 658
Government Expenditure on .. .. .	.. 678
Industry, Long Service Leave .. .. .	.. 651, 654
Pension Fund .. .. .	.. 672, 675
Coastline .. .. .	.. 28-29
Commonwealth Banking Corporation .. .. .	.. 694-697
Conciliation and Arbitration Commission .. .. .	.. 431-432, 434-436
Development Bank of Australia .. .. .	.. 695, 696, 697
Employment Service .. .. .	.. 467-469
Industrial Court .. .. .	.. 434-436
Savings Bank .. .. .	.. 694, 695, 696, 701
Scientific and Industrial Research Organization .. .. .	.. 584
State Financial Relationships .. .. .	.. 648-656
Trading Bank .. .. .	.. 691, 692, 694, 695, 696
Communications, Employment .. .. .	.. 472, 473
Hours of Work .. .. .	.. 437
Telecommunications .. .. .	.. 795-800
Wage Rates .. .. .	.. 464, 465
Companies .. .. .	.. 724-726
Company Tax .. .. .	.. 671
Compensation, Workers' .. .. .	.. 444, 450-452
Concerts .. .. .	.. 187
Confectionery .. .. .	.. 612
Consolidated Revenue Fund .. .. .	.. 657-658
Constitution .. .. .	.. 65-68
Consumer Goods ( <i>See</i> Retail Sales) .. .. .	
Price Index .. .. .	.. 477-479
Co-operative Housing Societies .. .. .	.. 365
Organizations .. .. .	.. 714-715
Societies .. .. .	.. 303-305
Coroners, Committals by .. .. .	.. 333
Council of Adult Education .. .. .	.. 225-228
Councils, Municipal ( <i>See</i> Local Government)	
Country Fire Authority .. .. .	.. 428-430
Party .. .. .	.. 71
Roads Board .. .. .	.. 381-382, 386, 400, 408-411, 660
Women's Association .. .. .	.. 250
Court, Children's .. .. .	.. 318-321
Commonwealth Industrial .. .. .	.. 434-436
County .. .. .	.. 315
Full .. .. .	.. 313
General Sessions .. .. .	.. 315
Industrial Appeals .. .. .	.. 433-434
Licensing .. .. .	.. 338-340
Petty Sessions .. .. .	.. 316-317, 330-332
Supreme .. .. .	.. 313-314
Credit Foncier .. .. .	.. 698, 700
for Retail Sales .. .. .	.. 729-732
Restrictions .. .. .	.. 689
Cremations .. .. .	.. 170
Crime Statistics .. .. .	.. 330-337

	<i>Page</i>
Criminal Law .. .. .	322-330
Institution of Proceedings .. .. .	.. 324
Probation and Parole .. .. .	328-329
Prosecutions .. .. .	325-327
Punishment .. .. .	327-328
Youthful Offenders .. .. .	.. 330
Offences .. .. .	322-324
Coroners' Inquests .. .. .	.. 333
Courts of Petty Sessions .. .. .	330-333
Higher Courts .. .. .	334-337
Crops ( <i>See also</i> Specific Crops)	
Area under .. .. .	513-516
Fertilizers Used .. .. .	.. 510
Liens on .. .. .	.. 723
Minor .. .. .	.. 538
Number of Growers .. .. .	.. 515
Principal .. .. .	516-538
Value of Production .. .. .	.. 576
Yields, Area, and Value .. .. .	514-516
Crown Law Department .. .. .	.. 312
Cultural Centre .. .. .	177-178
Customs and Excise Revenue .. .. .	750-751

## D

Dairy Cattle .. .. .	539-540
Dairying, Commonwealth Assistance .. .. .	651, 655
General .. .. .	545-547
in conjunction with Pig Breeding .. .. .	.. 549
Production .. .. .	546, 547
Size of Herds .. .. .	542, 543, 547
Size of Holdings .. .. .	.. 510
Value of Production .. .. .	575, 576, 578
Dasyures .. .. .	.. 8-10
Day Nurseries .. .. .	243-246 pass.
Death, Rates .. .. .	137, 142, 151, 156, 157-169
Accidents .. .. .	165-166
Diabetes Mellitus .. .. .	.. 162
Diseases of the Digestive System .. .. .	.. 164
Genito-urinary System .. .. .	.. 164
Heart .. .. .	.. 162
Respiratory System .. .. .	.. 163
Infant .. .. .	.. 157
Infective and Parasitic Diseases .. .. .	.. 159
Malignant Neoplasms .. .. .	159-160
Tuberculosis .. .. .	.. 159
Vascular Lesions Affecting Central Nervous System .. .. .	.. 162
Deaths, Accidental .. .. .	165-166
Ages at Death .. .. .	.. 153
Causes of .. .. .	153-166
Infant .. .. .	166-170
Law Relating to .. .. .	135-136
Maternal .. .. .	.. 164
Mental Patients .. .. .	.. 252
Number of .. .. .	137, 151
Registration of .. .. .	.. 135
Decentralization .. .. .	.. 583
Deer .. .. .	23-24
Denominational Schools .. .. .	202-205, 207-209

	<i>Page</i>
Departments, Victorian Government—	
Agriculture .. .. .	95-96
Chief Secretary's .. .. .	.. 94
History of .. .. .	100-104
Crown Lands and Survey .. .. .	.. 98
Education .. .. .	.. 97
Health .. .. .	.. 99
Labour and Industry .. .. .	.. 98
Law .. .. .	94-95
Local Government .. .. .	98-99
Mines .. .. .	96-97
Ministry of Transport .. .. .	.. 95
Premier's .. .. .	.. 93
Public Works .. .. .	97-98
State Forests .. .. .	.. 99
Treasury .. .. .	.. 93
Water Supply .. .. .	.. 96
Detergents and Soap .. .. .	613, 614
Diabetes Mellitus .. .. .	.. 162
Deaths from .. .. .	.. 162
Dingo, The .. .. .	21-22
Diseases, Changes in Incidence of .. .. .	234-237
Deaths from .. .. .	159-164
Dispensaries, of Friendly Societies .. .. .	.. 303
Divorce .. .. .	142-145
Dolphins and Whales .. .. .	16-17
Drainage .. .. .	376-377
Drama .. .. .	180-183
Drapery Sales .. .. .	734, 735
Dried Fruit .. .. .	516, 533, 536-537
Drivers' Licences .. .. .	659, 660, 776-777, 780, 781
Droughts .. .. .	40-41, 53
Drunkenness .. .. .	.. 332
Dwellings ( <i>See also</i> Houses, Flats)	
Unoccupied .. .. .	122, 367-368, 369
<b>E</b>	
Echidna .. .. .	.. 7
Education ( <i>See also</i> Schools)	
Agricultural .. .. .	505-507
Buildings .. .. .	195-196
Catholic .. .. .	204-205, 207-208
Council of Adult .. .. .	.. 225-228
Council of Public .. .. .	.. 205-209
Denominational Schools .. .. .	202-205, 207-209
Department .. .. .	.. 191-227 pass.
Employment in .. .. .	.. 472, 473
Examinations .. .. .	.. 197, 209-211
Government Expenditure on .. .. .	.. 200-202
Primary .. .. .	.. 191-196, 197
Registered Schools .. .. .	202-205, 207-209
Salient Features of Contemporary State .. .. .	.. 196-197
Secondary .. .. .	.. 196-197
Special Services .. .. .	.. 197
Teachers .. .. .	194-195, 197, 198, 204, 205, 206-207, 224
Technical .. .. .	.. 197, 199-200, 221-225
Egg Prices .. .. .	.. 482
Eggs .. .. .	.. 576
Electoral System .. .. .	84-92
Electric Light and Power .. .. .	401-405, 612, 633-640, 657, 677, 683

	<i>Page</i>
Electrical Appliances .. .. .	612
Goods .. .. .	614
Power Equipment .. .. .	621, 622
Employment, Control of .. .. .	466-469
Government .. .. .	472, 473
in Building Industry .. .. .	359-360, 472, 473
in Factories .. .. .	582, 589-595, 595-600
in Retail Establishments .. .. .	472-473, 737-739
Statistics .. .. .	469-473
Engineering Wage Rates .. .. .	464, 465
Ensilage .. .. .	528
Entertainments Tax .. .. .	666-667
Estate Duties .. .. .	661
Eviction Cases .. .. .	317
Examinations, School .. .. .	197, 209-211
Excise Revenue .. .. .	750-751
Executive Council, Functions of .. .. .	67
Exports .. .. .	743-751
of Frozen Meat .. .. .	562

## F

Factories ( <i>See also</i> Individual Industries)	
Acts .. .. .	454, 466, 583
Classification of .. .. .	586-595
Cost of Materials Used .. .. .	603
Costs and Output .. .. .	605-607
Definitions in Statistics .. .. .	585-586
Development of .. .. .	582
Employment in .. .. .	582, 589-595, 595-600
Government .. .. .	644
in Statistical Divisions .. .. .	592-593
Land, Buildings, Plant, and Machinery .. .. .	582, 592, 608-611
Materials and Fuel Used .. .. .	582, 589, 592, 605, 606, 607
Number of .. .. .	582, 589, 590, 592, 593
Power, Fuel and Light .. .. .	602-603, 605, 606, 607
Principal Products .. .. .	612-614
Production Summaries .. .. .	614
Salaries and Wages Paid .. .. .	582, 589, 592, 600-601, 605, 606, 607
Value of New .. .. .	351-354
Output .. .. .	582, 589, 592, 594, 604-605, 606, 607
Production .. .. .	582, 589, 592, 594, 604-605
Family Welfare .. .. .	291-292
Farm Machinery .. .. .	512, 621, 624
Farming ( <i>See also</i> Industries and Agriculture)	
Aerial Agriculture .. .. .	511-512
Collection of Statistics .. .. .	507
Land Uses .. .. .	509-510
Rural Finance .. .. .	512-513
Size of Holdings .. .. .	509-510
Fauna Protection .. .. .	190-191
Fertilizers .. .. .	510, 616, 617
Fibrous Plaster Sheets .. .. .	612
Film Centre, State .. .. .	185
Finance ( <i>See</i> Public Finance and Private Finance)	
Fire Authority, Country .. .. .	428-430
Brigades .. .. .	426-430
Local Government Grants .. .. .	400
Insurance .. .. .	706-710
Fires, Forest .. .. .	566-568
Fisheries .. .. .	569-572, 577
Value of Production .. .. .	575, 577



	<i>Page</i>
Flats, Building Approvals .. .. .	351
Increasing Numbers of .. .. .	347
Number of New .. .. .	354-358
Own-Your-Own .. .. .	720-721
Value of New .. .. .	351-354
Flax .. .. .	530
Flood Protection .. .. .	501-502
Floods .. .. .	<b>38-40</b> , 52
Flour .. .. .	612, 614
Prices .. .. .	482
Fodder Conservation ( <i>See also</i> Hay) .. .. .	543-545
Fog in Melbourne .. .. .	63
Food, Consumer Price Index Numbers .. .. .	479
Prices .. .. .	480
Trades Apprentices .. .. .	453
Wholesale Price Index Numbers .. .. .	481
Foodstuffs .. .. .	612, 613, 614, 627-629
Footwear .. .. .	612, 614
Forestry .. .. .	<b>564-569</b> , 683
Government Expenditure on .. .. .	658, 678
Value of Production .. .. .	575, 577
Foundries .. .. .	621
Foxes .. .. .	23
Free Library Service Board .. .. .	174-177
Friendly Societies .. .. .	301-303
Frosts in Victoria .. .. .	50
Fruit Production .. .. .	533-537, 576, 612
Fuel and Power, Government Expenditure on .. .. .	647
Used in Factories .. .. .	602-603
Funeral Benefits .. .. .	282
Furniture .. .. .	588-612 <i>pass.</i> , 629, 630
Trade, Apprentices .. .. .	453

## G

Gaols .. .. .	<b>297-301</b> , 658
Gas and Fuel Corporation .. .. .	641-643, 677, 683
Production .. .. .	612, <b>640</b>
Gases, Industrial .. .. .	618-619
Geelong Harbor Trust .. .. .	759-761
Port .. .. .	759-761
Water Supply and Sewerage .. .. .	376, <b>422-424</b>
Wool Market .. .. .	560
General Insurance .. .. .	706-710
Geographical Features of Victoria .. .. .	24-30
Geography, Physical .. .. .	43-48
Geology .. .. .	27, 28, 29, 30, <b>43-48</b>
Gliding Clubs .. .. .	786
Goats .. .. .	24
Gold .. .. .	573, 577, 702-703
Production .. .. .	573
Gordon Institute of Technology .. .. .	224
Government Employment .. .. .	472, 473
Governor, Functions of .. .. .	65-66
Grain Elevators Board .. .. .	519-520, 683
Grants to States .. .. .	651-656
Grapes .. .. .	515, <b>536-537</b>
Grass Seed .. .. .	514, 515, 516

	<b>H</b>	<i>Page</i>
Hail and Snow in Melbourne .. .. .		58
Halford, George Britton .. .. .		216, 217
Ham, Prices .. .. .		482
Harbours .. .. .		757-762
and Rivers .. .. .		677
Hares .. .. .		22
Hay .. .. .		514, 516, 527-528, 576
Health, Changes in Incidence of Diseases .. .. .		234-237
Department .. .. .		239-248
Developments in Medicine 1910 to 1960 .. .. .		230-238
Government Expenditure on .. .. .		658
Group Practices .. .. .		232
Pregnancy .. .. .		238
Services, Employment .. .. .		472, 473
Sources of Doctors' Incomes .. .. .		238
Surgery .. .. .		237-238
Heart Diseases .. .. .		162-163
Deaths from .. .. .		162
Foundation of Australia, National .. .. .		276-277
Hire Purchase .. .. .		729-732
Home Finance Trust .. .. .		366
Homicide .. .. .		166, 333, 334, 335, 336
Honey .. .. .		562-563, 576
Prices .. .. .		482
Hops .. .. .		515
Horses .. .. .		23, 542
Hosiery .. .. .		625
Hospital, Alfred .. .. .		233, 247, 265-266, 272-273
Benefits .. .. .		290-291, 301, 302, 303
Fairfield .. .. .		230, 233
Repatriation .. .. .		308
Royal Children's .. .. .		233, 234
Medical Research Foundation .. .. .		275-276
Melbourne .. .. .		234
Victorian Eye and Ear .. .. .		233
Women's .. .. .		233
Hospitals .. .. .		230-231, 233-234
and Charities Commission .. .. .		252-258
Building .. .. .		677
Government Expenditure on .. .. .		658
Local Government Grants .. .. .		400
Lottery Duty .. .. .		664-665
Private .. .. .		257
Public .. .. .		254-257, 258-261
Number of .. .. .		256, 259
Number of Beds and Inmates .. .. .		261
Receipts and Expenditure .. .. .		260-261
Hotels, Hours of Work .. .. .		437
Value of New .. .. .		351-354
Wage Rates .. .. .		464, 465
Hours of Work .. .. .		436-438
House of Representatives, Victorian Members .. .. .		91-92
Houses and Flats, Building Approvals .. .. .		351
Employment .. .. .		360
by Municipalities .. .. .		114-120
Imported .. .. .		651, 655
Materials of Walls .. .. .		357-358, 370
Number of New .. .. .		354-358
Value of New .. .. .		351-354

	<i>Page</i>
Housing .. .. .	698, 700
Average Number of Inmates and Rooms .. .. .	.. 370
Census 1961 .. .. .	366-370
Commission of Victoria .. .. .	<b>361-363</b> , 683
Consumer Price Index Numbers .. .. .	.. 479
Finance Institutions .. .. .	361-366
Government Expenditure on .. .. .	.. 677
Home Finance Trust .. .. .	.. 366
Humidity .. .. .	.. 63
Hydrology .. .. .	30-38

## I

Ice Cream .. .. .	.. 612
Production .. .. .	.. 612
Immigration .. .. .	.. 677
Import Restrictions .. .. .	689, 743
Imports .. .. .	743-751
Income Tax .. .. .	667-670
Industrial Accidents .. .. .	445-450, 467
Appeals Court .. .. .	433-434
Arbitration .. .. .	431-438
Development .. .. .	579, 582
Disputes .. .. .	438-439
Gases .. .. .	618-619
Hygiene .. .. .	.. 239
Metals, Machines, and Conveyances .. .. .	.. 621
Safety .. .. .	443-452
Industry of Population .. .. .	.. 127
Value of Production of Rural .. .. .	575-578
Infant, Death Rates .. .. .	.. 157
Health .. .. .	.. 218
Mortality .. .. .	137, 166-170
Welfare Centres .. .. .	<b>243-244</b> , 246, 398, 404
Inquests .. .. .	332-333
Institute of Applied Science .. .. .	179-180
Insurance, Fire, Marine, and General .. .. .	706-710
Life .. .. .	703-705
Motor Vehicle .. .. .	710-711
State Accident Insurance Office .. .. .	712-713
Motor Car Insurance Office .. .. .	711-712
Third Party .. .. .	710-711
Invalid Pensions .. .. .	280-281
Irrigation ( <i>See also</i> Water Supply) .. .. .	496-503

## J

Justice ( <i>See</i> Law)	
Justices of the Peace .. .. .	.. 316

## K

Kangaroos .. .. .	14-16
Koalas and Possums .. .. .	11-14
Kindergartens .. .. .	<b>244-245</b> , 246
Knitted Goods .. .. .	.. 625

## L

Labor Party .. .. .	.. 71
Labour and Industry Department .. .. .	466-467
and National Service Department .. .. .	467-469
Organizations .. .. .	439-442
Lakes .. .. .	.. 43

	<i>Page</i>
Land, Alienation of .. .. .	488-489
Crown .. .. .	488-489, 657
Settlement .. .. .	677, 683
Civilian .. .. .	494-496
Soldier .. .. .	492-493
Tax .. .. .	661-663
Titles Issue .. .. .	.. 722
Transfer of .. .. .	720-724
Uses .. .. .	509-510
Utilization .. .. .	483-488
Latrobe Valley Water and Sewerage Board .. .. .	423-424
Law, Government Expenditure on .. .. .	.. 658
Historical .. .. .	311-312
Legal System .. .. .	311-312
Leather .. .. .	.. 613
Legislative Assembly .. .. .	70-75 pass.
By-election .. .. .	.. 91
Elections .. .. .	88-90
Members .. .. .	77-79
Redistribution of Electoral Districts .. .. .	.. 84
State Electoral Districts .. .. .	.. 86
Council .. .. .	70-75 pass.
Elections .. .. .	.. 90
Members .. .. .	.. 76
State Electoral Provinces .. .. .	.. 85
Legitimation of Children .. .. .	150-151
Liberal and Country Party .. .. .	.. 71
Libraries in Country Districts .. .. .	176-177
Library Service Board, Free .. .. .	174-177
State .. .. .	173-174
Licences, Drivers' .. .. .	659, 660, 776-777, 780, 781
<i>Licensing Act</i> 1958 .. .. .	338-340
Import .. .. .	.. 743
Lieutenant-Governor, Functions of .. .. .	66-67
Life Insurance .. .. .	703-705
Limestone Production .. .. .	.. 573
Linseed .. .. .	515, 530
Liquor Laws and Licences .. .. .	338-340
Tax .. .. .	.. 664
Livestock .. .. .	539-541
<i>Local Government Act</i> 1958 .. .. .	.. 349
Building Approvals .. .. .	.. 349
Business Undertakings .. .. .	401-402
By-laws .. .. .	.. 375
Commission of Inquiry .. .. .	383-384
Constitution of Municipalities .. .. .	371-372
Construction of Private Streets .. .. .	405-407
<i>Department Act</i> 1958 .. .. .	371-372
General Administration .. .. .	.. 371
Government Grants .. .. .	380-381
Infant Welfare Services .. .. .	.. 243-244, 246, 398, 404
Inspection of Scaffolding .. .. .	.. 373
Loan Finance .. .. .	382-383, 396, 399, 402-405
Local Authorities Superannuation Board .. .. .	.. 384-385
Municipal Association of Victoria .. .. .	.. 384
Municipalities .. .. .	.. 374
Assistance Fund .. .. .	.. 381
New Money Loan Raisings .. .. .	.. 430
Powers and Duties .. .. .	375-378
Pre-school Services .. .. .	244-245, 246
Rating of Land and Property .. .. .	379-380, 396
Revenue and Expenditure .. .. .	379, 382, 383, 397-406
Statistics, General .. .. .	.. 395
Street Construction .. .. .	405-407
Valuer-General .. .. .	372-373

	<i>Page</i>
Lonsdale, Captain William .. .. .	105
Lord Mayor's Children's Camp.. .. .	311
Fund .. .. .	262
Lottery (Tattersall) Duty .. .. .	664-665
Lucerne .. .. .	515, 516, 527
<b>M</b>	
Machinery .. .. .	613
Agricultural .. .. .	621, 624
Magistrates, Stipendiary .. .. .	316-317
Mail Services .. .. .	789, 794
Maize .. .. .	514, 515, 516, 526, 576
Prices .. .. .	482
Malignant Neoplasms .. .. .	159-161
Deaths from .. .. .	159-160
Malt .. .. .	613, 614
Mammals	
Changes since European Settlement .. .. .	5-6
Classification of .. .. .	2-3
Common Names for .. .. .	7
Distribution of .. .. .	3-5
Egg-laying .. .. .	7-8
Echidna .. .. .	7
Platypuses .. .. .	7-8
General .. .. .	1-2
Introduced .. .. .	22-24
Management, Australian Institute of .. .. .	580, 581, 582
Techniques .. .. .	579-582
Manslaughter, Commitals for .. .. .	333
Manufacturing ( <i>See also</i> Factories)	
Bounties .. .. .	584
Decentralization .. .. .	583
Employment .. .. .	472, 473, 582, 589-595, 595-600
Hours of Work .. .. .	437
Industrial Disputes .. .. .	439
Management Techniques .. .. .	579-582
Scientific Research.. .. .	584-585
Value of Output .. .. .	582, 589, 592, 594, 604-605, 606, 607
Production .. .. .	578, 582, 589, 592, 594, 604-605
Wage Rates .. .. .	464, 465, 582, 589, 592, 600-601, 605, 606, 607
Marine Insurance .. .. .	706-710
Marriage Rate .. .. .	137
Marriages, Conjugal Condition of Parties .. .. .	140
Law Relating to .. .. .	135-136
Mean Age of Parties .. .. .	139
Number of .. .. .	137
of Divorced Persons .. .. .	140
of Minors .. .. .	139
Percentages of Bridegrooms and Brides in Age Groups .. .. .	138
Registration of .. .. .	135
Relative Ages of Parties .. .. .	138
Religious and Civil .. .. .	141
Marsupials	
Families .. .. .	8-16
Bandicoots .. .. .	10-11
Dasyures .. .. .	8-10
Kangaroos .. .. .	14-16
Koala and Possums .. .. .	11-14
Main Groups .. .. .	8
Wombats .. .. .	14
Prehistoric .. .. .	5
Maternal Welfare .. .. .	388
Maternity Allowances .. .. .	284-285
Matriculation Examination .. .. .	210-211
Mattresses .. .. .	613, 614

	<i>Page</i>
Meat, Canned .. .. .	613, 614
Exports .. .. .	552, 562
Prices .. .. .	.. 482
Medical Postgraduate Committee, Melbourne .. .. .	264-265
Research and Education .. .. .	231, 216-218
Service, School .. .. .	242-243
Medicine, 1910 to 1960, Developments in .. .. .	230-238
Medicines .. .. .	.. 613
Melbourne and Metropolitan Board of Works .. .. .	376, 412-420
Abattoirs .. .. .	401, 402, 403, 405
Airport .. .. .	785-789 pass.
Aircraft Movements .. .. .	.. 789
Passenger Movements .. .. .	.. 789
Basic Wage .. .. .	458-459
City Council .. .. .	386-388
Climate .. .. .	54-58
Harbor Trust .. .. .	.. 759
Housing and Building .. .. .	.. 354
Local Government Authorities .. .. .	395-406
Metropolitan Area .. .. .	114-115, 121
Town Planning .. .. .	419-420
Population .. .. .	112-113
Port .. .. .	757-759
Road Accidents .. .. .	.. 783
Shipping .. .. .	755-759
Street Construction .. .. .	.. 406
Tramways .. .. .	771-775
Mental Health Research Institute .. .. .	.. 275
Hygiene Authority .. .. .	248-252
Expenditure .. .. .	651, 654, 657, 658
Metal Trades, Apprentices .. .. .	.. 453
Metals .. .. .	621, 624
Meteorological Records .. .. .	61-64
Metropolitan Area, Melbourne .. .. .	114-115, 121
Fire Brigades Board .. .. .	426-427
Mice and Rats .. .. .	18-19, 23
Migration .. .. .	129-133
Assisted .. .. .	.. 132
Milk .. .. .	576, 613, 629
Production .. .. .	546, 547
Millet .. .. .	.. 515
Mineral Oils .. .. .	.. 620
Production .. .. .	.. 573
Minerals .. .. .	.. 577
Mining .. .. .	572-574, 577, 616
Employment .. .. .	472, 473
Government Expenditure .. .. .	.. 678
Hours of Work .. .. .	.. 437
Industrial Disputes .. .. .	.. 439
Value of Production .. .. .	575, 577
Wage Rates .. .. .	.. 464
Ministries, 1945 to 1962 .. .. .	.. 69
Ministry, Present .. .. .	69-70
Monash University ( <i>See also</i> University) .. .. .	218-221
Money Bills .. .. .	73-75
Mortgages .. .. .	722-724
Motor Boat Registration .. .. .	.. 780
Transport Regulation Board .. .. .	780-781
Vehicle Accidents .. .. .	782-784
Commercial Regulations .. .. .	780-781
Drivers' Licences .. .. .	659, 660, 776-777, 780, 781
Industry .. .. .	580, 621, 623
Registrations .. .. .	776-779
Taxation .. .. .	659, 660
Traffic Regulations .. .. .	781-782

	<i>Page</i>
Mountain Regions .. .. .	27-28
Municipal ( <i>See</i> Local Government)	
Murders .. .. .	333, 334, 335, 336
Museum of Applied Science .. .. .	179
Musical Instruments .. .. .	588-610 pass.
<b>N</b>	
National Association of Testing Authorities .. .. .	585
Debt Sinking Fund .. .. .	684-685
Gallery .. .. .	177-178
Heart Foundation of Australia .. .. .	276-277
Parks .. .. .	189-191
Welfare Fund .. .. .	277-278
Naturalization .. .. .	132-133
Nervous System, Vascular Lesions Affecting .. .. .	162
Newspapers .. .. .	630
Noxious Weeds and Vermin, Destruction of .. .. .	491-492
Nurses, Infant Welfare .. .. .	244
Mothercraft .. .. .	246
Nursing Association, Victorian Bush .. .. .	262-263
Bush Centres .. .. .	257
Nuts and Bolts .. .. .	612
<b>O</b>	
Oats .. .. .	504, 514, 515, 516, 524, 527, 576
Prices .. .. .	482
Oils, Mineral .. .. .	620
Onions .. .. .	515, 516, 529, 576
Prices .. .. .	482
Orchards .. .. .	515, 516, 533, 534, 535-536, 576
Output, Value of Factory .. .. .	582, 589, 592, 594, 604-605, 606, 607
<b>P</b>	
Paints .. .. .	613, 614
Paper .. .. .	614
Industry, Wage Rates .. .. .	464
Production .. .. .	612
Parks, National .. .. .	189-191
Parliament, Acts Passed during 1961 .. .. .	81-84
Cost of .. .. .	80
Electoral System .. .. .	84-92
Functions of .. .. .	81
House of Representatives .. .. .	91-92
Members .. .. .	76, 77-79, 91-92
Ministries, 1945 to 1962 .. .. .	69
Money Bills .. .. .	73-75
Present Ministry .. .. .	69-70
Senate .. .. .	91
Sittings, Number of .. .. .	79
Parliamentarians' Retirement Fund .. .. .	672, 675-676
Parliamentary Procedure .. .. .	71-72
Parliaments, Number and Duration of .. .. .	79
Parole and Probation .. .. .	293, 300-301, 328-329, 331
Pastoral Industry, After the Gold Rushes .. .. .	550
Beginnings .. .. .	549-550
Changes in Breeding .. .. .	552
Development, 1870 to 1920 .. .. .	550-551
Economic Factors .. .. .	554-555
Mixed Husbandry .. .. .	551-552
Small Selections .. .. .	551
Value of Production .. .. .	575, 576, 578
Pasture, Area under .. .. .	509-510
Improvement .. .. .	545, 553-554

	<i>Page</i>
Pastures, Fertilizers Used .. .. .	510
Pay-roll Tax .. .. .	658
Penal Department ( <i>See</i> Social Welfare Department)	
Establishments .. .. .	297-301
Pensions, Age .. .. .	278-280, 281
and Gratuities .. .. .	671-676
Fund, Police .. .. .	672-673
Government Expenditure on .. .. .	671-672
Invalid .. .. .	280-281
Parliamentary .. .. .	672, 675-676
Reciprocal Agreements .. .. .	289
State Superannuation Fund .. .. .	672, 673-674
War and Service .. .. .	305-306
Widows' .. .. .	282-284
Women Teachers, Married .. .. .	672, 676
Periodicals .. .. .	630
Peter MacCallum Institute .. .. .	233
Petrol and Oil Sales .. .. .	734
Pharmaceutical Benefits .. .. .	291, 657
Goods .. .. .	619
Pharmacy, Victorian College of .. .. .	228-229
Pig Industry .. .. .	541, 542, 543, 547-549, 576
Number Slaughtered .. .. .	562
Pilots (Shipping) .. .. .	762-764
Pipes, Concrete .. .. .	613
Plastic Products .. .. .	614, 632
Platypuses .. .. .	7-8
Police .. .. .	341-344
Pensions Fund .. .. .	672-673
Poliomyelitis and Allied Diseases .. .. .	235, 240
Pollard .. .. .	482, 613
Population, Age Distribution of .. .. .	109, 124
Australian Capital Cities .. .. .	106
States and Territories .. .. .	106, 128
Birthplace of .. .. .	125
by Municipality .. .. .	114-121
Census 1961 .. .. .	113-127
Conjugal Condition of .. .. .	126
Density .. .. .	25
Distribution .. .. .	25-26
Extra-Metropolitan Localities .. .. .	112-113, 123-124
Historical .. .. .	105
in Statistical Divisions 1933 to 1961 .. .. .	112, 113
in Statistical Divisions by Sex .. .. .	113
Increase in Age Groups .. .. .	109, 124
1861 to 1961 .. .. .	107
1933 to 1961 .. .. .	107
Industry of .. .. .	127
Masculinity .. .. .	112, 114
Migration .. .. .	129-133
Nationality of .. .. .	125, 133
Natural Increase .. .. .	108
of Melbourne Metropolitan Area .. .. .	112-113
Period of Residence of Immigrants .. .. .	126
Religion of .. .. .	127
Victoria .. .. .	107
Victoria, 1836 to 1961 .. .. .	128
Portland Harbour .. .. .	761-762
Ports .. .. .	757-762
Possums and Koalas .. .. .	11-14
Post Office Activities .. .. .	789-800
Revenue and Expenditure .. .. .	793
Postal Services .. .. .	789, 794



	<i>Page</i>
Potatoes .. .. .	515, 516, 528-529, 576
Prices .. .. .	.. 482
Poultry .. .. .	.. 541
Farming, Value of Production .. .. .	.. 575, 576, 578
Premiers of Victoria, 1945 to 1962 .. .. .	.. 69
Pre-Natal Services .. .. .	.. 246
Pre-School Services .. .. .	.. 244-245, 246
Press .. .. .	.. 183-184
Price Index Numbers .. .. .	.. 475-482
Prices, Food .. .. .	.. 480
Wholesale .. .. .	.. 482
Primary Production ( <i>See</i> Rural Industries)	
Value of .. .. .	.. 575-578
Printing .. .. .	.. 631
Prisons .. .. .	.. 297-301, 658
Probate Duties .. .. .	.. 659, 660-661
Probates .. .. .	.. 717-719
Probation and Parole .. .. .	293, 300-301, 328-329, 331
Psychiatric Services .. .. .	.. 248-249, 308
Public Debt .. .. .	.. 658, 678-685
Finance, Economic Importance of .. .. .	.. 643-648
Expenditure from Loan Funds .. .. .	.. 677-678
Grants to States .. .. .	.. 651-656
Pensions and Gratuities .. .. .	.. 671-676
Receipts and Outlay .. .. .	.. 647-648
Relations with Commonwealth .. .. .	.. 648-656
Revenue and Expenditure .. .. .	.. 656-658, 677-678
Taxation ( <i>See</i> Tax)	
Trust Funds and Special Accounts .. .. .	.. 676
Service .. .. .	.. 92-104
Trustee .. .. .	.. 715-716
Works .. .. .	.. 658, 677, 683
<b>Q</b>	
Quarrying .. .. .	.. 574, 577
<b>R</b>	
Rabbit Control .. .. .	.. 491
Rabbits .. .. .	.. 22, 577
Racing Legislation .. .. .	.. 340-341
Tax .. .. .	.. 665-666
Radio Broadcasting .. .. .	.. 791, 797
Communications .. .. .	.. 793, 796
Railways .. .. .	.. 622, 657, 658, 677, 683
Accidents .. .. .	.. 165
Capital Cost .. .. .	.. 766
Hours of Work .. .. .	.. 437
Loan Liability .. .. .	.. 766
Revenue and Expenditure .. .. .	.. 768-770
Road Motor Services .. .. .	.. 770
Rolling Stock .. .. .	.. 621
Staff .. .. .	.. 767
Standard Gauge .. .. .	.. 656, 764-765
Superannuation Fund .. .. .	.. 640
Traffic .. .. .	.. 767-768
Wage Rates .. .. .	.. 464
Rainfall .. .. .	.. 61-64
in Melbourne .. .. .	.. 56-57
in Victoria .. .. .	.. 50
Reliability .. .. .	.. 53-55
Rats and Mice .. .. .	.. 18-19, 23
Red Cross Society .. .. .	.. 250, 309-310
Registered Schools .. .. .	.. 202-205, 207-209
Rehabilitation .. .. .	.. 289

	<i>Page</i>
Religion of Population .. .. .	127
Religious Marriages .. .. .	141
Repatriation .. .. .	305-309
Reserve Bank of Australia .. .. .	694
Reservoirs .. .. .	413-414
Retail and Wholesale Trades, Hours of Work .. .. .	437
Establishments, Sales, and Stocks .. .. .	733-740
Employment in .. .. .	472-473, 737-739
Price Index Numbers .. .. .	455-457, 475-480
Trade, Wage Rates .. .. .	464, 465
River Improvement .. .. .	501-502
Rivers and Harbours .. .. .	677
and Streams, Catchments .. .. .	30, 35-36
Droughts .. .. .	40-41
Floods .. .. .	38-40
Flow Measurement .. .. .	36-37
Hydrology Characteristics .. .. .	30-38
Length .. .. .	31-35
Location .. .. .	37
Main Stream Basins .. .. .	31-35
Reserves .. .. .	37
Schedule of Flows .. .. .	30
Stream Flow .. .. .	30, 36, 38
Total Flow .. .. .	37
and Water Resources .. .. .	30-43
Road Traffic Accidents .. .. .	782-784
Roads .. .. .	375-376, 405-407, 409-411, 677, 683
Board, Country .. .. .	381-382, 386, 400, 408-411, 660
Commonwealth Assistance .. .. .	651, 653-654
Receipts and Outlay, Victorian Total .. .. .	647
Ropes and Cables .. .. .	613
Royal Melbourne Institute of Technology .. .. .	223, 580, 581, 582
Mint .. .. .	702-703
Society of Victoria .. .. .	171-172
Rubber .. .. .	588-610 pass., 632
Rural, Aerial Agriculture .. .. .	511-512
Artificial Fertilizers .. .. .	510
Finance Corporation .. .. .	512-513, 583
Industries ( <i>See also</i> Agriculture and Farming) .. .. .	492-495, 512-513, 683
Financial Assistance .. .. .	677
Government Expenditure on .. .. .	575-578
Value of Production .. .. .	514, 526
Rye .. .. .	514, 526

## S

Safety, Industrial .. .. .	443-452
Public .. .. .	658
Sales, Retail .. .. .	733-740
Sawmills .. .. .	629, 630
School Medical Service .. .. .	242-243
Schools ( <i>See also</i> Education) .. .. .	198, 199
Ages of Pupils .. .. .	677
Building .. .. .	204-205, 207-208
Catholic .. .. .	199
Class of School .. .. .	202-205, 207-209
Denominational .. .. .	197, 209-211
Examinations .. .. .	198-200, 207-209
Number and Pupils .. .. .	202-205, 207-209
Registered .. .. .	199
Sex of Pupils .. .. .	198-199
State Primary .. .. .	198-199
State Secondary .. .. .	197, 199-200
Technical .. .. .	17-18
Seals .. .. .	408-430
Semi-Governmental Authorities .. .. .	91
Senate, Victorian Members .. .. .	305-306
Service Pensions .. .. .	305-306

	<i>Page</i>
Sewerage .. .. .	376-377
Country Towns .. .. .	421-426
Finance .. .. .	647, 657, 658, 677
Melbourne .. .. .	414-419
Sheep ( <i>See also</i> Wool)	
Breeding .. .. .	.. 539
Breeds .. .. .	552, 555, 557-558
General .. .. .	549-562
Lambing .. .. .	529-530
Mutton and Lamb Exported	.. 562
Numbers .. .. .	558, 559
Size of Flocks .. .. .	542, 543
Size of Holdings .. .. .	.. 510
Slaughtered .. .. .	.. 562
Value of Production .. .. .	.. 576
Sheriff, Writs Received by .. .. .	.. 315
Shipping .. .. .	751-757
Pilots .. .. .	762-764
Wage Rates .. .. .	.. 464
Shoes and Boots .. .. .	.. 627
Shops, Law Relating to .. .. .	454, 466
Number of New .. .. .	354-358
Sales .. .. .	733-736, 739-740
Value of New .. .. .	351-354
Sickness Benefits .. .. .	286-288
Silver Production .. .. .	.. 573
Sinks, Stainless Steel .. .. .	.. 613
Slaughtering .. .. .	.. 562
Snow and Hail in Melbourne .. .. .	.. 58
Falls .. .. .	.. 52
Snowy Mountains Hydro-Power .. .. .	.. 635
Soap and Detergents .. .. .	613, 614
Social Services, Benefits Available	278-289
Expenditure on .. .. .	277-278
Reciprocal Agreements .. .. .	.. 289
Welfare Act 1960 .. .. .	.. 291
Department .. .. .	291-301
Soil Conservation Authority .. .. .	489-491
Soldier Settlement .. .. .	492-493, 677, 683
Commission .. .. .	.. 364
Squirrels .. .. .	.. 22
Stamp Duties .. .. .	663-664
Standards Association of Australia .. .. .	.. 584
State Accident Insurance Office .. .. .	712-713
Electricity Commission .. .. .	633-640
Film Centre .. .. .	.. 185
Library of Victoria .. .. .	173-174
Revenue and Expenditure .. .. .	657-658, 677-678
Rivers and Water Supply Commission	37-42 pass., 412, 421, 423, 497-499
Savings Bank .. .. .	365, 697-700
Superannuation Fund .. .. .	672, 673-674
Statutes, Consolidation of .. .. .	.. 317
Steel .. .. .	.. 613
Stillbirths .. .. .	.. 170
Stipendiary Magistrates .. .. .	316-317
Stock Exchange .. .. .	726-729
Mortgages .. .. .	.. 723
Slaughtered .. .. .	.. 562
Stocks, Retail .. .. .	.. 735
Streams ( <i>See</i> Rivers) .. .. .	
Streets ( <i>See</i> Roads) .. .. .	
Subsidies .. .. .	.. 647
Suicide .. .. .	.. 166

	<i>Page</i>
Summons Cases .. .. .	331, 332
Superannuation Funds ( <i>See</i> Pensions)	
Superphosphate .. .. .	.. 616
Swinburne Technical College .. .. .	224-225

## T

Tariff Board .. .. .	.. 579
Tariffs .. .. .	584, 740-743
Tax, Company .. .. .	.. 671
Entertainments .. .. .	666-667
Estate Duties .. .. .	.. 661
Income .. .. .	667-670
Indirect .. .. .	.. 647
Land .. .. .	661-663
Liquor .. .. .	.. 664
Lottery Duty .. .. .	664-665
Motor Vehicle .. .. .	659, 660
Pay-roll .. .. .	.. 658
Probate Duties .. .. .	659, 660-661
Racing .. .. .	665-666
Reimbursement Grants .. .. .	651-652
Stamp Duties .. .. .	663-664
Total Collections .. .. .	.. 657
Teachers .. .. .	194-195, 197, 198, 204, 205, 206-207, 224
Technical Education .. .. .	.. 197, 199-200, 221-225
Telecommunications .. .. .	.. 795-800
Telegraph Services .. .. .	.. 791-792, 795
Telephone Services .. .. .	.. 790, 794, 796
Television .. .. .	.. 188-189, 797
Temperature .. .. .	.. 62-63
Temperatures in Melbourne .. .. .	.. 54-56
Victoria .. .. .	.. 49-50
Textiles ( <i>See also</i> Clothing) .. .. .	.. 587-609 pass.
Wage Rates .. .. .	.. 464, 465
Wholesale Index Numbers .. .. .	.. 481
Third Party Insurance .. .. .	.. 710-711
Tiles .. .. .	.. 613
Timber .. .. .	.. 564-569
Production ( <i>See also</i> Forestry) .. .. .	.. 613
Tobacco .. .. .	.. 504, 515, 516, 531-533, 627, 651, 655
Tobacconist, Sales .. .. .	.. 735
Toilet Products .. .. .	.. 619
Torrens System .. .. .	.. 720
Total Abstinence Societies .. .. .	.. 303
Town and Country Planning .. .. .	.. 349, 377-378, 419-420
Trade Agreements .. .. .	.. 740-743
Customs and Excise Revenue .. .. .	.. 750-751
Department .. .. .	.. 585
Imports and Exports .. .. .	.. 743-751
Legislation, Oversea .. .. .	.. 740-743
Retail .. .. .	.. 733-740
Tariffs .. .. .	.. 584, 740-743
Unions .. .. .	.. 439-442
Traffic .. .. .	.. 343-344
Accidents .. .. .	.. 782-784
Commission .. .. .	.. 781-782
Regulations .. .. .	.. 781-782
Trailers .. .. .	.. 613
Tramcars .. .. .	.. 621
Tramways .. .. .	.. 771-776
Transport Accidents .. .. .	.. 166
Employment .. .. .	.. 472, 473
Government Assistance .. .. .	.. 647
Hours of Work .. .. .	.. 437
Industrial Disputes .. .. .	.. 439
Industries, Wage Rates .. .. .	.. 464, 465
Regulation Board .. .. .	.. 780-781

	<i>Page</i>
Trapping .. .. .	575, 577
Trust Funds and Special Accounts .. .. .	.. 676
Trustee Companies .. .. .	716-717
Public .. .. .	715-716
Tuberculosis .. .. .	235, 240-241, 247-248
Deaths from .. .. .	.. 159
Tyres .. .. .	613, 632

## U

Unemployment .. .. .	474-475, 677, 683, 689, 690
Benefits .. .. .	.. 286-288
Unincorporated Areas .. .. .	.. 116, 117, 119
Universities, Commonwealth Government Grants .. .. .	.. 651, 655
Victorian Government Grants .. .. .	.. 658
University of Melbourne, Asian Students .. .. .	.. 213, 214
Degrees Conferred .. .. .	.. 214
Department of Child Health .. .. .	.. 218
Enrolments .. .. .	.. 212-213
Faculties .. .. .	.. 211-212, 216
Fees .. .. .	.. 212
General .. .. .	.. 211
Income and Expenditure .. .. .	.. 214-215
Medical School .. .. .	.. 216-218, 231
Public Examinations .. .. .	.. 209-210
School of Agriculture .. .. .	.. 506-507
Monash .. .. .	.. 218-221
Building .. .. .	.. 219
Chairs .. .. .	.. 220
Enrolments .. .. .	.. 220
Entrance .. .. .	.. 220
Finance .. .. .	.. 221
Halls of Residence .. .. .	.. 220
Interim Council .. .. .	.. 219
Unoccupied Dwellings .. .. .	.. 122, 367-368, 369

## V

Value of Output and Production, Factories .. .. .	582, 586, 589, 592, 594, 604-605, 606, 607
Production, Primary .. .. .	.. 575-578
Valuers .. .. .	.. 372-373
Vascular Lesions, Deaths from .. .. .	.. 162
Vegetables .. .. .	515, 516, 537-538, 576, 613
Vermin and Noxious Weeds, Destruction of .. .. .	.. 491-492
Victorian Bush Nursing Association .. .. .	.. 262-263
College of Pharmacy .. .. .	.. 228-229
Vine Fruits .. .. .	.. 536-537
Vines .. .. .	.. 515-516
Vineyards .. .. .	.. 515, 517
Local Value of Production .. .. .	.. 576

## W

Wage, Basic .. .. .	.. 454-460
Earnings, Average Weekly .. .. .	.. 465
Margins .. .. .	.. 460-461
Rates .. .. .	.. 462-465
Minimum Weekly .. .. .	.. 463-464
Wages Boards .. .. .	.. 432-434, 454, 455, 459-460, 466
Walter and Eliza Hall Institute .. .. .	.. 217, 231, 273-275

	<i>Page</i>
War Pensions .. .. .	305-306
Service Homes .. .. .	363-364
Water Supply ( <i>See also</i> Irrigation) .. .. .	41-43, 376-377, 401, 403, 405, 412-414, 421, 425
Authorities .. .. .	.. 412
Domestic and Stock .. .. .	.. 496-503
Finance .. .. .	647, 657, 658, 683
List of Authorities .. .. .	.. 412
to Country Towns .. .. .	421-425, 677, 683
to Melbourne ( <i>See</i> Melbourne and Metropolitan Board of Works)	
Resources and Rivers .. .. .	30-43
Weather Summary for 1961, Victorian .. .. .	58-61
Whales and Dolphins .. .. .	16-17
Wheat .. .. .	517-523
Area, Production, and Value .. .. .	514, 516, 522
Australian Wheat Board .. .. .	517, 520, 521
Breeding .. .. .	522-523
Exports .. .. .	.. 747
Government Expenditure .. .. .	.. 678
Grain Elevators Board .. .. .	519-520, 683
Grown for Grain .. .. .	522
in Conjunction with Livestock Grazed .. .. .	510, 523, 556
Number of Growers .. .. .	.. 515
Prices .. .. .	.. 482
Principal Varieties .. .. .	504, 523
Size of Holdings .. .. .	.. 510
Standard .. .. .	.. 521
Value of Production .. .. .	.. 576
Wholesale and Retail Trades, Hours of Work .. .. .	.. 437
Price Indexes .. .. .	481-482
Prices .. .. .	.. 482
Widows' Pensions .. .. .	282-284
Wildlife .. .. .	.. 569
Wind in Melbourne .. .. .	57-58
Window Frames .. .. .	.. 613
Winds .. .. .	.. 52
Wine .. .. .	515-516
Wire Netting, Advances .. .. .	.. 677
Production .. .. .	.. 621
Wireless .. .. .	.. 621
Wombats .. .. .	.. 14
Wood Products ( <i>See</i> Forestry)	
Wool, Auction System .. .. .	560-561
Carding, Spinning, and Weaving .. .. .	.. 625
Exports .. .. .	.. 747
Liens on .. .. .	.. 723
Prices .. .. .	551-552
Production .. .. .	559, 613
Value of Production .. .. .	.. 576
Work Force .. .. .	469-473
Hours of .. .. .	436-438
Workers' Compensation .. .. .	444, 450-452
Writs, Received by Sheriff .. .. .	.. 315
<b>X</b>	
X-ray Surveys, Mass .. .. .	240-241, 247
<b>Y</b>	
Yallourn Works Area .. .. .	119, 634-644 pass.
Youth Welfare .. .. .	.. 292

---

BY AUTHORITY:  
A. C. BROOKS  
GOVT. PRINTER, MELBOURNE

---