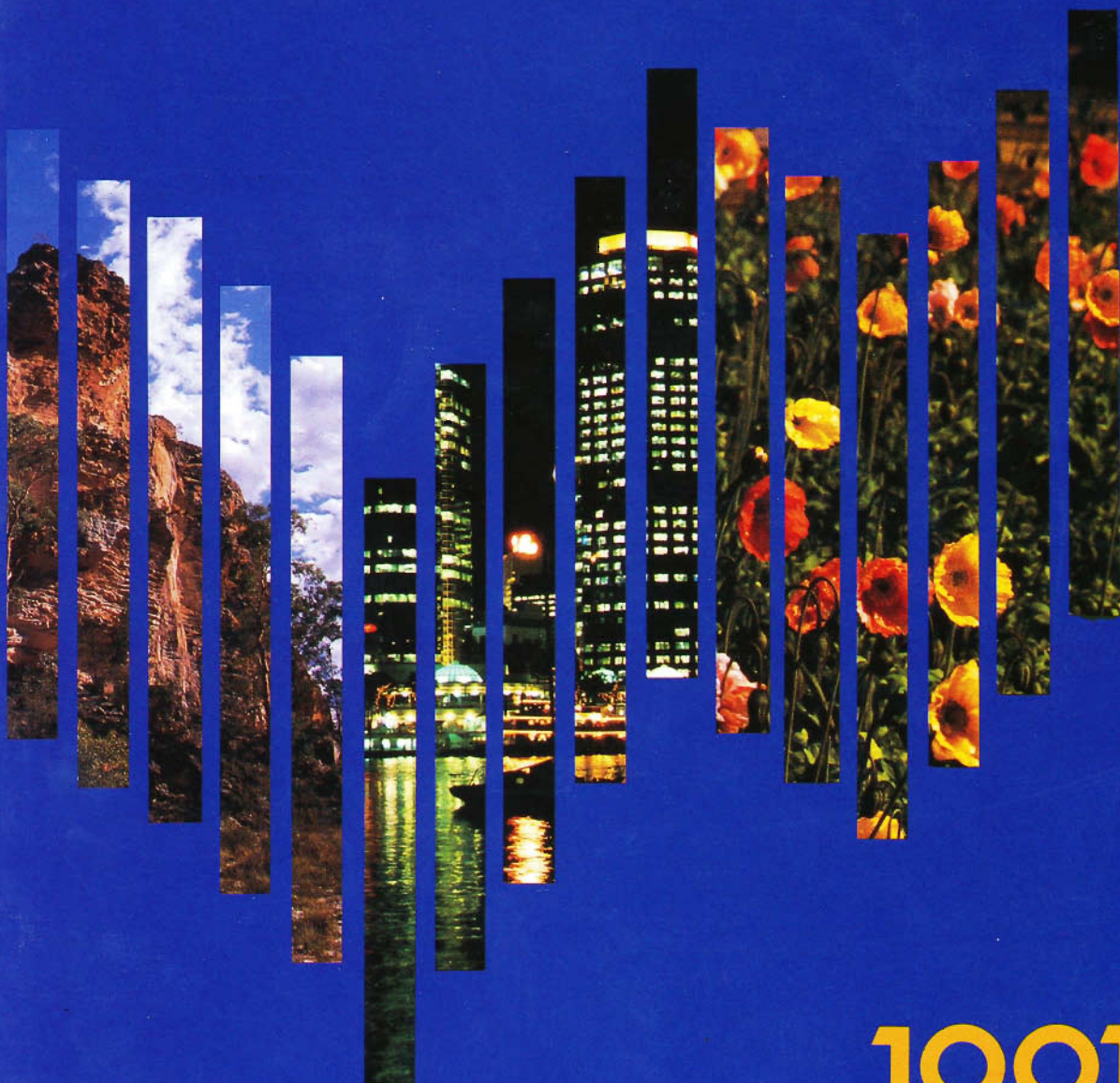


QUEENSLAND

Year Book



1991

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(Front endpaper) Bunya Mountains
National Park

(Frontispiece) Tim Shea Falls, Bunya Mountains
National Park

(Back endpaper) Bunya Mountains
National Park

Photos: *Queensland Department of
Environment and Heritage*



QUEENSLAND YEAR BOOK
1991



QUEENSLAND

QUEENSLAND YEAR BOOK 1991

No. 49

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J. K. CORNISH

DEPUTY COMMONWEALTH STATISTICIAN

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Bureau of Meteorology, Queensland
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Queensland Tourist and Travel Corporation
Bureau of Tourism Research
Queensland Division of Arts
Queensland Division of Sport

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Queensland Main Roads Department
Queensland Department of Transport
Department of Transport and Communications
Department of Harbours and Marine

EXPLANATORY NOTES

Symbols and Other Usages

The following symbols mean:

n.a.	Not available
n.e.c.	Not elsewhere classified
n.e.i.	Not elsewhere included
n.e.s.	Not elsewhere specified
n.p.	Not available for separate publication (but included in totals where applicable)
n.y.a.	Not yet available
p	Preliminary — figure or series subject to revision
r	Figure or series revised since previous issue
..	Not applicable
—	Nil or less than half the final digit shown
——	(Where drawn across a column between two consecutive figures) break in continuity of series
*	Subject to sampling variability too high for most practical uses

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

Values are shown in Australian dollars (\$) or \$A) or cents (c).

All measurements of physical quantities have been expressed in metric units.

For the current source of most of the information shown in the Summary of Queensland Statistics refer to the relevant chapter.

Further References

At the end of the chapters a list of selected publications issued by the Queensland and Central Offices of the Australian Bureau of Statistics is given. These provide detailed statistical information on topics covered in the chapters.

A catalogue number is shown in brackets after the title, and this number should be quoted when ordering these publications.

A complete list of ABS publications produced in Canberra and in each of the State Offices is contained in the *ABS Catalogue of Publications and Products* (1101.0) which is available from any ABS Office.

Local Government Areas

Local government areas were created as each part of the State became populated, but since 1916 the trend has been towards a reduction in the number of areas together with the delegation of wider powers. They represent the whole, undivided area of responsibility of an incorporated local government council.

Local government areas are used as basic districts for the presentation of Population Census and other statistical data.

Statistical Divisions

Statistical collections in the State are based generally on local government areas. For convenience of comparison, the areas are grouped into statistical divisions. The maps between pages 24 and 25 indicate the areas covered by the local government areas and statistical divisions.

The 11 statistical divisions are: Brisbane, Moreton, Wide Bay-Burnett, Darling Downs, South-West, Fitzroy, Central-West, Mackay, Northern, Far North and North-West.

INFORMATION SERVICES

The Australian Bureau of Statistics (ABS) offers a variety of consultancy and information services which, in addition to its many printed and electronic publications and products, provide information and advice on a wide range of statistical needs. The consultancy service operates on a fee for service basis.

All ABS publications are available for reference from the library in the Queensland Office of the ABS and from regional data centres. These are located in the libraries at James Cook University (Townsville) and the University Colleges of Central Queensland (Rockhampton) and Southern Queensland (Toowoomba). Readers are invited to make use of these services. Catalogues of ABS publications are available on request.

The ABS also has a publications mailing service. Readers may subscribe to ABS publications and arrange to receive them on a regular basis.

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PREFACE

I have much pleasure in introducing the 1991 edition of the Queensland Year Book.

The Year Book is a general reference book containing the more important economic and social statistics on the State of Queensland, together with information on its history, government, culture and the physical environment. It provides, therefore, an authoritative and permanent record of the economic and social developments for the period under review.

There is also some background information on selected important historical events and recent matters of interest to the State of Queensland.

The statistical tables include reference to the source of the statistics. Readers are encouraged to access the source publications (in most cases these are ABS publications) for more detailed, and in many cases more up to date, statistics. The source publications also provide information about definitions and methods used to compile the statistics.

I want to take this opportunity to acknowledge the continued cooperation received from individuals, businesses, primary producers, government agencies and other organisations who provide the basic information from which ABS statistics are produced. Without this cooperation the wide range of statistics provided in this book would not have been available for general use by the community.

The production of the Queensland Year Book is very much a team effort. Many staff in the Queensland Office of the ABS have contributed significantly to this edition and I am grateful for their efforts. Special thanks are due to Sharyn Marken and her team who were responsible for overseeing its production.

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Australian Bureau of Statistics
Brisbane

1990

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Graphic and Cover Design: Victoria Sherrin, Certificate of Commercial Illustration

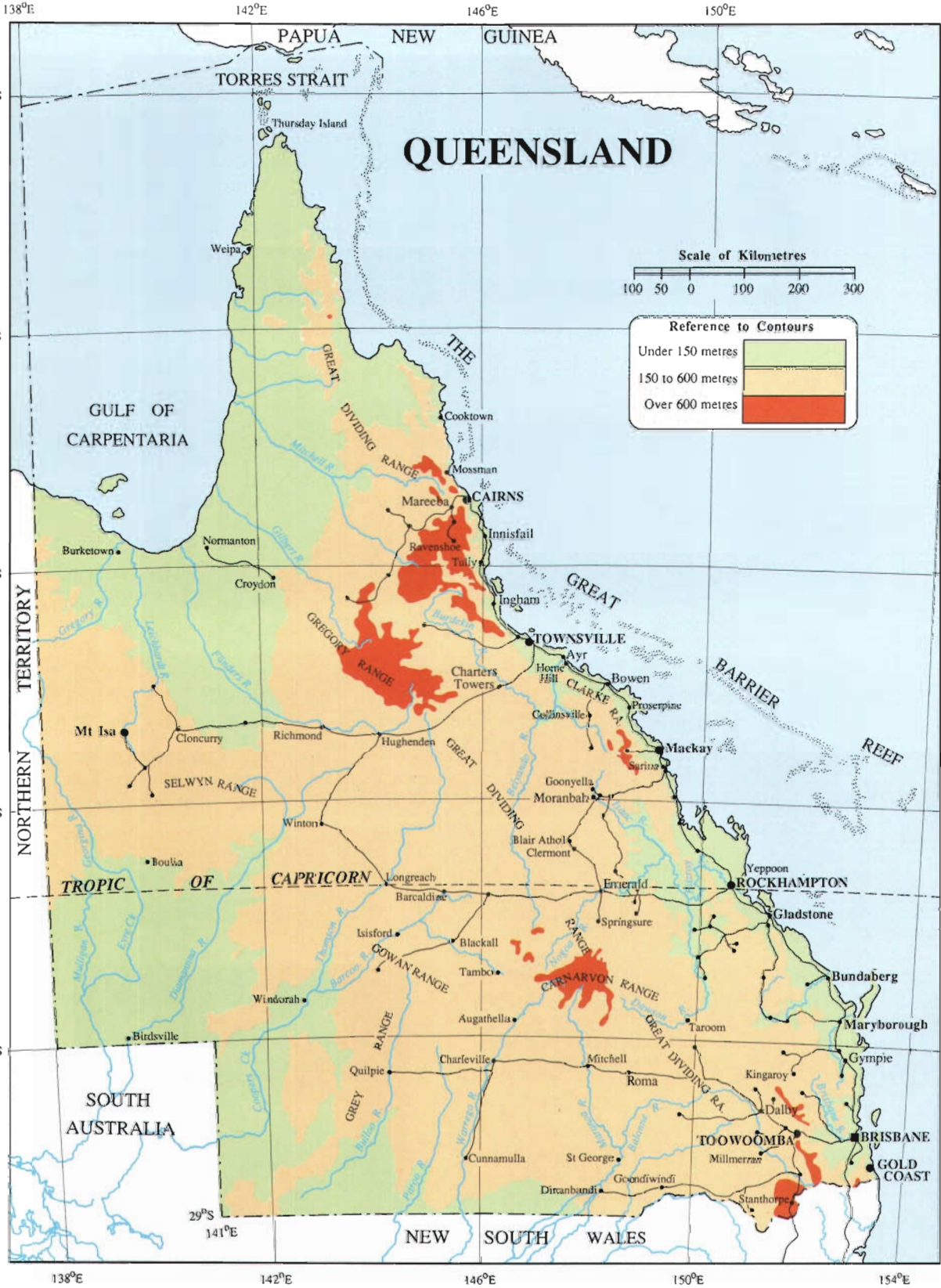


The Coat of Arms was authorised originally in 1893 by Royal Warrant. The Supporters — the brolga and red deer — were assigned by Royal Warrant signed by the Queen during her Silver Jubilee Year visit to Queensland on 9 March 1977. Agricultural industries (represented by cattle, sheep, grain and sugar cane) and mining (represented by a column of gold on a bed of quartz) are depicted. The crest above the shield incorporates the State Badge comprising the Queen's Crown superimposed on the Maltese Cross and resting on entwined gold and black bands. The scroll motto in Latin is translated as Bold, Aye, And Faithful, Too!

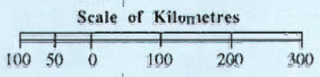
Queensland's floral emblem is the Cooktown Orchid (*Denrobium bigibbum*) and was proclaimed in 1959. It is a native flower growing profusely around Cooktown in the north-east while it is also cultivated in many urban centres.

The orchid is an epiphyte (not a parasite) and grows on a variety of trees. The delicate purple blossom flowers between February and early July although no single plant blossoms for the total period.





QUEENSLAND



Reference to Contours

- Under 150 metres
- 150 to 600 metres
- Over 600 metres

GULF OF CARPENTARIA

NORTHERN TERRITORY

TROPIC OF CAPRICORN

SOUTH AUSTRALIA

NEW SOUTH WALES

PAPUA NEW GUINEA

TORRES STRAIT

THE GREAT DIVIDING RANGE

GREAT DIVIDING RANGE

GREAT BARRIER REEF

CARNARVON RANGE

GOWAN RANGE

GREAT DIVIDING R.A.

TOOWOOMBA

GOLD COAST

CAIRNS

TOWNSVILLE

ROCKHAMPTON

BUNDABERG

MARYBOROUGH

GYMPIE

BRISBANE

BURKETOWN

WEIPA

CROYDON

MT ISA

SELWYN RANGE

BOULIA

BIRDSVILLE

WINDORAH

ISISFORD

BLACKALL

TAMBO

AUGATHELLA

CHARLEVILLE

QUILPIC

CUNNAMULLA

ST GEORGE

GOONDIWINDI

DIRCUMBANDI

STANTHORPE

COOKTOWN

MOSSMAN

MAREEBA

INNISFAIL

RAVENSHOE

TULLY

LOGHAM

CHARTERS TOWERS

AYR

HORN HILL

COLLINSVILLE

GOONYELLA

MORANBAH

BLAIR ATHOL

CLERMONT

SPRINGSURE

EMERALD

YEPPON

GLADSTONE

TAROOM

ROMA

MITCHELL

KINGAROY

DALBY

MILLMERRAN

STANTHORPE

Chapter 1

HISTORY AND CHRONOLOGY

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Chapter 1

HISTORY AND CHRONOLOGY

European settlement of Queensland began in 1824 when a site for a penal settlement was chosen on the Brisbane River, although the first inhabitants probably arrived from south-eastern Asia about 40,000 years ago. By 1831 the convict population of the Moreton Bay settlement had reached its peak of 1,100. In the next 8 years the convict establishment was phased out and by 1839 only a maintenance crew was retained to look after the government stock and to help the party of surveyors as land in the Moreton district was being prepared for sale to free settlers. In 1840 Patrick Leslie settled on the Darling Downs and in 1842 the first auction of land was held in Brisbane Town. In 1859, the Colony of Queensland was separated from New South Wales under the Governorship of Sir George Bowen.

The population of the newly proclaimed Colony of Queensland in 1859 was 23,520. Rapid growth was experienced in the first few decades after separation and by 1880 the population had grown to 211,040. This growth has continued to the present and by 30 June 1989 there were 2,830,200 people in Queensland.

1.1 EARLY EXPLORATION

- 1606** William Jansz visited Cape York Peninsula.
- 1623** Jan Carstens explored the Gulf of Carpentaria and Staaten River.
- 1644** Abel Tasman explored Cape York Peninsula, naming it Carpentaria Land.
- 1770** Captain Cook sailed up the Queensland coast: 16 May, Cook off Point Danger; Moreton (Morton) Bay named; 17 May, Cook named Cape Moreton (Morton) and 22 August, Cook landed on Possession Island and took possession of the whole eastern coast, naming it New South Wales.
- 1788** The Colony of New South Wales was founded.
- 1799** Captain Matthew Flinders explored Moreton and Hervey Bays.
- 1802** Port Bowen discovered by Lieutenant John Murray.



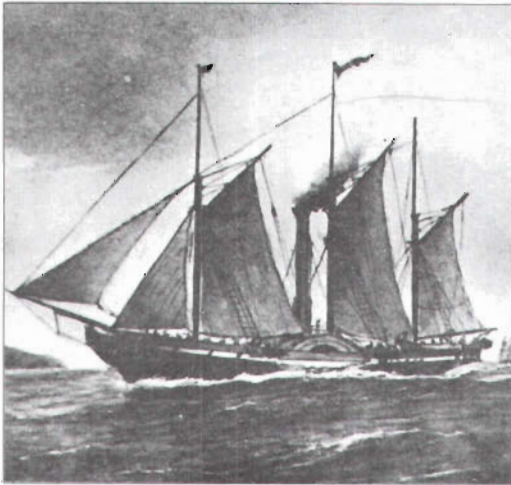
Sir Thomas Brisbane

Photo: John Oxley Library

- 1818** John Thomas Bigge was commissioned to investigate the condition of New South Wales, with the underlying assumption that he would suggest ways of putting 'terror back into transportation'. He reported that three penal bases could be established at Port Bowen (now Port Clinton), Port Curtis and Moreton Bay, all to be places of stern discipline and control.

1.2 SETTLEMENT

- 1823** The Governor of New South Wales, Sir Thomas Brisbane, sent John Oxley to select a site for a penal settlement. He recommended Moreton Bay and discovered the Brisbane River.
- 1824** The founding party of 29 volunteer convicts and one overseer with Lieutenant Henry Miller as commandant left Sydney and in September began unloading at Redcliffe Point.
- 1825** Moreton Bay penal settlement moved to a new site on the Brisbane River between Queen and William Streets.
- 1826** Brisbane's first school opened.
- 1827** The botanist, Allan Cunningham, travelled through the 'gap' in the main divide and named the Darling Downs.
Coal was used in limestone kilns at Ipswich.
- 1828** Queensland's first industry was established — a treadmill to grind maize at Wickham Terrace, Brisbane.
- 1831** The peak of 1,100 convicts reached.
- 1837** The *James Watt* became the first steamer in Moreton Bay.



James Watt

Photo: *John Oxley Library*

- 1838** German missionaries settled at Nundah, a future suburb of Brisbane.
- 1839** The Brisbane penal settlement was officially closed.

- 1840** Patrick Leslie led the first squatters and their thousands of sheep and cattle from New England and southern New South Wales to the Darling Downs.
- 1841** The first sale of Moreton Bay land was held in Sydney.
- 1842** Free settlement began in Moreton Bay. The first land sale held in the colony took place in Brisbane Town.
- 1843** Moreton Bay settlement became an electoral division of New South Wales.
- 1844** Dr Ludwig Leichhardt and Sir Thomas Mitchell began their exploration of vast areas of Queensland.
- 1845** The first population count of the Moreton Bay and Darling Downs districts showed 1,599 persons.
- 1846** The first newspaper, the *Moreton Bay Courier*, was published.
Port Curtis was founded as a penal settlement.
The first commercial production of coal was mined at Redbank.
- 1848** The Native Mounted Police Force was established.
Edmund Burke Kennedy made his tragic journey through Cape York, hoping to reach its tip. Leichhardt disappeared mysteriously in the far west.
- 1849** Technical education began under the auspices of the Brisbane School of Arts.
- 1850** The first bank opened.
- 1856** Augustus Gregory's expedition from the Northern Territory reached Brisbane.
- 1858** The first discovery of payable gold was made at Canoona.
The first trade union, the Stonemasons Union, was formed.

1.3 SELF-GOVERNMENT

- 1859** On 6 June, Letters Patent for the separation of Queensland from New South Wales were issued.
On 6 September, Brisbane, with a population of 5,000, was proclaimed a municipality.
On 10 December, separation of Queensland from New South Wales was proclaimed by the first Governor, Sir George Ferguson Bowen.

QUEENSLAND AT THE BEGINNING

When the Colony of Queensland was proclaimed in 1859, it had an estimated white population of 25,020 and an Aboriginal population of between 10,000 and 15,000.

There were 41 schools in operation. The government supported the education of 819 students (460 males and 359 females) at ten denominational schools, run by either the Church of England or the Church of Rome, and one national school. A further 698 students (361 males and 337 females) attended 30 private schools.

The health care of the Colony was serviced by two hospitals — one in Brisbane, the other in Maryborough. Over the year of 1859, a total of 190 patients were admitted for treatment, with only 28 being in residence on 31 December.

For the confinement of prisoners only the Brisbane Gaol, which was under construction, was available and it had accommodated 217 prisoners during 1859. By the end of the year only 32 were still serving their sentences.

Manufacturing industries were developing and four steam sawmills, a soap factory, a candle factory, a saltworks and a pottery had been established. The grinding of grain was undertaken by one of the sawmills. Two coal mines were in operation and produced a total of 5,181 tons (5,264 tonnes) of coal for the year.

The only commercial fishing industry was the catching of dugong which was boiled down to extract oil.

1860 On 22 May, the Parliament of Queensland had its first sitting with R. G. W. Herbert as the first Premier.

A Grammar School Act was passed. An Act regulating the occupation of Crown lands was passed as a result of exploration by Captain John Mackay and J. G. and P. F. Macdonald. Ipswich and Rockhampton were constituted as towns.

1861 The Supreme Court of Queensland was established.

Burke and Wills died on their return journey after traversing the inland to the Gulf of Carpentaria. Maryborough and Warwick became towns.

1862 Copper was discovered at Peak Downs. The first telegraph link between Brisbane, Ipswich, Toowoomba and Sydney was completed.

1863 The Brisbane Council was authorised to erect a town hall in Queen Street. Severe flooding of the Brisbane River.

Melanesians (Kanakas) were first recruited to provide manual labour on the sugar plantations. An Act authorising government construction of railways was passed.

The first grammar school was opened at Ipswich.

1864 On 1 January, the first police commissioner was appointed.

The first commercial production of sugar was obtained at Ormiston.

1865 The first bridge across the Brisbane River, a temporary wooden structure, was opened to traffic.

The first rail line, from Ipswich to Grandchester, was opened.

Cobb and Co. started operating coach services and obtained their first mail contract.

1866 Severe economic crisis.

1867 Gold was discovered at Gympie, Cape River and Cloncurry and copper at Einasleigh and Cloncurry.

The Constitution Act was passed.

The railway line from Ipswich to Toowoomba was completed.

1868 Walkers Limited factory was established at Maryborough.

Gold was discovered at Ravenswood.

The State population exceeded 100,000.

1869 Gilberton gold and Mount Perry copper discoveries were made.

Free education was introduced.

1870 Sheep numbers exceeded 8,000,000 and cattle numbers 1,000,000.

1872 Gold at Charters Towers and copper at Mount Flora were discovered. Tin was discovered in the Stanthorpe region and opals in western Queensland.

Universal adult male suffrage was introduced.

1873 Gold was discovered at The Palmer, attracting 15,000 Europeans and 20,000 Chinese over the next 3 years.

1874 The Victoria Bridge over the Brisbane River, with swing span for shipping, was opened.

1875 The railway from Roma Street, Brisbane, to Ipswich was opened.

Tin was discovered at Kangaroo Hills and gold at Hodgkinson.

Legislation established the principle of 'free, compulsory, and secular education'.

1876 Gold was discovered at Coen.

1877 The first woollen mill opened at Ipswich.

1878 Legislation created local government authorities for towns and country areas in an attempt to ensure that road and bridge construction was a local responsibility.

- 1879** The principle of elections by secret ballot was adopted by all States.
- 1880** Tin discoveries were made in the Herberton region.
- 1881** A technical college under the auspices of the Brisbane School of Arts commenced.
- 1882** Gold was discovered at Mount Morgan, which in time became one of the richest fields in gold as well as copper.
The first electric power display took place in Brisbane.
- 1884** The southern portion of New Guinea was annexed by Great Britain and administered by Queensland.
- 1885** Gold was discovered at Croydon. Queensland had the largest number of cattle of any Australian colony.
Queensland became the third largest colony in population.
Brisbane began operating a tramway.
Cobb and Co. expanded to cover 6,500 route kilometres and a coach-building factory was established at Charleville.
Premier Griffith appointed a Royal Commission to inquire into the system of Kanaka recruitment and treatment. He introduced a Bill to stop recruiting licences being issued after 1890.
- 1887** The Department of Agriculture was established.
- 1888** Electricity supply to the G.P.O., Brisbane, commenced.
The first through trains from Brisbane to Sydney, transshipping at Wallangarra, commenced running.
- 1889** The Australian Labour Federation was formed in Queensland.
- 1890** The country arbitrary meridian (C.A.M.) system of mapping was introduced.
Chillagoe-Mungana silver-lead discoveries were made.
Many sectors of the economy suffered as a serious depression set in.
- 1891** The railway from Brisbane to Gympie was opened.
A shearers' strike was called against the principle of freedom of contract ('closed shop') which led to violence and virtual martial law.
- 1893** Electricity was connected to 91 consumers near the G.P.O., Brisbane. The first hydro-electricity station, Thargomindah, opened for rural supply.
Eight of the 11 banks of issue failed and were closed.
- A major flood occurred in Brisbane and both the Victoria Bridge and the Indooroopilly railway bridge were destroyed. Considerable damage was done to parts of South Brisbane, heavy shipping was stranded in the Botanical Gardens and river channel silting interfered with shipping for a year. The newly formed Labour Party won 16 seats in its first general election. Among those elected was Andrew Fisher who became Australia's 6th, 8th and 10th Prime Minister; 1908-09, 1910-13 and 1914-15.
- 1895** The Native Mounted Police Force was disbanded.
- 1897** The Countess Street power station was opened by Brisbane Tramways and electric trams commenced running.
Gatton Agricultural College was established.
The policy of Archibald Meston was introduced to remove Aboriginal people who had become troublesome or burdensome and isolate them in Reserves.
- 1899** Cyclone *Bathurst Bay* caused the pearling fleet to be destroyed with the loss of over 300 lives.
The first Labour Government, led by Andrew Dawson, was formed but lasted only 7 days.
- 1900** Roma (Hospital Hill) gas was discovered.
A period of copper discovery and smelting began at Kuridala, Selwyn and Mount Cuthbert. Copper smelting commenced at Mount Garnet and Mount Molloy.
The school leaving age was raised from 12 to 14 years and the 'compulsory' aspects of education were enforced.

1.4 FEDERATION

- 1901** The Commonwealth of Australia was created with Queensland as a State.
Copper was discovered at Chillagoe-Mungana and Etheridge and smelting commenced.
- 1902** Brisbane was proclaimed a city.
Copper production commenced at Mount Morgan.
- 1903** The Philp Conservative Government was replaced by a coalition of the Labour Party and other opposition remnants.
- 1904** The City Electric Company was established as successor to the Brisbane Electric Supply Company.
- 1905** Suffrage for females was introduced.
- 1906** William Kidston, the Labour Party leader, took over as Premier.



First aircraft (Avro 504K) owned by Qantas

Photo: *Qantas Airways Ltd*

- 1908** The first National Park, Witches Falls on Tamborine Mountain, was proclaimed.
- 1910** Water control by State Act was introduced. The Workers' Dwelling Board was established.
- 1911** Queensland University opened in George Street, Brisbane.
- 1912** The supply of electricity to local consumers in provincial towns commenced. The first State high school was established.
- 1914** World War I commenced.
- 1922** The Legislative Council (upper house) was abolished.
The first airmail service from Charleville to Cloncurry commenced.
The Correspondence School opened.
The death penalty was abolished — the first State to do so.
- 1923** Silver, lead and zinc were discovered at Mount Isa.
A system of unemployment insurance commenced, well in advance of other States in the Commonwealth.
- 1924** The Brisbane to Cairns rail line was completed.
- 1925** On 1 October, the Greater Brisbane Council, the largest municipal council in Australia, was constituted.
The Main Roads Commission was established.
- 1926** *Cactoblastis cactorum* was introduced to tackle the prickly pear pest which was rapidly taking over productive land.
- 1927** Mount Morgan mine was closed.
The first motor vehicle assembly took place in Brisbane.
Roma Oil Corporation gas discovery was made.
- 1928** The Flying Doctor Service was commenced by the Australian Inland Missions.
Charles Kingsford-Smith arrived in Brisbane after crossing the Pacific Ocean.
- 1929** Mount Morgan mine re-opened.
The Labor Government was replaced by a Country-National Government.

1.5 1915 TO 1930

- 1915** Compulsory voting was introduced.
The election of the Labor Party to office under T. J. Ryan brought a long period of Labor Government which, except for 3 years, lasted until 1957.
- 1916** The Workers' Compensation Act was passed.
The 8 hour working day was introduced.
- 1918** World War I ended.
- 1920** The Main Roads Board was instituted. Queensland and Northern Territory Aerial Services Ltd (Qantas) was formed with headquarters at Winton.
- 1921** District Courts were abolished.
The first Basic Wage declaration was made by the State Industrial Court.

1.6 THE DEPRESSION YEARS

- 1930** The present Brisbane City Hall was officially opened.
The Brisbane to Sydney air service was inaugurated by Australian National Airways.
- 1931** Gold was discovered at Cracow.
- 1932** Grey Street Bridge in Brisbane was opened to traffic.
The Labor Party was re-elected to power.
- 1937** Cement was produced from Moreton Bay coral.
- 1938** The State Electricity Commission was established.
The State population exceeded 1,000,000.
- 1939** World War II commenced.
- 1940** The Story Bridge in Brisbane was opened to traffic.
Local consumers in 64 provincial towns were being supplied with electricity.
- 1941** Mineral sand production commenced at Burleigh Heads.
- 1942** Uniform federal income taxation commenced.
- 1943** The Queensland People's Party, which 2 years later would become the Queensland Division of the Liberal Party of Australia, was formed.
- 1944** Pay-as-you-earn (PAYE) income taxation was introduced from 1 July.
- 1945** The Queensland Housing Commission was established.
The Queensland Institute of Medical Research was established.
World War II ended.
By the end of World War II, 750,000 United States servicemen had passed through Brisbane.
A free government hospital system was introduced.

1.7 POST WORLD WAR II

- 1947** 'Displaced persons' commenced arriving from Europe.
The Labor Government created a four-zone electorate system weighted to favour the western electorates.
- 1948** The 40-hour working week was introduced.
Queensland University commenced relocating at St Lucia.

- 1951** The Main Roads Department was established.
- 1954** The Mary Kathleen uranium mine was opened.
- 1955** Bauxite was discovered at Weipa in Cape York Peninsula.
- 1956** A contract was signed for the supply of uranium oxide to the United Kingdom Atomic Energy Authority.
- 1957** When the Labor Government failed to legislate for 3 weeks' annual leave for all workers, the Premier, V. C. Gair, was expelled from the Party which then split and subsequently lost office to the Country-Liberal coalition led by G. F. R. Nicklin.
- 1959** The District Courts were re-established.
The Flying Surgeon Service was introduced at Longreach.
Television transmission commenced in Brisbane.
The Townsville Copper Refinery was established.
The Brisbane City and State Centenaries were celebrated.
The first coking coal was mined at Kianga.
The Gold Coast townships were united under the title Gold Coast City.

1.8 1960 TO 1979

- 1960** The Radio School of the Air began.
- 1961** The first commercial oil discovery was made at Moonie.
Open-cut coal mining at Moura commenced.
Natural gas was piped from nearby wells to Roma Power House.
University College, later to become James Cook University of North Queensland, was opened at Townsville.
The Gladstone-Mourra rail link was opened.
- 1963** Mary Kathleen uranium mine was closed.
- 1964** Oil was discovered at Alton.
The school leaving age was raised to 15 years.
- 1965** Queensland Institute of Technology in Brisbane was opened.
- 1966** Decimal currency was introduced on 14 February.
- 1967** An alumina plant was opened at Gladstone.
High-grade nickel laterite was discovered at Greenvale.

- 1968** Johannes Bjelke-Petersen, the longest-serving Premier of Queensland, took office.
- 1969** The new Victoria Bridge in Brisbane was opened to traffic.
- 1971** Cyclone *Althea* extensively damaged Townsville.
Hay Point coal bulk-handling port opened.
- 1972** The use of the metric system of measurement as the sole system of measurement of physical quantities commenced.
- 1973** The Captain Cook Bridge and the first stage of the South East Freeway in Brisbane was opened.
The State population exceeded 2,000,000.
The preschool education network started.
- 1974** Australia Day weekend floods caused 14,000 homes in Brisbane and Ipswich to suffer water damage following torrential rain brought in by cyclone *Wanda*.
The State Emergency Service was established.
The Office of Parliamentary Commissioner for Administrative Investigations, 'Ombudsman', was created.
The age of majority was reduced from 21 to 18 years.
- 1975** Rock phosphate production commenced at Duchess and Lady Annie.
Griffith University in Brisbane was opened.
Brisbane's four television stations began colour transmission.
- 1976** Mary Kathleen uranium mine recommenced production.
Elizabeth Jean Woods became Queensland's first woman Rhodes Scholar.
Cyclone *Ted* devastated Mornington Island.
- 1977** H.R.H. Queen Elizabeth II visited Brisbane during Her Silver Jubilee year.
Severe flooding was recorded in north Queensland and the Gulf Country.
A new Coat of Arms was adopted for the State.
An international airport was opened at Cairns.
- 1978** The planetarium, located in Brisbane's new Botanic Gardens at Mount Coot-tha, opened.
The cross-river rail link, the Merivale Bridge, between South Brisbane and Roma Street Stations was opened.
Aurukun and Mornington Island, previously Church Aboriginal Communities, were established as local authorities under the *Local Government (Aboriginal Lands) Act 1978*, on 22 May.
- 1979** Queensland's Parliamentary Annexe was opened by the Duke of Gloucester.
The Great Barrier Reef Marine Park

agreement with the Commonwealth Government was signed.

Electric trains commenced to run in Brisbane. The Houghton Bridge, the longest road bridge in Australia, was opened, replacing the Hornibrook Highway Bridge between Brighton and Redcliffe Peninsula.

1.9 THE NINETEEN-EIGHTIES

1980 Much of Queensland had one of the hottest, driest summers on record. The drought brought huge stock losses.

Construction work began on Brisbane's International Airport redevelopment project.

1981 The World Heritage Committee accepted the Great Barrier Reef for World Heritage listing.

Townsville's international airport was opened. Mount Isa Mines Ltd and the Queensland government agreed to proceed with the \$550m Newlands Coal Project.

1982 The Brisbane City Mall, in Queen Street was opened by the Lord Mayor.

Brisbane was the host city to the XII Commonwealth Games.

Mary Kathleen uranium mine, which had re-opened in 1975, was closed again.

Production commenced at Queensland's first aluminium smelter at Boyne Island.

Stage 3 of the electrification of the Brisbane rail services became operational.

1983 Cyclone *Elinor* crossed the coast near Carmila on 4 March.

Their Royal Highnesses the Prince and Princess of Wales visited Queensland.

Caboolture marathon runner, Ron Grant, completed an around Australia run.

Widespread rainfall in April and May ended the drought which in many areas was the worst on record for the past 100 years.

In an October State election, the National Party gained enough seats to govern in its own right.

1984 Hervey Bay was proclaimed a city.
Dalrymple Bay coal loading facility was opened.

The population of Queensland reached 2.5 million. Roma meatworks re-opened after being closed for 4 years due to drought.

1985 Corbould Park Racecourse at Caloundra was opened.

Wivenhoe Dam, 70 kilometres from Brisbane on the upper reaches of the Brisbane River, was opened.

A redistribution of State Electorates was conducted in conjunction with the decision to increase the number of seats in parliament to 89.

Mrs Sallyanne Atkinson became Brisbane's first female Lord Mayor.

H.R.H., the Duke of Kent, opened the Performing Arts Complex of the Queensland Cultural Centre.

Queensland's first casino, *Jupiters*, opened at Broadbeach on the Gold Coast.

1986 Mrs Yvonne Chapman became the first female appointed to Cabinet in Queensland. Thuringowa Shire was proclaimed a city.

The Gateway Bridge on the lower reaches of the Brisbane River was opened to traffic.

Tropical cyclone *Winifred* caused extensive property and crop damage from Cairns to Ingham and the adjacent inland.

The Queensland Museum, the third stage of the Queensland Cultural Centre, was opened.

Brisbane Transit Centre, a centrally located rail and coach terminal, was opened.

Twelve miners were killed in an explosion at the Moura Underground Mine.

1987 The Redlands Public Hospital at Cleveland was opened.

As a result of allegations that prostitution, gambling and pornography were controlled by groups receiving protection from the police an inquiry headed by Mr Tony Fitzgerald, Q.C. began hearings on 27 July.

Lady Cilento, Australia's 'Medical Mother', died in Brisbane aged 93 years.

Michael John Ahern succeeded Sir Joh Bjelke-Petersen as Premier of Queensland.

Miss Susan Kiefel was the first woman in Queensland to be appointed a Queen's Counsel.

The Shire of Landsborough was renamed the Shire of Caloundra then subsequently constituted as the City of Caloundra.

1988 Cyclone *Charlie* devastated coastal areas from Rockhampton to Townsville and extended inland to Clermont and Charters Towers. Extensive damage was caused to property and crops and one life was lost.

Dr Graham Saunders, the founding director of the Queensland National Parks and Wildlife Service died.

A new domestic air terminal opened in Brisbane. Brisbane Royal Women's Hospital celebrated its Golden Jubilee.

In Brisbane the world's largest underground diesel bus station was opened.

The Australian Stockman's Hall of Fame and Outback Heritage Centre at Longreach was opened by H.R.H. Queen Elizabeth II.

From 30 April to 30 October, World Expo 88 was held in Brisbane with attendances of 18.5 million. Queensland was awarded the first rural traineeships in Australia.

The centenary of electricity supply in Queensland was celebrated.

Queensland's first world-class film studio opened in July at Coomera.

DR COLIN CLARK (1905-1989)

Dr Colin Grant Clark was a leading economist, a gifted statistician and a highly respected author. His qualifications were, to say the least, impressive — Master of Arts with Honours, Doctor of Literature, Doctor of Science with Honours, Doctor of Economics with Honours and a Fellow of the British Academy.

Born and educated in England, Dr Clark graduated from Oxford University in 1927 with a degree in chemistry and an interest in economics and the application of statistics to economic problems. At the age of 25 years he became a lecturer in statistics at Cambridge University after serving on the Economic Advisory Council to the British Government.

While in Australia as a visiting lecturer at the Universities of Melbourne, Sydney and Western Australia, he was offered a position with the Queensland Government. He accepted and from 1938 to 1946 was the Government Statistician for Queensland, Director of the Bureau of Industry and Financial Adviser to the Treasurer. He was then appointed Under Secretary for the Department of Labour and Industry, a post which he held from 1947 until his return to Oxford University in 1953. In 1969 he returned to Australia, first to Monash University and then, upon retirement, to the University of Queensland in 1978 to become an Honorary Research Consultant for the Faculty of Economics.

Dr Clark will be remembered for his pioneering work in the study and development of national income accounting which was seen as a significant contribution in the field of economics.

The first two electronic learning centres in Queensland secondary schools opened at Noosa District and Pine Rivers State High Schools.

1989 Queensland Institute of Technology became the Queensland University of Technology.

The new Centenary prison near Wacol, with medium and maximum-security blocks, opened. The Honourable William George Hayden sworn in as Australia's 21st Governor-General. He is the first Queensland-born person to hold the post.

Queensland suffered a double disaster in early April with flooding in many parts of the State and devastation of the Home Hill-Ayr region by cyclone *Aivu*. North Queensland was declared a disaster area. A total of 6 lives were lost, 4 in the floods and 2 in the cyclone.

Mr Justice Macrossan sworn in as Queensland's Chief Justice.

Poet and civil rights campaigner, Oodgeroo Noonuccal (Kath Walker) became the first woman

and the first Aboriginal to receive a doctorate from Griffith University.

Gympie suffered flooding for the second time in 3 weeks and was declared a disaster area. A mini-cyclone savaged the Sunshine Coast and Brisbane during which about 110 millimetres of rain fell in 2 hours.

Queensland's oldest primary school, Hemmant State School, originally Bulimba Creek School, celebrated 125 years of operation.

First shipping service between Brisbane and mainland China established.

Central and south-west Queensland experienced severe flooding.

Sister Angela Mary Doyle, a health-care worker of Brisbane named Queenslander of the Year.

Mr Justice Angelo Vasta removed from the Supreme Court Bench by State Parliament.

Australia's longest electric passenger train service from Brisbane to Rockhampton (630 kilometres) began.

The Report of the Commission of Inquiry into Possible Illegal Activities and Associated Police Misconduct (The Fitzgerald Inquiry) was released. Permanent Sunday retail trading began in Brisbane's City Heart.

Acting Inspector Evelyn Hill became the first female inspector appointed in the Queensland Police Force.

Dr Colin Clark, noted economist and former Queensland Statistician, died.

Theodore Russell Cooper became Premier of Queensland.

A trial period of daylight saving began in Queensland for the first time in 17 years.

Brisbane air traffic controller, Barbara Weir, appointed as Australia's first woman search and rescue mission coordinator.

In the State election of 2 December the Australian Labor Party was voted into Government for the first time in 32 years. The polls recorded the largest swing to Labor in Australia since 1909.

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Chapter 2

PHYSICAL ENVIRONMENT

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Chapter 2

PHYSICAL ENVIRONMENT

In terms of absolute area, Queensland is the second largest of the six Australian States and has the largest habitable area. It occupies the north-eastern quarter of the continent and covers 1,727,200 square kilometres, with 7,400 kilometres of coastline. Equivalent in size to the whole of the British Isles and Western Europe and nearly five times the area of Japan, it ranges from the temperate and densely populated south-east to the tropical, sparsely populated Cape York Peninsula in the north. Lying between 9 degrees and 29 degrees south of the equator, it is in latitudes similar to those of Mexico, Egypt, India, Thailand and Hong Kong in the Northern Hemisphere.

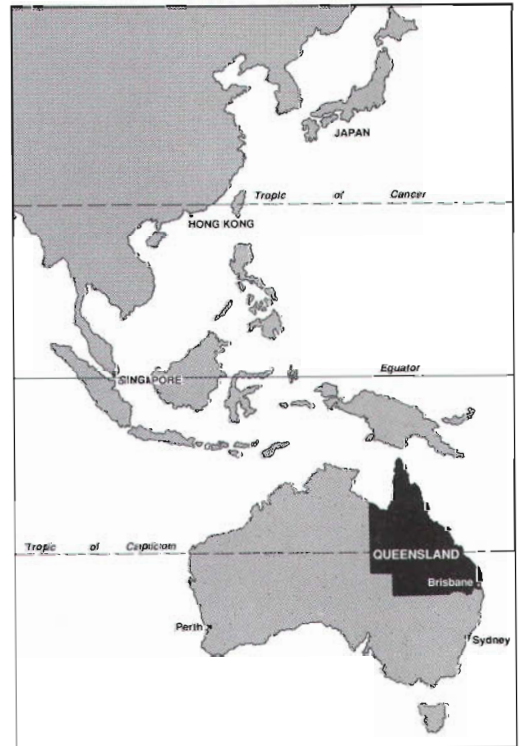
2.1 AREAS OF STATES AND TERRITORIES, AUSTRALIA

<i>State or Territory</i>	<i>Area</i>	<i>Proportion of total</i>
	<i>'000 sq km</i>	<i>per cent</i>
New South Wales	802	10.4
Victoria	228	3.0
Queensland	1,727	22.5
South Australia	984	12.8
Western Australia	2,525	32.9
Tasmania	68	0.9
Northern Territory	1,346	17.5
Australian Capital Territory	2	0.0
Australia	7,682	100.0

2.1 CLIMATE

Queensland, known as the 'Sunshine State', has an equable climate. Weather conditions vary dramatically from the temperate south to the tropical north and from the drier inland to the coastal plain. Sunny days with cold and frosty nights are characteristic of the inland winter while along the coast the days are usually mild with only occasional frosts. Summer has high temperatures and low humidity to the west of the Great Dividing Range but along the coast the humidity is high and temperatures may be lowered by cool sea breezes.

There is a wide variation in rainfall patterns. In the dry south-western corner as little as 150 millimetres a year may fall, while some areas along the tropical coast can experience up to 4,000 millimetres in a year.



On the whole, the Queensland climate may be summarised as being healthy and pleasant. Cold, wet winds (bleak weather) are practically unknown in the State.

2.1.1 Temperature

Queensland has a typical subtropical to tropical climate. High daytime temperatures are a normal feature of the period from October to March, resulting in quite a short spring and a long summer. Temperatures increase fairly rapidly in September and October with the temperature often exceeding 40 degrees Celsius in inland areas even before the official commencement of summer on 1 December.

The sea breeze, which is an almost daily phenomenon in coastal parts, tempers conditions considerably but the humid conditions in summer on the tropical coast (north of Rockhampton) can be enervating.

Day temperatures in the winter are quite mild, and, with the decreased cloudiness, make for pleasant weather from May to September with sunny days and temperatures in the low-twenties to mid-twenties.

2.2 TEMPERATURES FOR SIX TYPICAL STATIONS, QUEENSLAND (degrees Celsius)

Station	1988		1989	
	Mean maximum	Mean minimum	Mean maximum	Mean minimum
Brisbane (a)	25.4	16.1	24.7	15.4
Rockhampton	28.6	17.9	27.6	17.1
Cairns	29.6	21.4	29.0	20.8
Charleville	28.7	14.4	27.4	13.9
Longreach	31.9	17.3	29.9	15.7
Mount Isa	32.9	19.2	31.4	18.2

(a) At Brisbane airport.

Source: Bureau of Meteorology.

2.1.2 Rainfall

Average annual rainfall in Queensland varies from about 150 millimetres in the desert of the extreme south-western corner of the State to about 4,000 millimetres in parts of the sugar lands of the wet north-eastern coast, the latter being the wettest part of Australia.

Every part of Queensland receives more rain in the summer 6 months (November to April) than in the winter 6 months (May to October). The concentration of rain in the summer months is greatest in the north and west, reaching a maximum in the Gulf of Carpentaria region. This area receives only 25 to 40 millimetres of rain in winter, or about one-twentieth of the annual total. South of the Tropic of Capricorn (Rockhampton-Longreach) winter rainfall becomes an important part of the annual total, being about 30 per cent, while it rises to about 40 per cent along the southern border of the State. The east coast of Queensland, both tropical and subtropical portions, receives a substantial portion of its rain in winter, but on the tropical coast this is mainly due to the prolonga-

tion of the autumn rains into April and May, while July, August and September are relatively dry months.

2.3 RAINFALL, QUEENSLAND (millimetres)

Locality	1988	1989	Long-term average (a)
Coastal			
Brisbane airport	1,355	1,259	1,152
Bundaberg	1,235	1,286	1,147
Gladstone	1,084	1,082	928
Rockhampton	1,002	1,110	845
Mackay	2,466	1,899	1,618
Townsville	812	1,123	1,188
Cardwell	2,051	2,330	2,151
Cairns	1,603	2,484	2,032
Thursday Island	2,091	1,964	1,727
Normanton	603	855	925
Subcoastal			
Warwick	967	794	712
Toowoomba	1,391	1,100	970
Kingaroy	837	913	782
Gayndah	663	838	782
Emerald	717	860	638
Charters Towers	584	960	663
Atherton	1,084	1,576	1,413
Coen	1,215	1,123	1,186
Western			
Cunnamulla	443	503	366
Charleville	372	512	501
Blackall	370	697	528
Longreach	246	679	469
Boulia	143	130	266
Winton	309	598	411
Hughenden	233	566	494
Mount Isa	243	274	456
Georgetown	692	814	837

(a) Averages of all years of record held to 1985.

Source: Bureau of Meteorology.

The seasonal distribution is reflected in the temporal pattern of flooding. Winter floods may occasionally affect subtropical districts but most of the State's flooding is experienced from January to April, when catchments are regularly saturated and rates of run-off are high.

Variability of Rainfall

One of the most outstanding features about Queensland's rainfall is its great variability, not only from year to year, but also from place to place during the same year. This is due to the sporadic nature of cyclones and tropical and subtropical depressions, as well as the variability of thunderstorm rains which frequently make up a large proportion of the spring and early summer totals. There is a great difference in reliability of summer and winter rain between north and south Queensland. North Queensland has highly reliable summer rains, particularly in the east coast and Peninsula areas. Winter rains are very unreliable in north Queensland, except for the regular late autumn falls of the Cooktown-Ingham, Proserpine-Mackay and Cape York areas.

In south Queensland good summer rainfall is slightly less reliable than in north Queensland, except for the south coastal fringe, which has an assured summer rainfall. Good winter rainfall is far more reliable in south Queensland, however, particularly near the coast, and it is sufficiently frequent further inland to be of economic value for winter crops such as wheat and oats.

2.1.3 Tropical Cyclones

Contributed by the Bureau of Meteorology, Queensland

Tropical cyclones are among the most devastating of natural phenomena. They are intense low pressure systems which develop in many tropical areas of the world and are also known as hurricanes and typhoons. A tropical cyclone is a roughly circular system of gale force (speeds of more than 63 kilometres an hour) or stronger winds whirling clockwise in the Southern Hemisphere around a centre of very low pressure, called the 'eye'. The eye is an area of calm or light winds with only small amounts of overhead cloud.

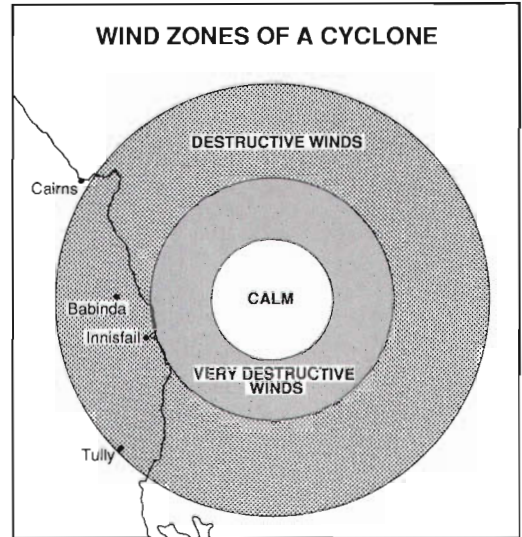
Cyclones develop from tropical depressions (lows). In the lower levels of the atmosphere the wind blows into these depressions, spiralling inwards to the centre. During the months of November to April, when abundant moisture is available over the warm tropical oceans, this motion around the depression can give rise to very rapid ascent of the air around the centre and the development of a deep cloud structure (cumulonimbus with tops to 12 kilometres) with heavy rain. The release of large amounts of latent heat due to condensation together with the heat from the ocean surface provide the energy for further development of the cyclone. The central pressure falls well below the normal environmental pressure, thus the pressure gradient around the eye is extremely steep and unusually strong winds develop.

The life cycle of tropical cyclones is variable ranging from very short to up to almost 3 weeks. The tracks of tropical cyclones are a result of large scale interaction with the environment. They range from smooth regular paths to others exhibiting complex oscillations.

Cyclone Monitoring

Tropical cyclones form over the oceans, mainly within about 15 degrees of the Equator. Those which affect Queensland almost exclusively have their genesis in the oceans and seas to the immediate east and north of the continent and in these areas direct observations are sparse or non-existent.

The Bureau of Meteorology in Brisbane warns of cyclones and cyclonic development along the whole of the Queensland and northern New South Wales coasts and the adjoining ocean areas.



Most cyclones are initially detected by satellites which provide hourly coverage of the cloud pattern in the Australian region. The Bureau maintains a network of radar installations, enabling it to monitor the rain patterns characteristic of cyclones along almost all of the Queensland coast. Techniques are being refined which relate patterns on satellite and radar imagery to cyclone intensity.

Dangers

Cyclones produce extreme winds which may exceed 200 kilometres an hour. These winds can result in extensive property damage and cause airborne debris to become potentially lethal missiles. It is important to remember that the passage of the cyclone eye will produce a temporary lull in the wind, but that this will soon be replaced by extreme winds from another direction. Highest wind gusts (3 seconds duration) recorded in the Queensland region are 200 kilometres an hour at Willis Island, 195 kilometres an hour at Townsville and 186 kilometres an hour at Bowen.

Severity Categories

A category number, estimating the severity of the cyclone, is now included in all tropical cyclone advices. The categories range from 1 for weak cyclones (pressure above 985 hectopascals) to 5 for the most severe (pressure below 920 hectopascals). They refer only to the zone of maximum winds and therefore the effects felt and damage at individual locations will vary.

Damage will depend on such factors as distance from the zone of maximum winds, the exposure of the site and building standards.

The category ratings do not reflect the occurrence of storm surges.

Rainfall and Wind

In tropical cyclones, rainfall is usually widespread and heavy. Flood rains can produce further damage and death by drowning. The heaviest rain is concentrated around the eye and in the region of strongest onshore winds. If the system moves slowly over a locality, that area may be deluged. On the other hand, if the system is moving rapidly, falls will generally be less.

Many falls of over 450 millimetres in 24 hours have occurred due to cyclones. Highest totals recorded are:

305 millimetres in 2 hours at Upper Ross, near Townsville, 3 March 1946;

869 millimetres in 24 hours at Mount Dangar, 20 January 1970 (*Ada*);

907 millimetres in 24 hours at Crohamhurst, 3 February 1893;

1,044 millimetres in 36 hours at Springbrook, 19-20 February 1954;

1,140 millimetres in 24 hours at Bellenden Kerr Top Station, 4 January 1979 (*Peter*) and

1,864 millimetres in 5 days ending 12 January 1972 at Paluma (*Bronwyn*). (Including successive 24 hours totals of 629 and 635 millimetres.)

The winds around a cyclone generate phenomenal seas which are dangerous both for vessels at sea and those moored in harbours. Serious erosion of the foreshore can also occur. Even if the cyclone remains well out to sea huge swells may be generated which may cause erosion and create dangerous surf conditions despite light local winds.

Storm Surge

Another maritime phenomenon which can cause serious damage by inundation of low lying coastal areas is the storm surge. This is a raised dome of water which in extreme cases can be up to 5 metres higher than the normal tide level. The surge is mostly produced by winds driving the sea water shorewards and partly by the low atmospheric pressure at the storm centre. In shallow water the surge is amplified due to shoaling. If the surge occurs at the same time as a high tide then the area inundated may be quite extensive.

In cyclone *Althea* at Townsville in December 1971, the storm surge added an extra 3 metres to the height of the tide at the time it arrived, making a total of 4 metres. If the surge had occurred at high water, about 5 hours later, the storm tide could have been 5 metres and would have caused much more serious damage.

Pressure

Pressures as low as 914 hectopascals (Bathurst Bay Cyclone, 5 March 1899) have been reported in Queensland tropical cyclones. However, such

pressures are rarely recorded on land. Central pressures usually range from 950 to 990 hectopascals.

As the storm approaches, pressure decreases, this reduction being more rapid as the eye passes over the station. This is followed by an equally rapid rise as the system moves away. The pressure drop may not be steady throughout. Rhythmic oscillations (pumping) are often recorded and are caused by the extreme gustiness of the wind.

In very small cyclones, such as *Ada* at Proserpine in January 1970, there may be few obvious indications of the approach. Steady pressures, light winds and little rain can prevail until the cyclone is only about 50 kilometres away.

Cyclone Names

The first record of naming significant weather systems was when a tropical cyclone was given the name *Zeta* in 1894 by Clement Wragge. Wragge's system continued for some years, then fell into disuse.

In the mid-1950s the news media often selected names for cyclones. This practice was regularised in the 1964-65 season when female names were selected by international agreement. From the 1975-76 season the prepared list was extended to include male names. Male and female names are now used alternately. Cyclones are named by the regions in which they form.

Cyclone Risk in Queensland

Individual towns rarely experience the full impact of a tropical cyclone. For this reason, the best indicator of cyclone threat is obtained by considering sections of the coastline rather than specific localities. Examination of records for the period 1909 to 1989 shows that the number of cyclones which crossed the coast from sea to land were as follows:

Queensland/Northern Territory border to Karumba	19
Karumba to Edward River	11
Edward River to Thursday Island	23
Thursday Island to Cooktown	17
Cooktown to Cairns	17
Cairns to Townsville	14
Townsville to Bowen	10
Bowen to Mackay	8
Mackay to Yeppoon	14
Yeppoon to Maryborough	13
Maryborough to New South Wales border	16

The Australian coastline is threatened on average ten times each season by tropical cyclones. Long-term records show that on average two cyclones cross the Queensland coast each year. Impact by severe tropical cyclones is relatively infrequent, occurring, on average, once every 6 or 7 years.

Life of a Cyclone

Tropical Cyclone *Aivu* — 31 March to 5 April 1989

During the afternoon of 31 March 1989 a tropical low developed off the south-eastern tip of Papua New Guinea. It travelled in a general south-westerly direction, slowly deepened and was declared a tropical cyclone late in the morning of 1 April. At that time, the cyclone was still in the Papua New Guinea area of responsibility and they allocated the name *Aivu* to the system. Very early on 2 April, *Aivu* became a severe tropical cyclone and reached its maximum intensity of 935 hectopascals by mid-afternoon on 3 April.

From then on *Aivu* gradually weakened but maintained severe tropical cyclone intensity until landfall over the Burdekin delta at about 10.30 a.m. on 4 April. The estimated central pressure at coastal crossing was 957 hectopascals with estimated wind gusts to 200 kilometres an hour and a storm tide surge of up to 3 metres. The system continued to move west-south-west after landfall and degenerated into a rain depression during the next 6 hours, losing all identity later near Mount Isa.

The lowest recorded pressure was 959 hectopascals in Fredericksfield near Home Hill. The most significant overall damage was caused by the storm surge in Upstart Bay where all buildings along the beachfront were destroyed and one person drowned.

Crop and vegetation damage was moderate. Some sugar cane, fruit and field crops were lost. Defoliation of trees was confined to a few exposed hillsides. Total damage amounted to around \$80m.

At landfall tropical cyclone *Aivu* rated category 3 on the cyclone severity scale.

2.1.4 Flooding and Flood Warnings

Contributed by the Bureau of Meteorology, Queensland

Major flooding in Queensland river systems occurs most frequently in the summer months with tropical cyclones being one of the major causes of flood rainfalls. The winter months are normally flood free in north Queensland, however, flooding can occur in most months including the winter months in southern coastal and inland Queensland.

Flooding can last for a month or more in the southern flowing inland streams and is usually accompanied by widespread traffic disruptions during the period immediately following the heavy rain on unsealed roads and also at major stream crossings where bridges or causeways are flooded.

Floodwarning Service

The Bureau of Meteorology floodwarning service covers most of the major river systems in Queensland. A network of rainfall and river level reporting

stations is maintained to monitor catchment conditions and provide the data from which river height forecasts are derived. Some 230 volunteer river level observers provide reports according to a prearranged schedule using a system which allows the observers to telephone a central computer to transmit their data by a small terminal connected to their phones. This ensures that the data is received quickly into the data base at minimum cost.

A floodwarning upgrade program is underway to install telemetry systems in the highest priority river systems for floodwarning purposes. Both landline and radio telemetry systems are being installed although the landline systems are primarily being employed for one-off installations and radio systems for networked systems with base stations located in local authorities. These radio systems use the ALERT technology. ALERT is the acronym for automated local evaluation in real-time. In these projects, the Bureau shares with the local authority the costs of establishing the telemetry system and the local authority accepts the responsibility for ongoing maintenance. The data collected at the local authority base station is used for local decision making in response to flood rainfalls and upstream flood levels. The ALERT technology employs an event-reporting principle where each 1 millimetre of rainfall which falls at a field station signifies an event which causes the transmission of a reading to the base station. A river level event is indicated by a rise or fall in river level of 0.05 metres at a river level station. The base station is therefore always up-to-date with the latest conditions in the catchment.

The Bureau's Floodwarning Centre in Brisbane collects the data from the local authority stations at regular intervals by microcomputer and telephone modems.

River level information is very important to the man on the land and floodwarning agencies during flood periods. The Bureau therefore distributes collated bulletins of river levels to radio stations for broadcast about 1 hour after the reporting time, five times each day.

River Height Forecasts

River height forecasts are provided for many of the coastal and inland cities in the State. These are derived from the application of rainfall and river level data to calibrated models. A variety of models are employed from simple correlation of upstream river levels to mathematical rainfall-runoff models.

The operation of the floodwarning system involves all three levels of government, particularly in the case of flood forecasting for urban areas. These are as follows:

- (1) Formulation and issue of flood forecasts and warnings on a river basin scale with forecast river levels for key reference gauges. This is

usually a responsibility of the Bureau of Meteorology although some local authorities operate their own systems in cooperation with the Bureau.

- (2) Interpretation of forecast flood heights into areas and depths of inundation. This is usually undertaken by local authorities which have detailed survey and mapping information and local knowledge. A number of local authorities now open Flood Information Centres which provide information and advice on expected flood levels during the flood events.
- (3) Individual and mass alerts that specific areas are to be inundated so that people, property and stock can be evacuated ahead of rising floodwaters. This is normally carried out by the police and State Emergency Service.

Flash Flooding

The warning of flash flooding in small creeks and urban draining systems and the capital development of data collection systems for flash-flood warning is undertaken by local authorities although the Bureau of Meteorology provides advice and assistance as required. The Bureau will continue research into the radar assessment of rainfall which in the longer term promises to be a cost effective input to flash-flood warning models.

Benefits of Flood Warning

Flood forecasts and warnings constitute a direct means for the reduction of flood damage and loss of life. Advance warning of the levels expected in an approaching flood permits the evacuation of property and stock with little loss except the cost of removal. Regular broadcasts of flood warnings and interpreted information also help to keep the public informed and assist in minimising personal anxiety.

2.1.5 Sunshine

Both Queenslanders and Western Australians share the distinction of having sunny areas of their State with the highest annual daily average sunshine for Australia. This amount is in excess of 10 hours a day, and in Queensland it occurs in the south-west corner of the State in the area Birdsville-Bouli-Windorah.

The highest daily averages do not occur in summer when the day length is the greatest, but in October when the lack of cloudiness combines with increasing day length to bring over 11 hours daily average in the Birdsville-Bouli-Windorah area. During October, 5 per cent of the State exceeds 10 hours with the remainder recording at least 8 hours.

July is the month with the least average sunshine. During this month the maximum area is based on

Camooweal where the daily average is at least 10 hours. The minimum area is the Innisfail-Cairns-Atherton Tableland region where slightly less than 7 hours is the daily average.

The abundance of sunshine in the winter months is demonstrated by a comparison of the average number of sunshine hours a day during June to August, at the Australian capital cities, as follows: Melbourne, 3.9; Hobart, 4.4; Adelaide, 4.6; Canberra, 5.4; Perth, 5.5; Sydney, 6.2; Brisbane, 7.2 and Darwin, 10.0.

2.1.6 Drought

Contributed by the Bureau of Meteorology, Queensland

Drought is in many ways a relative term. Crops, vegetation, industries and land use in different parts of the world are more or less adjusted to the moisture or water normally available to them. A rainless period that would constitute a drought in one region may not be unusual or injurious in another. Drought is also a relative term in a given area, since conditions which a market gardener would regard as drought may cause a pastoralist no concern.

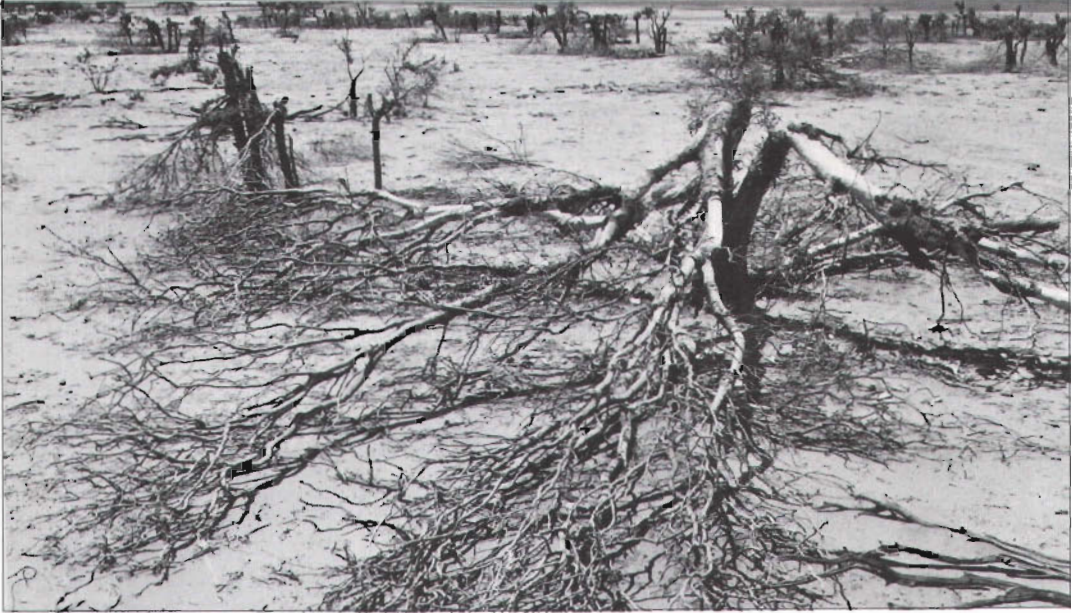
The vulnerability of a nation's economy to drought changes with time. Increased development, particularly in the spheres of transport, water conservation and diversification of the economy, may mitigate the serious adverse effects of extended dry periods which in earlier years would have been regarded as disastrous.

Development does not always act to decrease the effects of drought. Population increases and the establishment of secondary industries create an increased water need and give rise to problems of combating drought in new areas and sectors of the economy.

Water need is thus a function of time and place and depends on many factors. The nature and intensity of land water use, transport facilities, water storage capacity, number of stock involved and the development of drought resistance in plants are among the factors which affect water need and the impact of drought on primary and secondary industry and the community in general. The only objective method of defining drought is to specify minimum water needs for a particular purpose and this can then be compared with water available.

Drought Index

The natural availability of water depends on rainfall, although other effects such as evaporation, wasteful use of water, moisture storage in the soil and storage of water in artesian basins or reservoirs must be taken into account. Nevertheless, rainfall is the best single index of water availability and



Effects of drought

Photo: Premier's Department

monthly rainfall totals are sufficient for most studies of the occurrence, spread and breaking of droughts.

Thus, if the minimum water need for a given period of time is met by rainfall of a given amount 'X', drought may be said to occur whenever the rainfall during that time interval is less than 'X' and the severity of drought linked to the amount by which rainfall falls short of the requirement.

Rainfall has several advantages over other criteria, such as the effects on plants and animals, as a basis for study. Rainfall data are numerical and methods for their observation, collection and processing have been substantially unchanged over the past 100 years. The data are therefore amenable to statistical analysis and provide uniformity, reliability and completeness of statistics to a degree that is impossible to obtain if other criteria are used as a basis for study.

Rainfall records are available for more than 3,300 stations in Queensland, of which about 2,000 are currently in operation. The length of record varies greatly; at some stations, records have been taken for more than 100 years and about one-fifth of the stations have records exceeding 70 years.

Drought Study

Scientific study of the areal extent of drought and its frequency of occurrence is essential for the proper planning of agricultural, pastoral, industrial and economic activities. Such studies can provide an assessment of drought risk and assist the planning of short-term action, such as the declaration

of drought occurrence and the choice of areas to which stock might be moved.

An additional, useful field of research is the determination of the water needs of crops, animals, industry and communities. This information is basic to any drought study and is essential if drought is to be defined in a meaningful way.

Surveys of the impact of drought on the Australian economy at various stages of its development are not only of historical interest. They provide information which can enable planners to profit from past experience and to seek remedies for circumstances which aggravated the disastrous effects of previous droughts.

Drought Prediction

For many years there has been great interest in the variations of rainfall in time. Investigators have sought for any regularly recurring cycles of rainfall patterns and for any tendency for dry and wet periods to persist. As yet no reliable method for the long-range forecasting of rainfall and drought has been devised.

Recent studies have indicated a relationship between rainfall patterns over Australia and the El Niño-Southern Oscillation phenomenon.

Treatment of Data

Rainfall, unlike many other meteorological elements such as temperature and pressure, is non-continuous in time and space. As a result the statistical description of rainfall occurrence is quite complex.

THE EL NINO-SOUTHERN OSCILLATION

The El Nino is the name originally given to an abnormally warm ocean current that appears around December in some years off the South American coast adjacent to Peru and Ecuador. Heavy rainfall is often associated with the appearance of the warm ocean waters and results in disastrous community disruption in the normally arid coastal belt. El Nino, now, also refers to the more extensive warming of the usually cool ocean surface of the eastern equatorial Pacific about every 2 to 7 years.

The Southern Oscillation is best described as a see-saw of the atmospheric pressure between the South Pacific and the Indian Oceans. When the surface pressure is abnormally high over the Indian Ocean it is usually abnormally low over the South Pacific and vice versa. The strength of the Southern Oscillation is normally measured by the pressure difference between Darwin and Tahiti.

El Nino and the Southern Oscillation are now known to be components of a broader set of inter-related processes in the atmosphere and the ocean which appear to have their origins in the tropics but which can result in unusual weather and climate conditions over remote regions of the globe.

The best known and most commonly used rainfall statistic is the arithmetic mean, often called the 'average' or 'normal'. Monthly means are computed by adding the rainfalls in a given month over a long period and dividing the total by the number of years of record.

2.4 JANUARY RAINFALLS, QUEENSLAND (millimetres)

Place	Mean	Median
Brisbane	166	133
Cairns	399	399
Charleville	78	59
Cloncurry	108	71
Longreach	70	44
Rockhampton	159	131
Toowoomba	140	122
Townsville	307	221

Another statistic is the 'median' or '50 per cent' value, which is the value exceeded by half the occurrences and not exceeded by the other half. With many meteorological quantities the mean or median values are equal or very close and the use of 'average' for either value causes no confusion. Although this is often the case with annual rainfall, for shorter periods (3 months or less) the mean can differ significantly from the median.

Decile values are also used and divide each 10 per cent of occurrences from the driest to the wettest years and give some indication of rainfall variability. The Bureau of Meteorology has adopted decile ranges for drought studies. The first decile range (decile range 1) is the range of the driest 10 per cent of rainfalls, the second decile range is the next driest 10 per cent and so on. The middle 40 per cent of rainfalls (decile ranges 4 to 7) can be considered as 'average', although in some cases the arithmetic mean may lie outside this range.

Drought in Queensland

The rainfall records at Brisbane date from 1840 but have been continuous only since 1858. Rainfall records in the State generally start in the 1870 to 1880 decade. Descriptions of drought date back to the proclamation of the colony as separate from New South Wales in 1859, but little previous information is available. The State has suffered severely from drought throughout its history.

The principal droughts over the last 30 years are listed below:

1964-1966 Severe drought mainly in the south-west and south, particularly from November 1964 to November 1965. In

1965, an area around the central coast, central highlands and the south coast (Curtis) districts was also affected. Good rains in December 1965 and January 1966 brought relief but dry conditions persisted in the far south-west and parts of coastal areas as late as August 1966. In the north-east, drought conditions commenced about October 1964 and continued throughout 1965 and following an improvement in January to March 1966 again deteriorated. Other areas were also affected during this period.

1967 Drought in lower western and in central west.

1969-1970 Widespread drought, most severe in western border districts and in central coast districts, with average rains, however, in Darling Downs, Maranoa, Warrego and northern Cape York Peninsula, and drought easing in areas adjacent to those districts in 1970.

1972 Drought in southern half of State, most severe in south-western quarter.

1977-1980 After comparatively poor summer rains combined with failure of the winter rainfall, drought conditions became established over the south-east quarter by late 1977 and continued into 1978. Substantial winter rainfall finally eased the situation in 1978. The 1977-78 summer rainfall for the far northern tropical inland and Cape York Peninsula was also a virtual failure and drought became established by early 1978, continuing to the 1978-79 summer. Less than average rainfall over the southern interior brought drought by late 1979 to early 1980, to that area.

1981-1983 In the south-west quarter the drought which began in late 1979, continued into 1981. Winter and spring rainfall in 1981 was in general above average, except for spring rain in the western districts. The 1982 summer and autumn rainfall was below to well below average throughout the State and the number of drought declared areas increased during the second half of 1982. A lack of summer rainfall during 1982 and 1983 increased the drought area to include large regions of the north-west. The south-east corner was the only area of the State not affected by drought. Rainfall during March 1983 in the western regions gave a measure of relief but the drought continued in the central and southern districts. Widespread rainfall during April and May finally ended the drought in Queensland which was one of the worst on record in eastern Australia for the past 100 years.

1983-1984 Well below average summer rainfall was recorded on the central coast and isolated localities experienced record

low December to February totals. During the following months rainfall deficiencies extended to the north coast and parts of the south coast districts.

Widespread rainfall during July overcame the deficiencies, apart from small areas in the southern part of the central coast and isolated localities in the far north of the State.

1985 As a result of patchy, early wet season rain, deficiencies occurred during January 1985 in parts of the Carpentaria and the southern inland. These areas gradually extended during the following few months to include parts of the central inland. Some measure of relief occurred in the northern areas with good rains received during early June 1985.

1987-1988 Considerable parts of the State experienced serious rainfall deficiencies although good falls in late February, early March and early April 1988 eased the situation in many areas.

SEVERE WEATHER SECTION

Contributed by the Bureau of Meteorology, Queensland

For several years the need to upgrade severe weather services and to update equipment was recognised. Studies of natural disasters such as Ash Wednesday fires in south-eastern Australia (1983), tropical cyclone *Tracy* in Darwin (1974) and the hailstorm in Brisbane (1985), highlighted this need.

In 1987 government funding was provided for both requirements with a program evaluation to be conducted after 1990-91. The main objectives of the upgrade program are to contribute to the safety of life and protection of property, and to reduce the social and economic impact of natural disasters.

During 1988, Severe Weather Sections were created in all States. Queensland now has three dedicated meteorologists and technical support staff. In general terms, the Section serves as a focus for the monitoring, development and coordination of severe weather warning services in this State. More specifically, the functions of the severe weather meteorologists are to assist in the provision of reliable and timely warnings of severe weather phenomena and to develop expertise in that area.

In Queensland, the Severe Weather Section is particularly concerned with tropical cyclones but considerable effort is also expended on severe local thunderstorms and weather aspects of grass and bush fires. Research into these phenomena is the most time-consuming function of the Section. Encouraging results have already been

obtained and presented at annual severe weather conferences.

Shortly after a tropical cyclone or major thunderstorm impacts on an area, a survey is conducted. Citizens affected are asked to comment on the warning service and the feedback is used to implement system improvements. Damage is also assessed.

Obsolete equipment is gradually being replaced and sophisticated systems introduced. Satellite imagery is now available at hourly frequency with a resolution close to 1 kilometre. Information from the Bureau's coastal radar network is conveniently displayed in the Tropical Cyclone Warning Centre with pictures updated every 10 minutes. Another radar is soon to be installed in the southern Gulf of Carpentaria, bringing the total number in Queensland to nine.

Automatic weather stations are being progressively installed with plans to establish a dense network around Brisbane within the next few years. Frequent recordings of pressure, wind and temperature are relayed direct to the Bureau allowing early recognition of changes to weather patterns and rapid adjustments to forecasts and warnings.

Since their inception, Severe Weather Sections around Australia have made considerable progress in upgrading their operations and providing the community with reliable forecast and warning services.

2.2 NATIONAL PARKS

National Parks are usually large tracts of land established for their value as wilderness, historic, scientific and recreational areas. Flora, fauna and landscape features are considered before any land is declared a national park.

From the lush jungle-like growth of tropical rainforest in the north to the arid sands of the Simpson Desert in the south, national parks are found in all parts of the State.

Queensland governments have had a long history of association with nature conservation. The first legislative action was on 10 August 1877 when royal assent was given to an Act to provide for the protection of native birds. From October to March each year most native birds were protected. The penalty provided for breaches of the 1877 Act was a \$2 to \$10 fine, in default 3 months imprisonment. The 1877 Act also made provision for the declaration of reserves which were the forerunners of present-day sanctuaries.

The first protection given to native mammals was in 1906 when, from November to April each year, native bears (koalas) and possums were protected. All year protection was conferred upon the tree kangaroo, wombat, platypus, echidna and pygmy glider.

The first national park proclaimed in Queensland was Witches Falls on Tamborine Mountain on 24 March 1908. This action was taken following representations by the Tamborine Shire Council and resulted in 131 hectares being set aside as a national park.

At 30 June 1989, 330 national parks covering 3,528,052 hectares had been gazetted. In addition, there were 171 environmental parks covering 48,314 hectares and five fauna refuges totalling 6,473 hectares.

Reserves for department and official purposes totalled 57 and covered 200,799 hectares while the 8 reserves for scientific purposes covered 64,854 hectares. Fauna sanctuary status over grazing properties, which are mostly privately owned, extends over more than 11 million hectares.

Two of the largest national parks are the Simpson Desert and Lakefield National Park in Cape York, both of which exceed 500,000 hectares. One of the smallest national parks is Round Island, south-east of Cairns, which is less than half a hectare.

Often regarded as the Eighth Wonder of the World, the Great Barrier Reef is an assemblage of coral reefs situated on a platform that is submerged in shallow water off the tropical north-eastern coastline of Australia. This assemblage constitutes

the largest single collection of coral reefs that has ever existed on this planet. During 1983 the Great Barrier Reef Marine Park was extended to cover 99 per cent of the reef, making it the largest marine park in the world with an area of 345,000 square kilometres.

The *National Parks and Wildlife Act 1975-1989* provides for the setting aside and management of areas of scenic, scientific and historic interests as national parks. It prescribes the cardinal principle of management of national parks as being 'the permanent preservation, to the greatest possible extent, of their natural condition', to ensure the survival, in the wild state, of our native fauna and flora, and of the natural landscape in the presence of man and his activities.

Environmental parks are declared under the *Land Act 1962-1988*. They are natural or near natural areas in Crown ownership, less outstanding in size or natural attributes than national parks, but having features worthy of conservation on a more local basis.

Fauna reserves are declared under the *Fauna Conservation Act 1974-1989*. They are ecological reservoirs of State-wide significance, totally protected to preserve fauna habitat. Fauna refuges, declared under the same Act, may be over Crown or private land and set conditions to protect one or more species of fauna.

Fauna sanctuary status includes all national parks, all State forests and all islands off the Queensland coast, as well as other lands so declared. This places no constraints on land use but the Service seeks to encourage maintenance of fauna habitat.

All native mammals, birds, reptiles, two frogs and two butterflies are protected throughout the State of Queensland. This applies irrespective of the land tenure.

On national parks, environmental parks and fauna reserves the legislation protects the total environment — biological and physical.

Under the *Fauna Conservation Act 1974-1989*, all fauna (mammals, birds and reptiles) are the property of the Crown and the National Parks and Wildlife Service is responsible for 'the conservation of fauna in its habitats and throughout the State'. Thus protection is given to fauna in the wild, and controls are imposed on keeping, moving (including import and export) and on dealing in fauna.

Plants are deemed to be owned by the landholder, but the Service is responsible for the protection of certain declared species on some Crown-controlled lands.

Approximately 90 kilometres north-west of Brisbane, lives one of the rarest frogs in Australia,

Rheobatrachus silus, described as recently as 1973; this is our most primitive frog — a living fossil. Zoologists have discovered that it has bizarre habits of parental care. By some unknown process, the larvae are brooded in the stomach of the female. When mature, they are propulsively ejected from the mouth! *Rheobatrachus silus* occurs only in Kondalilla National Park and the nearby Conondale Ranges.

Queensland has developed a system of constructed tracks, carefully graded for easy walking. Another development has been the establishment of interpretive on-park programs for national park visitors. These programs aim at interpreting the natural features of the park to the visitor so that the visit becomes a meaningful experience. Interpretive aids such as brochures, posters and maps are also available to the public.

Recent studies indicate that 23 per cent of Queensland national park visitors go for specific activities such as bushwalking, camping and fishing, 21 per cent visit with curiosity as their prime reason, and 18 per cent visit 'for escape'. Fifteen

per cent go primarily to see a natural feature such as a waterfall and 6 per cent go to see flora and fauna.

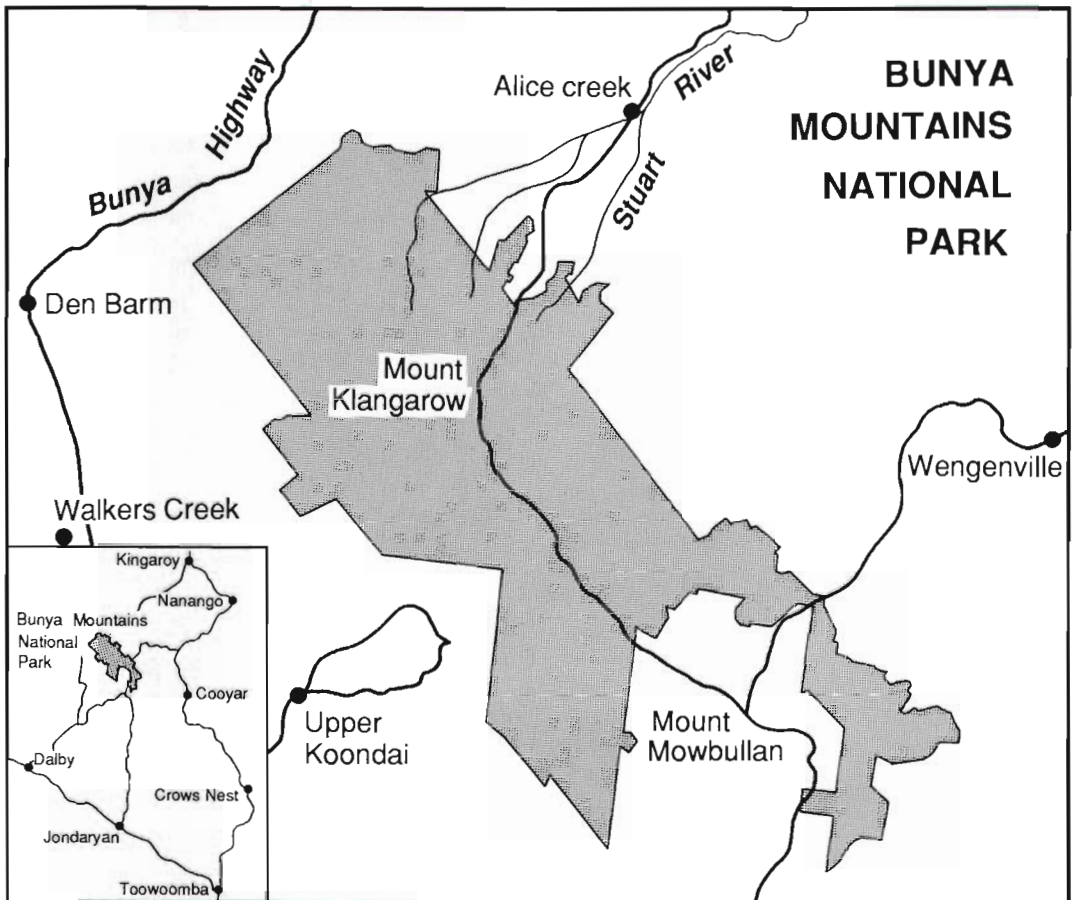
2.2.1 Bunya Mountains National Park

Contributed by the Queensland Department of Environment and Heritage

The Bunya Mountains National Park is an isolated section of the Great Dividing Range and lies about 150 kilometres from the coast. The mountains rise abruptly from the surrounding country to an average elevation of 975 metres. The range is capped by peaks such as Mounts Mowbull and Kiargarow which rise above 1,100 metres.

The area experiences a mild climate with temperatures ranging from freezing to 30 degrees Celsius. Annual rainfall averages 1,055 millimetres.

In 1908, Bunya Mountains National Park, with an area of 9,303 hectares, was gazetted and became the second national park in Queensland. The park



now covers 11,700 hectares. The combination of varied scenery, wildlife, walking tracks and history attracts thousands of campers and day trippers every year.

Vegetation

Vegetation in the national park is both interesting and diverse and can be broadly grouped into rainforests, eucalypt forests and grasslands (balds). The towering form of the bunya pine (*Araucaria bidwilli*), from which the mountains take their name, dominates the rainforests. At lower elevations the hoop pine, a close relative, is more prevalent.

The tall rainforests of the area have an open appearance under the canopy created by the characteristic dome-shaped tops of the bunya pine. Thirty per cent of the vegetation is made up of Araucarian pine forest and there are more than 200 plant species represented in the area, including many vines, mosses, lichens, orchids and ferns.

About 15 per cent of the mountains are covered in open, tall eucalypt woodland interspersed with the unusual phenomenon of grassy 'balds'. Scientists are baffled by the origins of these treeless, grass-covered, black-soiled plains, surrounded by the rainforests and eucalypt forests. They suspect the balds formed about 30,000 years ago when the climate was drier and cooler. As a result of the dry conditions and regular fire-lighting by Aboriginals, the lush, temperate rainforest retreated, allowing the grasslands to take over.

Later, eucalypts became established in some areas but in others, where the soil was too shallow and dry, the grass remained. When the climate became warmer and wetter about 12,000 years ago, the subtropical rainforests re-established their position in the area, displacing the eucalypt forests and existing side-by-side with the grassy balds.

The vegetation cover also includes stands of grass trees. Indeed, the highest point in the area, Mount Kiangarow, has been known as Grass Tree on account of the forest of grass trees on its western and southern slopes. The many skirted grass trees grow to a height of 6 metres and, like many trees on the mountains, seed abundantly every third year.

The bunya pine also seeds every 3 years. Being a conifer, the nuts are grouped within a large cone which can grow to 30 centimetres in diameter and 7 kilograms in weight. From February to April the mature cones fall, with a bumper crop about every 3 years. It takes about 2 years for the cone to mature from conception.

History

The crop of tasty nuts attracted the Aboriginal tribes of the region during the summer of each third

year. Known to the Aboriginals as the 'bon-yi' nut, the harvesting of these delicacies attracted tribes from 200 to 300 miles away for 6 weeks of tribal ceremonies, hunting, feasting and corroborees.

According to legend, the local Aboriginal tribe, the Jarowair, would send messengers out to invite members from other tribes to come and join the feast. These tribes would, in turn, ask other tribes so the invitation went from group to group. Then would begin the great trek to the mountains.

The last great bunya feast took place in 1875 but smaller gatherings of the tribes continued until 1883.

Timber-getting began in the area in the 1860s to cut mainly red cedar. Initially bunya pine was not taken but in 1883 the Great Bunya Sawmill opened and commercial cutting of the pine commenced.

Until 1922, there were no roads to the top of the mountains and the difficult task of getting the timber down from the mountains was achieved by building chutes. Originally, they were constructed by digging a downhill furrow or shallow trench.

This method was refined in 1911 when a local, Dan Vohland, built a timber-framed chute and again in 1922, when a sawmill owner, Lars Andersen, worked a system of trolleys known as Andersen's Tramway and Winder System.

Visitors to the Bunya Mountains can still see the remains of some of these chutes and Andersen's tramway stands intact. Timber-getting was banned from the national park but many relics of the era still remain within the park boundaries.

Recreation

The great variety of walking tracks through the park leads visitors through the natural and human history of the Bunya Mountains.

There are 11 walking tracks in all, including a walk for disabled people at Russell Park. Walks vary from 500 metres to a 10 kilometre track to the lookout to Big Falls, a waterfall of 122 metres.

Graded walking trails begin at the Dandabah camping area and others link the Burton's Well and Westcott Plains camping areas and include an easy walk to the top of Mount Kiangarow. Keen bushwalkers can link up these tracks and walk for days.

The popular 4 kilometre Festoon Falls scenic circuit track takes the average walker about 90 minutes to complete. It follows a small, rocky creek, passes three waterfalls, tunnels through the roots of a strangler fig tree and circles huge bunya pines.

Bushwalkers and picnickers can see the many and varied wildlife of the Bunya Mountains. The region is renowned for the considerable number of native

birds; king parrots, rosellas, galahs, black cockatoos, several species of finch, yellow-tailed thornbills, forest kingfishers, olive-backed orioles, striped honeyeaters, rufous fantails, lewin honeyeaters, spectacled flycatchers, grey thrushes, grey fantails, yellow robins, spotted pardalotes, pied currawongs and scrub turkeys are all commonly seen.

The mountains are home to frogs, snakes, the marsupial mouse, the koala, wallabies and the red ringtail possum.

Bunya Mountains National Park holds many delights for the visitor. Not only is the region steeped in Aboriginal and pioneer history, the park preserves the myriad natural features of the area.

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A tree 'blossoms' with a flock of pink and grey galahs



Photos: *Department of Environment and Heritage*

Eastern spine bill

King parrot




QUEENSLAND LOCAL AUTHORITIES AT 30 JUNE 1989


Statistical Divisions ..	MACKAY	
Cities	Cairns	
Towns	Roma	
Shires	TAMBO	




SOUTH-EASTERN QUEENSLAND LOCAL AUTHORITIES AT 30 JUNE 1989

Statistical Divisions .. MORETON ———

Cities Ipswich 

Towns Daby 

Shires WONDAL 





An inquisitive bilby

Photos: *Department of Environment and Heritage*

Yellow-footed rock wallaby, Charleville

Brushtail possum, Cooloola National Park



Chapter 3

CONSERVATION

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Chapter 3

CONSERVATION

Before the arrival of the First Fleet, the Aboriginal people depended totally on the environment for their food, water and shelter. Their hunter-gatherer and nomadic lifestyle allowed for the appropriate management practices of the natural resources by leaving a previously inhabited area time to recover before being used again. However, Europeans brought a permanent style of living. As settlement progressed, wildlife habitat and land cover were reduced by cutting and burning forests, streams and air were polluted by industrial and urban development, wetlands were drained and the face of the land was permanently changed.

As the third century of European settlement unfolds, Australians are becoming more aware of the impact of their lifestyle on their fragile surroundings.

Conservation is defined as the preservation of natural resources but detailed knowledge and understanding of what one is trying to conserve is essential for success. Various special interest groups and Federal and State government departments are involved in the protection of the environment through research, recording, legislation and education.

3.1 WATER AND THE COASTAL ZONE

Contributed by the Queensland Department of Environment and Heritage

3.1.1 Beach Erosion

About half of Queensland's 7,400 kilometres of coastline is backed by rock, mud, alluvium or tertiary (lateritic) sediments. The other half is backed by sand dunes or beach ridges. Beaches and estuaries are evolving natural systems, constantly changing and adapting to the prevailing environmental conditions. With proper planning and management they remain as a natural buffer against extreme weather conditions, providing protection and then recovering their former condition. The value of such buffers may become apparent if climatic and sea level changes, that could result from the 'greenhouse effect', cause coastal realignment and inundation of low land areas.

Parts of the coastal sand dunes and beach ridges are devoid of vegetation and subject to wind erosion.

3.1 COASTLINE (a) WITH DUNAL DEVELOPMENT, QUEENSLAND, 1981 (kilometres)

Type	Vegetated	Bare	Total
Small parabolic dunes	390	160	550
Large parabolic dunes	20	0	20
Sand cliffs	40	10	50
Transverse dunes	230	60	290
Irregular dunes	50	30	80
Beach ridges	1,930	100	2,030
Total	2,660	360	3,020

(a) Excluding offshore islands.

Source: Inventory of Coastal Lands (CSIRO).

Recession of the sand shoreline occurs when sand is blown landward from the beach proper and from an unstable frontal sand dune. From trials on Queensland beaches, it has been calculated that from the 360 kilometres of bare mainland coastal sand dunes, the annual, permanent and cumulative loss of sand by wind action is in the range of 3.4 to 17.2 million cubic metres. Over the next 50 years, wind blown sand losses could be as high as 170 to 860 million cubic metres.

Changes to unstable beach and estuarine systems can affect areas well away from the site of the original works.

Erosion of the southern Gold Coast beaches is claimed to be primarily a result of the impact of the Tweed River training walls. Approximately 4 million cubic metres of sand taken from outside

the active beach system was placed on Gold Coast beaches from 1974 to 1988. The current southern Gold Coast beach nourishment project (Stage 1) involves an additional 2.4 million cubic metres.

Beaches elsewhere in Queensland suffer erosion due to natural or human causes. Some examples are at Amity Point (North Stradbroke Island), Hervey Bay, Yeppoon and near Cairns. Restoration work is being undertaken at many locations by local authorities and the Beach Protection Authority.

3.1.2 Coastal Development

The rate and extent of development of the Queensland coast over the past decade has meant economic gain for the State but has caused concern over the environmental costs.

Development has meant the loss of some of the coastal zone's finite biological resources, such as mangrove forests and seagrass meadows, with adverse impacts on fisheries production and the ecology of near-shore waters. Tourist development is continuing, with many projects planned or under way along the entire Queensland coast.

Expansion of mineral sand extraction is proposed for the Shoalwater Bay-Miriam Vale area. Sand-mining continues on North Stradbroke Island. In the Gladstone region, there are proposals for a steel mill, a titanium metal production plant, expansion of the existing aluminium refinery and smelter, reclamation of tidal lands for expansion of port facilities and a naval base. Work has commenced on the building of two sodium cyanide manufacturing plants.

Many more proposals are being considered for the coast in the Brisbane area and the Sunshine and Gold Coast regions including large integrated tourism resort and urban development projects.

3.1.3 Offshore Islands

Some 230 offshore islands have been declared national parks and are managed under the provisions of the *National Parks and Wildlife Act 1975-89*. In 10 of these including North Stradbroke, Moreton, Bribie, Fraser, Heron and Green Islands, only part of the island has national park status.

Seventeen islands, declared environmental parks under the Land Act, are also managed by the Queensland National Parks and Wildlife Service. Two islands, Maclennan and Pandora Cays, have been set aside as scientific purposes reserves. Five islands — Bell Cay, Wild Cattle, Raine, Magnetic (part) and Moreton (part) — have been gazetted as departmental and official purposes reserves.

All islands off the coast of Queensland are fauna sanctuaries. Raine Island, the most important



Fraser Island

Photo: Sharyn K. Marken

seabird and green turtle nesting island, has been gazetted as a fauna refuge under the provisions of the *Fauna Conservation Act 1974-89*.

The National Parks and Wildlife Act allows for the specialised management of national parks. Three island parks (Masthead, Hoskyn and Fairfax) have been zoned as scientific areas in recognition of significant seabird populations which breed on the islands. Other islands are restricted access areas to protect breeding sites for species such as loggerhead and flatback turtles.

St Helena Island National Park, site of historic penal settlement ruins, has been declared an historic area under the National Parks and Wildlife Act.

The major sand islands (Fraser, Moreton, Stradbroke and Bribie) have been subject to considerable attention over the past few years. Almost 90 per cent of Moreton Island is presently national park and this is being enlarged as existing mining leases become available. Negotiations are continuing to enlarge the national park area of North Stradbroke Island from 501 hectares to 14,000 hectares, about half the island.

South Stradbroke Island is subject to negotiations designed to establish a major environmental park (2,430 hectares) which, in conjunction with 110 hectares of park and recreation reserves, will occupy 94 per cent of the island. Fraser Island is primarily national park (52,400 hectares) and State forest (105,000 hectares) with most of the island gazetted as a recreation area.

Ongoing extensions are planned to the Bribie Island Environmental Park and the Pumicestone National Park to protect the coastline of the island and provide protection to the Pumicestone Passage estuary (a marine park).

3.1.4 Wetlands

Wetlands may be broadly defined as vegetated areas which are permanently or seasonally flooded; the term therefore describes inland and coastal tidal swamps and marshes. Wetlands are complex and

highly productive ecosystems important to endemic and migratory waterbirds and to many species of fish and crustaceans which spend at least part of their life cycles in wetland environments. Wetlands also perform important roles in water conservation, flood control, absorption of sediments and nutrients, and bank and shore stabilisation.

A total of 142 major wetland aggregations have been identified in Queensland, representing about 90 per cent of the total natural wetland surface area of the State. Significant areas of wetland are found in the Gulf Country, on Cape York Peninsula, in the Townsville region, on Fraser, Moreton and Stradbroke Islands and along the lower reaches of waterways in the Channel Country. The wetlands vary widely in type and occurrence within the biogeographic regions in accordance with climatic factors, land forms, soils and proximity to the coast.

No estimate of the extent of wetland loss in Queensland is available due to deficiencies in our knowledge of the wetland resources. Wetlands have nevertheless been altered and destroyed as a result of increasing development. Major threats to their survival include flood mitigation and flow improvement, reclamation for industrial, commercial and residential developments, mining, grazing, sedimentation, water pollution and introduced animals and plants.

To varying degrees, wetlands may be afforded protection under the Queensland reserve system. National parks, environmental parks and marine parks may include areas of wetland. Of the 142 major wetland areas, identified reserves have been gazetted over all or portions of 39 of them. Many of these reserves cover only a small portion of the total wetland and in some cases the wetland is threatened by activities beyond the reserve boundary.

Wetland areas are included in some 30 national parks established in the Wet Tropical Coast and South-East Queensland biogeographic regions. The major wetlands of inland Queensland and Gulf Plains are unprotected.

Reserves established specifically for the purpose of protecting wetlands are restricted almost entirely to the coastal fringe. Fifty fish habitat reserves protecting a total of 1,781,043 hectares of tidal lands, 29 wetland reserves totalling 52,865 hectares and six fish sanctuaries totalling 3,343 hectares of tidal lands have been declared.

About 460,200 hectares of mangrove forest occur along the coast of Queensland, comprising nearly 40 per cent of the national resource. Mangrove destruction has been extensive near coastal cities. Between 1974 and 1987, approximately 20 per cent of mangroves in Moreton Bay were destroyed. Mangrove forests more remote from population centres remain largely intact. An estimated 60,020 hectares, 13 per cent of the total cover, is included



Mangroves

Photo: Sharyn K. Marken

in reservations. All mangroves are protected under the Fisheries Act which prohibits the destruction of mangroves without authorisation.

3.1.5 Water Pollution

Pollutants may come from point sources, such as sewage and industrial effluents, and diffuse sources including urban and rural run-off contaminated with sediment, chemicals and nutrients.

In Queensland, the first major legislation which provided for control of water pollution and water quality management was the *Clean Waters Act 1971* which aimed to preserve, restore and enhance the quality of the State's waters. The Act sought to control water pollution by two principal means; by licensing, whereby the quality and quantity of effluent discharged are stipulated and by the 'duty of special care' provision, whereby premises must ensure that water pollution does not occur. Specific provision in the Act for controlling diffuse source pollution is minimal. At present, there are about 590 discharges licensed under the Clean Waters Act.

Despite major reductions in water pollution since the Act was introduced, water quality problems persist in many areas. Organic waste discharges can cause severe deterioration of the oxygen content of the water making conditions intolerable to most aquatic life. In many such cases, practicable opportunities for improving effluent quality or for alternative disposal are unavailable.

As populations increase, a greater number of watercourses in urban areas are threatened by excessive input of nutrients that promote the growth of algae and other aquatic plants. In an effort to develop appropriate wastewater disposal strategies, studies have been conducted on many rivers receiving domestic wastes including the Logan, Albert, Maroochy, Mary and Burnett Rivers.

Nutrient enrichment of coastal waters is also a potential problem near some major population centres. Moreton Bay is increasingly subject to

nutrient input from several sewage treatment plants. The increased nutrient concentrations may be one of a number of factors responsible for the development of algae blooms ('red tides') in Bramble Bay and Deception Bay. Major ocean discharges of treated sewage effluent also occur off Kawana on the Sunshine Coast and off the Gold Coast.

Nutrient concentrations can be reduced through advanced treatment, but to date nutrient limits have been included in only relatively few licences. The number is likely to increase as more information supporting the need for limits becomes available.

Point source discharges in the past have been the focus of pollution control strategies. Now attention is turning to diffuse sources, especially agricultural chemicals. When rainfall follows crop treatment, pesticides may be washed into creeks and rivers. Each year a number of 'fish kills' are reported. Vast quantities of sediments and nutrients are washed from catchment soils. Each year, an estimated 9,400 tonnes of phosphorus is washed into the Cairns section of the Great Barrier Reef Marine Park.

Study of the impacts of diffuse source pollution in Queensland has been limited, but has provided an insight into the range of problems which might exist. The extent and magnitude of such problems remain largely unknown.

3.2 FLORA

Contributed by the Queensland Department of Environment and Heritage

The Queensland flora comprises approximately 7,200 named species of vascular plants, of which 920 are introduced, with perhaps a further 1,000 species awaiting description. The indigenous species occupy a diversity of habitats from semi-arid grasslands to tropical rainforests and swamps. The vegetation communities in Queensland are the most diverse in Australia. Queensland can be divided into 13 biogeographic regions on the basis of vegetation type and land form.

3.2.1 Threatened Flora

During the years of European settlement there has been widespread modification of plant habitats ranging from total clearing for intensive agriculture through various degrees of partial clearing for broad scale low-intensity grazing. All of these processes have contributed to the decline in many of our native plant species. Selective exploitation has also occurred, such as the logging of open forest and rainforest tree species and the collection for sale of ferns, orchids and other species of horticultural value.

A 1989 review of the status of the Queensland flora identified 1,201 vascular plant species as rare and/or threatened. A further 52 species are regarded as endangered and 231 as vulnerable. Another 650 species have restricted but relatively secure distributions. A further 264 species are poorly known and therefore may or may not warrant rare or threatened status. Of the 35 species known only from their type collection, most may also be extinct since they have not been collected in the past 50 years.

The wet tropics of north-eastern Queensland contain the greatest concentration of rare or threatened species. The major rainforest areas of the Bellenden Ker Range, Boonjee-Mount Bartle Frere, the Hugh Nelson Range and the sclerophyll forests and woodlands of the Herberton-Irvinebank area, contain 315 listed species. Other rainforest areas, including Mount Lewis, Mount Spurgeon, Thornton Park, the McDowall Range, the Daintree valley and the Alexandra Bay-Cape Tribulation area contain 278 species.

Of the 1,201 rare or threatened species, 607 have been recorded from nature conservation reserves in Queensland. A further six have been recorded from reserves elsewhere in Australia. The majority of the rare species (434 out of 650) occur in nature conservation reserves whereas only 115 of the 287 threatened species are known from reserves.

The Department of Environment and Heritage is responsible for carrying out the functions of *The Native Plants Protection Act of 1930*. Under this Act, special protection is given to 73 species of palms, orchids, ferns and other plants including some wildflowers on Crown land.

The major threat to the survival of the endemic flora of Queensland is habitat destruction. Those habitats which are not totally protected are susceptible to the pressures of commercial, industrial, agricultural and urban expansion. The habitats of a significant number of both rare and threatened plant species are not protected in existing conservation reserves.

3.2.2 Forests and Woodlands

Since European settlement, extensive areas of the original forest have been cleared or severely modified. Before European settlement, forest covered an estimated 35,544,000 hectares (21 per cent) of Queensland. By 1984 this had been reduced by nearly half to between 17 and 20 million hectares. Woodland originally covered approximately 28 per cent of the State but has now been reduced to 19 to 21 per cent, a loss of some 11 to 15 million hectares.

The remaining area of Queensland forests dominated by large trees potentially capable of commercial timber production is currently 7,718,000 hectares. Hardwood covers 4,795,000 hectares, cypress

pine 1,686,000 hectares and rainforest 1,237,000 hectares. Approximately 6.6 per cent (510,000 hectares) of this is on Crown land such as national park which excludes timber production.

3.2 FOREST AREAS BY OWNERSHIP, QUEENSLAND, 1989 (*'000 hectares*)

Type	Public			Private	Total
	1(a)	2(b)	3(c)		
Rainforest	(d) 696	147	313	81	1,237
Tall eucalypt forest	163	4	16	22	205
Open eucalypt forest	1,563	1,724	175	1,128	4,590
Cypress pine	696	773	6	211	1,686
Total	3,118	2,648	510	1,442	7,718

(a) Forests managed for multiple use including wood production. (b) Crown land, vacant or occupied under lease, on which wood harvesting is carried out under Government control. (c) Crown land, e.g. national parks, on which wood production is excluded. (d) Approximately 621,000 hectares in the wet tropics is now part of the World Heritage area and no longer available for extensive logging.

Source: Australian Forest Resources Report (February 1989).

The Crown forest estate consists of 3,984,000 hectares of State forest and 529,000 hectares of timber reserve. In addition to native forests, the State forest includes an area of 169,304 hectares of plantations of native and introduced species. Native conifers (mostly hoop pine) cover 44,932 hectares, introduced conifers 122,600 hectares and broadleaf species (native hardwoods) 1,772 hectares. Of the total Crown estate, approximately 2 million hectares of State forest have been set aside for future timber production. The remainder will not be logged, but will be retained for other multiple use purposes including catchment protection, stock grazing, wildlife habitat protection, honey production and recreation.

State forests are managed with the aim of sustaining production of forest products and services within a multiple-use management system.

3.3 TIMBER MILLED BY TYPE AND SOURCE, QUEENSLAND, 1988-89 (*gross cubic metres*)

Wood type	Crown land	Private land	Total
Rainforest	8,733	35,617	44,350
Forest hardwoods	252,479	208,823	461,302
Native forest conifers	154,731	53,272	208,003
Plantation species	555,560	55,133	610,693

About 80 per cent of wood cut from the State's forests is used in construction and furniture manufacture. The remainder is chipped or used in bulk as railway sleepers or bridge piles.

With increasing awareness of the value of trees in protecting land and water resources from degradation and their role in maintaining air quality and climatic stability, the planting and preservation of trees has been encouraged. The interest on the part

of the rural landholder and the city dweller in growing trees is reflected in tree sales from the Department of Forestry nurseries. In 1988-89 total sales amounted to 487,670 seedlings.

In 1989, the One Billion Trees Program was launched by the Commonwealth with the aim of having one billion more trees around Australia by the year 2000. This will entail a community tree planting program to plant 400 million trees and a natural regeneration and direct seeding program to establish more than 600 million trees. The Save the Bush Program was also launched. It aims to protect remnant areas of forest, woodlands, heaths, grasslands and wetlands which lie outside existing reserves.

3.2.3 Vegetation Conservation

Rainforest

Rainforests are renowned for their intrinsic beauty, but more importantly for the diversity and abundance of plant and animal life and the genetic resources they contain. Rainforests can be classified into a number of types including complex notophyll forests, araucarian notophyll microphyll forests, semi-evergreen vine thickets and tall open forests (wet sclerophyll type).

The patches of rainforest extending along the east coast of Australia are believed to be remnants of the type of vegetation which once covered most of the continent. The rainforests of north Queensland are of significance in having the highest number of relict genera of any region in Australia and the highest concentration of primitive angiosperms of any locality in the world. The area also supports many narrowly endemic species.

Less than one-half, some 1,237,000 hectares, of the original rainforest in Queensland remains. This represents approximately 54 per cent of Australia's remaining rainforests. Much is preserved within national parks and other Crown reserves. Within the wet tropics rainforest region between Townsville and Cooktown, 727,443 hectares remain. Of this, 621,566 hectares (85.4 per cent) is within the World Heritage area. Before listing as a World Heritage area, only 19.6 per cent of the rainforest was in national parks. As a result of World Heritage listing, rainforest timber production from Crown land declined from 60,274 cubic metres in 1987-88 to 8,733 cubic metres in 1988-89.

Administrative arrangements and management plans for the World Heritage area are prepared by State and Commonwealth agencies.

Open Forest

Open forests are widespread in south-east Queensland on the ranges on the central coast and the sandstone ranges in the central highlands. A large number of broad forest community types can be classified on the basis of geological substratum.

Brigalow open forests and shrublands present a unique case because of the scale of clearing at a time when other land uses, including conservation, were barely considered. Approximately 6 million hectares of brigalow *Acacia harpophylla* dominated communities have been cleared in the past three decades with areas protected on national parks and State forests representing less than 1 per cent of the original occurrence. A number of brigalow communities are not covered or only poorly so. The development of a conservation strategy for the whole Brigalow Belt is being undertaken by the Queensland National Parks and Wildlife Service. This also includes the eucalypt forests and woodlands of the region.

Woodland

Woodlands presently face more widespread and complete clearing than open forests because there are few perceived tangible economic benefits accruing from their retention. Exceptions are the widespread cypress pine communities of the central and southern inland. The woodlands on flat to gently undulating country are most at risk, particularly the poplar box woodlands, which cover a vast area of central Queensland and northern New South Wales and are one of the largest uncleared areas of woodland in Australia.

Other Vegetation Types

Wildflower heaths of south-east Queensland have been reduced mainly through the spreading of urban and other development. The tea-tree (*Melaleuca spp.*) forested wetlands of central and southern Queensland have been impacted significantly through all types of coastal development.

3.2.4 Noxious Plants

A noxious plant is a plant considered a serious enough pest to warrant its control being enforced under the *Rural Lands Protection Act 1985-1988*. The prolific growth of one particular plant in an area may have significant environmental and/or economic consequences. Complex native plant communities which offer a range of habitat types and support a diversity of plant and animal life may be replaced by a single plant species. Infestation of farm lands may result in a significant reduction in productivity and an increase in running costs. Rivers and lakes may also be affected. Lakes may become covered by dense mats of vegetation and rivers choked.

Declared plants under the Act are categorised according to the threat they pose and the measures required for control. Thirty-seven plants, including prickly acacia, giant sensitive plant and bitou bush, are declared under the Rural Lands Protection Act. All are introduced species, the spread of which are not controlled by natural mechanisms such as insect pests, diseases and competition with



Brigalow land

Photo: Premier's Department

other species. The management of the control of major pest plants and animals is the responsibility of the Rural Lands Protection Board.

3.3 FAUNA

Contributed by the Queensland Department of Environment and Heritage

Queensland has 214 native mammals (approximately 67 per cent of the national total), 581 species of birds (79 per cent), 396 reptiles (55 per cent) and 114 frogs (59 per cent).

Determining which native animal species are threatened with extinction is difficult because of the lack of information about many of the more elusive species. Some are endangered, some threatened and some rare but common in their restricted habitats. There can be major difficulties in determining whether a species is in fact rare or just rarely seen.

3.4 FAUNA SPECIES, QUEENSLAND, 1989

Type	Total	Endangered	Extinct
Mammals	80	8	5
Birds	581	9	1
Reptiles and amphibians	510	5	—

3.3.1 Mammals

The Queensland National Parks and Wildlife Service is conducting research on the northern hairy-nosed wombat, Proserpine rock wallaby, bridled nailtail wallaby, greater bilby and brushtailed betton and kowari. The habitat of the

Proserpine rock wallaby is protected in the Conway and Dryander National Parks and that of the bridled nailtail wallaby in a central Queensland scientific purposes reserve/fauna refuge.

In addition to those species considered as endangered, other species of concern include four species of bat, the Hastings River rat, the mulgara, the plains rat and the Julia Creek dunnart. Habitat destruction poses a significant threat to the survival of several of these species. In 1989 mining was responsible for the destruction of part of the Mount Etna cave complex, a known habitat of the ghost bat. The tube-nosed insectivorous bat was captured for the first time in Australia in 1981 in the Atherton Tableland. It is the rarest mammal recorded alive in Australia. Its distribution is restricted to the mountainous tropical rainforests of north Queensland. There are only two records of the orange horseshoe bat in Queensland, Kalkadoon Cave near Camooweal and an unnamed cave on Louie Creek in Lawn Hill National Park. However, the species does occur in limited numbers in the Kimberley region and in the Northern Territory. The golden-tipped bat is extremely rare and was thought to be extinct in Australia until it was rediscovered in 1981 in the Cairns region. The Hastings River rat is known in Queensland only from near Warwick, although bones have been found in owl pellets near Maleny, 100 kilometres north of Brisbane.

Some other mammal species are rare but there is insufficient data on populations to determine whether they are threatened.

Following the decimation of the world's whale population in the late 1800s and early 1900s, numbers are now increasing. The population of humpback whales off the Queensland coast is estimated at 1,100, with an annual increase of about 10 per cent.

3.3.2 Birds

The paradise parrot has not been sighted in Queensland since 1922 and is presumed extinct.

A number of species of birds are rare or threatened. The golden shouldered parrot which nests in termite mounds is an endangered species from tropical north Queensland. Other rare species include the red goshawk, black-breasted button quail and the Eungella honey-eater.

The Queensland National Parks and Wildlife Service is involved in a number of studies on birds. A major study on the rare ground parrot (*Pezoporus wallicus* (Kerr)) has recently been completed. Centred on Cooloola National Park, the study looked particularly at food and breeding requirements. It was found that these were related to the fire history of the area. Conclusions were drawn as to the appropriate controlled burn fire regime needed to ensure survival of the population. A

study of the distribution and habitat requirements of the eastern bristle-bird is currently under way. Monitoring of seabird breeding sites throughout the Great Barrier Reef is continuing, particular attention being given to the little tern (*Sterna albifrons* Pallas).

Very little is known about most of these species in Queensland. Species with highly localised distributions may be quite common within their specific habitat, but as a result of their limited distribution are especially vulnerable to adverse habitat modification. In the almost total absence of data on populations, to identify those species which are gravely threatened or rare is difficult.

3.3.3 Reptiles and Amphibians

Approximately 400 non-marine reptile species occur in Queensland. Of these, 168 species are endemic to Queensland or their Australian distribution is only in Queensland.

Several species are rare or threatened, and a number have very restricted distributions. The Bartle Frere skink occurs only on Mount Bartle Frere. Other rare skinks include Thornton Peak skink which is found only on Thornton Peak, north Queensland, and Mjoberg's skink which has been recorded only between Mount Bartle Frere and Ravenshoe.

Several species of frogs are also very rare, and the gastric-brooding frog (*Rheobatrachus silus* Liem), first discovered in 1973, is now believed to be extremely rare. It is confined to a small area of the Blackall and Conondale Ranges in south-east Queensland. Much of its habitat is not protected in reserves. The Eungella gastric-brooding frog is restricted to the Clarke Range and nearly all the habitat is in national park.

A number of rare species occur in habitat types which lie outside the protection of parks or reserves and which are threatened by development. Much of the habitat of Rawlinson's striped skink from Cape Bedford, north Queensland, is threatened by mining activities. Urban development in Brisbane and clearing in other areas represent a threat to the collared Delma skink. Similarly, clearing of the brigalow in central Queensland has probably contributed to the rarity of the elapid snake. Habitat destruction has probably also contributed to the declining populations of red-bellied black snakes and death adders. On Cape York Peninsula, six rare species of frogs and 22 rare reptile species are recorded. Of these, one gecko, five skinks and one elapid snake were not found in national parks, State forests or timber reserves (as of 1982).

Other reptile and amphibian species may be at risk or declining but there is limited data on the central Queensland brigalow belt, north-west Queensland, the Gulf drainage system and the Mitchell grasslands.

3.3.4 Insects

Queensland has a large and diverse insect fauna with many species undescribed or poorly known. As a result of the scant resources available, the inaccessibility of many habitats and the enormous diversity of insects in some ecosystems, many important areas of the State remain totally or relatively unsurveyed.

The enormity of the task of describing the insect fauna is best illustrated by the diversity in tropical rainforests. In 1981, an intensive 3-week survey by the Queensland Museum and Earthwatch of five sites extending from the Russell River to the summit of the Bellenden Ker Range yielded over 5,000 species of insects and over 300 species of spiders. It was estimated that this small area contained about 7 per cent of the total Australian insect fauna. Despite the high diversity, the population of many species was low, with 612 species of beetles being represented by only one specimen. The vast majority of species collected were undescribed and this survey did not include the rainforest canopy. A recent survey of rainforest canopy insects in the subtropical rainforest of Mount Glorious also revealed enormous diversity, with more than 900 species recorded from one rainforest tree and only 380 species able to be identified to genus.

Australia was once part of the cool, wet, 'Antarctic' supercontinent Gondwanaland which began to break up about 150 million years ago. The summits of some of Queensland's mountains experience a climatic regime similar to that of ancient Gondwanaland. Here some ancient forms of animals and plants have survived relatively unchanged for 100 million years. In surveys of mountain tops undertaken particularly in the last 10 years, many new species of insects have been found with nearest relatives now surviving on mountains in New Zealand, New Caledonia and South America.

Many rainforest insects, particularly the surviving ancient forms, are flightless and restricted to a small area. Some quite large and beautiful beetles are restricted to one rainforest locality. They are therefore particularly vulnerable to habitat destruction. Considering how little is known of the vast insect fauna and the extent of rainforest clearing to date, almost certainly many species of insects have become extinct without their existence ever being noted.

Few intensive surveys of insects in drier areas of Queensland have been undertaken. One at Lake Broadwater near Dalby revealed 1,231 species of moths and many species of other insects, including a new genus of Christmas beetle represented by just two specimens after trapping for a year.

The main danger to insects is habitat destruction, not collection. Legislative protection from collectors without protection of the species' habitat

does little to ensure its survival. The butterflies thus protected in Queensland, the birdwing butterflies and the Ulysses butterfly, are only scarce where the rainforest has been destroyed and this has been somewhat allayed by the planting of foodplants.

The butterflies are the only group of insects whose distribution is fairly well known throughout the State. Several species are considered to be endangered or vulnerable. Many other species are almost certainly under pressure but even with this well known group of insects, it is often difficult to make definite statements about their status.

Many other Queensland insects are extremely rare and, due to restricted distributions, may be endangered. They are certainly vulnerable unless their habitat is protected.

Queensland boasts the largest moth and largest cockroach in the world. The stag beetle from north Queensland, is the most sought after Australian beetle. New species and new genera are being discovered and described constantly. In 1980, the 'Cooloola monster' (*Cooloola propator* Rentz), a very special and bizarre burrowing cricket from the sand masses of Cooloola and Fraser Island, was described as a new family.

3.3.5 Introduced Fauna

Eighteen introduced species of mammal are now established in the wild in Queensland. These are: black rat, brown rat, house mouse, hare, rabbit, cat, dog, fox, horse, donkey, pig, camel, water buffalo, goat and four species of deer. Chital deer near Charters Towers pose a great threat to habitat despite being subject to a 12-month open season. Only the rats and the house mouse were introduced accidentally. The dingo was brought to Australia not less than 6,000 years ago by the Aboriginal people.

The introduction of animals to a land in which conditions were suitable for colonisation and in which there were no natural predators or other population control agents has contributed either directly or indirectly to the decline of some native marsupials and the degradation of a variety of habitats. The cat and fox, highly efficient predators, combined with fire regime changes, may have contributed to the rarity of several of the smaller marsupials especially in desert areas.

Rabbit plagues before the introduction of the Myxoma virus were responsible for significant land degradation, particularly in semi-arid areas. Rabbits are widespread in southern inland border areas with smaller infestations elsewhere in the southern half of the State. Chemical control is actively used in support of regular releases of the Myxoma virus.

Feral pigs are distributed throughout the State with highest densities in isolated wetter areas. They

are responsible for severe damage to pastures and native plant communities and predation on native animals and livestock. Their impact has been reduced significantly in recent years through poisoning, trapping and commercial harvesting. Feral horses and goats are a significant problem only in localised areas.

Several other animals of significance have also been introduced to Queensland. The cane toad, *Bufo marinus* (Linnaeus), was introduced in 1935 to the sugar cane fields of Gordonvale, north Queensland, from Hawaii, as a biological control agent for the greyback and frenchi beetles. It established very quickly due to its ability to adapt to a variety of environments, its high breeding potential and the virtual lack of predators. However, by 1941 it was apparent that the toad was having little impact on beetle numbers. The cane toad is now distributed across the Gulf Country, north-eastern Northern Territory and along the eastern seaboard into northern New South Wales. Populations appear to be limited by the controlling factors of available food, water, cover and temperature. It is unlikely that the toad has reached its potential limits of distribution in Australia. Evidence suggests that it has caused a decline in native frog populations by direct predation and domination of breeding sites. The numbers of native frog-eating predators, such as goannas, snakes and birds, have also suffered as they die from the poison carried by the toad.

Queensland's inland waters have been successfully colonised by nine freshwater fish species introduced to the continent. The species are regarded as ecological pests in Australia and are especially problematic in subtropical and tropical Queensland. These fishes are generally most abundant and successful in disturbed habitats such as polluted drains and degraded urban streams and waterways with regulated flow.

3.4 NATURE RESERVES

Contributed by the Queensland Department of Environment and Heritage

National Parks

The basic objectives of Queensland's national park system are:

- conservation of areas representative of natural diversity;
- conservation of unique, uncommon and threatened species and
- protection of outstanding natural scenery and maintenance of opportunity for passive recreation, education and scientific and historic interest.

A total of 218 major vegetation types have been identified within the 13 biogeographic regions of

Queensland. This broad classification system has provided the biological foundation for selecting representative and important areas for national park status.

Just over 2 per cent of the State lies within the national park estate, which encompasses approximately 55 per cent of the major vegetation types in the State.

While the average size of national parks is 11,110 hectares, slightly more than 100 parks, including aggregations of like groups of islands, have areas greater than 1,000 hectares, considered to be a minimum for conservation and management purposes.

Environmental Parks

A 1973 Land Act amendment provided for declaration of lands in Crown ownership as environmental parks and allows for the protection of such areas in their natural or near-natural state. On a Queensland scale, these parks, managed by the Queensland National Parks and Wildlife Service, sometimes with the assistance of trustees, are seen to have only moderate conservation and recreation values. At regional or local levels, particularly in the urban and highly modified lands of south-east Queensland, they have great importance as reminders of past landscapes and as benchmarks to encourage retention and proliferation of natural vegetation in nearby lands and as havens for wildlife. Of 177 environmental parks declared, only five exceed 1,000 hectares. Most are between 5 and 20 hectares.

Fauna Refuges, Sanctuaries and Reserves

Under the Fauna Conservation Act, which protects most native species throughout Queensland, fauna refuges, sanctuaries and reserves can be declared. These categories cover land of any tenure, include flora and one or more species of fauna. Conditions and restrictions may be imposed on the use of the area for purposes other than fauna conservation.

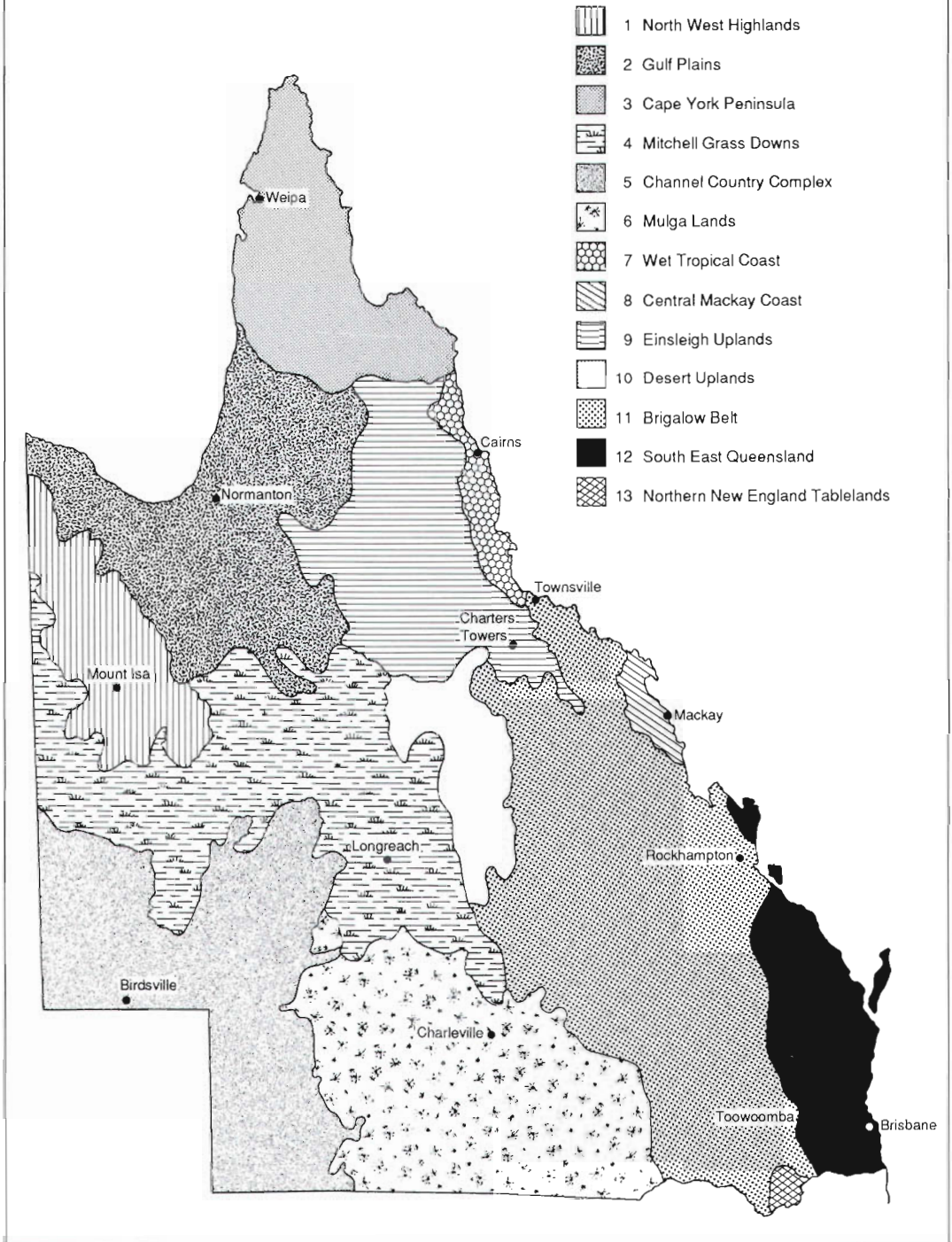
All State forests, national parks and islands off the Queensland coast are fauna sanctuaries. Open season fauna cannot be taken from these areas.

Other Reserves

Department and official purposes reserves are declared under the Land Act for various purposes by Government departments. The Environment and Heritage Department divides its reserves into resource reserves, primarily landscapes with legal impediments to national or environmental park declarations, and administration reserves for offices, accommodation and information centres.

Scientific purposes reserves are also declared under the Land Act for specific scientific studies relating to flora and fauna conservation.

BIOGEOGRAPHIC REGIONS, QUEENSLAND



3.5 AREA AND NATIONAL PARKS BY BIOGEOGRAPHIC REGION, QUEENSLAND, 1 JANUARY 1988

Biogeographic region	Area	Proportion of State	National parks	
			Area	Proportion of region
	'000 hectares	%	'000 hectares	%
1. North-West Highlands	8,117.8	4.7	12.2	0.2
2. Gulf Country	17,272.0	10.0	470.0	2.7
3. Cape York Peninsula	10,881.4	6.3	1,368.0	12.6
4. Mitchell Grass Downs	25,735.3	14.9	13.8	0.1
5. Channel Country	21,762.7	12.6	613.5	2.8
6. Mulga Lands	20,726.4	12.0	27.3	0.1
7. Wet Tropical Coast	2,245.4	1.3	231.5	10.3
8. Central Mackay Coast	1,554.5	0.9	106.9	6.9
9. Ensligh Uplands	13,126.7	7.6	39.6	0.3
10. Desert Uplands	6,217.9	3.6	—	—
11. Brigalow Belt	33,162.2	19.2	471.6	1.4
12. South-East Queensland	11,399.5	6.6	201.4	1.8
13. New England Tablelands	518.2	0.3	23.7	4.6
Total	172,720.0	100.0	3,579.6	2.1

Recreation Areas

These may be declared under the Recreation Areas Management Act over land and waters of any tenure by agreement of the landholders. A Board, answerable to an Authority, is required to provide, coordinate, integrate and plan for the recreational development and management of such areas taking into account the recreation, education, conservation, commercial and production values, and the interests of landholders.

Most of Fraser Island is presently managed under the provisions of the Act to provide for nature-based recreation. Brisbane Forest Park is managed under similar legislation.

Marine Parks

Under the *Marine Parks Act 1982-88*, marine parks may be declared over tidal lands and tidal waters of Queensland. A marine park may protect a coral reef community, a mangrove forest or an area of mudflats and seagrass important for birds, turtles or dugong. They are intended mostly to provide a means for guiding the use of marine and estuarine areas.

Hervey Bay Marine Park of about 200,000 hectares was gazetted on 16 September 1989. This park has one general-use zone covering a whale management and monitoring area. Pumicestone Passage Marine Park, gazetted on 1 February 1986, is managed for the protection of fisheries resources. Mackay/Capricorn Marine Park, gazetted on 27 August 1988, incorporates the Capricorn-Bunker Marine Park, part of which was formerly the Heron-Wistari Marine Park and a zoning plan is in force. Townsville/Whitsunday Marine Park was gazetted on 3 October 1987. Cairns Marine Park, gazetted on 18 February 1989, incorporates Green Island Marine Park.

The Great Barrier Reef Marine Park covers 344,000 square kilometres and extends along 2,300 kilometres of the Queensland coast, from the tip

of Cape York to just south of Lady Elliot Island. This is by far the world's largest marine protected area. Within the area are 2,900 individual reefs. More than 2,100 reefs make up the main barrier, with a further 540 high continental islands closer inshore having significant fringing reefs. The reef is home to more than 1,500 species of fishes, 330 species of hard corals and 350 species of echinoderms (starfish, sea urchins and feather stars). Innumerable other species of a variety of life forms also inhabit the park waters. The islands are inhabited by or visited by more than 240 species of birds.

The Great Barrier Reef Marine Park Act was passed by Federal Parliament in 1975. In October 1979, the southernmost Capricornia section was declared. By 1983, the entire Great Barrier Reef had been covered and has been inscribed on the World Heritage List as a natural site.

The park is a multiple-use protected natural area. Management is based on the concept of zoning whereby areas are designated suitable for particular activities. Zoning plans have been developed for all sections of the park, the last, the Mackay/Capricorn section, coming into effect on 1 August 1988.

The Queensland National Parks and Wildlife Service is the agency primarily responsible for the park's day-to-day management subject to the Great Barrier Reef Marine Park Authority.

The rising population of coastal towns, mainland agricultural and industrial development, a growing tourist industry and an increase in accessibility of the reef inevitably pose some threat to the integrity of the reef ecosystem.

Concentrations of the nutrients nitrogen and phosphorus in reef waters have caused concern in recent years. Research has shown that the concentrations in some inshore areas at times significantly exceed those which have been shown to cause premature mortality in corals.

Another contentious issue concerning the Great Barrier Reef is that of the Crown of Thorns starfish (*Acanthaster planci* (Linnaeus)) and whether infestations are natural or induced by human activity. Major infestations occurred in the 1960s and again in the 1980s causing considerable damage to many reefs in the northern and central sections. In response to concern, a comprehensive research program addressing various aspects of the biology and ecology of the Crown of Thorns is well advanced.

3.5 LAND CARE

Contributed by the Queensland Department of Primary Industries

Queensland encompasses 173 million hectares, but only a small area has fertile soils and a climate favourable for agriculture. Most of the soils are moderate to low in fertility and the climate is harsh. A special need exists to conserve not only the limited areas of prime agricultural land but also the large areas of fragile land.

Three million hectares are regularly used to produce grain, sugar cane and horticultural crops. The soils used for cropping are generally fertile and are located along the east coast and adjacent inland, where rainfall is sufficient for crop growth.

Some 160 million hectares are used for sheep, beef and dairy production. Dairying is mainly carried out along the coastal belt. In the drier inland and western areas, the beef and sheep industries are the major land users.

Much of Queensland has been used for agriculture for less than 100 years, but land degradation was identified as far back as 1900. Soil erosion, soil salinity, pasture decline and soil structure and fertility decline are now plainly evident in the State's cropping and grazing lands.

3.5.1 Land Degradation

In areas undisturbed by humans, soil erosion occurs slowly. Plant roots hold the soil together and vegetation protects the soil surface from the energy of raindrops and wind. However, when land is cleared for cultivation and grazing, much of the natural vegetation is destroyed and the potential for soil erosion is increased. This potential depends on the intensity of the rainfall, the type of soil and the land's slope length and gradient. These factors interact to create a potential hazard that can be reduced only by controlling run-off and using protective land-management practices.

Most of the State's cropping lands have a high to extremely high soil-erosion hazard. The grazing lands — apart from the north-west and far north,

which have a low to moderate hazard — have a moderate to very high erosion hazard.

The major types of land degradation in Queensland are listed below.

Soil erosion by water occurs in different forms, which include:

- sheet erosion, which is the removal in run-off water of a thin layer of topsoil stirred up by rainfall;
- rill erosion, which occurs when run-off water creates small channels in cultivated land by removing the soil to the depth of cultivation;
- gully erosion, which occurs when large quantities of run-off water are concentrated on an area of unstable soil (either cultivated or grazing land) and
- erosive flooding, which generally occurs on flood plains when creeks and rivers overtop their banks and damage cultivated land.

Soil salinity outbreaks can completely denude large areas of all useful vegetation. Salinity can be caused by:

- overclearing of trees (causing a rise in saline watertables);
- erosion (where subsoils are high in salts and sodium clays);
- irrigation with poor-quality water and
- irrigation causing a rise in saline watertables.



Soil erosion

Photo: Premier's Department

Fertility decline can result from soil erosion and continuous cropping. Erosion removes the topsoil, which contains most of the nutrients needed for crop and pasture growth. Continuous cropping depletes organic matter, nitrogen and other plant nutrients in soils.

Soil-structure breakdown results from either excessive cultivation or trampling by stock. After prolonged cultivation, some soils develop hardpans, which are highly compacted layers of soil below the depth of ploughing.

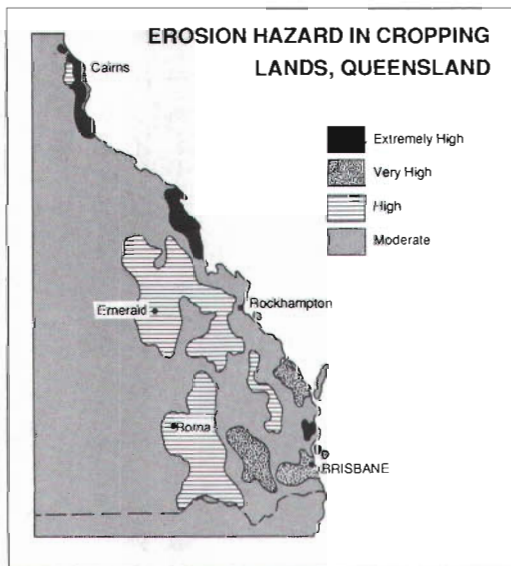
Pasture decline is the loss of useful plant species owing to heavy grazing or to a fertility loss because of soil erosion. In many cases woody-weed invasion occurs.

Landslip is downslope mass movement of soil and rock. It generally occurs on **steep** slopes and movement can be started by an earth tremor, excessive wetness, vegetation removal or undercutting the slope.

All these forms of degradation cause productivity loss which, in most cases, is difficult to remedy. Eroded soil also damages roads, railways and bridges; silts up creeks, rivers, dams and estuaries; and aggravates flooding problems.

The effects of gully erosion, major salinity outbreaks and landslip are always obvious. However, in many cases, **land** degradation occurs without obvious effects.

Sheet erosion, soil-structure and fertility decline, and minor soil salinity outbreaks are not immediately apparent and visual signs of rill erosion disappear after cultivation. These forms of land degradation, although not obvious, still result in a major productivity decline over time.



3.5.2 Control

Since the 1930s the Queensland Department of Primary Industries (QDPI) and farmers have worked together to control land degradation. Suitable measures, for both cropping and grazing, are now available for most areas of the State.

Conservation farm planning is carried out for both individual farms and groups of farms in sub-catchments. As at 30 June 1989, a total of 1.4 million hectares of land had been planned on 5,230 properties.

In controlling soil erosion by water, the first aim is to reduce run-off by using practices that encourage rainfall to soak into the soil. This is achieved with tillage practices that retain crop residues on the soil surface and with cropping sequences that minimise the time that land is left fallow.

Because of Queensland's high-intensity storms and the low water-infiltration rates of most of the State's soils, some water inevitably runs off, even under good management. So, on sloping cultivated lands, run-off water must be intercepted with control structures, such as contour banks, before it travels fast enough to pick up and carry soil.

Practices that are used to reduce run-off and control erosion in cropping lands include:

- growing crops that provide good groundcover;
- using crop rotations that provide high levels of protection;
- opportunity cropping (growing extra crops to use available soil moisture);
- increasing crop yields, which increase surface cover;
- retaining stubble on the soil surface during fallow periods;
- minimising tillage frequency during fallows;
- contour cultivation;
- contour banks, waterways and other run-off control structures and
- strip cropping on flood plains.

Farm programs to control soil erosion need to integrate a range of soil-conservation practices. The level of control depends on local environmental conditions. In most cases, a combination of soil-conservation works and conservation-cropping practices is required to reduce soil loss — the harsher the conditions, the greater the level of protection needed.

Practices used to control erosion and maintain productivity in grazing lands include:

- adjusting stocking rates to minimise overstocking for different classes of country and seasonal conditions;
- locating water facilities and subdivision fencing to minimise local overgrazing;

- locating fences and access tracks to avoid erosion problems;
- designing water-spreading and ponding schemes to improve productivity;
- controlling pasture burning to avoid serious losses of surface cover and
- using drought-management strategies that reduce land degradation.

3.5.3 The Future

Of the 2,730,000 hectares of erosion-prone land in Queensland, assistance has been given to farmers to implement run-off control measures on 1,200,000 hectares. There are now over 1,000,000 hectares protected with contour banks. It is estimated that an additional 900,000 hectares require treatment.

The purpose of the *Soil Conservation Act 1986* is to facilitate the implementation of soil erosion control measures by landholders in Queensland. The Act is:

- based on the principle that the prime responsibility for the control of soil erosion rests with individual landowners and land users;
- concerned with the provision of approved property and project plans which provide for the satisfactory coordination of run-off water from farming areas and
- geared to provide for financial assistance by way of loans for soil conservation purposes.

The QDPI gives technical advice, assistance and leadership; undertakes research and develops effective and economically feasible methods of controlling erosion. Over 13,000 landholders use the extension and advisory service in soil conservation of the department.

In recent years, local communities have become concerned with land degradation problems in their area and have formed land care groups throughout Queensland. By the middle of 1990, 70 of these groups are expected to have been formed. The main functions of these groups are to promote the adoption of conservation practices in their area and foster cooperation between the community, all land users and government agencies.

During the 1990s, people across Australia are being encouraged to make a concerted effort to care for the land. Activities and projects are being promoted to make people more aware of how serious and urgent the problem of land degradation is to the whole community.

3.6 REFERENCES

- Queensland Department of Environment and Conservation, *Annual Report*
 Queensland National Parks and Wildlife Service, *Annual Report*
 Queensland Department of Primary Industries, *Annual Report*

Chapter 4

GOVERNMENT AND ADMINISTRATION

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Chapter 4

GOVERNMENT AND ADMINISTRATION

Queensland is part of a federation of six States and two Territories which form the Commonwealth of Australia. The State Government, like that of Australia, is modelled on the British Westminster system. The State Parliament takes responsibility for domestic affairs and shares mutual responsibilities with the Commonwealth Government. The Local Government Act allows cities, towns and shires to provide a system of government in their local areas. Thus government in Queensland is exercised in the three jurisdictions of federal, State and local.

All principal events in Queensland in the period under review occurred at the State level of government. There was a by-election in the State electorate of Merthyr, which was won by the Liberal Party, and a change of Speaker in the Queensland Legislative Assembly in July 1989. T. R. Cooper replaced M. J. Ahern as leader of the National Party and Premier in September 1989 and in December 1989 the Australian Labor Party swept to power with large majorities in seats which had been traditionally conservative.

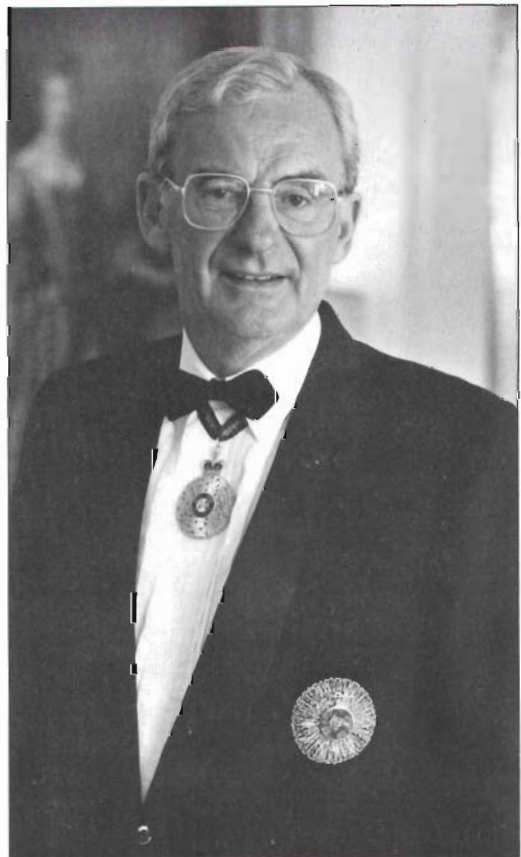
4.1 COMMONWEALTH GOVERNMENT

Since the Australian Constitution was agreed to by the separate colonies in 1901 the legislative power of the Commonwealth of Australia has been vested in the Parliament of the Commonwealth, which consists of the Sovereign (represented by the Governor-General), the Senate and the House of Representatives.

The Governor-General, His Excellency the Honourable William George Hayden, A.C. was sworn in on 16 February 1989.

4.1.1 Commonwealth Parliament

The Commonwealth Government is made up of the 148 member House of Representatives and the Senate which has 76 Senators.



Hon. W. G. Hayden Photo: Premier's Department

The Senate

All States are represented by 12 Senators, chosen in accordance with the principles of proportional representation by all the electors of the State acting as a single electorate. Since 1975 the Australian Capital Territory and the Northern Territory have each been represented by two Senators. Each Senator represents a whole State or Territory.

4.1 QUEENSLAND SENATORS ELECTED JULY 1987

Senator	Party affiliation	Year of retirement
Bjelke-Petersen, F. I.	National	1993
Black, J. R.	A.L.P.	1990
Boswell, R. L. D.	National	1990
Burns, B. R.	A.L.P.	1990
Colston, M. A.	A.L.P.	1993
Jones, G. N.	A.L.P.	1990
Macklin, M. J.	Democrats	1990
MacGibbon, D. J.	Liberal	1993
Parer, W. R.	Liberal	1993
Reynolds, Hon. M.	A.L.P.	1993
Sheil, G.	National	1990
Stone, J. O.	National	1993

Source: Australian Electoral Commission.

In the 1987 Senate election there was no change in party representation.

4.2 SENATE ELECTION, 1987: QUEENSLAND RESULTS

Party	Total valid primary vote	Per cent of vote	Per cent swing
A.L.P.	643,094	42.02	+2.37
National	439,618	28.73	-0.15
Liberal	275,085	17.98	+0.61
Democrats	115,456	7.54	-1.66
N.D.P.	17,411	1.14	-3.27
U.A.P.	1,638	0.11	+0.11
Other	38,058	2.49	+2.01

Source: Australian Electoral Commission.

The House of Representatives

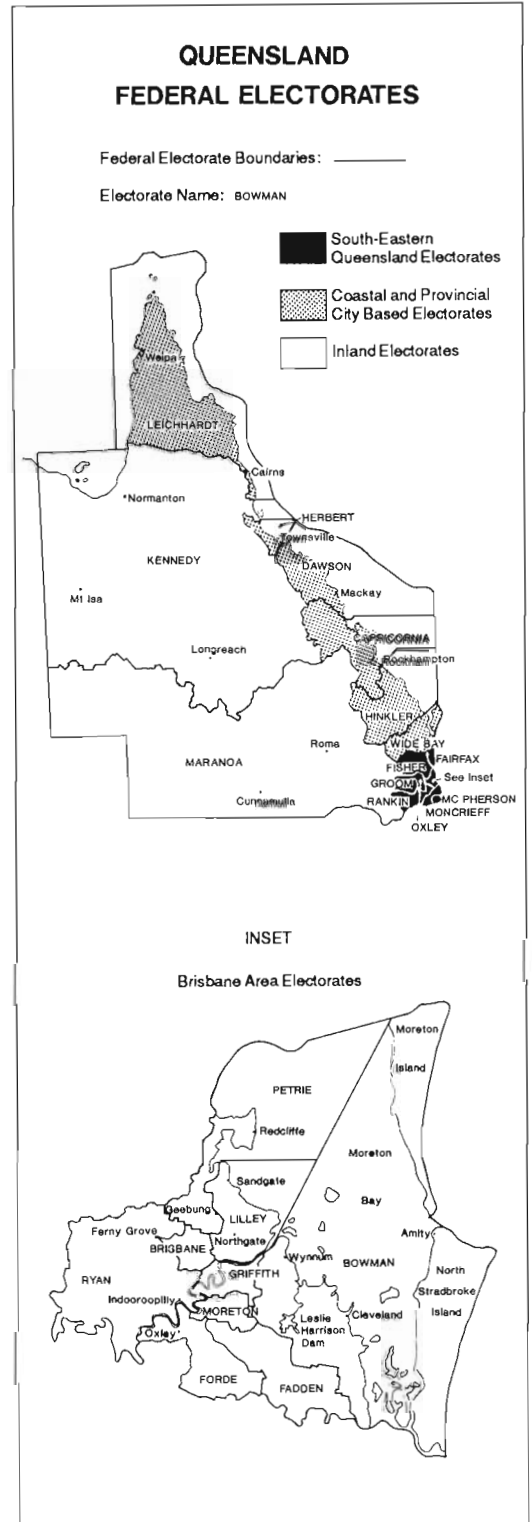
Queensland has 24 of the 148 single-member electorates. At the July 1987 election, 13 were won by the Australian Labor Party, the Liberal Party won five and six were won by the National Party.

4.3 HOUSE OF REPRESENTATIVES ELECTION, 1987: QUEENSLAND RESULTS

Party	Total valid primary vote	Per cent of vote	Per cent swing
A.L.P.	683,639	44.96	+0.90
National	438,625	28.85	-2.85
Liberal	319,607	21.02	+1.86
Democrats	74,215	4.88	+0.06
Other	4,402	0.29	+0.03

Source: Australian Electoral Commission.

The 1987 election gave the Australian Labor Party an increase of four House of Representatives



seats in Queensland — Fisher and Hinkler from the National Party and Petrie and Forde from the Liberal Party.

4.4 QUEENSLAND MEMBERS OF THE HOUSE OF REPRESENTATIVES ELECTED JULY 1987

<i>Electorate</i>	<i>Member</i>	<i>Party</i>
Bowman	Sciacca, C.	A.L.P.
Brisbane	Cross, M. D.	A.L.P.
Capricornia	Wright, K. W.	A.L.P.
Dawson	Braithwaite, R. A.	National
Fadden	Jull, D. F.	Liberal
Fairfax	Adermann, Hon. A. E.	National
Fisher	Lavarch, M. H.	A.L.P.
Forde	Crawford, M. C.	A.L.P.
Griffith	Humphreys, Hon. B. C.	A.L.P.
Groom	McVeigh, Hon. D. T. (a)	National
Herbert	Lindsay, E. J.	A.L.P.
Hinkler	Courtice, B. W.	A.L.P.
Kennedy	Katter, Hon. R. C.	National
Leichhardt	Gayler, J.	A.L.P.
Lilley	Darling, E. E.	A.L.P.
McPherson	White, P. N. D.	Liberal
Maranoa	Cameron, I. M. D.	National
Moncreiff	Sullivan, K. J.	Liberal
Moreton	Cameron, D. M.	Liberal
Oxley	Hayden, Hon. W. G. (b)	A.L.P.
Petrie	Johns, G. T.	A.L.P.
Rankin	Beddall, D. P.	A.L.P.
Ryan	Moore, Hon. J. C.	Liberal
Wide Bay	Millar, P. C.	National

(a) At a by-election on 9 April 1988 W. L. Taylor, Liberal, elected. (b) At a by-election on 8 October 1988 L. Scott, A.L.P., elected.

Source: Australian Electoral Commission.

Two Queensland members were appointed to the Commonwealth ministry which was sworn in on 2 September 1988:

Hon. B. C. Humphreys, M.H.R. — Minister for Veterans' Affairs and
 Senator the Hon. M. Reynolds — Minister for Local Government and Minister Assisting the Prime Minister for the Status of Women.

4.2 QUEENSLAND GOVERNMENT

An Executive Council, comprising an 18 member ministry from the party in power in the Legislative Assembly, advises the Governor who represents the Crown as the titular head of government in the State. The 89 member Legislative Assembly is elected for a 3-year term from single-member constituencies divided into four zones. Besides administering the usual range of public services, the State Government retains from the Commonwealth Government the right to collect some forms of taxation.

4.2.1 Historical Summary

Moreton Bay, the 'Northern District of New South Wales', was first used in 1824 as a penal

settlement and by 1843 had become a distinct electoral division. It was given a separate member of parliament in 1851, two in 1853, four in 1855 and nine in 1858. As electors of New South Wales, residents in what is now Queensland had enjoyed responsible government since *The New South Wales Constitution Act, 1855*. When separation was effected by Letters Patent of 6 June 1859, an Order-in-Council of the same date gave Queensland a Constitution similar to that of New South Wales: Sir George Bowen was appointed Governor. On 10 December 1859 the Governor landed at Brisbane and proclaimed the separation of Queensland from New South Wales.

The Order-in-Council provided for a nominated Legislative Council of not less than five members appointed by the Governor of New South Wales for 5 years and such additional members as the Queensland Governor thought fit, to be appointed by him for life. In May 1860, 15 members were appointed, 11 for 5 years and 4 for life. There was also an elected Legislative Assembly consisting of 26 members returned by 16 electorates. The franchise included all adult males subject to a small property or tenancy qualification which excluded, according to the Registrar-General of the day, 'only new arrivals not six months in the Colony, aliens, and a few hundreds of the most worthless, wandering and improvident members of the community'.

Elections were held in April and May 1860. Executive government was in the hands of the Executive Council and the first members were appointed by the Governor on 10 December 1859. The 1859 Order-in-Council was validated by *The Australian Colonies Act, 1861*, and with the passing of *The Constitution Act of 1867*, responsible government in Queensland was consolidated.

With political parties not yet developed, there were loose, shifting factions and personal alliances that formed two basic groupings, 'conservative' and 'liberal'. The former represented country interests — pastoralists, miners and developers, while the latter tended to be more town-centred and concerned about democratic and industrial issues. Politics through the first 60 years were a tussle between these two groups.

By the mid-1880s mass organisation of workers had developed. Although direct strike action failed to achieve significant wage gains, it did reinforce those who were urging political action to achieve industrial, political and social goals. In the first general election it contested, in 1893, the Labour Party won 16 seats. In December 1899 the first Labour Government took office in Queensland. It lasted 7 days. William Kidston, leader of the Labour Party, became Premier of a coalition government in 1906, before a split developed and the remaining Labour members went into opposition. Under a new leader, T. J. Ryan, the Labour

Party won government in 1915 ushering in a long period of Labour rule — to 1957 apart from the depression years, 1929 to 1932.

In 1957 the Party split and lost government. The new Premier was the leader of the Country Party, G. F. R. Nicklin. With the Liberal Party as the junior partner, a Country-Liberal coalition governed until 1983 when the Country Party, by then named the National Party, secured a majority and was able to govern alone.

The National Party continued to govern, winning the 1986 election. However, confidence in the party was seriously affected by the Commission of Inquiry into Possible Illegal Activities and Associated Police Misconduct under Commissioner Tony Fitzgerald, Q.C. The leadership changed three times with M. J. Ahern replacing Sir Joh Bjelke-Petersen and T. R. Cooper taking over to lead the National Party to the poll on 2 December 1989.

The election resulted in the Australian Labor Party, under the leadership of W. K. Goss, being elected to govern Queensland.

4.2.2 The Governor

Sir Walter Campbell, Q.C. was appointed Governor of Queensland on 22 July 1985. He is the twenty-first holder of the office since Queensland was separated from New South Wales. A complete list of Governors, with the date when each assumed office, is as follows:

Sir George Ferguson Bowen, G.C.M.G.	December 1859
Colonel Samuel Wensley Blackall	August 1868
Marquis of Normanby	August 1871
William Wellington Cairns, C.M.G.	January 1875
Sir Arthur Edward Kennedy, G.C.M.G., C.B.	July 1877
Sir Anthony Musgrave, G.C.M.G.	November 1883
Sir Henry Wylie Norman, G.C.B., G.C.M.G., C.I.E.	May 1889
Lord Lamington, G.C.M.G.	April 1896
Sir Herbert Charles Chermiside, G.C.M.G., C.B.	March 1902
Lord Chelmsford, K.C.M.G.	November 1905
Sir William MacGregor, G.C.M.G., C.B.	December 1909
Sir Hamilton John Goold-Adams, G.C.M.G., C.B.	March 1915
Sir Matthew Nathan, P.C.(Ire.), G.C.M.G.	December 1920
Sir John Goodwin, K.C.B., C.M.G., D.S.O.	June 1927
Sir Leslie Wilson, G.C.S.I., G.C.M.G., G.C.I.E., D.S.O.	June 1932
Sir John Lavarack, K.C.M.G., K.C.V.O., K.B.E., C.B., D.S.O.	October 1946
Sir Henry Abel Smith, K.C.M.G., K.C.V.O., D.S.O.	March 1958
Sir Alan James Mansfield, K.C.M.G., K.C.V.O.	March 1966
Sir Colin Thomas Hannah, K.C.M.G., K.B.E., C.B.	March 1972
Commodore Sir James Maxwell Ramsay, K.C.M.G., K.C.V.O., C.B.E., D.S.C.	April 1977
Sir Walter Benjamin Campbell, Q.C.	July 1985

4.2.3 The Legislative Assembly

Since the abolition of the Legislative Council in 1922, the Queensland Parliament, in contrast to the parliaments of all other States, has comprised just one legislative chamber. The Legislative Assembly, after the December 1989 election, consisted of 89 members: Australian Labor Party, 54; National Party, 26 and Liberal Party, 9.

4.2.4 Electoral System

In 1872 adult male suffrage after 6 months' residence was introduced and property qualifications were abandoned. Twenty years later optional preference voting was brought in and from 1905 women could vote. In 1914 voting was made compulsory for the first time in Australia. Preferential voting was replaced by the relative majority ('first past the post') vote in 1942 but it was re-introduced in 1962 and made compulsory, which brought Queensland back into line with all other mainland States and the Commonwealth. In 1973 the voting age was reduced from 21 to 18 years.

In 1910 responsibility for drawing electoral boundaries was given to three appointed electoral commissioners. Until then electoral boundaries had been defined by the government of the day and electorates outside Brisbane, particularly those in outlying parts of the State, had comparatively small enrolments. The 1910 legislation provided for 72 electorates with a permitted variation of 20 per cent above and below the average. In 1931 the size of the Assembly, and consequently the number of electorates, was reduced to 62. As well, stipulations were introduced to make city electorates larger than country electorates.

In 1949 the Assembly was enlarged to 75, and a zonal system was introduced comprising: a metropolitan zone (Brisbane) of 24 members; a south-eastern zone of 28 members; a northern zone with 13 members and a western zone of 10 members. In 1958, when the Assembly was again enlarged to 78 members, the number of zones was reduced to three but with a further enlargement in 1971 to 82, a fourth zone was re-introduced to provide for: a south-eastern zone of 47 members; a provincial cities zone with a total of 13 members; a country zone of 15 members and a western and





4.5 SEATS IN ELECTORAL ZONES, QUEENSLAND

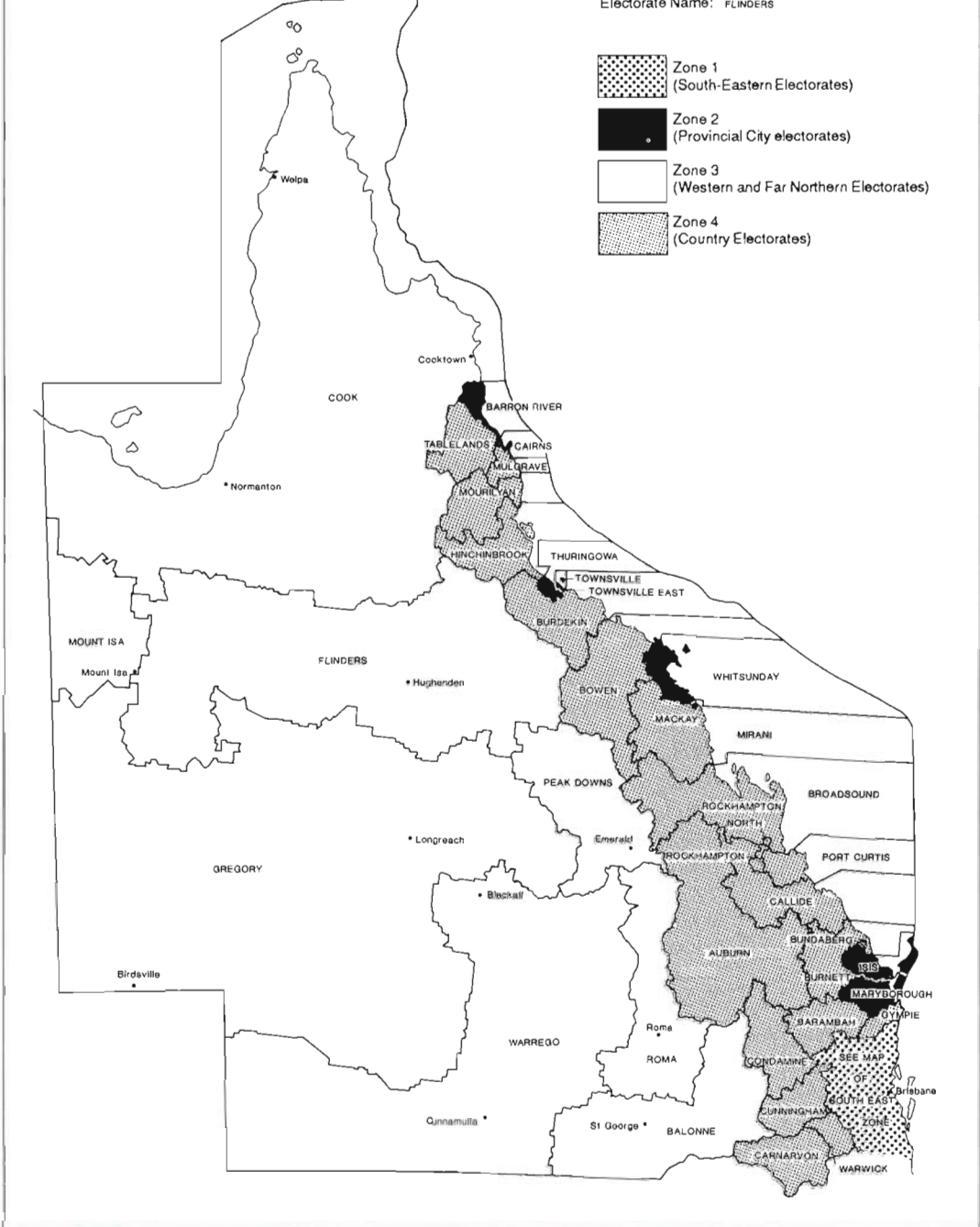
Zone	1971		1985	
	No.	%	No.	%
South-eastern	47	57.3	51	57.3
Provincial cities	13	15.9	13	14.6
Country	15	18.3	17	19.1
Western	7	8.5	8	9.0
Total	82	100.0	89	100.0

QUEENSLAND STATE ELECTORATES

State Electoral Boundaries _____

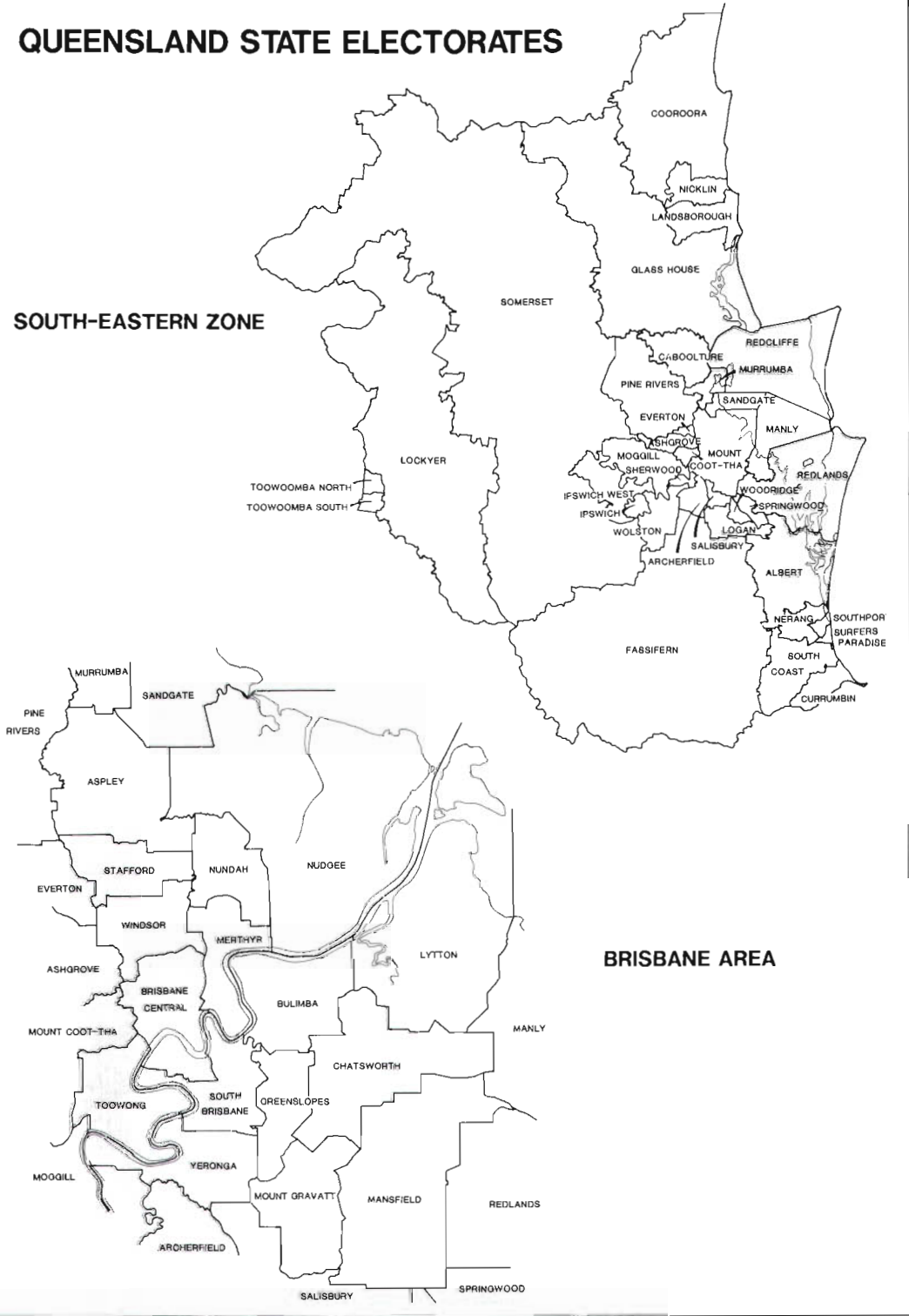
Electorate Name: FLINDERS

-  Zone 1
(South-Eastern Electorates)
-  Zone 2
(Provincial City electorates)
-  Zone 3
(Western and Far Northern Electorates)
-  Zone 4
(Country Electorates)



QUEENSLAND STATE ELECTORATES

SOUTH-EASTERN ZONE



far northern zone electing 7 members. Despite redistributions prior to elections in 1972, 1977 and 1986, the basic system remains that drawn up in 1971. The 1985 redistribution increased the number of members in the Assembly to 89. Although it did respond to changing demographic patterns within the zones, it did not alter the relativity between zones.

4.2.5 The Merthyr By-election

In a by-election on 13 May 1989 in the electorate of Merthyr the Liberal candidate, Santo Santoro, won the seat which had previously been held by Don Lane of the National Party.

4.2.6 State Election, 1989

In a fiercely contested election on 2 December 1989, at which 335 candidates nominated to contest the 89 electorates, a decisive swing gave the Australian Labor Party their first chance to govern since 1957. Their representation increased from 30 seats to 54 thus reducing the number of National Party seats by nearly 47 per cent. Only one seat was lost by the Liberal Party.

4.6 SEATS WON IN QUEENSLAND ELECTIONS

Party	1983	1986	1989
Labor	32	30	54
National	(a) 41	49	26
Liberal	(a) 8	10	9
Other	1	—	—
Total	82	89	89

(a) After the election 2 elected Liberals switched to the National Party, making 43 Nationals and 6 Liberals in the Assembly.

Sources: Prasser, Scott, *The Queensland Liberals, Current Affairs Bulletin*, March 1987, and Queensland Government Gazettes.

4.2.7 The Cabinet and Executive Government

In Queensland, as in other States and the Commonwealth, executive government is based on the system which was evolved in Britain in the 18th century, and which is generally known as 'Cabinet' or 'responsible' government. Its essence is that the head of the State, the Governor, should perform governmental acts on the advice of ministers; that ministers of State should be chosen from members of parliament belonging to the party, or coalition of parties, commanding a majority in the Legislative Assembly; that the ministry, the Cabinet, so chosen should be collectively responsible to that house for the actions and administration of government departments and authorities which have been created to put into practice the laws made by parliament and that the ministry should resign or advise an election if it ceases to command a majority in the Assembly.

The Cabinet at 20 January 1990

Premier, Minister for Economic and Trade Development and Minister for the Arts
Hon. Wayne Keith Goss

Deputy Premier, Minister for Housing and Local Government
Hon. Thomas James Burns

Minister for Police and Emergency Services
Hon. Terence Michael Mackenroth

Treasurer and Minister for Regional Development
Hon. Keith Ernest DeLacy

Minister for Tourism, Sport and Racing
Hon. Robert James Gibbs

Minister for Transport and Minister Assisting the Premier on Economic and Trade Development
Hon. David John Hamill

Minister for Employment, Training and Industrial Relations
Hon. Neville George Warburton

Minister for Resource Industries
Hon. Kenneth Hamilton Vaughan

Minister for Primary Industries
Hon. Edmund Denis Casey

Minister for Health
Hon. Kenneth Victor McElligott

Minister for Education
Hon. Paul Joseph Braddy

Minister for Environment and Heritage
Hon. Patrick Comben

Attorney-General
Hon. Deane McMillan Wells

Minister for Family Services and Aboriginal and Islander Affairs
Hon. Anne Marie Warner

Minister for Justice and Corrective Services
Hon. Glen Richard Milliner

Minister for Administrative Services
Hon. Ronald Thomas McLean

Minister for Manufacturing and Commerce
Hon. Geoffrey Norman Smith

Minister for Land Management
Hon. Andrew George Eaton

Premiers

The present Premier, The Honourable Wayne Keith Goss was sworn in on 7 December 1989 following the general election on 2 December 1989.

Mr Goss was elected to Parliament on 22 October 1983. The former Leader of the Opposition served on both the Standing Orders Committee and the Select Committee on Privilege and had been Opposition Spokesman in many portfolios.

He was born in Mundubbera on 26 February 1951 and is married with a daughter and a son. He obtained his Bachelor of Laws from the University

4.7 VOTES RECORDED AT QUEENSLAND GENERAL ELECTION, 2 DECEMBER 1989

Electoral district	First preference votes recorded						Invalid votes recorded	Total votes recorded
	Australian Labor Party	National Party of Australia	Liberal Party	Australian Democrats	Other parties	Independent		
<i>South-Eastern Zone</i>								
Albert	10,485	7,088	6,677	..	404	..	729	25,383
Archerfield	13,045	1,571	3,082	..	..	..	922	18,620
Ashgrove	9,921	1,244	6,248	..	..	(a) 860	453	18,726
Aspley	9,124	2,973	6,759	..	521	269	470	20,116
Brisbane Central	10,449	1,519	3,322	..	792	..	588	16,670
Bulimba	12,766	2,156	3,792	..	..	..	567	19,281
Caboolture	13,522	2,772	4,629	..	614	(a) 2,272	882	24,691
Chatsworth	11,142	1,833	5,131	..	..	..	503	18,609
Coorooora	11,857	5,629	5,613	..	..	1,561	702	25,362
Currumbin	9,955	4,553	6,767	1,078	..	..	593	22,946
Everton	12,165	1,317	5,909	..	..	..	438	19,829
Fassifern	10,130	7,435	5,186	..	1,170	..	799	24,720
Glass House	11,547	6,558	4,937	563	870	..	1,021	25,496
Greenslopes	10,141	2,302	5,628	..	..	1,037	389	19,497
Ipswich	12,766	..	5,583	..	..	895	461	19,705
Ipswich West	12,534	..	7,600	..	..	..	888	21,022
Landsborough	10,538	10,400	4,465	..	920	..	683	27,006
Lockyer	4,950	9,082	3,819	..	..	(a) 1,422	438	19,711
Logan	16,810	3,139	5,057	..	..	..	1,140	26,146
Lytton	14,237	2,327	3,312	..	..	..	511	20,387
Manly	13,338	3,434	3,931	2,297	234	..	781	24,015
Mansfield	9,298	5,683	4,557	..	..	..	496	20,034
Merthyr	8,659	1,955	7,266	..	..	..	547	18,427
Moggill	7,509	2,245	8,004	..	939	..	338	19,035
Mount Coot-tha	9,439	1,454	5,845	..	476	..	324	17,538
Mount Gravatt	9,673	3,717	5,831	..	..	..	545	19,766
Murrumba	12,223	2,663	4,907	..	..	..	545	20,338
Nerang	10,828	5,832	6,499	..	..	585	918	24,662
Nicklin	9,105	5,779	5,607	337	..	(b) 3,470	754	25,052
Nudgee	11,629	1,927	3,593	..	..	..	533	17,682
Nundah	10,443	1,548	6,201	..	..	..	450	18,642
Pine Rivers	11,281	3,856	(a) 5,381	..	..	(a) 607	598	21,723
Redcliffe	9,862	1,155	7,887	..	..	527	461	19,892
Redlands	11,750	6,024	4,982	978	..	297	534	24,565
Salisbury	13,379	2,762	7,069	..	..	..	647	23,857
Sandgate	12,833	2,171	4,307	..	..	..	587	19,898
Sherwood	9,282	..	10,837	..	..	..	713	20,832
Somerset	7,748	7,338	3,241	..	..	(b) 2,725	751	21,803
South Brisbane	10,075	2,108	3,563	..	..	1,666	622	18,034
South Coast	9,394	6,800	6,820	..	..	1,017	727	24,758
Southport	6,001	5,880	5,708	459	414	..	585	19,047
Springwood	11,436	5,159	5,237	..	..	956	559	23,347
Stafford	9,948	1,723	5,770	855	..	..	416	18,712
Surfers Paradise	4,771	4,962	4,707	..	..	512	467	15,419
Toowong	7,961	1,513	7,417	..	855	..	365	18,111
Toowoomba North	8,649	5,251	4,636	..	..	1,301	470	20,307
Toowoomba South	7,179	8,046	4,357	..	..	..	514	20,096
Windsor	11,468	2,196	4,742	..	..	..	495	18,901
Wolston	13,552	..	6,713	..	..	..	1,474	21,739
Woodridge	12,852	2,063	3,704	..	..	..	912	19,531
Yeronga	11,043	1,798	6,067	..	..	..	418	19,326
<i>Total</i>	<i>540,692</i>	<i>180,940</i>	<i>278,902</i>	<i>6,567</i>	<i>8,209</i>	<i>21,979</i>	<i>31,723</i>	<i>1,069,012</i>

4.7 VOTES RECORDED AT QUEENSLAND GENERAL ELECTION, 2 DECEMBER 1989 — *continued*

<i>Electoral district</i>	<i>First preference votes recorded</i>						<i>Invalid votes recorded</i>	<i>Total votes recorded</i>
	<i>Australian Labor Party</i>	<i>National Party of Australia</i>	<i>Liberal Party</i>	<i>Australian Democrats</i>	<i>Other parties</i>	<i>Independent</i>		
<i>Provincial Cities Zone</i>								
Barron River	10,421	6,040	2,485	..	..	..	705	19,651
Bundaberg	10,155	5,307	1,771	..	299	..	370	17,902
Cairns	9,937	5,855	..	..	..	..	929	16,721
Isis	10,174	4,850	3,758	..	..	4,117	550	23,449
Mackay	9,561	4,715	1,687	..	..	530	489	16,982
Maryborough	8,887	7,163	1,571	..	529	..	419	18,569
Port Curtis	9,016	3,230	..	..	..	(a) 2,371	380	14,997
Rockhampton	9,961	5,639	..	..	..	..	658	16,258
Rockhampton North	11,342	5,931	2,128	..	(a) 1,072	..	490	20,963
Thuringowa	13,513	6,008	4,397	..	..	..	850	24,768
Townsville	9,839	5,171	3,839	..	..	748	663	20,260
Townsville East	11,001	4,482	2,310	..	..	..	555	18,348
Whitsunday	8,385	5,510	3,548	..	..	(a) 1,271	623	19,337
<i>Total</i>	<i>132,192</i>	<i>69,901</i>	<i>27,494</i>	<i>..</i>	<i>1,900</i>	<i>9,037</i>	<i>7,681</i>	<i>248,205</i>
<i>Western and Far Northern Zone</i>								
Balonne	1,706	4,236	..	..	932	686	230	7,790
Cook	4,305	2,208	706	..	..	(b) 2,766	769	10,754
Flinders	4,316	4,315	345	..	..	(a) 573	381	9,930
Gregory	2,857	3,435	364	..	..	(a) 299	225	7,180
Mount Isa	6,689	863	3,666	..	..	..	483	11,701
Peak Downs	3,160	4,232	..	..	971	..	122	8,485
Roma	1,900	5,174	..	..	..	..	265	7,339
Warrego	3,602	3,905	415	..	..	..	177	8,099
<i>Total</i>	<i>28,535</i>	<i>28,368</i>	<i>5,496</i>	<i>..</i>	<i>1,903</i>	<i>4,324</i>	<i>2,652</i>	<i>71,278</i>
<i>Country Zone</i>								
Auburn	4,575	6,290	..	..	..	2,346	257	13,468
Barambah	2,957	6,477	1,733	..	1,625	..	273	13,065
Bowen	7,384	2,596	..	..	..	869	261	11,110
Broadsound	6,170	5,434	634	..	354	1,038	397	14,027
Burdekin	5,002	5,229	2,506	..	..	..	358	13,095
Burnett	4,786	6,584	1,131	..	..	1,618	299	14,418
Callide	6,199	7,363	..	..	..	..	421	13,983
Carnarvon	3,676	4,712	1,481	..	..	(a) 1,528	472	11,869
Condamine	2,967	9,102	..	..	..	..	514	12,583
Cunningham	3,309	7,376	3,742	..	..	..	339	14,766
Gympie	5,376	5,076	1,144	..	147	3,352	463	15,558
Hinchinbrook	5,352	4,238	2,524	..	..	236	355	12,705
Mirani	5,659	5,913	1,093	..	..	..	297	12,962
Mourilyan	6,764	4,103	..	..	..	1,627	377	12,871
Mulgrave	7,350	6,876	..	..	..	..	614	14,840
Tablelands	6,219	6,518	..	..	888	..	500	14,125
Warwick	3,398	4,942	2,030	..	..	1,682	254	12,306
<i>Total</i>	<i>87,143</i>	<i>98,829</i>	<i>18,018</i>	<i>..</i>	<i>3,014</i>	<i>14,296</i>	<i>6,451</i>	<i>227,751</i>
Total	788,562	378,038	329,910	6,567	15,026	49,636	48,507	1,616,246

(a) Two candidates. (b) Three candidates or more.

4.8 MEMBERS OF THE QUEENSLAND LEGISLATIVE ASSEMBLY AT 20 JANUARY 1990

<i>Electoral district</i>	<i>Member</i>	<i>Political party</i>	<i>Electoral district</i>	<i>Member</i>	<i>Political party</i>
<i>South-Eastern Zone</i>			<i>Provincial Cities Zone</i>		
Albert	Szczerbanik, J.	A.L.P.	Barron River	Clark, L. A.	A.L.P.
Archerfield	Palaszczuk, H.	A.L.P.	Bundaberg	Campbell, C. B.	A.L.P.
Ashgrove	Fouras, Hon. D. J.	A.L.P.	Cairns	DeLacy, Hon. K. E.	A.L.P.
Aspley	Goss, J. N.	Liberal	Isis	Nunn, W. G.	A.L.P.
Brisbane Central	Beattie, P. D.	A.L.P.	Mackay	Casey, Hon. E. D.	A.L.P.
Bulimba	McLean, Hon. R. T.	A.L.P.	Maryborough	Dollin, R. H.	A.L.P.
Caboolture	Hayward, K. W.	A.L.P.	Port Curtis	Prest, W. G.	A.L.P.
Chatsworth	Mackenroth, Hon. T. M.	A.L.P.	Rockhampton	Braddy, Hon. P. J.	A.L.P.
Cooroora	Barber, R. D.	A.L.P.	Rockhampton North	Schwarten, R. E.	A.L.P.
Curumbin	Coomber, T. McD.	Liberal	Thuringowa	McElligott, Hon. K. V.	A.L.P.
Everton	Milliner, Hon. G. R.	A.L.P.	Townsville	Davies, K. H.	A.L.P.
Fassifern	Lingard, K. R.	National	Townsville East	Smith, Hon. G. N.	A.L.P.
Glass House	Sullivan, J. H.	A.L.P.	Whitsunday	Bird, L. R.	A.L.P.
Greenslopes	Fenlon, G. B.	A.L.P.	<i>Western and Far Northern Zone</i>		
Ipswich	Hamill, Hon. D. J.	A.L.P.	Balonne	Neal, Hon. D. McC.	National
Ipswich West	Livingstone, D. W.	A.L.P.	Cook	Bredhauer, S. D.	A.L.P.
Landsborough	Ahern, Hon. M. J.	National	Flinders	Katter, Hon. R. C.	National
Lockyer	Fitzgerald, A. A.	National	Gregory	Johnson, V. G.	National
Logan	Goss, Hon. W. K.	A.L.P.	Mount Isa	McGrady, A.	A.L.P.
Lytton	Burns, Hon. T. J.	A.L.P.	Peak Downs	Lester, Hon. V. P.	National
Manly	Elder, J. P.	A.L.P.	Roma	Cooper, T. R.	National
Mansfield	Power, L. J.	A.L.P.	Warrego	Hobbs, H. W. T.	National
Merthyr	Santoro, S.	Liberal	<i>Country Zone</i>		
Moggill	Watson, D. J. H.	Liberal	Auburn	Harper, Hon. N. J.	National
Mount Coot-tha	Edmond, W. M.	A.L.P.	Barambah	Perrett, T. J.	National
Mount Gravatt	Spence, J. C.	A.L.P.	Bowen	Smyth, K. W.	A.L.P.
Murrumba	Wells, Hon. D. McM.	A.L.P.	Broadsound	Pearce, J.	A.L.P.
Nerang	Connor, R. T.	Liberal	Burdekin	Stoneman, M. D.	National
Nicklin	King, R. G.	Liberal	Burnett	Slack, D. J.	National
Nudgee	Vaughan, Hon. K. H.	A.L.P.	Callide	McCaulley, D. E.	National
Nundah	Heath, P. A.	A.L.P.	Carnarvon	Springborg, L. J.	National
Pine Rivers	Woodgate, M. R.	A.L.P.	Condamine	Littleproud, B. G.	National
Redcliffe	Hollis, R. K.	A.L.P.	Cunningham	Elliott, J. A.	National
Redlands	Briskey, D. J.	A.L.P.	Gympie	Stephan, L. W.	National
Salisbury	Ardill, L. A.	A.L.P.	Hinchinbrook	Rowell, M. H.	National
Sandgate	Warburton, Hon. N. G.	A.L.P.	Mirani	Randell, J. H.	National
Sherwood	Innes, J. A. M.	Liberal	Mourilyan	Eaton, Hon. A. G.	A.L.P.
Somerset	Gunn, Hon. W. A. M.	National	Mulgrave	Pitt, F. W.	A.L.P.
South Brisbane	Warner, Hon. A. M.	A.L.P.	Tablelands	Gilmore, T. J. G.	National
South Coast	Quinn, R. J.	Liberal	Warwick	Booth, D. J.	National
Southport	Veivers, M. D.	National	<i>Source: Queensland Government Gazette.</i>		
Springwood	Robson, M. J.	A.L.P.	<div style="border: 1px solid black; padding: 10px;"> <p><i>Speaker: Hon. D. J. Fouras</i> <i>Premier: Hon. W. K. Goss</i> <i>Leader of the Opposition: T. R. Cooper</i></p> </div>		
Stafford	Welford, R. J.	A.L.P.			
Surfers Paradise	Borbidge, R. E.	National			
Toowong	Beanland, D. E.	Liberal			
Toowoomba North	Flynn, J. G.	A.L.P.			
Toowoomba South	Berghofer, C. J.	National			
Windsor	Comben, Hon. P.	A.L.P.			
Wolston	Gibbs, Hon. R. J.	A.L.P.			
Woodridge	D'Arcy, W. T.	A.L.P.			
Yeronga	Foley, M. J.	A.L.P.			



Queensland Cabinet



Hon. W. K. Goss

of Queensland and worked as a solicitor before becoming a politician. He is a former President of the Caxton Street Legal Service and lists his recreational interests as reading, films, music, running, law reform and photography.

4.9 QUEENSLAND PREMIERS FROM 1920

Premier	Appointed
Theodore, E. G.	22.10.19
Gillies, W. N.	26.2.25
McCormack, W.	22.10.25
Moore, A. E.	21.5.29
Forgan Smith, W.	17.6.32
Cooper, F. A.	16.9.42
Hanlon, E. M.	7.3.46
Gair, V. C.	17.1.52
Nicklin, G. F. R.	12.8.57
Pizzey, J. C. A.	17.1.68
Chalk, G. W. W.	1.8.68
Bjelke-Petersen, Sir Johannes	8.8.68
Ahern, M. J.	1.12.87
Cooper, T. R.	22.9.89
Goss, W. K.	7.12.89

4.3 LOCAL GOVERNMENT

There are three classes of local authorities in Queensland. At 30 June 1989, 20 city councils, including Brisbane, controlled the more important urban areas and 3 other urban areas were controlled

by town councils. The rest of the State was administered by 111 shire councils. On 18 February 1989 the Shire of Proserpine was renamed Shire of Whitsunday.

Local authorities exercise those powers granted to them by statute, chiefly by the Local Government Act (City of Brisbane Act in the case of Brisbane), and also by other Acts conferring specific powers not covered by the principal Act. The Local Government Act, which prescribes the standards to be maintained by local authorities, is administered by the Department of Local Government.

All council by-laws must be approved by the Governor in Council, after which they have the force of law. Each authority must prepare a budget showing receipts and expenditure for the ensuing year and their accounts are audited by the Queensland Auditor-General or by an auditor appointed by the Auditor-General.

Apart from roads declared under the Main Roads Act, local authorities are responsible for the construction and maintenance of all roads, streets, footpaths etc. within their areas. Declared roads are the responsibility of the State Government, through the Department of Main Roads.

In Queensland, the provision of water, sewerage and other cleansing services is generally undertaken by local government. Facilities for recreational activities, including public parks and gardens, sporting venues and libraries are also maintained. Many authorities support local museums, have built cultural centres and have commissioned the publication of official shire histories.

Local authorities are largely responsible for the control of building in their areas and are responsible for the administration of the Standard Building By-laws which specify certain minimum standards to be observed. In recent years authorities have become increasingly involved in environmental problems such as town planning, beach protection and anti-litter measures.

4.4 REFERENCES

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Chapter 5

THE QUEENSLAND ECONOMY

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Chapter 5

THE QUEENSLAND ECONOMY

Agriculture and mining provided the original base for the development of the Queensland economy. Although the relative importance of these industries has since declined, they continue to make a strong contribution, especially in earning export income.

In recent years the manufacturing sector has diversified into higher value-added, high technology industries. The fast-growing services sector in Queensland covers a wide variety of activities such as construction, wholesale and retail trade, transport and communications, and business and financial services. The tourism industry, in particular, has experienced strong growth based on climatic advantages and the State's many natural attractions.

In the early days of settlement, grains, wool and beef were the main agricultural industries. These activities remain important but have been supplemented by a large range of other agricultural industries including sugar cane, tropical and citrus fruits, dairy products, vegetables, cotton, livestock and tobacco.

Mining of minerals such as gold, copper, lead and zinc began early in the State's history. During the 1960s and 1970s, some of the world's largest deposits of coal and bauxite were discovered. The acceleration of mineral production and processing during the 1970s and early 1980s was a significant stimulus for the expansion of the Queensland economy.

During the 1980s tourism expanded in Queensland, with visitors to the State from both interstate and overseas reaching a peak in 1988 with the staging of World Expo 88 in Brisbane.



5.1 ECONOMIC INDICATORS

Various economic indicators show that, over the last 5 years, the Queensland economy has performed strongly across a broad range of activities.

Queensland makes an important contribution to the Australian economy as a whole. Compared with its population share, economic indicators show that Queensland is making a substantial contribution

to Australia's economic performance in areas such as employment growth, agriculture, tourism and residential building activity.

Queensland's trade with overseas countries and with other States and Territories has grown strongly during the 1980s. The value of foreign exports has increased at an average annual rate of 11.3 per cent and interstate exports by 12.2 per cent a year over the 5 years ending 1988-89. The growth in imports has been stronger however, with foreign imports rising by an average 13.3 per cent a year and interstate imports by 12.0 per cent a year over the same

5.1 SELECTED ECONOMIC INDICATORS, QUEENSLAND

Particulars	1983-84	1987-88	1988-89	Percentage change (a)
Retail turnover (\$m)	7,704	11,301	12,907	+10.9
<i>Proportion of Australia (%)</i>	15.2	15.9	16.8	..
Manufacturing turnover (\$m)	11,707	17,255	n.a.	(b) +10.2
<i>Proportion of Australia (%)</i>	13.2	12.9	n.a.	..
Private new capital expenditure (\$m)	2,669	3,394	3,350	+4.6
<i>Proportion of Australia (%)</i>	18.5	14.1	12.2	..
Household income (\$m)	22,894	33,700	n.a.	+10.1
<i>Proportion of Australia (%)</i>	14.7	14.2	n.a.	..
Mineral production (\$m)	2,473	4,107	p 4,609	+13.3
Agricultural production (\$m)	3,119	3,935	p 4,548	+7.8
<i>Proportion of Australia (%)</i>	20.2	19.5	p 19.9	..
New dwelling units approved (No.)	33,531	35,274	47,116	+7.0
<i>Proportion of Australia (%)</i>	22.2	23.3	25.3	..
Takings from tourist accommodation (c) (\$m)	173	415	519	+24.6
<i>Proportion of Australia (%)</i>	20.8	24.5	25.2	..
Employment (d) ('000)	1,027	1,194	1,284	..
<i>Proportion of Australia (%)</i>	15.8	16.2	16.6	..
Unemployment rate (d) (%)	9.2	7.9	6.5	..
<i>Unemployment rate for Australia (d) (%)</i>	8.9	7.2	5.8	..

(a) Average annual change over a 5-year period. (b) Average annual change over the 4-year period to 1987-88. (c) Hotels, motels etc. with facilities. (d) June survey figures.

Sources: Retail Trade (8501.0), Manufacturing Industry (8203.0), State Estimates of Private New Capital Expenditure (5646.0), Australian National Accounts (5220.0), Mineral Production (8405.0), Value of Agricultural Commodities Produced (7503.0), Tourist Accommodation (8635.0), The Labour Force (6203.0).

period. Interstate imports accounted for 69.5 per cent of total imports into the State during this time.

5.2 EXPORTS AND IMPORTS, QUEENSLAND (\$m)

Year	Exports		Imports	
	Foreign	Interstate	Foreign	Interstate
1983-84	5,559	2,058	2,087	4,767
1984-85	6,603	2,136	2,316	5,094
1985-86	7,737	2,465	2,650	5,899
1986-87	7,928	2,857	2,504	6,056
1987-88	8,290	3,177	2,844	6,721
1988-89	9,432	3,637	3,788	8,318

Source: Interstate and Foreign Trade (8502.3).

Consumer prices in Brisbane as measured by the Consumer Price Index (CPI), increased more slowly than prices in the other capital cities of Australia.

During the 5-year period ending December 1989, consumer prices increased by 45.0 per cent in Brisbane, (7.7 per cent a year) as compared with an average increase of 47.7 per cent (8.1 per cent a year) for all Australian capital cities over the same period.

5.3 CONSUMER PRICE INDEX

December quarter	Brisbane		All capital cities (a)	
	Index No.	Percentage change	Index No.	Percentage change
1984	136.5	..	135.9	..
1985	147.5	+8.1	147.1	+8.2
1986	160.7	+8.9	161.5	+9.8
1987	171.5	+6.7	172.9	+7.1
1988	183.7	+7.1	186.2	+7.7
1989	197.9	+7.7	200.7	+7.8

(a) Weighted average of the eight capital cities.

5.2 ECONOMIC STRUCTURE

Over the past 20 years, there have been significant changes in the structure of the Queensland economy with the mining and services sectors growing in importance in relation to the agricultural sector. Nevertheless, the agricultural sector still constitutes an important part of the Queensland economy.

Queensland's agricultural sector accounts for around 7 per cent of Gross State Product (GSP), 7 per cent of employment in the State and 20 per cent of agricultural production in Australia.

Approximately 2 per cent of employment in the State, 9 per cent of GSP and 25 per cent of national mineral production comes from the mining sector.

The manufacturing sector is responsible for around 14 per cent of GSP, 12 per cent of employment in the State and 13 per cent of the value of goods manufactured in Australia. Construction accounted for 9 per cent of GSP and 9 per cent of employment in the State. Wholesale and retail trade is responsible for 13 per cent of GSP and 22 per cent of employment in Queensland.

During the 5-year period between November 1984 and November 1989, the number of persons employed in Queensland increased by 311,800 (30.8 per cent), representing an annual increase of 5.5 per cent. The most substantial increases were in wholesale and retail trade where employment increased by 72,800. Recreation, personal and other services employment increased by 52,500. There

were increases of 48,800 persons employed in community services and 40,100 in finance, property and business services. In percentage terms the largest increases were in recreation, personal and other services (75 per cent), construction (49 per cent), mining (49 per cent) and finance, property and business services (46 per cent).

5.4 GROSS STATE PRODUCT, QUEENSLAND, 1986-87

Sector	Value	Per cent
	\$m	
Agriculture, forestry and fishing	2,301	6.7
Mining	2,951	8.6
Manufacturing	4,638	13.5
Electricity, gas and water	1,476	4.3
Construction	2,940	8.6
Wholesale and retail trade	4,544	13.3
Transport, storage and communication	3,199	9.3
Finance, property and business services	1,962	5.7
Public administration, defence and community services	5,209	15.2
Recreational, personal and other services	1,345	3.9
Ownership of dwellings	2,779	8.1
General government	930	2.7
Total	34,274	100.0

Source: Australian National Accounts: State Accounts (5220.0).

In November 1984 there were 58 females employed for every 100 employed males in Queensland. By November 1989 this ratio had increased to 69 females for every 100 males.

Tourism is one of the fastest growing sectors in the Queensland economy. In the 5 years to 30 June 1989 the number of bed spaces available in hotels and motels with facilities had grown by 64 per cent to almost 109,000 bed spaces. The annual number of guest nights provided increased by more than 71 per cent during this 5-year period, representing annual increases of 11.2 per cent. Accommodation charges increased by 76 per cent per guest night during this time, resulting in total takings increasing from \$173.4m in 1983-84 to \$519.2m in 1988-89, an increase of 199 per cent over the 5 years.

5.5 EMPLOYED PERSONS, QUEENSLAND ('000)

Industry	November 1984	November 1989	Change (per cent)
Agriculture, forestry, fishing and hunting	94.1	93.9	-0.2
Mining	18.3	27.3	+49.2
Manufacturing	127.0	164.2	+29.3
Construction	78.6	116.7	+48.5
Wholesale and retail trade	222.0	294.8	+32.8
Transport and storage	60.9	75.9	+24.6
Finance, property and business services	87.1	127.2	+46.0
Community services	170.7	219.5	+28.6
Recreation, personal and other services	69.8	122.3	+75.2
Other	83.1	81.4	-2.0
Total	1,011.5	1,323.3	+30.8

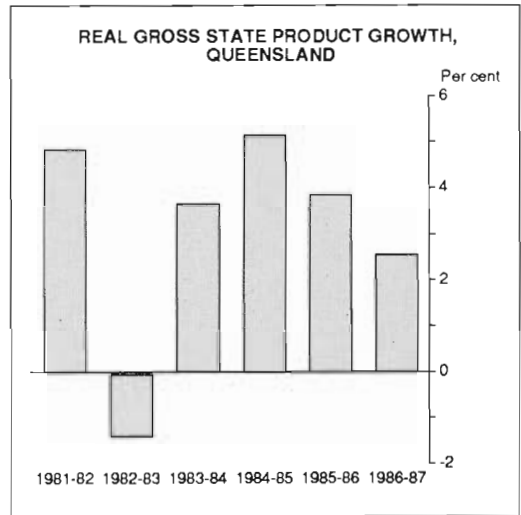
Source: The Labour Force (6201.3).

In addition to hotels and motels, holiday units, flats and houses available for commercial letting in Queensland provided almost 58,000 bed spaces at 30 June 1989 with takings from accommodation of \$150.5m during 1988-89.

5.3 ECONOMIC GROWTH

Queensland's economy has grown strongly for most of the past decade.

In the period 1981-82 to 1986-87, Queensland's GSP has grown in real terms by 14.6 per cent. This represents an average annual compound growth rate of 2.8 per cent. Growth in real terms is indicated when GSP is expressed in terms of constant prices. Over the period 1981-82 to 1986-87, Australia's Gross Domestic Product (GDP) grew in real terms by 17.2 per cent, representing an average annual compound growth rate of 3.2 per cent.



5.6 GROSS STATE PRODUCT AT FACTOR COST, QUEENSLAND

Year	Current prices	Percentage change	Constant prices (a)	Percentage change
	\$m		\$m	
1981-82	20,903	..	26,096	..
1982-83	22,765	+8.9	25,723	-1.4
1983-84	25,266	+11.0	26,680	+3.7
1984-85	28,060	+11.1	28,060	+5.2
1985-86	31,144	+11.0	29,161	+3.9
1986-87	34,274	+10.1	29,908	+2.6
Total change	..	+64.0	..	+14.6
Average annual change	..	+10.4	..	+2.8

(a) Constant 1984-85 prices adjusted using GDP deflator.
Sources: Australian National Accounts: National Income and Expenditure (5206.0) and State Accounts (5220.0).

Much of this growth has been generated by the expansion and development of mining and mineral processing, tourism and the increased demand arising from the migration of people from interstate. Queensland's strong economic growth is reflected in major economic aggregates such as consumption and investment.

5.4 ECONOMIC ACTIVITY

Indicators such as retail turnover, motor vehicle registrations, building approvals and sales of residential dwellings reflect the high rates of economic activity in Queensland over most of the 1970s and 1980s.

5.4.1 Retail Trade

In 1988-89, the estimated value of retail turnover in Queensland was \$12,907m and accounted for 16.8 per cent of the total value of retail turnover in Australia. In the 5 years to 1988-89, retail turnover in Queensland increased in nominal terms by 68 per cent, representing an average annual growth rate of just under 11 per cent.



5.4.2 House Price Indexes

Estimates of changes in established house prices and project home prices in Brisbane show that price rises peaked in June quarter 1989 and increases have since eased on a gradual basis. On a quarter-to-quarter basis, prices of established houses increased by 9.2 per cent in December quarter 1988 but the increase was down to 2.8 per cent in December quarter 1989. Project house prices increased by 6.2 per cent in December quarter 1988 and by 1.5 per cent in December quarter 1989.

5.7 HOUSE PRICE INCREASES (per cent)

Year	Brisbane	Australia
ESTABLISHED HOUSE PRICES		
1987	5.9	9.0
1988	24.9	32.9
1989	17.1	10.6
PROJECT HOME PRICES		
1987	7.4	5.8
1988	22.2	18.7
1989	14.7	11.2

Source: House Price Indexes (6416.0).

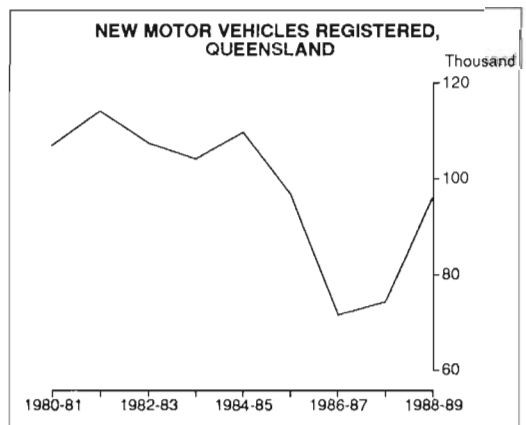
5.4.3 Dwelling Unit Approvals

After reaching a 10-year low in 1986-87, dwelling unit approvals in Queensland have risen dramatically over the past 2 years. The total number of dwelling units approved for new residential building in Queensland in 1988-89 was 47,116. This compares with 35,274 in 1987-88 and 22,498 in 1986-87.

Of particular significance is the recent increase in dwelling unit approvals in Queensland relative to the rest of Australia. In 1986-87 Queensland accounted for 18.6 per cent of all approvals. This rose to 23.3 per cent in 1987-88 and 25.3 per cent in 1988-89.

5.4.4 Motor Vehicle Registrations

The number of new motor vehicles registered in Queensland during 1988-89 was 96,665, accounting for 17.0 per cent of total new motor vehicle registrations in Australia.



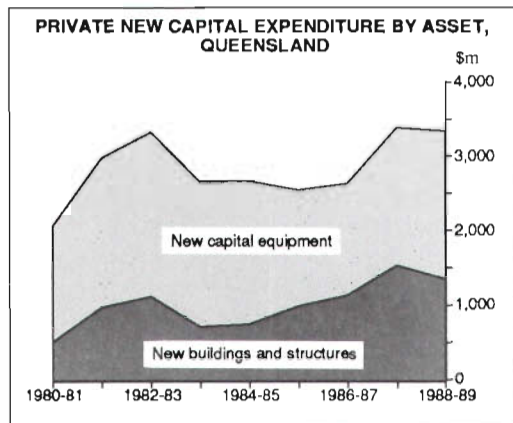
Motor vehicle registrations at both the State and national levels have fluctuated widely over the last 10 years. After reaching a peak of 114,384 in 1981-82, motor vehicle registrations in Queensland

declined to a low of 70,946 in 1986-87 before recovering to 96,665 in 1988-89, an increase of 30.9 per cent compared to the total for the previous year.

5.5 INVESTMENT

5.5.1 Private New Capital Expenditure

New capital expenditure investment in the private sector in Queensland in 1988-89 totalled \$3,350m which was a decrease of 1.3 per cent from the expenditure for the previous year. Investment in new buildings and structures decreased by 12.0 per cent to \$1,366m while investment in equipment, plant and machinery increased 7.7 per cent to \$1,984m.



5.8 PRIVATE NEW CAPITAL EXPENDITURE, QUEENSLAND

Particulars	1987-88	1988-89	Percentage change
	\$m	\$m	
Industry			
Finance, property and business services	952	898	- 5.7
Mining	327	465	+ 42.2
Manufacturing	755	747	- 1.1
Other selected industries	1,360	1,240	- 8.8
Total	3,394	3,350	- 1.3
Asset			
New buildings	1,552	1,366	- 12.0
Equipment, plant and machinery	1,842	1,984	+ 7.7

Source: State Estimates of Private New Capital Expenditure (5646.0).

All sectors showed decreases in private new capital expenditure in Queensland during 1988-89 with the exception of the mining sector, which accounted for 13.9 per cent of the total. Expenditure in the finance, property and business services sector accounted for 26.8 per cent, the

manufacturing sector for 22.3 per cent, while other selected industries accounted for the remaining 37.0 per cent.

5.5.2 State Government Gross Fixed Capital Expenditure

5.9 EXPENDITURE ON NEW FIXED ASSETS BY STATE GENERAL GOVERNMENT, QUEENSLAND

Particulars	Value	Percentage change
	\$m	
1983-84	756	..
1984-85	857	+ 13.4
1985-86	1,031	+ 20.3
1986-87	1,004	- 2.6
1987-88	832	- 17.1
1988-89	940	+ 13.0
1989-90 (estimate)	1,159	+ 23.3
Total change	..	+ 53.3
Average annual change	..	+ 7.4

Source: Government Financial Estimates (5501.0).

Expenditure on new fixed assets by the State general government sector (excluding public trading enterprises) was estimated at \$1,159m in 1989-90, representing 19.7 per cent of such expenditure of all State Governments in that year. In the 5 years to 1989-90, the estimated expenditure increased by 53.3 per cent. This represented an average annual increase of 7.4 per cent for the entire period. However, expenditure declined in 1987-88.

5.6 BUSINESS IN QUEENSLAND

Excluding the agricultural sector, there were 112,707 businesses which employed staff, operating from 138,305 locations throughout Queensland in July 1989. Most businesses were in the wholesale and retail trade sector which accounted for 34 per cent. The construction sector had 19 per cent of all business with the finance, property and business sector providing 14 per cent of the total.

5.10 BUSINESSES AND LOCATIONS BY INDUSTRY DIVISION (a), QUEENSLAND, JULY 1989

Industry division	Businesses	Locations
Mining	571	872
Manufacturing	7,201	8,366
Electricity, gas and water	167	560
Construction	21,086	21,567
Wholesale and retail trade	38,766	45,900
Transport and storage	7,948	9,905
Communication	58	1,146
Finance, property and business services	16,032	20,197
Public administration and defence	197	1,075
Community service	7,730	14,086
Recreation, personal and other services	12,951	14,631
Total	112,707	138,305

(a) Excluding agriculture.

Most businesses are small with 110,362 of them (97.9 per cent) having fewer than 20 employees and only 146 employing 200 or more employees.

Businesses in the personal services industries employed more than 56,000 persons at 30 June 1987 and had a turnover totalling over \$2,500m in 1986-87.

5.11 SELECTED PERSONAL SERVICES INDUSTRIES, QUEENSLAND, 1986-87

Industry	Persons employed at 30 June	Turnover (\$m)
Hotels etc. (mainly drinking places)	16,992	1,184
Licensed clubs	4,632	230
Cafes and restaurants	12,140	352
Accommodation	11,442	495
Travel agency services	1,412	52
Motor vehicle hire	674	n.a.
Hairdressers and beauty salons	6,664	138
Laundries and dry cleaners	1,649	45
Photography services	656	27
Motion picture theatres	667	35

Source: Selected Tourism and Personal Service Industries, Summary of Operations, Preliminary (8650.0).

There were more than 43,000 persons employed in professional and business services industries in Queensland at 30 June 1988. Businesses in these industries had turnover totalling more than \$2,200m in 1987-88.

5.12 SELECTED PROFESSIONAL AND BUSINESS SERVICES, QUEENSLAND, 1987-88

Industry	Persons employed at 30 June	Turnover (\$m)
Legal	10,093	474
Accounting	6,556	278
Real estate agents	5,296	384
Architectural	2,415	113
Surveying	1,882	74
Engineering and technical	4,895	282
Computing	1,722	94
Advertising	1,688	392
Debt collecting etc.	290	15
Pest control	463	19
Cleaning	5,368	69
Security/protection and services n.e.c.	2,725	88

Source: Professional and Business Services, Summary (8662.0).

5.7 REFERENCES

ABS publications produced by the Queensland Office:

Monthly Summary of Statistics (1304.3), monthly
Queensland in Relation to Australia (1305.3), annual

Economic Indicators (1307.3), monthly

The Labour Force (6201.3), quarterly

Tourist Accommodation (8635.3), quarterly

Motor Vehicle Registrations (9303.3), monthly

ABS publications produced by the Canberra Office:

Australian National Accounts: National Income and Expenditure (5206.0), quarterly

Australian National Accounts: State Accounts (5220.0), annual

Exports (5434.0), quarterly

Imports (5435.0), quarterly

Government Financial Estimates (5501.0), annual

State Estimates of Private Capital Expenditure (5646.0), quarterly

The Labour Force (6203.0), monthly

Consumer Price Index (6401.0), quarterly

House Price Indexes (6416.0), quarterly

Value of Agricultural Commodities Produced (7503.0), annual

Manufacturing Industry: Details of Operations by Industry Class (8203.0), annual

Mineral Production (8405.0), annual

Retail Trade (8501.0), monthly

Tourist Accommodation (8635.0), quarterly

Selected Tourism and Personal Service Industries, Summary of Operations, Preliminary (8650.0), irregular

Professional and Business Services, Summary Statistics (8662.0), irregular

Other publications:

Queensland Department of the Valuer-General, *Annual Report and Queensland Real Estate Market Report*

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FINANCE

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Chapter 6

FINANCE

The financial transactions and regulations of government affect the lives of most people while private financial institutions play their part in community development.

6.1 PUBLIC FINANCE

In Australia the collection of public revenue and expenditure of public moneys are undertaken by three levels of government, Commonwealth, State and local governments.

The Constitution setting out the structure of the federal system gave the central government power to impose all forms of taxation but not to discriminate between the States. The States were given concurrent powers but were excluded from collecting customs and excise duties. This was later interpreted to include virtually all forms of sales or other indirect taxes on goods.

Under Section 96, the Constitution also empowered the Commonwealth to grant financial assistance to any State. This was later interpreted to enable the central government to provide both general purpose payments to the States and specific purpose payments to achieve particular policy objectives.

The Commonwealth Grants Commission was established to consider applications by the States for special assistance. It has since been responsible for recommending the percentage of general purpose grants to be paid to each State.

During World War II, the Uniform Tax Scheme was introduced. This has generally excluded States from collecting individual and company income taxes in return for the Commonwealth providing general purpose assistance to the States. In the 1987-88 year, total grants paid by the Commonwealth to the States, the Northern Territory and local government amounted to \$23,800.3m, that is 40.6 per cent of those governments' receipts. The corresponding value of grants paid by the Commonwealth in 1986-87 was \$22,579.8m or 40.2 per

6.1 STATE AND LOCAL GOVERNMENT: OUTLAYS AND RECEIPTS, QUEENSLAND (\$m)

<i>Economic type</i>	<i>1986-87 r</i>	<i>1987-88</i>
OUTLAYS		
<i>Current outlays</i>	<i>6,123.1</i>	<i>6,562.7</i>
General government final consumption expenditure	4,204.8	4,495.3
Interest paid	1,537.6	1,660.7
Subsidies paid	71.3	66.2
Personal benefit payments	78.8	93.3
Current grants	226.7	241.9
Other	3.8	5.2
<i>Capital outlays</i>	<i>3,021.1</i>	<i>2,550.4</i>
Expenditure on new fixed assets	2,768.3	2,506.1
Expenditure on second-hand fixed assets (net)	-29.0	-34.3
Increase in stocks	67.7	16.0
Expenditure on land and intangible assets (net)	-35.6	-77.1
Capital transfer payments	20.3	31.5
Advances paid (net)	229.5	108.1
Total outlays	9,144.2	9,113.1
RECEIPTS		
<i>Revenue and grants received</i>	<i>8,043.4</i>	<i>8,958.3</i>
Taxes, fees and fines	2,003.9	2,449.4
Net operating surpluses of public trading enterprises	1,001.8	1,208.4
Property income	1,125.3	1,141.8
Other revenue	130.0	152.4
Current grants	3,222.8	3,485.1
Capital grants	559.4	521.3
<i>Financing transactions</i>	<i>1,100.9</i>	<i>154.8</i>
Advances received (net)	73.4	-23.3
Net borrowing	1,061.9	440.6
Deposits received (net)	0.1	-0.5
Decrease in investments	-262.2	-239.9
Decrease in currency and deposits	-80.3	-364.0
Increase in provisions	286.8	273.7
Other funds available (net), including errors and omissions	21.2	68.2
Total receipts	9,144.2	9,113.1

Source: State and Local Government Finance (5504.0).

cent of total State, Northern Territory and local government receipts.

Total receipts of all State and local government authorities including the Northern Territory in 1987-88 were \$58,611.7m, an increase of 4.4 per cent over those of the previous year. Queensland's receipts were \$9,097.0m for this period.

6.2 STATE GOVERNMENT FINANCE

Government authorities are classified into two sectors, budget and non-budget. The budget sector consists of those authorities whose day-to-day financial transactions are recorded in the public accounts (i.e. revenue, loan, trust and special funds maintained by the government). The non-budget sector comprises those authorities whose day-to-day financial transactions and financial balances are held with financial enterprises in their own name, independent of the public accounts. Public financial institutions, such as government banks and insurance offices are excluded from the following government finance statistics.

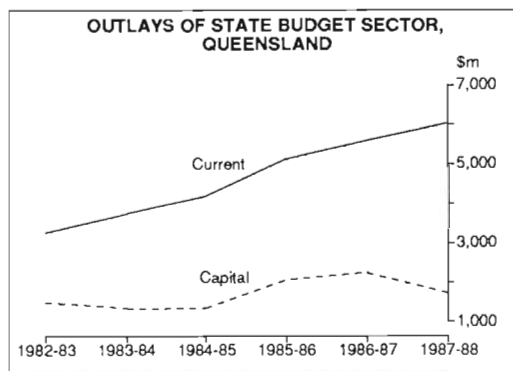
Restructuring of the public sector may adjust the balance of activities between the sectors. Of particular note are the Agricultural Bank and Rural Reconstruction Board (both budget sector). These authorities have ceased operations and from 1 July 1986 their activities have been assumed by the Queensland Industry Development Corporation. The Queensland Treasury Corporation absorbed the functions of the Queensland Government Development Authority on 1 July 1988 and inter alia acts as a financial institution for the State and its statutory authorities. Its main functions are to borrow money or obtain financial accommodation on behalf of the State and its statutory authorities and provide a medium for the investment of funds of those bodies. The expanded activity of the Queensland Treasury Corporation has encouraged the restructuring of the debt of authorities in both budget and non-budget sectors.

6.2.1 Budget Sector

Outlays

In 1987-88 total outlays by the budget sector were \$7,773.3m. This compares with \$7,842.4m in the previous year.

Current Outlays. Education accounted for 29.8 per cent of total current outlays with primary and secondary education (\$1,106.3m) and tertiary education (\$460.6m) being the major components. Expenditure on health at 17.4 per cent of the total was also a significant item of which hospitals and other institutional services was the major component. Public debt transactions represented a further 23.1 per cent of total current outlays.



6.2 BUDGET SECTOR: CURRENT OUTLAYS BY PURPOSE, QUEENSLAND (\$m)

Purpose	1986-87 r	1987-88 p
General public services	313.8	355.2
Public order and safety	433.9	458.6
Education	1,739.2	1,800.5
Health	957.5	1,050.4
Social security and welfare	160.2	183.5
Housing and community amenities	8.5	10.0
Recreation and culture	83.2	84.2
Fuel and energy	6.1	13.5
Agriculture, forestry, fishing and hunting	192.9	197.8
Mining, manufacturing and construction	28.4	34.8
Transport and communications	217.0	238.0
Other economic affairs	82.9	93.0
Other purposes		
Public debt transactions	1,259.3	1,395.2
General purpose intergovernment transfers	98.8	107.1
Other (including natural disaster relief)	10.2	17.4
Total	5,592.0	6,039.3

Source: Government Finance (5503.3).

6.3 BUDGET SECTOR: CAPITAL OUTLAYS BY PURPOSE, QUEENSLAND (\$m)

Purpose	1986-87 r	1987-88 p
General public services	65.5	55.1
Public order and safety	29.2	61.5
Education	215.1	159.4
Health	39.6	31.7
Social security and welfare	4.1	5.1
Housing and community amenities	191.2	165.2
Recreation and culture	58.8	55.4
Fuel and energy	429.7	218.3
Agriculture, forestry, fishing and hunting	298.5	94.8
Mining, manufacturing and construction	11.3	50.5
Transport and communications	786.6	649.4
Other economic affairs	79.5	165.9
Other purposes	41.3	21.9
Total	2,250.5	1,734.0

Source: Government Finance (5503.3).

Capital Outlays. Transport and communications accounted for 37.5 per cent of total capital outlays, of which expenditures on road transport (\$310.1m) and rail transport (\$300.8m) were the major components. Outlays on fuel and energy (12.6 per cent) and education (9.2 per cent), were the other main items of capital outlays.

Receipts

Grants from the Commonwealth Government comprised 51.3 per cent of Queensland's budget sector receipts during 1987-88. These may be classified as general purpose payments or specific purpose payments, each of which can be further classified into those of a revenue (current) nature and those of a capital nature.

General purpose payments are designed to assist States chiefly to finance their current outlays in providing services such as education, health, law and order etc. The States are free to determine the allocation of these payments in accordance with their budgetary priorities.

The Financial Assistance Grant is the main general purpose grant made by the Commonwealth to the States. The amount for 1987-88 was set at \$11,756.1m. Financial Assistance Grants are distributed among the States in accordance with the per capita relativities recommended by the Commonwealth Grants Commission.

The Queensland entitlement for 1987-88 was \$2,414.3m, an increase of 9.4 per cent over the amount provided in 1986-87.

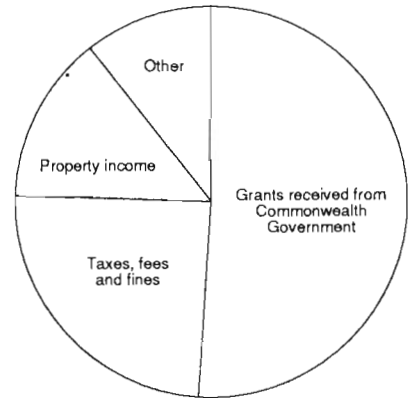
6.4 BUDGET SECTOR: RECEIPTS BY ECONOMIC TYPE, QUEENSLAND (\$m)

<i>Economic type</i>	1986-87 r	1987-88 p
<i>Revenue and grants received</i>	6,854.6	7,769.6
Taxes, fees and fines	1,503.4	1,899.3
Net operating surpluses of public trading enterprises	509.5	729.5
Property income	1,012.0	1,073.9
Other revenue	55.0	73.0
Grants received from the Commonwealth Government		
Current purposes	3,213.0	3,473.7
Capital purposes	557.8	516.9
Other grants	4.0	3.3
<i>Financing transactions</i>	987.8	3.7
Advances from the Commonwealth Government	73.4	-23.3
Net borrowing	1,022.4	416.4
General government	213.6	33.9
Public trading enterprises	808.8	382.5
Deposits received (net)	-0.2	0.1
Decrease in investments	-254.6	-276.1
Decrease in currency and deposits	-15.0	-279.9
Increase in provisions	168.0	174.3
Other funds available (net), including errors and omissions	-6.2	-7.8
Total	7,842.4	7,773.3

Source: Government Finance (5503.3).

The level of Financial Assistance Grants for the 1988-89 year has been reviewed to take into account a new method of hospital funding and the inclusion of the Northern Territory in the distribution. Also the States' revenue raising base was broadened from 1 July 1988 as government business enterprises are no longer exempt from payroll tax assessment. Since 1981-82 identified health grants have been paid to the States, representing one general purpose grant identifiable as the Commonwealth contribution towards the cost of health programs instead of the separate cost-related grants previously made to them in respect of public hospitals, community health and school dental services. Queensland received \$139.3m in 1987-88, an increase of 9.7 per cent over the amount provided in the previous year. From 1 July 1988 a new program of hospital funding grants replaced the identified health grants and Medicare compensation grants.

RECEIPTS BY ECONOMIC TYPE, BUDGET SECTOR, QUEENSLAND, 1987-88



The amount of the Financial Assistance Grants proposed in the Commonwealth Budget for 1989-90 is intended to maintain the same real value as in 1988-89 except that the base level of grants will be reduced by \$550m as a contribution to the Government's commitment to reduce expenditure and a further \$45m used to fund special assistance to the Northern Territory. Further adjustments have been made to reflect increased payroll tax receipts from government business enterprises. For 1988-89 and 1989-90 the total value of grants for the States and the Northern Territory was fixed at \$12,405.0m and \$12,779.4m, respectively. Queensland's share of these amounts is \$2,233.4m and \$2,415.3m, respectively.

General purpose financial assistance has been provided by the Commonwealth to the States for passing to local authorities since 1974-75. The level of funding for 1987-88 was determined by increasing the previous year's allocation by the greater of Consumer Price Index movements and percentage

change in general purpose payment to the States. Queensland received \$106.8m in 1987-88, an increase of 9.2 per cent over the allocation for 1986-87. Of the \$675.3m expected to be distributed to the States for this purpose in 1989-90, Queensland has been allocated \$114.6m.

The Commonwealth has provided the States with general purpose capital assistance under the State Governments' Loan Council programs. In recent years, these programs have included grants and loans of a general purpose nature with a proportion of the loans being nominated for housing.

In 1985 the Loan Council adopted a 'global approach' to the oversight of borrowings. Under this arrangement, the State Governments were asked to voluntarily limit the level of new money borrowings by their authorities from all sources to the 'global limits' agreed by the Loan Council. The States are free to distribute the 'global total' among their authorities according to their priorities.

6.5 COMMONWEALTH PAYMENTS TO OR FOR QUEENSLAND STATE AUTHORITIES FOR CURRENT PURPOSES (\$m)

Purpose	1986-87	1987-88
General public services and public order and safety	r 11.9	13.4
Education	549.8	572.8
Health	91.5	102.4
Social security and welfare	21.5	31.6
Fuel and energy	5.1	12.9
Agriculture, forestry, fishing and hunting	55.0	31.6
Transport and communications	0.2	0.6
Other economic affairs	r 35.1	18.8
Other purposes		
Financial assistance grants	2,206.0	2,414.3
Identified health grants	127.0	139.3
Other general purpose intergovernment transfers	r 103.4	130.2
Other (including natural disaster relief)	6.5	5.7
Total	r 3,213.0	3,473.7

Source: Government Finance (5503.3).

In 1987-88 capital grants of \$12.5m were paid to Queensland while \$25.0m was allocated as Loan Council borrowings. This latter amount was nominated for housing.

Specific purpose grants are made for both current and capital purposes. The most significant current grants are for education purposes. These grants are identified either for a specific level of education, or as being contributions towards a named project. During 1987-88, these grants included \$175.6m for universities, \$135.2m for colleges of advanced education, \$242.3m for primary and secondary schools, both government and private, and \$18.8m for technical and further education. For the first time in 1988-89 grants towards the cost of the National Policy on Languages Program were made to the States.

A new program of Commonwealth assistance aimed at reducing hospital waiting lists in State public hospital systems was introduced in 1987-88. Financial assistance was also provided to assist States in the transfer of education of nurses from hospitals to colleges of advanced education.

The largest grants received for capital purposes are those for roads. Under the *Land Transport (Financial Assistance) Act 1985*, the road grants have been distributed to the States by category of road. Grants for 1987-88 to Queensland were \$159.1m paid under the Australian Land Transport Program. In addition, \$95.1m was received for the Australian Bicentennial Roads Development Program. From these two programs, \$50.9m was passed on to the local authorities.

6.6 COMMONWEALTH GRANTS TO OR FOR QUEENSLAND STATE AUTHORITIES FOR CAPITAL PURPOSES (\$m)

Purpose	1986-87	1987-88
Education	85.0	105.8
Health	7.9	7.9
Social security and welfare	8.6	7.1
Housing and community amenities	97.7	103.7
Recreation and culture	6.1	1.1
Agriculture, forestry, fishing and hunting	34.5	22.6
Transport and communications	257.3	254.2
Other economic affairs	—	0.6
Other purposes	r 60.6	13.8
Total	r 557.8	516.9

Source: Government Finance (5503.3).

The Commonwealth also provides the States with specific purpose assistance in the form of repayable advances. The major payment to Queensland in 1987-88 was \$7.5m for natural disaster relief.

6.2.2 Non-budget Sector

6.7 NON-BUDGET SECTOR OUTLAYS, QUEENSLAND (\$m)

Economic type	1986-87 r	1987-88 p
Current outlays	519.2	553.2
General government final consumption expenditure	409.5	435.2
Interest paid	82.0	92.4
Unrequited current transfer payments	28.6	28.0
Income transferred by public trading enterprises (net)	-0.8	-2.4
Capital outlays	506.7	488.2
Expenditure on new fixed assets	381.5	373.7
Expenditure on second-hand fixed assets (net)	-8.4	-28.7
Increase in stocks	2.2	2.4
Expenditure on land and intangible assets (net)	-1.0	0.4
Capital transfer payments	7.8	2.8
Advances paid (net)	124.5	137.5
Total	1,025.9	1,041.3

Source: Government Finance (5503.3).

6.8 NON-BUDGET SECTOR RECEIPTS, QUEENSLAND (\$m)

<i>Economic type</i>	<i>1986-87 r</i>	<i>1987-88 p</i>
<i>Revenue and grants received</i>	<i>879.8</i>	<i>926.4</i>
Taxes, fees and fines	20.5	23.0
Net operating surpluses of public trading enterprises	279.9	268.9
Property income	90.7	104.3
Other revenue	51.0	54.6
Current grants received	405.2	424.7
Capital grants received	32.5	50.9
<i>Financing transactions</i>	<i>146.1</i>	<i>114.9</i>
Advances received (net)	35.7	-8.5
Net borrowing	21.7	-0.7
Deposits received (net)	0.3	-0.7
Decrease in investments	-7.6	36.2
Decrease in currency and deposits	-34.6	-2.9
Increase in provisions	118.9	99.4
Other funds available (net), including errors and omissions	11.7	-7.9
Total	1,025.9	1,041.3

Source: Government Finance (5503.3).

The non-budget sector comprises those State authorities (e.g. port authorities and electricity boards) whose daily financial transactions and financial balances are held with financial enterprises in their own name, independent of the public accounts. The enterprises included in this sector are mainly trading enterprises. A convention of government finance statistics is to show a net operating surplus of such enterprises and not details of current revenue and expenditure.

6.3 LOCAL GOVERNMENT FINANCE

Queensland's 19 city councils, three town councils and 112 shire councils collectively outlaid \$1,261.2m in 1987-88. This represented an increase of 6.6 per cent over that for 1986-87.

6.3.1 Outlays

6.9 LOCAL GOVERNMENT OUTLAYS, QUEENSLAND (\$m)

<i>Economic type</i>	<i>1986-87</i>	<i>1987-88</i>
<i>Current outlays</i>	<i>618.0</i>	<i>642.3</i>
General government final consumption expenditure	312.5	340.3
Interest paid	246.9	271.4
Subsidies paid	27.4	3.1
Current grants	1.0	1.1
Levies paid to other government authorities	30.3	26.4
<i>Capital outlays</i>	<i>r 565.6</i>	<i>618.9</i>
Expenditure on new fixed assets	r 579.6	651.7
Expenditure on second-hand fixed assets (net)	-7.0	-5.4
Expenditure on land and intangible assets (net)	-7.1	-27.4
Total outlays	r 1,183.6	1,261.2

Source: State and Local Government Finance (5504.0).

Of the total final consumption expenditure, the major outlays were for transport and communications purposes (\$120.2m for 1987-88). Road transport accounted for \$119.4m of this amount.

6.10 LOCAL GOVERNMENT FINAL CONSUMPTION EXPENDITURE, QUEENSLAND (\$m)

<i>Purpose</i>	<i>1986-87</i>	<i>1987-88</i>
General public services	77.1	73.3
Health	16.9	17.8
Housing and community amenities	52.0	60.7
Recreation and culture	76.3	90.2
Transport and communications	109.2	120.2
Other (including plant hire surplus)	-18.8	-21.9
Total	312.5	340.3

Source: State and Local Government Finance (5504.0).

The major component of new fixed capital expenditure in 1987-88 was the outlay on transport and communications (\$258.3m), mainly road transport of \$254.5m. A total of \$248.0m was spent on housing and community amenities during 1987-88. The main components were water supply \$109.8m and sanitation and protection of the environment \$123.2m.

6.11 LOCAL GOVERNMENT EXPENDITURE ON NEW FIXED ASSETS, QUEENSLAND (\$m)

<i>Purpose</i>	<i>1986-87</i>	<i>1987-88</i>
General public services	26.3	14.4
Housing and community amenities	214.5	248.0
Recreation and culture	65.5	63.8
Transport and communications	215.3	258.3
Other	58.0	67.2
Total	579.6	651.7

Source: State and Local Government Finance (5504.0).

6.3.2 Receipts

Local authorities finance their day-to-day operations mainly from taxes (rates), sales and charges for services and government grants, while the provision of capital works and services is financed mainly through loan raisings supplemented by government subsidies.

Charges, rather than rates, are frequently imposed by local authorities for the supply of water, sewerage and transport services. Current costs associated with the provision of these services are deducted from the revenue from such charges and the resultant net operating surplus of public trading enterprises is included as revenue received.

Grants and subsidies for approved works are paid to local authorities by both the Commonwealth and State Governments. In general, Commonwealth grants are paid via the State Government.

6.12 LOCAL GOVERNMENT RECEIPTS, QUEENSLAND (\$m)

<i>Economic type</i>	<i>1986-87 r</i>	<i>1987-88</i>
<i>Revenue and grants received</i>	<i>1,053.7</i>	<i>1,100.4</i>
Taxes, fees and fines	480.0	527.1
Net operating surpluses of public trading enterprises	212.4	210.0
Property income	70.8	57.7
Other revenue	56.8	53.9
Current grants	129.6	135.0
Capital grants	104.0	116.7
<i>Financing transactions</i>	<i>129.9</i>	<i>160.8</i>
Advances received (net)	2.1	-4.5
Net borrowing	143.1	162.6
Decrease in currency and deposits	-30.7	-81.2
Other funds available (net), including errors and omissions	15.4	83.9
Total receipts	1,183.6	1,261.2

Source: State and Local Government Finance (5504.0).

The largest Commonwealth funded grant to local authorities is the General Purpose Assistance Grant received by the State Government and distributed among local authorities according to the recommendations of the Local Government Grants Commission of Queensland. During 1987-88 the amount allocated under this arrangement was \$106.8m. The Commonwealth also provided \$50.9m assistance for road construction to Queensland local authorities in 1987-88.

Local authorities have also received grants directly from the Commonwealth. The programs have included the provision of facilities for aged or disabled persons, Aboriginal advancement and children's services. Direct financial assistance is also received in respect of a program dedicated to the transfer of small Commonwealth-owned aerodromes to local ownership.

6.4 TAXES COLLECTED IN QUEENSLAND

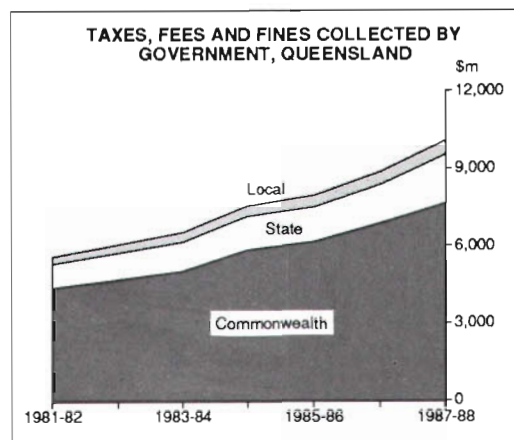
Under the Constitution the Commonwealth is given the exclusive right to levy customs and excise duties, while other forms of taxation are shared with other levels of government depending upon the legislative provisions that exist at any given time.

6.13 TAXES, FEES AND FINES COLLECTED IN QUEENSLAND

<i>Level of government</i>	<i>1986-87 r</i>	<i>1987-88</i>
	<i>\$m</i>	<i>\$m</i>
Commonwealth	6,906.7	7,675.6
State	1,524.0	1,922.7
Local	480.0	527.1
Total	8,910.7	10,125.4
	<i>\$</i>	<i>\$</i>
Per capita	3,362.0	3,738.0

Sources: State and Local Government Finance (5504.0). Government Finance (5503.3).

A total of \$10,125.4m was collected in Queensland in 1987-88. Although this is the equivalent of \$3,738.0 per capita, Commonwealth tax receipts represent amounts paid into Commonwealth accounting offices in Queensland and do not purport to measure taxes paid by Queensland residents.



6.4.1 Commonwealth Taxes

Personal income tax represented 64.2 per cent of all Commonwealth taxation receipts in Queensland during 1987-88; in 1986-87 it was 65.5 per cent.

6.14 COMMONWEALTH TAXES, FEES AND FINES COLLECTED IN QUEENSLAND (\$m)

<i>Type of tax</i>	<i>1986-87</i>	<i>1987-88</i>
<i>Taxes on income</i>	<i>5,023.7</i>	<i>5,519.1</i>
Personal income tax	4,520.6	4,927.3
Company tax	477.1	563.2
Income tax paid by superannuation funds	1.0	1.0
Dividend withholding tax	3.0	3.6
Interest withholding tax	22.0	23.9
<i>Employers' payroll taxes (a)</i>	<i>37.5</i>	<i>55.7</i>
<i>Taxes on property</i>	<i>1.5</i>	<i>1.3</i>
<i>Taxes on provision of goods and services</i>	<i>1,824.7</i>	<i>2,078.0</i>
Sales tax	568.5	689.8
Excise Act duties	879.0	916.0
Agricultural production taxes	39.8	69.1
Customs duties on imports	280.8	342.1
Customs duties on exports	51.5	54.9
Agricultural produce export taxes	5.1	6.1
<i>Taxes on use of goods and performance of activities</i>	<i>0.5</i>	<i>0.4</i>
Departure tax	0.1	—
Other	0.4	0.4
<i>Fees and fines</i>	<i>18.8</i>	<i>21.1</i>
Compulsory fees	18.5	21.0
Fines	0.3	0.1
Total	6,906.7	7,675.6

(a) Including Fringe Benefits Tax.

Source: Government Finance (5503.3).

6.4.2 State Taxes

One of the main sources of revenue from taxation for the State is payroll tax which was introduced by the Commonwealth Government in July 1941 but was transferred to the States on 1 September 1971. The exemption from payment of this tax, previously accorded to government business enterprises, was removed with effect from 1 July 1988. For 1987-88 the maximum tax exemption level on wages paid was \$324,000. Since September 1974 the rate has been 5 per cent.

6.15 TAXES, FEES AND FINES COLLECTED BY THE STATE GOVERNMENT, QUEENSLAND (\$m)

Type of tax	1986-87	1987-88
Employers' payroll tax	423.0	462.8
Taxes on property		
Land taxes	47.5	62.5
Property owners' contributions to fire brigades	48.8	67.0
Stamp duties on financial and capital transactions	292.9	495.1
Taxes on provision of goods and services		
Agricultural production taxes	7.1	7.4
Taxes on government lotteries	74.5	77.0
Taxes on private lotteries	4.1	3.8
Casino taxes	19.7	24.9
Race betting taxes	51.9	57.0
Taxes on insurance	63.7	68.7
Taxes on the use of goods and the performance of activities		
Vehicle registration fees and taxes	190.7	233.4
Stamp duty on vehicle registration	51.4	62.0
Drivers' licences	9.0	11.1
Road transport and maintenance	29.4	38.0
Liquor franchise taxes	63.9	71.5
Other	5.9	6.2
Fees and fines		
Compulsory fees	r 103.4	128.3
Fines	37.1	46.1
Total	r 1,524.0	1,922.7

Source: Government Finance (\$503.3).

Stamp duty is payable under the *Stamp Act 1894-1989* on the transfer of property, money transactions and other agreements. Examples include cheques, conveyances, mortgages, hire purchase agreements and life insurance policies. There are exemptions from duty on some classes of documents, particularly in relation to educational, charitable and religious organisations and for government departments.

Stamp duties on transactions concerning insurance, motor vehicle registration, lotteries and betting are included in the relevant subgroup of the table above, and are not part of the receipts of stamp duties on financial and capital transactions. A tobacco franchise licence fee was introduced on 1 January 1989. The fee is levied at 30 per cent of the value of wholesale sales.

6.4.3 Local Government Taxes

Rates on property are the main taxes collected by local government authorities.

The main fees and fines collected in 1987-88 were building fees \$20.0m and parking fines \$5.0m. Fines are also imposed for non-compliance with library, anti-litter and animal control regulations.

6.16 LOCAL GOVERNMENT TAXES, FEES AND FINES COLLECTED IN QUEENSLAND (\$m)

Tax	1986-87	1987-88
Taxes on property (rates)	443.7	477.3
Fees and fines	36.4	49.8
Total	480.0	527.1

Source: Taxation Revenue (\$506.0).

6.5 PRIVATE FINANCE

The operations of the financial sector in Queensland are controlled by both Commonwealth and Queensland legislation.

Since 1980 there have been substantial changes in the Australian financial system. These changes have emanated primarily from a committee established to inquire into the Australian financial system, the Campbell Committee, followed by a further review known as the Martin Review Group. As a result there has been substantial deregulation of the Australian financial system and the entry of new banks into the system.

The overall result has been increased competition between the various financial institutions and a reduction in the institutionalised differences between them.

6.5.1 Banks

The banking system in Australia in June 1989 comprised a central bank (the Reserve Bank of Australia), 29 trading banks, 17 savings banks and a number of specialist banks (e.g. Commonwealth Development Bank).

Trading and Savings Banks

Trading banks provide widespread and varied commercial and personal banking facilities throughout Australia. They are normally divided into two groups, major trading banks and other trading banks. There are four major trading banks operating in Australia, (Australia and New Zealand Banking Group Limited, Commonwealth Bank of Australia, National Australia Bank Limited and the Westpac Banking Corporation). At June 1989 these banks accounted for approximately 80 per cent of all trading bank deposits.

Savings banks in Australia are similar to trading banks in that they accept deposits from the public repayable on demand, but differ in that deposits are not, generally speaking, subject to transfer by cheque.

The Commonwealth Savings Bank opened in Queensland on 16 September 1912. The savings bank field was opened to private banks in this State in 1956. Depositors' balances in Queensland for June 1989 amounted to \$9,687m, an increase of 35.9 per cent over the corresponding period of 1988.

Changes to the *Banking Act 1959* were proclaimed in November 1989 which effectively removed the legislative distinctions between trading and savings banks.

Development Banks

These organisations comprise the Commonwealth Development Bank of Australia, which provides finance for the development of approved enterprises in primary, secondary and tourist industries where finance is not otherwise available on reasonable and suitable terms and conditions; the Australian Resources Development Bank Ltd, which specialises in arranging finance for enterprises engaged in the development of Australia's natural resources; the Primary Industry Bank of Australia Ltd, which provides loans, through banks and other lenders, to primary producers for longer terms than normally available; and the Australian Industry Development Corporation, which assists in the development and expansion of Australian industry by arranging for investment, principally from overseas sources, and in ways conducive to maximising Australian ownership.

6.5.2 Building Societies

Building societies are established primarily to raise funds to assist members by granting loans, secured on mortgage, to build or acquire homes. These societies are either permanent or terminating (cooperative housing) societies.

6.17 PERMANENT BUILDING SOCIETIES, QUEENSLAND

<i>Particulars</i>	1986-87	1987-88
	\$'000	\$'000
Number of societies	12	11
<i>Liabilities</i>	3,245,102	3,560,295
Withdrawable shares	1,383,980	1,878,970
Borrowings	1,760,704	1,548,188
Other	100,418	133,137
<i>Assets</i>	3,245,102	3,560,295
Amount owing on loans	2,255,197	2,492,807
Bills, bonds, other securities	753,788	845,307
Other	236,117	222,181
Expenditure	447,433	451,616
Income	459,645	478,382

Permanent building societies raise most of their funds from the public while terminating societies rely heavily on funds from government and other financial institutions.

6.18 TERMINATING BUILDING SOCIETIES, QUEENSLAND

<i>Particulars</i>	1986-87	1987-88
	\$'000	\$'000
Number of societies	565	503
<i>Liabilities</i>	89,184	90,981
Loans		
Banks	16,701	17,042
Government	51,043	45,784
Other	14,474	20,387
Other liabilities	6,965	7,768
<i>Assets</i>	89,184	90,981
Amount owing on loans	80,182	80,644
Other	9,001	10,338
Expenditure	8,845	9,812
Income	9,537	10,607

6.5.3 Other Financial Institutions

Credit Cooperatives

Credit cooperatives or 'credit unions' operate by predominantly borrowing from and providing finance to, their own members.

6.19 CREDIT COOPERATIVES, QUEENSLAND

<i>Particulars</i>	1986-87	1987-88
	\$'000	\$'000
Credit cooperatives on register (a)	43	41
Number of members (a)	317,595	324,402
<i>Income</i>		
Interest on loans	121,486	122,347
Income from placements and other deposits (b)	14,425	12,897
Income from securities	8,633	9,765
Other	6,596	11,557
<i>Total</i>	151,140	156,566
<i>Expenditure</i>		
Interest on borrowing	100,577	94,814
Wages, salaries etc.	16,600	17,204
Other administrative expenses (c)	21,495	19,712
Other	13,924	15,668
<i>Total</i>	152,598	147,397
<i>Liabilities</i>		
Members' funds		
Share capital	3,190	3,265
Deposits	846,707	902,268
Other	50,529	62,764
<i>Total</i>	900,425	968,297
<i>Assets</i>		
Loans to members	697,231	702,830
Other	203,194	265,468
<i>Total</i>	900,425	968,297

(a) At 30 June. (b) Including interest on deposits with banks. (c) Including bad debts written off and allowances for doubtful debts.

Finance Companies

Finance companies are corporations which rely substantially on borrowings from the financial

markets and whose provision of finance is predominantly in the form of business and commercial lending instalment credit to finance retail sales by others or other loans to individuals.

6.20 FINANCE COMPANIES, QUEENSLAND (a) (\$m)

Particulars	1988	1989
Finance lease receivables	1,667.6	1,994.3
Loans outstanding		
Individuals for housing	305.4	268.3
Individuals for other purposes	1,039.8	1,127.8
Other loans and advances	2,385.7	3,502.5

(a) At June of each year.

Certain types of financial institutions which operate in Queensland have been excluded. These institutions include authorised money market dealers, pastoral finance companies, cash management trusts, insurance companies and superannuation schemes. Data on these institutions are not generally available at the State level.

Lending Activity of Financial Institutions

6.21 TYPE OF FINANCIAL COMMITMENT, QUEENSLAND, 1988-89 (\$m)

Lender	Housing finance for owner occupation	Personal finance	Commercial finance	Lease finance
Banks	2,646.5	2,213.4	9,180.9	281.1
Permanent building societies	518.9	—	—	—
Credit cooperatives	2.1	329.5	—	—
Finance companies	21.4	881.9	3,091.7	1,065.8
Money market corporations	—	—	427.7	75.0
Other	(a) 253.3	13.7	38.2	48.8
Total	3,442.1	3,438.5	12,738.5	1,470.7

(a) Including Queensland Housing Commission.

As a result of recommendations arising from a joint investigation by the ABS, Treasury and Reserve Bank of Australia aimed at rationalising finance statistics, statistical collections were introduced to measure lending activity by significant lenders in the fields of housing for owner occupation, personal, commercial and lease finance.

In 1988-89 total financial commitments increased for all types of finance when compared with the 1987-88 figures. The largest increase occurred in lease finance, an increase of 34.2 per cent followed by commercial finance 19.6 per cent, housing finance 18.0 per cent and personal finance 14.0 per cent. Banks continued to be the dominant financing

institutions in all sectors with the exception of lease finance which was dominated by finance companies.

6.6 PRIVATE NEW CAPITAL EXPENDITURE

Estimates of capital expenditure are obtained from a sample of private enterprises other than those primarily engaged in the agriculture, construction and community services industries. In general, new capital expenditure relates to expenditure charged to fixed tangible asset accounts including major improvements, alterations and additions but excluding expenditure on second-hand assets.

The survey is designed to produce Australian estimates. State dissections are obtained by allocating expenditure to the State where the asset has been or will be used. Where enterprises are unable to allocate expenditure to individual States because the asset is mobile across States (e.g. aeroplanes, transport trucks), the expenditure is allocated to the State of the Australian head office of the enterprise.

6.22 PRIVATE NEW CAPITAL EXPENDITURE, QUEENSLAND (\$m)

Particulars	1986-87	1987-88 r	1988-89
Selected industry			
Finance, property and business services	632	952	898
Mining	451	327	465
Manufacturing	482	755	747
Other selected industries	1,080	1,360	1,240
Asset type			
New buildings and structures	1,150	1,552	1,366
Equipment, plant and machinery	1,496	1,842	1,984
Total	2,645	3,394	3,350

6.7 REFERENCES

ABS publications produced by the Queensland Office:

Monthly Summary of Statistics (1304.3), monthly
Local Government (5502.3), annual
Government Finance (5503.3), annual

ABS publications produced by the Canberra Office:

Government Financial Estimates (5501.0), annual
Commonwealth Government Finance (5502.0), annual

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LAW AND ORDER

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Chapter 7

LAW AND ORDER

The maintenance of law and order is an important issue that concerns all members of the community today. The State Government has responsibility, not only for enacting legislation, but also for providing a police force, a judiciary and a corrective system.

Criminal law in Queensland, in the main, is based on legislation enacted by the Queensland Parliament. This is in contrast to New South Wales, Victoria and South Australia where common law (i.e. court decisions) is still an important source of criminal law.

Queensland moved away from common law in the criminal field with the passing of the *Criminal Code Act 1899*. However, not all the statutory criminal law that applies in Queensland today is contained in the Criminal Code. Some statutes, both Imperial (English) and local, which were enacted before 1899 remain in force and additional legislation relating to crimes has been passed since the introduction of the Criminal Code. Also, the Commonwealth Government has powers under the Constitution to make laws relating to criminal offences involving Commonwealth agencies, and can enact overriding legislation where the Commonwealth and States have concurrent powers. The *Crimes Act 1914* is the major piece of Commonwealth legislation relating to criminal offences.

When State courts exercise criminal jurisdiction, they may apply Imperial, Commonwealth or State law, depending on which legislature has dealt with the subject matter of the offence under the Australian constitutional framework.

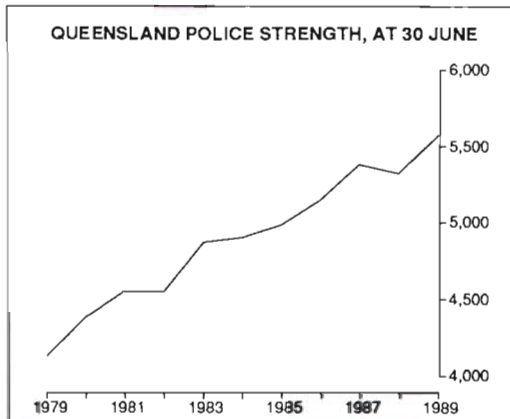
7.1 POLICE STRENGTH AND GENERAL CRIME

The main duties of the police force are the protection of life and property, the prevention and detection of crime, the preservation of good order and the apprehension and bringing to justice of offenders.

7.1.1 Police Strength

The Queensland Police Department is headed by the Commissioner with a Deputy Commissioner and six Assistant Commissioners responsible for the major functions of the Department: operations, traffic and buildings, personnel, crime and services, training and legal and administration. The State is divided into eight administrative regions, each headed by a Regional Superintendent. Within each region there are between two and five police districts, each with a number of local stations.

Pending Government consideration of the report of the Commission of Inquiry into Possible Illegal Activities and Associated Police Misconduct (the Fitzgerald Commission), there were a number of senior positions in the police force unfilled at 30 June 1989. The Deputy Commissioner of Police was Acting Commissioner but he retired when the new Police Commissioner was appointed on 1 November 1989.



7.1 QUEENSLAND POLICE STRENGTH AT 30 JUNE

Rank	1987	1988	1989
Commissioner	1	1	—
Deputy Commissioner	1	1	1
Assistant Commissioners	5	3	3
Superintendents	30	29	27
Inspectors	123	127	133
Senior Sergeants	187	215	228
Sergeants: 1st class	381	386	396
2nd class	740	763	777
Sergeants 3rd class/constables	3,453	3,408	3,502
Total	4,921	4,933	5,067
Uniformed	4,063	4,077	4,169
Detectives	597	585	600
Plain clothes	261	271	298
Technical and scientific	151	152	152
Total sworn-in officers	5,072	5,085	5,219
Sworn-in officers per			
100,000 population (a)	190	185	184
Probationaries	119	46	167
Cadets in training	190	191	187
Total police strength	5,381	5,322	5,573

(a) Estimated resident population at 30 June.

Source: Queensland Police Department.

7.1.2 General Crime

The total number of offences reported to police changed little between 1987-88 and 1988-89 following a 9 per cent rise in the preceding year. In 1988-89, the number of fraud offences involving credit cards was 5,132, less than half the 1987-88 figure (12,673) and lower than in 1986-87 (7,022). This reflects a change in the policy of the banks regarding which offences they report to Police. In the latest year, there were increases in the number of offences reported relating to malicious damage, stealing and non-sexual assaults.

7.2 OFFENCES REPORTED TO QUEENSLAND POLICE

Offence	1986-87	1987-88	1988-89
Homicide	220	254	261
Serious assault	2,764	3,455	3,986
Minor assault	4,173	4,392	4,903
Rape and attempted rape	189	288	366
Other sexual offences	2,363	3,857	3,067
Robbery	649	703	791
Fraud and false pretences	15,924	25,425	15,799
Kidnapping and extortion	192	257	342
Unlawful use of motor vehicle	10,109	10,068	11,602
Other stealing	61,730	64,358	65,852
Breaking and entering	35,510	34,282	38,314
Malicious damage	16,840	17,065	19,377
Other	2,123	2,361	2,722
Total	152,786	166,765	167,382

Source: Queensland Police Department.

The proportion of offences cleared during 1988-89 was 36 per cent. The clear-up rate has remained relatively steady over the past 6 years, however, there is significant variation of clear-up rates between offence categories. Stealing and malicious damage offences had the lowest clear-up

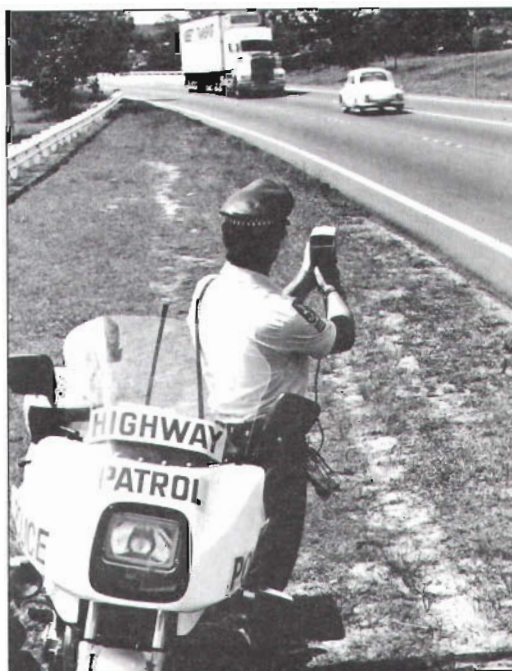


Photo: Queensland Police Department

rate while homicide offences had a clear-up rate of 98 per cent and rape and attempted rape 92 per cent.

7.3 PROPORTION OF OFFENCES CLEARED (a)
BY QUEENSLAND POLICE
(per cent)

Offence	1986-87	1987-88	1988-89
Homicide	95	98	98
Serious assault	81	84	78
Minor assault	75	77	76
Rape and attempted rape	95	92	92
Other sexual offences	81	87	81
Robbery	35	41	37
Fraud and false pretences	64	63	73
Kidnapping and extortion	85	81	85
Unlawful use of motor vehicle	29	27	28
Other stealing	33	33	32
Breaking and entering	21	21	19
Malicious damage	29	29	28
Other	81	83	76
Total	36	39	36

(a) Offences cleared in a year could have been reported in a previous year.
Source: Queensland Police Department.

In addition to offences reported to police there are victimless offences detected by police on their own initiative. Noteworthy among these offences in 1988-89 are drink driving offences (29,166) and drug offences (9,879).

Following the success of a pilot program on the Gold Coast, a Neighbourhood Watch Program was

officially introduced on a statewide basis in July 1988. This program is aimed at involvement of the community in the reduction of preventable crimes, improvement in personal and household security, reduction in the fear of crime and the provision of support for victims of crime. As at 30 June 1989, 82 programs operated throughout the State.

Participating in the program are 120,000 Queensland residents and they are supported by police from the Neighbourhood Watch Unit based in Brisbane. Each program is serviced by a volunteer police liaison officer from the local police station. This officer provides the day-to-day contact with community groups. Administration of the program is undertaken by approximately 3,000 trained community coordinators.

7.4 OFFENCES DETECTED BY POLICE

<i>Offence</i>	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89</i>
Receiving and unlawful possession	1,963	2,207	2,310
Drug offences	11,544	9,450	9,879
Good order offences	11,317	12,046	12,941
Drink driving	27,092	28,185	29,166
Other driving etc. offences	4,372	3,691	3,778
Liquor offences	1,545	1,327	1,361
Other	1,993	1,619	1,792
Total	59,826	58,525	61,227

Source: Queensland Police Department.

7.2 COURTS

Judicial matters in Queensland are handled by the Supreme, District, Magistrates and Children's Courts for both civil and criminal cases.

The Supreme Court of Queensland comprises the Chief Justice, a Senior Puisne Judge and 18 puisne judges, including one stationed in Rockhampton and one in Townsville. In Brisbane there are two Masters appointed to look after the procedural work enabling the judges to fulfil their main courtroom functions. Cases are heard in circuit courts in places other than Brisbane, Rockhampton and Townsville, when necessary.

The Supreme Court is the highest court in the Queensland judicial system. Its jurisdiction in civil matters is unlimited and in criminal matters it has jurisdiction where the sentences that may be imposed range from 14 years to life imprisonment. Criminal trials are heard by a judge and a jury of 12 people. In certain civil cases there may be a jury of four people. Appeals may go to the Full Court of the Supreme Court in civil matters and to the Court of Criminal Appeal in criminal matters. Both these courts are usually constituted by three judges of the Supreme Court and sittings are held in Brisbane only.

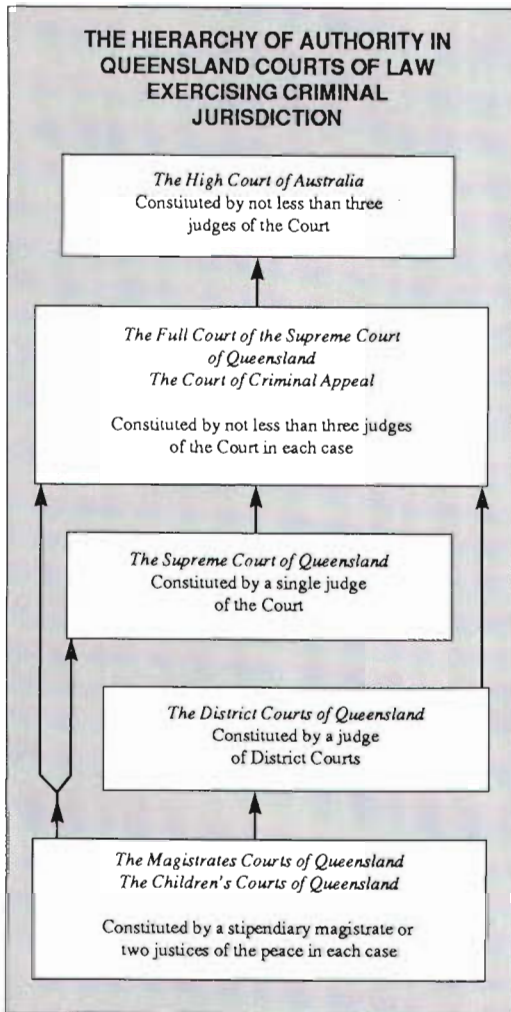
The District Court of Queensland comprises 26 District Court judges, including two in Southport, one in Rockhampton, three in Townsville and one in Cairns. Outside Brisbane, Southport, Rockhampton, Townsville and Cairns, District Courts are held in 24 centres throughout the State at various times during the year.

The crimes tried in District Courts are those where the sentence can be up to 14 years imprisonment. District Courts also hear civil matters where the amount of money involved is between \$20,000 and \$200,000 (between \$5,000 and \$40,000 prior to 1 November 1989). However, they do not have 'full' jurisdiction, as they are excluded from dealing with certain aspects of a matter. District Courts also hear appeals, generally of magistrates' decisions.

Throughout Queensland, there are 204 places appointed for holding Magistrates Courts. A Magistrates Court is usually constituted by a stipendiary magistrate sitting alone. During the absence of a stipendiary magistrate, the Court may be constituted by two or more justices of the peace. There are 70 stipendiary magistrates in Queensland and two acting stipendiary magistrates stationed at Thursday Island and at Cooktown. Stipendiary magistrates are stationed at country centres and travel on circuit to hold courts in their district.

The civil jurisdiction of Magistrates Courts is limited to claims that do not exceed \$20,000 (\$5,000 prior to 1 November 1989). A Magistrates Court does not have jurisdiction to hear claims where the title to land or the validity of a devise, bequest or limitation under a will or settlement is in question. In the criminal area, stipendiary magistrates can deal only with those indictable offences which are authorised to be so dealt with under the provisions of the Criminal Code. If the Magistrates Court does not have jurisdiction to hear and determine a particular charge, any justice of the peace may conduct an examination of witnesses to ascertain if there is sufficient evidence to commit the accused person for trial or for sentence either to the Supreme Court or to the District Court, depending on the seriousness of the charge. Although this authority is vested in a single justice of the peace, these examinations are rarely conducted other than by a stipendiary magistrate. Magistrates Courts deal exclusively with all simple offences, such as offences against the Traffic Act, Vagrants, Gaming and Other Offences Act and Liquor Act, as well as a wider range of other statutory offences.

The Small Claims Tribunal settles disputes between consumers and traders and between traders. A referee presides in an informal manner, hearing submissions from the parties involved without the involvement of any legal counsel. Jurisdiction is limited to situations in which the amount concerned does not exceed \$5,000 (\$1,500 prior to 1 November 1989) and the referee's decision is final and binding on all concerned; no appeals are allowed. There were 1,865 cases heard in 1988.



Where problems of debt arise and traders and other creditors are involved, the Small Debts Court operates. It is constituted by a stipendiary magistrate sitting alone and deals with actions where the amount does not exceed \$5,000 (\$1,500 prior to 1 November 1989) inclusive of interest. The judgment of the Court is final and binding on all parties to the action; no appeal is allowed. There were 1,339 cases heard in 1988.

The Children's Court deals with all matters relating to children under the age of 17 years. The matters may be indictable offences, other than those in respect of which (were they not of such age) the maximum penalty is imprisonment for life with hard labour, simple offences or breaches of duty, applications for care and control of children and the admission to care and protection of neglected children. In metropolitan and near country areas, the Court is presided over by a specially appointed Children's Court magistrate (called a Magistrate

of Children's Courts) sitting alone, while in country areas that duty is performed by a local stipendiary magistrate or, in his absence, by two justices of the peace.

District Court judges also sit on the Local Government Courts, the Licensing Court and the Police Complaints Tribunal. The Industrial Court is presided over by a Supreme Court judge as is the Mental Health Tribunal.

The Family Court is a federal body and has jurisdiction in matrimonial cases and other matters relating to dissolution of marriage. Bankruptcy is also a federal matter; the Federal Court of Australia exercises jurisdiction in the southern district of Queensland while the Supreme Court exercises jurisdiction in the central and northern districts.

A juvenile offender first appears before a Children's Court and an adult before a Magistrates Court. The matter can then proceed to either the District or Supreme Court on indictment, depending on the seriousness of the offence or on appeal. Supreme Court and District Court trials are presided over by a judge who determines all questions of law. Questions of fact, including the ultimate question of guilt or innocence, are determined by the unanimous decision of a jury of 12 persons. In Magistrates and Children's Courts, the magistrate determines all questions of law and fact without the assistance of a jury.

7.2.1 Magistrates Courts

A defendant can appear before the court on one or more charges at that one appearance. For example, a defendant who has committed a number of breaking and entering offences would face a number of breaking and entering charges on appearing before a Magistrates Court. Another example of a defendant facing multiple charges for the one appearance would be someone who was apprehended for both drink driving and driving without a licence.

7.5 APPEARANCES IN MAGISTRATES COURTS, QUEENSLAND

Offence	1983-84	1987-88	1988-89
Homicide etc.	113	167	219
Assault etc.	3,612	5,006	5,856
Robbery and extortion	166	178	247
Fraud and misappropriation	1,385	2,682	2,538
Theft, breaking and entering etc.	9,176	9,986	10,683
Property damage	1,353	1,991	2,304
Driving, traffic etc.	93,665	110,033	120,457
Other (a)	58,202	50,261	55,339
Total	167,672	180,304	197,643

(a) Including drug offences and drunkenness (5,411 and 25,612, respectively, in 1988-89).

Source: Law and Order (4502.3).

7.6 MAGISTRATES COURTS APPEARANCES RESULTING IN CONVICTIONS, QUEENSLAND, 1988-89

<i>Offence</i>	<i>Imprisoned</i>	<i>Community service</i>	<i>Placed on probation</i>	<i>Fined and/or ordered to pay money</i>	<i>Fined and/or licence disqualified</i>	<i>Bond of good behaviour recognizance</i>	<i>Convicted not punished</i>	<i>Total</i>
Assault etc.	279	250	199	2,437	—	297	26	3,488
Fraud and misappropriation	211	160	170	1,312	—	100	6	1,959
Theft, breaking and entering etc.	896	1,105	897	5,052	56	310	22	8,338
Property damage	100	236	136	1,405	3	35	5	1,920
Driving, traffic etc.	795	1,402	23	82,271	26,400	14	84	110,989
Other	769	742	322	20,074	9	222	1,729	23,867
Total	3,050	3,895	1,747	112,551	26,468	978	1,872	150,561

Source: Law and Order (4502.3).

In Magistrates Courts there were 197,643 appearances (at which 265,321 charges were heard) in 1988-89, which represented increases of 10 per cent from 1987-88 and 18 per cent from 1983-84. Of the appearances before Magistrates Courts in 1988-89, 150,561 (76 per cent) resulted in convictions.

In 1988-89, females made up 15 per cent of appearances before Magistrates Courts, compared with 13 per cent in 1983-84 and 14 per cent in 1987-88.

Driving and traffic offences made up 61 per cent of appearances in 1988-89, the same as in the preceding 2 years.

The conviction rate for these offences in 1988-89 was 92 per cent. The number of appearances for assault etc. offences increased to 5,856 in 1988-89, compared to 1983-84 and 1987-88 figures of 3,612 and 5,006 respectively. Included in this category are rape offences, which must be referred to a higher court for sentence or trial if sufficient

evidence exists against the accused person. In 1988-89, 142 of the 169 appearances for rape offences were committed to a higher court, with the remainder being discharged or withdrawn. In 1988-89, there were 1,860 appearances for major assault and 3,050 for minor assault compared with 1,543 and 2,622, respectively, for the previous year.

The possible outcomes of an appearance before a Magistrates Court, other than conviction, are that the case may be discharged or the charge(s) withdrawn (7 per cent of 1988-89 appearances), bail can be estreated, i.e. forfeited if an offender fails to appear in court (14 per cent) or the defendant can be committed to a higher court for sentence or trial (2 per cent).

Although 45 per cent of Queensland's population is in the Brisbane Statistical Division, 51 per cent of appearances before magistrates courts occurred there in 1988-89 and included 54 per cent of appearances for driving/traffic offences in Queensland. The Far North and North-West

7.7 MAGISTRATES COURTS APPEARANCES: MOST SERIOUS OFFENCE CHARGED BY STATISTICAL DIVISION OF APPEARANCE, QUEENSLAND, 1988-89

<i>Statistical division</i>	<i>Most serious offence</i>							<i>Total</i>	<i>Estimated resident population (a)</i>
	<i>Theft</i>			<i>Drink driving offences</i>	<i>Other driving, traffic etc. offences</i>	<i>Drug offences</i>	<i>All other offences</i>		
	<i>Breaking and entering</i>	<i>Unlawful use of motor vehicle</i>	<i>Other stealing</i>						
<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>%</i>	
Brisbane	798	512	3,688	12,055	53,300	2,072	28,307	100,732	45.0
Moreton	181	143	899	4,425	16,161	890	3,423	26,122	17.1
Wide Bay-Burnett	138	69	316	1,298	2,743	299	2,564	7,427	6.4
Darling Downs	119	54	454	1,159	4,693	258	2,962	9,699	6.6
South-West	37	25	56	322	629	56	1,064	2,189	1.0
Fitzroy	152	56	422	1,167	4,369	237	3,931	10,334	5.8
Central-West	17	11	30	109	228	12	499	906	0.5
Mackay	67	46	210	941	2,485	229	1,721	5,699	3.8
Northern	172	90	448	1,937	5,008	471	5,333	13,459	6.3
Far North	314	141	689	2,275	3,766	801	8,508	16,494	6.3
North-West	131	43	155	436	951	86	2,780	4,582	1.4
Total	2,126	1,190	7,367	26,124	94,333	5,411	61,092	197,643	100.0

(a) Based on preliminary estimated resident population figures at 30 June 1989.

Source: Law and Order (4502.3).

Statistical Divisions had 11 per cent and 3 per cent of Queensland appearances on theft offences compared to their proportions of the State's population of 6.3 per cent and 1.4 per cent, respectively.

7.2.2 Children's Courts

Children under the age of 17 years appear in Children's Courts which have jurisdiction to try or sentence, under certain conditions, children charged with indictable offences, simple offences or breaches of duty and to decide applications for care and control or for care and protection of children.

For statistical purposes, appearances are coded to the offence with the most serious outcome. For appearances involving both offences and child welfare matters, the latter take precedence over criminal charges in classifying to the most serious outcome. A proven offence in Children's Courts may or may not result in conviction.

In 1988-89, the total number of appearances in Children's Courts for both child welfare (applications) and criminal matters was 5,151, compared to the 1983-84 and 1987-88 figures of 4,745 and 5,146, respectively.

7.8 CHILDREN'S COURTS APPLICATIONS, QUEENSLAND

Particulars	1983-84	1987-88	1988-89
Applications for care and control of children			
Likely to fall into a life of vice or crime	34	—	—
Exposed to moral danger	6	—	—
Uncontrollable	214	116	67
Total	254	116	67
Applications for care and protection of children			
Neglected and other unfit guardianship	544	568	708
Likely to fall into a life of vice or crime	—	—	—
Other	18	14	12
Total	562	582	720
Outcome			
Order refused or revoked	162	210	199
Committed into care and control	92	34	14
Ordered into care and protection	404	317	449
Placed under supervision	57	8	6
Placed under protective supervision	99	129	119
Other	2	—	—
Total	816	698	787

Source: Law and Order (4502.3).

Offenders appearing more than once during any one year are counted once for each appearance. Information is also available for distinct children appearing before the courts. Children's Courts dealt with 3,724 distinct offenders in 1988-89. Of

these children, 34 per cent were 16 year olds while a further 23 per cent were aged 15 years.

Applications for care and control of children have fallen from 254 in 1983-84 to 67 in 1988-89. On the other hand, the number of applications for care and protection of children increased from 562 in 1983-84 to 720 in 1988-89. For appearances on child welfare matters, the most common outcome is that the child is ordered into care and protection.

The number of appearances in Children's Courts for criminal matters was 4,364 in 1988-89, 2 per cent fewer than in 1987-88. In contrast to appearances on child welfare matters, which involved an almost equal proportion of boys and girls, boys accounted for 87 per cent of appearances for criminal matters in 1988-89.

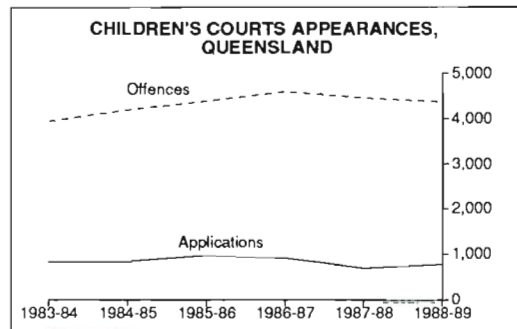
Theft and breaking and entering offences once again accounted for the majority of appearances for criminal matters (57 per cent). Appearances for property damage offences increased from 117 in 1983-84 to 257 in 1988-89.

7.9 CHILDREN'S COURTS APPEARANCES FOR OFFENCES, QUEENSLAND

Offence	Appearances			Percent- age proven
	1983-84	1987-88	1988-89	1988-89
Homicide etc.	3	6	2	—
Assault etc.	198	299	290	96
Robbery and extortion	24	18	20	35
Fraud and misappropriation	35	65	53	100
Theft, breaking and entering etc.	2,297	2,479	2,485	98
Property damage	117	211	257	96
Driving, traffic etc.	738	700	595	98
Other	517	670	662	98
Total	3,929	4,448	4,364	97

Source: Law and Order (4502.3).

Of all appearances on criminal matters in 1988-89, 3 per cent (112) resulted in the offence not being proven, of which 68 were discharged or withdrawn and the remaining 44 resulted in a committal to a higher court for sentence or trial.



Of the 4,252 appearances at which a charge was proven, 82 per cent resulted in no conviction. Those admonished and discharged accounted for 2,217 of the 3,488 such appearances.

7.10 OUTCOME OF PROVEN OFFENCES (APPEARANCES) IN CHILDREN'S COURTS, QUEENSLAND

Outcome	1983-84	1987-88	1988-89
Unconvicted			
Admonished and discharged	2,046	2,321	2,217
Committed into care	508	534	506
Placed under supervision	470	701	744
Other	8	15	21
Total	3,032	3,571	3,488
Convicted			
Imprisoned	3	—	—
Committed into care	197	223	301
Placed under supervision	40	66	89
Fined and/or restitution	439	409	341
Other	36	9	33
Total	715	707	764
Total	3,747	4,278	4,252

Source: Law and Order (4502.3).

7.2.3 Higher Courts

Higher courts are District and Supreme Courts. Most offenders appearing before these courts have previously appeared before a magistrate. As with the Magistrates Courts, defendants appearing on more than one charge on the same day are counted once only and classified to the offence with the most serious outcome.

Between 1987-88 and 1988-89 the number of appearances before higher courts rose 3 per cent to 3,923; only 11 per cent of these appearances were by females. Of the total appearances, 34 per cent were for theft and related offences and a further 27 per cent for assaults.

Of appearances before higher courts in 1988-89, 914 were before the Supreme Court and the remaining 3,009 before the District Court.

7.12 HIGHER COURTS APPEARANCES, QUEENSLAND

Offence	Appearances			Percent- age convicted
	1983-84	1987-88	1988-89	1988-89
Homicide etc.	94	113	134	60
Assault etc.	566	1,095	1,062	69
Robbery and extortion	180	174	186	75
Fraud and misappropriation	232	356	368	73
Theft, breaking and entering etc.	1,157	1,423	1,336	73
Property damage	179	206	215	70
Driving, traffic etc.	28	61	68	81
Other offences	203	383	554	81
Total	2,639	3,811	3,923	73

Source: Law and Order (4502.3).

The proportion of appearances resulting in conviction was 73 per cent in 1988-89 compared with 74 per cent in 1987-88. In 1988-89, 85 per cent of appearances for drug offences resulted in conviction, compared to 56 per cent of murder or attempted murder appearances.

Of the 1,062 appearances which did not result in conviction in 1988-89, 430 resulted in an acquittal and 632 in a finding of no true bill or *nolle prosequi*.

7.3 CORRECTIVE SERVICES

Following conviction in the courts, offenders move into the prisons system and the probation and parole service. These systems are not just designed to punish but to correct behaviour so that offenders can become functioning members of society.

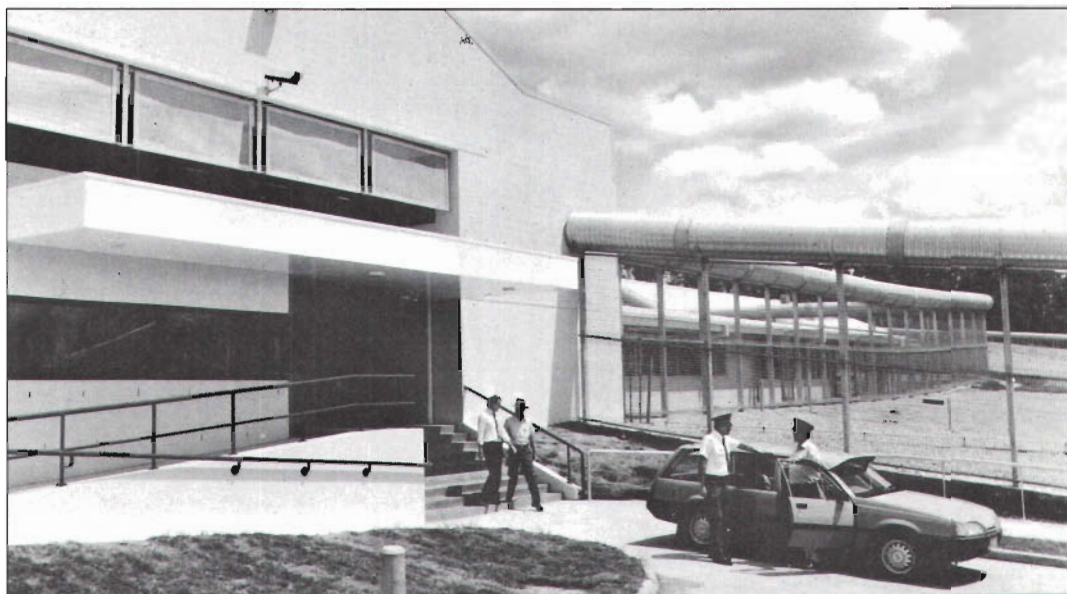
7.3.1 Prisons

Queensland prisons are administered by the Director-General of Corrective Services Commission for the Minister of Justice and Corrective Services.

7.11 HIGHER COURTS APPEARANCES RESULTING IN CONVICTIONS, QUEENSLAND, 1988-89

Offence	Imprisoned	Community service	Placed on probation	Fined and/or ordered to pay money	Good behaviour bond	Children's Services order	Total
Homicide etc.	64	5	1	9	1	1	81
Assault etc.	361	137	81	68	70	21	738
Robbery and extortion	106	17	5	3	1	8	140
Fraud and misappropriation	98	52	23	42	53	—	268
Theft, breaking and entering etc.	411	224	164	86	67	26	978
Property damage	31	38	26	37	10	9	151
Driving, traffic etc.	24	7	—	20	4	—	55
Other offences	227	73	50	78	20	2	450
Total	1,322	553	350	343	226	67	2,861

Source: Law and Order (4502.3).



Sir David Longland Correctional Centre, Wacol

Photo: Premier's Department

The Brisbane Correctional Centre comprises both male and female divisions. Remand prisoners only are held in the male division while the female division accommodates both remand and sentenced prisoners. In March 1989, the Sir David Longland Correctional Centre officially commenced operations at Wacol as a high security facility. Townsville Correctional Centre accommodates high, medium and low security male prisoners and also has a female division. Rockhampton Correctional Centre also accommodates prisoners of high, medium and low security classifications. Most prisoners requiring special protection are housed at Woodford Correctional Centre. Lotus Glen Correctional Centre, near Mareeba, commenced operations in May 1989 and includes high, medium and low security areas.

With the closure of the Wacol Security Patients Hospital, Division B of Wacol Correctional Centre and the hospital combined to become the Moreton Correctional Centre, a special needs facility. From June 1989, the John Oxley Memorial Hospital, under the control of the Department of Health, has accommodated and treated psychiatrically ill prisoners who were previously held in the Security Patients Hospital. The State farms at Palen Creek and Numinbah, both south of Brisbane, are fully open institutions in that prisoners are placed on their honour not to escape.

The first privately operated correctional institution in Australia will open at Borallon, near Ipswich in January 1990 and will comprise both medium and low security sections. The privatisation of this centre resulted from the recommendations of the Commission of Review into Corrective Services in Queensland conducted by Mr J. J. Kennedy.

The statistics in this section refer to convicted and sentenced prisoners only, prisoners on remand or otherwise detained are excluded. Prisoners are counted once for each time they are admitted or discharged.

There were 4,633 admissions to Queensland prisons during 1988-89, 2 per cent fewer than in 1987-88 and 9 per cent below the peak year of 1986-87 when 5,116 people were admitted. During 1988-89, 331 females were admitted to prison compared with 334 in 1987-88.

7.13 CONVICTED PRISONERS, QUEENSLAND

<i>Convicted prisoners</i>	1983-84	1987-88	1988-89
Admissions during year	4,035	4,748	4,633
Discharges during year	3,897	4,719	4,624
<i>In prison at 30 June</i>	<i>1,696</i>	<i>2,181</i>	<i>2,190</i>
Males	1,662	2,080	2,084
Females	34	101	106
Prisoners per 100,000 population	67	79	p 77

Source: Law and Order (4502.3).

Of the 4,633 prisoners admitted in 1988-89, 76 per cent were sentenced from a Magistrates or Children's Court, with the remainder sentenced from the higher courts. Persons admitted to prison in lieu of payment of a fine made up 25 per cent of admissions.

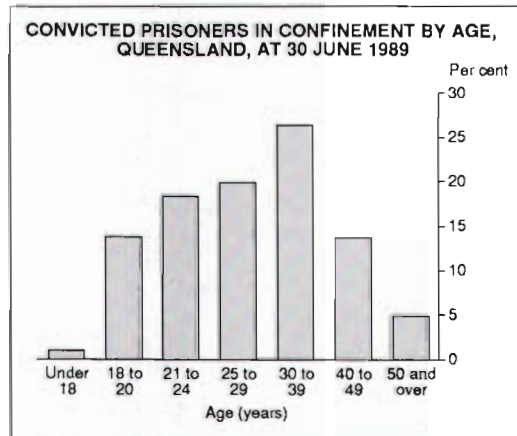
In 1988-89, 60 per cent of prisoners admitted were sentenced to terms of less than 6 months, while prisoners sentenced to terms of over 10 years, including life, indefinite and habitual criminals, only accounted for slightly less than 2 per cent of admissions.

7.14 QUEENSLAND PRISONERS

Most serious offence	1983-84	1987-88	1988-89
ADMISSIONS DURING YEAR			
Homicide etc.	40	59	68
Assault etc.	357	531	601
Robbery and extortion	111	96	99
Fraud and misappropriation	189	359	320
Theft, breaking and entering etc.	965	1,222	1,214
Property damage	105	130	140
Driving, traffic etc.	1,313	1,371	1,227
Other (a)	955	980	964
Total	4,035	4,748	4,633
IN PRISON AT 30 JUNE			
Homicide etc.	181	242	263
Assault etc.	319	489	524
Robbery and extortion	177	186	196
Fraud and misappropriation	79	140	122
Theft, breaking and entering etc.	434	574	572
Property damage	34	40	51
Driving, traffic etc.	210	222	170
Other (a)	262	288	292
Total	1,696	2,181	2,190

(a) Including drug offences.
Source: Law and Order (4502.3).

There were 242 convicted prisoners in confinement for homicide etc. offences at 30 June 1988. During 1988-89, 68 convicted prisoners were admitted for these offences and 4 prisoners already serving sentences for different offences were reclassified to homicide etc. offences after being found guilty of that offence by the courts. The number of prisoners discharged during the year was 51, leaving a total of 263 prisoners on hand for homicide etc. offences at 30 June 1989. This trend of admissions for homicide etc. offences outnumbering discharges for the same offences has prevailed for a considerable number of years and is reflected in the fact that, although only 1 per cent of all admissions during 1988-89 were for homicide etc. offences, 12 per cent of convicted prisoners in confinement at 30 June 1989 were imprisoned for this category of offences.



In comparison, driving, traffic etc. offences accounted for 26 per cent of admissions, while only 8 per cent of prisoners confined at 30 June 1989 were convicted of driving, traffic etc. offences.

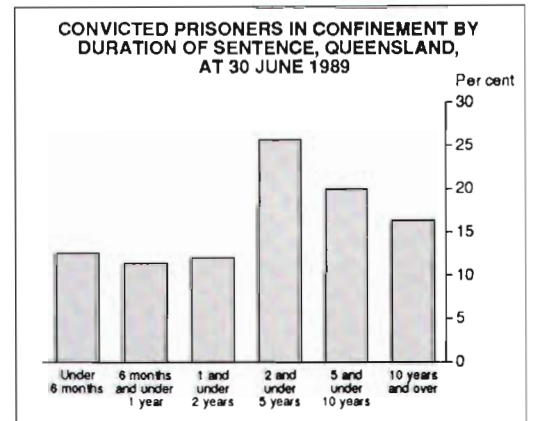
Most prisoners do not serve their full sentence; they are usually granted a remission (a reduction of their sentence). The normal remission since September 1985 for a sentence of 2 months and over is one-third of the sentence. Prior to that date it was (for sentences of 2 months and over) one-quarter of the total sentence for a first imprisonment with no previous convictions, one-fifth of the total sentence for a first imprisonment with one previous conviction and one-sixth for all others. The actual remission time can, however, be more or less than the normal remission period.

7.15 CONVICTED PRISONERS DISCHARGED, QUEENSLAND

Method of discharge	1983-84	1987-88	1988-89
Without remission	793	775	810
With remission			
Reduced	68	84	49
Normal	237	553	651
Additional	1,449	1,956	1,155
To court	69	40	24
Paid fine	575	275	303
Paroled	211	302	425
Died	3	5	7
Other (a)	492	729	1,200
Total	3,897	4,719	4,624

(a) Including those transferred to custodial care outside the prison system, e.g. Wolston Park Hospital and deported, and those who escaped.
Source: Law and Order (4502.3).

From 1987, people convicted of offences such as drink driving, fine defaulting and minor property offences, can be approved to serve the last part of their sentence at home under the Home Detention Program. It allows prisoners to be employed and therefore support their families but they must not drink, gamble or take drugs and their whereabouts must be known at all times. Over 1,000 prisoners have completed their sentences under the scheme since its inception.



7.16 ADMISSIONS TO PROBATION, PAROLE AND COMMUNITY SERVICE ORDERS, QUEENSLAND, 1987-88

Offence	Probation	Prison/ probation	Parole	Community service	Fine option
Homicide etc.	1	—	26	2	—
Assault etc.	394	50	77	244	51
Robbery and extortion	20	12	62	10	1
Fraud and misappropriation	231	19	26	118	40
Theft, breaking and entering etc.	1,688	160	59	1,250	262
Property damage	174	8	6	168	49
Driving, traffic etc.	109	40	15	379	1,455
Other	542	58	39	458	525
Total	3,159	347	310	2,629	2,383
Total 1986-87	3,170	422	300	2,248	2,518

Source: Queensland Probation and Parole Service.

During 1988-89, 4,624 prisoners were discharged from Queensland prisons. Of these, 1,155 were discharged with additional remission, representing 25 per cent of discharges as compared with the 1987-88 figure of 41 per cent. The method of discharge depended on the type of offence for which the prisoner was convicted. For example, of the prisoners discharged in 1988-89 who were serving sentences for homicide etc. offences, 57 per cent were paroled and 24 per cent had their sentence expire with additional remission. The corresponding figures for prisoners discharged after serving sentences for theft and breaking and entering were 8 per cent and 31 per cent, respectively.

7.3.2 Probation, Parole and Community Service

Where persons are convicted of offences punishable by a term of imprisonment the court may, instead of sentencing the offenders, place them under the supervision of a probation officer. Another option open to the court is the community service order, whereby offenders are required to perform unpaid community service work under the supervision of probation officers assisted by members of community organisations. An extension to the community service scheme is the fine option order. These orders allow offenders, who are unable to pay fines, the option of performing community service rather than serve a term of imprisonment for defaulting on payment of the fine. Both the probation and community service schemes are administered by the Community Corrections Division of the Corrective Services Commission.

Following on from recommendations of the Commission of Review into Corrective Services in Queensland (the Kennedy Commission), a new set of Community Corrections Boards was set up in December 1988 to replace the Parole Board. There are six Regional Community Corrections Boards, each of six persons, based in Mareeba, Townsville, Rockhampton, Woodford, Wacol and Brisbane. Prisoners apply to their local Regional Board for parole, home detention and leave of absence; they have the right to appear before a Regional Board for a parole application. Regional Boards can

decide matters for prisoners whose sentence is 5 years or less. For those with longer sentences, the Regional Board prepares a report to the Queensland Community Corrections Board which can make a decision for all prisoners except those on life sentences; for these it makes a recommendation to the Governor in Council for his decision. The six person Queensland Community Corrections Board includes an aboriginal person and one person must be a woman.

The total number of offenders admitted to probation by Queensland courts in 1987-88 was 3,159, a slight decrease from the number for 1986-87.

The popularity of community service orders as a sentencing option was reflected by a 17 per cent increase in orders for 1987-88. The courts made 2,629 orders during 1987-88 which represented 368,697 hours of community work. The courts offered 2,383 offenders the option to perform community service rather than imprisonment in default of paying a fine in 1987-88. The scheme resulted in 362,252 hours of unpaid community service being performed.

7.4 REFERENCES

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Law and Order, Summary (4501.3), annual
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Local government, Atherton

Photo: *Sharyn K. Marken*

Outdoor activities, Mount Gravatt

Photo: *Premier's Department*





Spring gathering in New Farm Park, Brisbane

Photo: *Sharyn K. Marken*

Sand, sun and sea at a Queensland beach



Chapter 8

POPULATION

Queensland's population has shown steady growth over the past decade, progressively increasing its share of the Australian total. In common with most western societies, the population is gradually ageing as birth rates decline and life expectancy increases. The State is expected to reach a population level of between 4.3 and 5.3 million by 2031.

8.1 POPULATION GROWTH

Queensland's estimated resident population was 2,830,200 at June 1989. On separation from the Colony of New South Wales in 1859, Queensland's population was 23,520, at that time the second smallest colony exceeding only Western Australia. With the exception of 1916 and 1946, which were affected by World Wars I and II, Queensland's population has increased each year.

The first census of Queensland was conducted on 7 April 1861 when the population was 30,059 (18,121 males and 11,938 females).

In 1867 the Queensland population exceeded that of Tasmania and in 1885 it passed that of South Australia to become the third largest colony, a position which has been maintained. According to censuses taken by the several colonies in 1881, Queensland's population was 9.5 per cent of the Australian total. At June 1986 Queensland accounted for 16.4 per cent of the Australian total.

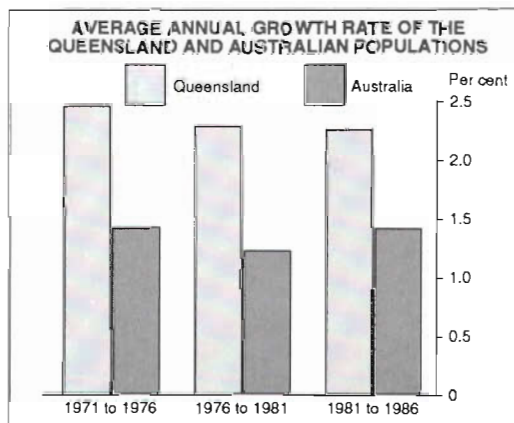
Queensland's population first exceeded a quarter of a million in 1883, it was half a million in 1901, one million in 1938 and two million in 1974. Growth in the 5-year period, June 1981 to June 1986, averaged 2.3 per cent annually, which was well above the Australian average of 1.4 per cent.

Natural increase (excess of births over deaths) and net migration have each been important factors in the growth of the Queensland population. Net migration was consistently the most important cause of population growth in the State's early development and has also been the major component again since the early 1970s.

The early years after separation from New South Wales saw large influxes of migrants attracted by free passage or gifts of land orders. Discoveries of gold in the 1870s and 1880s led to another influx of immigrants, followed by a decline in the 1890s. Depressed economic conditions in the early 1900s were accompanied by a steady decline in the number of births as well as in net migration.

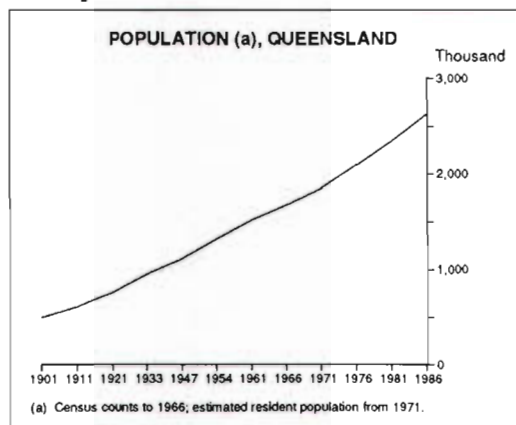
The economic collapse in 1929 and the depression during the 1930s brought a decline in the number of births and in net migration. During World War II, net migration fell further, while births rose to 26,713 in 1945.

At the end of World War II the Commonwealth Government launched a program to increase Australia's population by 1 per cent annually through immigration. Queensland, although not proportionally receiving as many migrants as the major



southern States, nevertheless showed considerable gains, with the population increasing to 1,106,415 in 1947.

This post World War II period up to the 1960s also experienced high fertility and was known as the *baby boom* era.



A general lowering of the crude birth rate, to a level below that of the depression years, occurred during the 1960s and 1970s. The slight increase in the number of births, coupled with an increase in the number of deaths, resulted in a minor reduction in the level of natural increase. Net migration over the last 20 years has fluctuated, with peaks in the early 1970s, early 1980s and again in 1988-89.

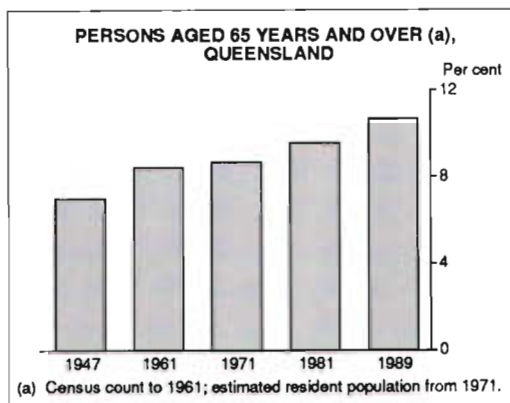
8.2 POPULATION CHARACTERISTICS

Queensland, in common with most other developed nations, is experiencing a 'greying' of the population, with increasing median ages and a higher proportion in the 65 years and over age group. As Queensland moves into the 21st century, this trend will accelerate as those born in the post World War II *baby boom* era reach retirement age.

8.2.1 Age Distribution

In June 1971, the median age of the Queensland population was 26.9 years. By June 1989 the median age had risen progressively to 31.2 years. The median age of males at June 1989 was 30.6 years and that of females was 31.8 years, reflecting the longer lifespan of females.

The 65 years and over age group has increased significantly since 1947. This is a trend being experienced by many nations resulting in the workforce being required to support an increasing proportion of retired persons.



8.2.2 Ethnicity

The proportion of Queenslanders born overseas is increasing. According to the 1986 Census, 15.0 per cent of the population counted in Queensland was born overseas compared with just 10.3 per cent in 1947. With the proportion for Australia at 20.8 per cent, the Queensland figure reflects lower levels of immigration when compared with New South Wales and Victoria, the major destinations of overseas migrants.

While the percentage of people born overseas has been increasing, there has also been a change in the pattern of the birthplaces of the overseas born.

8.1 BIRTHPLACE OF THE POPULATION, QUEENSLAND (per cent)

Birthplace	Censuses		
	1947	1966	1986
Australia	89.7	88.0	83.6
New Zealand	0.4	0.5	2.4
U.K. and Ireland	7.5	6.3	6.1
Other Europe	1.9	4.1	3.5
Asia	0.3	0.6	1.5
America	0.2	0.3	0.6
Other	0.1	0.3	1.0
<i>Total overseas born</i>	<i>10.3</i>	<i>12.0</i>	<i>15.0</i>
Not stated	—	—	1.4
Total	100.0	100.0	100.0

Source: Summary Characteristics of Persons and Dwellings (2481.0).

In the 1986 Census 149,232 Queenslanders spoke a language other than English at home, the most common being Italian (17.2 per cent) followed by German (9.5 per cent) and Greek (6.8 per cent).

Of those born in non-English speaking countries, over one-third speak English only, although this is naturally most evident among the younger age groups. In the 1986 Census, 90.9 per cent of those in the 5 to 14 years age group either only spoke English at home or spoke English well or very well

compared with 88.2 per cent in the 15 to 64 years age group and 72.6 per cent among those aged 65 years and over.

8.2 ENGLISH PROFICIENCY OF QUEENSLANDERS BORN IN NON-ENGLISH SPEAKING COUNTRIES (per cent)

Particulars	1981	1986
Uses another language and speaks English		
Very well	26.1	23.5
Well	20.4	18.7
Not well	10.2	8.9
Not at all	1.7	1.5
Proficiency not stated	0.5	0.7
Speaks English only	38.4	34.2
Language(s) used not stated	2.7	12.5
Total	100.0	100.0

Source: Censuses of Population and Housing.

8.2.3 Religion

Queensland is a predominantly Christian society. In 1986, 75.5 per cent of Queenslanders were Christians, 0.7 per cent belonged to a non-Christian group and 11.7 per cent had no religious affiliation.

8.3 RELIGIOUS AFFILIATION, QUEENSLAND (per cent)

Particulars	1976	1986
Christian		
Anglican	27.5	24.8
Baptist	1.5	1.5
Catholic	24.3	24.3
Lutheran	2.3	2.2
Methodist	8.8	(a)
Presbyterian	8.8	4.6
Uniting Church	(b)	9.9
Other	6.6	8.2
Non-Christian	0.3	0.7
No religion	7.6	11.7
Not stated	12.3	12.1
Total	100.0	100.0

(a) Included in Uniting Church. (b) The Uniting Church was established in 1977.

Source: Censuses of Population and Housing.

The number of Anglicans increased by 79,814 between 1976 and 1986 and the number of Catholics increased by 134,562 during the same period. As a result of the establishment of the Uniting Church in 1977, the number of people who reported themselves as Presbyterians and Methodists declined.

Non-Christian believers increased by 11,987 persons or 195 per cent during the 1976 to 1986 intercensal period, and those claiming no religious affiliation rose from 154,548 to 302,505 during the 10 years.

8.3 ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE — A 1986 CENSUS PROFILE

At the 1986 Census, there were 61,268 Aboriginal and Torres Strait Islander (TSI) people counted in Queensland. This represented 2.4 per cent of the total Queensland population and 26.9 per cent of all Aboriginal and TSI people in Australia.

In Queensland, the Aboriginal and TSI population increased by 37.1 per cent between the 1981 and 1986 Censuses, compared with an increase of 12.7 per cent for the total State population. The apparent large increase in numbers between 1981 and 1986 was not due solely to natural increase. Apart from general improvement in census procedures and a possible greater inclination to identify as being of Aboriginal or TSI origin, action was taken during the last Census to obtain a count as accurate as possible of this group. This included an awareness campaign on the importance of the Census specifically directed towards Aboriginal and TSI people.

8.4 ABORIGINAL AND TSI PEOPLE, QUEENSLAND, AT 30 JUNE

Census year	Aboriginal people	TSI people	Total
1971	24,414	7,508	31,922
1976	31,948	9,396	41,344
1981	33,966	10,732	44,698
1986	48,098	13,170	61,268

Source: Censuses of Population and Housing.

Geographic Distribution

Aboriginal and TSI people were unevenly distributed throughout Queensland. Over half (54.4 per cent) were located in the Northern, Far North and North-West Statistical Divisions with the majority living in Far North. By contrast, almost half (44.4 per cent) of the total population of Queensland was located in the Brisbane Statistical Division and the next highest proportion in Moreton Statistical Division.

Of the total population of Aboriginal and TSI people, 13,648 or 22.3 per cent were counted in localities in the Torres Strait or in designated community areas. The largest of these communities were located at Thursday Island, Palm Island near Townsville and Yarrabah, south of Cairns.

Age and Sex

The age profile of the Aboriginal and TSI people was significantly younger than that of the total population of Queensland. While persons aged

8.5 POPULATION BY LOCATION, QUEENSLAND, AT 30 JUNE 1986

Statistical division	Aboriginal and TSI population				Total population	
	Aboriginal people	TSI people	Total	Proportion	Proportion	
	No.	No.	No.	%	%	
Brisbane	9,935	1,322	11,257	18.4	44.4	
Moreton	1,918	315	2,233	3.6	15.9	
Wide Bay-Burnett	3,000	214	3,214	5.2	6.5	
Darling Downs	1,806	111	1,917	3.1	6.7	
South-West	1,831	27	1,858	3.0	1.1	
Fitzroy	4,081	479	4,560	7.4	6.1	
Central-West	611	16	627	1.0	0.5	
Mackay	1,161	1,060	2,221	3.6	4.0	
Northern	5,505	1,699	7,204	11.8	6.6	
Far North	11,452	7,669	19,121	31.2	6.5	
North-West	6,771	240	7,011	11.4	1.5	
Off-shore and migratory	27	18	45	0.1	0.1	
Queensland	48,098	13,170	61,268	100.0	100.0	

Source: Census 86 — Aboriginal and Torres Strait Islander People (2510.3).

under 20 years made up 32.5 per cent of the total population, 53.0 per cent of the Aboriginal and TSI population were in this age group. By contrast, only 28.7 per cent of Aboriginal and TSI people were aged 30 years and over, whereas 51.1 per cent of the total population were in this category. An even greater difference is evident in the 65 years and over age group which accounted for 10.8 per cent of the total population, but only 2.8 per cent of the Aboriginal and TSI population.

In the total Queensland population, females were only more numerous than males in the over 60 years age groups. However, Aboriginal and TSI women (30,808) predominated in all age groups over 20 years and outnumbered their male counterparts (30,460), whereas in the total Queensland population males (1,295,630) outnumbered females (1,291,684).

Educational Attainment

Almost all Aboriginal and TSI people aged 15 to 24 years had some schooling while 20.6 per cent of those aged 65 years and over had not attended school at all. For the total population only 0.9 per cent of persons aged 65 years and over had not attended school.

8.6 EDUCATION PARTICIPATION RATE (a), QUEENSLAND, AT 30 JUNE 1986 (per cent)

Age group (years)	Aboriginal and TSI people	Total population
5-9	93.1	96.9
10-14	95.8	97.8
15-24	20.8	31.4
25-34	3.5	6.4
35 and over	1.5	2.0
Total	9.4	24.8

(a) Total number of students in each age group expressed as a percentage of the total population in that age group.

Source: Census 86 — Aboriginal and Torres Strait Islander People (2510.3).

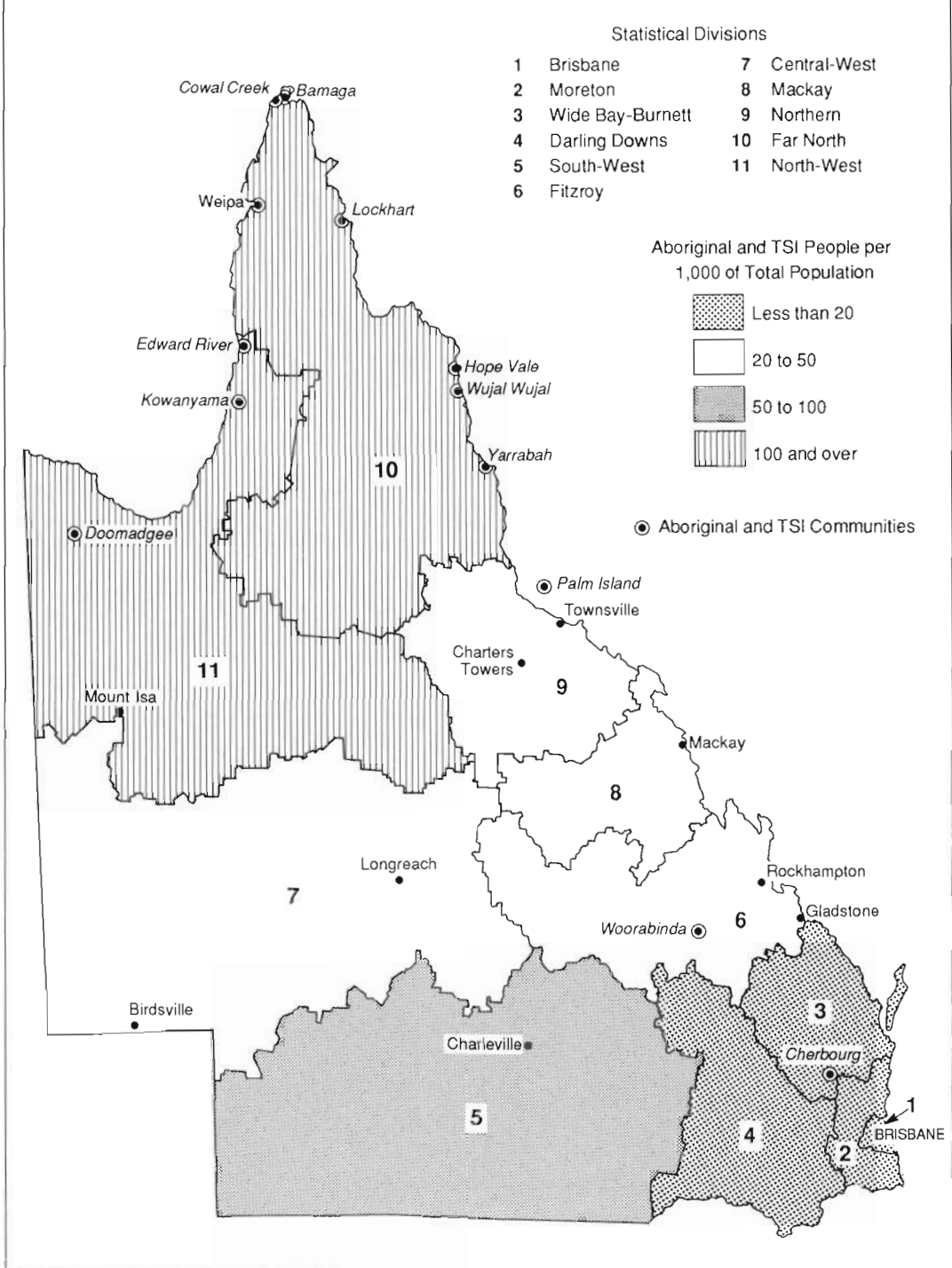
Participation in education by Aboriginal and TSI people was lower than for the total Queensland population in all age groups. The greatest difference occurred in the 15 to 24 years age group which is when most people undertake post-secondary school education.

Employment

The age profile of labour participation for the Aboriginal and TSI population was similar to the total population. Labour force participation rates were lowest for males amongst the youngest and oldest in the working age population. Female participation rates declined in older age groups and also in the predominant child-bearing age groups.



ABORIGINAL AND TSI COMMUNITIES IN QUEENSLAND



Labour force participation rates in the Aboriginal and TSI population were lower than for the total population in all areas other than Moreton Statistical Division. The lowest rate was in Far North Statistical Division, although it contained almost one-third of that population group.

Employed females in both the Aboriginal and TSI and total populations had a younger age profile than their employed male counterparts. In addition, the age profile of employed Aboriginal and TSI males was younger than that of employed males in the total Queensland population.

8.7 EMPLOYED POPULATION BY AGE AND SEX, QUEENSLAND, AT 30 JUNE 1986 (per cent)

Age group (years)	Aboriginal and TSI population		Total population	
	Males	Females	Males	Females
15-19	12.8	17.1	7.7	11.9
20-24	18.8	20.3	12.7	16.2
25-34	30.3	28.2	27.1	25.7
35-44	21.0	20.5	24.9	25.0
45-54	11.5	10.5	16.2	14.4
55-64	4.9	3.2	10.0	5.8
65 and over	0.6	0.3	1.5	1.0
Total	100.0	100.0	100.0	100.0

Source: Census 86 — Aboriginal and Torres Strait Islander People (2510.3).

8.4 LIVING ARRANGEMENTS

The vast majority of Queenslanders live in family households. Couple families comprise 86 per cent of all families, whereas single-parent families account for 8 per cent. In single-parent families, female parents outnumber their male counterparts by almost six to one. Persons in non-family households represented less than 10 per cent of all Queenslanders, while occupants of hospitals, hostels, nursing homes and other non-private dwellings represented less than 4 per cent of the State's population.

8.4.1 Households

On census night 1986, 860,813 households were identified in Queensland. Over 65 per cent were single-family households living in separate houses. The number of households had increased more rapidly than the number of persons in households, resulting in a decrease in average household size from 3.18 persons in 1976 to 2.92 persons in 1986.

The 39.3 per cent growth in household numbers in Queensland is well above the national increase of 25.3 per cent. Households of 4 or 5 people have increased at almost twice the Australian rate. Lone-person households, in line with those in the rest of the country, have shown the largest growth over the 10-year period.

8.8 HOUSEHOLDS IN PRIVATE DWELLINGS, QUEENSLAND

Persons in household	Households		Percentage change 1976 to 1986
	1976	1986	
1	90,488	152,303	+68.3
2-3	271,996	397,665	+46.2
4-5	178,866	233,998	+30.8
6 and over	56,790	49,537	-12.8
Total	598,140	833,503	+39.3

Source: Censuses of Population and Housing.

8.4.2 Families

In 1986, over 2.2 million people in Queensland on census night were classified as family members. A further 38,624 people, while not related to family members, were counted with families as boarders or visitors.

Couple families formed the majority of all living arrangements, with 591,664 families and 1,951,742 family members. Just over half the couple families (51.4 per cent) had dependent children (i.e. children aged under 15 years and children aged 15 to 20 years who were full-time students) usually present. The traditional nuclear family, a couple with dependent children only, represented 35.3 per cent of all Queensland families identified in the Census and 41.1 per cent of couple families. On average these families had two dependent children.

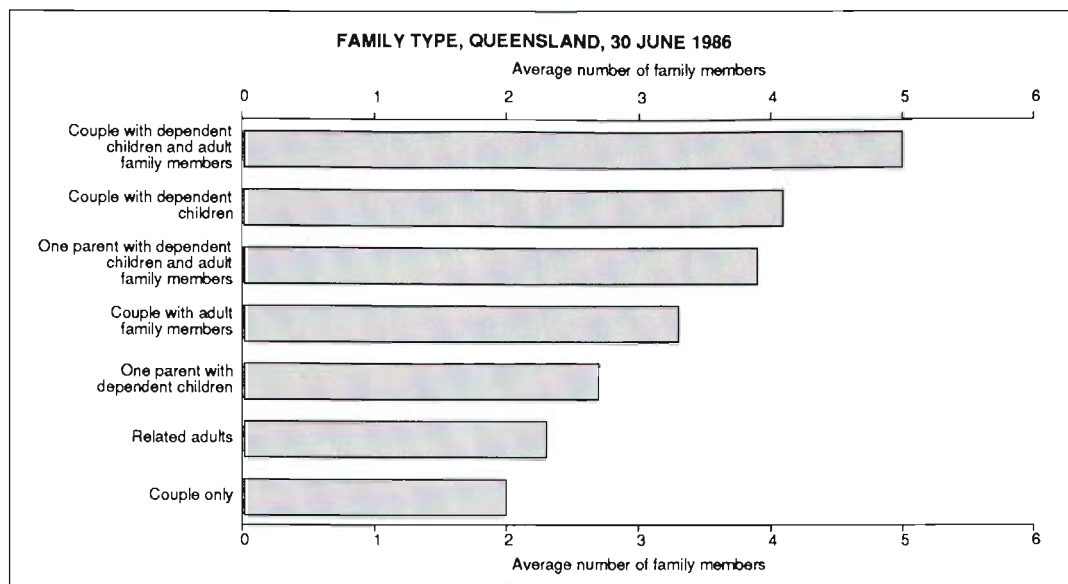
One-parent families represented 8.1 per cent of all families identified at the Census. About a quarter of one-parent families lived with other adult family members and many of these were adult children of the parent. About half (52.7 per cent) of one-parent families had only one dependent child, compared with 32.2 per cent of couple families with dependent children. Most single parents had been married or were still married but separated from their spouse. A greater proportion of male parents than female parents had been widowed.

8.9 COUPLE FAMILIES, QUEENSLAND, AT 30 JUNE 1986

Family type	Married		De facto	
	Number	Per cent	Number	Per cent
Couple only	198,124	35.8	20,861	53.9
Couple with dependent children	229,816	41.6	13,136	33.9
Couple with dependent children and adult family members	58,872	10.6	2,495	6.4
Couple with adult family members	66,116	12.0	2,244	5.8
Total	552,928	100.0	38,736	100.0

Source: Census of Population and Housing.

Families consisting of related adults represented 6.0 per cent of all families. With an average of 2.3



people per family, families of related adults were the smallest of all family types, except couple-only families.

8.4.3 Non-family Members

There were 38,624 non-family members living in family households and only 12.7 per cent were boarders while over 60 per cent were males. For females, 40.3 per cent were under 20 years of age as were 29.5 per cent of males. Almost one-third of all non-family members were under 20 years of age.

8.4.4 Housing

Queenslanders tend to live in separate houses, rather than other types of dwellings, regardless of the household or family type.

8.10 HOUSEHOLDS BY TYPE OF DWELLING, QUEENSLAND, AT 30 JUNE 1986
(per cent)

Type of dwelling	Family households	Group or lone person households
Separate house	86.9	60.0
Medium density	7.2	28.1
High rise	1.1	2.8
Caravans etc. in caravan park	2.5	5.4
Other	2.2	3.7
Total	100.0	100.0

Source: Census of Population and Housing.

Over 72 per cent of family households own or are purchasing their dwelling, compared with 28.1

per cent of group households and 57.7 per cent of lone-person households.

8.5 GEOGRAPHIC DISTRIBUTION

Since World War II, Queensland's urban population has grown strongly. At the 1986 Population Census, 78.9 per cent of people counted were in urban areas compared with 59.7 per cent in 1947. This was considerably lower than the Australian total of 85.4 per cent.

The rural population, having dropped to 373,392 in 1971, had increased to 542,944 by 1986, with 104,038 persons in small rural localities of between 200 and 999 people.

8.11 ESTIMATED RESIDENT POPULATION, AT 30 JUNE 1988

State	Total		Capital City
	'000	'000	%
New South Wales	5,701.5	3,596.0	63.1
Victoria	4,261.9	3,002.3	70.4
Queensland	2,743.8	1,240.3	45.2
South Australia	1,408.3	1,023.5	72.7
Western Australia	1,544.8	1,118.8	72.4
Tasmania	448.5	179.9	40.1

Source: Australian Demographic Statistics (3101.0).

Queensland's population is the least centralised of all the mainland States of Australia, with 45.2 per cent of the population living in Brisbane Statistical Division.

Notwithstanding the relatively decentralised nature of population distribution in Queensland, 61.5 per cent of the population resided in the south-eastern Statistical Divisions of Brisbane and Moreton at 30 June 1988.

8.12 POPULATION AND GROWTH IN STATISTICAL DIVISIONS, QUEENSLAND, AT 30 JUNE 1989

Statistical division	Estimated resident population p Queensland		Average annual growth rate, 1984 to 1989 p
	No.	%	
Brisbane	1,272,378	45.0	1.8
Moreton	482,714	17.1	5.6
Wide Bay-Burnett	180,548	6.4	2.0
Darling Downs	186,255	6.6	1.1
South-West	28,558	1.0	0.1
Fitzroy	162,742	5.8	1.0
Central-West	13,318	0.5	-0.8
Mackay	107,860	3.8	1.6
Northern	177,145	6.3	1.3
Far North	179,168	6.3	3.2
North-West	38,477	1.4	-0.3
Queensland (a)	2,830,198	100.0	2.3

(a) Including persons not counted elsewhere, e.g. off-shore areas and migratory.

Source: Estimated Resident Population and Area, Preliminary (3201.3).

In Brisbane City, the growth rate continues to be below the Queensland average. However, local government areas on the periphery of the Division (Logan City, Redland Shire and parts of the Shires of Albert, Beaudesert, Caboolture, Moreton and Pine Rivers) have all grown strongly, with young families moving to outer suburban and semi-rural areas to take advantage of the greater availability of suitable land at lower prices.

Moreton Statistical Division continues to experience the highest growth rate in Queensland. The Gold and Sunshine Coasts are the major growth areas although areas on the border of Brisbane Statistical Division have also grown strongly in recent years.

8.13 POPULATION AND GROWTH IN STATISTICAL DISTRICTS, QUEENSLAND, AT 30 JUNE

Statistical district	Estimated resident population		Average annual growth rate, 1983-1988
	1983	1988	
	No.	No.	%
Gold Coast-Tweed (a)	184,296	235,556	5.0
Sunshine Coast	72,970	95,683	5.6
Bundaberg	41,873	43,837	0.9
Rockhampton	56,888	61,124	1.4
Gladstone	n.a.	30,623	n.a.
Mackay	48,181	50,301	0.9
Townsville	100,727	109,699	1.7
Cairns	62,951	76,475	4.0

(a) Including that part in New South Wales.

Source: Estimated Resident Population and Area (3202.3).

Apart from the south-east corner of the State the majority of population growth has been associated with the larger coastal cities, such as Cairns and Townsville.

8.6 COMPONENTS OF CHANGE

Changes in the population are due to the movements in the four components of population change: births, deaths, overseas migration and interstate migration. Although the birth rate has been decreasing over recent years, Queensland continues to maintain a high level of population growth due to net migration gain.

8.6.1 Births

Registration of births is the responsibility of the Queensland State Registrar-General's office and is based on data provided by one of the parents.

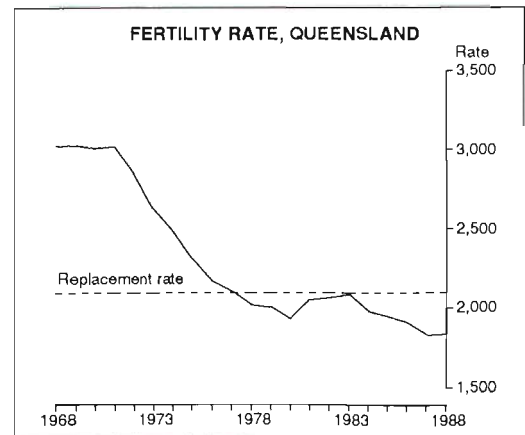
8.14 BIRTHS, QUEENSLAND

Particulars	1961-	1971-	1987	1988
	1970 (a)	1980 (a)		
Males	18,160	18,819	20,293	20,820
Females	17,238	17,828	19,072	19,741
Total	35,398	36,647	39,365	40,561
Masculinity ratio of births	105.3	105.6	106.4	105.5
Crude birth rate (b)	21.4	17.9	14.7	14.8

(a) Average of annual numbers and rates. (b) Births per 1,000 mean estimated resident population.

Source: Births (3306.3).

Apart from minor fluctuations, crude birth rates for Queensland have been declining steadily over the last 25 years. However, numbers of births have been gradually increasing, primarily as a function of the increase in the population.



The number of male births to every 100 female births (masculinity ratio) has varied little from year to year. The masculinity ratio for all births since 1857 is 105.5.

The total fertility rate for Queensland has also been decreasing steadily over the past 25 years. This rate, which measures the total number of children 1,000 women would be expected to bear in their lifetimes, has now been consistently below the long-term replacement level of 2,100 since 1978. There is no immediate danger of population decline due to the high fertility of previous generations and net migration gain. However, the age distribution of the population is altering substantially because the proportion of elderly people in the population is continually growing and the proportion of children is continually decreasing.

8.15 AGE-SPECIFIC BIRTH AND FERTILITY RATES, QUEENSLAND

Particulars	1971-	1976-	1981-	1988
	1975 (a)	1980 (a)	1985 (a)	
Age-specific birth rates (b)				
Age group (years)				
15-19	57.9	38.1	34.2	23.9
20-24	168.6	127.5	115.2	90.3
25-29	170.8	143.5	147.5	137.4
30-34	88.0	71.1	79.0	86.3
35-39	37.5	24.3	25.0	26.1
40-44	9.9	5.4	4.7	4.3
45-49	0.7	0.3	0.3	0.3
Total fertility rate	2,667	2,051	2,029	1,843
Net reproduction rate	1.26	0.97	0.96	0.88

(a) Average of annual rates. (b) Births per 1,000 women in each age group. Source: Births (3306.3).

The fertility rate has been affected by the significant decrease in the average family size in the last 20 years. While 20 per cent of the married mothers in 1968 had previously had three or more children, only 7 per cent were in this category in 1988. A number of factors have contributed to this decrease, the most significant of which is the availability of more efficient birth control methods which allows greater control over the number and timing of children born. The average time after marriage until women have their first child has risen from 1.3 years in 1968 to 2.3 years in 1988.

In 1988 approximately 12 in every 1,000 confinements resulted in multiple births with live-born issue. There were 445 cases of twins and 16 cases of triplets resulting in 936 live-born issue and 2 stillbirths.

8.6.2 Deaths

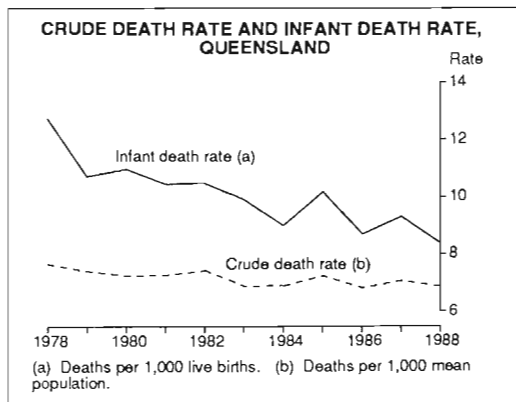
There were 18,803 deaths of Queensland residents during 1988. This was 0.3 per cent lower than the 1987 total of 18,861 which was the highest annual total ever recorded.

8.16 DEATHS, QUEENSLAND

Year	Males	Females	Persons	Crude death rate (a)
	No.	No.	No.	
1978	9,496	7,071	16,567	7.6
1983	9,725	7,331	17,056	6.9
1986	10,006	7,855	17,861	6.8
1987	10,522	8,339	18,861	7.0
1988	10,597	8,206	18,803	6.9

(a) Deaths per 1,000 mean population. Source: Deaths (3307.3).

While total death rates have fallen over recent years, the greatest reductions have been at the very youngest ages. The infant death rate for 1988 was 8.4, less than half the figure it was 20 years ago.



The death rate for males is higher than for females in every age group, the most significant differences being in the 15 to 34 years age group and the 60 to 69 years age group. In the 15 to 34 years age group male victims of motor vehicle accidents outnumbered females by three to one in 1988, while the ratio of male suicides to female suicides was more than five to one. The relatively large ratio of male death rates to female death rates in the 60 to 69 years age group has been linked to the stresses experienced by males in adjusting to retirement. Heart disease and cancer cause the deaths of twice the number of males than females in these age groups.

8.17 AGE-SPECIFIC DEATH RATES BY MARITAL STATUS, QUEENSLAND, 1986

Particulars	Never married	Married	Widowed or divorced
Males			
20-54	2.9	2.0	5.6
55-74	38.0	20.4	34.0
75 and over	116.4	85.7	115.1
Females			
20-54	1.3	1.1	2.0
55-74	18.1	10.2	16.1
75 and over	83.4	61.5	76.5

Sources: Deaths (3307.3). Census of Population and Housing.



The death rates for married people of both sexes are lower than those for people not married.

A measure often used to indicate changes in the health status of a community or to make comparisons between communities is life expectancy. This is the number of years that a person can, on average, expect to live past his/her present age and is based on death rates of the population.

Because of the relatively lower mortality rates for females, life expectancy is greater for females than for males at each age. Girls born in Queensland in 1988 have a life expectancy of over 6 years more than boys born in the same year.

8.18 EXPECTATION OF LIFE (YEARS), QUEENSLAND, 1988

At age (years)	Males	Females
0	73.30	79.79
1	72.96	79.42
10	64.23	70.69
20	54.66	60.88
30	45.36	51.15
40	35.96	41.47
50	26.78	32.08
60	18.55	23.29
65	15.03	19.15
70	11.85	15.27
80	6.83	8.65

Source: Deaths (3307.3).

As a consequence of the continuing reduction in mortality rates and the resultant increases in life expectancy there has been a gradual increase in the median age at death.

8.19 MEDIAN AGE AT DEATH, QUEENSLAND

Year	Males	Females	Persons
1960	67.5	71.4	69.0
1970	68.0	74.2	70.5
1980	69.2	76.3	71.9
1986	70.6	76.9	73.2
1987	71.4	77.7	74.1
1988	71.5	77.8	74.2

Source: Deaths (3307.3).

8.6.3 Overseas Migration

The number of people coming to Australia to settle is subject to government control and varies from year to year according to economic conditions and government policy. In the last 20 years, the number of people settling in Queensland reached a low of 4,700 in 1976. In the 1980s, settler arrivals in Queensland have fluctuated between a low of 8,750 in 1984 and a record high of 23,020 in 1988.

8.20 OVERSEAS MIGRATION, QUEENSLAND

Year	Settlers arriving	Departures		Net gain
		Former settlers	Total	
1968	10,220	1,910	2,970	7,250
1978	6,870	1,630	3,090	3,780
1983	10,630	3,380	5,350	5,280
1986	13,310	1,950	3,470	9,840
1987	16,660	2,270	4,020	12,640
1988	23,020	2,050	3,810	19,210

Source: Overseas Arrivals and Departures (3404.0).

8.21 SETTLER ARRIVALS BY COUNTRY OF BIRTH, QUEENSLAND

Country of birth	1986	1987	1988
<i>Africa</i>	580	620	530
South Africa	370	360	380
Other	210	260	150
<i>America</i>	870	890	980
United States	320	270	390
Other	550	620	590
<i>Europe</i>	3,850	4,810	4,660
U.K. and Ireland	2,550	3,330	3,240
Germany	190	280	260
Other	1,110	1,200	1,160
<i>Asia</i>	2,860	3,510	4,250
Philippines	750	1,020	990
Hong Kong	400	470	740
Other	1,710	2,020	2,520
<i>Oceania</i>	5,160	6,830	12,600
New Zealand	4,570	6,060	11,600
Fiji	210	430	460
Other	380	350	540
Total (a)	13,310	16,660	23,020

(a) Including not stated.

Source: Overseas Arrivals and Departures (3404.0).

The number of Australian residents departing permanently has not varied significantly in the last 20 years. Since 1981, former settlers have accounted for 59.0 per cent of permanent emigration.

New Zealand continues to provide the largest number of settlers to Queensland. The number of New Zealanders settling in Queensland dropped from 6,113 in 1981 to 1,710 in 1983 but rose to a high of 11,600 in 1988. New Zealand, together with the United Kingdom and Ireland (the second largest contributor) accounted for 64.5 per cent of settlers in 1988.

Asian countries provided 18.5 per cent of settlers to Queensland in 1988. Since 1986, the Philippines has been the major contributor of Asian migrants.

8.22 OVERSEAS-BORN PERSONS (a) IN STATISTICAL DIVISIONS, QUEENSLAND, AT 30 JUNE 1986

Statistical division	In residence 0-4 years		Total overseas born	
	Number	Per cent	Number	Per cent
Brisbane	33,947	2.9	211,065	18.3
Moreton	9,013	2.3	65,580	16.9
Wide Bay-Burnett	1,149	0.7	12,505	7.6
Darling Downs	1,235	0.7	11,861	6.8
South-West	124	0.4	1,070	3.8
Fitzroy	1,766	1.1	12,896	8.4
Central-West	87	0.7	523	4.0
Mackay	1,188	1.2	9,515	9.5
Northern	2,367	1.4	18,687	11.3
Far North	2,754	1.8	22,347	14.3
North-West	582	1.6	4,376	11.7
Queensland (b)	54,292	2.1	370,704	14.6

(a) Usual residents of Australia. (b) Including persons not counted elsewhere, e.g. off-shore areas and migratory.

Source: Census of Population and Housing.

Within Queensland, the majority of migrants tend to settle in the south-east corner. According to the 1986 Census, 18.3 per cent of usual residents in Brisbane Statistical Division were born overseas, while in Moreton Statistical Division the figure was 16.9 per cent compared with the Queensland figure of 14.6 per cent. Brisbane and Moreton Statistical Divisions together account for 74.6 per cent of the overseas born in Queensland.

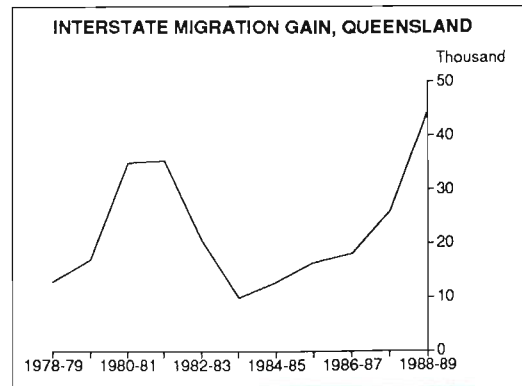
Apart from the south-east corner of the State, relatively larger proportions of overseas-born persons were found in Far North, Northern and North-West Statistical Divisions. The lowest proportions were found in the inland Statistical Divisions of South-West and Central-West.

8.6.4 Internal Migration

In postwar years, Queensland has tended to gain population from the other States and Territories.

Since the early 1970s this trend has intensified. The last three intercensal periods, 1971 to 1976, 1976 to 1981 and 1981 to 1986, have seen estimated gains from interstate migration of 71,251, 88,054 and 95,663, respectively.

According to the 1986 Census, the majority of persons from interstate who settled in Queensland in the previous 5 years came from New South Wales (51.0 per cent) or Victoria (25.5 per cent). The other States and Territories accounted for the remaining 23.5 per cent of interstate settlers. Within Queensland, Brisbane Statistical Division was the main destination for interstate settlers (38.7 per cent) while Moreton Statistical Division accounted for 28.2 per cent. Of the usual residents in Moreton Statistical Division in 1986, 14.6 per cent had arrived from interstate in the previous 5 years. This is compared to the Queensland figure of 7.9 per cent and reflects the influence of the Gold and Sunshine Coasts.



8.7 MARRIAGES AND DIVORCES

The Queensland marriage and divorce rates both rose slightly in 1988. However, the trend towards marrying at an older age has been maintained.

8.23 USUAL RESIDENTS, QUEENSLAND, 1986

Statistical division	State of usual residence in 1981				Total usual residents 1986 (a)
	New South Wales	Victoria	Queensland	Other	
Brisbane	40,425	19,398	921,327	17,948	1,155,113
Moreton	30,048	16,453	280,676	10,133	388,271
Wide Bay-Burnett	5,058	2,925	136,548	2,314	164,353
Darling Downs	6,284	1,820	145,988	2,064	175,663
South-West	939	181	22,886	340	27,900
Fitzroy	4,282	1,810	125,560	2,622	154,344
Central-West	356	86	10,739	212	13,217
Mackay	3,088	1,442	79,638	1,868	100,175
Northern	5,769	3,657	130,344	4,507	165,557
Far North	5,296	3,072	120,576	4,211	156,644
North-West	802	366	29,185	765	37,414
Queensland (b)	102,449	51,256	2,004,174	47,052	2,540,249

(a) Including persons whose usual residence in 1981 was overseas and children aged 0 to 4 years. (b) Including persons not counted elsewhere, e.g. off-shore areas and migratory.

Source: Census of Population and Housing.

8.7.1 Marriages

There were 18,850 marriages registered in Queensland during 1988. This is the third successive year in which the number of marriages has increased, with the 1988 total being comparable to the numbers recorded in the early 1980s.

8.24 MARRIAGES, QUEENSLAND

Period	Number		Crude rate (a)	
	Aust.	Qld	Aust.	Qld
1968	14,860	106,345	8.6	8.8
1978	15,431	102,958	7.1	7.2
1983	18,645	114,860	7.5	7.5
1987	18,265	114,113	6.8	7.0
1988	18,850	116,816	6.9	7.1

(a) Marriages per 1,000 mean population.

Sources: Marriages (3304.3).

Marriages (3306.0).

Although the crude marriage rate increased slightly from 6.8 in 1987 to 6.9 in 1988, there has been a general decline over the last 20 years. This decline follows the national trend, confirming the continuing decline in the proportion of Australians marrying.

The overall increase in age at marriage for brides and bridegrooms since 1966 is, in part, due to the postponement of first marriages with many people preferring to further their education, establish careers and to pursue a more independent lifestyle before taking on the responsibility of marriage. Other factors are the increasing number of de facto relationships and the lessening of the social stigma attached to unmarried motherhood as evidenced by the sharp increase in the rate of ex-nuptial births during the last decade.

8.25 AGE-SPECIFIC FIRST MARRIAGE RATES (a), QUEENSLAND

Particulars	1971	1976	1981	1986
Males				
15-19	19.3	13.1	7.7	3.1
20-24	190.8	142.4	99.0	67.9
25-29	180.2	144.7	127.2	101.9
Females				
15-19	78.6	61.8	40.2	17.7
20-24	294.5	206.8	154.9	115.3
25-29	177.2	141.2	127.6	115.2

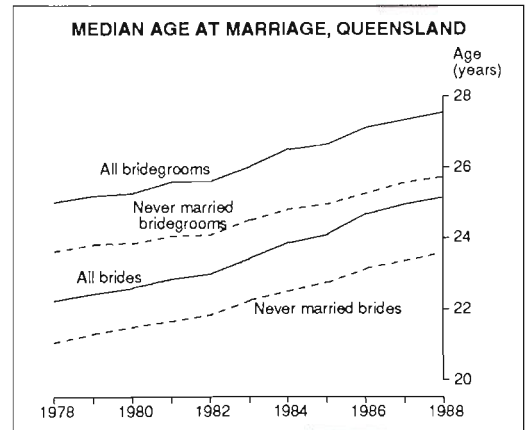
(a) Per 1,000 of the population previously never married.

Source: Marriages (3304.3).

The increase in the number of people remarrying has also contributed to the rise in the median age at marriage.

The greatest increase over the past 20 years is in the remarriage of divorcees. In 1968, 5 per cent of persons marrying had been previously divorced, compared with 22 per cent in 1988. One of the main

factors influencing this rise was the introduction, in 1976, of the Family Law Act which reduced the grounds for divorce to one, irrevocable breakdown of marriage. This subsequently resulted in an increase in the numbers of people divorcing and hence a corresponding increase in the number of divorcees remarrying.



Over the last 10 years, males have shown a higher tendency to remarry than females. Between 1978 and 1988, more divorced males remarried than divorced females despite the fact that divorced females outnumbered them in the population. Although 20 per cent more widowed females than widowed males have married since 1978, there are over three times as many widows as widowers in the population and so, on a proportional basis, widowed males show a greater tendency to remarry than their female counterparts.

8.26 PROPORTIONS OF PEOPLE MARRYING, QUEENSLAND

Year	Never married	Widowed	Divorced
1968	92.0	3.3	4.7
1973	89.7	3.4	6.9
1978	77.7	3.6	18.7
1983	76.9	2.9	20.2
1987	74.9	2.9	22.1
1988	75.0	2.8	22.2

Source: Marriages (3304.3).

8.7.2 Divorces

The *Family Law Act 1975*, which instituted the Family Court of Australia, came into operation on 5 January 1976, replacing the Australian *Matrimonial Causes Act 1959*.

A large peak in the crude divorce rate occurred in 1976 indicating the large number of divorces granted during the first year of operation of the Family Law Act. The rates have decreased since then but are still significantly higher than rates attained in years prior to 1976, reflecting the

comparative ease of obtaining a divorce under the Family Law Act than under the earlier Matrimonial Causes legislation.

The median age at divorce has been increasing for several years. The tendency towards deferral of marriage by younger persons, and the growing proportions of people divorcing more than once, are contributing factors which have led to this increase. The median age of husbands who divorced in 1988 was 38.0 years at the time of their divorce compared with 35.0 years for wives.

8.27 DIVORCES (a), QUEENSLAND

Particulars	1978	1986	1987	1988
Divorces granted	6,106	7,042	6,918	7,690
Median duration of marriage (years)	11.00	10.71	10.29	10.39
Divorces involving children	4,066	4,385	4,204	4,605

(a) Including cases heard at Lismore (New South Wales).
Source: Divorces (3305.3).

The proportion of second and further divorces has stabilised after increasing significantly over the last few years. In 1988, 15.9 per cent of males and 14.3 per cent of females who divorced had been previously divorced. In 1978, the corresponding proportions for husbands and wives were much lower at 6.7 per cent and 6.8 per cent, respectively.

8.28 MEDIAN DURATION OF MARRIAGE BY MARITAL STATUS AT TIME OF MARRIAGE, QUEENSLAND, 1988 (years)

Sex	Never married	Widowed	Divorced
Males	11.68	7.00	7.26
Females	11.55	9.19	7.30

Source: Divorces (3305.3).

8.8 POPULATION PROJECTIONS

Queensland's population is projected to increase from 2.7 million in 1987 to between 3.7 and 4.1 million by the year 2010 and between 4.3 and 5.3 million by 2031. The population is expected to grow at a declining rate in the future. The population increased by 2.0 per cent from 1986 to 1987, but this is projected to decline to an average annual growth rate of between 1.4 and 1.9 per cent in the period 1987 to 2010 and between 0.7 and 1.2 per cent during the years 2010 to 2031.

Population projections illustrate the change in the population which would occur if various assumptions about future demographic trends prevail over the projection period. Alternative projections are prepared in recognition of the uncertainty of these trends.

8.29 PROJECTED POPULATION DISTRIBUTION, STATES AND TERRITORIES, 30 JUNE (per cent)

State or Territory	1987	2011	2031
New South Wales	34.5	32.7-33.3	31.4-32.6
Victoria	25.9	24.3-24.8	23.2-24.1
Queensland	16.5	17.8-18.5	18.6-19.9
South Australia	8.6	7.6-7.8	6.9-7.3
Western Australia	9.2	11.0-11.5	12.3-13.1
Tasmania	2.8	2.4-2.5	2.0-2.3
Northern Territory	1.0	1.2-1.3	1.4-1.6
A.C.T.	1.6	1.6-1.8	1.5-2.0

Source: Projections of the Populations (3222.0).

Distribution of the population between the States and Territories of Australia is projected to change, with Queensland, Western Australia and the two Territories each expected to increase their share of the population. If the current assumptions both eventuate and continue, Queensland's population should overtake Victoria's in the latter half of the 21st century.

8.30 PROJECTED EXPECTATION OF LIFE, QUEENSLAND

Year	Expectation of life at age (years)			
	0	25	45	65
<i>Males</i>				
1985-86 (actual)	72.5	49.4	30.8	14.8
2021	76.6	52.7	33.6	17.0
2031	77.2	53.2	34.1	17.3
<i>Females</i>				
1985-86 (actual)	79.1	55.3	36.0	18.6
2021	82.8	58.3	38.9	21.2
2031	83.7	59.2	39.7	21.9

Source: Projections of the Populations (3222.0).

Although Queensland's population is projected to continue growing, there will be an increasing reliance on migration to maintain this growth. With decreasing birth rates and increases in the elderly population, Queensland's natural increase (births minus deaths) is projected to decrease significantly from 21,800 in 1987 to between 13,100 and minus 3,200 in 2031.

8.31 PROJECTED MEDIAN AGES OF THE POPULATION, STATES AND TERRITORIES (years)

State or Territory	1987	2011	2031
New South Wales	32.0	37.5-39.1	40.5-44.2
Victoria	31.5	37.7-39.2	41.0-44.5
Queensland	30.6	36.5-38.8	39.7-43.2
South Australia	32.3	39.1-40.4	42.4-45.9
Western Australia	30.3	35.9-37.6	38.8-42.1
Tasmania	31.0	38.3-39.5	42.3-45.7
Northern Territory	26.0	30.2-31.5	33.0-35.4
A.C.T.	28.3	33.9-36.0	37.3-41.7
Australia	31.4	37.3-38.8	40.4-43.8

Source: Projections of the Populations (3222.0).

With mortality rates assumed to continue decreasing, the expectation of life is projected to increase. As an example, a 65 year old man retiring in 2021 will have 15 per cent more time left to live than his present-day counterpart.

As a consequence of people's longer life expectations and the declining birth rates, the median age of the population of all States and Territories is projected to increase significantly.

Associated with the projected ageing of the population are changes to the proportion of the population in the various age groups, such as the 0 to 14 years and 65 years and over.

Of particular interest is the projected fluctuation in the dependency ratio, which measures the number of children (0 to 14 years) and elderly (65 years and over) per 100 persons of working age (15 to 64 years). The dependency ratio is projected to decline gradually from 51.7 in 1987 to between 44.9 and 47.9 in 2006, before rising in the following years to reach between 54.5 and 57.3 in the year 2031. The initial decline will be due to the decrease in the proportion of children in the population outweighing the increase in the proportion of the elderly. However, once the *baby boom* generation begins to turn 65 years of age, their effect will outweigh the decreasing proportion of children, resulting in the rise after 2006 of the dependency ratio.

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Divorces (3305.3), annual

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Interstate Migration, Australia, Census of Population and Housing (3411.0), irregular

Chapter 9

LABOUR, WAGES AND INDUSTRIAL CONDITIONS

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Chapter 9

LABOUR, WAGES AND INDUSTRIAL CONDITIONS

The Queensland labour market has shown marked improvement since the downturn experienced early in the 1980s. Unemployment rates, though still relatively high for some groups, have fallen to their lowest level since late 1982.

Both Commonwealth and State Governments are providing assistance and support in an effort to improve employment prospects. The main thrust of this support in 1988-89 has been a change in emphasis from job creation towards a concentration on training and the reduction of inequalities in the labour force. Governments have initiated a range of programs aimed at those traditionally most disadvantaged including the young, the unskilled, sole parents, women, the disabled, Aboriginals and older workers.

9.1 THE LABOUR FORCE

Employment levels and the civilian population aged 15 years and over have consistently risen throughout the 1980s. The labour force increased at a faster rate than the civilian population which resulted in an increase in the participation rate during this period.

9.1 LABOUR FORCE, QUEENSLAND

<i>At November</i>	<i>Persons</i>	<i>Participation rate</i>
	'000	%
1984	1,116.6	58.9
1985	1,189.4	61.2
1986	1,247.2	62.4
1987	1,252.8	61.0
1988	1,318.1	62.0
1989	1,408.7	64.0

Source: The Labour Force (6201.3).

However, the employment levels increased much more rapidly during 1989. As a result the unemployment rate which reached a high of over 11 per

cent at times during the 1980s dropped throughout 1989 from 8.3 per cent in January to 6.1 per cent in November 1989.

9.2 LABOUR FORCE STATUS OF THE POPULATION (a), QUEENSLAND

<i>At November</i>	<i>Employed</i>	<i>Unemployed</i>	<i>Not in the labour force</i>	<i>Total</i>
	'000	'000	'000	'000
1984	1,011.5	105.1	777.6	1,894.2
1985	1,091.1	98.2	754.4	1,943.7
1986	1,137.6	109.6	751.9	1,999.1
1987	1,144.8	108.0	802.1	2,055.0
1988	1,228.5	89.7	806.3	2,124.4
1989	1,323.3	85.5	794.1	2,202.8

(a) Civilians aged 15 years and over.

Source: The Labour Force (6201.3).

9.1.1 Characteristics of the Labour Force

The civilian labour force in Queensland is estimated to be 1,408,700 persons at November 1989, having risen by 90,600 persons, or 6.9 per cent, in the previous 12 months. The proportion of civilians aged 15 years and over who participated in the labour force was 64.0 per cent with the male rate being 75.9 per cent compared with 52.2 per cent for females.

Just over 46 per cent of Queensland's working age population lived in the Brisbane Statistical Division (BSD) and accounted for the same proportion of the labour force. While the participation rates for the BSD and the balance of Queensland were similar at approximately 64 per cent (the State average), there were fairly wide fluctuations within the smaller regions comprising these areas. The Mackay/Fitzroy/Central-West Region has the



Gold pour at Pajingo gold mine

Photo: Premier's Department



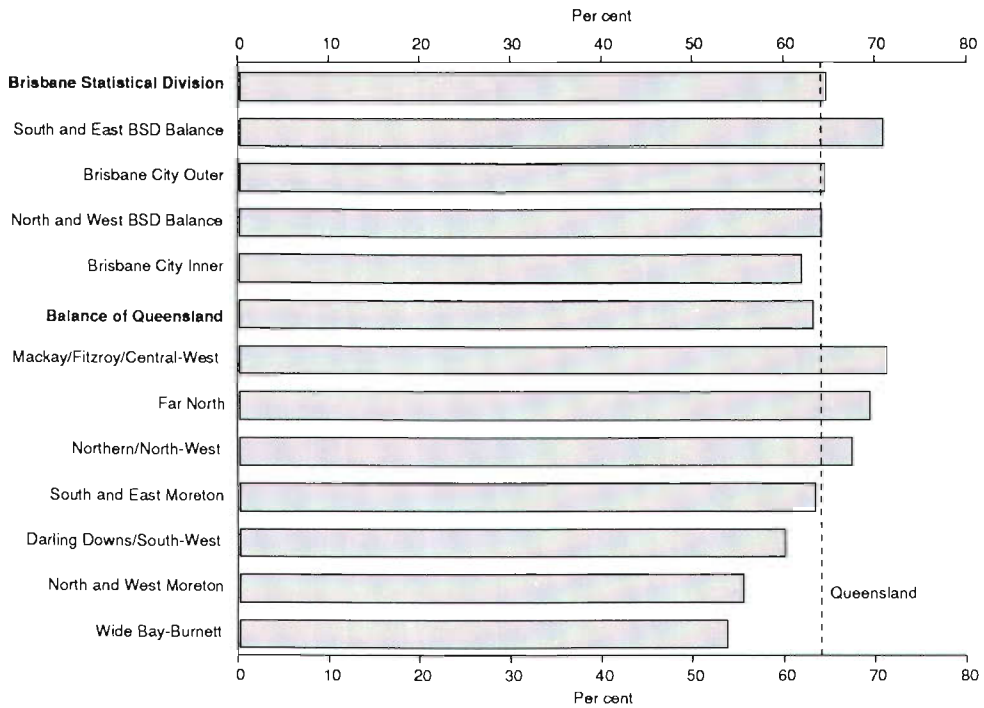
Potter at work, Atherton Tableland

Photos: *Premier's Department*

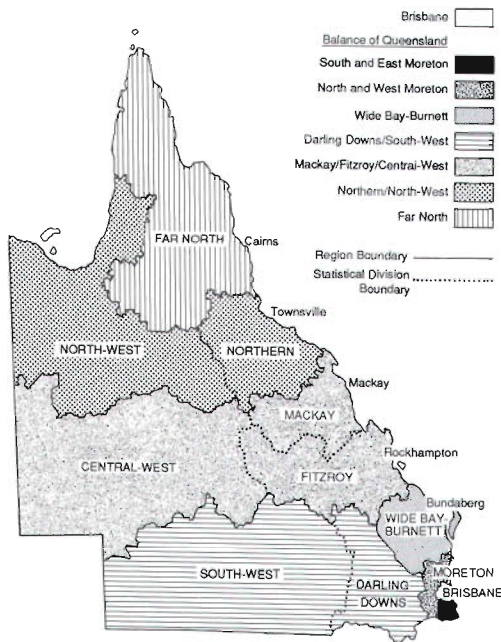
Building workers on a construction site



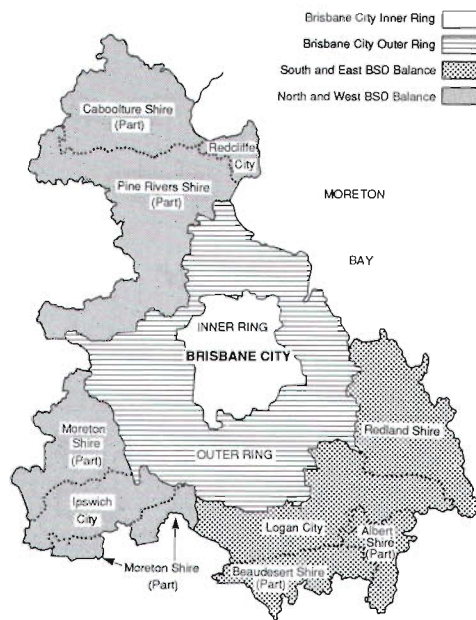
REGIONAL PARTICIPATION RATES, QUEENSLAND, NOVEMBER 1989



STATISTICAL REGIONS, QUEENSLAND



STATISTICAL REGIONS, BRISBANE STATISTICAL DIVISION



highest participation rates in the State at 84.6 per cent for males, 57.3 per cent for females and 71.3 per cent for persons in November 1989. This compares with the Wide Bay-Burnett Region which generally has the lowest participation rates at 68.0 per cent for males, 40.2 per cent for females and 53.8 per cent for persons.

Approximately half of the labour force was in the 25 to 44 years age group with the 15 to 24 years range and those 45 years and over being almost equally represented at 24.6 per cent and 24.5 per cent, respectively. Over 82 per cent of persons in the labour force were born in Australia and over 60 per cent were married.

9.1.2 Employment

There were 94,800 more people employed in Queensland in November 1989 than 12 months earlier. The total number employed was 1,323,300 giving a current annual growth rate of 7.7 per cent. Married females had the greatest increase both numerically with 36,800 and in relative terms at 12.7 per cent. The rising employment level had the greatest impact on the group aged 45 years and over where the number employed increased by 32,000 or more than 10 per cent. Even though 50,200 of the new jobs went to people in the 25 to 44 years age group the increase for that group was relatively lower at 7.9 per cent.

9.3 EMPLOYED PERSONS (a) BY INDUSTRY, QUEENSLAND, NOVEMBER 1989

Industry division	Males		Females	
	Number	Per cent	Number	Per cent
	'000		'000	
Agriculture, forestry, fishing and hunting	70.0	8.9	23.9	4.4
Mining	24.8	3.2	* 2.5	* 0.5
Manufacturing	123.6	15.8	40.6	7.5
Electricity, gas and water	12.5	1.6	* 2.4	* 0.4
Construction	99.2	12.6	17.5	3.2
Wholesale and retail trade	155.8	19.9	139.1	25.8
Transport and storage	61.4	7.8	14.4	2.7
Communication	17.5	2.2	6.3	1.2
Finance, property and business services	60.7	7.7	66.5	12.3
Public administration and defence	28.4	3.6	14.3	2.7
Community services	79.7	10.2	139.8	25.9
Recreation, personal and other services	50.8	6.5	71.5	13.3
Total	784.5	100.0	538.8	100.0

(a) Civilians aged 15 years and over.
Source: The Labour Force (6201.3).

Approximately 41 per cent of employed women worked part-time compared to just over 9 per cent of males. The number of males working part-time rose by 12,100 over the 12 months to 71,300 and the number of women working part-time rose by 28,800 to reach 221,800. Of women working part-time, approximately 69 per cent were married compared with 54 per cent of women working full-time.

The wholesale and retail trade division provided the highest number of jobs overall. This industry division was the largest employer of males with 155,800 or 19.9 per cent and had the second highest level of female employment at 139,100 (25.8 per cent). Slightly more females, 139,800 or 25.9 per cent, were employed in the community services industry division. The manufacturing division was the second highest source of jobs for males employing 123,600. The distribution of employment across industries has changed very little since November 1988.

9.4 EMPLOYED PERSONS (a) BY OCCUPATION, QUEENSLAND, NOVEMBER 1989

Occupation group	Males		Females	
	Number	Per cent	Number	Per cent
	'000		'000	
Managers and administrators	107.6	13.7	31.1	5.8
Professionals	78.1	10.0	58.6	10.9
Paraprofessionals	40.7	5.2	28.1	5.2
Tradespersons	191.5	24.4	19.9	3.7
Clerks	39.6	5.0	166.7	30.9
Salespersons and personal service workers	77.7	9.9	142.3	26.4
Plant and machine operators and drivers	90.5	11.5	10.7	2.0
Labourers and related workers	158.7	20.2	81.2	15.1
Total	784.5	100.0	538.8	100.0

(a) Civilians aged 15 years and over.
Source: The Labour Force (6201.3).

In November 1989, 191,500 or just over 24 per cent of working men were classified as tradespersons. Labouring and related occupations made up the next highest occupation category with 158,700 male workers. Women worked predominantly as clerks (166,700) with another 142,300 being salespersons and personal service workers. The proportion of workers classified as professionals or paraprofessionals was almost the same for each sex but the proportion of females who were managers or administrators was only 5.8 per cent compared to 13.7 per cent of males.

9.1.3 Unemployment

The 12 months to November 1989 saw a fall of 0.7 percentage points in the unemployment rate to

6.1 per cent. This followed the 6.5 per cent rate for October 1989 and was the lowest rate recorded for Queensland since July 1982. The unemployment rate for males in November 1989 was 5.4 per cent compared with 7.1 per cent for females.

9.5 DURATION OF UNEMPLOYMENT, QUEENSLAND ('000)

Duration of unemployment (weeks)	November 1988		November 1989	
	Males	Females	Males	Females
Under 4	11.3	11.7	10.5	13.5
4 and under 8	5.5	4.9	6.2	5.8
8 and under 13	5.3	4.3	3.4	4.3
13 and under 26	5.5	6.5	7.0	4.2
26 and under 52	6.9	5.6	5.8	6.7
52 and over	14.6	7.4	11.5	6.5
Total	49.1	40.6	44.6	40.9

Source: The Labour Force (6201.3).

For those unemployed, the length of time without a job also fell from a median duration of 13 weeks in November 1988 to 11 weeks in November 1989. The number of long-term unemployed, those out of work for 1 year or longer, also fell, from 22,100 in November 1988 to 18,000 in November 1989.

Unemployment rates tended to be slightly higher outside BSD. The rate in the BSD was 4.6 per cent for males and 6.7 per cent for females. The rate for males for the remainder of Queensland was 6.0 per cent and for females was 7.3 per cent.

Persons aged 15 to 19 years were affected by a lack of jobs, although there was little variation in the unemployment rate for this group from 13.4 per cent in November 1988 to 13.7 per cent in November 1989.

For those in the labour force who were born overseas, the unemployment rate in November 1989



(a) The unemployed in each group as a percentage of the civilian labour force in the same group.

was 7.2 per cent in comparison with 5.8 per cent for those born in Australia. More recent arrivals however, who have come to Australia since the beginning of 1986, had an even higher unemployment rate of 12.6 per cent.

9.1.4 Labour Force Status of Families

In June 1989, 1,680,500 persons in Queensland, almost 85 per cent of the total civilian population aged 15 years and over, lived in family households. Of the remainder, 164,900 lived alone and 142,000 lived with other persons who were not family members. Of the total 713,000 families in Queensland, married-couple families (including de facto) made up 87 per cent, one-parent families with a female parent 6.3 per cent, one-parent families with a male parent 0.8 per cent and other families accounted for 6.0 per cent.

9.6 LABOUR FORCE STATUS BY STATISTICAL REGIONS, QUEENSLAND, NOVEMBER 1989

Region	Employed	Unemployed	Labour force	Not in the labour force	Unemployment rate (a)	Participation rate (b)
	'000	'000	'000	'000	%	%
Brisbane Statistical Division	619.7	36.1	655.8	357.3	5.5	64.7
Brisbane City Inner Ring	183.6	10.4	194.0	118.8	5.4	62.0
Brisbane City Outer Ring	200.7	11.0	211.6	115.8	5.2	64.6
South and East BSD Balance	106.6	7.6	114.2	46.9	6.7	70.9
North and West BSD Balance	128.8	7.1	135.9	75.7	5.2	64.2
Balance of Queensland	703.6	49.4	752.9	436.8	6.6	63.3
South and East Moreton	132.2	7.3	139.5	80.3	5.2	63.5
North and West Moreton	85.6	6.7	92.3	73.9	7.3	55.6
Wide Bay-Burnett	73.1	6.6	79.7	68.5	8.3	53.8
Darling Downs/South-West	89.3	6.4	95.7	63.5	6.7	60.1
Mackay/Fitzroy/Central-West	145.9	10.3	156.2	63.0	6.6	71.3
Northern/North-West	101.1	6.2	107.3	51.5	5.8	67.5
Far North	76.3	5.9	82.2	36.1	7.2	69.5
Queensland	1,323.3	85.5	1,408.7	794.1	6.1	64.0

(a) The number of unemployed in each group as a percentage of the labour force in the same group. (b) The labour force in each group as a percentage of the civilian population aged 15 years and over in the same group.

Source: The Labour Force (6201.3).

The rate of participation in the labour force for married-couple families was 79 per cent for husbands and 50 per cent for wives. This compared with a participation rate for one-parent families with a male parent of 85 per cent and 51 per cent for those with a female parent. However, the unemployment rate for one-parent families was almost triple the rate for husband and wife couples.

Married-couple families included 45 per cent with both partners employed, 29 per cent with the husband employed and the wife not in the labour force and 19 per cent where neither partner was in the labour force. In the majority of families where neither partner was in the labour force, there were no dependent children.

9.7 LABOUR FORCE STATUS OF FAMILIES, QUEENSLAND, JUNE 1989 (*'000*)

<i>Particulars</i>	<i>Number</i>
<i>Married-couple families</i>	620.2
One or both spouses unemployed	32.0
Both unemployed	* 1.8
Unemployed husband and employed wife	4.5
Unemployed wife and employed husband	11.7
Unemployed husband and wife not in the labour force	13.0
Unemployed wife and husband not in the labour force	* 1.1
Neither spouse unemployed	588.2
Both employed	280.1
Employed husband and wife not in the labour force	177.7
Employed wife and husband not in the labour force	13.1
Neither spouse in the labour force	117.3
<i>One-parent families</i>	50.1
Parent unemployed	3.8
Male parent	* 0.5
Female parent	3.3
Parent not unemployed	46.3
Employed male parent	4.1
Employed female parent	19.7
Male parent not in the labour force	* 0.8
Female parent not in the labour force	21.7
<i>Other families</i>	42.7
Family head unemployed	* 1.8
Family head not unemployed	40.9
Family head employed	17.5
Family head not in the labour force	23.4
Total	713.0

Source: Labour Force Status and Other Characteristics of Families (6224.0).

For persons in Queensland not living as members of a family, the labour force participation rate varied from 43 per cent for those living alone to 87 per cent for persons living with other non-family members.

9.1.5 Labour Mobility in Queensland

The mobility of the labour force is the extent to which workers, whether employees or self-

employed, change jobs. This may involve a change of employer or business at either the same or a different location, or else a move to a different location with or without a change of employer or business.

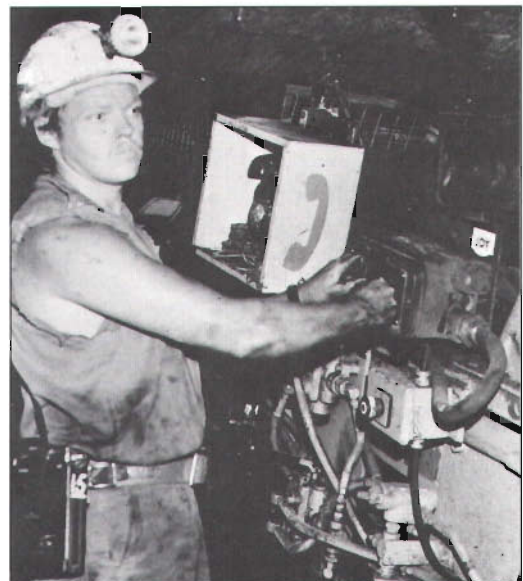
In February 1989, a study of the labour force showed that 1,374,100 persons had worked at some time during the previous 12 months and almost 23 per cent (312,000) had changed jobs. Over 76 per cent of these changes involved a change of employer while a change of locality but with the same employer was made by the remainder. More males than females changed jobs, 23.2 per cent in comparison with 22.0 per cent.

Of those persons who had worked at some time during the previous 12 months, 1,236,800 were working in February 1989, with the remainder either looking for work (55,700) or not in the labour force (81,600). A total of 83 per cent of those working in February 1989 had been with the same employer or business for the previous 12 months. A change to employment in another industry was made by 7 per cent of persons employed in both February 1988 and 1989 while 6 per cent changed to another occupation.

9.8 JOB MOBILITY, QUEENSLAND, FEBRUARY 1989 (*'000*)

<i>Particulars</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
No job mobility	619.0	443.1	1,062.1
<i>Job mobility</i>	187.0	125.0	312.0
Changed employer	142.3	96.5	238.8
Changed locality but not employer	44.7	28.5	73.2
Total	806.0	568.1	1,374.1

Source: Labour Mobility (6209.0).



Coal worker

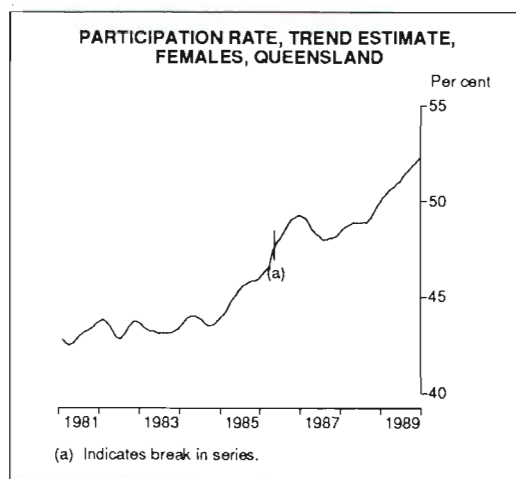
Photo: Premier's Department

9.1.6 Females in the Labour Force

The civilian population of Queensland aged 15 years and over was estimated at 2,202,800 in November 1989. Women accounted for 1,111,100 or 50.4 per cent of the total. In the past 10 years, the number of women in the civilian population in Queensland rose by 34.7 per cent, while the number in the labour force increased by 68.6 per cent, reaching 579,700 in November 1989. The male labour force rose by only 32.8 per cent over the decade, keeping pace with the 34.4 per cent increase in the population of working age. Women represented 41 per cent of the labour force, compared with just 36 per cent 10 years earlier.

Participation Rates

Female participation in the work force increased fairly steadily in the late 1970s then rose more rapidly in the early and mid-1980s. In September 1988, the participation rate first reached 50 per cent for women and by November 1989 it had risen to 52.2 per cent.



Participation rates in November 1989 were highest in the 20 to 24 years age group with rates of 74 per cent for all women and 82 per cent for women who were not married. In contrast, married

women had the highest rate in the 35 to 44 years age group, with 71 per cent either working or looking for work. Women with children aged under 15 years had a participation rate of 58 per cent, higher than the rate for all women.

Employed Women

In November 1989, 538,800 women were employed in Queensland. This represented 40.7 per cent of the employed population in the State. Just under 26 per cent were aged between 15 and 24 years and 53 per cent were aged 25 to 44 years. Of the 408,800 new jobs created since November 1979, 221,200, or 54 per cent, were taken up by women.

Relatively few working women were employers; only 4.7 per cent of the total employed female work force. Similarly, only 9.3 per cent were self-employed. In contrast, 6.6 per cent of male workers were employers and 11.9 per cent were self-employed. The vast majority of women worked for a wage or salary although 1.6 per cent were employed as unpaid helpers in a family business or on a farm.

Industry

As a proportion of total workers women are relatively over-represented in the wholesale and retail trade; finance, property and business services; community services; and recreation, personal and other services industries. These industries have seen strong growth in the number of new jobs over the past few years and many of these jobs have been taken up by women. With the exception of wholesale and retail trade, women represented over half of all employed persons in these industries. If these industries continue to expand, it is likely that growth in female employment will be sustained.

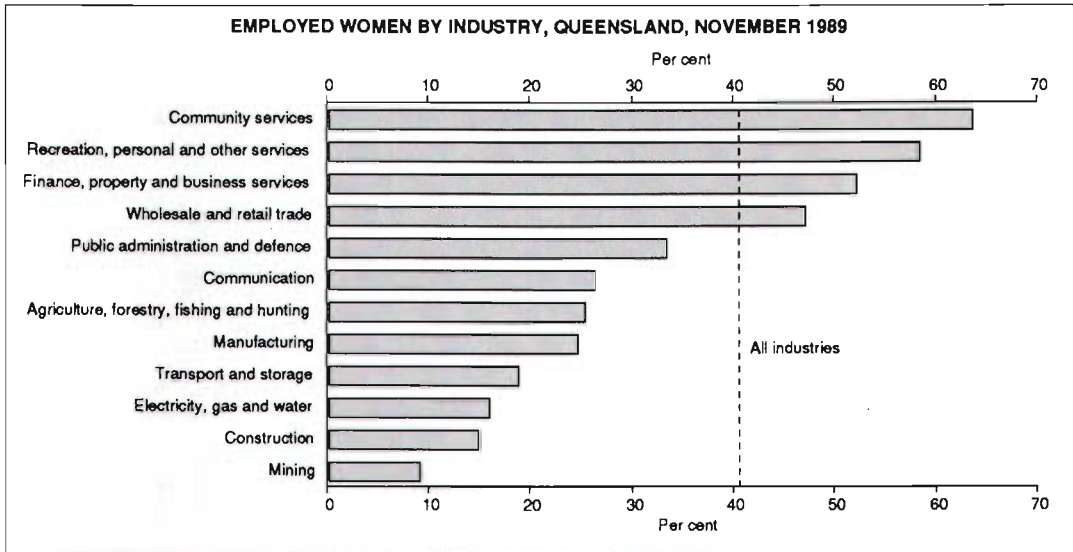
Occupation

Clerical workers were mainly women, representing 80.8 per cent of this occupational group. They also dominated the sales and personal service workers group, comprising 65 per cent of all such workers. In contrast, only 9.4 per cent were tradespersons, a traditionally male dominated occupation group.

9.9 LABOUR FORCE STATUS OF THE FEMALE POPULATION, QUEENSLAND

At November	Employed			Unemployed		Labour force	Not in labour force	Civilian population aged 15 years and over	Unemployment rate	Participation rate
	Full-time	Part-time	Total	Looking for full-time work	Total					
	'000	'000	'000	'000	'000	'000	'000	'000	%	%
1980	217.5	132.2	349.8	18.7	27.1	376.8	473.2	850.0	7.2	44.3
1985	249.5	158.3	407.8	28.1	42.5	450.3	528.9	979.3	9.4	46.0
1986	273.5	176.3	449.8	31.5	47.2	497.0	510.2	1,007.1	9.5	49.3
1987	256.8	197.1	453.8	30.7	43.7	497.5	539.1	1,036.6	8.8	48.0
1988	287.9	193.0	480.9	27.6	40.6	521.5	550.6	1,072.1	7.8	48.6
1989	317.0	221.8	538.8	27.3	40.9	579.7	531.5	1,111.1	7.1	52.2

Source: The Labour Force (6201.3).



The female work force increased by 19.8 per cent during the 3 years to November 1989. Over 60 per cent of these women found jobs as clerks, salespersons and personal service workers. However, the most significant proportional growth occurred in the relatively small plant and machine operators and drivers group with a 75.4 per cent increase during the same period.

9.10 EMPLOYED WOMEN BY OCCUPATION, QUEENSLAND

Occupation group	November			Increase, 1986 to 1989 %
	1986 '000	1988 '000	1989 '000	
Managers and administrators	29.2	25.3	31.1	6.5
Professionals	49.5	51.8	58.6	18.4
Paraprofessionals	28.1	27.2	28.1	—
Tradespersons	19.7	20.7	19.9	1.0
Clerks	138.2	151.3	166.7	20.6
Salespersons and personal service workers	115.7	132.1	142.3	23.0
Plant and machine operators and drivers	6.1	8.6	10.7	75.4
Labourers and related workers	63.3	63.8	81.2	28.3
Total employed	449.8	480.9	538.8	19.8

Source: The Labour Force (6201.3).

Hours Worked

Less than 10 per cent of employed males worked part-time, but over 40 per cent of women workers were in this category. Married women were more likely to work part-time with 54.3 per cent working less than 35 hours each week. Women who had children aged under 15 years also tended to work part-time, with 57.8 per cent opting for a shorter working week. Many women returning to the work

force take up part-time employment and this sector of the labour market has seen strong growth over the past decade, with 156,300 new jobs of which 112,500 were filled by women.

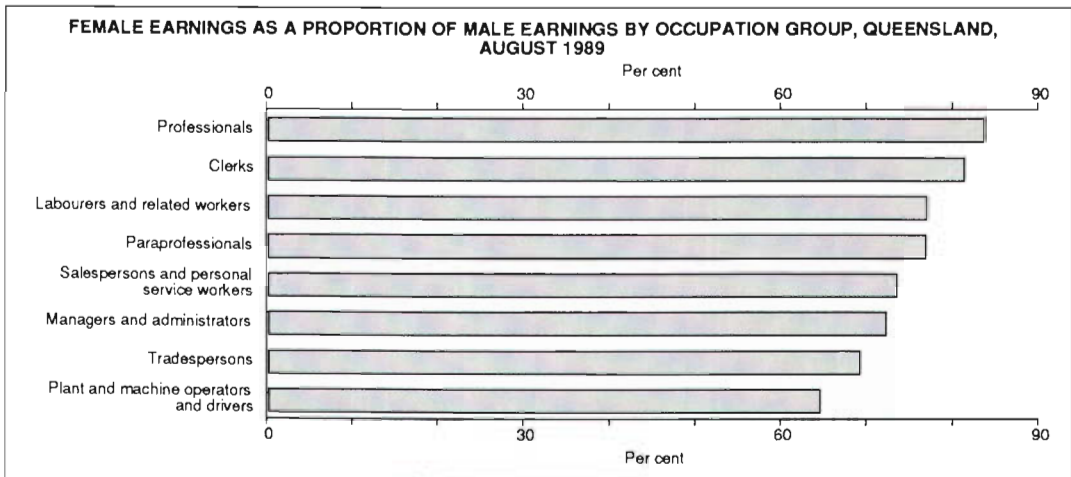
Weekly Earnings

In August 1989, women working full-time for wages or salary earned an average of \$388 a week in their main job. Women employed in the mining and community services industries had the highest earnings, while those employed in agriculture, forestry, fishing and hunting earned the least. Professional women earned more than their counterparts in other occupations while labourers and related workers were the least well paid, earning \$66 less a week than the average for all women working full-time.

Although pay differentials between men and women have been decreasing over the years as women enter the traditionally male-dominated occupations, women's earnings were still only 77 per cent of male earnings for full-time workers in August 1989. On an industry basis, female workers in communication earned 84 per cent of male earnings, while the small number of women employed in electricity, gas and water industry division received only 63 per cent of male earnings. Women employed as professionals earned 84 per cent of male earnings, compared to plant and machine operators and drivers whose earnings were less than two-thirds of their male counterparts.

Unemployed Women

There were 40,900 unemployed women in Queensland in November 1989, representing 7.1 per cent of the female labour force. Almost 67 per cent of these women were looking for full-time work.



Married women had an unemployment rate of 5 per cent compared with 10 per cent for women who were not married. Almost 62 per cent of unemployed, married women and 70 per cent of unemployed, not married women were seeking a full-time position. Over half of unemployed women with responsibility for children under 15 years of age were looking for a full-time job. Unemployment rates were higher for younger women, with 13.1 per cent of teenagers and 10.2 per cent of 20 to 24 year olds, who wanted a job, unable to find work. Male unemployment rates were lower than those for females at all ages 20 to 54 years.

Women Not in the Labour Force

Over half a million women aged 15 years and over were not in the labour force in November 1989. About 32 per cent were aged 65 years and over and 61 per cent were married. In September 1989 the majority of women who were not in the labour force were caring for a home and/or children, while just over 11 per cent were attending an educational institution. Most women who were not working or looking for work but who had previously been employed, had left their job voluntarily either to get married, to have children or to retire.

Women Employed at Home

Women represented 71.4 per cent of persons employed at home in April 1989, with 38,700 workers. At 8 per cent of the female work force, this type of employment is of considerable significance. Over one-quarter were aged 25 to 34 years, and one-third were aged 35 to 44 years. Over half had children aged under 15 years and 16 per cent had children under 3 years of age. Sixty-one per cent of women working at home who had children of school or preschool age worked less than 20 hours a week. This illustrates the desire by many women to combine a career with child-rearing, without having to leave the home environment to work.

Three-fifths of all women working at home worked less than 20 hours a week and one-fifth worked for 40 hours or more. For over 90 per cent of the women, their home-based employment was their main job. The majority worked in the construction, wholesale and retail trade, finance, property and business services and community services industries. Most of the workers were engaged in clerical duties, with sales and personal service workers and professionals being the other main occupation groups.

Trade Union Membership

Under one-third of women workers surveyed in August 1988 belonged to a trade union, compared with 44 per cent of male workers. In the industries employing significant numbers of women, union membership is traditionally lower than average. Of these industries, recreation, personal and other services had the lowest level of membership at 23 per cent, while community services had the highest level of female membership at 42 per cent.

Older women workers were more likely to be union members, with over 35 per cent of 45 to 59 year old women registered, compared with only 30 per cent of teenage women workers and 34 per cent of employed women aged 20 to 24 years.

Employment Benefits

Approximately 6.2 per cent of women working in a full-time job received no employment benefits in August 1989, compared with 5.9 per cent of full-time male workers. Leave was the most common benefit, with over 87 per cent of women workers eligible for annual and sick leave and 69 per cent having access to long service leave. Nearly 50 per cent were covered by a superannuation scheme and 22 per cent received goods and services. Only 6 per cent received any transport benefit compared with 24 per cent of male workers. Child-care benefits were very rarely received.

Benefits for part-time workers were relatively rare, with only about half receiving any benefits at all. Goods and services were received by about one-fifth of workers while leave of any type was available to just over 20 per cent of part-time women employees.

9.2 EMPLOYMENT, EDUCATION AND TRAINING

The Commonwealth and State Governments have supported a number of schemes aimed at improving employment prospects for the labour force. These schemes cover a range of options such as encouraging employers to conduct more training, enhancing the skill levels of the labour force and a general emphasis on the importance of improving the educational standards of the labour force.

As a result of this government support, considerable interest has been aroused in education and training. Some indicators of progress in this area include employer expenditure on training, the number of apprentices and more effective transition of the population from educational institutions to the workplace.

9.2.1 Training Expenditure

During July to September 1989 a survey of 2,000 employers in Australia was conducted to assess the level of expenditure on formal training.

Queensland employers generally spend less than the Australian average on training. Total training expenditure for the survey period represented 1.9 per cent of gross wages and salaries in Queensland compared with 2.2 per cent for Australia. While 22.1 per cent of employers in Australia reported expenditure on training, the figure for Queensland was the lowest of any of the States at 10.3 per cent.

9.11 TRAINING EXPENDITURE FOR ALL EMPLOYERS, JULY TO SEPTEMBER 1989

Particulars	Unit	Queensland	Australia
Training expenditure (a)	%	1.9	2.2
Training expenditure per employee	\$	105.7	132.9
Training hours per employee	hours	4.4	5.7
Employers reporting training expenditure (b)	%	10.3	22.1

(a) As a proportion of gross wages and salaries. (b) As a proportion of all employers.

Source: Employer Training Expenditure (6353.0).

The cost per hour of training in Queensland, however, was the highest of any State. Queensland employers who reported expenditure on training,

spent an average of \$24.10 per training hour compared with the Australian average of \$23.10 per training hour.

9.2.2 Apprentices

In May 1989 there were a total of 21,700 apprentices in Queensland which was an overall decrease of 300 from the figure for May 1988. There has been an increase, however, in the number of first-year apprentices from 6,400 to 8,200 over the same period.

The number of building trade apprentices has increased since May 1988 whereas there has been a decrease in the number of electrical and electronic trade apprentices over the same period.

9.12 APPRENTICES, QUEENSLAND

Particulars	May		
	1987	1988	1989
Year of apprenticeship			
First	5,400	6,400	8,200
Second	3,700	3,800	3,900
Third	5,000	6,600	5,000
Fourth and fifth	4,500	5,200	4,700
Field of trade			
Metal fitting and machining and other			
metal	4,000	3,800	4,400
Electrical and electronic	3,200	4,000	* 2,600
Building	* 2,600	3,700	4,500
Vehicle	* 1,600	* 2,600	4,000
Hairdressing	* 2,200	* 2,700	* 1,400
Other	5,000	5,200	4,700
Total	18,600	22,000	21,700

Source: Transition From Education to Work (6227.0).

A large number of first-year apprentices elect to cancel their indentures and do not proceed to second year. Many of these, however, continue to gain practical experience within their specific trade and apply to be re-indentured at some later time. In these cases allowance can be made for the practical experience gained and formal completion of the second year may be waived. The number of third-year apprentices, therefore, is often larger than the number who completed second-year training the previous year.

9.2.3 Educational Attainment

One measure of the skill level of the labour force is the proportion with post-school qualifications. In February 1989, 43.0 per cent of the labour force had obtained some type of post-school qualification. This compares with a figure of 39.8 per cent in February 1985. A certificate or diploma was the most common type of (post-school) qualification held.

9.13 LABOUR FORCE STATUS BY EDUCATIONAL ATTAINMENT, QUEENSLAND, FEBRUARY 1989

Educational attainment	Employed	Unem- ployed	Labour force	Not in labour force	Total	Unem- p- loy- ment rate	Partici- pation rate
	'000	'000	'000	'000	'000	%	%
With post-school qualifications	545.7	31.3	577.0	189.4	766.4	5.4	75.3
Degree	93.8	3.5	97.3	20.8	118.1	3.6	82.4
Trade qualification or apprenticeship	234.2	10.2	244.4	69.2	313.6	4.2	77.9
Certificate or diploma	215.4	17.1	232.5	97.1	329.5	7.3	70.5
Other	* 2.3	* 0.5	* 2.9	* 2.3	5.2	* 18.9	* 55.4
Without post-school qualifications (a)	657.5	72.9	730.3	494.6	1,225.0	10.0	59.6
Attended highest level of secondary school available	164.4	23.2	187.6	58.7	246.4	12.4	76.2
Did not attend highest level of secondary school available	488.6	49.0	537.5	429.0	966.6	9.1	55.6
Left at age							
16 years or over	150.5	14.8	165.3	79.6	244.9	8.9	67.5
18 years or over	4.4	* 0.4	4.8	3.7	8.5	* 7.9	56.6
16 or 17 years	146.1	14.4	160.4	75.9	236.3	9.0	67.9
15 years or under	338.1	34.2	372.3	349.4	721.7	9.2	51.6
14 or 15 years	296.8	31.1	327.9	272.0	599.9	9.5	54.7
13 years or under	41.3	3.1	44.4	77.4	121.8	6.9	36.4
Never attended school	* 1.1	* 0.0	* 1.1	4.6	5.7	* 0.0	* 19.5
Still at school	26.2	7.0	33.2	58.5	91.7	21.2	36.2
Total	1,229.4	111.2	1,340.6	742.5	2,083.0	8.3	64.4

(a) Including persons for whom secondary school qualifications could not be determined.

Source: Labour Force Status and Educational Attainment (6235.0).

9.14 PERSONS AGED 15 TO 64: LABOUR FORCE STATUS BY ATTENDANCE AT AN EDUCATIONAL INSTITUTION, QUEENSLAND

In 1988	In May 1989	Employed	Unem- ployed	Labour force	Not in labour force	Total	Unem- p- loy- ment rate	Partici- pation rate
		'000	'000	'000	'000	'000	%	%
Full-time	Full-time	44.5	13.0	57.5	98.4	155.9	22.7	36.9
	Part-time	8.3	* 0.9	9.2	* 0.5	9.6	* 9.4	95.0
	Not attending	48.6	5.0	53.6	3.2	56.8	9.2	94.3
	Total	101.4	18.9	120.3	102.1	222.4	15.7	54.0
Part-time	Full-time	* 2.3	* 0.2	* 2.5	1.3	3.8	* 8.8	* 65.9
	Part-time	42.8	* 0.5	43.4	5.1	48.5	* 1.2	89.5
	Not attending	63.6	4.4	68.0	7.3	75.3	6.4	90.4
	Total	108.7	5.1	113.9	13.7	127.5	4.5	89.3
Did not attend	Full-time	* 2.4	* 1.3	3.7	3.3	7.0	* 35.4	52.7
	Part-time	25.4	* 1.3	26.7	3.6	30.3	4.8	88.1
	Not attending	1,027.4	68.1	1,095.5	365.7	1,461.2	6.2	75.0
	Total	1,055.2	70.7	1,125.9	372.6	1,498.5	6.3	75.1
Total	Full-time	49.1	14.6	63.7	103.0	166.7	22.9	38.2
	Part-time	76.6	* 2.7	79.3	9.2	88.5	* 3.4	89.6
	Not attending	1,139.7	77.4	1,217.1	376.2	1,593.3	6.4	76.4
	Total	1,265.4	94.6	1,360.0	488.4	1,848.4	7.0	73.6

Source: Transition from Education to Work (6227.0).

9.2.4 Transition from Education to Work

Surveys have been conducted on this topic since 1964 in order to assess the movement of the population from educational institutions to the workplace.

There were 222,400 persons who attended full-time at an educational institution in Queensland at some time during 1988. Of these 155,900 (70 per cent) were still attending full-time in May 1989, while a further 56,800 were not attending in May 1989. This latter group consisted of 48,600 (85.6

per cent) who were employed, 5,000 (8.8 per cent) unemployed and 3,200 (5.7 per cent) who were not in the labour force.

9.3 WAGES, COSTS AND INDUSTRIAL RELATIONS

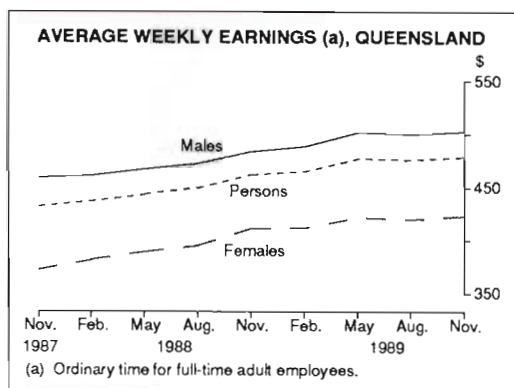
Average earnings continue to be lower in Queensland than in any other Australian State. The additional costs incurred by the employers of

labour in this State are also low by Australian standards and provide additional incentive for job creation.

The Queensland and Australian industrial relations systems are currently undergoing major reviews. Both the Conciliation and Arbitration Commission and the Queensland Industrial Commission have agreed to award wage increases which are based on commitment by unions to increase efficiency and productivity rather than on cost-of-living increases as has been the case previously.

9.3.1 Earnings

During the 12 months to November 1989, average weekly earnings for full-time adult employees in Queensland increased by 4.0 per cent in comparison with a national increase of 6.4 per cent. The Queensland average of \$510.40 was the lowest in Australia.



Full-time adult male employees in Queensland earned an average of \$543.00 a week in November 1989 compared to the Australian average of \$595.90 a week. For full-time adult female employees the Queensland average of \$434.00 a week was \$33.60 less than the Australian figure. Average weekly earnings of all employees for Queensland in November 1989 was \$419.30 which was \$37.90 below the Australian average.

9.15 AVERAGE WEEKLY EARNINGS OF FULL-TIME ADULT EMPLOYEES, STATES AND TERRITORIES

State or Territory	November		Percentage change
	1988	1989	
	\$	\$	
New South Wales	532.20	571.00	7.3
Victoria	523.00	559.30	6.9
Queensland	490.90	510.40	4.0
South Australia	493.80	531.40	7.6
Western Australia	521.30	551.90	5.9
Tasmania	502.60	526.40	4.7
Northern Territory	539.30	567.80	5.3
A.C.T.	572.10	599.20	4.7
Australia	520.20	553.80	6.4

Source: Average Weekly Earnings (6302.0).

The average ordinary time earnings for full-time adult employees in Queensland in November 1989 was \$478.90 a week which was 3.7 per cent above the November 1988 figure. Over the same period the Australian average rose by 6.6 per cent.

9.3.2 Labour Costs

In 1987-88 for each dollar Queensland private sector employers paid out for employee wages and salaries, an additional 1.7 cents was paid in workers' compensation costs, 3.0 cents in payroll tax, 2.9 cents in employer contributions to superannuation schemes and 0.6 cents in fringe benefits tax. Together, these costs added 8.2 cents to each dollar of employee wages and salaries and represented an annual cost of \$1,449 per employee.

The Queensland private sector had total labour costs per employee of \$19,062, compared with an average cost of \$22,310 for Australia.

9.16 MAJOR LABOUR COSTS IN THE PRIVATE SECTOR, STATES AND TERRITORIES, 1987-88 (\$)

State or Territory	Cost per employee		Major labour costs
	Gross wages and salaries	Other labour costs	
New South Wales	21,505	3,127	24,632
Victoria	18,862	2,593	21,455
Queensland	17,228	1,833	19,062
South Australia	18,687	2,293	20,980
Western Australia	20,013	2,620	22,633
Tasmania	18,391	2,112	20,504
Northern Territory	19,522	2,372	21,893
A.C.T.	18,844	2,082	20,926
Australia	19,667	2,643	22,310

Source: Major Labour Costs (6348.0).

9.3.3 Trade Unions

The proportion of employees in Queensland who are members of a trade union has declined over the last few years. In 1989, 47 per cent of employees belonged to a trade union. Female membership was lower at 39 per cent compared with 53 per cent of males.

9.17 PROPORTION OF EMPLOYEES BELONGING TO A TRADE UNION, QUEENSLAND (per cent)

June	Males	Females	Persons
1985	65	39	55
1986	61	41	53
1987	61	44	54
1988	59	40	51
1989	53	39	47

Source: Trade Union Statistics (6323.0).

After a long period of stability up to June 1987, when there were 137 trade unions with 456,300

members in Queensland, the number of unions had dropped to 129, with 458,000 members, by June 1989.

9.3.4 Award Rates of Pay Indexes

The Award Rates of Pay Indexes are constructed by weighting award rates of pay for selected classifications according to the pattern of employment that existed at May 1985. This 'basket' of classifications and their weights remain constant during the life of the index so changes in the indexes reflect general trends in award rates of pay over a period of time. All series are expressed as index numbers with a reference base of June 1985 = 100.0.

9.18 WEEKLY AWARD RATES OF PAY INDEXES FOR FULL-TIME EMPLOYEES

Period	Federal award		State award	
	Queensland	Australia	Queensland	Australia
1987				
February	106.7	106.4	106.2	106.7
May	109.9	109.6	109.6	110.0
August	110.2	109.8	109.8	110.1
November	111.2	110.8	110.5	110.4
1988				
February	114.7	114.6	113.3	113.2
May	114.8	114.6	114.7	113.8
August	115.5	115.2	114.9	114.4
November	119.2	119.1	119.0	118.2
1989				
February	120.0	119.5	119.3	118.9
May	122.8	122.4	122.7	121.6
August	123.1	122.6	122.8	122.0
November	125.8	125.4	123.2	123.0

Source: Award Rates of Pay Indexes (6312.0).

9.3.5 Industrial Disputes

In Queensland the number of working days lost per 1,000 employees was only 103 compared with 190 for Australia for December 1989. Only South

Australia and Tasmania had a lower number of working days lost per 1,000 employees.

9.19 WORKING DAYS (a) LOST THROUGH INDUSTRIAL DISPUTES, STATES AND AUSTRALIA

State	Average 1984 to 1988	1989
New South Wales	315.4	269
Victoria	198.8	199
Queensland	268.5	102
South Australia	76.6	67
Western Australia	245.4	187
Tasmania	194.6	64
Australia (b)	242.0	190

(a) Per 1,000 employees. (b) Including the Northern Territory and Australian Capital Territory.

Source: Industrial Disputes (6321.0).

9.4 REFERENCES

ABS publications produced by the Queensland Office:

The Labour Force (6201.3), quarterly

ABS publications produced by the Canberra Office:

Labour Statistics (6101.0), annual

The Labour Force (6203.0), monthly

Labour Mobility (6209.0), annual

Persons Not in the Labour Force (6220.0), annual

Job Search Experience of Unemployed Persons (6222.0), two-yearly

Labour Force Status and Other Characteristics of Families (6224.0), annual

Transition from Education to Work (6227.0), annual

Labour Force Status and Educational Attainment (6235.0), annual

Labour Force Status and Educational Attainment, Summary (6240.0), annual

Employed Wage and Salary Earners (6248.0), quarterly

Average Weekly Earnings (6302.0), quarterly

Distribution and Composition of Employee Earnings and Hours (6306.0), annual

Weekly Earnings of Employees (Distribution) (6310.0), annual

Award Rates of Pay Indexes (6312.0), monthly

Industrial Disputes (6321.0), monthly

Industrial Disputes (6322.0), annual

Trade Union Statistics (6323.0), annual

Major Labour Costs (6348.0), annual

Employer Training Expenditure (6353.0), irregular



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Chapter 10

WELFARE

The provision of cash benefits and welfare services is essential to protect people with special needs from economic hardship. These benefits and services may be provided by the Commonwealth Government, the Queensland Government or voluntary welfare organisations.

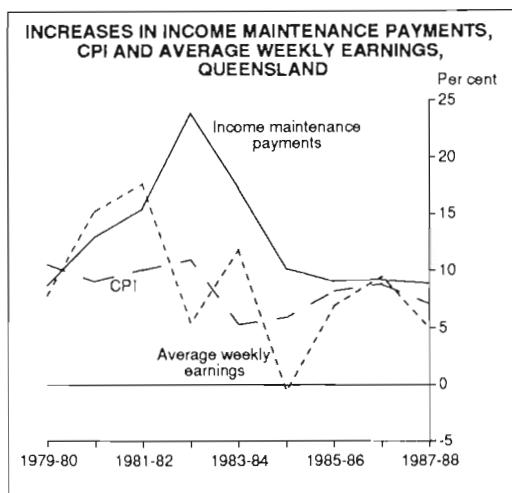
Most payments for living expenses to those unable to earn income because of their incapacity, unemployment, age or because they are caring full-time for other family members, are made by the Commonwealth Government in the form of pensions or benefits. A number of charitable institutions also provide emergency monetary grants to people in need.

In addition to income maintenance, there are a number of welfare services carried out in the community such as child welfare, accommodation for the aged and those in need and special services for minority groups in the community. There is considerable government involvement in this activity both directly and indirectly through funding but a number of religious and charitable institutions are also prominent in the field.

10.1 INCOME MAINTENANCE

Commonwealth pensions and benefits for income maintenance are mostly administered by the Department of Social Security or, in the case of returned service persons or their dependants, the Department of Veterans' Affairs. It is possible for beneficiaries to legally receive payments from both Departments.

In 1987-88 over \$3,500m was paid by the Commonwealth Government in income maintenance payments to Queensland residents. This was approximately 10 per cent higher than the previous year. In comparison, between 1986-87 and 1987-88, Queensland's average weekly earnings rose 6.1 per cent and the Consumer Price Index (CPI) for Brisbane increased 7.0 per cent.

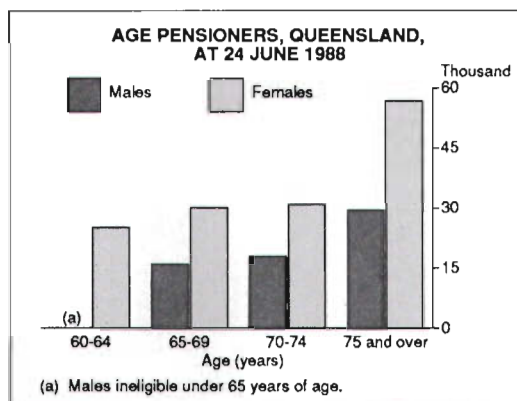


10.1.1 Age and Service Pensions

Age Pensions

Age pensions, administered by the Commonwealth Department of Social Security, are paid to eligible men aged 65 years and over and women aged 60 years and over. Eligibility is based on residence history, income and assets. The income test was extended to apply to those over 70 years in November 1983 but is more generous than for those under 70. The asset testing of pensioners was introduced from March 1985. A pension is also payable to a pensioner's wife or carer who does not qualify for a pension in their own right. Pensions are indexed twice yearly by the CPI. The number of male age pensioners in Queensland decreased slightly between 30 June 1987 and 30 June 1988, thus continuing the trend of the previous 4 years.

Female age pensioners, however, increased in number by 2.0 per cent over the same period and make up over two-thirds of age pensioners in Queensland.



In the year ended 30 June 1988 changes in the number of age pensioners in Australia were similar to those for Queensland. Male age pensioners declined in number by 0.7 per cent while numbers of female age pensioners increased by 1.0 per cent.

10.1 AGE PENSIONS, QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Age pensioners	193,268	208,356	210,818
Males	66,807	65,611	65,283
Females	126,461	142,745	145,535
Wife and carer pensioners	4,656	4,072	4,167
Total	197,924	212,428	214,985
Number per 1,000 population	91	79	78
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	447,165	997,856	1,120,988

Source: Department of Social Security.

The carer's pension is payable to a person caring, at home on a long-term basis, for a severely handicapped aged pensioner. From 1 February 1988, eligibility was extended from spouses and near relatives to include non-relatives providing constant care.

In 1987, the *May Economic Statement* changed assessment procedures in relation to complex investment products which had the effect of tightening the income tests for both the Departments of Social Security and Veterans' Affairs. On the other hand, the amount of income a pensioner is able to earn before the pension begins to be reduced was increased considerably from July 1987. The assets test limits are increased in June each year in line with the movements in the CPI between the two immediately preceding December quarters. The great majority of pensioners have assets below the

allowable assets test limits and, therefore, are subject only to the income test.

People aged 75 years and over accounted for 46.0 per cent of male age pensioners and 39.4 per cent of female age pensioners at 24 June 1988. This difference largely reflects the fact that females are eligible for the age pension from the age of 60 years whereas males become eligible at 65 years of age. Considering female age pensioners aged 65 years and over, 48.0 per cent of these were aged 75 years and over.

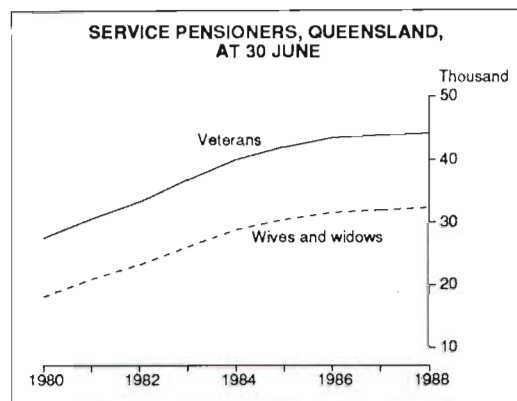
Service Pensions

Service pensions are payable to veterans who served in a theatre of war and have reached the age of 55 years (female) or 60 years (male) or who are permanently incapacitated for work. Service pensions are also paid to wives and widows of veterans and are available to certain Commonwealth and allied veterans and mariners who satisfy residency requirements. The Department of Veterans' Affairs pays a carer's pension where an eligible veteran receives constant care from a person other than their spouse. Service pensions carry the same rates and range of additional payments as age pensions and are similarly indexed in line with movements in the CPI. Service pensions are subject to the same income and assets test arrangements as social security pensions, except that any disability pension received is not regarded as income for service pension income test purposes.

10.2 SERVICE PENSIONS, QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Service pensioners	35,046	75,882	76,588
Veterans	21,837	43,917	44,194
Wives and widows	13,209	31,965	32,394
Pensioners per 1,000 population	16	28	28
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	68,367	329,665	382,343

Source: Repatriation Commission and Department of Veterans' Affairs.



The number of service pensioners increased 0.9 per cent in the year to 30 June 1988. At that date, 57.7 per cent of pensioners were veterans, the remainder being wives and widows. At 30 June 1978, 62.3 per cent of the total number were veterans.

There were 27 pension paydays in 1987-88 for those receiving service pensions, rather than the normal 26, which would account for some of the 16.0 per cent increase in the amount paid between 1986-87 and 1987-88.

10.1.2 Invalid and Disability Pensions

Invalid Pensions

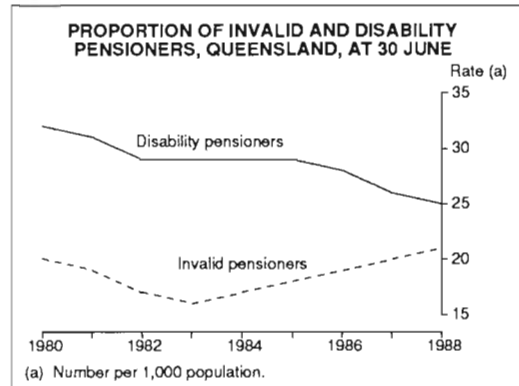
The Department of Social Security administers invalid pensions which are paid to those permanently incapacitated for work and the permanently blind. The former category is subject to the same income and assets tests for age pensioners under 70 years. Invalid pension entitlements are the same as for age pensions but, unlike age pensions, are not subject to income tax for men under 65 years and women under 60 years. Beyond these ages, invalid pensioners are transferred to the age pension except for a small proportion who do not meet the residency requirements for the age pension.

10.3 INVALID PENSIONS, QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Invalid pensioners	32,453	41,689	44,313
Males	21,400	30,515	32,607
Females	11,053	11,174	11,706
Wife and carer pensioners	7,214	11,687	12,786
Total	39,667	53,376	57,099
Number per 1,000 population	18	20	21
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	94,089	273,410	324,874

Source: Department of Social Security.

From 1 July 1987, an invalid pension cannot be paid unless the major part of a person's incapacity for work is directly caused by physical or mental impairment; non-medical factors may be taken into account, but can not now predominate in the assessment of eligibility. Despite this additional eligibility criterion, the number of male and female invalid pensioners in Queensland increased 6.9 per cent and 4.8 per cent, respectively, during the year ended 30 June 1988. The number of invalid pensioners for Australia as a whole only increased by 2.7 per cent and 2.6 per cent for males and females, respectively, during the same period. In preceding years, the movements in Queensland and Australian invalid pensioner numbers were similar.



Disability Pensions

Disability pensions may be paid to veterans with qualifying service who are suffering incapacity from an injury or disease which has been accepted as service-related and to widows and dependants of veterans whose death was service-related or who, at the time of death, were entitled to receive a special rate disability pension for the totally and permanently incapacitated. The disability pension is not subject to personal income tax or an income or assets test and may be paid to people also receiving a service pension.

Between 30 June 1987 and 30 June 1988 the number of disability pensioners in Queensland declined marginally as a small increase in the number of veterans receiving disability pensions was outweighed by a decrease in the number of dependants on the pension. This has been the trend in recent years.

10.4 DISABILITY PENSIONS, QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Disability pensioners	76,582	68,325	68,196
Veterans	31,117	31,748	31,947
Dependants	45,465	36,577	36,249
Pensioners per 1,000 population	35	26	25
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	68,629	168,800	190,720

Source: Repatriation Commission and Department of Veterans' Affairs.

There were 27 paydays in 1987-88 for those receiving disability pensions, rather than the normal 26, which would account for some of the 13.0 per cent increase in the amount paid between 1986-87 and 1987-88.

10.1.3 Widows Pension and Supporting Parents Benefit

Widows Pension

Widows pensions are payable by the Department of Social Security to widows and to some other

women who have lost the support of a male breadwinner. Widow pensioners are subject to the same income and assets tests as age pensioners and receive the same rates of pension.

There are three types of widows pension:

- **Class A** The woman must have a dependent child in her care and control. From 1 September 1987 the maximum age of the qualifying child was reduced from 24 years, for a full-time student, to 16 years.
- **Class B** The woman does not have a qualifying child but is aged at least 50 years, or previously received a Class A pension to at least the age of 45 years. Class B pensions are to be progressively phased out. Existing recipients at 1 July 1987 are fully protected as are women who on 1 July 1987 were aged 45 years or over and who subsequently received a Class A widows pension or a supporting parents benefit and women 50 years and over on 1 July 1987 who later become widows.
- **Class C** The woman does not qualify for a Class A or Class B pension but is in needy circumstances within 26 weeks of her husband's death.

10.5 WIDOWS PENSIONS, QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Widow pensioners	19,828	23,776	22,744
Class A	10,309	11,469	9,715
B	9,497	12,274	13,002
C	22	33	27
Pensioners per 1,000 population	9	9	8
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	56,962	146,806	160,196

Source: Department of Social Security.

The decrease in the number of Class A widow pensioners between 30 June 1987 and 30 June 1988 reflects the impact of the reduced age for a qualifying child. However, a significant number of Class A widow pensioners were eligible for Class B pensions, resulting in an increase in these numbers.

Supporting Parents Benefit

Supporting parents benefits are paid to sole parents who care for at least one qualifying child and who are not receiving another pension or benefit or support from a partner. The benefit may also be paid to a married person with dependent children whose spouse is away from home indefinitely through ill health or imprisonment, or who is separated. From September 1987, the

maximum age of a qualifying child became 16 years; prior to that, dependent full-time students aged 16 to 24 years inclusive, who were not in receipt of another pension or benefit, qualified. The same protection provisions as applied to a widows pension cover supporting parent beneficiaries. During 1987-88 the procedures for granting supporting parents benefits were tightened.

The benefit and associated allowances are payable at the same rate as age pensions and allowances and are subject to the same income and assets test as the age pension. There is also a residency qualification.

10.6 SUPPORTING PARENTS BENEFIT, QUEENSLAND

Particulars	1978(a)	1987	1988
AT 30 JUNE			
Supporting parent beneficiaries	10,642	32,790	32,995
Males	363	2,084	2,039
Females	10,279	30,706	30,956
Beneficiaries per 1,000 population	5	12	12
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	34,386	252,596	280,411

(a) Supporting fathers ineligible before November 1977.

Source: Department of Social Security.

Despite the changes introduced during 1987-88, the number of supporting parent beneficiaries in Queensland increased 0.6 per cent in the 12 months to 30 June 1988. For Australia as a whole the increase was 1.6 per cent.

From 1 March 1989, changes were introduced which altered the focus of pension payments from long-term income support for women who were expected to stay at home to care for their children to shorter-term support intended to enable sole parents to prepare for their entry (or re-entry) into the work force. They were:

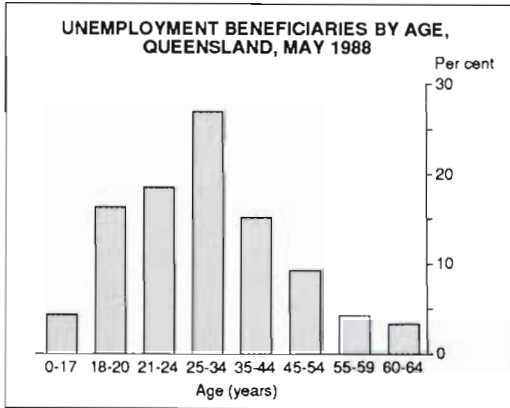
- the Class A widows pension was amalgamated with the supporting parents benefit to form the sole parents pension.
- the Class C widows pension was replaced by the widowed persons allowance.

10.1.4 Unemployment, Sickness and Special Benefits

Unemployment Benefits and Job Search Allowance

Unemployment benefits are available to those who are unemployed and willing and able to undertake suitable work, who are aged between 16 and 59 years for females, 16 and 64 years for males and who satisfy residency requirements. From 1 January 1988, the unemployment benefit for 16 and 17 year old recipients was replaced by a job search

allowance. This allowance is generally subject to the same conditions as an unemployment benefit but may also be dependent on a parental income test. The scheme is designed to encourage unemployed persons aged 16 and 17 years to take up training and employment opportunities rather than become dependent on long-term unemployment benefits and also to remove any financial incentive to leave school early.



For unemployment and job search allowance beneficiaries with dependants, the basic rates of the benefit are generally the same as for age and invalid pensions. For single persons, especially those under 21 years, rates are lower, with the job search allowance rate being the lowest.

In 1987-88 there were a number of initiatives to improve the administration of unemployment benefits, such as the requirement for personal lodgment of income statements, mandatory registration at the Commonwealth Employment Service, the introduction of selective regional reviews and, from 13 December 1987, an assets test.

These changes could be partly responsible for the 18.7 per cent decrease in the number of Queensland beneficiaries between 30 June 1987 and 30 June 1988 but beneficiary numbers are always volatile, reflecting general economic activity. Over the same period the total number of beneficiaries in Australia declined 13.8 per cent to 475,070 at 30 June 1988.

10.7 UNEMPLOYMENT BENEFITS (a), QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Unemployment beneficiaries	43,796	112,615	91,565
Beneficiaries per 1,000 population	20	42	33
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	123,476	686,222	665,115

(a) Including job search allowance beneficiaries.

Source: Department of Social Security.

Sickness Benefits

A sickness benefit may be paid to people who have been temporarily incapacitated for work, because of sickness or injury, and who have suffered a loss of income as a result of the incapacity or who, but for the incapacity, would qualify for an unemployment benefit. The age and residence requirements are the same as for an unemployment benefit, except that a person under 18 years may be paid a sickness benefit if not in receipt of the job search allowance. From December 1987 the rates of sickness benefit for new grants were made the same as the equivalent rates for unemployment benefits, previously they were higher for some categories of beneficiaries. The same income and assets tests apply.

In the 12 months to 30 June 1988, the number of sickness beneficiaries rose 5.6 per cent.

10.8 SICKNESS BENEFITS, QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Sickness beneficiaries	4,640	11,984	12,653
Beneficiaries per 1,000 population	2	4	5
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	16,710	75,130	86,442

Source: Department of Social Security.

Special Benefits

A special benefit may be paid to people who are not eligible for a pension or unemployment or sickness benefit but who are unable to earn a sufficient livelihood for themselves and their dependants and are in hardship. The benefit is designed to meet cases of special need and payments may be made immediately in an emergency. A person's special benefit cannot be greater than what they could receive in unemployment or sickness benefit if they were eligible. Total special benefits paid in 1987-88 were \$19,268,000.

10.9 SPECIAL BENEFITS, QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Beneficiaries	1,181	2,701	3,001
Beneficiaries per 1,000 population	0.5	1.0	1.1
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	3,489	16,851	19,268

Over the years the movement in the number of special beneficiaries has been erratic, reflecting in part the nature of the benefit. From 1 August 1988, eligibility has been determined by reference to a more stringent test of hardship which takes greater account of a person's liquid funds.

10.1.5 Family Allowances

Family allowances are paid to families caring for children under the age of 18 years and certain full-time dependent students. The income test for families with 16 or 17 year old students, introduced from December 1986, was superseded in November 1987 when an income test for all families receiving the family allowance took effect. From that date, the income test precludes payment of the full rate of family allowance to those persons whose joint parental income in the previous financial year exceeded \$50,000 plus \$2,500 for the second and each subsequent child, including student children. The allowance reduces by 25 cents for each dollar of income above the threshold. The income test threshold and threshold increment for additional children have been indexed annually to the CPI from January 1989.

Reflecting the introduction of the income test, the number of Queensland recipients at 30 June 1988 was 5.5 per cent lower than at the same date in 1987. The number of Australian recipients declined 8.8 per cent during the same period.

10.10 FAMILY ALLOWANCES, QUEENSLAND

Particulars	1978	1987	1988
AT 30 JUNE			
Children and students	654,593	701,600	666,638
In families	652,651	698,927	663,731
In institutions	1,942	2,673	2,907
Families	306,097	356,486	336,796
YEAR ENDED 30 JUNE			
Amount paid (\$'000)	158,525	234,922	235,735

Source: Department of Social Security.

Family Allowance Supplement

The Commonwealth Government is undertaking a major reform of assistance to families with low to moderate incomes to ensure that by the end of 1990 no child need live in poverty. The family allowance supplement is a major part of that reform.

10.11 FAMILY ALLOWANCE SUPPLEMENT (a), QUEENSLAND

Particulars	1987	1988
AT 30 JUNE		
Recipients	8,036	33,447
Sole mothers	197	1,979
Sole fathers	49	361
Married couples	7,790	31,107
Eligible dependent children	23,025	83,858
YEAR ENDED 30 JUNE		
Amount paid (\$'000)	14,210	52,499

(a) Family income supplement prior to 17 December 1987.

Source: Department of Social Security.

From 17 December 1987 the family allowance supplement scheme replaced the family income supplement scheme which had been in operation since 1 May 1983. It provides a higher level of assistance under a more generous income test to a substantially greater number of families with children. The higher cost of older children is recognised and payments for older children are significantly larger than payments for young children. The supplement provides cash assistance and the rate depends on the number and ages of children. Payments may also include an amount for rent assistance for families in the private rental market.

To be eligible for a family allowance supplement, a person must be qualified to receive family allowance and must not receive an additional pension or benefit for the child. The supplement is paid to the person who is paid family allowance, usually the mother.

The number of recipients of the family allowance supplement at 30 June 1988 was more than four times the number of recipients of family income supplement 12 months earlier.

From 29 December 1989, the family allowance supplement has been subject to an assets test similar to the test for age pensions.

10.1.6 Other Payments

There are a number of other federal government payments to the disadvantaged and those in particular need.

A sheltered employment allowance is payable to disabled people 16 years and over and below 65 years for men and 60 years for women, engaged in approved sheltered employment who are otherwise qualified to receive an invalid pension. Payments in 1987-88 amounted to \$12,622,000. From 15 June 1988 eligibility for payment of sheltered employment allowance was extended to participants in supported employment services.

In 1987-88, \$2,075,000 was paid in mobility allowances to severely disabled people aged 16 years or more who were gainfully employed or undertaking vocational training and who could not use public transport because of their disabilities.

Persons undertaking a rehabilitation program with the Commonwealth Rehabilitation Service and otherwise eligible for a social security pension or benefit can receive a non-taxable rehabilitation allowance equivalent to the invalid pension and subject to the same income and assets tests conditions. The allowance is paid during treatment or training and for up to 6 months thereafter. In 1987-88, payments amounted to \$3,966,000.

From 15 November 1987, child disability allowance replaced the handicapped child's allowance. The child disability allowance provides

financial assistance to people caring for physically, intellectually or psychiatrically disabled children in their homes. It is not subject to an income test or tax. In 1987-88 a total of \$4,786,000 was paid.

A pension is payable, free of income test, to the guardian of a double orphan who is aged under 16 years or who is a dependent full-time student aged 16 to 24 years. It is paid for a child effectively rendered parentless (through death of both parents or in certain other restricted circumstances). These payments amounted to \$331,000 in 1987-88.

Pensioners, supporting parent beneficiaries and recipients of some other benefits are eligible for a number of concessions from local, State and federal governments. Special discounts are given on fares, rates, registration, electricity and telephones, to name a few. It is also not uncommon for private firms to give discounts to pensioners and other beneficiaries.

10.2 SERVICES

Government and church, charitable and community organisations provide a variety of welfare services in the community.

The State Government has a particular responsibility for child welfare.

In 1987-88 there were 764 residential welfare establishments, other than emergency accommodation, which housed 17,751 people at the end of that year. In addition there were 131 emergency accommodation establishments.

Non-residential welfare services are typically provided by charitable and community organisations and target the disabled and others in need of care and/or counselling.

10.2.1 Child Welfare

Child Protection

In response to the increasing number of child protection notifications, the Queensland Centre for Prevention of Child Abuse was established in September 1986. The purpose of the centre is to encourage the development of programs and initiatives aimed at the prevention of all forms of child abuse by enhancing the well-being of children and families in Queensland.

Prior to 1987-88, all child protection notifications reported were recorded irrespective of seriousness. During 1987-88, revisions were made to ease practice procedures whereby the recording of reported matters is only undertaken if the degree of seriousness warrants.

In 1987-88 there were 5,954 child protection notifications recorded, which was a decrease of 11.2

per cent from the number of notifications for 1986-87 but over twice the number in 1983-84. These notifications were in respect of 8,374 distinct children (a child who is the subject of more than one notification is counted once only) and for 2,673 of these children the cases were substantiated.

10.12 CHILD PROTECTION, QUEENSLAND

Particulars	1983-84	1986-87	1987-88
Notifications (a)	2,574	6,705	5,954
Cases (b)	4,547	11,281	9,812
Distinct children (c)	n.a.	9,298	8,374
Substantiations			
Cases	1,142	3,031	2,923
Distinct children	n.a.	2,745	2,673

(a) Reports of neglect/abuse. (b) Number of children who are the subject of notifications. (c) A child who is the subject of more than one notification is counted once only.

Source: Department of Family Services and Aboriginal and Islander Affairs.

Of the 9,812 child protection cases notified in 1987-88, abuse or neglect was substantiated in 2,923 (29.8 per cent) cases and suspected in a further 1,845 (18.8 per cent). The remaining findings of investigations were no abuse or neglect identified (3,820), no investigation possible (347) and under investigation (877).

Neglect was the most common type of maltreatment (37.4 per cent) in the 2,923 cases where abuse or neglect was substantiated.

10.13 CHILD PROTECTION CASES SUBSTANTIATED, QUEENSLAND, 1987-88

Type of maltreatment	Males	Females	Persons
Abuse			
Physical	360	373	733
Emotional	263	256	519
Sexual	110	467	577
Neglect	548	546	1,094
Total	1,281	1,642	2,923

Source: Department of Family Services and Aboriginal and Islander Affairs.

Children in Care of the State

Responsibility for the care of children can fall on the State as a result of decisions from Children's, Magistrates, District or Supreme Courts. All children under orders are the responsibility of the Department of Family Services and Aboriginal and Islander Affairs.

As at 30 June 1988 there were 4,426 children under at least one order. Boys made up 59 per cent of the children under orders as at June 1988 while more than half the children were aged 14 years and over.

The department aims to assist and support children in their home environment where possible and appropriate. At 30 June 1988, 1,723 children

under orders (38.9 per cent) were placed at home. However, when a home placement is not considered appropriate, an alternative care service may be suitable to meet the needs of the child. The major types of alternative services are foster care and residential care.

10.14 CHILDREN (a) UNDER ORDERS, QUEENSLAND

Type of order	At 30 June		
	1986	1987	1988
Care and control	732	739	660
Care and protection	3,115	2,920	2,854
Supervision	552	r 550	503
Protective supervision	357	r 335	404
Detention at Queen's Pleasure	5	4	5
Total	4,761	4,548	4,426

(a) If under more than one order, shown under the most serious order.
Source: Department of Family Services and Aboriginal and Islander Affairs.

10.15 CHILDREN UNDER ORDERS BY TYPE OF PLACEMENT, QUEENSLAND

Type of placement	At 30 June		
	1986	1987	1988
In residential care establishments	603	r 546	479
Government	169	163	169
Licensed	434	r 383	310
Foster care	1,699	1,624	1,818
Employment	8	14	11
In adult custody	98	r 126	91
Home placement	1,949	1,873	1,723
Other establishments (a)	135	123	115
Other (b)	269	242	189
Total	4,761	4,548	4,426

(a) Including hospitals, gaols and establishments for the handicapped.
(b) Including children living with department approved persons, living independently, absconders and transfers interstate.
Source: Department of Family Services and Aboriginal and Islander Affairs.

Foster Care

Foster parents are a vital resource for children in care. As the need for child protection work increases so does the demand for care-givers for children. Foster parents have been called upon to care for an increasing number of emotionally disturbed children.

Parents wishing to foster are given a 6 to 8 week education program prior to their approval as foster parents. These programs give potential care-givers some preparation for the tasks involved in fostering children and assist them in making realistic decisions about the type of children for whom their family could provide care. The programs also help child care officers to become well acquainted with applicants before children are placed with them. Local foster parent groups are established throughout Queensland and, with the Foster Parents Association of Queensland, provide ongoing education and support.

Residential Care

Residential care is offered by both government and licensed non-government residential care establishments. Non-government organisations provide a range of licensed residential care facilities and related support services for children in care. The models of licensed residential care include congregate care institutions, campus style facilities, clustered group homes, group homes and hostels.

Adoptions

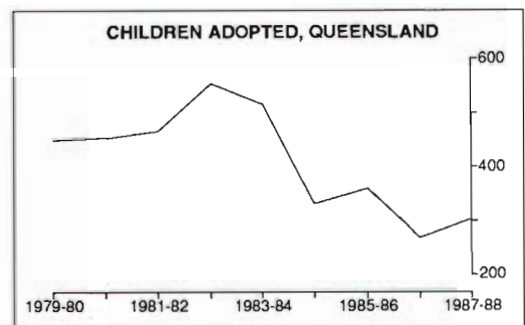
Adoption is the legal process to secure for a child, adoptive parents who have all the legal rights and responsibilities of natural parents. The Department of Family Services and Aboriginal and Islander Affairs is the sole authority responsible for the adoption of children in Queensland and this process is governed by the *Adoption of Children Act 1964-1988*.

The number of children adopted in 1987-88 was 302 compared with 268 for the previous year and 660 in 1977-78.

There were 90 adoption orders made for babies during 1987-88, while 226 applications were received from couples wishing to adopt infants aged under 12 months.

As a result of adoption legislation changes in 1987, the Adoption Contact Register was created. This register enables voluntary reunions to occur between an adopted person and his or her birth parents when all parties have applied to have their names entered in the register. The department does not seek out or trace individual parties. In most circumstances it is necessary to have the names of the adopted person, the adoptive parents and the birth parent or parents entered in the register before a reunion can be arranged. All participants to a reunion receive counselling so that they have an opportunity to consider the sensitive issues associated with a reunion before it occurs.

At 30 June 1988, applications to the Adoption Contact Register amounted to 1,960. Of these 515 were from adopted children, 780 from birth mothers, 651 from adoptive parents and 14 from siblings of an adopted person.



Also introduced during 1987, was the confidentiality provision which enables adopted persons and adoptive parents to request the department to disclose to them non-identifying information concerning birth parents. Similarly, this provision enables birth parents to request the disclosure of non-identifying information about adoptive parents and adoptees. During the year ended June 1988, 1,118 requests for non-identifying information were received.

10.2.2 Residential Welfare Establishments

Residential welfare establishments provide organised substitute living facilities to maintain a basic level of health and well-being for those people who are not fully capable of independently looking after themselves, e.g. the aged, neglected children and the handicapped.

Nursing care homes, however, which provide regular basic nursing care to chronically ill, frail or disabled persons, are part of the health care system.

A number of residential welfare establishments are run by government (e.g. the Department of Family Services and Aboriginal and Islander Affairs) and others by church, charitable and community organisations. A large proportion receive government funds through a range of programs; operating grants, handicapped children's benefits, personal care and hostel care subsidies to name a few. Funding can come from federal and State governments and the latter may have a federal component.

Establishments are categorised by the level of care they provide. There are changes year to year reflecting changes in eligibility criteria for different programs and changes in the perceived needs of the people being accommodated, so it is difficult to accurately compare statistics from year to year.

Substitute Family or Home Care Establishments

The predominant activity of these establishments is the provision of full board and lodging and some personal, custodial or parental care to aged or disabled persons or to dependent or delinquent children.

Of the 299 establishments operating during 1987-88, 197 had fewer than 21 beds.

Of the June 1988 residents, 64 per cent were aged, 26 per cent intellectually disabled and 6 per cent dependent, neglected or delinquent children.

Government contributions covered 65 per cent of operating expenditure in 1987-88, a similar proportion to the previous year.

10.16 SUBSTITUTE FAMILY OR HOME CARE ESTABLISHMENTS, QUEENSLAND

Particulars	1985-86	1986-87	1987-88
Establishments	288	299	299
Beds at end of June	7,612	7,692	7,857
Admissions during year	5,211	5,645	6,746
Residents at end of June	6,979	7,062	7,270
Total resident days during year ('000)	2,515	2,505	2,589
Average daily number resident ('000)	6.9	6.9	7.1
Bed occupancy rate at end of June (%)	92	91	93
Resident days (a)	968	945	956
Staff (full-time equivalent)	3,256	3,259	3,247
Medical	4	5	5
Other professional and technical	180	148	132
Nursing, medical attendants etc.	1,266	1,283	1,357
Other staff	1,806	1,823	1,753
Operating expenditure (\$'000)	81,733	85,444	90,631
Cost per resident day (\$)	32.50	34.10	35.01

(a) Rate per 1,000 mean estimated resident population.

Source: Health and Welfare Establishments (4302.3).

Hostel Care Establishments

These establishments are run by public authorities or registered non-profit organisations to provide board and lodging at reduced rates or some form of social assistance or rehabilitation. They cater for the aged, the physically and intellectually disabled etc. and must have adequate domestic staff and expenditure on food.

Compared to establishments providing substitute family or home care, in 1987-88 establishments providing hostel care had half the staff for every 100 residents and half the cost per resident day.

10.17 HOSTEL CARE ESTABLISHMENTS, QUEENSLAND

Particulars	1985-86 (a)	1986-87 (a)	1987-88
Establishments	73	73	72
Beds at end of June	3,904	3,904	3,845
Admissions during year	3,362	3,083	2,812
Residents at end of June	3,559	3,554	3,517
Total resident days during year ('000)	1,269	1,257	1,265
Average daily number resident ('000)	3.5	3.4	3.5
Bed occupancy rate at end of June (%)	91	91	91
Resident days (b)	489	474	467
Staff (full-time equivalent)	805	785	833
Medical	1	1	1
Other professional and technical	11	9	18
Nursing, medical attendants etc.	87	91	112
Other staff	706	685	702
Operating expenditure (\$'000)	18,890	20,815	22,004
Cost per resident day (\$)	14.88	16.56	17.39

(a) Figures revised to reflect exclusion of one large establishment which was out of scope. (b) Rate per 1,000 mean estimated resident population.

Source: Health and Welfare Establishments (4302.3).

Of the June 1988 residents, 79 per cent were aged 65 years and over and just over two-thirds were females.

In 1987-88 government funding covered 31 per cent of operating expenditure, a slightly higher proportion than in 1986-87. Patients' fees (including payments on behalf of patients, e.g. pensions, health benefits) continue to be the main source of revenue for these establishments.

Accommodation Only Establishments

These establishments provide beds, rooms or groups of units or cottages specifically for the aged, distressed or disabled, at rentals partially subsidised by the controlling authority, which must be a public authority or a registered non-profit organisation. Separate dwellings are not included even if subject to an individual rental rebate arrangement. Residents are responsible for their own provisions but occasional meals may be provided in some establishments. (Night shelters providing only casual accommodation are not included.)

Reflecting the lower level of service, in 1987-88 establishments providing accommodation only had less than one twenty-fifth of the staff per 100 residents and about a tenth of the cost per resident day of establishments providing substitute family or home care.

Of the 393 establishments operating during 1987-88, 323 had fewer than 21 beds.

10.18 ACCOMMODATION ONLY ESTABLISHMENTS, QUEENSLAND

Particulars	1985-86	1986-87	1987-88
Establishments	344	366	393
Beds at end of June	6,305	6,523	7,167
Admissions during year	873	823	1,176
Residents at end of June	6,130	6,359	6,964
Total resident days during year ('000)	2,215	2,297	2,485
Average daily number resident ('000)	6.1	6.3	6.8
Bed occupancy rate at end of June (%)	97	97	97
Resident days (a)	853	866	917
Staff (full-time equivalent)	106	125	113
Medical	—	—	—
Other professional and technical	—	—	—
Nursing, medical attendants etc.	16	17	17
Other staff	89	108	96
Operating expenditure (\$'000)	7,515	7,911	9,705
Cost per resident day (\$)	3.39	3.44	3.91

(a) Rate per 1,000 mean estimated resident population.

Source: Health and Welfare Establishments (4302.3).

Nearly all residents in June 1988 were aged 65 years or over and 58 per cent resided in government-run establishments.

Patients' fees, including payments on behalf of patients, e.g. pensions, continue to be the main source of revenue for these establishments.

Emergency Accommodation Services

In 1987-88 there were 133 services providing emergency accommodation and related support for persons who were homeless or in crisis. These were funded under the Supported Accommodation Assistance Program (50 per cent Commonwealth funds, 50 per cent State) administered by the Department of Family Services and Aboriginal and Islander Affairs.

The Supported Accommodation Assistance Program (SAAP) consists of three subsidiary programs: the General Supported Accommodation Program (GSAP), the Women's Emergency Services Program (WESP) and the Youth Supported Accommodation Program (YSAP).

The purpose of GSAP is to provide funding for supported accommodation and related support services for persons who are permanently or temporarily homeless and need assistance to move toward independent living. The program provides assistance to services providing for single homeless men and women and homeless families, and includes supported accommodation services, hostels, drop-in centres and meal services.

WESP provides funding for refuge and related support services for women and women with dependent children, escaping intolerable domestic circumstances or other crisis situations. The program includes women's refuges, special needs refuges, rape crisis services, women's information and refuge referral centres and detached worker services.

10.19 EMERGENCY ACCOMMODATION SERVICES, QUEENSLAND

Particulars	1985-86	1986-87	1987-88
NUMBER OF SERVICES			
GSAP	29	47	54
WESP	35	38	40
YSAP	30	34	39
Total	94	119	133
AMOUNT SPENT (\$'000)			
GSAP	1,450	3,811	5,128
WESP	2,993	3,393	4,477
YSAP	2,115	2,874	3,782
Total	6,558	10,078	13,387

Source: Department of Family Services and Aboriginal and Islander Affairs.

The purpose of YSAP is to provide funding for supported accommodation and related support services for young people aged 12 to 25 years (and their dependants where applicable) who are homeless as a result of crisis and need support to move

towards independent living where possible and appropriate. Services range from crisis and short-term shelters and drop-in centres to detached youth workers, youth housing workers and medium-term shelters.

During 1987-88, the number of SAAP services increased by almost 12 per cent, whereas funding of these services increased significantly by almost 33 per cent.

The Crisis Accommodation Program (CAP) is a Commonwealth funded program forming part of the Commonwealth/State Housing Agreement. CAP aims to provide capital housing funds for supported accommodation and related support services funded under the Supported Accommodation Assistance Program. The Queensland Housing Commission administers CAP funds in Queensland. A total of \$2.5m was allocated in 1987-88 (\$2.3m in 1986-87). Twenty-three premises were approved for purchase, with construction approved for two facilities. Renovations and maintenance were carried out on 36 premises throughout Queensland.

10.2.3 Non-residential Welfare Services

Most services are provided by religious and charitable bodies. Lifeline, St. Vincent de Paul Society and the Salvation Army are well known for supplying food and clothing to those in immediate need and for their counselling services. The Department of Family Services and Aboriginal and Islander Affairs provides crisis care which includes a 24-hour telephone crisis counselling service (26,953 incoming calls in 1987-88), emergency care and some financial assistance for clients.

There are day care and drop-in centres where people of similar backgrounds (aged pensioners, unemployed youth) can meet socially and, in some cases, receive care and/or counselling.

Under the Home and Community Care (HACC) program, the Commonwealth Government, in conjunction with State governments, is developing a comprehensive range of integrated home and community care services for frail or at risk aged people and younger disabled people who wish to remain in the community. The program aims to prevent the premature or inappropriate admission of these people to long-term care.

The HACC program provides funding for a range of services including home help and personal care, home maintenance and modifications, food services, community respite care, transport, community care paramedical services and community care nursing. In 1987-88, \$32,200,426 was allocated to services under the HACC program by the Queensland Department of Health; 60 per cent of these funds were provided by the Commonwealth Government.

For the physically and mentally disabled, a number of non-profit community-based organisations provide services, namely:

- sheltered employment,
- activity therapy,
- training,
- recreation and rehabilitation,
- aids and appliances and
- production and provision of audio and Braille material.

These are largely funded by the Commonwealth Department of Community Services.

There are some other government-run welfare services such as the Telephone Interpreter Service of the Department of Immigration, Local Government and Ethnic Affairs and other services to migrants including Migrant Resource Centres.

10.2.4 Services for Aboriginal and Torres Strait Islander People

Aboriginal and Islander people are covered by the services mentioned above and also by programs of the Commonwealth Department of Aboriginal Affairs and Aboriginal Development Commission and the State Department of Family Services and Aboriginal and Islander Affairs. They include community organisations, interpreter and translator services.

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Chapter 11

HEALTH

Sickness and death are of concern to any community and in Queensland many varied health services are provided by Government, non-profit organisations and private enterprise to help safeguard the health of Queenslanders and to assist those who are sick, frail or intellectually disabled.

More than 63 per cent of Queenslanders experienced illness conditions over a 2-week reporting period according to the findings of a national survey conducted by the ABS in 1983. These illnesses ranged from minor complaints such as colds and headaches to serious medical conditions such as heart disease. The most frequently experienced condition was headache, reported by 15.2 per cent of the population, followed by high blood pressure (6.5 per cent) and the common cold (6.2 per cent). More females than males reported recent illness, the proportions being 68.9 and 58.0 per cent, respectively.

Surveys are useful in providing broad indications of the ill-health of the population at various points of time but there are other indicators which enable the more frequent monitoring of certain aspects of ill-health.

Annual death statistics show that heart disease and cancer continue to be the main causes of death among Queenslanders, however, while deaths from

heart disease are now decreasing, deaths from cancer are continuing to rise.

Other statistics show that hospitalisation rates have been rising and that more than half a million patients are now treated in Queensland hospitals each year, involving over 3.5 million days of care.

In addition to the people admitted to residential health facilities, a variety of treatments are now provided by a range of non-residential health establishments. Available figures indicate something of the order of 9 million services being provided by these centres each year. As well, some 23 million professional services are provided by medical practitioners and specialists annually.

Monitoring and control of infectious disease are made possible by compulsory notification. Venereal disease continues to be by far the most common infectious disease but figures are showing alarming increases in the numbers of AIDS cases notified in Queensland.



Southport Hospital

Photo: Premier's Department

Total expenditure by the Commonwealth, State and local governments on health in Queensland during 1987-88 was \$2,083m (with transfers between governments netted out). Of this amount, 51 per cent was funded directly or indirectly by the Commonwealth Government.

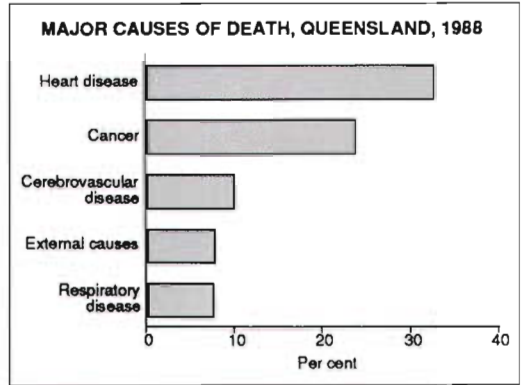
11.1 INDICATORS OF HEALTH STATUS

Indicators are signs or benchmarks that allow monitoring, comparison and appraisal and this can lead to corrective action if required. For example, the compulsory notification of communicable diseases can provide authorities with information that can enable quick and effective action to be taken to contain the outbreak of an infectious disease.

Causes of death, numbers of inpatients in hospitals, psychiatric institutions and nursing homes, details of conditions treated and operations performed in hospitals and figures on services provided are other useful indicators that help in the analysis of the health status of the Queensland population.

11.1.1 Causes of Death

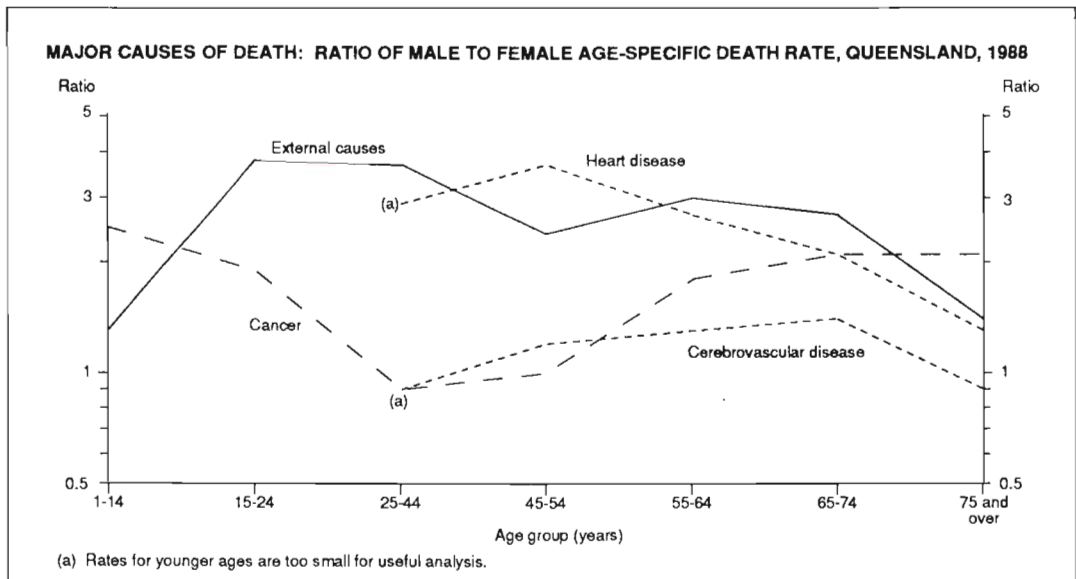
Heart disease and cancer (malignant neoplasms) killed more than half of the 18,803 Queenslanders who died in 1988. Approximately one-third of all deaths were caused by heart disease and nearly one-quarter were from cancer. Other leading causes were cerebrovascular disease (mainly stroke),



external causes such as accidents, poisonings and violence, and diseases of the respiratory system.

Since the early 1970s, the death rate for heart disease has decreased by 26.4 per cent, from an average rate of 314 deaths per 100,000 population for 1971 to 1973 to 231 for 1986 to 1988 and the rates for cerebrovascular disease have dropped even more markedly, by 42.4 per cent, from 125 to 72. The decline in the incidence of death from these two circulatory diseases has had a substantial effect on the overall death rates which fell by 20.9 per cent over the same period (from a rate of 872 deaths per 100,000 population to a rate of 690). In contrast, the death rates for cancer have risen from 123 to 164, an increase of 33.3 per cent.

The State Government has developed a major program called *Queensland Health 2000* which aims to lower mortality from the main causes of death of Queenslanders by bringing about a healthier lifestyle in general and by lowering the risk factors



associated with the major diseases in particular. Largely, this is to be achieved by increasing public awareness of the major determinants of health: nutrition, exercise, smoking, hypertension and factors related to accidents.

The significance of the various causes of death differ greatly according to sex. For example, 13.6 per cent of deaths of females in 1988 were caused by cerebrovascular disease compared with only 7.4 per cent for males. In contrast, deaths from external causes are much more significant for males than females; in 1988, 10.1 per cent of deaths of males were from these causes while the corresponding proportion for female deaths was 5.2 per cent. The proportions of deaths from heart disease and from cancer were similar for both males and females.

11.1 PRINCIPAL CAUSES OF DEATH, QUEENSLAND, 1988

Underlying cause	Persons	Percentage of total deaths	
		Males	Females
Heart disease	6,146	32.3	33.2
Cancer	4,502	25.6	21.8
Cerebrovascular disease	1,893	7.4	13.6
External causes	1,491	10.1	5.2
Respiratory system disease	1,451	8.6	6.5

Source: Causes of Death (3302.3).

The ratio of male to female deaths from the major causes differs markedly for the various age groups. In 1988 the death rate for males aged 45 to 54 years from heart disease was almost four times that for females but at ages 75 years and over the rates were much closer. A similar pattern applies to deaths from external causes, with the death rate for males in the 25 to 44 years age group being nearly four times that for females.

Causes of Death and Age

Cause of death is age related, with different causes assuming greater or lesser importance in the various age groups. For infants aged under 1 year, certain conditions originating in the perinatal period such as prematurity, birth injury and respiratory conditions were responsible for almost 47 per cent of the deaths in 1988. Other significant causes were congenital anomalies and 'cot deaths'. The risk of death diminishes considerably after the first year of life; in 1988 there were over 50 per cent more deaths at ages under 1 year compared with deaths at ages 1 to 14 years. Almost half of the deaths at ages 1 to 14 years were due to external causes, mainly motor vehicle traffic accidents and drownings.

In the 15 to 24 years age group, there were more than three times as many deaths of males as there were of females. Much of this disparity is caused by the large numbers of males who die in road

traffic accidents and by suicide. In 1988 accidents, poisonings and violence accounted for 78 per cent of all deaths in this age group.

11.2 MAIN CAUSES OF DEATH BY AGE, QUEENSLAND, 1988

Cause	Males	Females	Rate (a)
UNDER 1 YEAR			
Conditions originating in perinatal period	82	76	401
Congenital anomalies	49	43	233
'Cot deaths'	34	17	129
Other	22	16	96
All causes	187	152	860
1-14 YEARS			
Accidents and violence	61	43	17
Cancer	18	7	4
Other	38	46	14
All causes	117	96	36
15-24 YEARS			
Motor vehicle accidents	122	43	35
Suicides	66	6	15
Other	118	47	35
All causes	306	96	86
25-44 YEARS			
Accidents and violence	371	98	55
Cancer	98	102	24
Circulatory system diseases	99	46	17
Other	115	66	21
All causes	683	312	117
45-64 YEARS			
Cancer	806	527	264
Circulatory system diseases	871	335	239
Accidents	190	69	51
Other	382	228	121
All causes	2,249	1,159	676
65 YEARS AND OVER			
Circulatory system diseases	3,519	3,694	2,465
Cancer	1,779	1,143	999
Respiratory system diseases	731	413	391
Other	1,026	1,141	741
All causes	7,055	6,391	4,596

(a) Deaths per 100,000 population of same age group.

Source: Causes of Death (3302.3).

Accidents, poisonings and violence continue as the leading cause of death for males aged 25 to 44 years. For females of these ages, cancer emerges as the leading cause and remains so until the age group of 65 years and over, when circulatory system diseases, mainly heart disease, become the leading cause. They are also the most common cause of death for males aged 45 years and over.

11.1.2 Inpatients of Residential Health Establishments

Residential health establishments comprise acute hospitals, psychiatric institutions and nursing care homes.

11.3 PATIENTS OF RESIDENTIAL HEALTH ESTABLISHMENTS, QUEENSLAND, 29 JUNE 1988

Category of patient	Acute hospitals	Psychiatric institutions	Nursing care homes
Medical	3,826	—	—
Orthopaedic and surgical	3,011	—	—
Obstetric	725	—	—
Psychiatric or behavioural	454	875	746
Intellectually disabled	12	177	561
Aged and geriatric	982	192	10,171
Other	571	153	1,190
Total	9,581	1,397	12,668

Source: Health and Welfare Establishments (4302.3).

At 29 June 1988, 23,646 patients were being treated in these institutions throughout Queensland. The level of nursing care given to these patients ranged from round-the-clock, comprehensive nursing (for hospital patients and a small number of psychiatric hospital patients), to regular basic nursing care (for the majority of patients in psychiatric hospitals and nursing care homes), to minimal nursing care (for the minority of patients at nursing care homes).

Female patients in nursing care homes greatly outnumber male patients. At 29 June 1988, some 70 per cent of aged persons (65 years and over) in these homes were females whereas in the general population aged 65 years and over, females comprise 56 per cent of such persons.

Hospital Inpatients

The State Government bears prime responsibility for the administration of facilities for the maintenance of community health and prevention of disease. Free treatment for patients at public hospitals was introduced in 1945. Private hospitals, run mainly by religious authorities, supplement this service.

11.4 PATIENTS SEPARATED (a) FROM HOSPITALS, QUEENSLAND

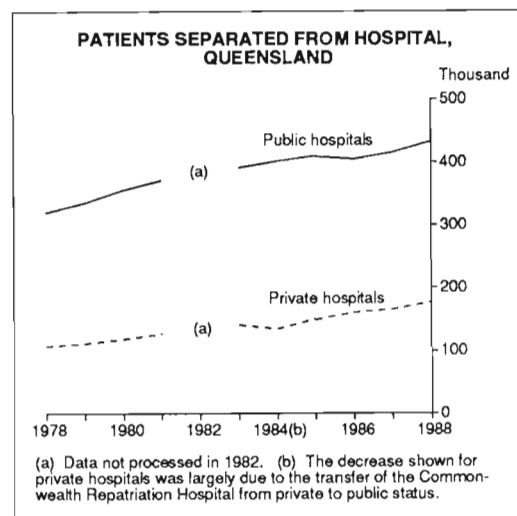
Patients separated	1987	1988
Males	262,032	274,738
Females	320,806	336,058
Persons	582,838	610,796
From public hospitals	416,389	433,310
From private hospitals	166,449	177,486
Rate (b)		
Males	1,947	1,995
Females	2,409	2,458
Persons	2,177	2,225

(a) Counted once each time they were separated during the year.
(b) Patients separated per 100,000 population.

Source: Hospital Morbidity (4303.3).

There were 610,796 patients separated from Queensland hospitals (excluding psychiatric hospitals) during 1988, an increase of 4.8 per cent over the number separated during 1987.

Separations of females are considerably higher than for males each year mainly because of the large numbers of females treated for pregnancy, childbirth and complications of these conditions. Although approximately 55 per cent of all separations in 1988 were of females, this proportion reduces to just under 50 per cent when pregnancy and childbirth cases are excluded.

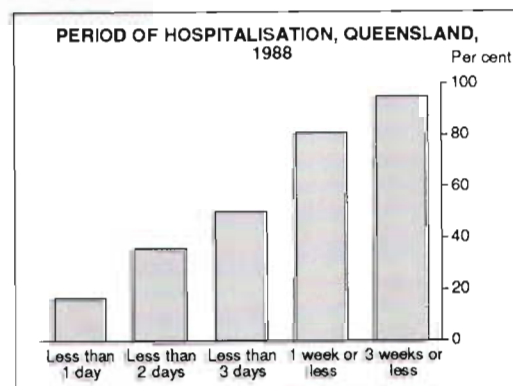


Between 1978 and 1988, hospital separations increased by 42.3 per cent. Over this period there was strong growth in the private hospital sector, with hospital separations increasing by 64.1 per cent. For both private and public hospitals the growth in the second half of the period was not as high as for the first half.

Hospitalisation rates have also been increasing over the last several years. In 1978 there were 1,976 patient separations for every 10,000 Queenslanders while in 1988 this rate had grown to 2,225.

Period of Hospitalisation

Just over 3.5 million days were spent in hospital by patients who were separated from hospital



during 1988, resulting in an average length of stay of 5.9 days. The average stay for public hospital patients was 6.0 days compared with 5.4 days for private hospital patients, reflecting the different mix of patients treated by the two types of hospital.

Of all patients separated in 1988, over one-third (37 per cent) had been hospitalised for one day or only part of a day, 82 per cent had been hospitalised for one week or less and 93 per cent were hospitalised for 2 weeks or less.

Age Distribution

Just over 41 per cent of patients separated from Queensland hospitals in 1988 were aged 15 to 44 years. In this age group, which is the childbearing age range, female patients outnumbered male patients by almost 2 to 1.

Comparison of the age distributions of patients separated in 1978 and 1988 shows that the proportion of patients aged 65 years and over increased from 17 per cent in 1978 to 24 per cent in 1988, while the proportions for the younger age groups declined. These movements reflect the ageing of the Queensland population.

11.5 PATIENTS SEPARATED BY AGE, QUEENSLAND

Age group (years)	1978		1988	
	Per cent	Number	Per cent	Number
0-14	18.3	82,656	13.5	
15-44	43.2	250,976	41.1	
45-64	21.7	130,991	21.4	
65 and over	16.7	146,173	23.9	
Total	100.0	610,796	100.0	

Source: Hospital Morbidity (4303.3).

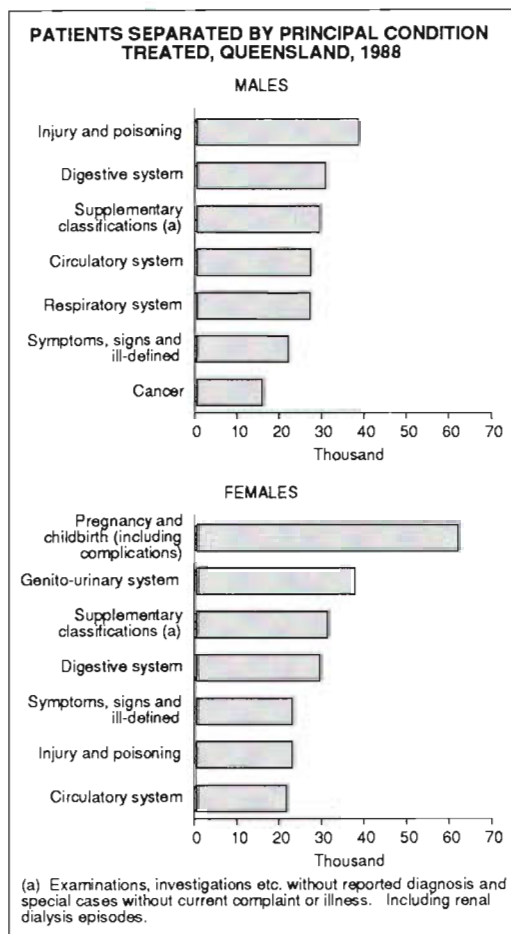
Principal Condition Treated

On separation from hospital, patients are classified according to the principal condition treated during the period of hospitalisation. For males separated in 1988, injuries and poisoning were the leading principal conditions treated, accounting for 14 per cent of separations. The leading conditions treated for females were pregnancy, childbirth and related complications, which accounted for 19 per cent of separations. Childbirth without complications comprised just over 31 per cent of this group of conditions.

Hospital resources expended on the treatment of different conditions can be inferred from the total period of hospitalisation for the various principal conditions treated. Among males the treatment of circulatory system diseases accounted for the greatest amount of hospitalisation (17 per cent of total patient days), followed by treatment of injury and poisoning (13 per cent) and treatment of cancer (9 per cent). For females, circulatory system diseases accounted for 15 per cent of total hospitalisation (including 6 per cent for stroke patients),

while pregnancy, childbirth and the puerperium accounted for 14 per cent. Treatment of mental disorders accounted for 10 per cent of the total period of hospitalisation for females.

For both males and females, the average period of hospitalisation is highest for patients treated for mental disorders. In 1988, the average for these patients was 12.4 days for males and 15.9 for females. Average length of stay is also high for perinatal conditions (13.4 days for males and 13.9 days for females), mainly because of the lengthy treatment of premature babies.



Principal Operation or Procedure Performed

Surgical or other medical procedures were performed on over half of the patients separated during 1988. These procedures ranged from major surgical operations and diagnostic procedures using the latest medical technology and highly skilled staff, to simple procedures requiring only small resources, e.g. incision of skin, enema etc.

11.6 PERIOD OF TREATMENT IN HOSPITAL, QUEENSLAND, 1988

Principal condition treated (International classification, 1975 Revision)	Males		Females	
	Percentage of total inpatient days	Average period (days)	Percentage of total inpatient days	Average period (days)
Infectious and parasitic	1.4	4.3	1.2	3.7
Cancer	9.4	9.4	6.0	10.3
Non-malignant neoplasms	0.6	3.3	1.3	4.1
Endocrine, nutrition and metabolic	1.5	7.5	1.9	8.9
Blood and bloodforming organs	0.6	4.3	0.5	4.9
Mental disorders	8.9	12.4	9.7	15.9
Nervous system and sense organs	5.3	5.3	3.7	4.6
Circulatory system	17.5	10.1	15.0	13.7
Respiratory system	9.1	5.3	5.8	5.2
Digestive system	8.0	4.1	6.6	4.4
Genito-urinary system (a)	4.3	5.1	6.6	3.4
Pregnancy, childbirth and puerperium	—	—	14.2	4.5
Skin and subcutaneous system	2.9	6.9	2.0	7.6
Musculoskeletal system and connective tissue	6.1	5.7	6.2	7.5
Congenital anomalies	0.8	4.5	0.6	5.2
Certain perinatal conditions	1.6	13.4	1.2	13.9
Symptoms, signs and ill-defined	6.0	4.3	5.6	4.8
Injury and poisoning	12.9	5.3	9.0	7.7
Supplementary classifications (b)	3.0	1.6	2.8	1.8
All causes	100.0	5.8	100.0	5.9

(a) Renal dialysis episodes are included in 'supplementary classifications'. (b) Examinations, investigations etc. without reported diagnosis and special cases without current complaint or illness.

Source: Hospital Morbidity (4303.3).

Of persons separated from hospital in 1988 for whom surgery was reported as the principal procedure, 60 per cent were females. Surgery on the female genital organs and obstetric operations account for much of this disparity.

Surgery on the genital organs accounted for 24 per cent of cases where surgery was reported as the principal operation for females. Dilation and curettage of the uterus comprised almost half of these operations. Similarly, obstetric operations accounted for 18 per cent of surgical operations for females. Approximately one-third of obstetric operations were episiotomies (small incisions made to facilitate childbirth) and one-third were caesarean sections.

For males separated from hospital in 1988, surgical operations on the musculoskeletal system accounted for almost 20 per cent of all surgical cases, while those performed on the digestive system accounted for 18.5 per cent of cases. Of the operations performed on the digestive system, more than half comprised hernia repairs and appendix operations.

Inpatients of Government Psychiatric Hospitals

Most psychiatric treatment is provided at specialist psychiatric units attached to general hospitals. In most cases initial referral is to these hospitals.

Where appropriate, persons with chronic mental illnesses (including alcoholism) are admitted to one of the State's three major psychiatric hospitals: Wolston Park in Brisbane with 466 beds, Baillie

Henderson Hospital in Toowoomba with 434 beds and Mosman Hall in Charters Towers with 110 beds.

Schizophrenia (characterised by the disintegration of the personality) was the main reason for admission to psychiatric hospitals in Queensland in 1988-89, accounting for 31 per cent of all such admissions.

11.7 PERSONS ADMITTED TO PSYCHIATRIC HOSPITALS (a) BY DIAGNOSIS, QUEENSLAND

Mental disorders	1987-88	1988-89
Schizophrenic psychosis	137	140
Alcohol dependence or abuse	98	26
Affective psychoses	40	35
Other psychoses	68	61
Other personality disorders	25	33
Mental retardation	22	9
Neurotic and depressive disorders	35	44
Non-psychotic disorders following brain damage	17	22
Social reasons	15	18
Other and unknown	76	62
Total	533	450

(a) Wolston Park, Baillie Henderson and Mosman Hall psychiatric hospitals. Psychiatric patients at general hospitals are included in the previous section.

Source: Queensland Department of Health.

11.1.3 Patients of Non-residential Health Establishments

Extensive non-residential medical treatment is provided by outpatient centres, day centres and day hospitals, rehabilitation centres and mobile services such as home nursing and ambulance services.

Outpatient Centre Patients

Most outpatient centres are attached to acute hospitals. Some are separate centres or are ancillary services attached to establishments other than acute hospitals. They provide for the treatment of casualty cases, X-ray tests, physiotherapy, treatment of special diseases and minor operations on patients not formally admitted to hospitals. Over 118,000 services were rendered to patients attending outpatient centres in the week ending 2 July 1988. Nearly 19 per cent of these were 'casualty' services, most of which were of an emergency nature for injuries resulting from accidents.

11.8 SERVICES AT OUTPATIENT CENTRES, QUEENSLAND, WEEK ENDED 2 JULY 1988

Type of treatment	Services (a)
Pharmacy	22,052
Casualty	22,004
Medical	28,876
Dental	10,201
X-ray	9,911
Physiotherapy	6,713
Surgical	5,015
Other	13,898
Total (b)	118,670

(a) One or more services may be provided during a single attendance.
(b) Including 105,905 services at 168 centres maintained by Hospital Boards and 12,765 services at 92 other centres.

Source: Health and Welfare Establishments (4302.3).

Patients of Day Centres and Domiciliary Nursing Services

Day centres or day hospitals provide therapy which requires non-residential attendance by patients at specified regular intervals over a period of time. Physiotherapy and occupational therapy are the services most frequently provided. In mid-1988, more than 9,000 services were provided each week by centres in Queensland.

11.9 SERVICES AT DAY CENTRES AND DOMICILIARY NURSING SERVICES, QUEENSLAND, WEEK ENDED 2 JULY 1988

Type of service rendered	Number (a)
Day centres	
Physiotherapy	2,472
Occupational therapy	1,700
Recreational and social activities	1,432
Chiropody or podiatry	311
Speech therapy	247
Other	3,090
Total	9,252
Domiciliary nursing services	
Medical treatment	16,000
Hygiene and observation	13,164
Counselling and supportive care	9,014
Rehabilitation	4,179
Physiotherapy	970
Other	3,033
Total	46,360

(a) One or more services may be provided during a single attendance or visit.

Source: Health and Welfare Establishments (4302.3).

Domiciliary or home-nursing services offer health care to people in their own homes. In mid-1988, over 45,000 home-nursing services were being provided to patients each week. Approximately one-third of these services comprised medical treatments and over one-quarter comprised hygiene and observation services.

Persons Using Ambulance Services

Ambulance services in Queensland are provided by the Queensland Ambulance Services Board which maintains 96 separate centres, and by local Hospital Boards which operate nine centres. During 1987-88 these services treated 71,082 patients at accidents and 126,868 at ambulance centres. A total of 521,672 patients were transported, involving 14,400,000 kilometres travelled.

11.1.4 Patients Receiving Professional Medical Services

In addition to professional services provided by medical practitioners and specialists at hospitals, outpatient centres, day hospitals etc., a large proportion of medical services and tests are carried out at private doctors' clinics and surgeries. If a charge is raised, Medicare benefits are paid in respect of such services and for services rendered to persons treated as private patients at hospitals. During 1988-89 more than 20 million of these Medicare services were rendered to Queenslanders. General practitioner attendances comprised half these services and pathology tests accounted for almost one quarter. The average number of services provided per head of population was 8.5, compared with 8.6 nationally.

11.10 MEDICARE SERVICES, QUEENSLAND, 1988-89

Type of service	Number	Per cent	Average (a)
	'000		
General practitioner	12,973	54.6	4.7
Pathology	5,607	23.6	2.0
Medical specialist	1,952	8.2	0.7
Radiology	1,003	4.2	0.4
Operations	787	3.3	0.3
Anaesthetics	322	1.4	0.1
Optometry	360	1.5	0.1
Obstetrics	77	0.3	—
Other	664	2.8	0.2
Total	23,745	100.0	8.5

(a) Number of services per head of population.

Source: Health Insurance Commission.

11.1.5 Communicable and Other Infectious Diseases

During 1988 a more complete system of infectious disease notifications was introduced in Queensland to include notifications from laboratories. This enables the Department of Health to monitor the incidence of these diseases and to establish strategies for control.

The most important notifiable infectious disease is acquired immunodeficiency syndrome (AIDS) and its precursor, human immunodeficiency virus (HIV) infection. A patient is diagnosed as having AIDS when one or more indicator diseases develop as a result of damage to the immune system following the infection of specific immunity cells by HIV.

As the latency period for HIV infection is long and varied, HIV notifications do not usually represent recent infections. During 1988, 145 new notifications were received. While this represents a decrease in notifications from the previous year, this figure may reflect only a change in the number of persons presenting for screening or presenting with AIDS. It is not possible to assess either the true incidence or prevalence of the disease from these statistics.

Other sexually transmissible diseases for which notification is required are: chancroid, chlamydia, donovanosis, genital herpes, gonorrhoea, lymphogranuloma venereum and syphilis. In April 1988 chlamydia and lymphogranuloma venereum were added to the list of notifiable venereal diseases and genital warts was excluded. Of the 4,079 sexually transmissible disease notifications during 1988, 1,176 were received for chlamydia, 943 for genital herpes, 979 for syphilis (all forms) and 919 for gonorrhoea.

There were 176 new cases of tuberculosis notified during 1988, an increase of 31 per cent on the previous year. Most of these cases were tuberculosis of the lungs. The rate per head of population was highest amongst South-East Asian migrants, followed by other migrants, indigenous Australians and then non-indigenous Australian born.

11.11 NOTIFICATIONS OF INFECTIOUS DISEASES, QUEENSLAND

Selected notifiable disease	1987	1988	
		Number	Rate (a)
AIDS	35	56	2.0
Epidemic polyarthritis (Ross River fever)	986	495	18.0
Hepatitis (type A-infective)	82	95	3.5
Hepatitis (type B-serum)	463	591	21.5
HIV	148	145	5.3
Leptospirosis	69	18	0.7
Malaria	287	332	12.1
Meningitis	40	51	1.9
Q-fever	179	175	6.4
Rubella	233	19	0.7
Salmonellosis	666	1,149	41.9
Shigellosis	82	164	6.0
Tuberculosis	134	176	6.4
Venereal diseases (b)	2,633	4,079	148.7

(a) Notifications per 100,000 population. (b) See above text for changes to this category in 1988. Excluding HIV infection.

Source: Queensland Health Department.

The management of all cases of tuberculosis is monitored and coordinated by the Brisbane Chest

Clinic. This has resulted in prompt diagnosis, efficient treatment and a high degree of tuberculosis control in Queensland.

There was a continuing decline in the total number of cases of epidemic polyarthritis but an increase in the number of cases of salmonellosis. The latter may be a reflection of the increasing amount of precooked food purchased; salmonellosis is usually caused by eating contaminated food but can be contracted from another person.

The hepatitis B figures do not reflect incidence but rather the number of chronic carriers detected through screening programs. A limited immunisation program in high risk groups exists in Queensland for this condition.

11.1.6 Employment Injuries

During the 12 months ended June 1988, 43,197 occupational injuries and 2,272 occupational diseases were sustained by Queensland workers, down by 5.4 and 9.9 per cent, respectively, on the figures for the previous year.

These figures represent compensative occupational injuries and diseases resulting in an absence of at least one shift. They exclude details of most self-employed persons and all Commonwealth Government employees.

11.12 EMPLOYMENT INJURIES (a), QUEENSLAND

Particulars	1982-83		1987-88	
	Persons	Males	Females	Persons
Fatalities	57	85	2	87
Occupational injuries	23	53	2	55
Occupational diseases	34	32	—	32
Permanent disability	1,177	1,946	109	2,055
Occupational injuries	619	628	93	721
Occupational diseases	558	1,318	16	1,334
Temporary disability	55,098	35,902	7,425	43,327
Occupational injuries	53,864	35,379	7,042	42,421
Occupational diseases	1,234	523	383	906

(a) Excluding injuries sustained while travelling to or from work, or on recess, which in 1987-88 totalled 2,342.

Source: Employment Injuries (6301.3).

Between 1982-83 and 1987-88, occupational injuries have decreased by 21 per cent whereas occupational diseases have risen by 24 per cent.

Although occupational diseases constitute only 4.8 per cent of all employment injuries, they result in similar numbers of fatalities as do occupational injuries. In recent years, more cases of permanent disability have been caused by occupational diseases than by occupational injuries. The great majority

of occupational injuries cause only temporary disability. In 1987-88, such injuries caused a loss of 1.1 million work days. In comparison, cases of temporary disability from disease are much fewer, accounting for a loss of 43,065 days.

In 1987-88, there were five occupational injuries sustained by males to every one sustained by females. Similarly, cases of occupational diseases of males outnumbered those of females by almost five to one.

Males in the manufacturing industry sustained 35.8 per cent of the 36,060 occupational injuries to males in 1987-88. This proportion was approximately the same as for the construction industry, wholesale and retail trade and transport and storage industries combined. Of the 7,137 occupational injuries sustained by female workers, 37.8 per cent were to females in community services industries (e.g. hospitals, nursing homes, schools etc.) and a similar proportion to females in the wholesale and retail trade and the manufacturing industry combined.

11.13 OCCUPATIONAL INJURIES (a), QUEENSLAND, 1987-88

Industry group	Injuries	Days lost
Agriculture, forestry, mining etc.	3,593	125,315
Manufacturing	13,903	289,768
Food, beverages and tobacco	4,211	84,182
Wood, wood products and furniture	1,643	39,241
Metal products	2,956	58,402
Transport and other machinery and equipment	3,144	61,388
Other	1,949	46,555
Building and construction	4,778	155,804
Wholesale and retail	5,680	131,968
Transport and storage	3,567	117,445
Health and other community services	5,036	133,079
Other	5,864	166,043
Total	42,421	1,119,422

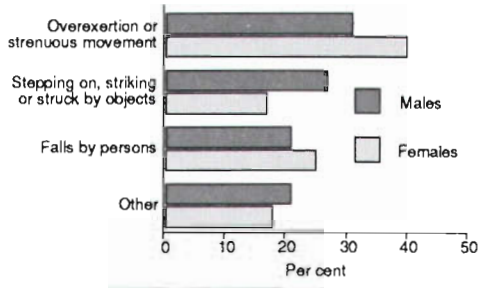
(a) Resulting in temporary disabilities only. Excluding injuries sustained while travelling to and from work, or on recess.

Source: Employment Injuries (6301.3).

Overexertion or strenuous movement was the most frequent cause of occupational injuries, comprising 40 per cent of injuries to females and 31 per cent of injuries to males. Other frequent causes were stepping on, striking against, or being struck by some object, and falls (including falls due to jumping or slipping).

The incidence of the various occupational diseases differs greatly for male and female workers. Deafness and other disorders of the ear are most significant for males and accounted for 70 per cent of the disease cases for males in 1987-88. These disorders occur seldom as occupational diseases in females, the most frequent diseases for females

OCCUPATIONAL INJURIES BY TYPE OF ACCIDENT, QUEENSLAND, 1987-88



being tenosynovitis and tendonitis. These diseases are often diagnosed in occupation over-use syndrome (repetitive strain injury) and in 1987-88 comprised 58 per cent of all occupational diseases in females.

The Workers' Compensation Board of Queensland is the sole provider of workers' compensation insurance in Queensland. Under the *Workers' Compensation Act 1916-1988*, all persons who work under a contract of service, except members of the police force and the Commonwealth Government Public Service (provided for under separate legislation), are entitled to compensation for personal injury arising out of or in the course of employment.

11.14 WORKERS' COMPENSATION, QUEENSLAND

Particulars	Unit	1982-83	1987-88
New claims registered	No.	89,739	77,540
Claims (a)	\$'000	149,642	199,648
Premiums (b)	\$'000	151,310	227,949

(a) Payments during the year, adjusted for estimated outstanding claims at the beginning and end of the year. (b) After distribution of bonuses which amounted to \$56,849,710 in 1987-88.

Source: Workers' Compensation Board of Queensland.

The Workers' Compensation Board also provides rehabilitation services to injured workers. The Board provides assistance to injured workers with counselling, occupational therapy, physiotherapy and work conditioning methods. The Board also makes regular grants to organisations involved in the treatment of injured workers or the promotion of work safety.

11.2 PRIMARY HEALTH CARE PROVISION

Primary health care, involving the direct treatment of ill-health of individuals, is provided at residential establishments and non-residential establishments such as outpatient clinics, day centres and domiciliary nursing services. Medical practitioners and specialists, nurses and other

health professionals are engaged at these establishments and in private practice throughout the State. Some 55,000 of these persons were registered to practise in Queensland at the end of 1988.

11.2.1 Residential Health Establishments

In Queensland, there are over 400 residential establishments providing hospital, nursing and psychiatric care to inpatients.

Acute hospitals provide facilities for the inpatient treatment of the sick and disabled. These comprise *recognised* (public) hospitals, most of which are administered by Hospital Boards, and private hospitals, operated by religious or other non-profit organisations or by private enterprise. In Queensland during 1987-88, there were 185 hospitals which together provided nearly 3.4 million inpatient days (i.e. the aggregation of days spent in hospital by all inpatients) of hospital care.

Nursing care homes offer long-term care for chronically ill, frail or disabled persons. Religious and other non-profit organisations run most of these establishments. During 1987-88 the 218 nursing care homes in Queensland provided 4.5 million inpatient days of nursing care.

Psychiatric institutions, operated mainly by the State Government, are devoted to the treatment and care of inpatients with psychiatric, mental or behavioural disorders or of senile patients. Over half a million inpatient days of psychiatric treatment were provided by 10 psychiatric institutions in Queensland during 1987-88.

In 1987-88 there were three acute hospitals in the metropolitan area of Brisbane with more than 500 beds. These hospitals use expensive medical equipment and employ highly specialised staff in the treatment of patients from all areas of the State. In the more remote country areas of Queensland, small hospitals (mainly public) treat emergency cases and general medical cases, with the more serious cases being transferred to base hospitals in the larger population centres. In 1987-88 there were 53 acute hospitals with fewer than 21 beds and less than one-quarter of acute hospitals had more than 100 beds. Nursing care homes also vary greatly in size. In 1987-88, four of these (mostly government owned) had more than 250 beds while almost half had 40 beds or fewer.

The south-east corner of Queensland (Brisbane and Moreton Statistical Divisions), in which just over 60 per cent of the State's population resides, has the majority of acute hospital beds and nursing care home beds. Of the 16,003 hospital beds and 13,109 nursing care home beds in Queensland at 30 June 1988, 51.5 per cent and 68.8 per cent, respectively, were located in the south-east corner.

There were 312 staff (full-time plus the full-time equivalent of part-time staff) at acute hospitals for every 100 patients at the end of 1987-88. This compares with 137 staff per 100 patients for psychiatric institutions and 71 for nursing care homes. The higher staff ratio for acute hospitals is indicative of the intensive, round-the-clock treatment given to inpatients at these establishments. In acute hospitals there were 119 qualified and student nurses per 100 inpatients. The majority of inpatients at psychiatric institutions do not require

11.15 RESIDENTIAL HEALTH ESTABLISHMENTS: ACTIVITIES AND FINANCES, QUEENSLAND, 1987-88

Particulars	Acute hospitals		Psychiatric institutions	Nursing care homes
	Recognised	Other		
Establishments	137	48	10	218
Beds at 30 June	12,397	3,606	1,741	13,109
Admissions during year	427,368	162,995	6,958	9,484
Inpatients at 30 June	7,284	2,223	1,409	12,656
Total inpatient days during year ('000)	2,635	754	506	4,529
Bed occupancy rate at 29 June (per cent)	59	62	80	97
Staff (a)	24,771	5,140	1,909	9,001
Medical	1,629	23	49	12
Other professional and technical	2,420	35	150	251
Registered and student nurses	9,163	2,271	814	1,946
Enrolled nurses, wardsmen etc.	11,559	2,812	896	6,792
Income (b) (\$'000)	708,199	195,321	67,556	290,794
Patients' fees	63,055	183,120	12,660	79,380
Government contributions	636,736	9,043	54,880	209,314
Other	8,408	3,158	17	2,100
Expenditure (b) (\$'000)	708,482	170,948	65,540	277,418
Salaries and wages	505,343	108,726	48,909	211,241
Other	203,139	62,222	16,631	66,177
Cost per inpatient day (\$)	268.89	222.78	129.44	61.26
Salaries and wages	191.78	144.20	96.66	46.64
Other	77.09	82.52	32.87	14.61

(a) Full-time plus full-time equivalent of part-time staff. (b) Excluding finances for outpatient departments attached to recognised hospitals.
Source: Health and Welfare Establishments (4302.3).

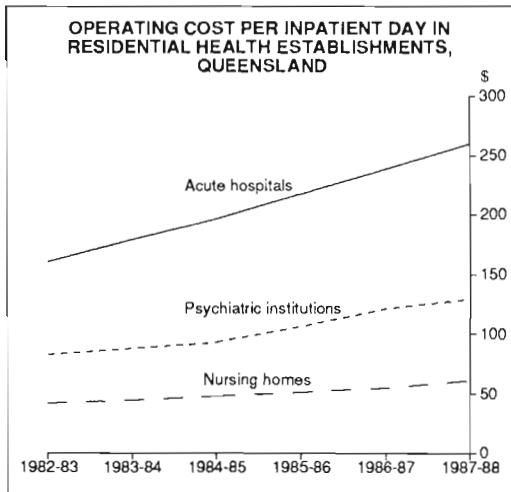
intensive nursing care and at the end of 1987-88 there were 58 nurses for every 100 inpatients at these establishments. For nursing care homes, there were 15 nurses per 100 inpatients, most of whom required only regular basic nursing care.

11.16 BEDS IN ACUTE HOSPITALS AND NURSING CARE HOMES IN STATISTICAL DIVISIONS, QUEENSLAND, 30 JUNE 1988

Statistical division	Beds in acute hospitals	Beds in nursing care homes
Brisbane	6,636	7,275
Moreton	1,602	1,738
Wide Bay-Burnett	1,385	861
Darling Downs	1,464	930
Fitzroy	1,153	646
Mackay	562	295
Northern	1,107	772
Far North	1,291	430
Balance	803	162
Total	16,003	13,109

Source: Health and Welfare Establishments (4302.3).

The cost of operating these facilities during 1987-88 was \$1,222 million. The largest expenditure item was salaries and wages, comprising 72 per cent of total expenditure. The operating cost per inpatient day was \$260 for acute hospitals, an increase of 62 per cent over the same figure for 1982-83; \$129 for psychiatric institutions, an increase of 56 per cent and \$61 for nursing care homes, a rise of 47 per cent.



11.2.2 Non-residential Health Establishments

Non-residential establishments providing direct treatment of patients include 260 outpatient facilities, 100 domiciliary nursing services and 62 day centres.

Outpatient Centres

Most outpatient centres operate as annexes to acute hospitals. In Queensland during 1987-88, there were 165 medical clinics attached to acute hospitals and 63 which were separate centres (i.e. not integral parts of other facilities). In addition, there were 30 psychiatric outpatient clinics of which 26 operated as separate centres. During 1987-88, 6,444,400 services were rendered to outpatients attending all centres. These services included casualty and medical treatment, pharmacy and X-ray services. It is not uncommon for more than one service to be given at a single attendance.

The average cost per service rendered in 1987-88 by the 134 annexes attached to recognised (public) hospitals and the 89 separate centres was \$35.55, up from \$31.41 in the previous year. Separate financial details are not available for the other ancillary centres.

Domiciliary Nursing Services and Day Centres

During 1987-88, staff employed by the 100 domiciliary nursing services in Queensland provided patients with 2,285,500 distinct services in their own homes. There were 72 separate domiciliary nursing services (not ancillary to other health services) and the staffing of these at the end of the year included 555 nurses. The average cost per patient service during the year was \$8.46.

Day centres provide courses of medical treatment to patients who attend these centres at specified intervals over a period of time. There were 62 of these centres operating in Queensland during 1987-88 and together they provided 524,000 occasions of service to the public.

11.2.3 Health Professionals and Paraprofessionals

Doctors, specialists, nurses, certain other medical and paramedical workers and dentists are required to register annually with relevant statutory boards. Registration of a person does not necessarily mean that that person is in practice in Queensland; merely that the person is authorised to practise in the State.

Registered nurses are by far the largest professional group and 29,290 were registered in Queensland at the end of 1988. Enrolled nurses, who work under the direction and supervision of registered nurses, are the next largest group, with 9,625 registered at the end of 1988.

Details from the latest Population Census show that there were 28,090 nurses and 4,800 medical practitioners (including specialists) employed in Queensland at 30 June 1986. Brisbane Statistical Division, which contained 46 per cent of the State's population, accounted for 52 per cent of the nurses

and 60 per cent of the medical practitioners in the State. The numbers of nurses and medical practitioners per head of population were higher for Brisbane Statistical Division than for any other region, with rates of 121 nurses and 24 medical practitioners per 10,000 population.

11.17 REGISTERED HEALTH PROFESSIONALS AND PARAPROFESSIONALS, QUEENSLAND

<i>Profession etc.</i>	<i>Number on register at 31 December 1988</i>
Medical practitioners (excluding specialists)	4,969
Medical specialists	2,143
Dentists	1,814
Dental specialists	111
Optometrists	398
Pharmacists	2,705
Psychologists	795
Physiotherapists	1,742
Podiatrists	178
Chiropractors	340
Occupational therapists	655
Speech therapists	409
Registered nurses (a)	29,290
Enrolled nurses	9,625

(a) Including 12,432 general nurses with two or more certificates and 856 psychiatric nurses.

Source: Registration Boards of Queensland.

11.18 EMPLOYED NURSES AND MEDICAL PRACTITIONERS, QUEENSLAND, 30 JUNE 1986

<i>Statistical division</i>	<i>Nurses</i>		<i>Medical Practitioners</i>	
	<i>Number</i>	<i>Rate (a)</i>	<i>Number</i>	<i>Rate (a)</i>
Brisbane	14,530	121	2,860	24
Moreton	3,300	82	660	16
Wide Bay-Burnett	1,660	98	180	11
Darling Downs	2,120	117	240	13
South-West	290	101	20	7
Fitzroy	1,570	99	190	12
Central-West	120	88	10	7
Mackay	850	82	120	12
Northern	1,760	103	250	15
Far North	1,600	99	240	15
North-West	290	75	30	8
Total	28,090	107	4,800	18

(a) Per 10,000 population of the region specified.

11.2.4 Health Services in Remote Areas

The Royal Flying Doctor Service of Australia, which was first established in Queensland in 1928, provides medical and dental services in isolated areas. Medical advice is given by a medical practitioner by means of two-way radio or telephone or, in serious cases, a doctor is flown to the patient.

In Queensland the service operates from air bases at Mount Isa, Cairns and Charleville. During 1988-89 consultations numbered 40,516, including 17,981 by radio and telephone. In addition, 1,393 flights were made involving a total of 1,056,000 kilometres and 1,220 patients were transported to

hospital. Subsidies and operational grants in 1988-89 amounted to \$1,289,975 from the State Government and an equal amount was received from the Commonwealth Government. Capital grants from the Commonwealth Government amounted to \$500,000 and \$652,918 was received in donations.

Doctors of the Flying Surgeons Service, with bases at Longreach and Roma, make routine and emergency visits to several hospitals in western Queensland. During 1987-88 they performed 1,748 operations including 112 emergency operations. Total distance flown during the year was 213,000 kilometres.

11.3 OTHER HEALTH SERVICES

A wide range of other health services, mainly of a preventative, advisory or ancillary nature, is provided by the various levels of government and by non-profit organisations.

The Commonwealth Department of Community Services and Health is involved in a large number of activities including human quarantine services; community, Aboriginal and environmental health; epidemiology; drug evaluation and elimination of drug abuse; and medical services (anti-tuberculosis campaign, nursing and medical, acoustic and radiation laboratories).

The State Health Department through its various divisions provides many essential services and close cooperation exists with other Departments (Education, Family Services and Aboriginal and Islander Affairs etc.) in an attempt to provide an integrated approach to health care delivery.

The Division of Community Medicine is responsible for providing the State's community health program. Through a State-wide infrastructure of 59 Community Health Centres, staff provide in-home consultations and respond to telephone requests for help. This modern approach to problem solving is effective in promoting the health of individuals and families and organising efforts of the local community to support those in need of help. The Division is also responsible for the Home and Community Care Program (HACC) in Queensland.

Other activities carried out by the State Health Department include:

- provision of hospital-based dental services and school dental services;
- inspection and sampling of foods;
- inspection and advisory services in respect of water supply quality and environmental sanitation;
- monitoring and advising on health hazards arising from occupational causes;

- supervision of the marketing and use of drugs and poisons;
- services to improve the health of Aboriginals;
- maintenance of the Queensland Radium Institute;
- coordination of cancer prevention and collection of epidemiological data;
- operation of the Laboratory of Microbiology and Pathology.

Local authorities are responsible for food hygiene and environmental sanitation, which includes rodent control and mosquito eradication. They also provide immunisation against diphtheria, whooping cough, tetanus, poliomyelitis, measles and mumps mainly in children and vaccination of adults against poliomyelitis and girls from 12 to 14 years against rubella. Serums and vaccines for immunisation and vaccination are supplied by the State Government free of charge. The State Government subsidises any works designed to remove permanently the breeding places of mosquitoes.

Red Cross Blood Transfusion Service

In 1989 the Red Cross Blood Transfusion Service in Queensland collected almost 170,000 blood donations from voluntary donors and the age limit for donors was lowered to 16 years with written parental consent. The service classifies and distributes the blood to doctors and hospitals as required. It supplies all equipment used for, and carries out

all tests associated with, the collection of blood donated throughout the State, as well as conducting allied research.

11.19 BLOOD DONATIONS (a), QUEENSLAND

Area	1986	1987	1988	1989
Metropolitan	72,228	82,025	80,412	94,720
Country	67,977	65,767	69,678	73,278
Total	140,205	147,792	150,090	167,998

(a) Each donation consists of 430 millilitres of blood.

Source: Australian Red Cross Society, Queensland Division.

The operating costs of the service are met mainly by the Commonwealth and State Governments of whom the latter is the major contributor. The remaining costs are met by the Australian Red Cross Society. In 1989, 1,653 voluntary workers and 347 doctors in private practice donated their services free of charge.

11.20 BLOOD DONATIONS BY GROUP, BRISBANE HEADQUARTERS

Group	Proportion of donations
	%
A Positive	31.3
A Negative	7.4
AB Positive	3.1
AB Negative	0.8
B Positive	8.4
B Negative	1.9
O Positive	37.7
O Negative	9.3

Source: Australian Red Cross Society, Queensland Division.

THE HISTORY OF BLOOD TRANSFUSION

Extract from *A History of Health and Medicine in Queensland 1824-1960* by Ross Patrick

In the latter half of the nineteenth century, doctors had tried to make up for blood loss in their patients by transferring blood from another human or even from animals. While some of the transfusions using human blood were successful, there were many fatalities, and some countries had subsequently prohibited transfusions. The reason for many of the failures was revealed, when, in 1902 Karl Landsteiner clearly divided human blood into four main groups, and showed that blood from these groups varied in its capacity to mix with blood from another group without adverse results.

Although Landsteiner had shown that if tests for compatibility were performed beforehand, transfusion could be given safely, there was no great immediate rush to make use of his discovery.

The reluctance of doctors to use blood transfusion was commented on in the *Medical Journal of Australia* in January 1918:

The practice of transfusing blood has not, however, been universally adopted, even in those cases in which its use would appear to be strongly indicated. The disinclination of surgeons and physicians to employ this remedy arises, in part, from knowledge of the dangerous aspects which may follow its use and, in part, from the lack of agreement among its advocates as to the best method of carrying out transfusion.

It was not until the latter years of World War I that this new adjunct to treatment was used freely. John Power, a Queenslander who had only graduated from Sydney Medical School in 1914 (the year war broke out), had considerable experience in blood transfusion while serving with the Australian Forces in 1918. Returning to Brisbane, he set up a surgical practice on Wickham Terrace in the same building as James Duhig, pathologist. In April 1920, Power read a paper on blood transfusion (for which Duhig contributed the scientific data), to the Queensland

branch of the British Medical Association. Power's paper was based on his experience in the forces, as up to that time, no blood transfusions had been given in Queensland. It contained references to the direct and indirect methods of transfusion. In the first method, blood flowed directly from an arm of the donor to that of the patient, while in the second method, the donor's blood was collected in specially-prepared containers.

Two months later, Power was called on to give the first transfusion of blood in Queensland. The patient, Tom Sweeney, an international footballer who had been injured in a club game on 5 June 1920, was admitted to the Mater Private Hospital, South Brisbane, obviously suffering from continual blood loss, the cause of which was at first unknown. Later it was found that Sweeney had fractured a shoulder-blade, and a jagged piece of bone had eroded an artery. The next day, a decision was made to replace the blood loss by transfusion. Crossmatching indicated that Sweeney's brother was a suitable donor and, using the indirect method, Power, assisted by James Duhig, Edward Ahern and Harvey Walsh, successfully performed the transfusion. The patient made an uninterrupted recovery. Power built up a busy transfusion practice using voluntary donors among relatives and friends of the patient, whose blood was crossmatched and taken just prior to the transfusion.

In 1924, James Duhig established the first blood donor panel in Queensland. Voluntary donors were obtained through radio broadcasts and, at first, were paid £5 per donation. The clerical work was managed by a member of the Brisbane Hospital Board staff. Difficulties were encountered in contacting donors when needed

and their inability to make themselves freely available. The Red Cross Society assumed responsibility and, with an enlarged donor panel, the system worked reasonably well and remained in force until World War II. However, transfusion was still being used sparingly and there was no storage of blood.

Shortly after World War II broke out in 1939, the Army Medical Services conferred with the Red Cross Society with a view to planning for any emergency that might arise. Records of donors and blood grouping were initiated, but storage of blood was not considered necessary at first. The entry of Japan into the war in December 1941 resulted in much greater activity. Emergency blood-taking centres were established at the Brisbane and Mater Hospitals and, as the intensity of the war in the Pacific increased, whole blood was flown daily from Queensland to the war zones. At the same time, James Duhig and Vera Madden established a serum bank at the Brisbane Hospital for the possible treatment of civilians with burns from bombing of Brisbane. In 1944, the Red Cross Society developed a civilian service and serum was made available for emergency and therapeutic use.

In October 1945, Eric Shaw was appointed director of the Queensland Blood Transfusion Service and, shortly afterwards, the Red Cross Society assumed entire responsibility for the service. Heavily subsidized by state and federal governments and under Shaw's dedication, a most efficient organization was developed. Blood and blood products were made available to all parts of the state when required on a routine basis and in emergencies, such as the Mount Lamington volcano disaster in 1951.

11.4 FINANCING OF HEALTH SERVICES

People receiving certain health services may be assisted financially by a number of Commonwealth benefits. In addition, individuals may take out private insurance to cover themselves against much of the cost of other health services which do not attract Commonwealth benefits. Commonwealth grants and subsidies are also payable to the State Government for public hospitals and to other health establishments.

11.4.1 Medical and Hospital Benefits

Australian residents are entitled, under the Medicare program, to free shared-ward hospitalisation and outpatient treatment at public hospitals. The Commonwealth Government provides grants to the States towards the costs of providing these services.

11.21 MEDICARE BENEFITS PAYMENTS (a), QUEENSLAND, 1988-89

Type of service	Payment	Proportion	Average payment (b)
	\$'000	%	\$
General practitioner	213,633	38.4	76.71
Specialist	78,843	14.2	28.31
Pathology	96,383	17.3	34.61
Operations	63,150	11.4	22.67
Radiology	50,085	9.0	17.98
Anaesthetics	13,015	2.3	4.67
Optometry	11,688	2.1	4.20
Obstetrics	6,282	1.1	2.26
Other	22,697	4.1	8.15
All services	555,776	100.0	199.55

(a) Not applicable to services for treatment as a public hospital patient as such services are provided free of charge to the patient. (b) Per head of population.

Source: Health Insurance Commission.

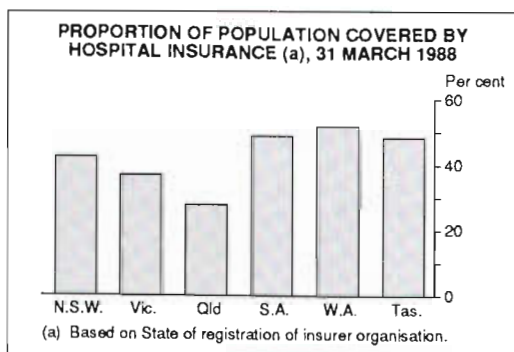
The Medicare program also provides a medical benefit of 85 per cent of the schedule fee with a maximum gap of \$20 for each non-inpatient medical service. The program meets 75 per cent of

the schedule fee for medical services to patients under private care in hospital. Doctors may also bulk-bill Medicare for services provided to pensioners and other patients. The program is funded from a levy of 1.25 per cent of taxable income.

A little over half of all payments were in respect of general practitioner and specialist services. The average payment per head of population was \$200 for Queensland in 1988-89 compared with \$204 nationally.

11.4.2 Health Insurance

A wide variety of health insurance tables is available from health insurance organisations. Basic insurance provides cover for hospital accommodation charges for private and intermediate inpatients. Supplementary insurance gives additional benefits for hospital accommodation and certain ancillary services.



The proportion of people covered by private hospital insurance in Queensland is significantly lower than that for any other State. Commonwealth Department of Community Services and Health records show that, at 31 March 1989, 32.4 per cent of the Queensland population had basic hospital cover and 26.7 per cent had supplementary cover. This compares with 45.8 per cent and 38.3 per cent, respectively, of the Australian population.

The proportion of people covered by private health insurance has been declining since the introduction of Medicare in 1984. For Queensland this proportion for basic health insurance has dropped by approximately 21 per cent between 1983 and 1989 while for Australia as a whole, it has dropped by 30 per cent over the same period.

11.4.3 Pharmaceutical Benefits

The Commonwealth Government provides for benefits on a comprehensive range of drugs and medicines when supplied by an approved pharmacist upon presentation of a prescription or by an approved hospital to patients receiving treatment at the hospital.

11.22 PHARMACEUTICAL PRESCRIPTION BENEFITS, QUEENSLAND

Item	Unit	1987-88	1988-89
Benefit prescriptions	'000	16,512	16,863
Commonwealth payments	\$'000	144,692	160,236
Patient contributions	\$'000	22,149	27,872

Source: Commonwealth Department of Community Services and Health.

Prescriptions are dispensed to the general public at a maximum cost of \$11 a prescription, to persons holding a Health Care Card at a concessional rate and to Pensioner Health Benefits cardholders at no cost. Commonwealth Government expenditure on pharmaceutical benefits for Queensland during 1988-89 was \$160m, representing 85 per cent of the total cost of the prescriptions.

11.4.4 Nursing Home Assistance

New funding arrangements for nursing homes were introduced in 1987. Rather than the former practice of paying benefits (with rates differing from State to State) or meeting the operating deficits of certain nursing homes, the Commonwealth Government is now implementing a uniform national level of funding. This new system involves standard daily fees for new residents as well as standard Commonwealth benefits and is to be fully implemented by mid-1991.

11.4.5 Domiciliary Nursing Care Benefits

This scheme provides a benefit for persons who provide care at home for persons who would otherwise justify admission to a nursing home. This Commonwealth benefit facilitates an alternative to nursing home care.

11.5 REFERENCES

ABS publications produced by the Queensland Office:

- Causes of Death* (3302.3), annual
- Summary of Social Statistics* (4101.3), annual
- Health and Welfare Establishments* (4302.3), annual
- Hospital Morbidity* (4303.3), annual
- Hospital Morbidity Rates* (4304.3), irregular
- Employment Injuries* (6301.3), annual

Other publications:

- Commonwealth Department of Community Services and Health, *Health Statistical Supplement*
- Queensland Health and Medical Services, *Annual Report*
- Australian Red Cross Society (Queensland Division), *Annual Report*

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EDUCATION

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Chapter 12

EDUCATION

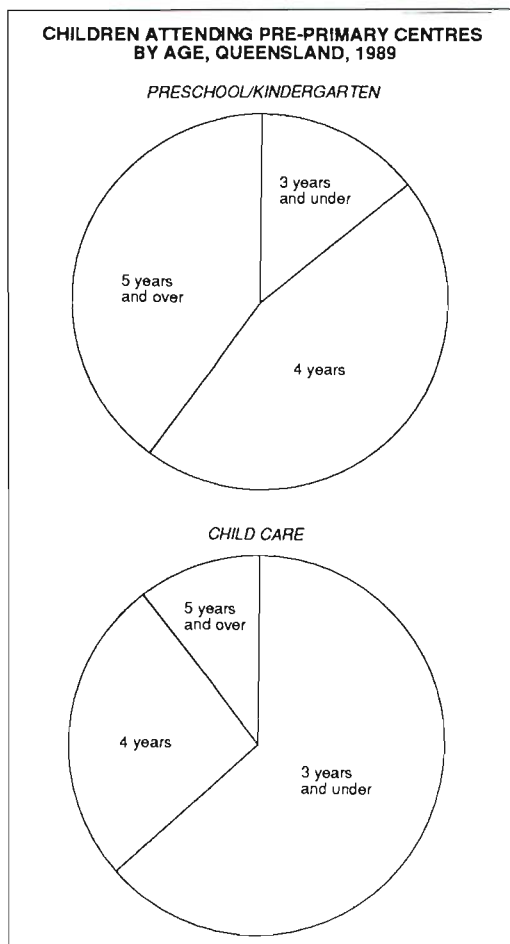
Education in Queensland ranges from the preschool level through to tertiary level. In addition child care, kindergarten and adult education facilities are available. Education is compulsory between the ages of 6 and 15 years. Primary and secondary education is provided free in government schools. Government funded tertiary educational institutions do not charge tuition fees (course charges apply) for Australian students who must fulfil the entrance requirements of the various establishments.

The Queensland Department of Education administers preschool, primary, secondary and technical and further education and has the responsibility of funding approximately 90 per cent of the total running costs. The Commonwealth Government contribution is around 10 per cent and is the major funding source of non-government schools (65 per cent). It is also responsible for the total funding of non-private universities and colleges of further education. A Commonwealth Government program provides grants to non-profit community groups and local government authorities for them to provide a range of child care services.

The Commonwealth Government has special responsibilities for migrants and aboriginal people, as well as the power to provide assistance for students. The Queensland Government also provides assistance to students, including scholarships, bursaries, transport and boarding allowances, many of which are intended for low-income families.

12.1 PRE-PRIMARY EDUCATION

In Queensland, State preschools offer free (but not compulsory) education to children aged 4 years by the end of December of the year before school entrance. Community kindergartens offer developmental and educational programs for 3 to 5 year olds and operate during school hours and school terms. Children can be enrolled at 3 years of age and can continue to school age. Child care centres offer full-day care and education of children under school age and are open for the normal working day and the normal working year.

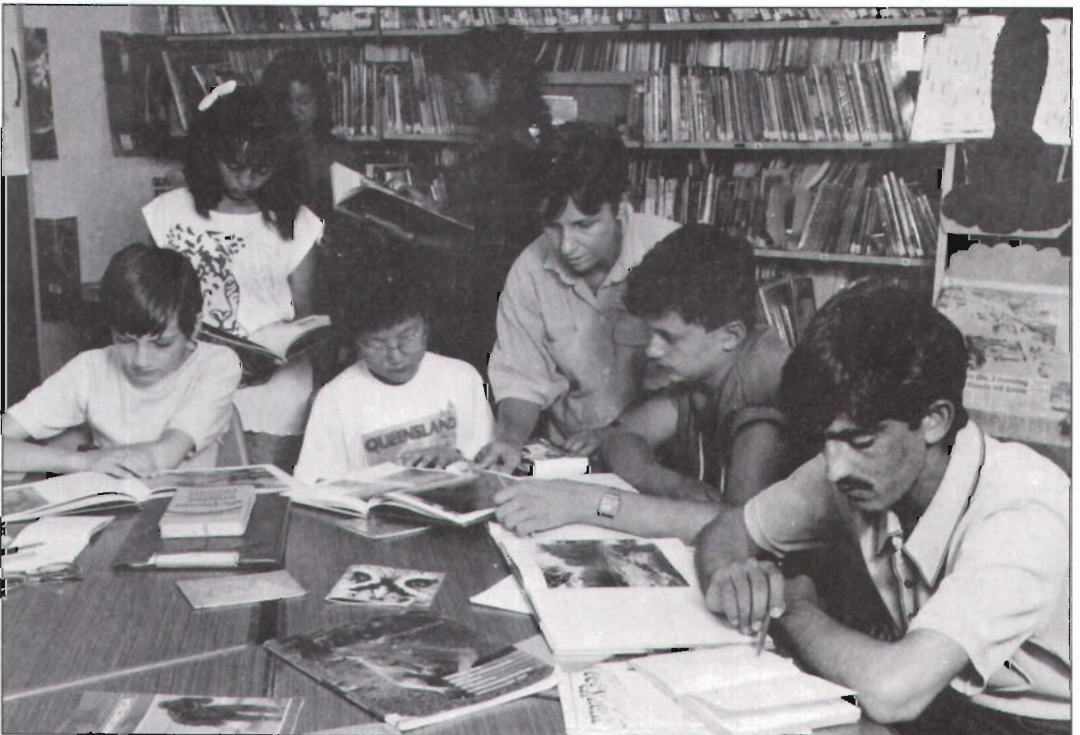




Story time in the Children's Library

Photos: Premier's Department

Migrant education



Between 1984 and 1989 the number of non-government pre-primary centres increased by 22 per cent and the number of government centres increased by 20 per cent.

12.1 PRE-PRIMARY CENTRES AND ATTENDANCE, QUEENSLAND

Year	Government		Non-government	
	Centres	Children attending	Centres	Children attending
1984	624	31,680	560	33,673
1985	649	31,427	580	35,867
1986	700	33,711	602	37,744
1987	714	35,928	623	40,452
1988	723	36,763	674	43,618
1989	747	37,140	682	45,132

Source: Preschools and Child Care Centres (4202.3).

12.1.1 Enrolments

The total enrolment for all pre-primary centres for 1989 was 82,272 children. Of the 55,543 children attending preschool/kindergarten centres, 85 per cent are 4 and 5 year olds, the majority of whom would progress to primary schooling in the following year. In child care centres, 63 per cent of the 26,729 children attending are under 4 years of age.

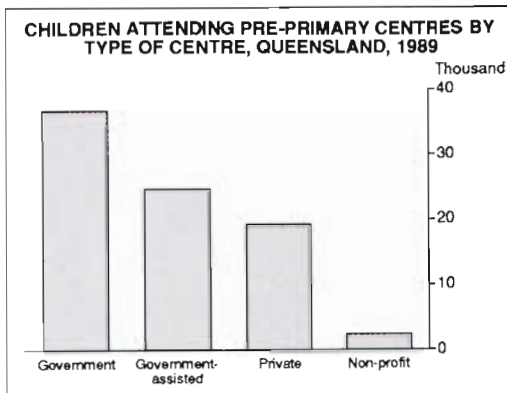
12.2 CHILDREN ATTENDING PRE-PRIMARY CENTRES, QUEENSLAND, 1989

Particulars	Type of centre		Total
	Preschool/ kindergarten	Child care	
Children attending			
Males	28,659	13,852	42,511
Females	26,884	12,877	39,761
Regular basis	55,202	24,536	79,738
Casual basis	341	2,193	2,534
Age (years)			
Under 3	714	8,838	9,552
3	7,165	8,106	15,271
4	25,585	7,003	32,588
5	21,720	2,648	24,368
6 and over	359	134	493
Total	55,543	26,729	82,272

Source: Preschools and Child Care Centres (4202.3).

A substantial proportion of Queensland's child population attends pre-primary centres and most attend on a regular basis. At July 1989, 57 per cent of 5 year olds (a substantial number of 5 year olds are in primary school), 76 per cent of 4 year olds and 37 per cent of 3 year olds were attending a preschool/kindergarten or a child care centre.

Government pre-primary centres are operated by the Queensland Department of Education and by local government authorities. Government-assisted centres are operated by non-profit or religious organisations in receipt of government funding.



Non-profit centres raise money through donations or have the free use of community facilities. Private centres are those operating on a profit-making basis. Seventy-six per cent of children attending a centre, attend a government or a government-assisted centre.

12.1.2 Centres and Staffing

12.3 STAFFING OF PRE-PRIMARY CENTRES, QUEENSLAND, 1989

Particulars	Type of centre		Total
	Preschool/ kindergarten	Child care	
Centres	1,133	296	1,429
Staff (a)			
Teachers	1,415	307	1,722
Teacher aides	1,293	274	1,567
Child care	92	1,160	1,252
Other (b)	176	278	454
Total	2,976	2,019	4,995

(a) Full-time equivalent. (b) Including administrative, clerical, domestic and maintenance personnel.

Source: Preschools and Child Care Centres (4202.3).

The staff employed by the centres reflect the type of program offered. Preschool/kindergarten centres have mainly teaching staff, 91 per cent being teachers or teacher aides. Child care centres employ mainly child care staff; 57 per cent are qualified child care staff, registered nurses and people qualified in mothercraft, kindercraft and playground leadership while 29 per cent are teaching staff.

12.2 PRIMARY AND SECONDARY EDUCATION

Children are eligible for enrolment in primary school if they have turned 5 years of age by the end of December of the year prior to enrolment. They then progress through 12 years of formal primary and secondary education. Some students do not

complete all secondary years, leaving school on attaining the age of 15 or leaving to enter other educational streams.

Secondary schooling commences in Year 8, when students are about 12 or 13 years of age and extends over 5 years. Students completing Year 10 are issued with a Junior Certificate, which is the accepted educational qualification for entry to some forms of employment, colleges of technical and further education (TAFE), rural training schools and certificate courses at colleges of advanced education. Senior Certificates are issued on completion of Year 12 and are based on teachers' assessments and internal examinations. This information contributes to the determination of a tertiary entrance score which, depending on the standard obtained, provides admission to tertiary studies.

Cooperative programs, developed jointly by secondary schools and TAFE colleges, provide one means of addressing the need for a broader range of studies in the post-compulsory years of schooling. Students enrolled in secondary schools actually attend a nearby TAFE college for certain studies, thus using available resources in a flexible manner. Two colleges, at Hervey Bay and in Brisbane at Alexandra Hills, are designed to bring cooperative programs onto one campus within a single institution.

Most non-government schools are controlled by religious authorities and provide both primary and secondary education. Grammar schools, controlled by boards of trustees, are mainly for secondary students but also cater for some primary students.

12.2.1 Primary Enrolments

The number of enrolments in primary schools has increased by 4 per cent since 1979. Over the same period, the Queensland population aged between 5 years and 11 years has increased by only 3 per cent. The larger increase is directly attributable to the Queensland Government's change of policy with respect to the age of entry to primary school. In 1989, a child must have turned 5 by the last day of December in the year preceding the year of enrolment. In contrast, a child must have turned 5 by the last day of February if enrolling in 1979.

12.4 PRIMARY ENROLMENTS, QUEENSLAND, 1989

Year	Males	Females	Total
1	24,781	22,999	47,780
2	23,525	21,899	45,424
3	22,515	20,897	43,412
4	21,461	20,118	41,579
5	21,602	20,330	41,932
6	21,429	20,523	41,952
7	21,970	20,846	42,816
Ungraded	711	510	1,221
Total	157,994	148,122	306,116

Source: Schools (4221.3).

Within the two sectors of education, the government sector has declined slowly from 81 per cent to 79 per cent over the last decade. The Catholic Church accounts for 79 per cent of primary enrolments in non-government schools. The proportions of enrolments for other denominations are Anglican, 5 per cent; Lutheran 5 per cent and all other denominations, 11 per cent.

12.5 PRIMARY ENROLMENTS BY CONTROLLING AUTHORITY, QUEENSLAND

Particulars	1979	1988	1989
<i>Government</i>	238,688	233,312	242,183
Males	122,719	120,428	125,237
Females	115,969	112,884	116,946
<i>Non-government</i>	54,558	60,989	63,933
Males	27,507	31,271	32,757
Females	27,051	29,718	31,176
Total	293,246	294,301	306,116
Males	150,226	151,699	157,994
Females	143,020	142,602	148,122

Source: Schools (4221.3).

The primary enrolments also include 1,926 Primary Correspondence School pupils, comprising 988 males and 938 females.

12.2.2 Secondary Enrolments

Education is compulsory to age 15 and successful completion of Year 10 provides students with educational qualifications which allow entry to some forms of employment and some courses at post-secondary colleges.

12.6 SECONDARY ENROLMENTS (a), QUEENSLAND, 1989

Year	Males	Females	Total
8	22,111	21,351	43,462
9	22,947	21,826	44,773
10	23,605	22,488	46,093
11	17,503	18,889	36,392
12	15,732	17,250	32,982
Ungraded	225	201	426
Total	102,123	102,005	204,128

(a) Including 908 full-time Secondary Correspondence School pupils.

Source: Schools (4221.3).

The movement of students out of the secondary education system is reflected in the sharp drop in enrolments between Years 10 and 11 and between the ages of 15 and 16. However an increasing number of students, many of whom are as old as 19 years of age, are remaining to Years 11 and 12. These rates are affected by the level of unemployment and the continuing demand for a higher level of education in the work force.

In addition to the full-time education services, classes are conducted at three schools in Brisbane to enable mature-age students to study secondary

subjects on a full-time or part-time basis. At July 1989 these students numbered 444 and 4,324, respectively.

12.7 SECONDARY ENROLMENTS (a) BY AGE AND SEX, QUEENSLAND, 1989

Age (years)	Males	Females	Total
Under 12	35	36	71
12	7,981	9,104	17,085
13	20,862	20,294	41,156
14	23,145	22,030	45,175
15	21,257	20,758	42,015
16	16,767	18,111	34,878
17	9,552	9,513	19,065
18	1,827	1,308	3,135
19 and over	697	851	1,548
Total	102,123	102,005	204,128

(a) Including 908 full-time Secondary Correspondence School pupils.
Source: Schools (4221.3)

The proportion of enrolments in government schools has fallen from 72 per cent in 1979 to 69 per cent in 1989. The growth in secondary enrolments in non-government schools over this period is 55 per cent compared to 35 per cent for government schools. Catholic schools continued to have the largest proportion, accounting for 60 per cent of total non-government secondary enrolments in 1989. The proportions of enrolments for other denominations are: Anglican, 11 per cent; Lutheran, 6 per cent and all other denominations, 24 per cent.

12.8 SECONDARY ENROLMENTS BY CONTROLLING AUTHORITY, QUEENSLAND

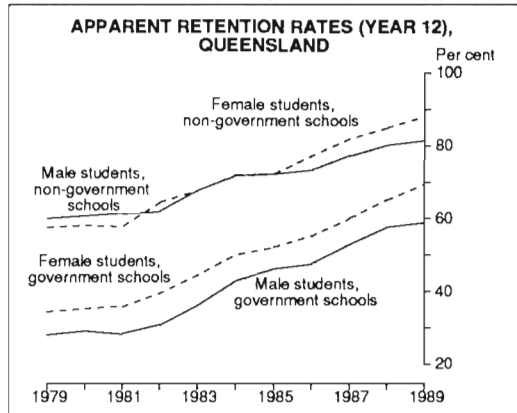
Controlling authority	1979	1988	1989
Government	105,333	143,011	141,712
Males	52,976	71,267	70,249
Females	52,357	71,744	71,463
Non-government	40,305	61,702	62,416
Males	20,858	31,613	31,874
Females	19,447	30,089	30,542
Total	145,638	204,713	204,128
Males	73,834	102,880	102,123
Females	71,804	101,833	102,005

Source: Schools (4221.3).

12.2.3 Retention Rates in Secondary Schools

The extent to which students remain in school from their first secondary year (Year 8) to the later years of schooling (Years 11 and 12), the apparent retention rate, has increased significantly in recent years from 48 per cent (Year 11) and 38 per cent (Year 12) in 1979 to 80 per cent (Year 11) and 70 per cent (Year 12) in 1989.

The apparent retention rate to Year 12 in non-government schools (85 per cent) is considerably higher than that for government schools (64 per cent). Changing social values probably account for the fact that retention rates for females, 40 in 1979

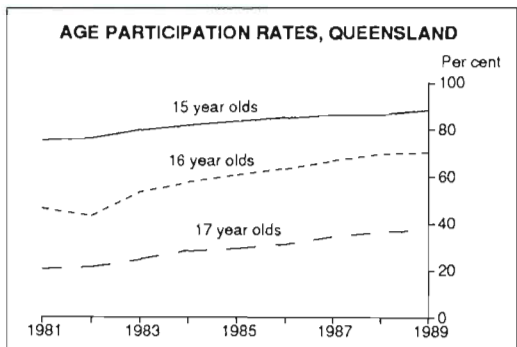


and 75 in 1989, have increased at a faster rate than those of males which were 36 in 1979 and 65 in 1989.

12.2.4 Age Participation Rates

The age participation rate is the number of school students of a particular age and sex expressed as a proportion of the population of the same age and sex in a specified year and indicates the proportion of students still at school. It does not include those students participating in education outside the schools system, for example university students, and students at colleges of advanced education, TAFE colleges and at senior colleges.

As education is compulsory in Queensland until a person attains the age of 15 years, the participation rate for this age group is very high, being 87 per cent for males and 90 per cent for females aged 15 years in 1989. This participation rate is significantly lower than 100 per cent, as the census date of the schools collection is in July and some students with birthdates prior to the census date leave school immediately upon attaining 15 years of age.



The greatest increase in the age participation rate has been for 16 year old females, having increased from 46 per cent in 1980 to 75 per cent in 1989, an increase of 29 percentage points. The age

participation rate for 16 year old males has increased to 66 per cent, an increase of 21 percentage points over the same period. The age participation rate for 17 year olds has increased to 38 per cent, an increase of 19 percentage points for females while the participation rate for males increased to 37 per cent, an increase of 16 percentage points since 1980. The rate for 15 year olds has shown the smallest increase, having risen from 74 per cent for females and 75 per cent for males in 1980 to 90 per cent for females and 87 per cent for males in 1989.

12.2.5 Schools and Staffing

There has been a net increase of 7 per cent between 1979 and 1989 in the number of schools in Queensland.

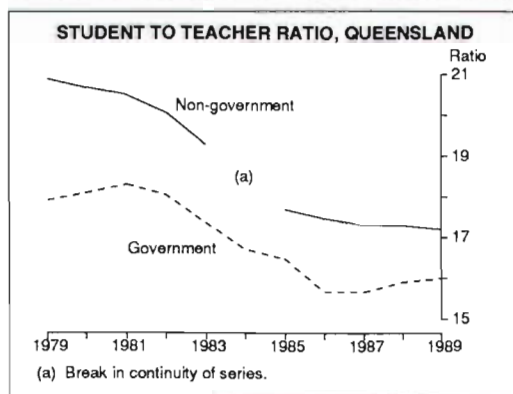
12.9 SCHOOLS AND STAFF (a) BY CONTROLLING AUTHORITY, QUEENSLAND

Particulars	1979	1988	1989
Government			
Schools	1,249	1,315	1,300
Staff			
Teaching	n.a.	23,895.1	24,256.6
Non-teaching	n.a.	5,063.3	5,487.6
Non-government			
Schools	335	394	400
Staff			
Teaching	n.a.	7,099.0	7,366.7
Non-teaching	n.a.	1,978.5	2,109.0
Total			
Schools	1,584	1,709	1,700
Staff			
Teaching	n.a.	30,994.1	31,623.3
Non-teaching	n.a.	7,041.8	7,596.6

(a) Full-time equivalent.
Source: Schools (4221.3).

For government schools the student to teacher ratios are 18.7 for primary and 13.5 for secondary. Non-government ratios are 21.1 for primary and 14.4 for secondary.

Because the State has assumed the major responsibility for providing education, government



schools are spread throughout Queensland in relation to population with almost 75 per cent located outside Brisbane. Non-government schools, however, are more concentrated in Brisbane, with a number of non-government schools offering boarding facilities for 9,145 students.

12.10 LOCATION OF SCHOOLS, QUEENSLAND, 1989

Statistical division	Government	Non-government
Brisbane	344	168
Moreton	192	40
Wide Bay-Burnett	144	22
Darling Downs	145	47
South-West	32	6
Fitzroy	107	27
Central-West	19	4
Mackay	73	14
Northern	92	34
Far North	121	32
North-West	29	6
Total	(a) 1,300	400

(a) Including correspondence schools.
Source: Schools (4221.3).

12.3 SPECIAL EDUCATION

Children with special education needs are provided for through 65 government and 4 non-government special schools. Guidance and support services are also made available through non-special schools to meet the requirements of children with special needs who attend regular schools. The main aim is to help children with special needs undertake programs in the most appropriate educational settings.

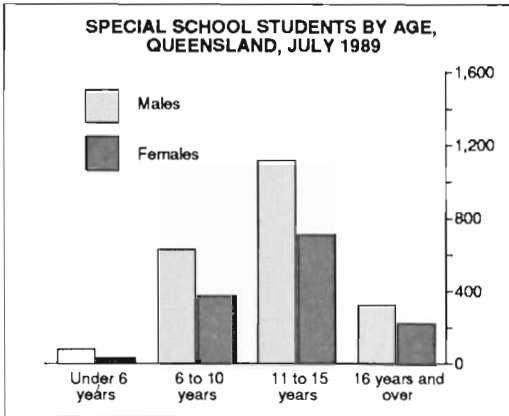
Although the schools are classified according to the predominant disability of children, each school caters for individual children having a range of disabilities. For example, at 10 July 1989, Redcliffe Special School catered for 94 mildly to moderately handicapped students with various disabilities.

12.11 ENROLMENTS IN SPECIAL SCHOOLS, QUEENSLAND, 1989

Particulars	Males	Females	Total
Type of school			
Government	2,157	1,386	3,543
Non-government	53	16	69
Type of handicap			
Visual	17	5	22
Aural	—	—	—
Physical	110	70	180
Intellectual	1,752	1,081	2,833
Hospitalised	123	104	227
Other (a)	208	142	350
Total	2,210	1,402	3,612

(a) Including autistic.
Source: Schools (4221.3).

The staffing skills required are different from those at non-special schools and require a greater



degree of contact with the pupil. The pupil to staff ratio for general teaching staff at special schools is 4.4 while at non-special schools it is 16.6. The pupil to staff ratio for specialist support staff at special schools is 41.3 while at non-special schools it is 678.4.

12.4 TERTIARY EDUCATION

Tertiary education in Queensland was provided to 238,238 students during 1987, through courses conducted at universities, colleges of advanced education and institutes of technical and further education. Courses are offered on an internal and external basis, although not by all institutions.

With the introduction from 1989 of the Higher Education Contribution Scheme, an annual course charge is made for each year of study undertaken. Students may elect to pay this charge up-front as a lump sum or delay payment and contribute through the taxation system.

Each institution may offer courses which belong to a different sector of education. For example, most colleges of advanced education offer some TAFE subjects and some TAFE colleges offer some advanced education subjects. In recent years some secondary school students have also attended TAFE colleges for some subjects, and, with the advent of senior colleges, some secondary schools are now offering some TAFE subjects to allow students to undertake their course on the one campus.

12.4.1 Technical and Further Education

In January 1977 technical education and adult education were integrated and the combined technical and further education operations in Queensland are now administered by the TAFE Division of the Department of Education.

The total number of students enrolled in TAFE vocational courses (not including students in the

recreation/leisure stream) has risen by 48,412 (75 per cent) from 64,168 in 1982 to 112,580 in 1987. During this period the number of female students increased by 28,656 (133 per cent) from 21,505 to 50,161. Male students increased by 19,756 (46 per cent) from 42,663 in 1982 to 62,419 in 1987.

In 1987, the Division of Technical and Further Education offered services through a network of 26 colleges of TAFE, of which 14 are multi-campus institutions and 14 are located in country areas. TAFE courses have been introduced in colleges at Hervey Bay and Alexandra Hills, and many secondary schools now offer TAFE courses under the supervision of TAFE principals. The most popular fields of study are business studies and art and design.

12.12 TAFE STUDENTS (a), QUEENSLAND, 1987

Field of study	Males	Females	Total
Applied science	255	450	705
Art and design	14,203	27,904	42,107
Building	6,701	701	7,402
Business studies	15,336	20,799	36,135
Engineering	23,012	1,926	24,938
Rural and horticulture	3,334	2,199	5,533
Music	56	156	212
Paramedical	589	1,131	1,720
Industrial services	4,501	7,775	12,276
Personal services	9,419	25,875	35,294
General studies	9,358	13,936	23,294
Number of students	82,618	96,805	179,423

(a) Students may be enrolled in more than one field of study.
Source: Department of Employment, Education and Training.

Special courses for Aboriginal and Torres Strait Islander people are available through most TAFE colleges. Special programs are also conducted, for adults in literacy and numeracy, for migrants in the English language and for the visually and physically handicapped.

12.13 TAFE TEACHING STAFF DUTY HOURS, QUEENSLAND

Type of appointment	1982	1986	1987
Full-time duty hours	2,256.4	2,998.6	3,180.7
Teaching	974.0	1,273.1	1,388.4
Non-teaching	1,282.4	1,725.5	1,792.3
Part-time duty hours	510.6	757.4	834.3
Teaching	450.1	667.4	735.0
Non-teaching	60.5	90.0	99.3
All duty hours	2,767.0	3,756.0	4,015.0
Teaching	1,424.1	1,940.5	2,123.4
Non-teaching	1,342.9	1,815.5	1,891.6

Source: Department of Employment, Education and Training.

12.4.2 Advanced Education

Advanced education courses are offered at the Queensland University of Technology which was upgraded to university status on 1 January 1989, the Darling Downs and Capricornia Institutes of

Advanced Education, the Queensland Conservatorium of Music, the Queensland Agricultural College, the Gold Coast College of Advanced Education and the Brisbane College of Advanced Education. They are also offered with courses available at some TAFE colleges, McAuley College administered by the Catholic Church and the institute of advanced education incorporated in the James Cook University of North Queensland.

The activities of the advanced education sector are coordinated by the Queensland Board of Advanced Education. Coordination involves such matters as planning, allocation of funds, course accreditation and awards conferred. The Board also collaborates with other statutory authorities with allied interests such as the Board of Teacher Education.

12.14 ADVANCED EDUCATION STUDENTS, QUEENSLAND, 1988

Type of course	Full-time	Part-time	External	Total
Masters degree	62	260	79	401
Graduate diploma	673	1,325	1,364	3,362
Bachelor degree	9,472	4,646	4,781	18,899
Diploma	5,931	430	..	6,361
Associate diploma	1,959	1,414	2,186	5,559
Miscellaneous	9	161	224	394
Total	18,106	8,236	8,634	34,976

Source: Department of Employment, Education and Training.

Most institutions involved in this sector offer courses on an external studies basis in a variety of fields of study at both graduate and post-graduate levels. However, the Darling Downs Institute of Advanced Education accounts for nearly 47 per cent of these enrolments with 4,090 external students.

The most popular fields of study are education and commercial studies. Courses in teacher education and commercial and business studies are offered at all levels except associate diploma and diploma, respectively.

12.15 ADVANCED EDUCATION STUDENTS BY FIELD OF STUDY, QUEENSLAND

Field of study	1983	1987	1988 (a)
Agriculture	519	573	665
Architecture/building	756	983	1,091
Arts, humanities and social sciences	3,002	4,035	4,139
Business, administration, economics and law and legal studies	6,479	9,329	11,090
Education	8,194	9,640	9,234
Engineering and surveying	3,279	3,642	3,755
Health	234	1,296	1,467
Science	2,849	3,022	3,141
Other	792	800	394
Total	26,104	33,320	34,976

(a) Excluding students attending James Cook University.

Source: Department of Employment, Education and Training.

STRUCTURED REFORM IN HIGHER EDUCATION

As a result of Commonwealth Government funding initiatives, the higher education system has been undergoing change over the past few years, including a review of the structure of the institutions. From 1 January 1990, several institutions providing higher education will amalgamate; negotiations are nearing finalisation and legislation is expected to be introduced into the Queensland Parliament early in 1990.

Capricornia Institute of Advanced Education will become the University College of Central Queensland and Darling Downs Institute of Advanced Education will become the University College of Southern Queensland under the sponsorship of the University of Queensland from 1 January 1990.

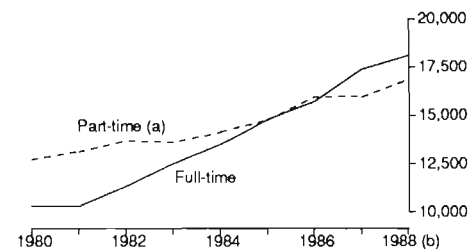
Legislation has been passed to amalgamate the Mount Gravatt campus of the Brisbane College of Advanced Education and the Griffith University from 1 January 1990. An agreement has been entered into whereby Griffith will sponsor the Gold Coast College of Advanced Education as a university college by 1 July 1990.

The Kedron Park, Carseldine and Kelvin Grove campuses of the Brisbane College of Advanced Education will be amalgamating with the Queensland University of Technology. The University and the Queensland Conservatorium of Music have agreed in principle to a merger.

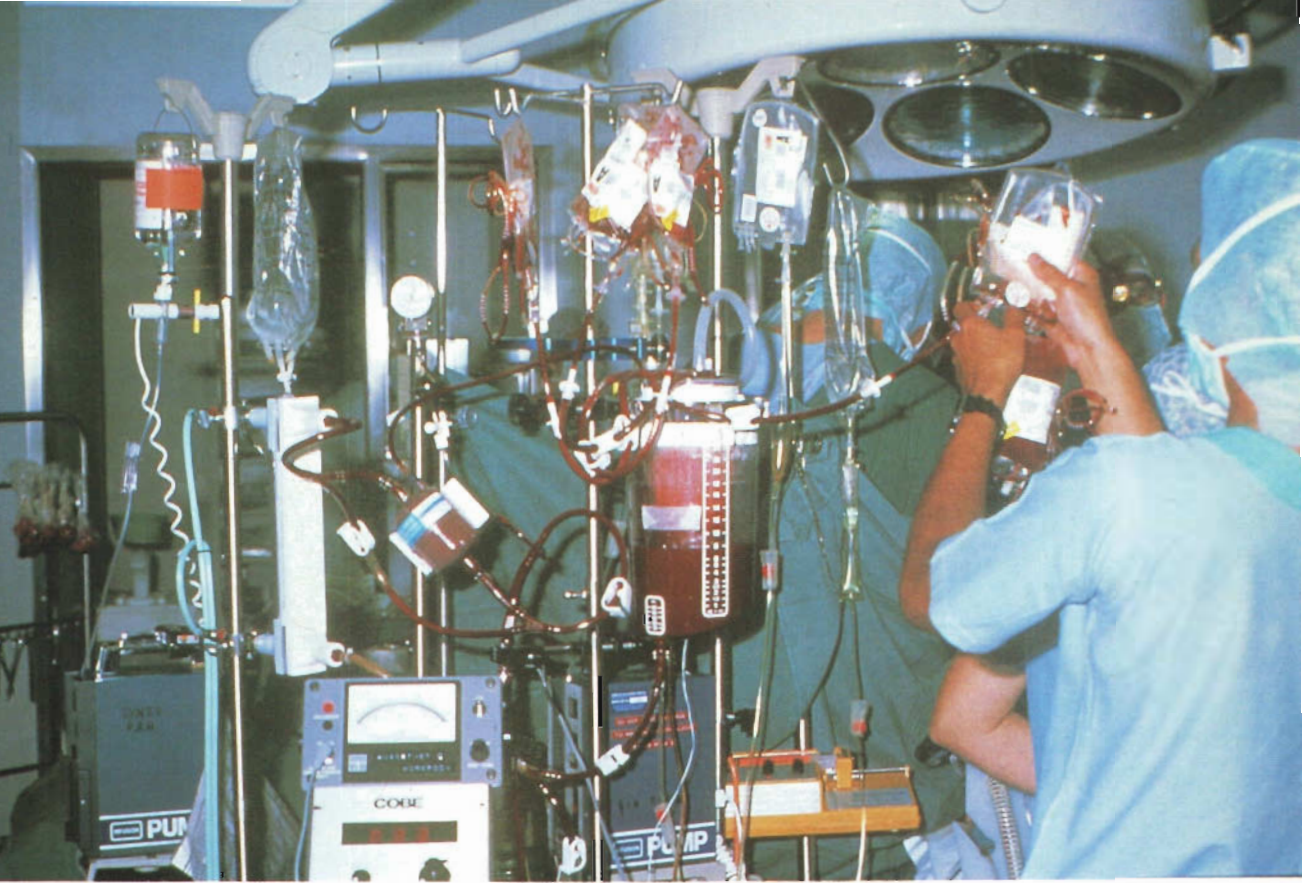
Queensland Agricultural College will amalgamate with the University of Queensland from 1 January 1990 and will be known as the University of Queensland, Gatton College.

Most staff employed at colleges of advanced education are full-time. However, at some colleges, e.g. the Queensland University of Technology, part-time staff are employed to cater for the part-time evening enrolment.

ADVANCED EDUCATION STUDENTS, QUEENSLAND



(a) Including external students. (b) Excluding students at James Cook University.



Blood and blood products ready for a liver transplant

Photos: Red Cross Blood Transfusion Service (Queensland Division)

Patient prepared for a liver transplant





Preschool children at play

Photos: *Premier's Department*

Primary school children and new technology, Wynnum West



12.16 ADVANCED EDUCATION TEACHING STAFF (a), QUEENSLAND, 1988

Particulars	Males	Females	Total
Teaching only	1,049	361	1,410
Research only	12	4	16
Teaching and research	68	5	73
Other functions	998	986	1,984
All functions	2,127	1,356	3,483

(a) Full-time equivalent.

Source: Department of Employment, Education and Training.

12.4.3 University Education

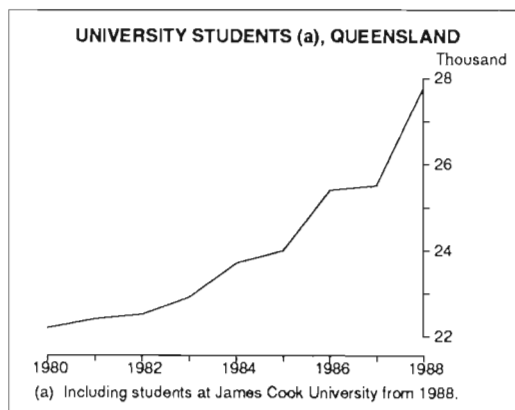
University education in Queensland centres around the University of Queensland, Griffith University and the Queensland University of Technology in Brisbane, and the James Cook University of North Queensland in Townsville. Australia's only private university, Bond University, opened on the Gold Coast in May 1989.

12.17 UNIVERSITY STUDENTS, QUEENSLAND, 1988

Particulars	Internal		External	Total
	Full-time	Part-time		
Higher degree				
Doctorate	3	22	..	25
Ph.D.	716	559	..	1,275
Masters				
Research	250	378	11	639
Course work	273	1,011	114	1,398
Postgraduate	454	306	178	938
Bachelor degree	16,225	4,751	1,487	22,463
Other courses	366	417	295	1,078
All courses	18,287	7,444	2,085	27,816
University				
Queensland	11,884	4,663	1,686	18,233
James Cook	2,967	878	399	4,244
Griffith	3,436	1,903	..	5,339

Source: Department of Employment, Education and Training.

The University of Queensland offers courses through 13 faculties leading to bachelor degrees, masters degrees, doctoral degrees and graduate degrees.



The Division of External Studies offers courses leading to bachelor degrees in arts, economics, law and education and masters degrees in education and literary studies to students who are unable to attend the University. External studies centres have been established throughout the State.

The James Cook University of North Queensland offers courses through 20 academic departments which form the five faculties of arts, commerce and economics, education, engineering and science, as well as an institute of advanced education. As well as offering bachelor degree courses, these faculties also offer masters degree courses, the degree of Doctor of Philosophy and other doctoral degrees.

12.18 UNIVERSITY STUDENTS BY FIELD OF STUDY, QUEENSLAND

Field of study	1983	1987	1988 (a)
Agriculture/forestry	325	335	343
Architecture	295	266	279
Arts	8,004	8,484	9,161
Economics/commerce	3,110	3,892	4,312
Education	1,948	2,157	2,621
Engineering	1,512	1,602	1,735
Health (b)	2,402	2,625	2,697
Law	1,035	705	714
Science	3,780	4,389	4,847
Veterinary science	454	471	486
Other (c)	2	569	621
Total	22,867	25,495	27,816

(a) Including advanced education students attending James Cook University.
 (b) Including Medicine and Dentistry. (c) Students who could not be classified to a field of study.

Source: Department of Employment, Education and Training.

12.19 UNIVERSITY TEACHING AND RESEARCH STAFF (a), QUEENSLAND, 1988

Academic organisational unit group	University			Total
	Queensland	James Cook	Griffith	
Teaching/teaching and research	1,176	303	264	1,743
Humanities	137	36	93	266
Social studies	159	41	—	200
Education	41	70	—	111
Science	242	66	114	422
Mathematics/computing	81	17	—	98
Visual/performing arts	20	—	—	20
Engineering and processing	94	28	—	122
Health sciences	208	—	—	208
Administration, business, economics and law	122	36	57	215
Built environment	14	—	—	14
Agriculture and renewable resources	58	9	—	67
Research	1,201	215	197	1,613
All staff (b)	2,579	547	461	3,587

(a) Full-time equivalent. (b) Including some staff not allocated to an academic group.

Source: Department of Employment, Education and Training.

Griffith University currently offers four bachelor degrees: Bachelor of Arts in the School of Humanities and Modern Asian Studies; Bachelor of Science in the Schools of Australian Environmental Studies and Science; Bachelor of Administration and Bachelor of Informatics in the School of Social and Industrial Administration. All schools offer honours degree programs and postgraduate training leading to the award of masters and doctoral degrees by research. The School of Science offers a graduate diploma program in clinical biochemistry. Masters degrees by course work are offered by the School of Australian Environmental Studies and Science (Masters of Science) and the School of Modern Asian Studies (Master of Arts).

Bachelor degree course enrolments have increased by 20 per cent between 1983 and 1988, with the largest percentage increases being recorded in the fields of study of economics and commerce (41 per cent), science (33 per cent) and arts, humanities and social sciences (17 per cent).

The Bond University, which commenced in May 1989, will award degrees to the doctoral level in four schools: Computing and Information Sciences; Humanities and Social Science; Business and Law; and Science and Technology.

The programs are designed to meet market demand from Australia and overseas, especially Asia and the Pacific region. Bond University has adopted a unique year-round teaching calendar composed of three 14-week semesters. Capable students can therefore complete many of the degrees in 2 years instead of the usual 3.

All students are required to take a core curriculum in computing, management, communication and ethical and cultural values. They are also

required to lease or purchase a personal computer to gain access to the University's highly integrated telecommunications system.

12.5 REFERENCES

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Griffith University, *Annual Report*

James Cook University of North Queensland, *Annual Report*

Brisbane College of Advanced Education, *Annual Report*

Chapter 13

TOURISM, CULTURE AND SPORT

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Chapter 13

TOURISM, CULTURE AND SPORT

Being a tourist or engaging in or watching cultural or sporting activities are leisure pursuits for most people. Expansion in many leisure related businesses has been dramatic in recent years and has encouraged more people to have a commercial involvement.

Tourism has been a growth industry in Australia throughout the 1980s and Queensland has led the way in that growth. As a generator of economic activity, employment and foreign exchange earnings, tourism has been Queensland's fastest growing industry and one of its most valuable.

With greater media exposure on sports in Australia and from around the world, and the emphasis on a healthier lifestyle, a wider variety of sports and leisure activities generate interest today. The choice of sports to watch or participate in, is wider now than ever before.

13.1 TOURISM

According to the Organisation for Economic Co-operation and Development (OECD), Australia was the fastest growing international tourism destination in the developed world during the 3 years to 1988 with an annual growth rate of 25 per cent in visitor numbers. In 1989 the number of overseas visitors to Australia decreased, but allowing for a peak during the World Expo and Bicentennial year of 1988, the number of visitors to Australia who choose to visit Queensland continues to increase.

Domestic tourism is currently the major component of the Australian tourism market. It constitutes around 80 per cent of tourism demand in Australia when measured in terms of visitor nights. Queensland's share is growing at a faster rate than the national average as more Australians choose Queensland holiday destinations.

The Queensland Tourist and Travel Corporation (QTTC) has played a significant role in the expansion of the tourism industry in Queensland since its inception in 1979. QTTC's goal has been



Koalas at Lone Pine Sanctuary

to place Queensland among the leaders in Pacific tourism by facilitating the creation of tourism infrastructure, destinations and integrated products. The Corporation also strives to maximise the economic benefit of tourism to the State by aggressive global and domestic marketing and promotion. As part of the Queensland tourism product, QTTC has promoted research and professional and vocational training in the hospitality field in educational institutions.

The Bureau of Tourism Research (BTR) has estimated that international and domestic tourism generated an income of more than \$16,000m and provided jobs directly and indirectly for 448,000 persons in Australia during 1988-89. Almost 73 per cent of both earnings and employment were generated by domestic tourism with the remaining 27 per cent being derived from international tourism. In-bound international tourism is estimated to have made a gross addition to foreign exchange of about \$5,700m in 1988-89.

The Queensland component of the BTR estimates is approximately \$4,000m in income from tourism, or 9.2 per cent of the State Gross Domestic Product at factor cost. Tourism provided an estimated 116,000 jobs being 9.2 per cent of the employed labour force in 1988-89.

Confidence in the industry is reflected by the investments being made in tourist development throughout the State. Projects under construction or firmly committed in Queensland in December 1989 were valued at \$8,534m which was 44 per cent of the Australian total and a 3 per cent increase over the corresponding figure of \$8,282m in December 1988.

However, there is a growing concern about the loss of the natural environment as resorts and related projects are developed in the most beautiful regions of the State. Of particular concern is the destruction of fisheries wetland breeding habitats as mangroves and seagrass beds are destroyed in land-fill operations for coastal resorts and marinas. Concern is also being voiced about the level of foreign ownership and control of Queensland tourist resources.

13.1.1 International Tourism

From 1985 the number of overseas visitors to Australia rose by around 25 per cent a year for 3 successive years to reach 2.25 million in 1988. In 1989 the figure declined by 8 per cent to 2.08 million. This reversal of the upward trend was due to a combination of factors including:

- escalating travel costs within Australia reinforced by the impact of a stronger Australian dollar on prices paid in terms of foreign currencies;
- the absence of hallmark events in Australia in 1989 comparable, in drawing power, with the Bicentennial, World Expo 88 and the America's Cup in previous years and
- the fact that these special events may have caused some travellers to bring forward their Australian holiday, contributing to a decline in the number of visitors arriving in 1989.

In addition it has been estimated by BTR that the impact of the disruption caused by the domestic airlines/pilots dispute may have resulted in the number of overseas visitors in the December quarter 1989 being around 10 per cent lower than the number predicted in the absence of the disruption. Arrivals from Japan and the United States appear to have been the most severely affected. Visitors from these countries are the most frequent users of commercial aircraft while in Australia.

13.2 INTERNATIONAL VISITORS TO AUSTRALIA BY MAIN STATE OF INTENDED STAY ('000)

State or Territory	1987	1988	1989	Percentage
				change, 1987 to 1989
New South Wales	888.0	1,084.7	971.8	+9.4
Victoria	298.9	346.7	330.9	+10.7
Queensland	327.2	522.1	442.2	+35.1
South Australia	48.1	52.2	53.2	+10.6
Western Australia	158.6	169.2	182.8	+15.3
Tasmania	13.0	15.2	13.0	—
N.T.	16.3	18.5	18.0	+10.4
A.C.T.	20.0	23.6	22.8	+14.0
Not stated	14.8	17.0	45.6	..
Australia	1,784.9	2,249.3	2,080.3	+16.5

Source: Overseas Arrivals and Departures (3404.0).

The proportion of overseas visitors to Australia who specify Queensland as their main State of intended stay has increased from 18.3 per cent of

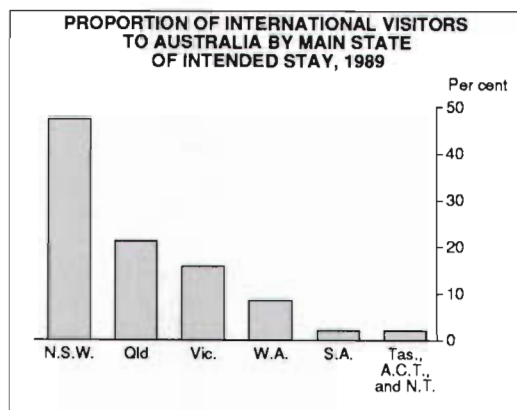
13.1 MAJOR TOURIST PROJECTS BY STATE AT 31 DECEMBER (\$m)

State or Territory	Under construction			Firmly committed		
	1987	1988	1989	1987	1988	1989
New South Wales	1,514	2,199	3,755	1,983	3,373	5,671
Victoria	171	299	(a) 328	944	137	(a) 218
Queensland	1,494	3,057	4,131	3,471	5,225	4,403
South Australia	113	361	222	92	310	248
Western Australia	—	25	130	20	55	55
Tasmania	37	43	—	—	36	9
Northern Territory	73	—	45	197	233	222
Australian Capital Territory	275	180	12	—	—	—
Australia	3,677	6,164	8,623	6,707	9,369	10,826

(a) June quarter 1989 data used as data for September and December quarters 1989 were unavailable.

Source: Department of the Arts, Sport, the Environment, Tourism and Territories.

the total in 1987 to 23.2 per cent in the World Expo year of 1988 before dropping to 21.3 per cent of the total in 1989. This sustained growth in the market share between 1987 and 1989 has eclipsed all other States and Territories.



While Queensland's apparent market share was 21.3 per cent in 1989 compared with 46.7 per cent for New South Wales, it is important to note that 'main State of stay' visitors represent less than half of all international visitors to Queensland each year. This is indicated by the International Visitors Survey (IVS) which showed that 35 per cent of all short-term visitors arriving in Australia in 1986 visited Queensland whereas only 16 per cent had actually specified Queensland as their main State of stay. In the World Expo year of 1988, the IVS showed that 49 per cent of overseas tourists visited Queensland although only 23 per cent had specified Queensland as their main State of stay. The 1986 survey also indicated that 23 per cent of all international visitor nights were spent in Queensland, compared with 32 per cent for New South Wales and 19 per cent for Victoria. The 1988 IVS showed that 28 per cent of all overseas visitor nights were spent in Queensland compared with 32 per cent in New South Wales and 21 per cent in Victoria.

The impact of World Expo 88 on overseas tourism to Queensland during 1988 is evident from the departure figures for overseas visitors who spent most time in Queensland. While March quarter 1989 departures were 18.9 per cent above the March quarter 1988 figure, departures during the June, September and December quarters of 1989 were 18.1, 31.4 and 23.9 per cent, respectively, down on figures for the corresponding quarters of 1988.

13.4 DEPARTURES OF OVERSEAS VISITORS WHO SPENT MOST TIME IN QUEENSLAND ('000)

Period	1987	1988	1989	Percentage
				change, 1987 to 1989
Quarter ended				
31 March	67.3	88.7	105.5	+ 56.8
30 June	67.7	118.0	96.6	+ 42.7
30 September	96.6	181.8	124.8	+ 29.2
31 December	84.0	129.0	98.2	+ 16.9
Total	315.6	517.4	425.1	+ 34.7

Source: Overseas Arrivals and Departures (3402.0).

The major source of international visitors to Australia who specify Queensland as their main State of stay is New Zealand. However, after consistently accounting for slightly over one-third of the total international visitors to Queensland in recent years, the New Zealand proportion declined to just 28.9 per cent or 127,600 visitors in 1989.

Japan is now the second largest source of international visitors to Queensland. The growth in the number of Japanese visitors has been remarkable with an increase of 113 per cent from 53,300 in 1987 to 113,700 in 1988 and a further increase of 4.1 per cent to 118,400 visitors in 1989. Numbers of international visitors to Queensland from all other major sources, except the United Kingdom, declined in 1989. Japanese visitors actually stay in Australia only 9 days on average compared with an average for all visitors of 4 weeks. In terms of

13.3 QUEENSLAND MAIN STATE OF INTENDED STAY: INTERNATIONAL VISITORS BY COUNTRY OF RESIDENCE ('000)

Country of residence	1987	1988	1989		Percentage change, 1987 to 1989
			No.	%	
Asia					
Japan	53.3	113.7	118.4	26.8	+ 122.0
Other	28.8	48.1	42.7	9.7	+ 48.1
Europe					
United Kingdom	22.6	32.1	34.6	7.8	+ 52.7
Other	19.4	28.1	27.3	6.2	+ 40.7
New Zealand	115.3	185.2	127.6	28.9	+ 10.6
North America					
Canada	9.7	15.5	10.9	2.5	+ 11.5
United States	47.3	58.7	46.0	10.4	- 2.8
Other	30.6	40.6	34.8	7.9	+ 13.6
Total	327.2	522.1	442.2	100.0	+ 35.1

Source: Overseas Arrivals and Departures (3404.0).

expenditure, however, Japanese visitors to Australia in 1988 spent \$1,624 on average during their visits which was only marginally less than the average of \$1,702 for all visitors.

North America ranks third in the international visitor stakes with 10,900 visitors to Queensland in 1989 from Canada and 46,000 visitors from the United States. The annual number of North American visitors to Queensland has remained virtually unchanged at 57,000 between 1987 and 1989, but their proportion of the total market has declined from 17.4 per cent in 1987 to 12.9 per cent in 1989.

13.5 QUEENSLAND MAIN STATE OF INTENDED STAY: INTERNATIONAL VISITORS BY REASON FOR JOURNEY ('000)

Reason for journey	1987	1988	1989	
			No.	%
Holiday	208.3	356.1	291.8	66.0
Visiting relatives	54.9	79.0	76.9	17.4
Business	19.5	30.8	25.0	5.7
Other	44.6	56.1	48.4	10.9
Total	327.2	522.1	442.2	100.0

Source: Overseas Arrivals and Departures (3404.0).

A holiday is the prime focus of most international visitors. This is illustrated by the fact that two-thirds of arrivals state 'holiday' as their reason for visiting Queensland compared with 17 per cent visiting friends and relatives and 6 per cent on business.

13.1.2 Inbound International Airport Movements

Of the five international airports on the eastern seaboard of Australia, Queensland has three — Brisbane, Cairns and Townsville.

However, the QTTC has been concerned for some time that Queensland does not have an appropriate share of inbound international air services in relation to its share of the international tourism market. The Corporation feels that this imbalance with more air services flying into Sydney and Melbourne has disadvantaged Queensland's tourism industry and restricted its development. For example, using the main State of intended stay as the base, Queensland's share of international visitors in 1986-87 was 17.1 per cent while the proportion of direct international passenger arrivals was only 11.9 per cent; in 1987-88 the proportions were 20.4 per cent and 13.4 per cent, respectively; and in 1988-89, 22.7 per cent and 15.4 per cent, respectively. The QTTC encourages international airlines to introduce new flights and services into Queensland in order to realise Queensland's potential to become the major international gateway to Australia.

13.6 INTERNATIONAL AIRPORT INBOUND MOVEMENTS, QUEENSLAND

Port	1986-87	1987-88	1988-89	Percentage change, 1987-88 to
				1988-89
PASSENGERS (a)				
Brisbane	317,291	413,724	506,735	+ 22.5
Cairns	45,144	71,131	100,572	+ 41.4
Townsville	14,515	11,498	10,560	- 8.2
Queensland	376,950	496,353	617,867	+ 24.5
Australia	3,156,926	3,692,976	4,016,975	+ 8.8
AIRCRAFT MOVEMENTS				
Brisbane	3,012	3,701	4,463	+ 20.6
Cairns	575	925	1,423	+ 53.8
Townsville	149	155	235	+ 51.6
Queensland	3,736	4,781	6,121	+ 28.0
Australia	25,555	28,298	32,168	+ 13.7

(a) Fare paying passengers.

Source: Department of Transport and Communications.

Cairns is now the fifth busiest international airport in Australia after Sydney, Melbourne, Brisbane and Perth, with Brisbane predicted to overtake Melbourne as number two in the 1990s. Increases in inbound passenger traffic in 1988-89 were experienced by Cairns (41 per cent) and Brisbane (22 per cent) while the average increase for all Australian international airports was 9 per cent. Townsville recorded an 8 per cent decrease in inbound passenger traffic for the same period.

The need to expand terminal facilities at Brisbane and Cairns international airports has been recognised. The Cairns Port Authority has undertaken an \$80m extension of Cairns airport comprising a 600 metre airport runway extension which was completed in December 1989, taxiways and aprons and related facilities, and a new international passenger terminal scheduled for completion in August 1990. Concurrently, the Civil Aviation Authority has been constructing a new \$25m control tower and radar installation, also scheduled for completion in August 1990.

Early in 1989, the Federal Airports Corporation Board called for expressions of interest from private enterprise in the construction by 1993 of a new international terminal at Brisbane airport.

13.1.3 Domestic Tourism

Domestic tourism constitutes approximately 80 per cent of visitor nights in Australia. Although daily expenditure of domestic tourists is said by BTR to be comparable to that of international tourists (at around \$60 to \$65 a day), only part of that expenditure for domestic tourists is additional to their normal consumption expenditure in Australia. In terms of visitor nights, domestic tourism in Australia actually dropped by 1.3 per cent in 1988-89 compared with 1987-88.

13.7 TOTAL DOMESTIC VISITOR NIGHTS ('000)

State or Territory visited	1986-87		1987-88		1988-89		Percentage change, 1987-88 to 1988-89
	No.	%	No.	%	No.	%	
New South Wales	70,474	33.4	72,303	33.3	67,147	31.4	-7.1
Victoria	38,173	18.1	39,046	18.0	35,970	16.8	-7.9
Queensland	53,369	25.3	55,671	25.7	61,722	28.8	+10.9
South Australia	16,221	7.7	15,437	7.1	15,501	7.2	+0.4
Western Australia	20,004	9.5	21,128	9.7	20,838	9.7	-1.4
Tasmania	5,862	2.8	5,435	2.5	5,648	2.6	+3.9
Northern Territory	3,642	1.7	4,359	2.0	3,217	1.5	-26.2
A.C.T.	3,147	1.5	3,486	1.6	3,983	1.9	+14.3
Not stated	40	—	32	—	—	—	..
Australia	210,933	100.0	216,897	100.0	214,027	100.0	-1.3

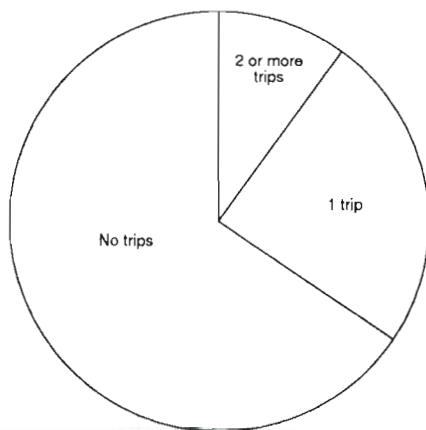
Source: Domestic Tourism Monitor.

INTRASTATE TRAVEL BY QUEENSLAND HOUSEHOLDS

Over one-third of Queensland households (333,000 out of 962,500) undertook household trips lasting four or more nights during the 12 months from October 1988 to September 1989. The major origin of these trips was the Brisbane Statistical Division while the major destination was the Moreton Statistical Division which includes the Sunshine and Gold Coasts, north and south of Brisbane, respectively. Most trips were for holidays (54 per cent).

Over four-fifths of the trips were of 14 nights or less duration and, for nearly half of the trips, groups stayed in free accommodation. Motor cars were the main type of transport used. The major activities carried out on trips were pleasure shopping, swimming, surfing or beach activities and touring or sightseeing.

HOUSEHOLD TRIPS UNDERTAKEN, QUEENSLAND, 1988-89



Domestic tourism in Queensland, however, grew by 11 per cent to 61.7 million nights in 1988-89 compared with 55.7 million nights in 1987-88 and accounted for 29 per cent of the total Australian market. Interstate visitor nights in Queensland increased by 20 per cent to 30.2 million in 1988-89 and intrastate visitor nights increased by 3 per cent to 31.5 million.

13.8 DOMESTIC VISITOR NIGHTS, QUEENSLAND ('000)

Source of visitor	1986-87	1987-88	1988-89	Percentage change, 1987-88 to 1988-89
	Interstate	22,626	25,163	30,229	+20.1
Intrastate	30,743	30,508	31,493	+3.2
Total	53,369	55,671	61,722	+10.9

Source: Domestic Tourism Monitor.

13.2 TOURIST ACCOMMODATION

There were 51,748 rooms and units available in Queensland for short-term accommodation in December quarter 1989. Licensed hotels with facilities provided 15,056 rooms; motels etc. with facilities had 21,545 rooms and 15,147 were self-contained holiday units, flats and houses.

When compared with Australia, Queensland had 25.1 per cent of the total hotel and motel room stock and 47.2 per cent of the available commercial holiday units, flats and houses. In addition there were 23,456 powered and unpowered sites and cabins etc. available at predominantly short-term caravan parks in Queensland in December 1989.

Of the total Queensland room stock for short-term accommodation, 27 per cent was located on the Gold Coast, 15 per cent in Cairns City and its surrounding Shires, 13 per cent on the Sunshine

13.9 TOURIST ACCOMMODATION CAPACITY AVAILABLE, QUEENSLAND, DECEMBER QUARTER

Selected regions	Rooms in licensed hotels, motels etc.				Holiday units, flats and houses	
	1987	1988	1989	Percentage change, 1987 to 1989	1988	1989
Brisbane City	4,389	4,934	5,056	+ 15.2	391	330
Gold Coast City	6,594	6,783	6,665	+ 1.1	7,141	7,171
Caloundra City, Maroochy and Noosa Shires	1,561	2,033	2,257	+ 44.6	4,216	4,633
Bundaberg City, Isis and Woongarra Shires	508	539	556	+ 9.4	n.p.	n.p.
Maryborough and Hervey Bay Cities	688	755	760	+ 10.5	475	430
Toowoomba and Warwick Cities and Stanthorpe Shire	872	834	844	- 3.2	—	—
Gladstone City and Calliope Shire	659	696	679	+ 3.0	—	—
Rockhampton City and Livingstone Shire	1,712	1,751	1,741	+ 1.7	86	111
Mackay City and Pioneer Shire	1,027	1,248	1,312	+ 27.8	n.p.	n.p.
Whitsunday Shire	1,518	1,886	1,757	+ 15.7	141	126
Townsville City	1,621	2,270	2,067	+ 27.5	188	212
Cairns City	2,540	2,982	3,644	+ 43.5	495	478
Atherton, Cardwell, Douglas, Eacham, Johnstone and Mulgrave Shires	1,681	2,105	2,769	+ 64.7	640	725
Great Barrier Reef islands (a)	1,727	2,286	1,915	+ 10.9	—	—
Queensland	30,618	34,662	36,601	+ 19.5	14,719	15,147
Australia	128,100	139,319	145,914	+ 13.9	31,538	32,118

(a) Figures included in relevant regions above.

Sources: Tourist Accommodation (8635.0).
Tourist Accommodation (8635.3).

Coast, 10 per cent in Brisbane City and 4 per cent in Townsville City. Although the Gold Coast is regarded as the tourism capital of Queensland, the Cairns-Port Douglas-Atherton Tableland region has undergone a tourism revolution since the opening of the Cairns international airport in 1984 with numerous three, four and five-star resorts opening in the last few years.

13.10 TOURIST ACCOMMODATION: ROOMS AVAILABLE IN LICENSED HOTELS, MOTELS ETC. BY STAR GRADING, QUEENSLAND

Particulars	December quarter		Percentage change, 1988 to 1989
	1988	1989	
Establishment type			
Licensed hotels	13,490	15,056	+ 11.6
Motels etc.	21,172	21,545	+ 1.8
Total	34,662	36,601	+ 5.6
Star grading			
One	740	724	- 2.2
Two	7,743	7,694	- 0.6
Three	9,827	10,783	+ 9.7
Four	3,582	4,854	+ 35.5
Five	4,796	5,170	+ 7.8
Ungraded			
Great Barrier Reef island establishments	2,286	1,915	- 16.2
Other	5,688	5,461	- 4.0

Source: Tourist Accommodation (8635.3).

While the Cairns region and the Gold Coast lead the way, areas such as the Whitsundays, the

Sunshine Coast, Townsville and Rockhampton have firm tourism bases with new developments under construction or firmly committed. Brisbane City has a good corporate accommodation market and is looking to expand its tourist and convention markets.

Tourism projects under construction in Queensland in December 1989 will provide an additional 7,700 rooms and projects firmly committed at the same date had the potential of providing a further 14,000 rooms.

In recent years the majority of Queensland tourist accommodation capacity increase comprises licensed hotels of three, four and five-star grading. This includes integrated resort developments such as the Sheraton Mirage hotels on the Gold Coast and at Port Douglas, island resorts and specific theme resorts such as the Hyatt Regency health resort and hotel at Coolool on the Sunshine Coast.

Australia's largest integrated resort, Sanctuary Cove, is situated near the Gold Coast. The resort covers 443 hectares and encompasses a five-star hotel, boat harbours, a residential component and a vast array of sporting, recreational, retail and accommodation facilities.

The size of the Queensland hotel and motel accommodation market grew by 18.2 per cent from 6.2 million room nights sold in 1987 to 7.3 million sold in 1988 then contracted by 10.2 per cent from 1988 to 6.6 million room nights sold in 1989. The net result was a modest growth of 6.2 per cent in the size of the market in the 2 years from 1987 to 1989.

13.11 TOURIST ACCOMMODATION IN LICENSED HOTELS, MOTELS ETC., QUEENSLAND

Selected regions	Room nights sold				Room occupancy rates		
	1987	1988	1989	Percentage change, 1987 to 1989	1987	1988	1989
					%	%	%
Brisbane City	979,223	1,348,220	1,040,121	+ 6.2	61.5	77.6	56.8
Gold Coast City	1,461,707	1,766,431	1,311,749	- 10.3	63.0	73.7	54.5
Caloundra City, Maroochy and Noosa Shires	297,267	349,722	326,155	+ 9.7	52.3	56.7	43.1
Bundaberg City, Isis and Woongarra Shires	103,748	110,644	111,606	+ 7.6	56.5	58.6	54.7
Maryborough and Hervey Bay Cities	121,687	134,607	138,778	+ 14.0	48.5	50.2	50.2
Toowoomba and Warwick Cities and Stanthorpe Shire	159,374	180,114	177,728	+ 11.5	49.7	59.3	57.9
Gladstone City and Calliope Shire	111,675	114,222	121,083	+ 8.4	46.5	45.7	48.0
Rockhampton City and Livingstone Shire	306,119	307,140	314,347	+ 2.7	50.8	48.2	49.5
Mackay City and Pioneer Shire	209,464	236,401	241,205	+ 15.2	59.6	56.3	51.1
Whitsunday Shire	336,691	386,987	344,647	+ 2.4	64.7	61.9	52.4
Townsville City	337,586	377,895	383,966	+ 13.7	58.1	52.6	49.3
Cairns City	603,227	680,367	678,732	+ 12.5	74.0	67.1	56.8
Atherton, Cardwell, Douglas, Eacham, Johnstone and Mulgrave Shires	290,654	347,181	345,921	+ 19.0	56.9	51.7	38.7
Great Barrier Reef islands (a)	422,325	467,648	363,240	- 14.0	71.5	61.8	48.0
Queensland	6,197,781	7,328,865	6,583,770	+ 6.2	57.6	61.7	51.1

(a) Figures included in relevant regions above.

Source: Tourist Accommodation (8635.3).

13.12 TOURIST ACCOMMODATION TAKINGS, QUEENSLAND
(\$m)

Selected regions	Licensed hotels, motels etc.				Holiday units, flats and houses	
	1987	1988	1989	Percentage change, 1987 to 1989	1988	1989
Brisbane City	61.2	117.9	82.1	+ 34.3	6.2	4.2
Gold Coast City	83.0	130.2	103.9	+ 25.1	90.7	76.3
Caloundra City, Maroochy and Noosa Shires	14.1	18.3	21.0	+ 48.5	31.9	31.7
Bundaberg City, Isis and Woongarra Shires	3.7	4.3	4.6	+ 23.4	n.p.	n.p.
Maryborough and Hervey Bay Cities	4.5	5.3	6.1	+ 35.9	2.2	2.3
Toowoomba and Warwick Cities and Stanthorpe Shire	6.0	7.4	7.9	+ 30.3	—	—
Gladstone City and Calliope Shire	5.8	6.4	6.5	+ 13.1	—	—
Rockhampton City and Livingstone Shire	15.5	16.3	16.6	+ 7.3	0.5	0.8
Mackay City and Pioneer Shire	9.6	13.9	14.8	+ 53.3	n.p.	n.p.
Whitsunday Shire	35.3	41.3	37.5	+ 6.3	1.0	1.0
Townsville City	17.8	21.0	21.7	+ 21.8	1.6	1.8
Cairns City	34.5	45.4	47.2	+ 37.0	5.4	4.9
Atherton, Cardwell, Douglas, Eacham, Johnstone and Mulgrave Shires	25.5	38.5	38.7	+ 52.2	5.9	6.1
Great Barrier Reef islands (a)	55.7	68.1	57.8	+ 3.7	—	—
Queensland	353.7	515.8	463.4	+ 31.0	151.2	134.4
Australia	1,519.3	1,959.5	2,065.0	+ 35.9	289.8	297.1

(a) Figures included in relevant regions above.

Sources: Tourist Accommodation (8635.0).

Tourist Accommodation (8635.3).

The Queensland hotel and motel room stock growth of 19.5 per cent, from 30,618 rooms in December 1987 to 36,601 rooms in December 1989, was far greater than the 6.2 per cent growth in room night sales between 1987 and 1989. Consequently, the average hotel and motel room occupancy rate decreased from 57.6 per cent in 1987 to only 51.1 per cent in 1989, after having risen to 61.7 per cent in 1988.

Gold Coast City and the Great Barrier Reef island establishments have fared particularly poorly with decreases of 10.3 per cent and 14.0 per cent, respectively, in market size between 1987 and 1989 in terms of number of room nights sold.

The far north Queensland region, which was adversely affected by the domestic air services disruption in late 1989, has also fared badly. The

TOURIST ATTRACTIONS

In 1986-87, a survey of 311 tourist attractions in Queensland was conducted. These attractions were considered by the QTTC to be important contributors to the tourism industry in the State. They also covered a wide range of activities within what is an extremely diverse industry.

In total, they earned \$138.1m in income and attracted almost 16 million visitors during the year (excluding visitors to national parks).

They employed 3,200 paid staff including a high proportion of casual workers who made up almost half of the labour force. Voluntary workers were also important.

While there were no statistics available on the extent of the voluntary work force, 27 per cent of the attractions surveyed relied to some extent on voluntary workers.

13.13 TOURIST ATTRACTIONS, QUEENSLAND, 1986-87

Type of attraction	Attractions		Visitors		Income	
	No.	'000	'000	\$'000	'000	\$'000
Museum or art gallery	71	1,577		5,116		
Amusement and theme park	33	6,623		66,864		
Zoo, wildlife sanctuary or oceanarium	29	1,391		10,500		
Primary or secondary producers						
Winery	7	65		668		
Mine or factory	23	1,419		4,129		
Other	16	143		666		
Natural attraction	15	(a) 2,291		4,617		
Historic attraction	32	261		3,344		
Cruise operator	54	1,355		35,272		
Other	31	805		6,920		
Total	311	(a) 15,930		138,095		

(a) Excluding visitors to national parks.

For all attractions, the peak visitor month was January. Other popular months were December, August, September and April when visitor numbers reached about two-thirds of the January level. However, the different types of attractions had different seasonality of visits.

Of the total of 16 million visits recorded (excluding visitors to national parks), most of them (79 per cent) were to attractions which charged admission. The most popular type of attraction in terms of visits was amusement and theme parks.

Almost \$30m of net capital expenditure was outlaid on the attractions during 1986-87 with more than \$14m (48 per cent) being invested in amusement and theme parks.



Herberton Historic Village

Photo: K. Boyle

region's market sales growth has been insufficient to match its growth in hotel and motel accommodation capacity available. The average room occupancy rate for Cairns City has decreased from 74.0 per cent in 1987 to 56.8 per cent in 1989 and the rate for the shires surrounding Cairns has fallen from 56.9 per cent to 38.7 per cent over the same period.

In 1989, with 29.1 per cent of the Australian commercial room stock for short-term accommodation, Queensland takings from accommodation were \$597.8m which was 25.3 per cent of the Australian total. This was a 10.4 per cent decrease from the corresponding figure of \$667.0m for 1988.

In terms of takings from accommodation, Gold Coast City was the dominant tourism market in 1989 in Queensland with \$180.2m followed by Brisbane City, \$86.3m; the Sunshine Coast, \$52.7m; Cairns City, \$52.1m; the shires surrounding Cairns, \$44.8m and Whitsunday Shire, \$38.5m.

13.3 CULTURE

The cultural well-being of the people of Queensland is catered for by a diverse range of arts-related activities. The funding and encouragement for the continued growth of many of these activities and the establishment of new ones is looked after by the Arts Division of the State Government. Queensland Artist Day, National Arts Week and Youth Arts promotion are helping in the growth of an industry that employs over 232,000 people around Australia.

There is increased involvement by the community in the arts. This has resulted in community-devised projects such as *Women in the West*, a play developed from the experiences of women in isolated communities throughout central-western Queensland.

In 1989, the Queensland Community Arts Network published *Artstarters*. This is a record of community arts practice and outlines 18 successful projects undertaken by local communities.

13.3.1 Dance

Queensland is the home of three of Australia's most active dance companies.

The Queensland Ballet, Australia's oldest professional ballet company, was established in 1960 by Charles Lisner. It tours the State, interstate and overseas.

Since 1984, the Dance North company, based in Townsville, has toured throughout Australia and overseas. It was the first Australian company to be invited to appear in Vietnam.

Expressions, the only professional contemporary dance company based in south-east Queensland, was established in 1984. The company employs a main group of six dancers and a schools team of three dancers. In 1988 it represented Australia at the Houston International Festival and carries out an extensive program of performances in Brisbane, Queensland regional areas and interstate.

13.3.2 Drama

Queensland's major theatre organisations continue to provide quality theatre of national significance with a strong commitment to Queensland artists, a high degree of Australian content and a wide variety of youth-related activities.

Established in 1970, the Royal Queensland Theatre Company is the State's major presenter,

offering Brisbane productions, touring in Queensland and exchanging productions with major companies in other States. Brolgas, the youth arm of the Company, tours annually to metropolitan and regional schools.

TN! Theatre Company offers a variety of styles based on vigorous music theatre, comedy and new writing. La Boite continues as a community-access theatre committed to providing opportunities and training for Queensland artists.

Excellence in theatrical performances is being recognised by the presentation of the Matilda Awards for drama to Queensland artists. The awards form part of National Arts Week and are presented on Artist Day, October 13th.

Increasing community interest in local history is reflected by the growing demand for large scale outdoor theatrical events, taking the form of historical pageants. Local communities receive assistance from the Arts Division's Community Drama Officer to produce these pageants. The 1989 *Toowoomba Spectacular*, a major celebration of the history of the Darling Downs, involved 350 local residents in the production and attracted an audience of 4,000 over two nights. There are plans for this to be a biennial event.

13.3.3 Film

Incorporated within the Arts Division is the State Government's film funding body, the Film Development Office. This body provides support



Queensland Youth Arts Festival

Photo: Premier's Department

for the film industry in Queensland and promotes the State's film locations. It has close links with the Warner Roadshow Studios at Coomera as these studios provide an important focus for the film industry in Queensland.

Since the Warner Roadshow Studios came into production in late 1988, two major television series and three feature films have been completed using the studio facilities and Queensland locations. In the second year of operation, the studios have generated \$23m worth of production and the Queensland Government has recently provided a further \$7.5m to expand the studios to a higher international standard.

Provision of financial assistance to stimulate local production is an important role of the Film Development Office. Since 1987, 28 applicants have been provided with investment funding for script development, totalling \$317,356; and 10 projects were funded for preproduction and marketing to a total of \$153,300.

Assistance to regionally-based film-makers in Queensland is also provided.

13.3.4 Literature

The Steele Rudd Award, a major national award for the best collection of short stories, continues to attract considerable interest from professional writers. The award, sponsored by the Queensland Government, was launched in February 1988 near the Drayton birthplace of Arthur Hoey Davis, and commemorates this famous Queenslander's contribution to literature. Davis, under his pen-name, Steele Rudd, was responsible for the many yarns about characters such as Dad and Dave and the famous Snake Gully. The 1989 award was presented to Marion Halligan at the September launch of Warana Writers Week, now nationally acclaimed on the literary festival calendar.

The Premier's Poetry Award, another award announced during Warana Writers Week, was won in 1989 by David Reiter.

13.3.5 Music

Music attracts a major share of government financial support. The State's two major orchestral companies are the Queensland Philharmonic Orchestra and the Queensland Symphony Orchestra.

The Queensland Symphony Orchestra does an annual tour of the State. An interesting feature of this event is that the trip is considered to be the longest land-based orchestra tour in the Southern Hemisphere.

The Queensland Youth Orchestra have found a new home at the old Queensland Museum building

at Bowen Hills. It is expected that this new environment will stimulate and revitalise the orchestra to new heights of excellence.

13.3.6 Visual Arts and Crafts

The Queensland Art Gallery exhibits an impressive range of local, national and international artists. A number of these exhibitions tour regional areas of the State through an active and growing network of regional galleries.

The Australian Flying Arts School continues to operate a regional program specifically developed to provide tuition in the arts and crafts to people disadvantaged by their geographical situation.

Organisations such as the Crafts Council of Queensland, Institute of Modern Art, Queensland Potters and Queensland Artworkers Alliance receive funding from the Queensland Government to assist with the provision of support and resources for individual professional artists.

Amateur arts organisations are also assisted financially with payments for the fees and expenses for professional tutors to conduct workshops and classes in the visual arts and crafts.

13.4 SPORT

In 1972 the Encouragement to Sport Scheme was established by the Queensland Government to provide specific measures of financial assistance to sportspersons and sports organisations. There are 81 separate and distinct sports recognised for participation in the scheme. Applications for grants and subsidies are considered from the State governing level down to local club level.

There are now 12 measures of assistance which make up the scheme and applications from sporting organisations are sought each February for the forthcoming financial year. The annual application call closes on 30 April and includes the following measures of assistance:

- coaching of junior sportspeople;
- development of new or additional playing facilities, e.g. a new tennis court, night lighting of a football field or change room facilities etc.;
- sending a properly selected State representative to attend national titles interstate, e.g. Queensland Netball Team to compete in the national titles in Melbourne;
- staging national and/or international sporting events in Queensland, e.g. the World Junior Ice Skating Championships in Queensland;
- a sports scholarship to Queensland resident athletes chosen in the Commonwealth Games Team;

- a coaches' scholarship to improve the standard of coaching;
- Queensland Championships in regional areas, e.g. the Queensland Under 15 Soccer Championships in Rockhampton and
- to individuals who demonstrate potential/ability and live in country regions, under the Regional Sports Talent Assistance Scheme.

State governing bodies may also apply for subsidy assistance for State administration costs, State directors of coaching, regional directors of coaching and courses or seminars arranged by the State body for officials, coaches and referees. In addition special financial assistance can be provided in the form of grants for gifted sportspeople.

The 1989-90 budgetary allocation to service these 12 measures of assistance is \$6.2m. Since 1972 over \$50m has been distributed throughout Queensland.

13.5 REFERENCES

ABS publications produced by the Queensland Office:

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ABS publications produced by the Canberra Office:

Overseas Arrivals and Departures (3402.0), quarterly

Overseas Arrivals and Departures (3404.0), annual

Tourist Accommodation (8635.0), quarterly

Intrastate Travel by Queensland Households (8637.3), irregular

Other publications:

Bureau of Tourism Research, *Tourism Update, International Visitor Survey, Domestic Tourism Monitor*

Department of the Arts, Sport, the Environment, Tourism and Territories, *Tourism Infrastructure Developments*

Department of Transport and Communications, *Air Transport Statistics*

Queensland Art Gallery, *Annual Report*

Queensland Cultural Centre Trust, *Annual Report*

Queensland Division of Cultural Activities, *Annual Report*

Queensland Tourist and Travel Corporation, *Domestic Travel in Queensland*

Queensland Museum, *Annual Report*

Queensland Performing Arts Trust, *Annual Report*

Chapter 14

AGRICULTURE

The agricultural and mining industries have been central to Queensland's economic development since the earliest days of settlement. Although tourism has grown in recent times, agriculture is still an important contributor to the State's economy and has maintained its vital role as a major export earner.

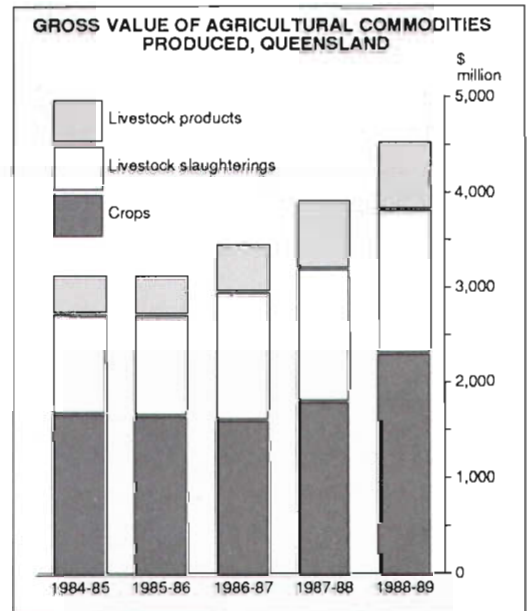
In 1988-89 the estimated total value of agricultural commodity production reached a new peak of \$4,548m, 16 per cent above the previous record of \$3,935m set in 1987-88. The gross value of all crops reached a record of \$2,331m due mainly to large increases in the values of wheat, sugar cane and vegetables. The gross value of livestock slaughterings continued the rising trend, evident since 1983-84, to reach a record \$1,503m and the value of livestock products rose to \$714m, largely due to increased milk production and higher milk prices.

The first settlement of rural lands in Queensland began in the 1840s when squatters occupied large areas and assumed ownership. In 1860, soon after the establishment of the State Government, legislation was passed regulating the occupation of Crown lands, so ending the days of free selection. The squatters were given Pastoral Leases over part of their holdings in return for making other areas available for closer settlement.

Agricultural and grazing farms were established and the sale of land brought important revenue for government purposes. The revenue needs of the colony encouraged the sale of land, but eventually the principle of leasehold tenure became established policy for pastoral lands.

In 1916, the principle of leasehold tenure was extended to preclude the alienation of any land, and a system of perpetual lease was introduced. Settlement was encouraged by allowing the sale of ownership of these lands without variation in rental. This continued until 1957, except for a period from 1929 to 1932, when the system of purchase on long terms was reintroduced.

Legislation in 1957 restored a system of freeholding purchase, at the option of the selectors or lessees, of town and country land held from the Crown under perpetual lease. Subsequent legislation permitted the conversion to freehold or to perpetual lease of other larger surveyed areas such as Settlement Farm Leases and Grazing Selections which had previously been leased for a term of years (mainly 30 years) and of all industrial lands.



As a result of these policies, at 30 June 1989 about 70 per cent of land in Queensland was leased from the Crown. The balance of the land comprised unoccupied vacant land, Crown reserves (not leased), roads and stock routes, as well as freehold land, lands in the process of freeholding and mining and petroleum leases.



A colourful production of *Salome* at the Lyric Theatre, Brisbane

Photo: *Premier's Department*

White water rafting in the far north

Photo: *Far North Queensland Promotion Bureau Ltd*





A golden field of sunflowers

Photos: *Premier's Department*

Sorghum harvesting, Miles



14.1 PROPORTION OF AUSTRALIA

Queensland is the leading beef producing State in Australia and, due to its tropical and subtropical climatic conditions, is the main Australian producer of a variety of cereal crops, citrus, tropical and exotic fruits and vegetables for human consumption.

The total value of the State's agricultural production remains fairly evenly divided between crops and livestock disposals and products.

Grains, wool and beef production, the main agricultural industries in the early days of settlement, remain important but have now been supplemented by a large range of other agricultural products, including sugar cane, cotton, tobacco, vegetables for human consumption and citrus and tropical fruits.

14.1 AGRICULTURE: QUEENSLAND IN RELATION TO AUSTRALIA

Particulars	Unit	Queensland	
		Total	Proportion of Australia
%			
Establishments, 1988-89			
Number		25,734	20.2
Total area	'000 hectares	151,310	32.4
Area under crops (excl. pastures), 1988-89	'000 hectares	2,842	16.2
Selected crop production, 1988-89			
Sugar cane	tonnes	25,585,878	94.3
Wheat	tonnes	1,549,976	11.1
Grain sorghum	tonnes	933,631	75.1
Barley	tonnes	374,053	11.5
Tobacco	tonnes	6,979	61.2
Cotton (raw)	tonnes	55,717	20.0
Peanuts	tonnes	23,880	96.1
Pineapples	tonnes	154,419	100.0
Bananas	tonnes	104,795	53.5
Citrus fruit	tonnes	45,654	14.3
Apples	tonnes	33,865	10.5
Livestock numbers, at 31 March 1989			
Sheep and lambs	'000	14,880	9.2
Cattle for meat production	'000	8,682	43.7
Cattle for milk production	'000	312	12.3
Pigs	'000	611	22.9
Livestock products, 1988-89			
Total wool production	tonnes	76,294	p 8.1
Milk (total intake)	million litres	627	p 10.0
Gross value of agricultural commodities produced, 1988-89			
Crops	\$m	2,330.9	p 24.3
Livestock disposals	\$m	1,503.2	p 28.8
Livestock products	\$m	714.1	p 9.0

In 1988-89 Queensland was the main Australian producer of: canary seed, grain sorghum, maize, soybeans, sunflower, sugar cane, mung beans, navy beans, chick peas, peanuts, tobacco, ginger, coffee, tea, popcorn, mandarins, avocados, mangoes, custard apples, papaws, bananas, pineapples, passion-fruit, gooseberries, lychees, rambutans, french beans, beetroot, broccoli, capsicums and chillies, chokos, cucumbers, marrows and squashes, zucchinis, rockmelons, watermelons, pumpkins and sweet potatoes.

14.2 VALUE OF PRODUCTION

The total value of agricultural production in Queensland is fairly evenly divided between crops and livestock. In 1988-89 crop production contributed \$2,331m or 51 per cent to the total value of agricultural production, while livestock production was valued at \$2,217m or 49 per cent of the total value.

14.2 GROSS VALUE OF AGRICULTURAL COMMODITIES, QUEENSLAND (\$m)

Particulars	1986-87	1987-88	1988-89
Crops	r 1,623	1,824	2,331
Livestock slaughtering	1,349	1,406	1,503
Livestock products	503	705	714
Total	r 3,476	3,935	4,548

Source: Value of Agricultural Commodities Produced (7501.3).

14.2.1 Crops

While Queensland's proportion of the total area of Australia's agricultural crops is approximately 15 per cent, the value of its crops usually averages about 25 per cent of the Australian total.

14.3 GROSS VALUE OF CROPS, QUEENSLAND (\$m)

Commodity	1986-87	1987-88	1988-89
Sugar cane	567	594	722
Barley	37	37	66
Grain sorghum	111	156	151
Wheat	r 125	121	342
Other cereals	36	39	40
Cotton	64	123	91
Peanuts	39	32	25
Sunflower	17	49	43
Tobacco (dried leaf)	41	41	41
Vegetables	252	253	328
Bananas	49	62	83
Pineapples	42	41	44
Other fruit	104	114	139
All other	138	161	189
Total	r 1,623	1,824	2,302

Source: Value of Agricultural Commodities Produced (7501.3).

The 1988-89 gross value of Queensland crops, estimated at a record \$2,331m, was 28 per cent higher than the value for the preceding year. Wheat, which was valued at \$342m, showed the largest increase. This was \$221m or 183 per cent more than the previous year and \$28m more than the record set in 1983-84. This increase was due to improved world prices which contributed to increased plantings, and to favourable growing conditions which resulted in excellent yields. Improved sugar prices resulted in the estimated gross value of sugar cane cut for crushing increasing to \$712m, 22 per cent more than the value in 1987-88. The value of vegetables rose from \$253m in 1987-88 to \$328m, an increase of 29 per cent. The vegetables that showed the greatest increases were beans, capsicums, carrots, lettuce, potatoes, tomatoes and watermelons.

14.2.2 Livestock Slaughtering

In 1988-89, the gross value of livestock slaughtering and other disposals continued to rise, reaching \$1,503m. This represented an increase of \$98m above the previous record set in 1987-88. Good seasonal conditions resulted in reduced slaughtering of cattle and sheep as farmers restocked. The resultant higher prices are reflected in the increased gross values of cattle slaughtering, up \$43m to \$1,233m, and sheep slaughtering, up \$9m to \$30m. Queensland continued to be the leading beef producing State in Australia, supplying almost 40 per cent of Australia's beef and veal.

14.4 GROSS VALUE OF LIVESTOCK SLAUGHTERINGS (a), QUEENSLAND (\$m)

Particulars	1986-87	1987-88	1988-89
Cattle and calves	1,142	1,190	1,233
Sheep and lambs	34	22	30
Pigs	96	111	147
Poultry	77	83	93
Goats	n.a.	1	n.a.
Total	(b) 1,349	1,406	(b) 1,503

(a) Including adjustment for net exports (overseas and interstate) of live animals. (b) Excluding goat slaughtering.

Source: Value of Agricultural Commodities Produced (7501.3).

The gross value of pig disposals, \$147m, is the highest value recorded, while the record value for poultry slaughtered, \$93m, reflects the continuing strength in demand for poultry meat.

14.2.3 Livestock Products

The gross value of livestock products in Queensland increased in value to \$714m in 1988-89, a slight increase over the record value set in the previous year. Wool production was valued at \$455m, 5 per cent lower than the 1987-88 record. Although the average selling price remained high during 1988-89

and was comparable with the record prices of 1987-88, the overall gross value of wool was slightly less due to a reduction in the quantity of shorn wool produced. Liquid whole milk used for manufacturing or market milk sales was valued at \$197m. This is 14 per cent higher than the value in 1987-88 and results from increases in both milk production and average farm gate returns to dairy farmers for whole milk supplied to factories.

14.5 GROSS VALUE OF LIVESTOCK PRODUCTS, QUEENSLAND (\$m)

Commodity	1986-87	1987-88	1988-89
Wool			
Shorn	288	468	446
Wool on skins	5	9	9
Liquid whole milk used for			
Manufacturing	40	49	60
Market milk sales	119	123	136
Eggs	45	50	55
Honey and beeswax	6	6	7
Cashmere, mohair and liquid goat milk	n.a.	1	n.a.
Total	(a) 503	705	(a) 714

(a) Excluding cashmere, mohair and liquid goat milk.

Source: Value of Agricultural Commodities Produced (7501.3).

14.3 AGRICULTURAL ESTABLISHMENTS

Commodity statistics from establishments with agricultural activity are obtained from the annual agricultural census conducted throughout Australia at 31 March. Excluded from the census are those establishments which make only a small contribution to overall agricultural production. Since 1986-87, the census has only included establishments with agricultural activity that had or were expected to have an estimated value of agricultural operations (EVAO) of \$20,000 or more. This differs in scope from previous censuses where establishments were included if they had or were expected to have an EVAO of \$2,500 or more.

Of the total area of Queensland, 88 per cent or 151,310,000 hectares was managed by agricultural establishments during 1988-89. Following the trend of land use in the previous few years, 1.9 per cent of this land was planted to crop production and 2.9 per cent was under sown pasture.

14.3.1 Establishments

Almost 45 per cent of Queensland's 25,734 agricultural establishments are of less than 200 hectares. These are mainly located in the Moreton and Brisbane, Wide Bay-Burnett and Darling Downs Statistical Divisions. Establishments in the

14.6 NUMBER AND SIZE OF AGRICULTURAL ESTABLISHMENTS, QUEENSLAND, AT 31 MARCH 1989

Statistical division	Size of establishment (hectares)									Total
	Under 10	10-19	20-49	50-99	100-199	200-499	500-1,999	2,000-19,999	20,000 and over	
Moreton and Brisbane	525	326	767	710	678	547	297	68	—	3,918
Wide Bay-Burnett	65	147	443	653	786	871	787	426	6	4,184
Darling Downs	91	77	246	331	822	1,704	1,607	963	22	5,863
South-West	8	1	3	4	4	37	240	966	368	1,631
Fitzroy	19	36	70	81	118	344	659	984	99	2,410
Central-West	—	—	—	1	—	—	9	408	279	697
Mackay	10	7	148	444	467	365	143	322	83	1,989
Northern	24	33	341	522	337	177	75	192	151	1,852
Far North	61	68	593	854	585	265	59	64	160	2,709
North-West	2	—	—	1	—	2	7	214	255	481
Queensland	805	695	2,611	3,601	3,797	4,312	3,883	4,607	1,423	25,734

Source: Agricultural Land Use and Selected Inputs (7411.3).

200 to 19,999 hectare size range are most prevalent in the Wide Bay-Burnett and Darling Downs Statistical Divisions. The largest concentration of establishments of 20,000 hectares or more occurs in the Statistical Divisions of South-West, Central-West and North-West. Average sizes of establishments in the western pastoral areas of South-West, Central-West and North-West Statistical Divisions are 18,798 hectares, 48,264 hectares and 64,461 hectares, respectively.

Almost 70 per cent of Queensland's agricultural establishments grow crops. Over 35 per cent of these grow cereal grains and tend to be concentrated in the Moreton and Brisbane, Wide Bay-Burnett, Fitzroy, Darling Downs and South-West Statistical Divisions. Sugar cane is grown on 29 per cent of establishments with crops.

14.7 NUMBER, AREA AND LAND USE OF AGRICULTURAL ESTABLISHMENTS, QUEENSLAND

Particulars	Unit	1986-87	1987-88	1988-89
Total area of Queensland	'000 ha	172,700	172,700	172,700
Agricultural establishments	number	25,860	25,717	25,734
Area of agricultural establishments	'000 ha	151,723	152,466	151,310
Area of crops (a)	'000 ha	3,036	2,870	2,842
Area under sown pasture	'000 ha	3,979	4,179	4,354
Balance (b)	'000 ha	144,707	145,417	144,114

(a) Excluding lucerne and other pasture harvested for hay, seed and green feed. (b) Used for intermittent grazing, lying idle, fallow, not suitable for agriculture etc.

Source: Agricultural Land Use and Selected Inputs (7411.3).

14.9 AGRICULTURAL ESTABLISHMENTS CARRYING LIVESTOCK (a) QUEENSLAND, 1988-89

Statistical division	Establishments carrying			
	Milk cattle (b)	Meat cattle	Sheep	Pigs
Moreton and Brisbane	732	1,839	38	268
Wide Bay-Burnett	445	2,634	47	442
Darling Downs	657	4,081	1,208	679
South-West	—	1,374	1,051	47
Fitzroy	83	2,007	31	105
Central-West	4	557	579	15
Mackay	47	953	1	33
Northern	3	571	—	25
Far North	237	693	2	45
North-West	—	421	168	11
Queensland	2,208	15,130	3,125	1,670

(a) Establishments carrying both cattle for meat production and cattle for milk production are included in both meat and milk cattle counts. (b) Excluding those carrying house cows only.

Source: Agricultural Land Use and Selected Inputs (7411.3).

14.8 AGRICULTURAL ESTABLISHMENTS GROWING MAJOR CROPS, QUEENSLAND, 1988-89

Statistical division	Establishments growing											
	Sugar cane	Barley	Wheat	Grain sorghum	Maize	Sun-flower	Cotton	Pota-toes	Toma-toes	Pine-apples	Bananas	Any crop
Moreton and Brisbane	206	195	101	281	124	36	2	285	148	228	192	2,676
Wide Bay-Burnett	1,056	331	324	489	288	18	4	26	127	131	20	2,922
Darling Downs	—	2,322	1,852	1,916	314	433	71	37	74	—	—	4,952
South-West	—	85	297	34	1	2	35	—	1	—	—	577
Fitzroy	—	52	530	538	34	192	115	2	16	53	9	1,344
Central-West	—	—	—	1	—	—	—	—	—	—	—	11
Mackay	1,346	3	73	101	3	73	—	2	1	6	4	1,560
Northern	1,200	—	—	10	19	2	—	6	59	8	5	1,462
Far North	1,238	1	—	11	128	1	—	51	18	14	201	2,151
North-West	—	—	—	—	—	—	—	—	—	—	—	11
Queensland	5,046	2,989	3,177	3,381	911	757	227	409	444	440	431	17,666

Sources: Agricultural Land Use and Selected Inputs (7411.3). Fruit (7322.3).

Vegetable and fruit growing activities are undertaken largely by establishments in the southern coastal regions of the State although a significant number of establishments growing these crops are in the Northern and Far North Statistical Divisions.

Nearly all Queensland's 17,573 livestock-carrying establishments run meat cattle. Like those running milk cattle, the majority are located in the south-eastern portion of the State, chiefly in Moreton and Brisbane, Wide Bay-Burnett and Darling Downs Statistical Divisions. This distribution is also broadly reflected in respect of establishments with pigs. Over 72 per cent of the establishments carrying sheep are in the Darling Downs and South-West Statistical Divisions.

14.3.2 Employment

As at November 1989, there were 86,500 persons employed in agriculture and services to agriculture, representing 6.5 per cent of all employed persons in Queensland.

Numbers employed in agriculture and services to agriculture are seasonal, depending on the harvesting times of principal cereal crops, fruit and vegetables. However, in recent years there has been a downward trend in the level of employment in agriculture and services to agriculture as a proportion of total employed persons in Queensland — falling from 8.7 per cent in November 1984 to its present level of 6.5 per cent.

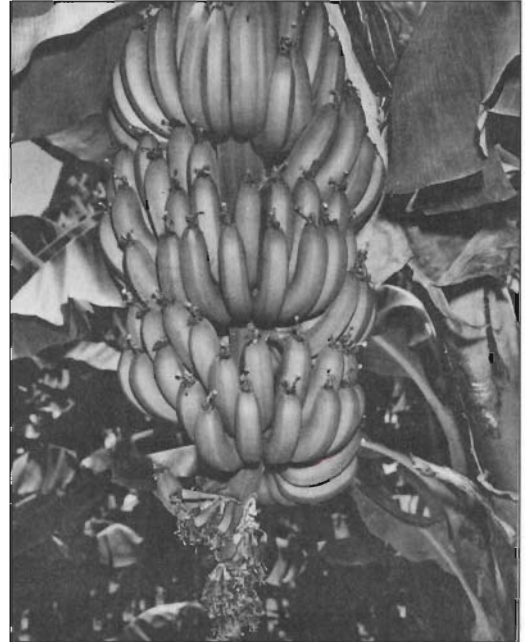
14.10 EMPLOYMENT (a) IN AGRICULTURE AND SERVICES TO AGRICULTURE, QUEENSLAND

Month	Males '000	Females '000	Persons '000	Proportion of total employment	
					%
1984: November	64.7	23.5	88.2		8.7
1985: November	60.3	23.9	84.2		7.7
1986: November	61.2	27.2	88.4		7.8
1987: November	57.4	24.7	82.1		7.2
1988: February	56.3	24.7	81.0		7.1
May	56.8	25.5	82.3		6.9
August	56.5	24.5	81.0		6.8
November	56.8	23.7	80.5		6.6
1989: February	58.9	25.9	84.8		6.8
May	60.9	27.2	88.1		6.9
August	60.6	25.0	85.6		6.7
November	64.1	22.5	86.5		6.5

(a) Estimates are derived from the ABS labour force surveys. Figures prior to February 1988 have been revised on the basis of results of the 1986 Population Census. See the Explanatory Notes in the ABS publication *The Labour Force* (Catalogue No. 6203.0).

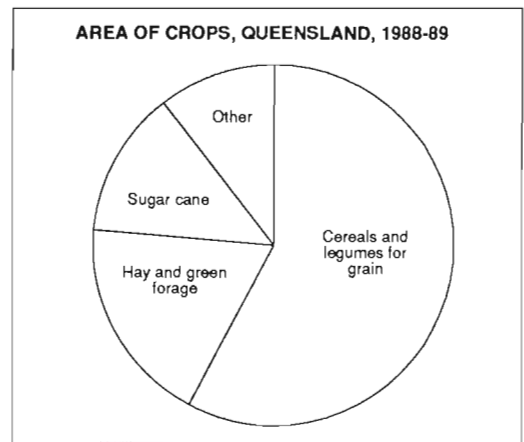
14.4 CROPS

Agriculture in Queensland differs from that in other States of Australia because of the greater proportion of crops grown which are suited to the



tropical and subtropical climates. These crops include sugar cane, pineapples, bananas, cotton and ginger. Moreover, the moist summer conditions in Queensland, compared with the relatively dry summers in other States, have contributed to a considerable increase in the production of summer-growing crops such as grain sorghum, peanuts, sunflowers, navy beans and soybeans, to meet a rising demand for processed foods, vegetable oils and stock feed.

Since the mid-1950s the area planted to crops in Queensland has nearly trebled. In this period the area planted to cotton has increased tenfold, the area of wheat for grain has more than trebled and the areas planted to sugar cane, hay and green forage have doubled.



14.11 AREA AND PRODUCTION OF PRINCIPAL CROPS, QUEENSLAND

<i>Crop</i>	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89</i>
<i>Area ('000 hectares)</i>			
Sugar cane (a)	287	291	298
Barley	168	169	200
Grain sorghum	625	565	468
Maize	38	37	36
Wheat	795	646	768
Soybeans	29	26	37
Sunflower seed	108	142	146
Tobacco	3	3	3
Cotton	31	81	53
Peanuts	33	31	22
Green forage	580	582	521
Hay (b)	52	63	46
Potatoes	6	7	6
Pumpkins	4	4	3
Tomatoes	4	3	4
Apples (c)	3	3	3
Bananas	3	4	4
Pineapples	4	4	4
<i>Production ('000 tonnes)</i>			
Sugar cane	23,466	23,200	25,586
Barley	276	244	374
Grain sorghum	1,019	1,213	934
Maize	118	124	132
Wheat	833	718	1,550
Soybeans	44	41	63
Sunflower seed	68	157	130
Tobacco	8	7	7
Cotton (raw)	40	72	56
Peanuts	44	36	24
Hay	229	258	238
Potatoes	133	120	115
Pumpkins	33	33	36
Tomatoes	79	81	99
Apples	37	34	34
Bananas	64	79	105
Pineapples	142	146	154

(a) Cane cut for crushing. (b) Including lucerne and other pasture hay. (c) Area of trees 6 years and over.
 Source: Crops and Pastures (7321.3).

14.4.1 Sugar

Production of sugar cane is the leading feature of Queensland agriculture and occupies most of the river flats in the fertile coastal valleys. Cultivation is intensive and irrigation is used wherever practicable, as in the Ayr and Bundaberg areas.

The Queensland sugar country can be grouped into five main areas. The most northerly area (Far North Statistical Division) stretches from Mossman in the north to Cardwell in the south. The Northern Division covers the Ingham, Townsville and Ayr districts, while the Mackay Division embraces the Proserpine and Mackay areas. Sugar is easily the most important crop grown on coastal farms from Mackay northwards, but south of Mackay other forms of agriculture are combined with cane growing. The two southern divisions are Wide Bay-Burnett (Bundaberg, Maryborough, Gympie and surrounding districts) and Moreton (the areas north and south of Brisbane). Harvesting, which begins

in most districts about June and ends in November or December, is nearly all done mechanically.

The 1988-89 agricultural census reported the production of almost 25.6 million tonnes of sugar cane from 298,200 hectares, resulting in an average yield of 85.8 tonnes a hectare for the 1988 season. This represented an increase of 10.3 per cent over the harvest for the previous year and was the highest level of sugar cane production ever recorded in Queensland. The Mackay Statistical Division cut the largest area of cane for crushing during the year, 92,800 hectares or 31 per cent of the State total, with approximately half of the sugar growing activities being confined to the Pioneer Shire. The Northern and Far North Statistical Divisions experienced the best yields during 1988, with the Burdekin and Cardwell Shires both achieving yields in excess of 100 tonnes a hectare.

14.12 SUGAR PRODUCTION, QUEENSLAND, 1988 SEASON

<i>Sugar district</i>	<i>Area cut for crushing</i> <i>'000 hectares</i>	<i>Cane cut for crushing</i> <i>'000 tonnes</i>	<i>Sugar production</i> <i>'000 tonnes</i>
Northern	109	9,884	1,276
Burdekin	37	4,130	617
Central	95	7,939	1,005
Southern	61	4,542	585
Queensland	302	26,495	3,483

Sources: Bureau of Sugar Experiment Stations, Brisbane. Crops and Pastures (7321.3).

14.4.2 Cereal Grain Crops

After sugar cane, wheat and grain sorghum are the second and third most important agricultural crops in Queensland.

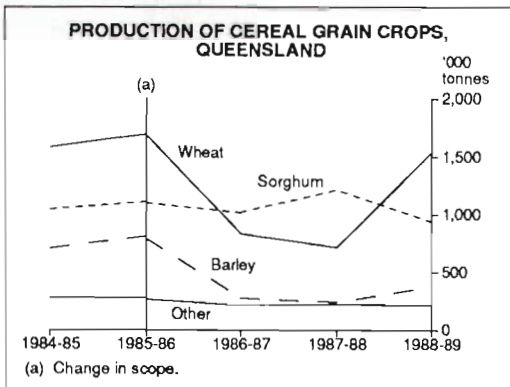
Production of wheat for grain rose sharply in 1988-89 to 1,550,000 tonnes, more than double the harvest for the previous year. The producing area increased by only 19 per cent, to 768,200 hectares, during the same period. Improved world prices for grain contributed to the increased plantings to wheat at the beginning of the season. Abundant rainfall during the year, following drought conditions in the previous two seasons, provided moisture for crops in almost every grain growing area of the State, improving yields considerably. However, some parts of the south-west and the central Darling Downs lost crops due to excessive rainfall.

The area sown to sorghum for grain in 1988-89 (468,000 hectares) was 17 per cent lower than that recorded for the previous year. The average yield also fell, from 2.15 tonnes a hectare in 1987-88 to 2.0 tonnes a hectare in 1988-89, causing an overall decline of 23 per cent in total sorghum production for grain when compared with the harvest for the previous year.

14.13 AREA AND PRODUCTION OF WHEAT AND GRAIN SORGHUM, QUEENSLAND, 1988-89

Statistical division	Wheat		Grain sorghum	
	Area	Production	Area	Production
	'000 hectares	'000 tonnes	'000 hectares	'000 tonnes
Moreton and Brisbane	2	4	4	16
Wide Bay-Burnett	16	40	22	53
Darling Downs	436	887	238	506
South-West	123	215	6	3
Fitzroy	156	329	141	260
Mackay	36	74	55	95
Northern	—	—	—	1
Far North	—	—	1	1
Queensland	768	1,550	468	934

Source: Crops and Pastures (7321.3).



Barley production increased from the 244,200 tonnes reported in 1987-88 to 374,100 tonnes in 1988-89, but was still well below the production levels of the 1984-85 and 1985-86 seasons. Although the average yield rose from 1.44 tonnes a hectare in 1987-88 to 1.88 tonnes a hectare in 1988-89, total production from the 200,000 hectares sown in 1988-89 fell short of expectations — due to the adverse effects of hot, dry weather and the presence of a number of plant diseases across the growing area.

Other cereal grain crops showed a combined production of 213,300 tonnes in 1988-89, a fall of 1.6 per cent from the 1987-88 level.

14.4.3 Vegetables

Queensland is Australia's leading grower of vegetables for human consumption with 34,300 hectares of farmland planted for vegetable production in 1988-89. Almost 50 per cent of total plantings occurred in the Moreton and Brisbane region, with Gatton and Laidley Shires being the main growing areas. In quantitative terms, the main vegetables produced in Queensland in 1988-89 were: potatoes, 115,100 tonnes (down 4.1 per cent on the production for the previous year); tomatoes,



Picking beans

Photo: Premier's Department

98,900 tonnes (up 21.5 per cent); watermelons, 37,200 tonnes (up 4.1 per cent) and pumpkins, 36,300 tonnes (up 9.9 per cent). During 1988-89 Queensland also produced: 24,600 tonnes or 92 per cent of the beetroot in Australia; 11,500 tonnes or 69 per cent of the capsicums, chillies and peppers; and 5,100 tonnes or 61 per cent of the zucchinis.

14.14 VEGETABLES FOR HUMAN CONSUMPTION, QUEENSLAND, 1988-89

Vegetable	Area	Production
	hectares	tonnes
Beetroot	822	24,552
Broccoli	1,458	8,314
Capsicums, chillies etc	907	11,509
Carrots	982	21,008
Cauliflowers	418	8,262
Cucumbers	856	8,578
Green beans	4,209	17,083
Lettuce	1,033	27,200
Marrows, squashes and zucchinis	1,031	5,707
Onions	983	21,307
Potatoes	6,208	115,112
Pumpkins	3,491	36,331
Rockmelons	1,123	17,783
Tomatoes	3,963	98,922
Watermelons	2,615	37,245

Source: Crops and Pastures (7321.3).

14.4.4 Fruit

Queensland is practically the sole Australian source of pineapples, papaws and most other tropical fruits, but in recent years has supplied only

about half of the Australian banana crop. In 1988-89 pineapple production increased by 5.4 per cent from the previous year to 154,400 tonnes, the largest crop ever recorded.

Queensland remains Australia's leading producer of passionfruit, papaws, avocados and custard apples.

14.15 MAJOR FRUIT CROPS, QUEENSLAND, 1988-89

Crop	Bearing area	Production
	hectares	tonnes
Bananas	3,679	104,795
Grapes	921	3,931
Papaws	355	4,973
Passionfruit	156	2,035
Pineapples	4,081	154,419
Strawberries	80	1,154

Crop	Trees aged 6 years and over	Production
	'000	tonnes
Apples	583	33,865
Apricots	23	409
Avocados	162	7,844
Custard apples	19	621
Lemons and limes	26	3,350
Macadamia nuts	306	2,025
Mandarins	207	22,409
Mangoes	138	5,204
Nectarines	56	1,520
Oranges	159	18,537
Peaches	83	1,927
Pears	55	3,514
Plums	105	2,260

Source: Fruit (7322.3).

In recent years, an increasing variety of exotic fruits has been introduced, particularly into north Queensland. The development of marketing strategies has led to a significant level of consumer acceptance for many of these fruits including lychees, rambutans, carambola, sapotes and longans. Lychee is the most important exotic species with production in 1988-89 more than doubling to 287 tonnes from 137 tonnes in the previous year, although the infant nature of the crop is still evident with over 80 per cent of all trees being less than 6 years old.

Nearly 62 per cent (22,400 tonnes) of the nation's mandarin crop was produced in Queensland in 1988-89.

14.4.5 Cotton

Lower cotton prices and better returns for alternative crops such as sorghum and soybeans, together with generally dry weather conditions at the time of planting, saw a decline in the area sown to cotton in Queensland in 1988-89 when compared with the record area sown in the previous year. The

actual area sown in 1988-89 was 53,300 hectares, a 34 per cent drop compared with 1987-88 but still larger than any previous year.

Favourable growing conditions during the year boosted yields despite showery weather and high humidity in many areas at harvest time. The average yield for the State in 1988-89 reached 1.05 tonnes of raw cotton a hectare compared with 0.89 tonnes a hectare in 1987-88, enabling the harvest to achieve the second highest production level on record. The Balonne Shire in the South-West Statistical Division was the largest producing area in the State in 1988-89, producing 33 per cent of the State's total harvest.

14.16 COTTON PRODUCTION, QUEENSLAND, 1988-89

Statistical division	Area	Raw cotton produced
	hectares	tonnes
Moreton and Brisbane	155	222
Wide Bay-Burnett	204	164
Darling Downs	10,384	14,989
South-West	19,408	18,157
Fitzroy	23,129	22,185
Queensland	53,280	55,717

Source: Crops and Pastures (7321.3).

14.4.6 Tobacco

The area under tobacco in Queensland in 1988-89 was 2,700 hectares, producing 7.0 million kilograms of dried leaf. Approximately 95 per cent of this production was from the Mareeba district (Atherton Tableland), 4 per cent from the Glasshouse Mountains district, 1 per cent from the Bundaberg district and a small quantity from the Inglewood region.

14.17 TOBACCO PRODUCTION, QUEENSLAND, 1988-89

Statistical division	Area	Tobacco produced
	hectares	tonnes
Moreton and Brisbane	144	260
Wide Bay-Burnett	43	67
Darling Downs	11	15
Far North	2,475	6,638
Queensland	2,672	6,979

Source: Crops and Pastures (7321.3).

14.4.7 Sunflower and Safflower

The total area sown to sunflower in Queensland in 1988-89 was 145,700 hectares, representing an increase of 3.0 per cent over plantings for the previous year. However, the average yield for the season was 0.89 tonnes a hectare or 20 per cent below the yield obtained from the 1987-88 harvest. This resulted in an overall decline in production of 17 per cent from that of the previous year.

Over half of the State's total sunflower crop in 1988-89 was grown in the Fitzroy Statistical Division, predominantly in the Bauhinia and Peak Downs Shires. The Belyando Shire in the Mackay Statistical Division was also a major producing area, harvesting 25 per cent of the State's total crop.

Safflower production continued its downward trend of recent years falling to 2,300 tonnes in 1988-89. This was 22 per cent lower than the production for the previous year and less than a quarter of the quantity harvested in 1985-86.

14.18 PRODUCTION OF SUNFLOWER AND SAFFLOWER, QUEENSLAND, 1988-89

Statistical division	Sunflower		Safflower	
	Area	Production	Area	Production
	hectares	tonnes	hectares	tonnes
Moreton and Brisbane	511	612	11	20
Wide Bay-Burnett	493	311	—	—
Darling Downs	24,631	22,283	1,573	724
South-West	240	24	1,723	377
Fitzroy	74,891	70,266	1,206	836
Central-West	—	—	35	30
Mackay	44,922	36,426	561	328
Northern	6	17	—	—
Far North	18	15	—	—
Queensland	145,711	129,955	5,109	2,315

Source: Crops and Pastures (7321.3).

14.4.8 Peanuts

Peanut production in Queensland fell sharply from 35,700 tonnes in 1987-88 to 23,900 tonnes in 1988-89, a decrease of 33 per cent. The area planted decreased by 29 per cent or 9,150 hectares during the same period, while the average yield fell from 1.14 tonnes a hectare to 1.09 tonnes a hectare.

The major producing areas in the State were the Kingaroy Shire in the Wide Bay-Burnett Statistical Division (42 per cent of total area sown and 27 per cent of total production) and the Atherton Shire in the Far North Statistical Division (14 per cent and 31 per cent, respectively).

14.19 PEANUT PRODUCTION, QUEENSLAND, 1988-89

Statistical division	Area	Peanuts produced
	hectares	tonnes
Moreton and Brisbane	10	—
Wide Bay-Burnett	15,113	10,606
Darling Downs	1,078	694
Fitzroy	382	811
Northern	5	4
Far North	5,399	11,765
Queensland	21,987	23,880

Source: Crops and Pastures (7321.3).

Heavy rains and floods in the Burnett area prevented growers from harvesting their peanut crop after 7 years of drought. As a result, yields only averaged 0.70 tonnes a hectare in the region.

Growers in the Atherton area experienced average yields of 2.0 to 2.5 tonnes a hectare but a long spell of wet weather around harvest time reduced optimum yields due to rootrot and poor separation of nuts from the soil.

14.4.9 Other Crops

Soybeans

Soybean production in 1988-89 rose sharply over that for the previous year to 63,400 tonnes, an increase of 70 per cent over the production for the previous year. This increase was a result of a 42 per cent increase in plantings and a rise in the average yield from 1.58 tonnes a hectare to 1.70 tonnes a hectare following favourable weather conditions during the growing season.

Rice

Rice is grown mainly in the Burdekin and Mareeba areas. In 1988-89 the total area sown was 3,000 hectares, representing a decrease of 17 per cent when compared to plantings for the previous year. However, the average yield for the season was 6.12 tonnes a hectare or nearly 17 per cent above the yield obtained from the 1987-88 harvest, resulting in only a minor decline in production compared to that for the previous year.

Ginger

Production of ginger in Queensland during the 1988-89 season was 5,531 tonnes from 124 hectares, which maintains the continued increase in production. Shires with the highest production were Maroochy, Noosa and Widgee.

14.5 ARTIFICIAL FERTILISERS

Comprehensive data on artificial fertiliser usage by agricultural establishments are only collected every 3 years — except for pasture, wheat and sugar cane, for which details are collected annually.

Sugar cane, vegetables and fruit are the main crop types to which artificial fertilisers are applied. In 1987-88, the area of Queensland sugar cane fertilised represented 83 per cent of the total area sown. During the same period, fertilisers were applied to 79 per cent of the total area under vegetables and 74 per cent of its total area of fruit. Only 17 per cent of the total area sown to wheat was fertilised in Queensland during the year ended March 1988.

In 1988-89, the area of wheat treated with artificial fertilisers increased by 69 per cent over that for the previous year to 190,073 hectares. This represented 24 per cent of the total area sown to wheat during the year (781,700 hectares). Both the total area sown to sugar cane and the area of sugar cane fertilised remained fairly constant in Queensland from 1987-88 to 1988-89.

14.20 AREA OF CROPS AND PASTURE FERTILISED, QUEENSLAND (hectares)

Particulars	1987-88		1988-89
	Total area	Area fertilised	Area fertilised
Wheat	681,926	112,800	190,073
Grain sorghum	601,112	197,269	n.a.
Other cereals	621,266	218,503	n.a.
Sugar cane	359,868	297,317	296,308
Vegetables	32,284	25,639	n.a.
Fruit (incl. grapes)	29,321	21,600	n.a.
Other crops	543,941	109,459	n.a.
Total crops	2,869,717	982,588	1,058,268
Lucerne	n.a.	9,579	180,560
Other pasture	n.a.	153,197	
Total	n.a.	1,145,364	1,238,828

Fruit cropping activities tend to have the highest artificial fertiliser application rates, with vegetable growing and sugar cane producing activities also using fairly high rates. In 1987-88, the application rates of the main crop types, in tonnes a hectare, were: wheat, 0.07; grain sorghum, 0.12; sugar cane, 0.72; vegetables, 0.87; fruit (including grapes), 1.14 and lucerne, 0.49.

14.21 TYPE OF ARTIFICIAL FERTILISERS USED, QUEENSLAND, 1987-88 (tonnes)

Particulars	Super-phosphate	Straight nitrogenous	Other or mixed
Lucerne	2,522	1,158	1,059
Other pasture	19,910	15,761	8,928
Wheat	1,822	4,552	2,032
Grain sorghum	3,232	17,286	3,207
Other cereals	1,316	5,745	2,316
Sugar cane	19,233	92,545	102,278
Vegetables	3,124	7,300	11,814
Fruit (incl. grapes)	2,683	8,329	13,554
Other crops	5,248	15,336	9,124
Total	59,090	168,012	154,312

14.6 IRRIGATION

Statistics on the irrigation of crops and pasture are collected every 3 years. Details obtained include area irrigated by type of crop, method of irrigation used and source of water. The latest available data relate to 1986-87.

In 1986-87, crops or pasture were irrigated on 7,280 establishments, or 28.6 per cent of all agricultural establishments in the State.

The irrigated area of crops (excluding pasture) in 1986-87 was 236,634 hectares, or 7.8 per cent of the State's total area under crop. In addition, there were 15,378 hectares of lucerne irrigated and 23,718 hectares of other sown and native pasture.

14.22 CROPS AND PASTURE: AREA IRRIGATED, QUEENSLAND, 1986-87

Particulars	Area irrigated	Total area	Proportion irrigated
	hectares	hectares	%
Grain sorghum	12,701	692,758	1.8
Other cereals	25,147	1,449,153	1.7
Sugar cane	106,255	354,863	29.9
Cotton	24,310	30,996	78.4
Vegetables	22,346	31,614	70.7
Fruit (incl. grapes)	11,654	28,684	40.6
Other crops	33,851	448,412	7.6
Total crops	236,264	3,036,480	7.8
Lucerne	15,378	n.a.	n.a.
Other pasture	23,718	n.a.	n.a.
Total	275,360	n.a.	n.a.

In 1986-87, the major source of water was underground supplies, which irrigated 123,000 hectares or 44.7 per cent of the total irrigated area in Queensland. Water from State irrigation schemes irrigated 69,250 hectares (or 25.2 per cent); rivers, creeks, lakes and other surface water sources irrigated 50,770 hectares (or 18.4 per cent) and farm dams irrigated 31,790 hectares (or 11.5 per cent). Only 550 hectares were irrigated from a town or country reticulated water supply.

14.23 CROPS AND PASTURE: METHOD OF IRRIGATION, QUEENSLAND, 1986-87 (hectares)

Particulars	Sprays	Furrows and flooding	Trickle (including micro-spray)	Multiple methods
	Grain sorghum	4,035	8,131		—	536
Other cereals	12,815	10,290	—	2,041
Sugar cane	44,791	52,092	175	9,197
Cotton	837	22,375	100	998
Vegetables	15,433	1,993	3,017	1,902
Fruit (incl. grapes)	4,917	186	5,679	872
Other crops	16,625	14,601	211	2,416
Total crops	99,453	109,667	9,182	17,962
Lucerne	14,082	211	—	1,086
Other pasture	16,291	4,213	—	3,214
Total	129,826	114,091	9,182	22,262

14.7 LIVESTOCK NUMBERS

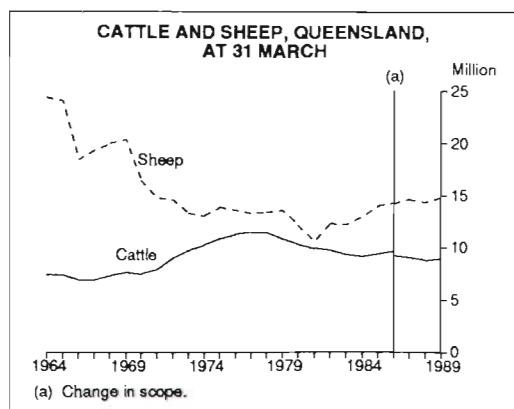
More than half of Queensland's agricultural establishments run livestock, with most of them

running either cattle or sheep or both. Of the 25,734 agricultural establishments operating in Queensland during 1988-89, 15,130 carried cattle for meat production (up 2.2 per cent when compared with the total for the previous year), 2,208 carried cattle for milk production (down 5.4 per cent), 3,125 carried sheep (up 2.3 per cent) and 1,670 carried pigs (down 4.6 per cent).

14.24 LIVESTOCK, QUEENSLAND, AT 31 MARCH ('000)

Description	1987	1988	1989
Meat cattle	8,675	8,504	8,682
Milk cattle	337	322	312
Sheep	14,627	14,367	14,880
Pigs	579	617	611
Goats	43	50	61
Horses	126	137	130

Source: Livestock and Livestock Products (7221.3).



14.7.1 Cattle

Queensland remains the major producer of meat cattle in Australia. At 31 March 1989, 44 per cent of all meat cattle were located on Queensland establishments.

Meat cattle numbers in Queensland showed annual increases ranging between 6 and 14 per cent in the early 1970s and reached a peak of 11.1 million in 1978. Meat cattle and calves numbers declined from this peak level to 8.8 million in 1984 and numbered 8.5 million at 31 March 1988. Numbers rose slightly in 1989 to 8.7 million.

Milk cattle numbers have been declining since the mid-1950s when numbers were four times as great.

Meat cattle are widely spread throughout the State although Fitzroy Statistical Division accounts for almost 20 per cent of the State total and Darling Downs and North-West Statistical Divisions account for a further 27 per cent. Most statistical divisions throughout the State experienced increases

in livestock numbers from 31 March 1988 to 31 March 1989. The largest increase for meat cattle occurred in the Moreton and Brisbane Statistical Divisions where numbers increased 14.2 per cent to 307,500 at 31 March 1989. The largest decrease occurred in the Far North Statistical Division where numbers fell 7.8 per cent to 550,000.

14.25 CATTLE NUMBERS, QUEENSLAND, AT 31 MARCH ('000)

Description	1987	1988	1989
<i>Meat cattle</i>			
Bulls	175	174	178
Bull calves for service	40	40	43
Cows and heifers	4,211	4,157	4,232
Calves and vealers	1,888	1,805	1,841
Other (spayed cows, bullocks etc.)	2,362	2,328	2,388
<i>Total for meat production</i>	<i>8,675</i>	<i>8,504</i>	<i>8,682</i>
<i>Milk cattle</i>			
Bulls	3	3	3
Bull calves for service	1	1	1
Cows, in milk and dry	215	207	202
House cows and heifers (on non-dairy establishments)	15	13	12
Heifers (1 year and over)	62	59	55
Heifer calves	42	39	39
<i>Total for milk production</i>	<i>337</i>	<i>322</i>	<i>312</i>
Total	9,011	8,825	8,994

Source: Livestock and Livestock Products (7221.3).

The total number of milk cattle in Queensland at 31 March 1989 was 311,800, 3 per cent less than in the previous year and a 13.9 per cent fall since March 1985. Milk cattle are mostly distributed along the eastern coastline south of Rockhampton, the eastern Darling Downs and on the Atherton Tableland.

14.26 REGIONAL DISTRIBUTION OF CATTLE, QUEENSLAND, AT 31 MARCH 1989 ('000)

Statistical division	Meat	Milk	Total
Moreton and Brisbane	307	109	417
Wide Bay-Burnett	726	62	787
Darling Downs	1,093	74	1,167
South-West	845	1	846
Fitzroy	1,672	14	1,686
Central-West	604	1	605
Mackay	886	10	897
Northern	775	1	776
Far North	550	40	590
North-West	1,223	—	1,223
Queensland	8,682	312	8,994

Source: Livestock and Livestock Products (7221.3).

During the last two decades the proportion of tropical straight breed cattle to total straight breed meat cattle has changed significantly. From 17 per cent at 31 March 1973, the figure has risen to 61

per cent at 31 March 1987 with approximately one-quarter of Queensland's meat cattle being tropical straight breeds, compared with only 9 per cent at 31 March 1973.

The most significant meat cattle straight breeds were Hereford (30 per cent), Brahman (27 per cent), Santa Gertrudis (14 per cent), Droughtmaster (10 per cent), Braford (9 per cent) and Shorthorn (7 per cent). In dairy cattle breeds, the most popular were Holstein-Friesian (66 per cent), Illawarra (20 per cent) and Jersey (10 per cent). Brahman/British was the most common type of cross breed cattle.

14.27 CATTLE BREEDS (a), QUEENSLAND, AT 31 MARCH 1987 ('000)

Breed particulars	Total cattle
Straight breeds	
Tropical breeds (meat)	
Braford	327
Brahman	1,011
Droughtmaster	379
Santa Gertrudis	513
Other	68
Total	2,298
British and European breeds (meat)	
Angus	24
Hereford (including polled)	1,113
Shorthorn (including polled)	246
Other	72
Total	1,455
Dairy breeds	
A.I.S.	54
Holstein-Friesian	178
Guernsey	7
Jersey	27
Other	3
Total	269
Other straight breeds (b)	11
Total straight breeds	4,033
Cross breeds	
Brahman/British	2,290
British/British	188
Other tropical/British	682
Tropical/tropical	275
Beef/dairy	65
Other (including unspecified)	1,463
Total cross breeds	4,964
Total	8,997

(a) Excluding house cows on non-dairy establishments. (b) Including recognised breeds too small numerically to tabulate separately and unspecified straight breed cattle.

Source: Cattle Breeds (7203.3).

14.7.2 Sheep

Sheep numbers increased by 3.6 per cent from 14.37 million in March 1988 to 14.88 million at 31 March 1989. Although sheep numbers in Queensland are still down on those of the mid-1950s to mid-1960s, there has been a trend over the past 8 years towards larger flock sizes with the number of sheep at 31 March 1989 being the highest recorded since 1970.

The main sheep belt is a broad strip running south-east and north-west through the centre of Queensland extending to the border of New South Wales but not reaching as far as the Gulf of Carpentaria.

Sheep numbers in the South-West Statistical Division, which accounts for over 40 per cent of the State total, increased by 3.4 per cent in 1988-89 when compared with the total for the previous year. Sheep numbers in the Central-West Statistical Division, which accounts for about one-third of the total number of sheep, increased by 1.4 per cent during the same period. The largest increase occurred in the Darling Downs Statistical Division, which rose 13.1 per cent to 2.5 million sheep at 31 March 1989.

14.28 SHEEP NUMBERS, QUEENSLAND, AT 31 MARCH ('000)

Description	1987	1988	1989
Rams	172	161	161
Ewes			
Breeding	5,705	5,182	5,243
Maiden	816	1,167	1,253
Other	360	296	305
Lambs and hoggets	2,783	2,733	2,896
Wethers	4,790	4,829	5,023
Total	14,627	14,367	14,880
Statistical division		Total sheep, 1989	
Moreton and Brisbane			3
Wide Bay-Burnett			2
Darling Downs			2,517
South-West			6,386
Fitzroy			23
Central-West			4,842
Mackay		}	3
Northern			
Far North			
North-West			1,105
Queensland			14,880

Source: Livestock and Livestock Products (7221.3).

14.7.3 Pigs

Pig raising is confined mostly to the Moreton, Wide Bay-Burnett, Darling Downs and Fitzroy Statistical Divisions. Pig numbers in the Darling Downs Statistical Division, which accounts for nearly 50 per cent of the State total, remained fairly constant between March 1988 and March 1989. Numbers in the Wide Bay-Burnett Statistical Division, which accounts for nearly 30 per cent of the State total, fell 7.4 per cent during the same period.

The two main breeds, with crosses between these two breeds, are Large White, about 60 per cent, and Landrace, about 30 per cent. Berkshire, Wessex Saddleback and Tamworth are other breeds, but in much smaller numbers. Pig numbers in Queensland have generally continued to rise since the mid-1970s. The total number at 31 March 1989

was 611,400, or 0.9 per cent less than the record level of the previous year but still 8.7 per cent higher than March 1985 and over 50 per cent more than March 1975.

14.29 PIG NUMBERS, QUEENSLAND, AT 31 MARCH

Description	1987	1988	1989
Boars	4,945	5,070	4,720
Breeding sows and gilts	75,401	77,742	75,132
All other	498,523	534,157	531,551
Total	578,869	616,969	611,403

Statistical division	Total pigs, 1989	
Moreton and Brisbane	59,560	
Wide Bay-Burnett	176,962	
Darling Downs	296,447	
South-West	8,169	
Fitzroy	44,001	
Central-West	86	
Mackay	4,375	
Northern	8,708	
Far North	12,974	
North-West	121	
Queensland	611,403	

Source: Livestock and Livestock Products (7221.3).

14.7.4 Goats

The goat industry, which has developed markedly in the last two decades, has a number of elements. Fibre production, which is the main activity in Queensland, has two components. Mohair is produced from Angora goats and cashmere, the fine undercoat, comes from the dual coated cashmere animal.

In recent years the demand for goats milk has increased and there has been an upsurge in organised production of milk for human consumption. Goats are also kept for meat production as a separate activity or as a by-product of rearing goats for other purposes. The use of fibre and meat goats for weed control is another developing aspect of the industry.



14.30 GOAT NUMBERS, QUEENSLAND, AT 31 MARCH

Description	1987	1988	1989
For fibre	37,721	43,100	55,272
For milk	811	1,564	1,638
Other	4,632	4,954	4,019
Total	43,164	49,618	60,929

14.8 LIVESTOCK SLAUGHTERINGS

Fewer cattle, calves and sheep were slaughtered in Queensland in 1988-89 than in 1987-88, but slaughterings of both pigs and lambs increased. In 1988-89, cattle and calf slaughterings decreased from the previous year by 13 per cent to 2,320,000 head and sheep and lamb slaughterings fell slightly to 1,594,000. Slaughterings of pigs continued their upward trend. The total of 1,157,000 pigs slaughtered in 1988-89 was 4 per cent above the figure for the preceding year and the highest level ever recorded.

14.31 LIVESTOCK SLAUGHTERINGS (a), QUEENSLAND ('000)

Description	1986-87	1987-88	1988-89
Cattle and calves	2,663	2,673	2,320
Sheep and lambs	1,542	1,610	1,594
Pigs	1,075	1,114	1,157

(a) In meatworks, slaughterhouses and on holdings; for human consumption only.

Source: Livestock Products — Meat (7204.3).

The Livestock and Meat Authority of Queensland is responsible for licensing all abattoirs, slaughterhouses, poultry slaughterhouses, knackers' yards and public meat markets in Queensland. At 1 July 1989, 40 abattoirs, 116 slaughterhouses, 40 poultry slaughterhouses, 9 knackers' yards and 57 public meat markets were licensed.

14.9 LIVESTOCK PRODUCTS

In Queensland, wool, livestock and poultry slaughterings, meat production, dairy production, egg production and beekeeping activities have all made important contributions to the economy.

14.9.1 Wool

During the year ended 31 March 1989, 65,120 tonnes of shorn wool were produced in Queensland. This represented a slight decrease compared with the 1987-88 production of 65,518 tonnes.

The wool industry is largely conducted on grazing properties in the natural grasslands of the

south-west, central-west and north-west. Only a small portion of the sheep numbers are on agricultural farms, these being nearly all on the Darling Downs.

14.32 WOOL PRODUCTION (a), QUEENSLAND

Particulars	Unit	1987	1988	1989
Sheep				
Number shorn	'000	12,595	12,956	12,719
Wool produced (b)	tonnes	59,634	61,692	61,220
Average cut per head	kg	4.73	4.76	4.81
Lambs				
Number shorn	'000	1,813	1,930	1,959
Wool produced	tonnes	3,557	3,826	3,900
Average cut per head	kg	1.96	1.98	1.99
Total				
Number shorn	'000	14,408	14,886	14,678
Wool produced	tonnes	63,192	65,518	65,120
Average cut per head	kg	4.39	4.40	4.44

(a) Year ended 31 March. Greasy basis. (b) Including crutchings.

14.9.2 Dairy Products

The dairying industry is situated mainly on coastal pastureland stretching along the east coast from the border of New South Wales northwards to Rockhampton, on the Darling Downs and on the Atherton Tableland west of Cairns.

Queensland's 1988-89 whole milk production of 627 million litres was a slight increase from the figure of the previous year.

Sales of market milk increased by 3.3 per cent to 310 million litres. This was achieved by the Queensland Milk Board guaranteeing supply of a fresh quality product at reasonable prices and the continued promotion of market milk.

14.33 DAIRYING, QUEENSLAND

Particulars	Unit	1986-87	1987-88	1988-89
Total milk cattle (a)	'000	322	308	299
Whole milk production (b)	million litres	604	614	627
Establishments with milk cattle (a)	No.	2,440	2,334	2,208
Butter produced in factories (b)	'000 kg	3,703	3,487	3,687
Cheese produced in factories (b)	'000 kg	13,946	15,198	14,434

(a) At 31 March. Excluding establishments with house cows only. (b) Source: Australian Dairy Corporation.

Milk used for manufacturing purposes in Queensland increased slightly in 1988-89 to 317 million litres. Cheese production fell 5 per cent while butter production rose 6 per cent over the figure for the previous year.

14.9.3 Meat

Slaughterings of cattle and sheep in Queensland during 1988-89 were affected by a reduced turnoff as graziers engaged in herd rebuilding. While beef, veal and mutton production decreased in line with slaughtering trends, lamb production increased by 8 per cent. Pigmeat production continued to increase steadily.

14.34 MEAT PRODUCTION, QUEENSLAND ('000 tonnes)

Type of meat	1986-87	1987-88	1988-89
Beef and veal	592.2	608.9	566.6
Mutton and lamb	27.0	28.0	28.5
Pigmeats (a)	66.4	69.5	71.7
Total	685.6	706.3	666.8

(a) Including quantities used to produce bacon and ham. Source: Livestock Products — Meat (7204.3).

14.9.4 Poultry

Since the 1940s there has been a continuing pattern of development and expansion into highly specialised segments within the poultry industry, namely egg production, chicken hatching and broiler production.

From the early 1960s the broiler industry in Queensland developed from virtually nothing to a peak production in 1988-89 of 46.9 million chickens with an estimated dressed weight of 58.2 million kilograms. This represents a slight increase over the 1987-88 weight. The rapid growth of the industry has been achieved by the integration of breeding, hatching, feed milling, growing, processing and marketing operations. Broiler processing firms have encouraged growers to establish farms within a 50 kilometre radius of the processing plants for economy in servicing and transport of chickens and feed. This policy has led to a concentration of growers in areas close to Brisbane and the provincial cities.

14.35 EGG PRODUCTION AND POULTRY SLAUGHTERED, QUEENSLAND

Particulars	Unit	1986-87	1987-88	1988-89
Egg production				
Eggs	'000 doz	30,950	32,740	33,846
Poultry slaughtered				
Chickens				
Number	'000	46,375	46,340	46,914
Dressed weight	'000 kg	56,245	56,769	58,214
Other fowls				
Number	'000	1,145	1,651	2,149
Dressed weight	'000 kg	1,761	2,532	3,242
Ducks and drakes				
Number	'000	14	12	7
Dressed weight	'000 kg	25	23	14
Turkeys				
Number	'000	6	9	7
Dressed weight	'000 kg	33	42	32
Total dressed weight	'000 kg	58,064	59,366	61,502

Source: Livestock and Livestock Products (721.3).

Egg production in Queensland reached a new peak of 34 million dozen in 1988-89, an increase of 3 per cent from 1987-88. Effective matching of egg supply with demand has been achieved by improved production forecasting and applying the seasonal hen quota adjustment system.

14.10 AGRICULTURAL FINANCE

In response to an increasing demand from organisations for regular financial data for the agricultural sector, the ABS introduced an annual *Agricultural Finance Survey from 1986-87*. The survey of enterprises predominantly engaged in agricultural activity was previously conducted in 1980-81 and was reintroduced to provide annual financial statistics on a consistent basis across all agricultural industries. The statistics from this survey are required for purposes such as the development of policy options relating to industry assistance and the analysis of commodity pricing.

The value of turnover for Australian agriculture in 1987-88 was \$18,708.0m, an increase of 16.2 per cent over the 1986-87 figure of \$16,094.2m. For 1987-88, the value of turnover for Queensland had increased by 18.3 per cent to \$3,944.9m (from \$3,334.5m in 1986-87).

Queensland agricultural businesses in 1987-88 were notable in having the highest average net worth (assets less indebtedness) of any State at \$890,700, an increase from \$789,500 in 1986-87. This is an important measure of the unencumbered value of assets, as the level of indebtedness continues to be an important factor in Australian agriculture.

The most important agricultural industries in Queensland are meat cattle and sugar.

Meat cattle enterprises in Queensland numbered 5,373, with a turnover of \$932.2m for 1987-88. This represented over half of the total Australian turnover for meat cattle of \$1,819.9m for that year. The net worth of beef cattle enterprises in Queensland was \$7,236.4m in 1987-88, compared to \$5,807.6m for the previous year. The Australian figure for net worth in the beef cattle industry for 1987-88 was \$14,543.5m.

Queensland agriculture accounts for almost all of Australia's sugar. The number of enterprises in Australia in the sugar industry in 1987-88 was 4,972. For 1987-88 there were 4,616 enterprises in Queensland in the sugar industry. This represented a decrease of 208 or 4.3 per cent of enterprises from the 1986-87 total of 4,824.

Turnover for sugar in Queensland increased from \$564.5m in 1986-87 to \$606.2m for 1987-88. The net worth of the sugar enterprises also increased from \$2,264.4m in 1986-87 to \$2,332.8m for 1987-88.

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Livestock Products — Meat (7204.3), monthly

Livestock and Livestock Products (7221.3), annual

Crops and Pastures (7321.3), annual

Fruit (7322.3), annual

14.36 SELECTED FINANCIAL STATISTICS FOR AGRICULTURAL ENTERPRISES, QUEENSLAND AND AUSTRALIA

Particulars	Queensland		Australia	
	1986-87	1987-88	1986-87	1987-88
	\$m	\$m	\$m	\$m
Sales from crops	1,445.2	1,638.3	6,350.1	6,507.7
Sales from livestock	1,201.4	1,395.8	4,447.2	5,052.1
Sales from livestock products	486.4	644.7	4,261.5	6,024.1
Turnover	3,334.5	3,944.9	6,094.2	18,708.0
Purchases and selected expenses	1,745.3	2,179.0	8,731.6	9,852.5
Value added (a)	2,081.0	2,144.4	8,899.4	10,187.0
Adjusted value added	1,883.4	1,923.5	7,886.1	9,108.5
Gross operating surplus	1,572.7	1,582.3	6,508.6	7,511.1
Total interest paid	328.3	314.8	1,581.0	1,473.6
Cash operating surplus (b)	811.6	952.1	3,678.9	4,999.9
Total net capital expenditure	300.8	293.2	1,212.6	1,566.1
Total value of assets	20,246.2	23,652.5	87,584.8	103,863.0
Gross indebtedness	2,438.5	2,850.3	11,152.4	11,425.6
Net indebtedness	1,495.7	1,723.5	6,937.0	6,633.4
Net worth	17,807.7	20,802.2	76,432.3	92,437.4
Number of enterprises	22,557	23,412	113,764	114,315

(a) Including an estimate for the value of the increase in livestock. (b) Excluding an estimate for the value of the increase in livestock.

Agricultural Land Use and Selected Inputs (7411.3), annual

Value of Agricultural Commodities Produced (7501.3), annual

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Cereal Grains: Estimates of Area Sown (7312.0), annual

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Chapter 15

MINING

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Chapter 15

MINING

The mining industry has for many years been vital to Queensland's economic growth and prosperity. The industry is currently the State's major export income earner, a large investor and a significant employer. Mining has further major economic impact in supporting minerals processing, smelting and refining industries, transport and related industries, and a wide range of service industries.

Dominated by large-scale expansion in black coal production capacity and output, the value of annual Queensland mineral production grew rapidly throughout the 1980s to reach \$4,192m in 1985-86. With the coal industry in particular beset by low prices, the value of Queensland mineral production decreased to \$4,107m in 1987-88, but recovered to \$4,612m in 1988-89. The improved 1988-89 result reflected increased coal production, a continuation of the surge in gold production during the 1980s and buoyant copper, zinc and mineral sands prices.

The most important metallic mineral-bearing region of Queensland is in the north-west where major deposits are contained in the Precambrian rocks occurring in the area. The Mount Isa silver-lead-zinc and copper mine, the State's largest producer, is located in this region.

Mineral resources are extensive also in the northern and eastern areas of the State, and a wide range of minerals, including gold, nickel and tin, is produced in these areas. Extensive deposits of bauxite occur at Weipa on Cape York Peninsula in the north of the State, and the coastal sand accumulations of southern Queensland contain significant quantities of mineral sands.

The largest Queensland coal deposits are located in the Bowen Basin which extends for about 500

kilometres south from Collinsville. These deposits have been the major source of the dramatic expansion of Queensland coal mining over the past 20 years. Other coal deposits currently being exploited include the longstanding Ipswich coal fields and the Tarong, Maryborough and Callide Basins. Extensive coal deposits in the Surat-Moreton Basin remain unexploited.

Significant oil and natural gas reserves exist in far south-west Queensland (Eromanga-Cooper Basin) and the Roma-Surat region (Surat-Bowen Basin), and gas reserves in the Rolleston region (Bowen Basin).

15.1 MINERAL PRODUCTION

The total value, at mine, of Queensland mineral production in 1988-89 was \$4,612m, an increase of 6 per cent from the 1986-87 figure and 12 per cent from the 1987-88 figure.

Major components of the total 1988-89 production value were black coal \$2,381m (52 per cent), gold bullion and concentrate \$530m (11 per cent), copper concentrate \$526m (11 per cent), bauxite \$206m (4 per cent), zinc concentrate and middlings \$193m (4 per cent), lead concentrate \$161m (3 per cent), mineral sands concentrates \$122m (3 per cent), oil and gas \$169m (4 per cent) and construction materials \$229m (5 per cent).

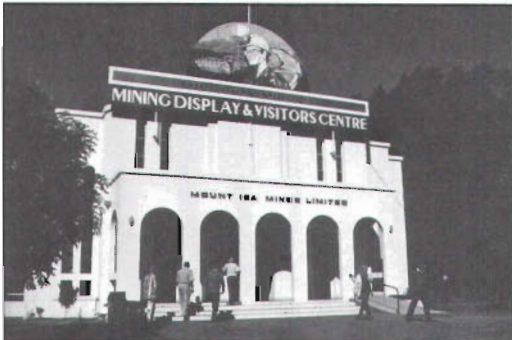


Photo: Sharyn K. Marken

**15.1 VALUE, AT MINE, OF MINERALS PRODUCED,
QUEENSLAND AND AUSTRALIA
(\$m)**

Mineral group	Queensland			Australia (a)
	1986-87	1987-88	1988-89	1987-88
Metallic minerals	(b) 1,106.7	1,421.0	1,756.0	(c) 7,834.3
Coal	2,672.6	2,145.0	2,380.5	(d) 4,842.0
Oil and gas	331.6	270.0	169.1	4,138.7
Construction materials	175.9	200.2	228.9	(e) 896.9
Other non-metallic minerals	58.5	70.4	78.0	(f) 712.8
Total	(b) 4,345.2	4,106.5	4,612.4	n.p.

(a) Excluding Australian Capital Territory. (b) Including Mount Isa Mines Limited production for 54 weeks. (c) Including coal for Tasmania. (d) Excluding coal for Tasmania. (e) Excluding production for Western Australia. (f) Excluding production for Northern Territory.

Sources: Mineral Production (8405.0).
Mineral Production (8402.3).

15.1.1 Metallic Minerals

The value of metallic minerals produced in Queensland in 1988-89 was \$1,756m, an increase of 24 per cent over the previous year. This reflected continuing increases in prices for base metals other than lead, significant expansion of Queensland's gold mining industry, increased output for bauxite and aluminium, and continuing buoyancy in mineral sands markets.

Base metal and aluminium prices which have generally been in decline or depressed after highs around 1980 have trended upward since 1986, with increased demand and decreased world stock levels for most metals.

Copper, Lead, Silver and Zinc

Mount Isa Mines Limited is the world's biggest single mine producer of lead and silver and one of the ten biggest producers of copper and zinc.

Quantities of lead concentrate and zinc concentrates produced by the company declined in 1988-89, but copper concentrate production was increased and significant price increases occurred for copper and zinc. The parent company, MIM Holdings Limited, has reported significant benefits from its technological research and development initiatives. The Isasmelt process, developed by MIM in conjunction with the CSIRO, has increased production efficiency in copper and lead smelting; while the world patented Isaprocess, using stainless steel rather than copper cathodes for copper refining, has been sold extensively, under licence, to other refiners around the world.

Commissioning in June 1989 of a new crusher station at a depth of one kilometre below ground level, marked the completion of a \$38m ore handling development program for the Southern 1100 copper ore body which will allow Mount Isa Mines Limited to maintain copper production at 170,000 tonnes a year.



Part of the Mount Isa Mine complex

Photo: Sharyn K. Marken

To maintain current levels of copper production from its Mount Isa mine in the mid-1990s, Mount Isa Mines Limited is facing major technological challenges to develop the deep 3000 and 3500 ore bodies. Mining at such great depths — 1,800 metres below the surface at the deepest point — will present problems in ground conditions, rock mechanics, ground support, refrigerated air-conditioning and electrically driven mine equipment.

15.2 PRINCIPAL CONTENTS (a) OF METALLIC MINERALS PRODUCED, QUEENSLAND

Metal	Unit	1986-87	1987-88	1988-89
Cadmium	tonnes	(b) 811	750	716
Cobalt	tonnes	2,528	2,105	1,912
Copper	'000 tonnes	(b) 183	158	181
Gold	kilograms	13,107	19,211	27,360
Lead	'000 tonnes	(b) 195	202	190
Nickel	'000 tonnes	28	29	25
Silver	tonnes	(b) 490	525	495
Tin	tonnes	700	386	168
Titanium dioxide	'000 tonnes	165	214	236
Tungstic oxide	(c)	16,580	—	—
Zinc	'000 tonnes	(b) 265	242	232
Zirconium dioxide	'000 tonnes	60	52	60

(a) Content of mine output before smelting. (b) Including Mount Isa Mines Limited production for 54 weeks. (c) Units of 10 kilograms.

Source: Mineral Production (8402.3).

In response to rising zinc prices during 1988 and 1989, MIM Holdings Limited is reconsidering a proposal to establish a \$500m zinc refinery at Townsville to process its zinc concentrate which is currently sold for refining overseas. The zinc refinery would be located on land adjacent to the existing MIM Townsville copper refinery.

As part of its long-term lead and zinc production strategy, Mount Isa Mines Limited brought the Hilton silver-lead-zinc mine into large-scale production during 1989-90. The Hilton mine has richer lead and zinc deposits than the remaining ore at Mount Isa and will enable planned production

15.3 PRODUCTION OF PRINCIPAL METALLIC MINERALS, QUEENSLAND

<i>Mineral</i>	<i>Unit</i>	<i>1986-87</i>	<i>1987-88</i>	<i>1988-89</i>
Bauxite				
Beneficiated	'000 tonnes	7,718	8,274	9,329
Calcined	'000 tonnes	174	175	219
Copper concentrate	'000 tonnes	(a) 670	601	671
Gold bullion (including alluvial gold)	kilograms	23,287	36,168	46,793
Lead concentrate	'000 tonnes	(a) 344	360	343
Mineral sands				
Ilmenite concentrate				
Run-of-mine	'000 tonnes	189	48	19
Upgraded	'000 tonnes	122	240	262
Rutile concentrate	'000 tonnes	108	96	108
Zircon concentrate	'000 tonnes	90	79	90
Nickel ore	'000 tonnes	2,133	2,039	1,921
Tin concentrate	tonnes	1,271	664	254
Tungsten concentrates				
Scheelite concentrate	tonnes	19	—	—
Wolfram concentrate	tonnes	229	—	—
Zinc concentrate	'000 tonnes	(a) 414	357	339
Zinc-lead middlings	'000 tonnes	(a) 101	109	117

(a) Comprising Mount Isa Mines Limited production for 54 weeks.

Source: Mineral Production (8402.3).

increases of 10 per cent for lead and 25 per cent for zinc. A \$25m concentrator has been built at the Hilton mine site which is 20 kilometres from Mount Isa. An Isasmelt lead smelter, costing \$65m, will be constructed at Mount Isa to enable increased tonnages to be smelted and to relieve production pressure on the existing older technology smelter.

In another development, Pancontinental Mining Limited has gone ahead with a \$75m base metals joint venture project in North Queensland. The project comprises the Thalanga lead, zinc, copper, silver and gold deposit 60 kilometres west of Charters Towers with full-scale production scheduled for 1990. Pancontinental has deferred development, however, of the high grade Lady Loretta lead, zinc and silver prospect, 130 kilometres northwest of Mount Isa, while alternatives to trucking the ore to Thalanga for treatment are considered.

Gold

Gold bullion, alluvial gold and gold concentrate production in Queensland in 1988-89 had a gold content of 27,360 kilograms and accounted for 11 per cent of the total value of Queensland mineral production for the year. The 1988-89 production was 42 per cent higher than the 1987-88 gold content figure of 19,211 kilograms and eclipsed the previous record annual Queensland gold output of 21 tonnes established in 1900. This major expansion of the Queensland gold mining industry reflected the trend in other gold producing States in Australia and has resulted from buoyant world gold prices (enhanced by a relatively weak Australian dollar), new technology for mining and gold recovery and, until 1991, a favoured taxation status.

The seven major Queensland gold mines in order of 1988-89 output were Kidston, Mount Leyshon,

Selwyn/Starra, Red Dome, Wirralie, Mount Morgan and Pajingo which together accounted for 80 per cent of 1988-89 Queensland contained gold output.

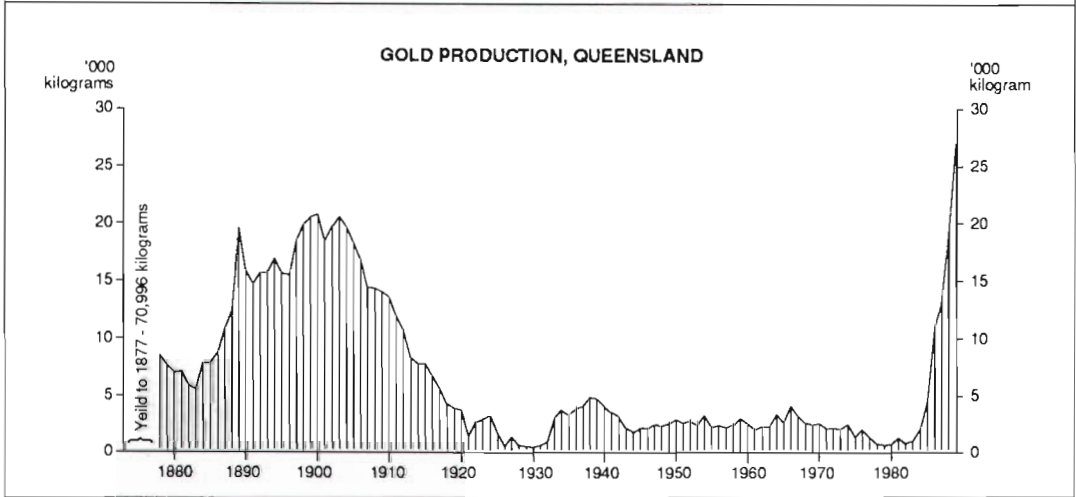
Although the average world gold price for 1988-89 at \$A497 an ounce was 21 per cent below the 1987-88 average, Queensland gold production is forecast to increase through to 1990-91 as producers take advantage of the pre-1991 corporate tax exemption on gold and the generally favourable margin between operating costs and prices for Australian gold production.

Bauxite

Queensland has the only fully integrated aluminium industry in Australia with a bauxite mine at Weipa, on the west coast of Cape York Peninsula, an alumina refinery at Gladstone and an aluminium smelter at Boyne Island, near Gladstone. Weipa is one of the world's largest bauxite mining and shipping operations.

Production of beneficiated bauxite from Weipa in 1988-89 increased by 13 per cent to 9.3m tonnes and calcined bauxite by 25 per cent to 219,000 tonnes. Almost 70 per cent of the beneficiated bauxite production from Weipa was sent to the Gladstone alumina refinery which operated at full capacity to produce 2.9m tonnes of alumina. The Boyne Island smelter produced 228,000 tonnes of aluminium in two pot lines during 1988-89.

Comalco Aluminium Limited is currently undertaking a feasibility study for an alumina refinery at Weipa to produce up to a million tonnes of alumina a year. Together with its co-owners in Boyne Smelters Limited, Comalco is also considering a \$400m addition of a third pot line to the Boyne Island aluminium smelter, contingent on the



Queensland Government selling Gladstone power station to Comalco and its partners.

World aluminium prices which have increased strongly since 1986, decreased by 6 per cent to an average \$A2,885 a tonne during 1988-89. Further easing of prices is expected due to production capacity expansions and subdued demand partly attributable to substitution.

Mineral Sands

The value of mineral sand concentrates produced in Queensland in 1988-89 increased by 37 per cent to \$122m compared with the previous year, reflecting increases in production quantities, modest price increases for ilmenite and rutile concentrates and a large price increase for zircon concentrate.

Compared with 1987-88, production quantities of concentrates increased by:

- 14 per cent to 90,000 tonnes for zircon;
- 13 per cent to 108,000 tonnes for rutile and
- 9 per cent to 262,000 tonnes for upgraded ilmenite.

Production values increased by:

- 80 per cent to \$46m for zircon concentrate;
- 22 per cent to \$64m for rutile concentrate and
- 16 per cent to \$10m for upgraded ilmenite concentrate.

The majority of Queensland mineral sands output is produced by Consolidated Rutile Limited from floating dredge operations at three locations on North Stradbroke Island. The company is currently considering prospects for further processing of its output such as production of synthetic rutile from ilmenite concentrate and increased production of zircon flour.

Other mineral sands prospects are being investigated. Exploration at Byfield, north of Rockhampton, has identified 2,400 million tonnes of heavy mineral sands which could support a 500,000 tonnes a year ilmenite, rutile and zircon mining operation over 25 years. At Rocky Point (previously Agnes Waters), north of Bundaberg, a feasibility study for mining of a 220 million tonne heavy mineral sand reserve is under way.

Nickel

Production of nickel ore from the Greenvale mine north-west of Townsville decreased by 6 per cent from the previous year to 1.9 million tonnes in 1988-89 but, with high world nickel prices, the value of the ore produced during the year increased by 8 per cent to \$13m.

Proposed major expansion over 2 years of the processing capacity of the Yabulu nickel-cobalt refinery near Townsville has been suspended pending a decision by the Great Barrier Reef Marine Park Authority on an application for approval to construct a materials handling pier

extending 1.35 kilometres into Halifax Bay, north of Townsville. With ore reserves of the Greenvale nickel mine approaching exhaustion in 1992, expansion plans for the refinery are based on importing nickel ore from New Caledonia and Indonesia to be offloaded at the proposed Halifax Bay facility and transported by conveyor belt to the refinery.

While the refinery operator is already importing nickel ore through Townsville harbour and rail-ing it to Yabulu, the company maintains that this option is prohibitively expensive compared with its Halifax Bay proposal. The company further claims that upgrading the port of Townsville to the required capacity would cost \$195m compared with a \$150m outlay for the Halifax Bay facility.

The Yabulu refinery has been valued at \$1,300m, provides 900 jobs and, as a value added manufacturing industry, generated export earnings of \$360m in 1988-89.

Tin

The decline in Queensland tin mining operations, following the collapse of the international tin market in October 1985, continued during 1988-89. Remaining producers either continued to scale down or ceased mining operations. Tin concentrate production fell to only 254 tonnes in 1988-89 compared with a production of 3,390 tonnes in 1984-85 prior to the market collapse. World tin prices which trended upwards in 1988-89 have again weakened in 1989-90 dashing expectations that economic mine production might resume.

15.1.2 Fuel Minerals

Queensland's fuel mineral resources include vast reserves of black coal, extensive natural gas reserves, sufficient to meet foreseeable domestic demand in the medium term, and significant but limited crude oil reserves.

15.4 PRODUCTION OF FUEL MINERALS, QUEENSLAND

Mineral	Unit	1986-87	1987-88	1988-89
Black coal, saleable (a)				
Open-cut	'000 tonnes	64,627	62,451	(b) 70,107
Underground	'000 tonnes	4,193	3,369	(b) 4,011
Total	'000 tonnes	68,820	65,819	74,118
Crude oil	megalitres	1,799	1,612	1,518
Natural gas condensate	megalitres	70	73	65
Natural gas	gigalitres	546	620	600
Liquefied petroleum gases (c)				
Propane	megalitres	52	64	61
Butane	megalitres	33	40	38

(a) Predominantly comprising washed coal but including some saleable raw coal. (b) Production for 53 weeks ending 1 July 1989. (c) Extracted from natural gas; excluding refinery output.

Sources: Mineral Production (8402.3).
Queensland Coal Board.

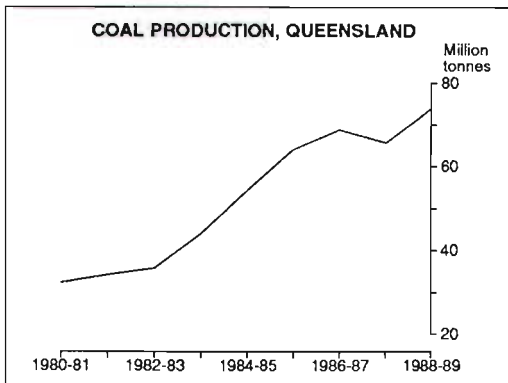
Coal

Black coal is the most important commodity in economic terms in the Queensland mining industry and the State's major export item. In 1988-89, however, it accounted for only 52 per cent of the value, at mine, of total Queensland mineral production, compared with 62 per cent in 1986-87 and 64 per cent in 1985-86.

After a period of rapid growth in output in the 1980s, Queensland's saleable black coal production declined by 4.4 per cent to 65.8 million tonnes in 1987-88 compared with 68.8 million tonnes in 1986-87, but surged to a record 74.1 million tonnes in 1988-89. The value, at mine, of Queensland coal production fell by a massive 20 per cent to \$2,100m in 1987-88 but recovered slightly in 1988-89 to \$2,381m.

The fall in coal production value and in its proportion of the value of total Queensland mineral production in 1987-88 and 1988-89 reflected severely depressed coal price levels. A strengthening Australian dollar relative to the U.S. dollar, in which most international sales are made, exacerbated the situation for Australian producers up until the end of 1988.

Despite the significant increase in production, total overseas exports of Queensland coal increased by only 1 per cent to 59.0 million tonnes in 1988-89 compared with 58.4 million tonnes in 1987-88. The availability of coal for export during 1988-89 was limited by erosion of the coal stock base during the previous year. Japan took almost half of Queensland's coal exports with the balance sold to 27 other countries. Compared with 1987-88 figures, coking coal exports increased by 1.9 per cent to 40.1 million tonnes and thermal (steaming) coal exports decreased by 0.8 per cent to 18.9 million tonnes in 1988-89.



Domestic Queensland coal sales for electricity generation and various industrial uses, including minerals processing, comprised 13.0 million tonnes in 1988-89 compared with 12.2 million tonnes in 1987-88. Interstate coal exports in 1988-89 comprised 1.1 million tonnes.

To counter low coal prices and domestic cost pressures, the coal mining industry has sought to maximise production and sales tonnages in order to minimise unit costs. Dramatic increases in productivity have been achieved through capital expenditure on more productive equipment. Since late 1988, radical changes to coal mining work practices, as arbitrated on 8 September 1988 by the Coal Industry Tribunal, have gradually been implemented. Queensland Coal Board statistics on output per man-shift worked show an 8.7 per cent increase to 29.40 tonnes in 1988-89 compared with 27.05 tonnes in 1987-88.

In spite of the depressed state of the industry, coal mine development initiatives during 1988-89 included:

- a longwall installation at Cook Colliery near Blackwater;
- major expansion of the Goonyella mine near Moranbah;
- development of a second longwall mine at the Southern Colliery at German Creek;
- a major expansion project at Blair Athol mine and
- the potential for the Dawson Valley semi-anthracite coal mine near Baralaba to be brought into production, contingent on export contracts being obtained.

Other coal deposits for which feasibility studies are continuing include Clermont (previously Wolfgang), Ensham and Gordonstone near Emerald in Central Queensland and North Goonyella near Moranbah.

15.5 COAL EXPORT PRICE INDEX (a), AUSTRALIA

Period	Index No.	Percentage change from previous year
1974-75	100	..
1975-76	152	+ 52.0
1976-77	164	+ 7.9
1977-78	176	+ 7.3
1978-79	178	+ 1.1
1979-80	180	+ 1.1
1980-81	189	+ 5.0
1981-82	231	+ 22.2
1982-83	270	+ 16.9
1983-84	251	- 7.0
1984-85	273	+ 8.8
1985-86	299	+ 9.5
1986-87	295	- 1.3
1987-88	243	- 17.6
1988-89	239	- 1.6

(a) Based on f.o.b. prices expressed in Australian currency.

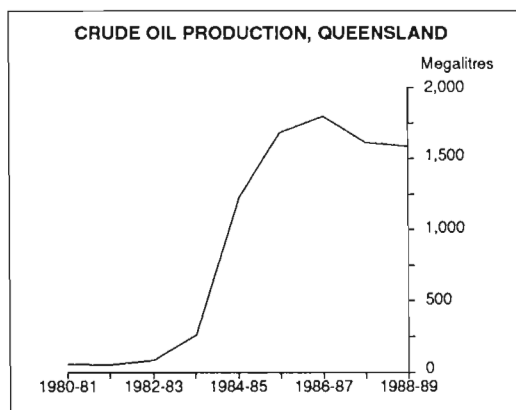
Source: Export Price Index (6405.0).

Crude Oil and Condensate

Oil production in Queensland, which currently provides one-quarter of the State's requirements

for finished petroleum products, has risen dramatically since 1983-84 with the development of new oilfields in south-west Queensland. This production increase has been facilitated by the completion, in March 1984, of an underground oil pipeline from the Jackson oilfield in south-west Queensland to Moonie, connecting with the previously constructed Moonie to Brisbane pipeline.

The production of crude oil and natural gas condensate in Queensland in 1988-89 was 1,583 megalitres, a decrease of 6.0 per cent from the previous year but more than five times the production quantity in 1983-84. The value, at well, of the 1988-89 production at \$121m was 45 per cent less than for the previous year and reflected the continuing deterioration in world oil prices compounded by a strengthening Australian dollar for much of the year and substantial increases in pipeline tariffs.



Natural Gas and Liquefied Petroleum Gas

All natural gas produced for sale in Queensland up to 1988-89 has come from the Roma-Surat district gas fields in the Surat-Bowen Basin. It is piped to the Wallumbilla junction of the Roma to Brisbane pipeline for pumping and reticulation to industrial, commercial and domestic consumers in Roma, Dalby, Toowoomba, Ipswich and Brisbane. Limited amounts of liquefied petroleum gas are extracted from the natural gas stream in one plant at the Kincora gas field and another plant at Wallumbilla pipeline junction.

Natural gas production in Queensland decreased by 3.2 per cent to 600 gegalitres in 1988-89 compared with 620 gegalitres in 1987-88 and the production value fell by 2.1 per cent to \$39m.

Recent years have seen dramatic developments in Queensland for the future exploitation of natural gas as an energy source.

The Queensland Government aims to sponsor the development of a State-wide strategic natural gas pipeline grid to promote industrial growth and, in

GAS RESERVES

Queensland's gas reserves are located in the Surat, Bowen, Adavale and Cooper Basins.

The Surat and Bowen Basin reserves have been commercially exploited since the late 1960s and allowed the construction of the Roma to Brisbane gas pipeline in 1969. Natural gas reserves in these basins are estimated at 183 petajoules.

The success in discovering commercial gas fields near Roma led to exploration northward and the discovery in the early 1960s of significant gas reserves in the Denison Trough in the region between Injune and Springsure. These reserves are estimated at 160 petajoules.

In 1964 gas was discovered in the Adavale Basin at Gilmore and subsequent drilling indicated gas reserves of about 22 petajoules.

In 1969 gas was discovered in far south-western Queensland in the Cooper Basin. Exploration has revealed that more than half of the State's identified gas reserves occur in this remote area. Natural gas reserves in the Cooper Basin are estimated at 1,140 petajoules.

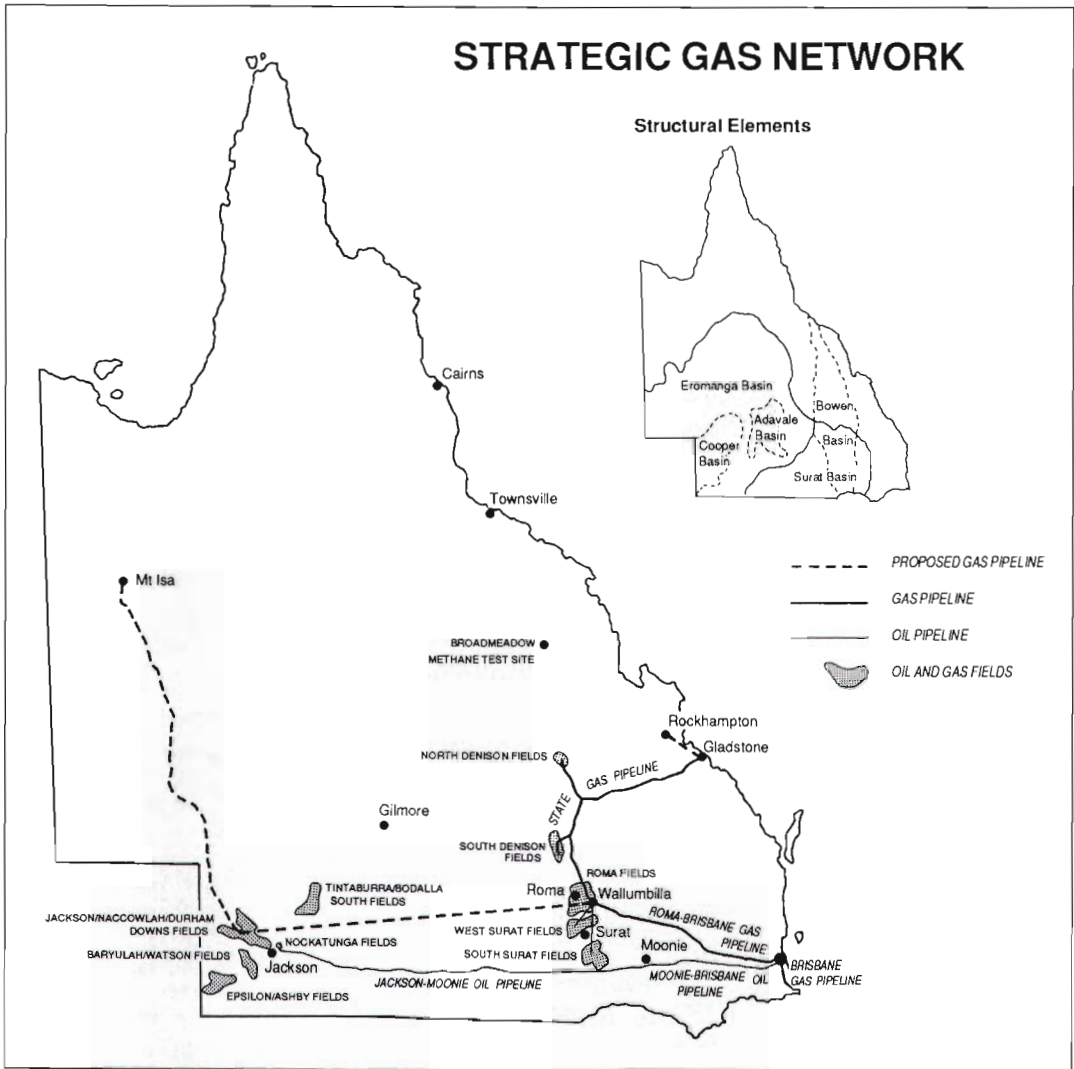
As well as these identified reserves, Queensland is believed to still have enormous resources of natural gas which lie undiscovered in established gas producing regions and also in coal beds.

Huge resources totalling more than 150,000 petajoules of methane, some of which may be recoverable in the future, are believed to exist in coal beds in the Bowen Basin.

turn, to provide for growth of market opportunities for gas exploration and production companies.

Construction of the \$100m (530 kilometre) State Gas Pipeline began in March 1989 to link the Surat Basin (Roma) and Denison Trough (near Westgrove and Rolleston) gas fields to Gladstone, passing through the Calliope industrial estate north of Gladstone. In June 1990, the first natural gas deliveries flowed through the new Wallumbilla to Gladstone State Gas Pipeline to supply the Gladstone Alumina Limited refinery, which will use 13 petajoules of gas a year, and the ICI sodium cyanide manufacturing plant in Gladstone, which has contracted to buy about 1 petajoule of gas a year. The pipeline is designed with a free flow capacity of approximately 27 petajoules but compression could double its capacity. Other companies have shown renewed interest in industrial development in the Gladstone area as a result of the State Gas Pipeline.

In February 1990, the Queensland Government approved a \$34m extension of its Wallumbilla to



Gladstone natural gas pipeline to Rockhampton and Yaamba to the north. The extension should facilitate a quick start for magnesite mining and processing operations proposed by Pancontinental Mining Limited at Kunwarara and Peabody Australia Limited at Yaamba. Construction of the pipeline extension is scheduled to commence in September 1990 with the pipeline to be operational by mid-1991.

In December 1988, MIM Holdings Limited called for expressions of interest from natural gas companies in bidding to supply gas as a power source for a sixth generator unit to be constructed at its Mica Creek power station near Mount Isa. Natural gas supply proposals are being compared with the cost of continuing coal usage for electricity generation. Although neither has given MIM firm costings, both the Queensland and Northern

Territory Governments have lobbied MIM to switch to natural gas. The Queensland Government has proposed a pipeline from the Jackson field in far south-west Queensland to Mount Isa, while the Northern Territory proposes running a spurline to Mount Isa from the Amadeus Basin to Darwin pipeline. Another interested party is Elders Resources NZFP Limited which, with its joint venture partner, Mitsubishi Gas Chemical Company Inc., has been invited to tender for supply of its Bowen Basin methane gas by pipeline to Mount Isa.

Irrespective of the MIM issue, the Bowen Basin coal bed methane reserves being explored by Elders and Mitsubishi could be of major significance, if recoverable, for both the domestic and export markets as an energy source or for production of methanol and other natural gas-based chemicals.

In other oil and gas industry developments:

- The second stage is due for completion in June 1990 of the progressive looping project to duplicate the Roma to Brisbane natural gas pipeline thereby meeting growth in natural gas demand in south-east Queensland. Approximately 140 kilometres of the 440 kilometre pipeline have now been duplicated.
- Allgas Energy Limited has been granted a franchise to reticulate natural gas to the Gold Coast and adjacent areas. Allgas has undertaken to extend its reticulation system, which previously reached south to Beenleigh, to the New South Wales border by 1996.
- In December 1988, the Queensland Government approved the sale, over 10 years, of 300 petajoules of natural gas to the South Australian market from the Cooper Basin deposits in south-west Queensland. The agreement was subject to a number of requirements which would ensure an adequate quantity of gas was retained for Queensland use in the future.

15.1.3 Construction Materials and Other Non-metallic Minerals

Construction Materials

Production of construction materials — sand, gravel, crushed and broken stone, dimension stone (viz. shaped marble, sandstone etc. slabs), fill etc. — caters almost exclusively to the domestic market and, to some extent, is a reflection of domestic economic conditions.

15.6 PRODUCTION OF CONSTRUCTION MATERIALS, QUEENSLAND ('000 tonnes)

Mineral	1986-87	1987-88	1988-89
Sand	6,138	7,029	6,970
Gravel	2,972	3,311	4,247
Crushed and broken stone	20,679	21,413	22,724
Other construction materials (including dimension stone)	4,149	4,446	5,435

Sources: Mineral Production (8402.3).
Sand, Gravel and Quarry Production (8403.3).

The sand, gravel and quarry production industry includes hundreds of small, medium and large scale operators throughout the State, but it is dominated by three or four major companies.

Other Non-metallic Minerals

Excluding fuel minerals, the most significant non-metallic minerals currently produced in Queensland are gemstones, limestone, silica, salt, kaolin and bentonite.

15.7 PRODUCTION OF NON-METALLIC MINERALS, EXCLUDING FUEL MINERALS (a) QUEENSLAND

Mineral	Unit	1986-87	1987-88	1988-89
Bentonite	'000 tonnes	26	33	33
Clays				
Brick	'000 tonnes	835	1,030	1,230
Cement	'000 tonnes	122	127	191
Pipe and tile	'000 tonnes	5	10	10
Diatomite	tonnes	329	651	1,569
Dolomite	'000 tonnes	26	28	26
Kaolin	'000 tonnes	17	29	68
Limestone	'000 tonnes	2,165	1,825	1,987
Magnesite	tonnes	1,852	724	748
Peat	tonnes	2,879	1,229	2,644
Perlite	tonnes	4,669	5,133	3,744
Phosphate ore	'000 tonnes	10	5	8
Salt	'000 tonnes	313	272	219
Silica	'000 tonnes	939	1,297	1,683

(a) Excluding gemstones.

Source: Mineral Production (8402.3).

The Queensland gemstone mining industry is dominated by sapphires and opals. In fact, Queensland accounts for a significant proportion of world uncut sapphire production. Less than 1 per cent of local sapphire production is cut and polished in Queensland, with most rough stones being exported to Thailand.



Sorting for sapphires, Rubyvale

Photo: Sharyn K. Marken

15.8 VALUE OF GEMSTONE PRODUCTION (a), QUEENSLAND (\$'000)

Gemstone	1986-87	1987-88	1988-89
Sapphires	7,552	10,271	6,785
Opals	2,102	6,602	4,250
Other	317	239	977
Total	9,971	17,112	12,012

(a) Excluding the production of part-time and itinerant miners and amateur fossickers.

Sources: Mineral Production (8402.3). Queensland Mines Department.

Kaolin production increased by 139 per cent from 29,000 tonnes in 1987-88 to 68,000 tonnes in 1988-89, reflecting expansion by Comalco Aluminium Limited of its kaolin mining and processing operations at Weipa and its development of overseas markets.

Investigations of the magnesite deposits, of world significance, at Kunwarara and Yaamba north of Rockhampton continued during 1988-89. Mining and construction of treatment plants in the area are foreshadowed. Opportunity exists for adding value to beneficiated magnesite through the addition of natural gas and electrical energy to produce calcined magnesia, dead-burned magnesia and magnesium metal. In October 1989, Pancontinental Mining Limited formally committed itself to a \$180m joint venture development to produce magnesia from part of the Kunwarara magnesite deposit.

At Phosphate Hill, south of Mount Isa, Queensland Phosphate Limited has plans for a phosphate mine and treatment plant to produce phosphoric acid and high analysis superphosphates to be used to produce ammonium phosphates. A decision to proceed with the project will depend on markets and the possible supply of natural gas. The venture would involve construction of a 144 kilometre pipeline from Mount Isa to supply sulphuric acid. Phosphate rock reserves are estimated at 1,000 million tonnes.

15.2 MINING OPERATIONS

The number of Queensland mining establishments operating at 30 June has declined from 458 in 1984-85 to 391 in 1986-87 followed by a modest increase to 398 in 1987-88. The decline has predominantly reflected tin mines ceasing operations, following the collapse of the world tin market in October 1985 and the apparent rationalisation and concentration in the sand, gravel and quarrying industry.

Turnover of mining establishments in Queensland in 1987-88 increased in current prices (not

adjusted for inflation) by 1.6 per cent to \$5,286m compared with the 1986-87 turnover figure of \$5,203m. However, value added for Queensland mining establishments decreased by 8.0 per cent from \$3,227m in 1986-87 to \$2,970m in 1987-88. Compared with 1986-87, value added decreased for coal mining establishments by \$410m (19.8 per cent) to \$1,659m and for oil and gas establishments by \$37m (12.3 per cent) to \$263m in 1987-88, reflecting depressed commodity prices and reduced production in these industries. Value added for metallic minerals establishments, however, increased compared with 1986-87 by \$173m (23.7 per cent) to \$904m in 1987-88.

15.10 MINING OPERATIONS (a), STATES AND AUSTRALIA, 1987-88

State or Territory	Establishments at 30 June	Employment at 30 June (b)	Turnover	Value added (c)
	No.	No.	\$m	\$m
N.S.W. (d)	444	22,790	4,029.4	2,088.9
Victoria	208	5,901	2,923.5	2,605.5
Queensland	398	18,523	5,285.8	2,970.2
S.A.	110	3,784	1,073.4	788.6
W.A.	229	20,796	6,078.7	4,078.9
Tasmania	49	2,771	457.4	208.0
N.T.	37	2,188	1,063.9	865.8
Australia	1,475	76,753	20,912.2	13,605.8

(a) Excluding small-scale miners with low value of output. (b) Including working proprietors. (c) Turnover, plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses. (d) Including A.C.T.

Source: Census of Mining Establishments (8402.0).

Employment in the Queensland mining industry decreased marginally to 18,523 persons (17,526 males and 997 females) at 30 June 1988 compared with 18,639 at 30 June 1987. A significant decrease in employment in coal mining establishments by 807 persons from 10,527 at 30 June 1987 to 9,720

15.9 MINING OPERATIONS (a), QUEENSLAND AND AUSTRALIA

Operation	Establishments at 30 June	Employment at 30 June (b)	Wages and salaries (c)	Turnover	Value added (d)
	No.	No.	\$m	\$m	\$m
Queensland					
1985-86	416	18,426	633.4	4,928.0	3,104.8
1986-87	391	18,639	679.6	5,202.8	3,226.9
1987-88	398	18,523	702.3	5,285.8	2,970.2
Metallic minerals	71	6,364	210.5	1,427.5	904.3
Fuel minerals					
Coal	30	9,720	431.6	3,213.6	1,659.5
Oil and gas	23	213	8.8	344.9	262.9
Construction materials	227	1,743	40.9	249.6	122.1
Other non-metallic minerals	47	483	10.5	50.3	21.3
Australia					
1987-88	1,475	76,753	2,883.1	20,912.2	13,605.8

(a) Excluding small-scale miners with low value of output. (b) Including working proprietors. (c) Excluding drawings by working proprietors. (d) Turnover, plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

Sources: Census of Mining Establishments (8402.0).
Census of Mining Establishments (8401.3).

at 30 June 1988 was largely offset by employment increases for other mining sectors. In particular, employment in metallic minerals mining establishments increased during the year by 440 persons to total 6,364 at 30 June 1988.

Although suffering depressed prices, coal mining remains the dominant sector of the Queensland mining industry and accounted for 52 per cent of total mining employment, 61 per cent of total turnover and 56 per cent of total value added in 1987-88.

As a proportion of total Australian figures for 1987-88, Queensland had 27 per cent of mining establishments, which accounted for 24 per cent of mining employment, 25 per cent of mining turnover, and 22 per cent of mining value added.

15.3 MINERAL EXPLORATION

Private exploration expenditure in Queensland for minerals, other than petroleum and oil shale, in 1988-89 amounted to \$139.8m, a decrease of \$19.5m or 12 per cent from the \$159.3m expenditure for 1987-88. Although overshadowed by private exploration expenditure in Western Australia of \$387.2m (56 per cent of the Australian total of \$697.6m for 1988-89), private exploration expenditure in Queensland ranked a clear second among the States at 20 per cent of the Australian total, followed by the Northern Territory with \$68.6m or 10 per cent.

15.11 PRIVATE MINERAL EXPLORATION (a) EXPENDITURE, STATES AND AUSTRALIA (\$m)

State or Territory	1986-87	1987-88	1988-89
New South Wales	47.6	61.5	50.6
Victoria	15.5	33.9	21.7
Queensland	120.6	159.3	139.8
South Australia	11.0	18.9	16.6
Western Australia	323.3	466.3	387.2
Tasmania	10.9	10.4	13.1
Northern Territory	27.9	48.9	68.6
Australia	556.8	799.2	697.6

(a) Excluding petroleum and oil shale exploration.

Sources: Mineral Exploration (8407.0).

Actual and Expected Private Mineral Exploration (8412.0).

The \$19.5m decrease in expenditure on Queensland mineral exploration in 1988-89 broadly comprised a \$37.2m decrease for gold exploration offset by a \$17.9m increase in exploration for base metals.

The downturn in petroleum exploration that commenced during 1986, following the collapse of the international oil price early that year, continued into the early part of 1987 and remained evident in very low levels of seismic exploration activity in

Queensland throughout 1987. In spite of low oil prices Queensland oil and gas drilling exploration recovered to high levels in 1987. The bulk of exploration drilling was undertaken in the Surat-Bowen Basin and its environs.

15.12 PRIVATE MINERAL EXPLORATION EXPENDITURE BY MINERAL SOUGHT, QUEENSLAND AND AUSTRALIA (\$m)

Mineral	Queensland			Australia
	1986-87	1987-88	1988-89	1988-89
Copper, lead, zinc, silver, nickel and cobalt	20.7	13.4	31.3	100.4
Gold	70.1	119.5	82.3	448.5
Iron ore	0.1	n.p.	0.6	7.0
Mineral sands	1.2	1.6	n.p.	16.5
Tin, tungsten, scheelite and wolfram	0.3	n.p.	0.4	1.4
Uranium	1.6	0.6	n.p.	28.3
Coal	20.4	14.9	15.7	29.0
Construction materials	n.p.	n.p.	0.1	1.1
Diamonds	1.5	2.0	n.p.	32.6
Other	n.p.	6.6	5.0	32.7
Total	120.6	159.3	139.8	697.6

Sources: Mineral Exploration (8407.0).

Actual and Expected Private Mineral Exploration (8412.0).

15.13 PRIVATE PETROLEUM EXPLORATION, QUEENSLAND

Particulars	Unit	1986	1987	1988
Expenditure	\$'000	63,061	92,447	58,403
Geological	\$'000	8,493	5,669	6,066
Seismic	\$'000	26,934	19,889	22,042
Drilling	\$'000	27,471	60,772	27,354
Other	\$'000	164	6,117	2,941
Wells drilled	No.	54	123	93
As oil producers	No.	13	23	14
As gas producers	No.	1	17	19
Plugged and abandoned	No.	40	83	60
Average final depth of wells drilled	metres	1,774	1,736	n.a.
Total drilling	metres	90,345	210,782	154,823

Source: Commonwealth Bureau of Mineral Resources, Geology and Geophysics.

The Queensland Department of Resource Industries has reported that petroleum exploration activities in Queensland declined significantly in 1988-89 with expenditure on exploration falling from \$96 million to \$65 million. Exploration drilling accounted for 38 wells, a decrease of around 59 per cent on 1987-88. Twenty of the exploration wells were drilled in the Eromanga and/or the underlying Cooper and Galilee Basins. Thirteen wells were drilled in the Surat/Bowen Basin, four in the Carpentaria Basin and one in the Georgina

Basin. Seismic activity was at a low level. A total of 5,509 line kilometres of section was recorded, representing a decrease of almost 43 per cent on 1987-88. However, this figure represented around 40 per cent of the total seismic activity recorded in onshore Australia in 1988-89.

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Mineral Production (8405.0), annual
Mineral Exploration (8407.0), annual

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 Australian Bureau of Agricultural and Resource Economics, *Quarterly Mineral Statistics*

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Chapter 16

MANUFACTURING

The manufacturing sector in Queensland has undergone a dramatic change in the 5-year period from 1982-83 to 1987-88. The number of manufacturing establishments increased by 34 per cent and the turnover by 61 per cent but, with improved technology and greater use of efficiency programs, employment rose by only 14 per cent.

In 1987-88 the turnover of the manufacturing sector was \$17,255m, an increase of 16 per cent on the 1986-87 figure of \$14,848m.

Manufacturing establishments in Queensland represent 14.6 per cent of the Australian total.

16.1 MANUFACTURING SECTOR (a), QUEENSLAND

Particulars	Percentage change, 1982-83 to 1987-88		
	1982-83	1987-88	
Establishments (b)	3,440	4,624	+ 34.4
Employment (b)	111,839	127,544	+ 14.0
Wages and salaries (c) (\$'000)	1,786,294	2,545,442	+ 42.5
Turnover (\$'000)	10,715,479	17,254,681	+ 61.0
Value added (\$'000)	3,445,095	n.a.	n.a.

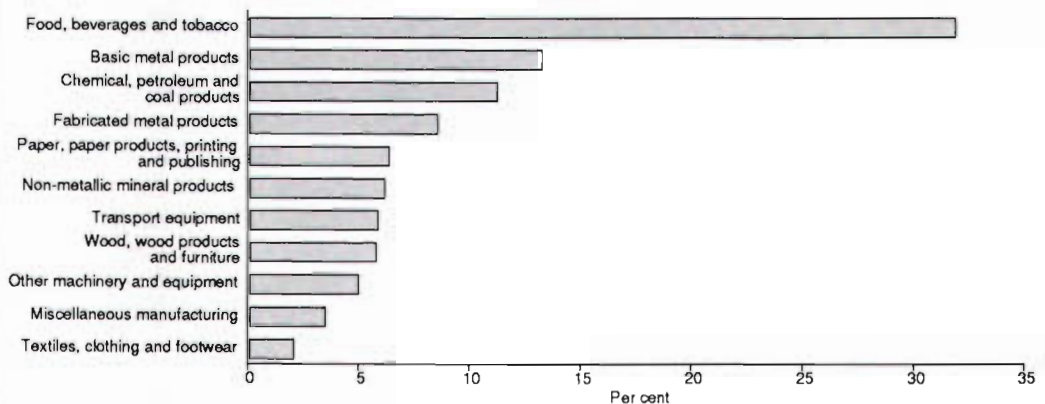
(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed. (b) At end of June. (c) Excluding the drawings of working proprietors.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1 MANUFACTURING INDUSTRIES

Manufacturing in Queensland, in terms of economic output, is dominated by the food, beverages and tobacco subdivision, which accounts for 32 per cent of the total turnover and an employment of 27 per cent of the labour force. The manufacture of basic metal products (copper, lead, aluminium etc.) and chemical, petroleum and coal products are also significant manufacturing industries which, combined, provide 25 per cent of turnover and 9 per cent of employment in the sector.

MANUFACTURING: PROPORTION OF TOTAL TURNOVER BY INDUSTRY SUBDIVISION, QUEENSLAND, 1987-88



16.2 MANUFACTURING (a), QUEENSLAND, 1987-88

Industry subdivision	Employment at 30 June		Turnover \$'000
	No.		
Food, beverages and tobacco	34,566		5,500,594
Textiles	1,263		138,326
Clothing and footwear	5,388		227,019
Wood, wood products and furniture	14,446		998,370
Paper, paper products, printing and publishing	11,904		1,104,134
Chemical, petroleum and coal products	3,843		1,952,258
Non-metallic mineral products	6,483		1,075,033
Basic metal products	7,033		2,293,061
Fabricated metal products	15,434		1,482,330
Transport equipment	11,030		1,029,423
Other machinery and equipment	10,090		860,113
Miscellaneous manufacturing	6,064		594,019
Total	127,544		17,254,681

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1.1 Food, Beverages and Tobacco

The most important industry group in this subdivision is meat processing with large abattoirs in Brisbane, Toowoomba, Rockhampton and Townsville. Some of the producers operating in this field are the Livestock and Meat Authority in Brisbane, Australia Meat Holdings Pty Ltd (Townsville, Rockhampton, Dinmore and Beaudesert), Darling Downs Co-operative Bacon Association Ltd (Brisbane and Toowoomba), Thomas Borthwick and Sons (A'Asia) Ltd at Baker's Creek and Merinda, and Tancred Bros Pty Ltd at Oxley.

16.3 FOOD, BEVERAGES AND TOBACCO SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment at 30 June		Turnover \$'000
	No.		
Meat products	12,944		2,184,581
Meat (except smallgoods and poultry)	10,092		1,787,850
Milk products	2,006		452,400
Fruit and vegetable products	1,484		169,036
Margarine, oils and fats, n.e.c.	n.p.		n.p.
Flour mill and cereal food products	1,102		154,310
Bread, cakes and biscuits	5,756		357,914
Bread	3,684		210,712
Other food products	7,994		1,442,049
Raw sugar	5,359		1,002,446
Beverages and malt	2,675		662,287
Soft drinks, cordials and syrups	1,239		n.p.
Tobacco products	n.p.		n.p.
Total	34,566		5,500,594

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

The processing of sugar cane into syrup, molasses and raw sugar is also an important contributor to production. CSR Limited operates mills in Queensland and a number of cooperative mills operate in the sugar belts.

Together, raw sugar milling and meat account for over half the turnover of this subdivision and 18 per cent of all manufacturing turnover in Queensland.

16.1.2 Clothing, Footwear and Textiles

The manufacture of clothing and footwear is mainly confined to the Brisbane Statistical Division which accounts for three-quarters of total production. Companies operating in this subdivision include the Bradmill Group Limited which mainly manufactures work clothes, The House of Jenyns Pty Ltd which specialises in foundation garments and Freedman and Company Pty Ltd.

In 1987-88 the turnover of this industry subdivision was greater than \$227m and it employed over 5,300 persons. Clothing and footwear production accounts for 1 per cent of the total manufacturing production in the State.

With a total turnover of \$138m and employment of over 1,200, the textile industry subdivision was the smallest in Queensland in 1987-88.

16.4 CLOTHING, FOOTWEAR AND TEXTILES SUBDIVISIONS (a), QUEENSLAND, 1987-88

Industry	Employment at 30 June		Turnover \$'000
	No.		
Textiles	1,263		138,326
Textile fibres, yarns and woven fabrics	759		90,389
Clothing and footwear	5,388		227,019
Clothing	4,942		204,918

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1.3 Wood, Wood Products and Furniture

This subdivision includes sawmillers and furniture manufacturers. Although factories are situated throughout the State, the industry tends to be concentrated in the south-east corner and the far north.

Furniture manufacturers include Namco Industries at Strathpine, while sawmills and veneer and plywood-veneer mills include Hyne and Son Pty Ltd in Maryborough and Foxwood Ltd in Ingham. This industry subdivision contributes 6 per cent to manufacturing turnover and employs about 14,500 persons.



Furniture making, Woolloongabba

Photo: Department of Industry Development

16.5 WOOD, WOOD PRODUCTS AND FURNITURE SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment at 30 June		Turnover \$'000
	No.		
Wood and wood products	7,950		576,621
Furniture and mattresses	6,496		421,749
Total	14,446		998,370

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1.4 Paper, Paper Products, Printing and Publishing

Printing and publishing dominate this industry subdivision. Producers include Queensland Newspapers Pty Ltd, Sun Newspapers Pty Ltd, the regional daily newspapers, the State Government Printer and the pulp and paper manufacturer, Amcor Pty Ltd, which operates a paper mill at Petrie. Most production in this industry subdivision occurs in the Brisbane Statistical Division. The industries contribute 6 per cent to manufacturing turnover and employ almost 12,000 persons.

16.6 PAPER PRODUCTS, PRINTING AND PUBLISHING SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment at 30 June		Turnover \$'000
	No.		
Paper and paper products	1,862		346,803
Printing and allied industries	10,042		757,330
Total	11,904		1,104,134

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1.5 Chemical, Petroleum and Coal Products

There are 112 establishments employing some 3,800 persons within this industry subdivision. Manufacturers within this subdivision include the Ampol refinery at Lytton, the paint companies Taubmans Pty Ltd and Dulux Australia Ltd and the chemical fertiliser manufacturer Austral Pacific at Gibson Island. Nearly all production is centred in the Brisbane Statistical Division. This industry is important to Queensland and is responsible for 11 per cent of total manufacturing turnover.

16.7 CHEMICAL, PETROLEUM AND COAL PRODUCTS SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment at 30 June		Turnover \$'000
	No.		
Basic chemicals	1,307		429,589
Chemical fertilisers	503		232,297
Other chemical products	1,908		n.p.
Paints	700		123,761
Soaps and detergents	426		73,896

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1.6 Non-metallic Mineral Products

This industry subdivision includes the manufacture of glass, bricks, cement, concrete and plaster products. About two-thirds of total production occurs in the Brisbane Statistical Division. Manufacturers include the ACI group which manufactures glass and clay bricks, Queensland Cement and Lime, Humes Ltd and Pioneer Concrete (Qld) Pty Ltd which manufactures ready-mixed concrete. The industry subdivision employs about 6,500 persons and has 6 per cent of total manufacturing turnover.

16.8 NON-METALLIC MINERAL PRODUCTS SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment at 30 June		Turnover \$'000
	No.		
Glass and glass products	522		n.p.
Clay products and refractories	1,252		102,614
Clay bricks	927		91,025
Cement and concrete products	4,010		775,034
Ready-mixed concrete	846		282,572

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1.7 Basic Metal Products

Some of Queensland's most capital intensive manufacturing industries are contained in this

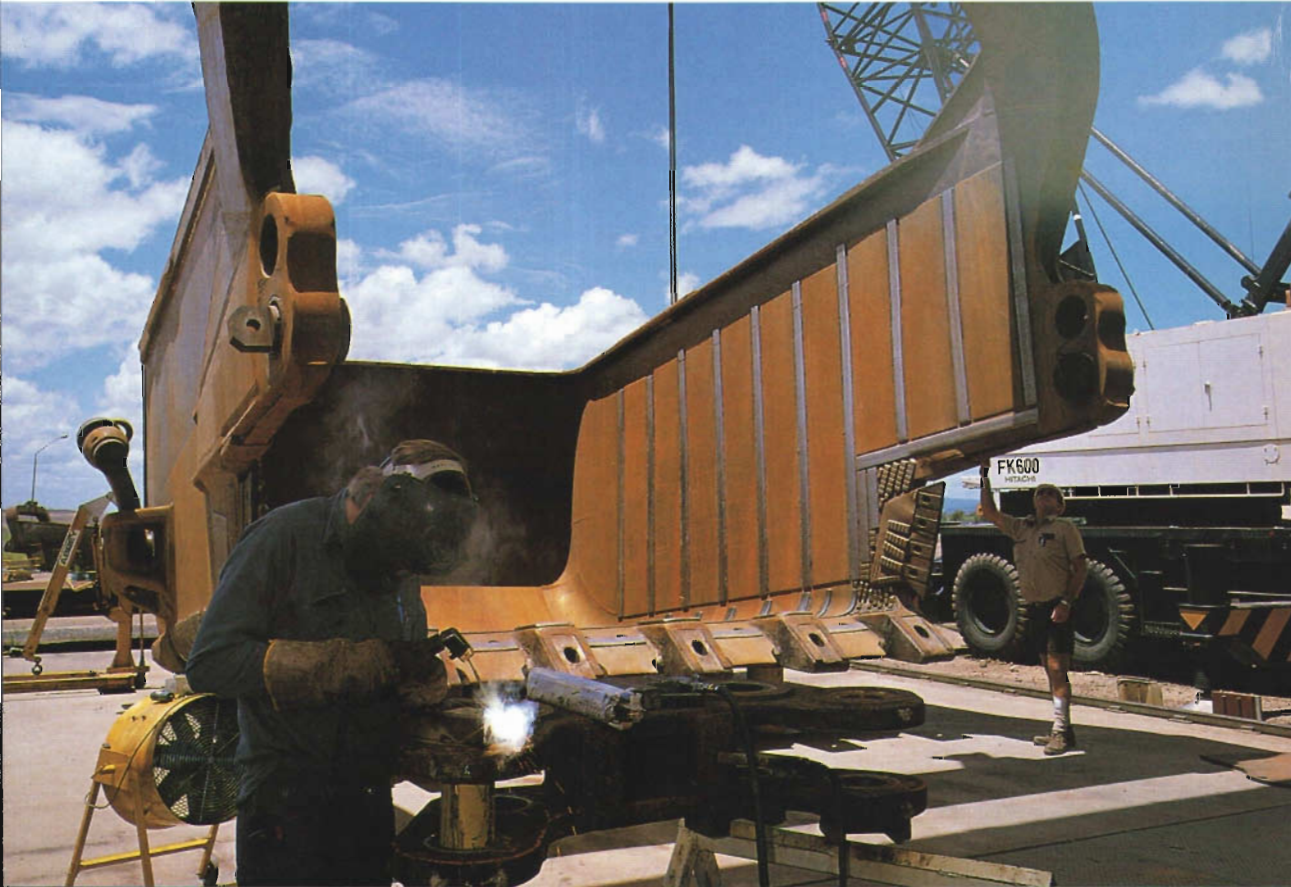


Tunnels of a sapphire mine, Rubyvale

Photo: *Sharyn K. Marken*

Manufacturing a dragline bucket

Photo: *Premier's Department*





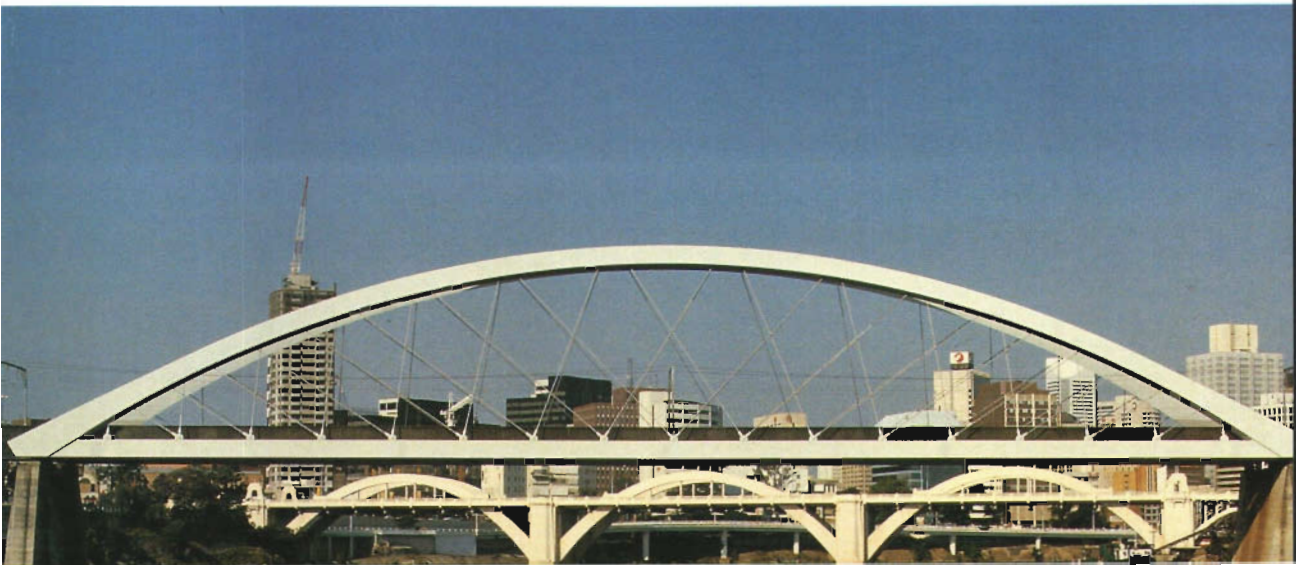
Peace and serenity at Chowie Bridge, Bundaberg

Photo: *Premier's Department*

Bridges spanning the Brisbane River

Bridge construction, old and new

Photo: *Sharyn K. Marken*



subdivision which includes the manufacture of copper, lead and aluminium. Most manufacturing occurs in the Brisbane Statistical Division and the provincial cities of Mount Isa, Townsville and Gladstone (including Boyne Island). The 78 factories operating in Queensland in 1987-88 employed over 7,000 employees and contributed 13 per cent to manufacturing turnover. Companies in this field are Mount Isa Mines (including copper refineries), Queensland Alumina Ltd and Boyne Smelters Ltd.

16.9 BASIC METAL PRODUCTS SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment	Turnover
	at 30 June	
	No.	\$'000
Basic iron and steel	2,303	476,430
Basic non-ferrous metals	3,983	1,701,820
Non-ferrous metal basic products	747	114,811
Total	7,033	2,293,061

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1.8 Fabricated Metal Products

Basic metal products usually undergo further processing before being sold to the end user and one of the major users of basic metals as inputs is the fabricated metals products industry. This subdivision is involved in the manufacture of items such as sheds, carports, scaffolding, awnings, aluminium windows, metal furniture, cutlery, hand tools, springs, nuts and bolts etc. Unlike the basic metal products industry, this industry subdivision covers a mixture of large, medium and many small establishments.

16.10 FABRICATED METAL PRODUCTS SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment	Turnover
	at 30 June	
	No.	\$'000
Structural metal products	7,337	747,875
Fabricated structural steel	3,591	424,019
Sheet metal products	3,526	416,460
Metal containers	1,123	203,881
Other fabricated metal products	4,571	317,994
Total	15,434	1,482,330

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

In 1987-88 there were 1,096 establishments in this subdivision of which 344 were single establishment enterprises employing fewer than four persons. The 752 larger enterprises employed about 15,400

employees and had a turnover of over \$1,482m. Companies include the hardware manufacturers, Whitco Pty Ltd at Sherwood, Amcor in Brisbane, Gladstone, Rockhampton and Townsville and G. James Glass and Aluminium with locations in Brisbane, Toowoomba, Bundaberg, Rockhampton and Gladstone. Although the industry is dominated by small manufacturers, most are located around the Brisbane region.

16.1.9 Transport Equipment

Companies in this subdivision are engaged in the manufacture or assembly of motor vehicles, trucks, railway rolling stock and ships. Production is centred in the Brisbane Statistical Division and in some provincial cities. Producers in this field are North Queensland Engineers and Agents which carries out ship and boat building in Cairns; the motor vehicle assemblers Ford, J.R.A., Mack Trucks and Volvo; and Queensland Railways, Walker's Ltd and A.N.I. Corp. Ltd which manufacture or repair railway rolling stock. As well as the large manufacturers, there are also a number of smaller companies manufacturing parts and accessories, engine reconditioning and other small items such as baby carriages, bicycle parts etc. Of the 420 establishments operating in this group in 1987-88, 147 were single-establishment enterprises employing fewer than four people. The 273 larger enterprises employed about 11,000 people and had a turnover in 1987-88 of over \$1,029m and contributed 6 per cent to total manufacturing turnover.

16.11 TRANSPORT EQUIPMENT SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment	Turnover
	at 30 June	
	No.	\$'000
Motor vehicles and parts	4,461	635,563
Motor vehicles	1,797	450,551
Other transport equipment	6,569	393,860
Boats	1,806	129,990
Railway rolling stock and locomotives	4,080	211,624
Total	11,030	1,029,423

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.1.10 Other Machinery and Equipment

This industry subdivision includes the manufacture of agricultural machinery, construction machinery, food processing machinery, and electrical appliances and equipment. Companies operating in these fields include Austoft Industries Ltd (Bundaberg), W.D.T. Engineering Pty Ltd (Acacia Ridge), Toowoomba Foundry Pty Ltd and Evans Deakin Industries at Rocklea. About 75 per cent of production occurs in the Brisbane Statistical

Division. Of the 617 establishments operating in 1987-88, 167 were single-establishment enterprises employing fewer than four persons. The 450 larger establishments contributed 5 per cent to total turnover and employed over 10,000 people.

16.12 OTHER MACHINERY AND EQUIPMENT SUBDIVISION (a), QUEENSLAND, 1987-88

Industry	Employment	Turnover
	at 30 June No.	\$'000
Appliances and electrical equipment	3,142	290,563
Refrigerators and household appliances	686	93,045
Industrial machinery and equipment	5,740	486,343
Agricultural machinery	1,522	105,892
Food processing machinery	531	47,214

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.2 MANUFACTURING ESTABLISHMENTS

16.2.1 Number of Manufacturing Establishments

The number of manufacturing establishments increased by 1,184 over the 5-year period from June 1983 to June 1988. All subdivisions contributed to the overall 34 per cent increase with the largest additions in the wood, wood products and furniture; fabricated metal products and food, beverages and tobacco subdivisions.

16.13 NUMBER OF MANUFACTURING ESTABLISHMENTS BY INDUSTRY SUBDIVISION (a), QUEENSLAND

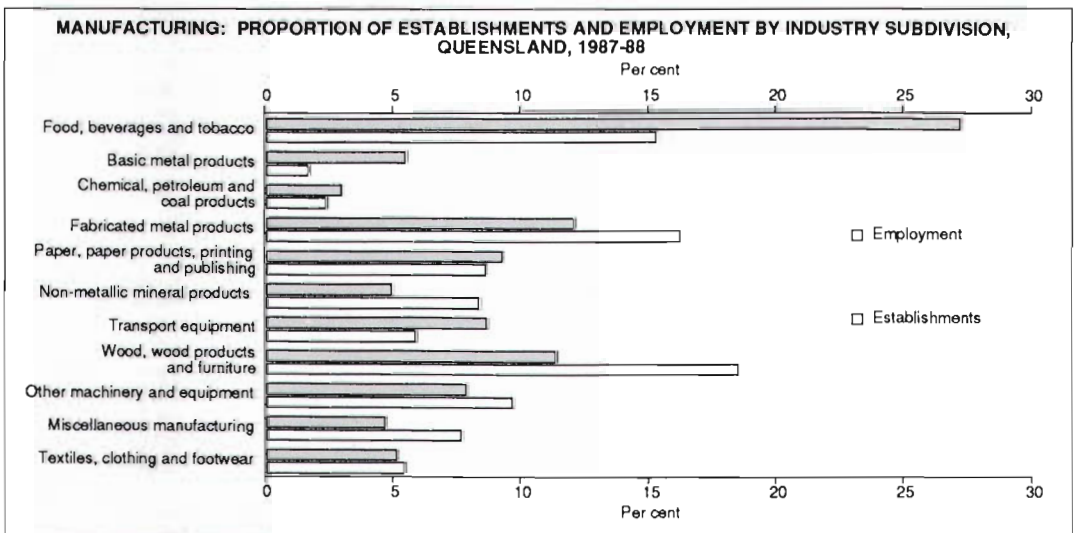
Industry subdivision	At 30 June	
	1983	1988
Food, beverages and tobacco	566	709
Textiles	43	58
Clothing and footwear	94	192
Wood, wood products and furniture	633	855
Paper, paper products, printing and publishing	271	400
Chemical, petroleum and coal products	71	112
Non-metallic mineral products	334	388
Basic metal products	59	78
Fabricated metal products	590	752
Transport equipment	208	273
Other machinery and equipment	335	450
Miscellaneous manufacturing	236	357
Total	3,440	4,624

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment manufacturing enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.2.2 Size of Manufacturing Establishments

Although the manufacturing sector consists of a large number of small establishments, it is the larger manufacturing enterprises that contribute most to employment and turnover. Excluding the single-establishment enterprises employing fewer than four persons, which provide only a very small proportion of the total manufacturing economic contribution, the 491 larger establishments that employed 50 or more persons had a turnover of \$12,740m, or about 74 per cent of total turnover for the sector.



16.14 DETAILS OF MANUFACTURING ESTABLISHMENTS BY SIZE, QUEENSLAND, AT 30 JUNE 1988

Industry subdivision	Establishments	Establishments employing (b)		
	with fewer than 4 persons (a)	Fewer than 50 persons	50 or more persons	Total
NUMBER OF MANUFACTURING ESTABLISHMENTS				
Food, beverages and tobacco	125	571	138	709
Textiles	31	53	5	58
Clothing and footwear	67	172	20	192
Wood, wood products and furniture	493	803	52	855
Paper, paper products, printing and publishing	151	354	46	400
Chemical, petroleum and coal products	18	97	15	112
Non-metallic mineral products	95	365	23	388
Basic metal products	22	56	22	78
Fabricated metal products	344	690	62	752
Transport equipment	147	235	38	273
Other machinery and equipment	167	408	42	450
Miscellaneous manufacturing	284	329	28	357
Total	1,944	4,133	491	4,624
NUMBER OF EMPLOYEES (c)				
Food, beverages and tobacco	279	6,353	27,900	34,253
Textiles	70	779	330	1,109
Clothing and footwear	142	2,368	3,000	5,368
Wood, wood products and furniture	1,008	8,908	5,480	14,388
Paper, paper products, printing and publishing	326	4,334	7,504	11,838
Chemical, petroleum and coal products	36	1,348	2,408	3,756
Non-metallic mineral products	197	3,009	3,236	6,245
Basic metal products	43	847	6,140	6,987
Fabricated metal products	729	8,472	6,794	15,266
Transport equipment	288	2,787	8,209	10,996
Other machinery and equipment	351	4,949	4,996	9,945
Miscellaneous manufacturing	582	3,500	2,471	5,971
Total	4,051	47,654	78,468	126,122
TURNOVER (\$m)				
Food, beverages and tobacco	13.4	787.5	4,702.2	5,489.7
Textiles	3.0	100.7	37.7	138.3
Clothing and footwear	4.6	99.9	126.5	226.4
Wood, wood products and furniture	38.4	564.1	426.6	990.7
Paper, paper products, printing and publishing	14.6	257.2	843.8	1,101.0
Chemical, petroleum and coal products	2.0	418.2	1,534.0	1,952.2
Non-metallic mineral products	9.1	556.4	513.6	1,070.0
Basic metal products	1.6	135.2	2,148.5	2,283.7
Fabricated metal products	34.8	693.5	784.7	1,478.2
Transport equipment	15.2	194.6	827.5	1,022.2
Other machinery and equipment	21.3	370.4	489.2	859.6
Miscellaneous manufacturing	24.1	288.1	305.7	593.8
Total	182.1	4,465.9	12,740.0	17,205.9

(a) Single-establishment manufacturing enterprises. (b) All manufacturing establishments owned by multi-establishment enterprises and single-establishment enterprises with four or more persons employed. (c) Excluding separately located administrative offices and ancillary units.

Source: Manufacturing Establishments: Details of Operations (8203.3).

16.15 EMPLOYMENT IN MANUFACTURING ESTABLISHMENTS (a), QUEENSLAND, AT 30 JUNE

Industry subdivision	1983	1988
Food, beverages and tobacco	32,928	34,566
Textiles	901	1,263
Clothing and footwear	3,157	5,388
Wood, wood products and furniture	11,412	14,446
Paper, paper products, printing and publishing	10,243	11,904
Chemical, petroleum and coal products	2,961	3,843
Non-metallic mineral products	5,967	6,483
Basic metal products	6,226	7,033
Fabricated metal products	12,701	15,434
Transport equipment	11,488	11,030
Other machinery and equipment	9,489	10,090
Miscellaneous manufacturing	4,366	6,064
Total	111,839	127,544

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment enterprises with four or more persons employed.

Source: Manufacturing Establishments: Details of Operations (8203.3).

In some industry subdivisions, smaller establishments contribute a significant share to total production. In the wood, wood products and furniture subdivision, 59 per cent of turnover is contributed by establishments employing fewer than 50 people, and in the manufacture of textiles, 74 per cent of turnover is contributed by these smaller sized establishments. Industries where activity is centred on the larger manufacturing establishments include basic metal products; food, beverages and tobacco; transport equipment and chemical, petroleum and coal products.

16.2.3 Regional Distribution

Although manufacturing activity occurs throughout the State, it is not evenly spread or commensurate with population distribution. The largest centre for manufacturing is the Brisbane Statistical Division. This region is responsible for 59 per cent of total turnover but has 45 per cent of the population. The major industries in this region are the food processors, the chemical industries, the manufacturers of fabricated metal products and the paper, printing and publishing industries. The Fitzroy Statistical Division, with 7 per cent of total turnover for the State, is the second largest manufacturing region in terms of turnover. Major industries in this area are the abattoirs and alumina and aluminium smelters.

16.17 REGIONAL DISTRIBUTION OF MANUFACTURING ACTIVITY (a), QUEENSLAND, 1987-88

Statistical division	Employment at	Turnover
	30 June (b)	
	No.	\$'000
Brisbane	76,152	10,102,478
Moreton	12,490	1,215,736
Wide Bay-Burnett	5,903	684,514
Darling Downs	7,497	797,691
South-West	297	n.p.
Fitzroy	7,052	1,284,039
Central-West	66	2,978
Mackay	3,782	535,818
Northern	7,977	1,113,024
Far North	5,275	642,394
North-West	1,053	n.p.
Queensland	127,544	17,254,681

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment enterprises with four or more persons employed. (b) Including working proprietors.

Source: Manufacturing Establishments: Small Area Statistics (8205.3).

16.3 COMMODITIES PRODUCED

The range of products produced in Queensland is quite diverse. It varies from the production of everyday items such as meat, bread, milk and butter to the production of naval ships, lasers and electronic and medical equipment. The State is a

16.16 MANUFACTURING ESTABLISHMENTS (a) IN STATISTICAL DIVISIONS, QUEENSLAND, 1987-88

Industry subdivision	Brisbane	Moreton	Wide Bay-Burnett	Darling Downs	South-West	Fitzroy	Central-West	Mackay	Northern	Far North	North-West	Queensland
Food, beverages and tobacco	284	96	52	75	11	47	7	27	50	52	8	709
Textiles	26	14	1	9	1	2	—	—	2	2	1	58
Clothing and footwear	125	51	5	1	—	1	—	1	4	4	—	192
Wood, wood products and furniture	386	215	55	54	10	28	1	23	33	49	1	855
Paper, paper products, printing and publishing	220	71	14	27	2	11	1	14	22	18	—	400
Chemical, petroleum and coal products	75	10	2	—	1	7	—	9	5	2	1	112
Non-metallic mineral products	136	75	28	24	2	34	—	26	27	32	4	388
Basic metal products	46	10	1	3	—	4	—	2	7	3	2	78
Fabricated metal products	448	92	29	37	1	38	2	24	42	31	8	752
Transport equipment	139	54	10	16	1	8	—	8	14	19	4	273
Other machinery and equipment	271	54	23	33	—	11	—	15	27	14	2	450
Miscellaneous manufacturing	233	61	7	14	2	5	1	7	14	12	1	357
Total	2,389	803	227	293	31	196	12	156	247	238	32	4,624

(a) All manufacturing establishments owned by multi-establishment enterprises and single-establishment enterprises with four or more persons employed.

Source: Manufacturing Establishments: Small Area Statistics (8205.3).

large producer of basic metal products and a wide range of commodities such as bricks, cement, paints and structural metal products.

16.18 QUANTITIES OF SELECTED COMMODITIES MANUFACTURED IN QUEENSLAND

Commodity	Unit	1982-83	1987-88
Aerated waters	'000 litres	185,924	255,534
Bacon and ham	tonnes	22,292	32,567
Bedding and mattresses			
Mattress supports (sprung)	No.	54,041	86,350
Mattresses			
Innerspring	No.	91,068	138,338
Other (a)	No.	177,221	n.a.
Bran and pollard	tonnes	42,508	52,106
Bricks, clay (b)	'000	244,643	262,430
Butter (c)	'000 kg	3,881	3,487
Cheese (c)	'000 kg	12,483	15,198
Concrete blocks (d)	'000	31,427	37,893
Concrete, ready-mixed	'000 cu m	2,886	3,633
Cordials and syrups			
Fruit juice	'000 litres	16,677	22,300
Other	'000 litres	9,170	8,441
Detergents	tonnes	24,775	32,052
Flour, wheaten	tonnes	147,422	175,639
Footwear — boots, shoes, sandals and slippers (e)	'000 pairs	653	781
Paints and enamels	'000 litres	17,838	25,817
Stock and poultry foods	tonnes	379,934	542,982
Sugar, raw	tonnes	3,324,155	3,244,577
Timber, sawn (f)			
Hardwoods	cu m	239,001	(g) 217,934
Softwoods			
Natural	cu m	89,324	(g) 90,571
Plantation	cu m	77,224	(g) 165,626
Sleepers	cu m	19,075	(g) 9,880
Veneers	'000 sq m	20,452	(g) 31,666
Wheatmeal, edible	tonnes	10,737	19,978

(a) Excluding water mattresses. (b) From 1984-85, structural only. (c) Excluding farm production. Source: Australian Dairy Corporation. (d) Expressed in terms of 400 mm × 200 mm × 200 mm. (e) Excluding thongs and boots with uppers of rubber or synthetic material. (f) Australian grown only, and excluding timber sawn and used in plywood and case mills. (g) From 1985 including all licensed sawmills.

Sources: Sawmill Statistics (8206.3).

Production Bulletins (8357.0 to 8368.0).

16.3.1 Gas

All natural gas currently produced for sale in Queensland comes from the Roma-Surat district gas fields in the Surat-Bowen Basin. Gas is piped to the Wallumbilla junction of the Roma to Brisbane pipeline for compressing and reticulation to industrial, commercial and domestic consumers in Roma, Dalby, Oakey, Toowoomba, Ipswich and Brisbane. Liquefied petroleum gas (LPG) is extracted from the natural gas stream in one plant at the Kincora gas field and another plant at Wallumbilla.

After extracting 2,632 terajoules of LPG, the total 1988-89 Queensland natural gas production in energy content terms was 21,973 terajoules.

Of the natural gas used in Queensland, 18,459 terajoules, or 85.3 per cent, was sold to consumers, 1,397 terajoules, or 6.5 per cent, was used as feed-

stock for reformed town gas production for the north Brisbane franchise area, 968 terajoules, or 4.5 per cent, was used as field and plant fuel and the residual 808 terajoules, or 3.7 per cent, represented pipeline compressor fuel and unaccounted for losses.

Gas reticulation in the south Brisbane franchise area is wholly natural gas, but a majority (54 per cent in energy content terms) of the gas reticulated in the north Brisbane franchise area is reformed town gas, derived from natural gas as feedstock and produced in a reforming plant at Newstead in Brisbane. Reformed town gas, which has a much lower heating value than natural gas, is also reticulated in the cities of Bundaberg and Cairns, where LPG is the feedstock used.

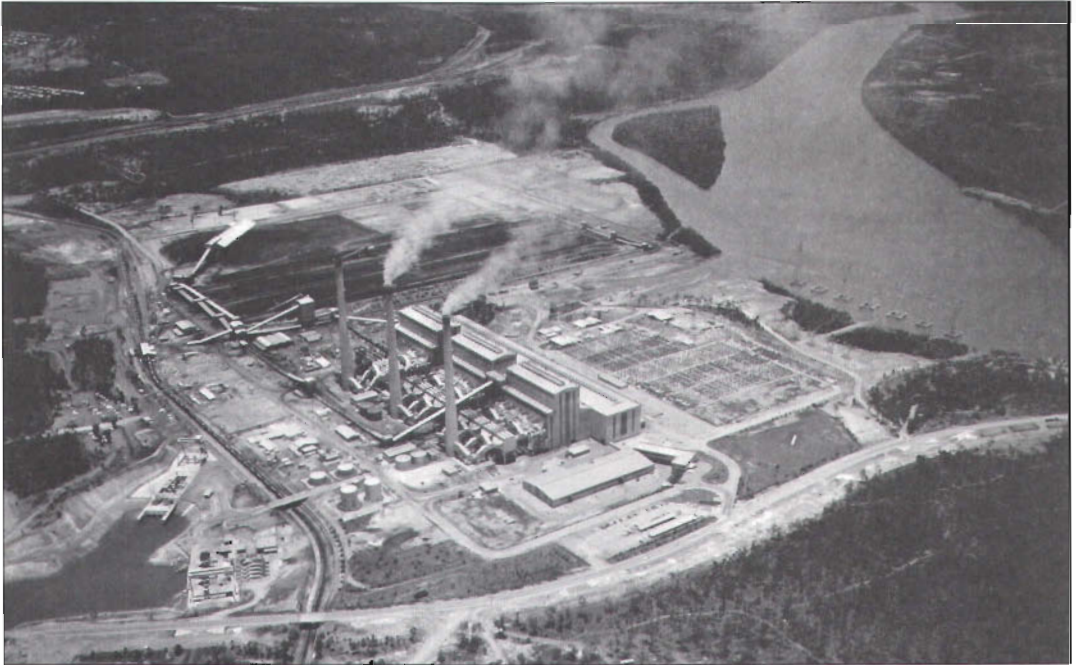
The Queensland LPG market totalled 8,063 terajoules in 1988-89, including 67 terajoules used as feedstock for town gas production for reticulation in Bundaberg and Cairns and 1,004 terajoules for traditional exports to northern New South Wales and to Pacific Islands. Automotive LPG consumption in Queensland increased by 21.4 per cent from 2,211 terajoules in 1987-88 to 2,685 terajoules in 1988-89, while LPG sales for industrial, commercial and domestic uses increased by 5.8 per cent to 4,307 terajoules. Oil refinery by-product LPG output amounted to 3,613 terajoules or 44.7 per cent of total demand; 2,632 terajoules (32.5 per cent) was stripped from natural gas and 1,844 terajoules (22.8 per cent) was imported from Victoria, New South Wales and New Zealand.

16.3.2 Electricity

The electricity supply industry in Queensland is regulated by the *Electricity Act 1976-1989*, the principal purpose of which is to provide the administrative framework within which a public supply of electricity is available to consumers. The Act requires that supply is to be properly planned, effectively coordinated, economical and reliable.

The Queensland Electricity Commission (QEC) is the arm of government through which the above functions are coordinated and has direct responsibility for electrical safety (in its widest sense), planning the electricity system as well as construction and operation of major power stations and the main transmission system. The QEC provides electricity to seven Electricity Boards and to certain special major users of power, determines electricity prices and is responsible for industry financial planning.

Electricity generation in Queensland is based primarily on the State's plentiful resources of black coal. Supply of 96.7 per cent of the energy needs of the industry in 1988-89 came from this source. The Barron Gorge and Kareeya hydro-electric power stations produced 3.2 per cent with the remainder being produced by the gas turbine



Swanbank Power Station

stations connected to the main transmission network and by internal combustion stations supplying isolated townships.

16.19 GENERATING STATIONS OPERATED BY PUBLIC UTILITIES, QUEENSLAND, 1987-88

Generating station	Existing (planned) capacity (a)	Energy generated
	Mw	GWh
Coal fired		
Gladstone	1,650	7,629
Tarong	1,400	9,782
Swanbank	492	964
Callide 'A' (b)	—	16
Collinsville (b)	—	6
Callide 'B'	700	4,594
Stanwell	(1,400)	—
Hydro-electric		
Kareeya	72	494
Barron Gorge	60	264
Wivenhoe	500	(c) 116
Tully-Millstream	(600)	—
Diesel-fired gas turbine: sundry	178	1
Internal combustion: sundry remote towns	41	21
Total	5,093 (2,000)	23,771

(a) Nameplate rating. (b) Retired during the year. (c) Not included in total.
Source: The Electricity Supply Industry in Queensland, *Annual Report*, 1988-89.

To meet peak demand loads, the Wivenhoe pumped-storage hydro-electric power station

generated 116 gigawatt hours of electricity during 1988-89 from a total 170 gigawatt hours used in pumping, realising an average pumped storage cycle efficiency of 68.2 per cent.

16.20 ELECTRICITY GENERATION AND DISTRIBUTION, QUEENSLAND, (gigawatt hours)

Particulars	1983-84	1987-88	1988-89
Generated (by QEC)	17,084	22,271	23,771
Purchased from other sources	176	176	195
Total	17,260	22,447	23,966
Used in works	959	1,468	1,616
Lost or unaccounted	1,613	2,028	2,231
Sold to consumers	14,688	18,951	20,119
Private generation (a)	1,564	1,553	n.a.

(a) Used in factories and mines.

Sources: The Electricity Supply Industry in Queensland, *Annual Reports*. Queensland Energy Advisory Council, 1989 Review.

16.21 ELECTRICITY CONSUMPTION, QUEENSLAND (gigawatt hours)

Sector	1983-84	1987-88	1988-89
Domestic	4,869	5,655	5,892
Commercial and industrial	9,516	12,765	13,491
Traction (electric railways)	56	225	412
Public lighting	80	98	103
Supply to N.S.W.	167	208	221
Total supplied by public utilities	14,688	18,951	20,119
Private generation (a)	1,564	1,553	n.a.

(a) Used in factories and mines.

Sources: The Electricity Supply Industry in Queensland, *Annual Reports*. Queensland Energy Advisory Council, 1989 Review.

Annual total energy sales have been growing at 6.5 per cent a year over the last 5 years. The annual increase in domestic sales for 1988-89 was 4.2 per cent. This follows an increase of 5.3 per cent last year but is still above the 3.9 per cent average annual increase for the last 5 years. The commercial and industrial sector has been the dominant influence on total sales growth with an average 7.3 per cent annual growth over the past 5 years.

16.22 ELECTRICITY CONSUMERS, QUEENSLAND ('000)

Sector	1983-84	1987-88	1988-89
Domestic	811	915	954
Commercial and industrial	136	157	162
Total supplied by public utilities	947	1,071	1,117

Source: The Electricity Supply Industry in Queensland, *Annual Reports*.

With the completion of the Callide 'B' power station, the Callide 'A' and Collinsville power stations have been able to be retired from service. This means power generation from coal-fired stations is now consolidated into four sites, at Swanbank, Gladstone, Tarong and Callide.

Each of the six 275 megawatt units at Gladstone are progressively undergoing refurbishment and this will ensure that Gladstone will meet a high level of availability and efficiency targets through the nineties.

Planning for the future is still based on coal-fired power stations providing the bulk of Queensland's electrical energy needs, augmented as necessary by pumped-storage and conventional hydro-electric stations for peaking capacity. To this end,

construction of a 600 megawatt hydro-electric scheme in the Tully-Millstream area of North Queensland is in progress and work is being planned to commence generation in 1997. This power station will follow Stanwell which is anticipated to commence commercial operation in 1993 and be completed by 1996.

16.4 REFERENCES

ABS publications produced by the Queensland Office:

Livestock Products — Meat (7204.3), monthly
Manufacturing Establishments: Details of Operations (8203.3), annual

Manufacturing Establishments: Small Area Statistics (8205.3), annual

Sawmill Statistics (8206.3), quarterly

ABS publications produced by the Canberra Office:

Manufacturing Establishments: Details of Operations by Industry Class (8203.0), annual

Manufacturing Establishments: Selected Items of Data Classified by Industry and Employment Size (8204.0), annual

Production Bulletins (8357.0 to 8364.0, 8367.0, 8368.0), monthly

Other publications:

The Electricity Supply Industry in Queensland, *Annual Report, 1988-89*

Queensland Energy Advisory Council, *1989 Review*

Chapter 17

HOUSING AND CONSTRUCTION

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Chapter 17

HOUSING AND CONSTRUCTION

In the late 19th century the Indian bungalow was adapted for Australian use, its high-hipped roof and wide verandahs providing protection against the heat. Between 1880 and 1900 the typical free-standing house in Queensland was built on stilts to allow extra ventilation with shade provided by verandahs. Stilt houses remained a feature of Queensland dwellings until replaced by fully enclosed highset and lowset dwellings and ground level construction on concrete slabs.

Building activity is a significant indicator of the state of the economy. The level of activity and the types of building being constructed affect our physical and social environment. The number of building approvals issued gives an indication of the extent of investment by private individuals, companies and government agencies.

Building approvals for new residential buildings totalled 47,116 in 1988-89 which was an increase of 34 per cent over the number in the previous year and the highest annual figure ever recorded. The value of these approvals was \$3,337.7m, an increase of 62 per cent over 1987-88 following an increase of 77 per cent last year.

17.1 HOUSING

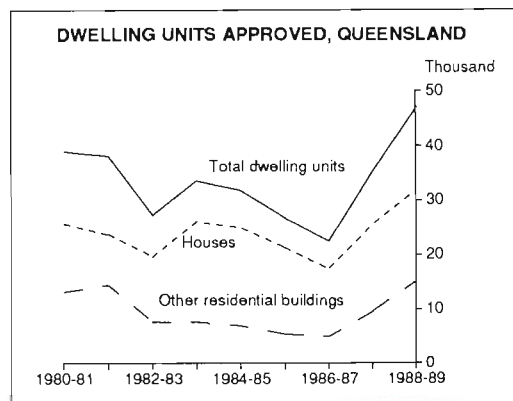
With more than two-thirds of dwellings in Queensland owned or being purchased by their occupants, home ownership continues to be a desired aim of Queenslanders.



Building activity

Photo: Sharyn K. Marken

Figures derived from the 1986 Census of Population and Housing show that 39.1 per cent of occupied private dwellings in Queensland were owned by the occupants and 28.6 per cent were being purchased by the occupants. When compared with those from the 1981 Census, these figures represent an increase of 3.2 per cent in ownership and a marginal decrease in the proportion of dwellings being purchased. Homes rented increased 2.1 per cent in comparison over the same period.



17.1 HOME OWNERSHIP (a), QUEENSLAND

Dwellings	1981		1986	
	Number	%	Number	%
Owned	250,476	35.9	325,581	39.1
Being purchased	204,991	29.4	238,442	28.6
Rented	172,324	24.7	223,148	26.8
Other	70,441	10.1	46,332	5.6
Total	698,232	100.0	833,503	100.0

(a) Excluding caravans etc. in parks.

Source: Census of Population and Housing.

17.1.1 Residential Building

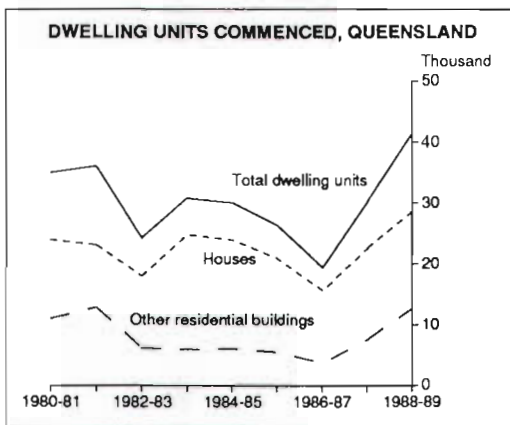
During 1988-89, residential building in Queensland continued its strong recovery from the slump in 1986-87 resulting in the number of commencements reaching an all-time high. Although commencements fluctuated throughout the year, both house building and other residential building trades experienced a boom period. House commencements increased 27 per cent compared with 1987-88 and commencements of dwelling units in other residential buildings (flats, home units etc.) increased by 67 per cent over the same period after more than doubling in the previous year.

17.2 DWELLING UNITS COMMENCED, QUEENSLAND

Dwelling units	1983-84	1987-88	1988-89
Houses	24,795	22,643	28,669
Other residential buildings	5,999	7,660	12,825
Total	30,794	30,303	41,494

Source: Dwelling Unit Commencements Reported by Approving Authorities (8741.3).

Most areas of Queensland reported increased building activity in 1988-89 with the majority of growth occurring in the south-east corner of the



17.3 DWELLING UNITS COMMENCED IN STATISTICAL DIVISIONS, QUEENSLAND

Statistical division	1987-88			1988-89		
	Houses	Other residential buildings	Total	Houses	Other residential buildings	Total
Brisbane	8,667	1,685	10,352	11,046	3,390	14,436
Moreton	8,405	4,347	12,752	10,267	6,274	16,541
Wide Bay-Burnett	1,345	225	1,570	2,066	560	2,626
Darling Downs	684	106	790	971	101	1,072
South-West	64	13	77	45	2	47
Fitzroy	487	91	578	736	161	897
Central-West	16	2	18	8	2	10
Mackay	467	133	600	687	372	1,059
Northern	569	206	775	874	418	1,292
Far North	1,714	833	2,547	1,940	1,531	3,471
North-West	225	19	244	29	14	43
Total Queensland	22,643	7,660	30,303	28,669	12,825	41,494

Source: Dwelling Unit Commencements Reported by Approving Authorities (8741.3).

State. Dwelling unit commencements in the Brisbane and Moreton Statistical Divisions accounted for 75 per cent of the State total.

17.4 DWELLING UNITS COMMENCED IN SELECTED AREAS, QUEENSLAND

Area	1987-88	1988-89		Total
		Houses	Other residential buildings	
Albert Shire	4,201	4,279	1,155	5,434
Brisbane City	3,793	2,877	1,998	4,875
Caboolture Shire	1,246	1,622	188	1,810
Cairns City	609	216	755	971
Caloundra City	1,328	1,495	465	1,960
Douglas Shire	361	110	273	383
Gold Coast City	4,130	1,286	3,405	4,691
Hervey Bay City	516	828	125	953
Logan City	1,811	2,075	639	2,714
Mulgrave Shire	1,000	951	282	1,233
Pioneer Shire	205	346	61	407
Proserpine Shire	218	139	257	396
Redland Shire	1,805	1,974	145	2,119
Sunshine Coast Statistical District	2,876	2,684	1,724	4,408
Thuringowa City	290	452	75	527
Toowoomba City	408	501	59	560
Townsville City	310	255	308	563
Queensland	30,303	28,669	12,825	41,494

Source: Dwelling Unit Commencements Reported by Approving Authorities (8741.3).

The local government area with the highest level of residential building activity was Albert Shire with 13.1 per cent of all reported commencements followed by Brisbane City with 11.7 per cent and Gold Coast City with 11.3 per cent. Away from the south-east corner, most growth occurred in the resort areas of Mulgrave Shire, Cairns City and Hervey Bay City.

17.1.2 House Building Materials

The types of materials used in the construction of dwellings in Australia and Queensland have

depended on their availability in each region and have changed over time. The transition from temporary to permanent settlements was the earliest change with the first settlers graduating from tents and drays to rough buildings constructed of local materials such as wattle and daub.

By 1901 wood was the most extensively used material in Australia and was the most common in New South Wales, the Northern Territory and Queensland. However, brick and stone dwellings had become dominant in the capital cities except in Brisbane. For people working in remote mining or pastoral areas, tents were still in use, especially in the north-west and south-west corner of Queensland. Iron, which could be readily transported to remote, treeless areas and widely used in Western Australia and the Northern Territory, was only a minor contributor to building in Queensland at this time.

Wooden walls were found on 52 per cent of houses in Australia in 1933. The use of tents on a national basis had dropped to 2.6 per cent by this time although with the effects of the Great Depression many itinerant workers in Queensland were living under canvas. In Queensland, iron was now dominant throughout the western districts from the Gulf of Carpentaria to the New South Wales border and Cape York Peninsula.

By 1976, 50 per cent of Australia's dwellings had brick or brick veneer walls and in 1975-76, 81 per cent of new houses were made of brick. In Brisbane, brick was common but in most areas south of the Tropic of Capricorn timber was still the usual material. Iron was evident only in the remote northern districts while fibre cement had become prominent since World War II due to its relative cheapness and transportability at a time when building materials were in short supply.

17.5 HOUSES COMMENCED, QUEENSLAND

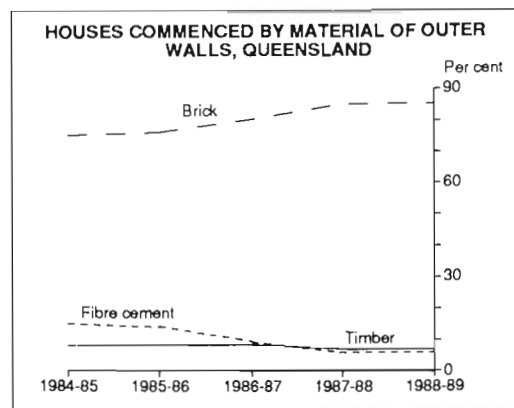
<i>Material of outer wall</i>	1986-87	1987-88	1988-89
NUMBER			
Double brick (a) (b)	1,260	1,645	1,904
Brick veneer (a)	11,383	17,708	22,647
Timber	1,315	1,573	2,002
Fibre cement	1,465	1,330	1,686
Other	190	387	430
Total	15,613	22,643	28,669
PER CENT			
Double brick (a) (b)	8	7	7
Brick veneer (a)	73	78	79
Timber	8	7	7
Fibre cement	9	6	6
Other	1	2	1
Total	100	100	100

(a) Including bricks or blocks of clay, concrete or calcium silicate.
(b) Including concrete poured on site, prefabricated steel reinforced concrete and stone.

Source: Dwelling Unit Commencements Reported by Approving Authorities (8741.3).

By the late 1970s, 83 per cent of new houses commenced in Australia were made of brick. The permanence and insulating qualities of brick and the ability of the average person to afford this material made it the number one choice.

The use of brick as an outer wall material in houses commenced in Queensland increased from 62 per cent in 1975-76, to 69 per cent in 1978-79 and to 86 per cent in 1988-89. The use of timber and fibre cement as outer wall materials decreased from 30 per cent in 1978-79 to 13 per cent in 1988-89 for new house commencements.



Tiles continued to be the most popular type of roofing material accounting for 50 per cent of all roofing for new houses commenced in 1988-89, closely followed by steel with 49 per cent.

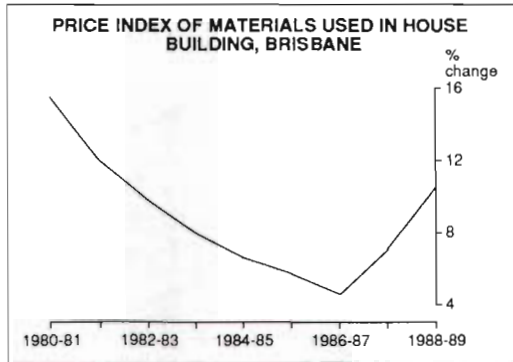
17.6 HOUSES COMMENCED BY TYPE OF ROOFING MATERIAL, QUEENSLAND

<i>Material</i>	1986-87	1987-88	1988-89
NUMBER			
Tiles (a)	6,620	11,495	14,451
Steel (b)	8,823	10,974	14,002
Other	170	174	216
Total	15,613	22,643	28,669
PER CENT			
Tiles (a)	42	51	50
Steel (b)	57	48	49
Other	1	1	1
Total	100	100	100

(a) Comprises terracotta and concrete tiles. (b) Including tiles of pressed steel.

17.1.3 Costs of House Building Materials

Although the prices of materials used in house building in Brisbane have risen during the last 3 years, the increases are less than the national average and for 1986-87 less than the increase in the Consumer Price Index (CPI). However, in 1987-88 the increase in the prices of materials used in house building was slightly greater than the increase in the CPI, with the corresponding figure for 1988-89, 3.4 per cent greater.



17.7 PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING AND CONSUMER PRICE INDEX (CPI): PERCENTAGE CHANGE FROM PREVIOUS YEAR

Year	Price index of materials used in house building		CPI all groups Brisbane
	Brisbane	Weighted average of six State capital cities	
1986-87	+4.6	+5.8	+8.6
1987-88	+7.1	+7.6	+7.0
1988-89	+10.5	+10.8	+7.1

Sources: Price Index of Materials Used in House Building (6408.0).
Consumer Price Index (6401.0).

17.2 GOVERNMENT FINANCE FOR HOUSING

Both Commonwealth and State Governments provide assistance for housing to low-income and other specific groups in the community: the Commonwealth to defence personnel as a long-standing policy and more recently to 'first home buyers' in the form of grants or interest subsidy.

State Government assistance dates back to 1910 when the Workers' Dwelling Board was established to assist persons in receipt of small incomes to provide homes for themselves. Since World War II the State Government has been a direct provider of housing for rental for low-income earners and has also provided means-tested loans for house purchase.

17.2.1 Defence Service Homes

Prior to 19 December 1988, the Commonwealth Government provided low interest housing loans to certain members and former members of the defence force and their widows. The maximum loan granted was \$25,000, repayable over 25 years. Interest on the first \$12,000 was 3.75 per cent, the next \$3,000 was at 7.25 per cent and the remaining \$10,000 at 10 per cent.

In the May 1985 Economic Statement, the Government announced its intention to seek private sector involvement in the Defence Service Homes Scheme. The Government achieved the sale of the portfolio of about 128,000 securities (Australia-wide) and contracted with a bank for the provision of subsidised housing loans and other benefits under a largely revised Defence Service Homes Act.

Under the amended Act and the Agreement entered into, housing assistance loans are provided to entitled persons. The Commonwealth pays a subsidy on a maximum of \$25,000 of any loan to keep the interest rate payable by new clients at 6.85 per cent, equivalent to the effective rate available on the former Defence Service Homes loans.

The bank also manages the mortgage portfolio and the Commonwealth pays a subsidy in respect of the 128,000 fixed interest rate securities transferred. The Commonwealth is still responsible for determining applicants' entitlements and monitoring the performance of the bank in accordance with the Agreement. During 1988-89, \$70.8m was provided to finance the acquisition and alteration of dwellings in Queensland.

17.2.2 The Queensland Housing Commission

Public housing in Queensland is provided in a wide range of styles. High standards are maintained and the quality of these dwellings compares favourably with private sector housing. In 1988-89 the Queensland Housing Commission provided 2,297 public rental dwellings for families and pensioners in 104 localities throughout the State. These consisted of detached houses, duplexes, attached houses, cluster houses, units and flats. Of the dwelling units constructed 127 were cluster style houses. A total of 1,775 were constructed for the Commission. Of the 522 which were obtained by spot purchase, 118 have been provided for crisis and emergency housing.

Through the Crisis Accommodation Program and the Rent Relief Scheme a further net increase of 134 dwellings were supplied to organisations providing emergency accommodation. The Commission also contributed significantly to the provision by 30 local authorities and community organisations of 53 dwellings of various types (including four hostels and one boarding house) for rental by low income earners.

In addition to public rental accommodation, the Commission provided housing loans to 4,902 households.

17.2.3 Assistance to First Home Owners

The Commonwealth Government introduced its First Home Owners Scheme in October 1983 to help

low to middle income earners to buy or build their first home. The purpose is to help with the deposit and the first 5 years of repayments. Assistance up to \$5,000 can be paid.

The amount of assistance payable under the Scheme is related to an applicant's income and the number of dependent children.

Assistance can be paid in three different ways:

- a monthly subsidy paid over 5 years;
- a lump sum paid on approval, together with a reduced monthly subsidy paid over the 5 years and
- a larger lump sum paid on approval, together with a smaller monthly subsidy paid over 5 years.

During 1988-89, 7,443 applications were approved in Queensland and the number of subsidy payments each month remained static at 44,000. As a result, the total amount paid for the year, in Queensland, was \$30.6m. The First Home Owners Scheme is administered by the Department of Community Services and Health.

17.3 BUILDING CONSTRUCTION

The construction industry is regarded as having two components, namely the building sector and the engineering construction sector. In 1988-89 the building sector accounted for \$5,226.7m of work done or 73.8 per cent of the total value of work done by the construction industry in Queensland.

17.3.1 Residential Building

The value of work done on new residential buildings in Queensland accounted for 56 per cent of the total value of work done on all building during 1988-89. New houses made up 71 per cent of the \$2,939.1m of work done on residential buildings and new other residential building was 29 per cent of this total. When compared with the value of work done in 1987-88, this was an increase of 62 per cent for houses and 123 per cent for other residential building.

17.8 VALUE OF WORK DONE ON RESIDENTIAL BUILDINGS, QUEENSLAND (\$m)

Type of building	1983-84	1987-88	1988-89
New houses	1,044.8	1,294.7	2,092.5
New other residential buildings	281.6	379.5	846.6
Alterations and additions	55.3	91.9	123.5
Total	1,381.7	1,766.1	3,062.6

Source: Building Activity (8752.3).



Courthouse, Mount Isa Photo: Sharyn K. Marken

17.3.2 Non-residential Building

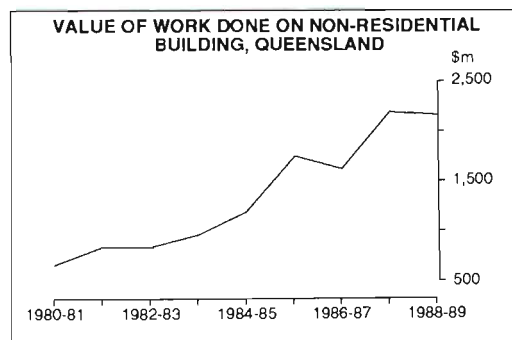
Construction work involving non-residential building relates not only to new buildings but also to refurbishments, fit outs, alterations and additions to existing buildings. The non-residential sector experienced a downward turn in 1988-89 with the value of work done recording a total of \$2,164.1m which was a marginal decrease from the 1987-88 figure after an increase of 35 per cent from the previous year.

17.9 VALUE OF WORK DONE ON NON-RESIDENTIAL BUILDING, QUEENSLAND (\$m)

Type of building	1983-84	1987-88	1988-89
Hotels etc.	110.2	405.7	400.2
Shops	168.7	577.9	403.2
Factories	77.2	143.9	185.4
Offices	176.2	431.5	410.2
Other business premises	111.3	246.0	254.8
Educational	86.0	157.9	194.0
Health	82.7	62.9	103.3
Other (a)	150.7	168.0	213.0
Total	963.0	2,193.7	2,164.1

(a) Including religious, entertainment and recreational and miscellaneous buildings.

Source: Building Activity (8752.3).



Private Sector

In 1988-89 the value of work done on non-residential building construction by the private

sector was \$1,770.1m or 82 per cent of the total. The value was a decrease of 4 per cent from the value of work done in 1987-88. Nearly all building work in the hotels etc., shops and factories categories was commissioned by private organisations.

**17.10 VALUE OF WORK DONE ON PRIVATE SECTOR
NON-RESIDENTIAL BUILDING, QUEENSLAND
(\$m)**

Type of building	1987-88	1988-89	Change %
Hotels etc.	404.8	385.5	- 4.8
Shops	576.1	388.2	- 32.6
Factories	139.9	180.9	+ 29.3
Offices	338.6	351.9	+ 3.9
Other business premises	195.1	189.0	- 3.1
Educational	52.9	99.4	+ 87.9
Health	42.8	73.5	+ 71.7
Other (a)	99.1	101.7	+ 2.6
Total	1,849.3	1,770.1	- 4.3

(a) Including religious, entertainment and recreational and miscellaneous buildings.

Source: Building Activity (8752.3).

Public Sector

The value of work done for the public sector on non-residential buildings totalled \$394.0m in 1988-89, an increase of 14 per cent when compared with the previous year. Educational buildings (24 per cent), other business premises (17 per cent) and offices (15 per cent) were the main categories of activity.

**17.11 VALUE OF WORK DONE ON PUBLIC SECTOR
NON-RESIDENTIAL BUILDING, QUEENSLAND
(\$m)**

Type of building	1987-88	1988-89	Change
Offices	92.9	58.3	- 37.2
Other business premises	50.9	65.8	+ 29.3
Educational	104.9	94.6	- 9.8
Health	20.1	29.8	+ 48.3
Other (a)	75.7	145.5	+ 92.2
Total	344.5	394.0	+ 14.4

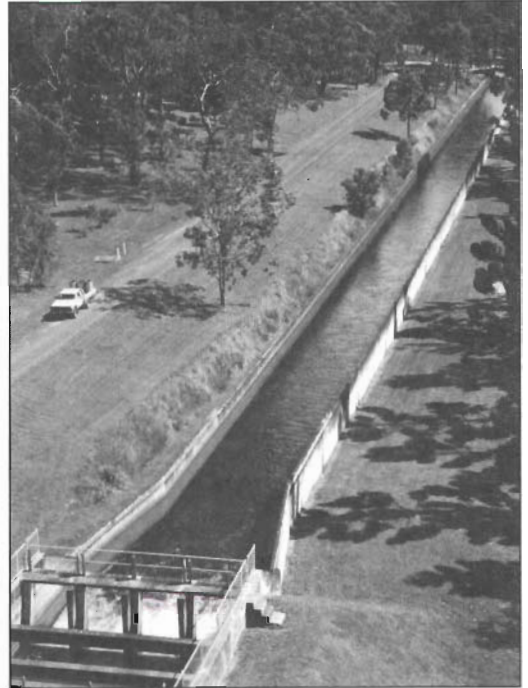
(a) Including the building categories of hotels etc., shops, factories, entertainment and recreation and miscellaneous.

Source: Building Activity (8752.3).

**17.4 ENGINEERING
CONSTRUCTION**

The construction of works such as roads, bridges, railways, harbours and pipelines are covered by the engineering construction sector.

In 1988-89 the total value of engineering construction work done was \$1,855.8m, of which 71.7 per cent (\$1,329.9m) was for the public sector and 28.3 per cent (\$525.9m) for the private sector.



Irrigation channel

Photo: Sharyn K. Marken

The two categories which contributed most to the total for 1988-89 were roads etc. with 38.6 per cent and telecommunications with 18.5 per cent.

**17.12 VALUE OF ENGINEERING CONSTRUCTION
WORK DONE, QUEENSLAND, 1988-89
(\$m)**

Type of work done	Amount
Roads, highways etc.	715.5
Telecommunications	342.7
Electricity generation, transmission etc.	211.8
Water storage and supply	152.3
Heavy industry	119.9
Other	313.6
Total	1,855.8

Source: Engineering Construction Survey (8762.0).

Engineering construction activity is undertaken by both public and private sector organisations. In 1988-89 of the \$1,855.8m work done, 53.3 per cent (\$989.5m) was undertaken by the public sector and 46.7 per cent (\$866.3m) by the private sector. Of the \$866.3m undertaken by the private sector, 39.3 per cent of the work done was for the public sector.

In 1988-89 the value of work done by the public sector was fairly evenly distributed between the three levels of government. The \$989.5m was comprised of 34.3 per cent by the Commonwealth Government, 33.9 per cent by the State Government and 31.8 per cent by local government.

17.5 REFERENCES

ABS publications produced by the Queensland Office:

- Census of Population and Housing Brisbane Statistical Division* (2405.3)
Local Authority Areas (2406.3)
Building Approvals (8731.3), monthly
Building Approvals: Small Area Statistics (8733.3), annual
Dwelling Unit Commencements Reported by Approving Authorities (8741.3), monthly
Dwelling Unit Commencements: Small Area Statistics (8743.3), annual
Building Activity (8752.3), quarterly

ABS publications produced by the Canberra Office:

- Building Approvals* (8731.0), monthly

Census 86

- Summary Characteristics of Persons and Dwellings* (2481.0)
Persons and Dwellings in Legal Local Government Areas, Statistical Local Areas and Urban Centres (Rural) Localities (2464.0)
Cross-classified Characteristics of Persons and Dwellings (2492.0)
Housing Finance for Owner Occupation (5609.0), monthly
Price Index of Materials Used in Building Other Than House Building, Eight Capital Cities (6407.0), monthly
Price Index of Materials Used in House Building, Six State Capital Cities and Canberra (6408.0), monthly
Building Activity (8752.0), quarterly
Engineering Construction Survey (8762.0), quarterly

Other publications:

- Queensland Housing Commission, *Annual Report*

Chapter 18

TRANSPORT AND COMMUNICATION

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Road train near Camooweal
Fisherman Islands, Brisbane

Photo: Premier's Department





Communications centre in the far north

Photo: *Sharyn K. Marken*

Chapter 18

TRANSPORT AND COMMUNICATION

As at 30 June 1989 Queensland's transport needs were met by 10,094 kilometres of railways, 12 airports serviced by the main airlines, 15 major ports and in excess of 170,000 kilometres of roads. The transport, storage and communications sector contributed 9.3 per cent to the gross State product in 1986-87 and of the total number of persons employed in Queensland at November 1989, 5.7 per cent were engaged in the transport and storage industry.

From March 1990 all transport related management functions of the Queensland Government will become the responsibility of the new Department of Transport. This restructuring is the first step in the development of an integrated approach to transport policy in Queensland affecting main roads, railways, freight and passenger transport as well as maritime transport.

While the nineteenth century was the age of railways, other forms of communication also developed. In 1846 the first newspaper, the *Moreton Bay Courier*, was published in Brisbane and in 1859 the Postmaster-General's Department was established.

Written communication, carried on horse-back and by sailing ship, was the forerunner to the telegraph introduced in 1861 and, a decade later, telephones. By 1895 there were 1,033 postal offices, 366 telegraph stations and six telephone exchanges with 774 telephones.

Radio telephony, as distinct from telegraphic transmissions, was introduced into Australia with the first public demonstration in Sydney in 1919.



The first station to be licensed in Queensland was 4GR (Toowoomba) in 1925. Some 34 years later, pictures were added to sound transmission with the introduction of television in black and white in 1959 and then in colour in 1975.

18.1 ROADS

The road system in Queensland is now vastly improved with fewer kilometres of dirt tracks which often become impassable in the wet season. Today the major roads are sealed and graded and are vital communication links for trade, commerce and tourism. They ensure the community access to essential services such as hospitals and schools.

By June 1988 there was a road network throughout Queensland totalling 169,589 kilometres, of which 33.4 per cent was sealed.

18.1 ROADS NORMALLY OPEN TO TRAFFIC, QUEENSLAND, AT 30 JUNE (kilometres)

Nature of construction	1986	1987	1988
Sealed	54,524	55,581	56,700
Formed and surfaced	43,021	43,739	44,397
Formed only	52,643	52,441	51,855
Total formed	150,188	151,761	152,952
Unformed	17,493	16,673	16,637
All roads	167,681	168,434	169,589

Source: Local Government (5302.3).

The percentage of formed roads to all roads is increasing. It was 89.6 per cent at 30 June 1986, 90.1 per cent at 30 June 1987 and 90.2 per cent at 30 June 1988.

The Main Roads Division, Queensland Department of Transport controls and has a major financial responsibility for the maintenance and construction of roads under the *Main Roads Act 1920-1988*.

Under the direction of the Main Roads Division, local government authorities are responsible for the construction and maintenance of a significant proportion of the declared roads network. This allows the local authorities to operate and employ, with a reasonable level of continuity, larger plant fleets and a more efficient workforce.

The declared roads (those roads which have been gazetted) under the Department's control are divided into: *State Highways* — important, long distance, through roads which link the major regions of the State; *Developmental Roads* — lightly trafficked through roads not well advanced in construction but forming a fundamental part of the developing road network in Queensland; *Main Roads* — major trunk roads connecting cities, towns and closely settled areas to one another or to the highway system; *Secondary Roads* — roads carrying relatively high volumes of local traffic which complete the network of roads in an area; *Urban Arterial Roads* — roads in urban areas which are the principal arteries for through traffic movement or which are extensions into urban areas of State highways and *Urban Subarterial Roads* — roads in urban areas which supplement urban arterial roads in providing for through traffic movement or which distribute traffic between urban arterial roads and local street systems.

18.2 QUEENSLAND ROADS AT 30 JUNE (kilometres)

Declared roads	1987	1988 (a)	1989
Type			
State highways	10,420	10,417	10,416
Developmental	8,716	8,712	8,712
Main	8,183	8,224	8,252
Secondary	13,212	6,373	6,388
Other	227	225	(b) 226
Surface			
Bitumen surfaced or concrete pavement	27,569	24,839	24,947
Gravelled pavement	4,472	3,360	3,340
Formed only	8,088	5,285	5,244
Unformed	629	467	463
Total	40,758	33,951	33,994

(a) Decrease due to Secondary Roads Review. (b) Including 146 kilometres of urban arterial road and 80 kilometres of urban subarterial road.

Source: Queensland Department of Transport.

18.1.1 New Road Works

In 1988-89 road work was completed on declared roads as follows: 110 kilometres were upgraded to a sealed surface; 447 kilometres which had been previously sealed were widened, realigned or upgraded; 82 kilometres which had been previously sealed were strengthened and resurfaced with

asphalt; 2,746 kilometres which were already sealed were resurfaced with a bitumen sealed coat and 85 kilometres of road works were constructed to the first stage of earthworks, formation and drainage.

During the year, 51 new bridges were completed, 10 existing bridges were widened or underwent major repairs, 30 major intersections were provided with traffic signals, 2 pedestrian crossings were provided with traffic signals and 5 railway level crossings were provided with flashing lights.



18.3 AUSTRALIAN LAND TRANSPORT PROGRAM, QUEENSLAND, 1988-89

Type of road	Expenditure		Proportion of Australia
	\$m	%	
National roads	43.8	21.7	
Urban arterial	8.5	13.0	
Rural arterial	16.5	28.9	
Local roads	20.0	19.7	
Total	88.8	20.7	

Source: Department of Transport and Communications.

18.4 AUSTRALIAN BICENTENNIAL ROAD DEVELOPMENT TRUST FUND, QUEENSLAND, 1988-89

Type of road	Expenditure		Proportion of Australia
	\$m	%	
National roads	25.5	23.9	
Urban arterial	14.1	29.1	
Rural arterial	3.5	14.2	
Local roads	9.4	15.3	
Other	6.2	19.5	
Total	58.7	21.5	

Source: Department of Transport and Communications.

18.5 ROAD DISTANCES BETWEEN MAJOR CENTRES (a)
(kilometres)

	Adelaide	Brisbane	Cairns	Canberra	Charleville	Darwin	Mackay	Melbourne	Mount Isa	Perth	Rockhampton	Sydney	Townsville	Winton
Adelaide		1,985	3,697	1,209	1,517	3,232	2,709	747	2,660	2,720	2,331	1,447	2,753	2,207
Brisbane	1,985		1,787	1,315	749	3,575	1,042	1,570	1,925	4,274	657	1,013	1,435	1,472
Cairns	3,697	1,787		2,675	1,585	2,885	745	3,132	1,235	5,625	1,131	2,559	352	833
Canberra	1,209	1,315	2,675		1,249	4,414	2,053	651	2,392	3,902	1,808	302	2,512	1,939
Charleville	1,517	749	1,585	1,249		2,793	910	1,706	1,143	3,806	895	1,253	1,236	698
Darwin	3,232	3,575	2,885	4,414	2,793		2,862	3,979	1,650	4,200	2,958	4,046	2,536	2,103
Mackay	2,709	1,042	745	2,053	910	2,862		2,457	1,212	4,998	386	2,050	393	970
Melbourne	747	1,570	3,132	651	1,706	3,979	2,457		2,849	3,467	2,079	889	2,783	2,396
Mount Isa	2,660	1,925	1,235	2,392	1,143	1,650	1,212	2,849		4,691	1,332	2,396	914	464
Perth	2,720	4,274	5,625	3,902	3,806	4,200	4,998	3,467	4,691		4,620	3,962	5,042	4,496
Rockhampton	2,331	657	1,131	1,808	895	2,958	386	2,079	1,332	4,620		1,506	778	868
Sydney	1,447	1,013	2,559	302	1,253	4,046	2,050	889	2,396	3,962	1,506		2,376	1,943
Townsville	2,753	1,435	352	2,512	1,236	2,536	393	2,783	914	5,042	778	2,376		591
Winton	2,207	1,472	833	1,939	698	2,103	970	2,396	464	4,496	868	1,943	591	

(a) All distances have been calculated along the most favourable travelling routes, and are therefore not necessarily the shortest.
Sources: Queensland Department of Transport, *UBD Street Directory*.

A feature of road and bridge construction in Queensland during 1989 was the number of projects in regional areas. The major undertaking was the 18 kilometre Sunshine Motorway, Stage 1, on the Sunshine Coast. It was completed in December for a total cost of \$76m.

18.6 AUSTRALIAN CENTENNIAL ROADS DEVELOPMENT TRUST FUND, QUEENSLAND, 1988-89

Type of road	Allocation	Proportion of Australia
	\$m	%
National highways	38.2	21.4
National arterial	26.8	16.8
State arterial	8.7	21.1
Local roads	25.8	18.5

Source: Department of Transport and Communications.

By 1988 over 1.6 million vehicles, more than one for every two people, were registered.

18.7 MOTOR VEHICLES ON REGISTER (a), QUEENSLAND, AT 30 JUNE ('000)

Type of vehicle	1987	1988	1989
Cars and station wagons			
(b)	1,123.0	1,159.2	1,222.3
Utilities and panel vans	303.5	307.6	319.7
Trucks	69.2	71.8	74.5
Buses	9.5	10.0	10.5
Motor cycles	70.2	67.7	66.4
All motor vehicles	1,575.3	1,616.2	1,693.4

(a) Including Commonwealth Government-owned vehicles. (b) Including vehicles licensed as taxicabs, 2,489 at 30 June 1989.
Source: Queensland Department of Transport.

18.2 ROAD TRANSPORT

18.2.1 Motor Vehicle Registration

Prior to 1 July 1921 the registration of motor vehicles in Queensland was a function of the Police Traffic Department. With the creation of the Main Roads Board in 1920, the Main Roads Act authorised the registration of all motor vehicles and payment of fees throughout the State. As this was to be one of the major sources of revenue to the Main Roads Fund, action was taken to draft the necessary regulations which came into force on 1 July 1921.

The first Main Roads Department Annual Report records that the number of motor vehicles registered to 30 June 1922 was 13,807 of which 11,643 were cars and trucks and 2,164 were cycles.

Registrations of new motor vehicles have risen dramatically during 1988-89, following a slump in 1986-87. Registrations of new cars and station wagons and of all new motor vehicles rose by 25.9 per cent and 29.4 per cent, respectively, when compared with 1987-88 figures.

Annual registration fees payable at July 1989 were: *passenger car* — 4 cylinders or rotary (2 rotors), \$123, 5 or 6 cylinders, \$191, 7 or 8 cylinders, \$269, and 9, 10, 11 or 12 cylinders, \$316; *commercial motor vehicle* — gross vehicle mass (G.V.M.) not exceeding 4 tonnes, fee as prescribed for a passenger car, and G.V.M. exceeding 4 tonnes, \$218 plus \$83 for each tonne or part thereof the G.V.M. exceeds 4 tonnes; *truck, tractor or prime mover* — gross combination mass (G.C.M.) not exceeding 6.67 tonnes, fee as prescribed for a passenger car, G.C.M. exceeding 6.67 tonnes but not exceeding 7 tonnes, \$417, G.C.M. exceeding 7 tonnes but not exceeding 24 tonnes, \$417 plus \$72

for each tonne or part thereof the G.C.M. exceeds 7 tonnes, G.C.M. exceeding 24 tonnes but not exceeding 41 tonnes, \$1,641 plus \$30 for each tonne or part thereof the G.C.M. exceeds 24 tonnes and G.C.M. exceeding 41 tonnes but not exceeding 42.5 tonnes, \$2,151 plus \$43 for each 0.1 of a tonne or part thereof the G.C.M. exceeds 41 tonnes; *omnibus or motorised caravan* — G.V.M. not exceeding 4 tonnes, fee as prescribed for a passenger car and G.V.M. exceeding 4 tonnes, \$246 plus \$55 for each tonne or part thereof the G.V.M. exceeds 4 tonnes and *motor cycle or motor tricycle*, \$40.

18.8 NEW MOTOR VEHICLES REGISTERED (a), BY TYPE OF VEHICLE, QUEENSLAND

Type of vehicle	1986-87	1987-88	1988-89
Cars and station wagons	55,552	59,355	74,731
Utilities and panel vans	12,001	11,029	17,555
Trucks	2,757	2,860	3,650
Buses	636	620	729
Motor cycles	4,228	3,841	3,922
All motor vehicles	75,174	77,705	100,587

(a) Including Commonwealth Government-owned vehicles.

Source: Motor Vehicle Registrations (9303.3).

18.9 HOUSEHOLDS WITH MOTOR VEHICLES (a), QUEENSLAND

Vehicles	Households (b), 1981 Census	Households (b), 1986 Census
0	87,298	94,162
1	298,755	357,271
2	208,491	265,431
3	56,893	66,885
4 or more	25,437	26,377
Not stated	21,358	23,377
Total	698,232	833,503

(a) Excluding motor cycles, motor scooters and tractors. (b) Excluding caravan parks.

Sources: Censuses of Population and Housing, 1981 and 1986.

In 1922 less than 8 per cent of Queensland households had at least one motor vehicle, excluding

motor cycles. By contrast, in 1986 this figure had increased dramatically to be more than 88 per cent.

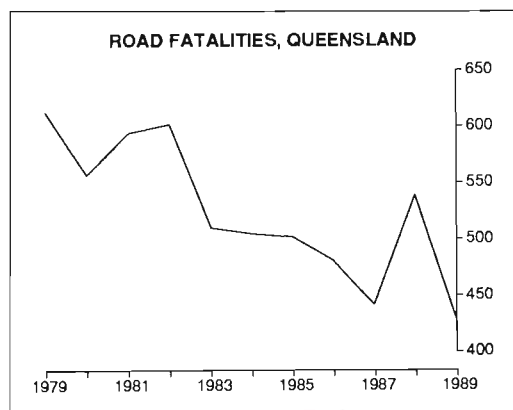
18.2.2 Motor Vehicle Census and Survey of Motor Vehicle Use

The motor vehicle census at 30 September 1988 and the survey of motor vehicle use for the 12 months ended 30 September 1988 were conducted on vehicles registered in Australia.

The survey of motor vehicle use provided results for an estimated 1,559,818 vehicles registered in Queensland. These vehicles were estimated to travel a total of 24,907.5 million kilometres a year comprising 8,701.8 million kilometres for the purpose of business, 5,179.2 million kilometres for travel to and from work and 11,026.5 million kilometres for private purposes.

18.2.3 Road Traffic Accidents

During 1989 there were 428 fatalities on Queensland roads, the lowest number since 1963. The rate



18.10 MOTOR VEHICLES ON REGISTER BY YEAR OF MANUFACTURE AND TYPE OF VEHICLE, QUEENSLAND, 30 SEPTEMBER 1988

Year of manufacture	Cars and station wagons	Utilities and panel vans	Rigid trucks	Articulated trucks	Non-freight-carrying trucks	Buses	Motor cycles	Total
Up to 1918 (veteran)	109	5	—	—	—	1	13	128
1919-1930 (vintage)	838	118	3	—	1	—	53	1,013
1931-1958	2,664	1,707	395	14	60	13	661	5,514
1959-1970	76,445	19,485	7,607	781	627	916	1,229	107,090
1971-1974	135,793	34,490	7,005	1,043	1,059	840	4,128	184,358
1975-1978	222,787	60,536	9,818	1,878	1,299	1,395	7,863	305,576
1979-1982	302,747	84,577	12,469	2,067	1,197	2,623	21,593	427,273
1983	71,772	19,165	2,275	266	187	1,035	5,183	99,883
1984	77,196	22,035	2,985	464	234	995	5,251	109,160
1985	81,080	21,583	4,097	694	279	950	6,331	115,014
1986	57,558	13,090	2,372	451	189	628	3,332	77,620
1987	50,749	9,239	1,827	355	106	605	2,897	65,778
1988	38,744	7,843	1,352	287	43	395	1,310	49,974
Not stated	12,653	3,812	1,568	68	73	102	506	18,782
Total	1,131,135	297,685	53,773	8,368	5,354	10,498	60,350	1,567,163

Source: Motor Vehicle Census (9309.0).

per 10,000 registered vehicles fell and was the lowest ever recorded, as was the rate per number of people in Queensland. Road accidents are required by law to be reported to the police when either a person is killed or injured, or when property damage is in excess of \$1,000.

18.11 ROAD TRAFFIC ACCIDENTS, QUEENSLAND

Details	1963	1988	1989
Total accidents (a)	23,653	16,879	17,038
Casualty accidents	6,724	7,301	7,212
Persons killed	398	539	428
Persons injured	9,445	9,505	9,240
Rate per 10,000 vehicles			
Persons killed	8.7	3.3	2.5
Persons injured	205.8	58.8	54.6

(a) Including accidents causing death or personal injury or causing more than a prescribed value of damage (\$50 in 1963 and \$1,000 from October 1978).

THE COST OF ROAD CRASHES

Contributed by the Queensland Department of Transport

Road crashes incur substantial costs both to the victims of crashes and to the community. Based on detailed costings prepared for the Bureau of Transport and Communications Economics (Steadman and Bryan, 1988), the average cost of a fatality in Australia in 1989 was approximately \$513,000. On this basis, the cost of road deaths in 1989 to the Queensland community was approximately \$220m.

In addition to these fatalities, many more people were injured on Queensland roads in 1989. An estimated 4,075 injuries requiring hospitalisation occurred in 1989 at a cost of approximately \$257m to the community. The estimated individual cost of these injuries ranged from \$6,400 for a minor injury to \$456,000 for a critical injury.

Crashes resulting in minor injuries and property damage only also accounted for a large proportion of community costs. These crashes were estimated to have cost the community a further \$660m in 1989.

The total cost of fatalities, injuries and property damage crashes to the Queensland community in 1989 was therefore approximately \$1,100m. On this basis, crashes on Queensland roads in 1989 cost about \$400 for every man, woman and child in Queensland.

These costs take into account loss of productivity and earnings, the costs of emergency and health care, legal and court proceedings, police investigations, insurance payments, hospital and medical costs, traffic delays and vehicle damage as well as a measure for the intangible cost of pain and suffering.

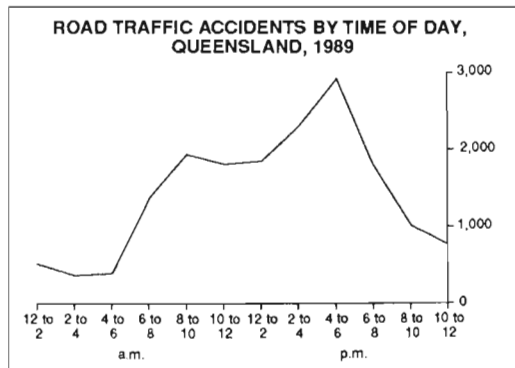
18.12 AGE AND SEX OF PERSONS KILLED IN ROAD TRAFFIC ACCIDENTS, QUEENSLAND, 1989

Age group (years)	Males	Females	Persons	Rate per 10,000 persons
Under 5	2	4	6	0.3
5-6	3	3	6	0.7
7-16	28	10	38	0.9
17-20	58	24	82	4.1
21-24	39	13	52	2.9
25-29	36	8	44	1.9
30-39	55	12	67	1.5
40-49	21	10	31	0.9
50-59	20	9	29	1.2
60 and over	40	33	73	1.7
Total	302	126	428	1.5

In 1989 one motor cyclist was killed or injured for every 66 registered motor cycles compared with one driver for every 411 of all other registered motor vehicles.

18.13 ROAD TRAFFIC CASUALTIES BY TYPE OF ROAD USER, QUEENSLAND

Road user	1987	1988	1989
Motor drivers			
Killed	165	222	173
Injured	3,617	3,748	3,790
Motor cyclists			
Killed	55	53	48
Injured	1,017	1,070	957
Pedal cyclists			
Killed	14	21	19
Injured	656	758	779
Pedestrians			
Killed	73	78	68
Injured	684	738	760
Passengers			
Killed	135	165	120
Injured	2,894	3,191	2,954



More than twice the hourly average number of accidents occurred between 4.00 p.m. and 6.00 p.m., with the greatest number of accidents occurring on Fridays.

18.14 ROAD TRAFFIC ACCIDENTS BY LOCATION, QUEENSLAND, 1989

Locality	Total Casualty accidents	Casualty	Persons killed	Persons injured
Brisbane (C)	5,581	1,884	55	2,284
Ipswich (C)	399	190	11	216
Logan (C)	674	302	18	384
Redcliffe (C)	207	94	2	117
Gold Coast (C)	837	405	22	472
Caloundra (C)	222	101	6	127
Bundaberg (C)	223	115	7	138
Gympie (C)	55	24	2	32
Hervey Bay (C)	118	64	7	93
Maryborough (C)	119	68	1	84
Dalby (T)	31	13	2	15
Goondiwindi (T)	22	8	1	12
Toowoomba (C)	435	184	7	213
Warwick (C)	65	31	1	51
Roma (T)	25	12	—	14
Gladstone (C)	104	56	1	62
Rockhampton (C)	307	135	4	161
Mackay (C)	111	60	3	76
Charters Towers (C)	56	22	—	30
Townsville (C)	540	232	4	279
Thuringowa (C)	133	71	5	125
Cairns (C)	500	180	7	208
Weipa (T)	11	4	1	7
Mount Isa (C)	77	39	3	43
Total cities and towns	10,852	4,294	170	5,243
Total shires	6,186	2,918	258	3,997
Queensland	17,038	7,212	428	9,240

(C) Cities. (T) Towns.

18.2.4 Urban Bus Services

Public transport in Queensland is provided by municipal organisations, private operators and the government railways.

The Passenger Transport (P.T.) Division of the Queensland Department of Transport is responsible for the administration of the *Urban Public Passenger Transport Act, 1984*. By virtue of that Act, the P.T. Division is responsible for the integration and improvement of public passenger services and facilities throughout all major urbanised areas of the State.

Subsidies totalling \$10.9m were paid during 1988-89 to assist urban passenger services throughout Queensland. The subsidies, provided under the Urban Passenger Service Proprietors Assistance Act and the Urban Public Passenger Transport Act, were paid to operators of bus passenger services, ferry services and western air services. Municipal passenger services operate in two Queensland cities. Brisbane residents are provided with bus and ferry services while only bus services operate in Rockhampton.

The number of ferry passengers carried in 1988-89 (1.3 million) was the same as in 1987-88 but was an increase of 18.2 per cent over 1986-87.

18.15 MUNICIPAL BUS TRANSPORT, QUEENSLAND, 1988-89

Particulars	Unit	Brisbane	Rockhampton
Route kilometres		743.4	87.8
Vehicle kilometres	'000	29,171	783
Rolling stock	number	592	28
Passengers carried	'000	47,985	940
Employees at 30 June	number	1,560	37

Source: Brisbane and Rockhampton City Councils.

While patronage of municipal bus services has increased by 14.3 per cent over the past 5 years, the figures for the last 2 years included a large number of passengers carried to World Expo 88.

The total distance travelled by Brisbane City Council buses increased by 7.7 per cent from 27.1 million kilometres in 1987-88 to 29.2 million kilometres in 1988-89.

18.16 MUNICIPAL BUS PASSENGERS CARRIED, QUEENSLAND ('000)

Year	Passengers carried
1983-84	43,924
1984-85	42,826
1985-86	42,811
1986-87	42,118
1987-88	44,492
1988-89	48,926

Source: Brisbane and Rockhampton City Councils.

18.3 RAILWAYS

The Queensland Railways system is owned by the State Government and at 30 June 1989 operated a fleet of 622 locomotives, 140 of which were electric. The rail network comprises 10,094 kilometres of line of which 9,983 kilometres were 1,067 millimetre gauge as well as 111 kilometres of 1,435 millimetre gauge in use between Brisbane and the New South Wales border.

During 1988-89 the \$1,075m Main Line Electrification Project was completed with the commissioning of Stage 4 which is the section between Caboolture and Gladstone. The 2,100 kilometres of line links the central Queensland coal mines with coastal ports and also connects Brisbane with Rockhampton and Emerald. Australia's longest electric passenger train service is the 630 kilometre section between Brisbane and Rockhampton, a journey which takes under 10 hours travelling time. Freight services hauled by electric locomotives commenced to operate between

Brisbane and Rockhampton and Rockhampton and Emerald in 1989. A total of 166 electric locomotives have been ordered and to date 135 have been delivered.

The *Queenslander* service between Brisbane and Cairns, a distance of 1,680 kilometres, is one of the longest passenger train services in Australia. The service is fully booked by both Australian and international tourists for most journeys during the winter months. The *Midlander* offers a fast service for passengers, with electric locomotives from Rockhampton to Emerald. This service has increased patronage due to the Stockman's Hall of Fame at Longreach. Queensland Railways operate two special tourist trains in the far north of the State, the daily Cairns to Kuranda and the weekly *Gulflander* service from Normanton to Croydon. Both services experienced increased patronage during 1988-89.

At June 1989 there were 20,224 wagons in service, 787 fewer than in the previous year. The number of carriages decreased to 434.

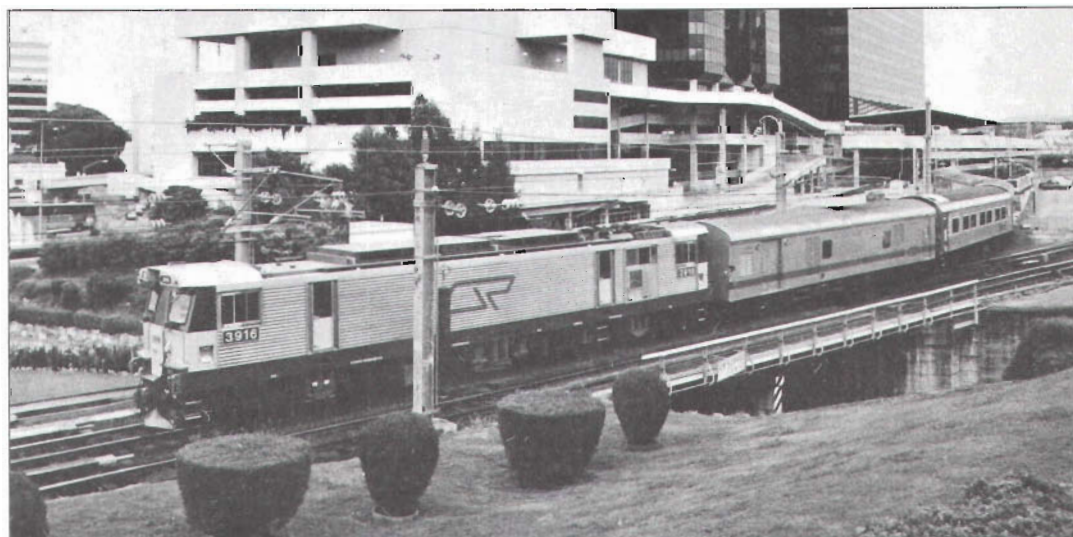


18.17 ROLLING STOCK, QUEENSLAND

Type	1986-87	1987-88	1988-89
Locomotives	651	645	622
Diesel-mechanical	4	—	—
Diesel-electric	549	487	411
Diesel-hydraulic	73	71	71
Electric	25	87	140
Cars (a)	852	822	736
Rail motors, trailers etc.	44	42	42
Brake vans	174	162	140
Wagons	22,096	21,011	20,224

(a) Including electric multiple units (264 cars (88 x 3) in 1988-89).
Source: Queensland Railway Department.

Earnings in 1988-89 were \$1.1m, representing an increase from those in 1987-88 of 11.7 per cent compared with an increase in working expenses of \$36.6m or 4.1 per cent. Goods traffic earnings, which provided 92.2 per cent of the total earnings, increased by 12.2 per cent. Coke and coal carried in 1988-89 represented 82.0 per cent of all goods traffic which was an increase of 6.4 per cent over that carried in 1987-88. The amount of wool carried decreased by 18.8 per cent, while livestock carried decreased by 35.6 per cent.



The *Queenslander* departing Roma Street Station, Brisbane

Photo: Queensland Railway Department

18.18 RAILWAY OPERATIONS, QUEENSLAND

Particulars	Unit	1986-87	1987-88	1988-89
Lines open	km	10,210	10,089	10,094
Traffic train-kilometres	'000	35,051	34,099	33,571
Train-kilometres per kilometre open	km	3,433	3,380	3,326
Total earnings	\$'000	1,028,871	991,422	1,107,125
Total working expenses (a)	\$'000	900,254	894,656	931,236
Net revenue	\$'000	128,617	96,766	175,889
Coaching traffic				
Train-kilometres	'000	9,311	9,739	10,392
Country	'000	3,653	3,565	3,646
Suburban (b)	'000	5,659	6,174	6,746
Passengers carried	'000	39,950	46,228	50,943
Country	'000	1,064	1,275	1,525
Suburban (b)	'000	38,886	44,953	49,418
Earnings collected	\$'000	48,601	56,886	65,328
Passengers	\$'000	43,344	56,233	65,100
Country	\$'000	11,781	13,902	15,333
Suburban (b)	\$'000	31,562	42,331	49,768
Parcels, mails etc.	\$'000	5,257	653	228
Goods traffic (c)				
Train-kilometres	'000	25,740	24,361	23,180
Freight carried	'000 tonnes	75,169	74,893	80,508
Minerals (including coal)	'000 tonnes	65,664	66,467	70,586
Agricultural produce	'000 tonnes	4,436	3,194	3,924
Other goods	'000 tonnes	4,583	4,767	5,698
Livestock	'000 tonnes	486	465	299
Earnings collected	\$'000	960,950	910,409	1,021,272
Minerals (including coal)	\$'000	786,988	755,471	854,352
Agricultural produce	\$'000	57,024	41,320	51,113
Other goods	\$'000	98,750	95,990	103,775
Livestock	\$'000	18,188	17,627	12,033
Rents, railway catering services etc.	\$'000	19,321	24,127	20,525

(a) Excluding interest, redemption and sinking fund charges on Uniform Gauge Railway. (b) Metropolitan district only. (c) Excluding departmental traffic.
Source: Queensland Railway Department.

Average earnings per passenger train-kilometre in 1988-89 were \$7.40 for suburban services and \$4.21 for country services. Country passenger traffic increased 19.6 per cent while suburban passenger traffic rose by 9.9 per cent. Increases were due mainly to World Expo 88.

18.4 AIR TRANSPORT

Contributed by the Department of Transport and Communications

The provision of air services within Queensland is regulated by the Queensland Government. In addition, the Commonwealth regulates on safety and operational grounds and provides infrastructure services through the Civil Aviation Authority. The authority has operational responsibility for air traffic control, flight advisory services, communications, navigation and surveillance systems and rescue and fire-fighting services.

The Commonwealth is responsible for negotiating international air services and administers and regulates domestic air transport on

interstate routes in Australia through an arrangement known as the 'two-airline' policy. This policy will cease on 30 October 1990.

At 30 June 1989, there were 139 aerodromes used for civil aviation in Queensland.

Archerfield, Brisbane, Coolangatta and Mount Isa airports are owned and operated by the Federal Airports Corporation (FAC) which was established on 1 January 1988 by the Federal Government.

Oakey and Townsville aerodromes are used for civil and military operations. Oakey is owned and operated by the Department of Transport and Communications and Department of Defence. Townsville is owned and operated by the FAC and Department of Defence.

As at 30 June 1989, eight other aerodromes were operated by the Department of Transport and Communications. There were 116 licensed aerodromes primarily owned, operated, maintained and developed by the local communities and which were eligible for financial assistance under the Commonwealth's Aerodrome Local Ownership Plan.

In addition, there were nine other licensed aerodromes which were locally or privately owned.

AIRCRAFT NOISE — BRISBANE

Since the commencement of operations of the new Brisbane domestic airport in March 1988, a major reduction in aircraft noise has resulted. The reduction was not uniform however, with some suburbs which had previously experienced little aircraft noise now experiencing a noticeable increase in noise levels. Although these noise levels do not qualify as a significant nuisance by international standards, nonetheless they have caused concern to residents in suburbs where the noise level has increased.

After consulting with resident groups and the aviation industry, the Commonwealth Government has announced a package of measures which includes voluntary restrictions on times of operation.

Cairns Port Authority expects the Stage 2 redevelopment of Cairns airport to be completed by mid-1990. This includes construction of a new international terminal and 41 metre control tower and the installation of radar. In January 1990 the main runway was extended by 600 metres to 3,200 metres and has eliminated the need for passenger and freight payload restrictions on most aircraft.

In addition to their competitive trunk route services, both Ansett and Australian Airlines operate limited domestic regional services on non-competitive routes. There are also a number of smaller regional airlines which provide regular passenger services in specific geographical regions. In recent years the regional airline, East-West, has shifted its emphasis from New South Wales intrastate routes and now operates jet aircraft services between Sydney, Coolangatta, Brisbane, Maroochydore, Rockhampton, Mackay, Proserpine, Cairns and Mount Isa.

18.19 SELECTED AVIATION SECURITY INCIDENTS, 1988-89

Type of incident	Queensland	Australia
Hoax calls or letters	9	50
Unauthorised entry or trespass	9	22
Hijack or hijack attempts	—	—
Bomb incidents	—	2
Suspicious objects	1	12
Passenger incidents	2	4
All incidents	23	136

Source: Department of Transport and Communications.

Air Vanuatu commenced flights between Brisbane and Port Vila, Vanuatu during the year.

The Royal Flying Doctor Service operates throughout western Queensland.

In 1988-89 most major Queensland airports experienced an increase in domestic and international traffic. A significant contribution to this

was the increase in tourism as a result of World Expo 88. There was a 10.9 per cent increase in the number of passengers through Brisbane airport, an 11.8 per cent increase at Cairns and a 7.4 per cent increase at Coolangatta.

18.20 PASSENGER, FREIGHT AND AIRCRAFT MOVEMENTS, QUEENSLAND AIRPORTS (a), 1988-89

Airport	Passengers	Freight	Aircraft
	(b)		movements
	No.	tonnes	(c)
Brisbane			
Domestic	3,581,535	32,893	41,563
International	973,232	27,034	8,933
Cairns			
Domestic	824,880	4,197	13,005
International	189,434	1,947	2,845
Coolangatta	1,080,222	1,719	16,446
Hamilton Island	162,815	261	3,340
Mackay	153,086	501	4,226
Maroochydore	81,936	2	1,956
Mount Isa	53,804	951	2,215
Proserpine	54,513	65	979
Rockhampton	160,335	1,172	6,705
Thursday Island	20,051	49	1,057
Townsville			
Domestic	379,362	4,978	10,528
International	21,141	438	470
Weipa	21,547	213	2,113

(a) Airports handling fewer than 20,000 passengers are not included.
(b) Uplifts and discharges. (c) Landings and takeoffs.

Source: Department of Transport and Communications.

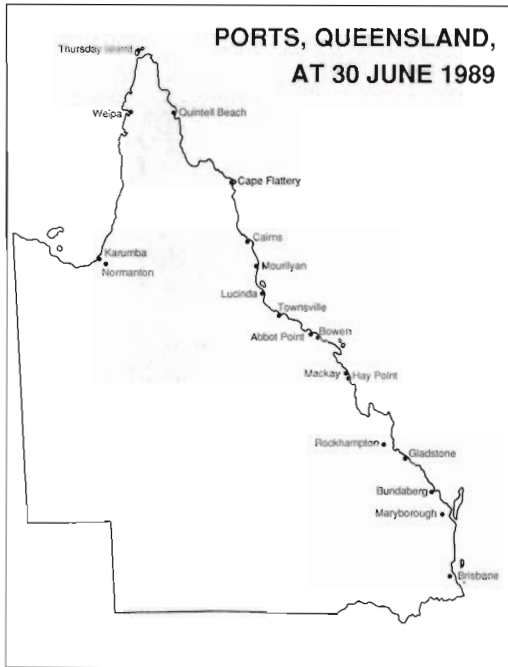
The number of aircraft registered in Queensland at 15 March 1990 was 1,456, comprising 901 private, 287 charter work, 261 other and 7 regular public transport.

18.5 SHIPPING

Contributed by the Division of Marine and Ports, Department of Transport

Queensland is a world leader in the development of major ports with facilities to handle essential commodities and has developed modern, efficient ports that easily accommodate huge bulk carriers. In 1988-89, Queensland's 15 major ports handled 104,022,969 tonnes of cargo carried by 4,268 ships. The largest ship was the *Iron Pacific* with a dead-weight tonnage of 231,851 tonnes. This vessel loaded a record single coal shipment of 200,052 tonnes from the port of Hay Point.

Queensland's decentralised port system is administered by two management structures, the Harbours Corporation of Queensland and seven regional port authorities. All ports and their administration are covered by State legislation and are Crown instrumentalities and therefore accountable to the Minister for Transport.



The ports of Brisbane, Bundaberg, Gladstone, Rockhampton (Port Alma), Mackay, Townsville and Cairns are administered by port authorities with members representing the towns and districts served by the ports. These authorities are coordinated by the Department of Transport's Marine and Ports Division under the provisions of the Harbours Act.

Various port authorities have expanded and diversified their activities, and in recent years the Mackay and Cairns authorities have taken over the operations of their regional airports.

All the other ports are controlled by the Harbours Corporation, including the major international bulk commodity ports at Weipa, Cape Flattery, Mourilyan, Lucinda, Abbot Point and Hay Point, and the larger domestic ports at Normanton-Karumba and Thursday Island. The Harbours Corporation also manages various harbours and the smaller domestic ports at Quintell Beach, Bowen, Maryborough and the Gold Coast.

18.5.1 Port of Brisbane

The Port of Brisbane Authority was created in 1976 for the management and control of the port which handles a greater cargo-mix volume than any other port in Australia. Thirty-one wharves handle coal, bulk grain, oil, cold storage cargoes, chemicals and fertilisers, and its two refineries handle in excess of 7 million tonnes of crude oil every year.

Another successful trade year was recorded during 1988-89, with the total throughput of cargo exceeding 15 million tonnes. This represented an increase of more than 1 million tonnes over the previous year.

To meet the demands of modern shipping, the Port of Brisbane Authority and private enterprise have spent \$250m to relocate the cargo wharves to the new Fisherman Islands facility at the mouth of the Brisbane River. Three container handling wharves were constructed at this site.

18.5.2 Regional Ports

During 1988-89 Australia's largest tonnage of coal, some 35,224,715 tonnes was exported from Hay Point's two terminals — Dalrymple Bay Coal Terminal and Central Queensland Coal Associates Terminal. Hay Point is the second biggest coal handling facility in the world.

A total of 4,997,689 tonnes of coking and steaming coal were exported from the Bowen Basin through Abbot Point. The port's present throughput is 10 million tonnes with plans for an expansion to 24 million tonnes as demand requires. The largest single shipment through Abbot Point during the year was 176,106 tonnes on the vessel *Mineral Nippon*, a record shipment for the port.

Located north of Cooktown, the port of Cape Flattery deals exclusively with the export of silica sand, exporting 1,290,385 tonnes during 1988-89 through its new bulk facility. The Weipa facilities are leased to Comalco Pty Ltd for the export of bauxite and kaolin to domestic and overseas users. The tonnage handled at Weipa totalled 10,828,474.

18.21 OVERSEAS CARGO HANDLED AT QUEENSLAND PORTS (a)

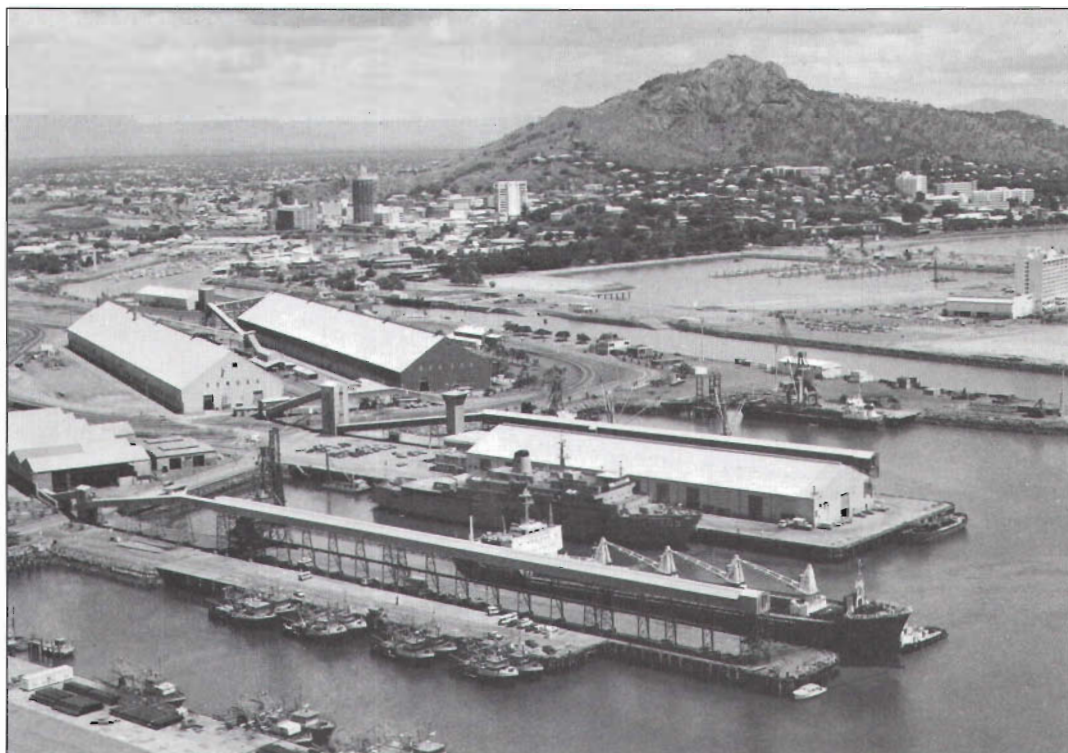
(*'000 gross weight tonnes*)

Port	Cargo loaded		Cargo discharged	
	1987-88	1988-89	1987-88	1988-89
Brisbane	4,904	6,206	1,274	2,261
Gladstone	18,168	18,006	809	501
Dalrymple Bay	363	—	—	—
Hay Point	32,087	32,738	—	—
Mackay	2,663	2,948	49	53
Bowen/Abbot Point	5,943	4,829	—	—
Townsville	1,626	1,704	331	533
Lucinda	397	415	—	—
Innisfail	448	394	—	—
Cairns	398	540	67	91
Cape Flattery	904	1,224	—	—
Weipa	2,763	3,469	49	54
Other ports	94	302	53	38
Total	70,756	72,775	2,632	3,532

(a) Excluding vessels of 200 registered net tonnes and under.

Source: Shipping and Air Cargo Commodity Statistics (9206.0).

The ports of Lucinda and Mourilyan are equipped with sugar handling plants and serve the



Port of Townsville

Photo: *Division of Marine and Ports*

sugar industry in the Ingham and Innisfail districts. Mourilyan exported 399,895 tonnes of sugar and 116,659 tonnes of molasses during the year.

The Port of Townsville rivals Brisbane for depth of water, ease of access and handling facilities. Its nine deepwater berths are all serviced by rail. The port exports large quantities of local sugar, and zinc concentrates and lead from Mt Isa, as well as handling heavy imports of fuel and machinery. During 1988-89 more than 2,876,000 tonnes of cargo were handled, an increase of 400,000 tonnes over the 1987-88 total.

The financial year also saw a record tonnage handled at the multi-commodity Port of Gladstone. A total of 575 vessels handled approximately 29 million tonnes of cargo, of which 16.5 million tonnes were coal exports. Gladstone is the second largest Queensland port in terms of tonnage handled, importing mainly bauxite from Weipa and petroleum products. During the year, Transfield Pty Ltd completed work on the second berth at the Clinton Coal Facility for the Gladstone Port Authority at a cost of around \$17m.

Cairns, on Trinity Bay, has nine deepwater berths. Its biggest export is sugar and it has facilities for loading fuel, tallow, molasses, containers and general cargo. The Cairns Port Authority has opened a modern passenger facility in the new

Trinity Wharf complex to cater for the growing cruise ship trade. The 1988-89 trading year was successful with 1,140,800 tonnes of cargo being handled, an increase of 80,000 tonnes over the previous year.

The Mackay Port Authority continued to expand its interests and took over the Mackay airport in October 1989 following the completion of the negotiations with the Commonwealth Government. The \$2.1m upgrading on Number 4 berth commenced and the grain export loading facility completed in 1988 was officially opened. Approximately 1,613,000 tonnes of cargo were handled through the Port of Mackay during the year.

18.6 TELECOMMUNICATIONS

A new Act, the *Telecommunications Act 1989*, aimed at restructuring the regulatory framework for the telecommunications industry was passed and brought into effect from 1 July 1989. Under the Act, AUSTEL becomes the new independent regulatory authority. It defines the monopolies of the carriers Telecom, OTC Limited and AUSSAT, and those areas which are open to competition.

The regulatory arrangements administered by AUSTEL have three basic aims:

- to safeguard safety and inter-operability in the public network;
- to ensure that the carriers' legitimate monopolies are not transgressed and
- to ensure that the carriers do not use their monopoly power unfairly to advantage themselves in the non-reserved markets.

Telecommunications have made a significant contribution to the development of Queensland since 1861, when operators began sending morse code messages along a line between Brisbane and Ipswich. By 1864, a complex telegraph network had extended as far north as Rockhampton.

But the days of tapping morse keys were numbered when Alexander Graham Bell in 1876 produced the world's first practical telephone. Less than 3 years later, Queensland had its own telephone exchange.

In August 1880, the Postmaster-General ordered that all Government offices were to be placed in telephone communication with each other through a central exchange at the head office at the GPO, Brisbane.

By April 1883 the Central Exchange could provide continuous service around the clock and 175 customers were connected.

The first country exchange in Queensland and Australia opened in 1882 at Maryborough with 32 customers. Townsville got its first exchange in 1883, Rockhampton the following year and Bundaberg in 1886. By 30 April 1899, there were 899 telephone customers in Brisbane and a total of 1,558 throughout the State. Less than a century later, over 88 per cent of households in Queensland have a telephone connected.

The provision of up-to-date, affordable and efficient telecommunication services throughout Australia is the task of Telecom. In Queensland at 30 June 1989, there were 1,168,691 telephone services in operation, an increase of 7 per cent over the number at 30 June 1988. During 1988-89, calls to Directory Assistance increased by 7 per cent to 27.9 million while telex calls continued to fall rapidly, decreasing by 95 per cent to 208,300.

18.22 TELEPHONE SERVICES IN OPERATION, QUEENSLAND, AT 30 JUNE

Area	1988	1989
Metropolitan	528,675	782,934
Country	567,092	385,757
Total	1,095,767	1,168,691

Source: Telecom Australia.

The number of public telephones in Queensland in 1988-89 increased by 505 or 9 per cent. This followed a small decrease in 1987-88.

Access to STD services continues to approach 100 per cent for telephone users.

18.23 TELECOMMUNICATIONS, QUEENSLAND

Particulars	1987-88	1988-89
Telex		
Customers	4,494	2,809
Calls (a)	4,210,000	208,300
Telephones		
New service connections	117,978	126,649
Services in operation (b)	1,095,767	1,168,691
Services with access to STD (b)	1,095,089	1,168,324
Public telephones	5,749	6,254
Datel (c)	14,348	12,707
Digital data services (c)	6,679	9,816
Austpac services	916	1,379

(a) National and international. (b) At 30 June. (c) Customer ends in operation.

Source: Telecom Australia.

18.7 POSTAL SERVICES

At 30 June 1989 Australia Post engaged 4,569 persons in full-time employment in Queensland and a further 569 were employed part-time. When post office agents and other agency engagements are added to mail contractors a total of almost 7,000 persons are engaged in postal services.

In 1988-89, a total of 524.7 million articles were posted in Queensland and 95 per cent were for delivery within Australia. Ninety-two per cent of all articles processed in Queensland were delivered within advertised times. There were 1,114,478 delivery points in Queensland, an increase of 12,444 from the 1987-88 figure.

18.24 DELIVERY POINTS, QUEENSLAND, AT 30 JUNE 1989

Particulars	Households	Businesses
Street delivery	779,719	54,734
Private boxes	85,728	49,701
Roadside delivery	87,047	3,772
Other (a)	49,974	3,803
Total	1,002,468	112,010

(a) Including private, locked and community bags and poste restante.

Source: Australian Postal Corporation.

New buildings were completed for the Cairns Mail Centre, Capalaba Post Office and a trans-shipment centre at the new Brisbane domestic airport. Renovations were completed at Maryborough, Toowoomba and Rockhampton Post Offices. Contracts were awarded for new buildings at Cairns (private box annexe) and Archerfield (mail delivery annexe), and for renovations to the postal hall at the Brisbane GPO and the former Cairns Mail Centre.

18.25 POST OFFICES AND AGENCIES, QUEENSLAND, AT 30 JUNE 1989

Type	Number
Post offices	218
Post office agencies	516
Total	734
Community mail agencies	34

Source: Australian Postal Corporation.

18.8 RADIO AND TELEVISION SERVICES

The responsibility for planning radio and television broadcasting in Australia rests with the Department of Transport and Communications. Other federal organisations involved in broadcasting are the Australian Broadcasting Tribunal, which is a licensing body and the Australian Telecommunications Corporation. The Australian Broadcasting Corporation (ABC) and the Special Broadcasting Service (SBS) provide national broadcasting networks.

There are four different types of radio and television services which operate in Queensland under the Broadcasting and Television Act:

- national radio and television services provided by the ABC and SBS;
- commercial radio and television services transmitted by licensee companies;
- public radio services transmitted by non-profit-making bodies under licence and
- special radio print handicapped (RPH) broadcasting stations.

18.8.1 Radio Broadcasting Services

In Queensland at the end of 1989 there were over 20 national radio broadcasting stations operating throughout the State in both the AM and FM bands, 40 commercial radio stations (34 AM and 6 FM) and 11 public radio stations.

During the year some AM radio stations converted to the FM band. The first radio station in Australia to make the change was 4GG located on Queensland's Gold Coast which began operations as 4GGG (FM) on 20 March 1989.

18.26 COMMERCIAL RADIO (FM) BROADCASTING STATIONS, QUEENSLAND, AT DECEMBER 1989

Call sign	Frequency	Location
	megahertz	
4BBB	105.3	Brisbane
4GGG	92.5	Gold Coast
4MK	91.5	Airlie Beach
4MMM	104.5	Brisbane
4QFM	106.9	Ipswich
4SEA	90.9	Gold Coast

Source: Department of Transport and Communications.

18.27 NATIONAL RADIO (AM) BROADCASTING STATIONS, QUEENSLAND, AT DECEMBER 1989

Call sign	Frequency	Location
	kilohertz	
4AT	720	Atherton
4CH	603	Charleville
4GM	1566	Gympie
4HU	1485	Hughenden
4JK	567	Julia Creek
4MI	1080	Mount Isa
4MS	639	Mossman
4PB	936	Brisbane
4QA	756	Mackay
4QB	855	Pialba
4QD	1548	Emerald
4QG (Radio National)	792	Brisbane
4QL	540	Longreach
4QN	630	Townsville
4QO	855	Eidsvold
4QR	612	Brisbane
4QS	747	Toowoomba
4QW	711	St George
4QY	801	Cairns
4RK	837	Rockhampton
4TI	1062	Thursday Island
4WP	1044	Weipa

Source: Department of Transport and Communications.

18.28 COMMERCIAL RADIO (AM) BROADCASTING STATIONS, QUEENSLAND, AT DECEMBER 1989

Call sign	Frequency	Location
	kilohertz	
<i>Metropolitan</i>		
4BC	1116	Brisbane
4BH	882	Brisbane
4IP	1008	Brisbane
4KQ	693	Brisbane
<i>Country</i>		
4AK	1242	Oakey
4AM	558	Atherton
4BU	1332	Bundaberg
4CA	846	Cairns
4CA	954	Gordonvale
4CC	666	Biloela
4CC	927	Gladstone
4GC	828	Charters Towers
4GC	765	Hughenden
4GR	864	Toowoomba
4GY	558	Gympie
4HI	945	Dysart
4HI	1143	Emerald
4HI	1215	Moranbah
4KZ	531	Innisfail
4KZ	693	Tully
4LG	1098	Longreach
4LM	1458	Cloncurry
4LM	666	Mount Isa
4MB	1161	Maryborough
4MK	1026	Mackay
4RO	990	Rockhampton
4RR	891	Townsville
4SB	1071	Kingaroy
4SS	828	Nambour
4TO	774	Townsville
4VL	918	Charleville
4VL	1584	Cunnamulla
4WK	963	Warwick
4ZR	1476	Roma

Source: Department of Transport and Communications.

Reviews of radio frequency spectrum allocations enabled the provision of additional commercial radio services in metropolitan and regional areas, and satellite delivered radio services began to be extended to remote areas.

Public Broadcasting Services

The 11 public radio stations operating in Queensland receive their income from various sources including government and non-government grants and subscriptions, as well as from sponsorship announcements. They broadcast a wide variety of programs ranging from classical music to ethnic, cultural and educational material.

Station 4RPH, located in Brisbane and heard on broadcast frequency 1620 kilohertz, has been specially licensed under the *Radiocommunications Act 1983*. It broadcasts spoken word programs such as drama and newspaper readings for visually impaired listeners.

18.29 PUBLIC RADIO STATIONS, QUEENSLAND, AT DECEMBER 1989

Call sign	Frequency	Location
4CBL	101.1 mhz	Logan
4CCR	89.1 mhz	Cairns
4CRB	89.3 mhz	Gold Coast
4DDB	102.7 mhz	Toowoomba
4EB	105.3 khz	Brisbane
4MBS	103.7 mhz	Brisbane
4RPH	1620 khz	Brisbane
4RRR	101.7 mhz	Roma
4TTT	103.9 mhz	Townsville
4YOU	98.5 mhz	Rockhampton
4ZZZ	102.1 mhz	Brisbane

Source: Department of Transport and Communications.

18.8.2 Television Broadcasting Services

18.30 NATIONAL TELEVISION STATIONS, QUEENSLAND, AT JUNE 1988

Call sign-channel	Location	Call sign-channel	Location
ABQ-2	Brisbane	ABMSQ-9	Miles
ABQ-3	Darling Downs	ABRAQ-7	Roma
ABRQ-3	Rockhampton	ABEQ-11	Emerald
ABTQ-3	Townsville	ABSGQ-8	St George
ABMQ-4	Mackay	ABCEQ-9	Charleville
ABWQ-6	Wide Bay-	ABAAQ-11	Augathella
	Maryborough	ABCAQ-10	Cunnamulla
ABNQ-9	Cairns	ABDIQ-7	Dirranbandi
ABSQ-9	South Downs-	ABMLQ-6	Mitchell
	Warwick	ABMNQ-7	Morven
ABIQ-6	Mount Isa	ABWNQ-8	Winton
ABCLQ-7	Cloncurry	ABCTQ-10	Clermont
ABJQ-10	Julia Creek	ABSEQ-9	Springhurst
ABRQ-6	Richmond	ABAQ-8	Alpha
ABHQ-9	Hughenden	ABBQ-10	Barcardine
ABMKQ-9	Mary Kathleen	ABBLQ-9	Blackall
ABGQ-6	Goondiwindi	ABLQ-6	Longreach

Source: Australian Broadcasting Tribunal.

18.31 COMMERCIAL TELEVISION SERVICES, QUEENSLAND, AT JUNE 1988

Call sign-channel	Location
<i>Metropolitan</i>	
BTQ-7	Brisbane
QTQ-9	Brisbane
TVQ-0	Brisbane
<i>Country</i>	
DDQ-10	Toowoomba
FNQ-10	Cairns
ITQ-8	Mount Isa
MVQ-6	Mackay
RTQ-7	Rockhampton
SDQ-4	Southern Darling Downs
SEQ-8	Wide Bay
TNQ-7	Townsville

Source: Australian Broadcasting Tribunal.

18.9 REFERENCES

ABS publications produced by the Queensland Office:

- Local Government* (5502.3), annual
- Transport* (9101.3), annual
- Motor Vehicle Registrations* (9303.3), monthly
- Road Traffic Accidents* (9405.3), quarterly
- Road Traffic Accidents* (9406.3), annual

ABS publications produced by the Canberra Office:

- Household Telephone Connections* (4110.0), irregular
- Shipping and Air Cargo Commodity Statistics* (9206.0), quarterly
- Rail Transport* (9213.0), annual
- Motor Vehicle Registrations* (9303.0), monthly
- Motor Vehicle Registrations* (9304.0), annual
- Motor Vehicle Census* (9309.0), irregular
- Road Traffic Accidents Involving Fatalities* (9401.0), monthly
- Road Traffic Accidents Involving Casualties (Admissions to Hospitals)* (9405.0), quarterly

Other publications:

Department of Harbours and Marine, individual Harbour Boards, Port Authorities, the Commissioner for Railways, the Department of Transport, the Commissioner for Transport, the Australian Postal Corporation, Australian Telecommunications Corporation, the Australian Broadcasting Tribunal, the Australian Broadcasting Corporation and the Department of Transport and Communications, *Annual Reports*

Chapter 19

TRADE AND PRICES

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Chapter 19

TRADE AND PRICES

Queensland's external trade situation continued to enjoy a strong surplus in the 1980s.

Queensland has traditionally been a net exporter of agricultural products such as sugar, meat and wool, as well as gold, initially to the United Kingdom and Commonwealth countries and then to Europe and South America.

In the early 1970s coal became the most valuable export item, replacing wool. New energy sources were sought by industrialising countries, particularly Japan, which became Queensland's principal trading partner.

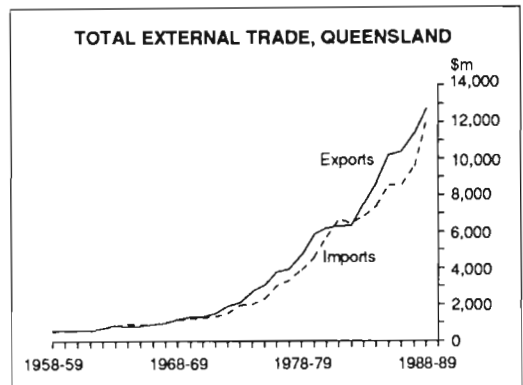
Over the past 5 years or so Queensland's retail industry has also grown strongly as the State has benefited economically not only from rising exports but from an increasingly buoyant tourism industry. Between 1980 and 1986 the total value of retail trading is estimated to have grown 32 per cent in real terms.

19.1 EXTERNAL TRADE

After a period of relatively stagnant economic activity during the 1950s and 1960s, the economic boom of the 1970s saw a dramatic increase in the volume of trade. Between 1970 and 1980, foreign exports increased five and a half times from \$773.5m to \$4,261.7m while interstate exports trebled from \$547.8m to \$1,596.7m.

A similar pattern is reflected in imports. Foreign imports increased four and a half times from \$294.1m to \$1,321.1m, while interstate imports increased from \$935.7m to \$3,272.3m.

As the 1980s progress there is a slowing in the rate of growth of foreign exports. Since 1984-85 the average annual growth has been 11 per cent and in 1988-89 the value was recorded as \$9,088.9m. However, the average annual rate of growth for foreign imports is increasing and over the same period has averaged 13 per cent, with an exceptional 33 per cent growth being recorded between 1987-88 and 1988-89.



During the same period, the opposite is the case for interstate trade. Interstate exports are growing at an average annual rate of 12.3 per cent while the rate of growth for interstate imports has slowed to 12.0 per cent a year. However, between 1987-88 and 1988-89 this trend was reversed for interstate imports, which grew by 23.8 per cent to \$8,318.0m.

19.1 TOTAL EXTERNAL TRADE, QUEENSLAND (\$m)

Direction of trade	1986-87	1987-88	1988-89
Exports			
Foreign (a)	7,806.3	8,167.4	9,088.9
Interstate	2,587.2	3,176.8	3,637.3
Total	10,393.5	11,344.2	12,726.2
Imports			
Foreign	2,503.5	2,845.2	3,788.4
Interstate	6,055.9	6,721.2	8,318.0
Total	8,559.4	9,566.4	12,106.4
Balance of trade	+1,834.1	+1,777.8	+619.8

(a) Excluding non-merchandise trade.

Queensland's surplus in its balance of total trade dropped dramatically during 1988-89 as a result of the strong growth in total imports for the year. The surplus was reduced from \$1,778.8m in 1987-88 to just \$619.8m in 1988-89, a decrease of 65.2 per cent.

Coal continues to be the State's single most valuable export item, while as a group, machinery and transport is the main import.

19.1.1 History

When the colony of Queensland was established, all trade was directed through the colony of New South Wales. In 1860 this changed when Queensland established its own direct overseas trading links. Initially trade was conducted only with Great Britain but was later extended to other parts of the British Empire and to other destinations such as Germany and South American countries.

During the early years the other Australian colonies and Great Britain not only provided the major commodities of wearing apparel, drapery and food but also took most of Queensland's exports, mainly wool. By 1869, the colony was also exporting gold dust, copper ore and cotton and, in that year, reported its first surplus, a tidy sum of £144,698 (\$289,396).

Up to federation the main imports continued to be flour, metals and manufactures of metals (including machinery), clothes, spirits (including beer) and groceries. Exports had begun to diversify, with meat overtaking sugar as the major item while wool and gold dust continued to be important. The United Kingdom replaced New South Wales as the major source of imports and goods flowed through Brisbane, the main port, as well as through the other major ports of Townsville, Rockhampton and Cairns.

Following federation in 1901, Queensland's economy continued to grow until World War I. By 1915 Queensland's major exports were meat, wool and butter, together with gold dust, sugar, copper and tin. The United Kingdom took 78.5 per cent of all exports in 1915 followed by the United States with just 5.7 per cent. Germany, which had been a major trading partner, was replaced by Japan which took 3.3 per cent. There was little change in the trading pattern for imports during this time, with the exception that Japan had become the State's third largest source of imports, replacing Germany.

Motor vehicles rapidly became the State's third largest item of imports, behind metal manufactures (including machinery) and apparel.

The 1920s saw a strong economic recovery with imports of £13.7m (\$27.4m) and record exports of £26.4m (\$52.8m) being recorded in 1925-26. The

Great Depression followed close on the heels of these boom years, however, and imports plummeted to just £3.7m (\$7.4m) in 1932 while exports reached a low of £15.5m (\$31m) in 1932-33. Recovery in imports was slow with the figure advancing to only £8.7m (\$17.4m) by the outbreak of World War II. Exports, on the other hand, increased more rapidly to reach a new record level of £32.2m (\$64.4m) on the eve of the war.

By 1932 Japan had become the State's second largest export destination after the United Kingdom, taking 10.2 per cent of total exports.

Following the war, Queensland's trade pattern began to undergo major changes. By 1955 Japan had once again emerged as the State's second most important destination for exports behind the United Kingdom. Wool, sugar and meat remained as major export earners. Imports continued to be obtained predominantly from the United Kingdom. The United States, however, was important for the supply of machinery, metal products and motor vehicles while Indonesia and India were prominent sources of textiles. By 1966 Japan had become the State's major trading partner.

By the end of the 1970s wool had been replaced by coal as the State's single most valuable item of export, ahead of meat, sugar and ores and concentrates of copper, lead, zinc and alumina. Commodities being imported had changed little, with machinery and transport equipment being the major items.

Since 1889, Queensland has mostly enjoyed a favourable balance of foreign trade. Although small at first, it is only since the end of World War II that the surplus began to increase dramatically. The most significant increases occurred during the 1970s from \$479.4m in 1970 to \$2,940.6m in 1980. This trend continued throughout the 1980s, peaking in 1988 at \$5,323.2m and then decreasing slightly in 1989 to \$5,300.5m.

19.2 BALANCE OF FOREIGN TRADE, QUEENSLAND
(\$m)

Year	Exports	Imports	Balance
1860	1.0	1.4	-0.4
1870	4.0	3.0	+1.0
1880	6.4	5.8	+0.6
1890	13.2	9.6	+3.6
1900	19.2	14.4	+4.8
1910 (a)	16.4	10.8	+5.6
1920	28.8	14.4	+14.4
1930	37.6	23.0	+14.6
1940	64.4	17.6	+46.8
1950	197.4	97.8	+99.6
1960	362.6	101.8	+260.8
1970	773.5	294.1	+479.4
1980	4,261.7	1,321.1	+2,940.6
1989	(b) 9,088.9	3,788.4	+5,300.5

(a) Before 1910, includes intercolonial and interstate trade. (b) From 1985 excludes non-merchandise trade.

Source: Statistics of Queensland.

Of the State's total imports, 69 per cent is recorded as interstate imports. It is not known how much of those imports is actually foreign imports, unloaded in southern ports and transhipped through, rather than originating in, other States.

Queensland's exports of minerals, meat and sugar contribute significantly to the national economy. During 1988-89, the State's foreign exports were maintained at 20.9 per cent of the Australian total, while foreign imports reflect the national growth and rose to 8.0 per cent of the Australian total.

19.1.2 Commodities Traded

Foreign Exports

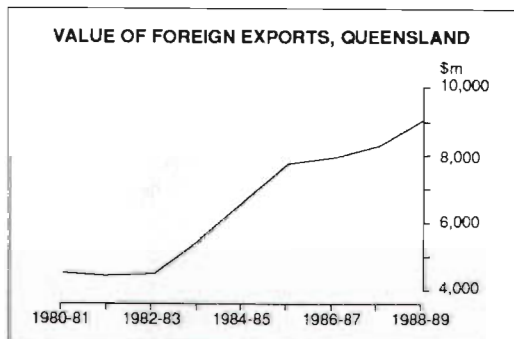
Minerals, particularly coal, continue to be the State's most valuable foreign export items. The value of coal exported in 1988-89 fell by \$139.9m to \$2,742.7m when compared with 1987-88. Unrefined, refined and articles of aluminium, copper and lead were \$462.5m, \$311.3m and \$194.7m, respectively, and this comprised 10.7 per cent of the value of exports for the year.

The value of meat exports for 1988-89 was \$1,069.8m, a decrease of \$33.5m (3 per cent) when compared to 1987-88. This was 11.8 per cent of the State's total exports compared with 13.5 per cent in the previous year. Sugar exports increased their proportion of exports by 1.2 per cent to 9.4 per cent during 1988-89.

19.3 PRINCIPAL FOREIGN EXPORTS,
QUEENSLAND, 1988-89
(\$'000)

Commodity	Value (a)
Coal	2,742,742
Meat	1,069,826
Sugar	852,930
Unrefined, refined and articles of aluminium	462,473
Wool	323,572
Cereal grains	313,415
Unrefined, refined and articles of copper	311,315
Unrefined, refined and articles of lead	194,658
Other	2,818,000
Total	9,088,931

(a) Excluding non-merchandise trade.



Interstate Exports

In 1988-89 the major groups comprised food and live animals (25.9 per cent), crude materials, inedible, except fuels (21.2 per cent), manufactured goods classified by material (20.1 per cent) and machinery and transport equipment (18.1 per cent).

The food and live animals group has shown a decline, in percentage terms, over recent years (down from 35.0 per cent in 1984-85), while crude materials, inedible, except fuels (up from 6.8 per cent in 1984-85) has maintained its growth.

19.4 PRINCIPAL INTERSTATE EXPORTS,
QUEENSLAND, 1988-89
(\$'000)

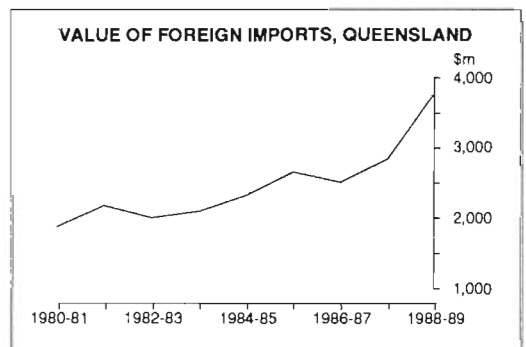
Commodity group	Value
Food and live animals	943,632
Crude materials, inedible, except fuels	769,758
Manufactured goods classified by material	730,258
Machinery and transport equipment	658,329
Other (a)	535,301
Total	3,637,278

(a) Contains items for which details are not publishable.

Foreign Imports

There has been a dramatic surge in the level of foreign imports into Queensland during 1988-89. The figure was recorded as \$3,788.4m, a 33.2 per cent increase over the 1987-88 figure.

This strong demand for imports has not been confined to any one specific commodity. The most dramatic increase has occurred in road motor vehicles and parts which have become the State's most valuable items of import. Valued at \$728.2m in 1988-89 (an increase of 78.9 per cent over 1987-88), they now represent 40.0 per cent of the total of the machinery and transport equipment group and 19.2 per cent of the State's total imports.



As a group, machinery and transport equipment (including road motor vehicles and parts) increased 47.7 per cent over 1987-88 to \$1,819.5m, while

mineral fuels and lubricants rose 38.8 per cent, due mainly to an increase of \$70.8m in crude petroleum oils which are now valued at \$110.3m. Miscellaneous manufactured articles account for 8.6 per cent of the State's total imports while manufactured goods classified by material are worth \$591.3m (15.6 per cent of total imports). These represent increases of 25.4 per cent and 22.1 per cent, respectively, when compared with 1987-88.

**19.5 PRINCIPAL FOREIGN IMPORTS,
QUEENSLAND, 1988-89
(\$'000)**

Commodity	Value
Machinery and transport equipment (excluding road motor vehicles and parts)	1,091,346
Road motor vehicles and parts	728,181
Manufactured goods classified by material	591,336
Miscellaneous manufactured articles	325,407
Mineral fuels and lubricants	222,322
Other	829,833
Total	3,788,425

Interstate Imports

Interstate imports of road motor vehicles and parts were valued at \$1,125.4m during 1988-89. This represents 13.5 per cent of the total interstate imports and 42.8 per cent of the machinery and transport equipment group which increased by 44.0 per cent over 1987-88 to \$2,630.4m.

The value of manufactured goods classified by material increased by 21.1 per cent during the same period to \$1,869.4m in 1988-89. Articles made of iron and steel comprised 43.0 per cent (\$804.2m) of this group.

As groups, food and live animals, chemicals and miscellaneous manufactured articles made up the majority of the remaining commodities for interstate imports. Individually, they represented 13.9 per cent, 11.3 per cent and 11.2 per cent, respectively, of the total value of interstate imports. These groups continue to dominate interstate imports, a trend which has continued for the latter half of the 1980s.

**19.6 PRINCIPAL INTERSTATE IMPORTS,
QUEENSLAND, 1988-89
(\$'000)**

Commodity	Value
Manufactured goods classified by material	1,869,373
Machinery and transport equipment (excluding road motor vehicles and parts)	1,504,938
Food and live animals	1,152,348
Road motor vehicles and parts	1,125,412
Chemicals	937,212
Miscellaneous manufactured articles	930,928
Other	797,829
Total	8,318,040

19.1.3 Foreign Trading Partners

Foreign Exports

Japan's share of Queensland's foreign exports rose from 34.9 per cent in 1987-88 to 36.3 per cent in 1988-89. This trend was reversed for the other major trading partners of Queensland. The European Economic Community recorded a fall of 2.3 per cent to 9.4 per cent, the United States fell 1.7 per cent to 8.1 per cent and the United Kingdom fell 0.2 per cent to 7.0 per cent. However, the Republic of Korea increased its share by 1.2 per cent to 4.9 per cent.

**19.7 DESTINATION OF FOREIGN EXPORTS FROM
QUEENSLAND
(\$m)**

Country	Value (a)	
	1987-88	1988-89
Japan	2,891.6	3,423.8
European Economic Community (excluding United Kingdom)	969.1	887.9
United States	808.8	763.3
United Kingdom	596.4	658.7
Korea, Republic of	309.6	468.0
Other	2,714.2	3,230.4
Total	8,289.7	9,432.1

(a) Including non-merchandise trade.

Raw materials, particularly coal (41.4 per cent) continue to be the major commodities exported to Japan. This was followed in importance by non-ferrous metals and meat which accounted for 16.2 per cent and 15.5 per cent, respectively, of the total value of exports to Japan.

**19.8 EXPORTS TO JAPAN FROM QUEENSLAND, 1988-89
(\$'000)**

Commodity	Value
Coal	1,418,576
Non-ferrous metals	552,979
Meat and meat preparations	531,475
Cereals and cereal preparations	112,009
Other (a)	808,717
Total	3,423,756

(a) Contains items for which details are not publishable.

**19.9 EXPORTS TO THE EUROPEAN ECONOMIC
COMMUNITY (a) FROM QUEENSLAND, 1988-89
(\$'000)**

Commodity	Value
Coal and coke	362,576
Metalliferous ores and metal scrap (b)	182,341
Textile fibres	95,462
Non-ferrous metals	61,167
Other (c)	186,390
Total	887,936

(a) Excluding the United Kingdom. (b) Excluding those items for which details are not publishable. (c) Contains items for which details are not publishable.

The value of commodities exported to the European Economic Community in 1988-89 was \$887.9m, which was 8.4 per cent less than the value for 1987-88. Coal and coke accounted for most of the decrease, with a fall of 25.8 per cent to \$362.6m. This decrease was offset by gains in textile fibres and metalliferous ores and metal scrap with increases of 61.4 per cent and 274.1 per cent to record values of \$95.5m and \$182.3m, respectively.

Queensland exports a wide variety of commodities to the United States. The most valuable item continues to be meat which in 1988-89 was valued at \$348.2m or 45.6 per cent of all commodities exported to the United States. However, this was a significant \$145.8m (29.5 per cent) lower than in 1987-88 and made the United States second, behind Japan, as the most important destination for Queensland meat.

19.10 EXPORTS TO THE UNITED STATES FROM QUEENSLAND, 1988-89
((\$'000))

Commodity	Value
Meat and meat preparations	348,210
Metalliferous ores and metal scrap (a)	44,191
Other (b)	370,878
Total	763,279

(a) Excluding those items for which details are not publishable. (b) Contains items for which details are not publishable.

Non-ferrous metals, metalliferous ores and metal scrap, and coal and coke are the prominent commodities exported to the United Kingdom. With values of \$327.8m, \$81.6m and \$70.1m, respectively, their combined market share was 72.8 per cent of all commodities exported to the United Kingdom in 1988-89.

19.11 EXPORTS TO THE UNITED KINGDOM FROM QUEENSLAND, 1988-89
((\$'000))

Commodity	Value
Non-ferrous metals	327,787
Metalliferous ores and metal scrap (a)	81,626
Coal and coke	70,133
Other (b)	179,193
Total	658,739

(a) Excluding those items for which details are not publishable. (b) Contains items for which details are not publishable.

The Republic of Korea continued to develop as a major destination for Queensland exports during 1988-89. Increases in exports were reported for all major commodities, the most noticeable being in metalliferous ores and metal scrap which increased by 222 per cent from the 1987-88 figure. Over the same period textile fibres rose 55.3 per cent and coal and coke increased by 14.5 per cent to remain the major commodity group with 36.2 per cent of the value of total exports to the Republic of Korea.

19.12 EXPORTS TO THE REPUBLIC OF KOREA FROM QUEENSLAND, 1988-89
((\$'000))

Commodity	Value
Coal and coke	169,252
Textile fibres	61,025
Metalliferous ores and metal scrap (a)	48,804
Other (b)	188,958
Total	468,039

(a) Excluding those items for which details are not publishable. (b) Contains items for which details are not publishable.

Foreign Imports

19.13 SOURCE OF FOREIGN IMPORTS TO QUEENSLAND
((\$m))

Country	Value	
	1987-88	1988-89
Japan	592.6	961.1
United States	653.1	912.9
European Economic Community (excluding United Kingdom)	346.6	362.5
New Zealand	160.9	185.1
United Kingdom	145.4	157.8
Other	946.6	1,209.0
Total	2,845.2	3,788.4

Japan displaced the United States and became Queensland's major source of imports during 1988-89. Imports from Japan leapt by 62.2 per cent to \$961.1m which was 25.4 per cent of the State's total value of imports, 4.6 per cent higher than 1987-88. The United States also increased its share of total imports from 23 per cent in 1987-88 to 24.1 per cent in 1988-89. Queensland's other major sources of imports had their share of total imports reduced. The European Economic Community's share fell by 2.6 per cent to 9.6 per cent, but New Zealand's 4.9 per cent and the United Kingdom's 4.2 per cent showed less severe decreases of 0.8 per cent and 0.9 per cent, respectively.

19.14 PRINCIPAL IMPORTS FROM JAPAN TO QUEENSLAND, 1988-89
((\$'000))

Commodity	Value
Road vehicles	520,761
Machinery, specialised for particular industries	88,755
Rubber manufactures	56,212
Electric machinery, apparatus and appliances	40,355
General industrial machinery and equipment	34,955
Other (a)	220,060
Total	961,098

(a) Contains items for which details are not publishable.

As a group, machinery and transport equipment valued at \$736.9m, accounted for 76.7 per cent of the total value of all commodities imported from Japan during 1988-89. The value of road vehicles increased by a dramatic 113.7 per cent to \$520.7m

which was 54.2 per cent of the value of all commodities. Machinery, specialised for particular industries also rose sharply (67.7 per cent) to \$88.8m.

With a value of \$215.3m, the purchase of aircraft from the United States was the single most valuable item of import from that country during 1988-89. Other major imports comprised machinery, specialised for particular industries and road vehicles which continued to be imported at or near the same levels as previous years.

19.15 PRINCIPAL IMPORTS FROM THE UNITED STATES TO QUEENSLAND, 1988-89 (\$'000)

Commodity	Value
Aircraft	215,344
Machinery, specialised for particular industries	109,182
Road vehicles	103,571
Power generating machinery and equipment	49,274
Other (a)	435,523
Total	912,894

(a) Contains items for which details are not publishable.

19.16 PRINCIPAL IMPORTS FROM THE EUROPEAN ECONOMIC COMMUNITY (a) TO QUEENSLAND, 1988-89 (\$'000)

Commodity	Value
Machinery, specialised for particular industries	55,897
Non-metallic mineral manufactures	43,362
Road vehicles	34,596
General industrial machinery and equipment	32,334
Other (b)	196,329
Total	362,518

(a) Excluding the United Kingdom. (b) Contains items for which details are not publishable.

Queensland continues to look to the European Economic Community (EEC) as a source of specialised machinery for industry. In 1988-89, the value of such equipment represented 15.4 per cent of all commodities imported from the EEC and was 3.5 per cent higher than the value of non-metallic mineral manufactures (\$43.4m) and 5.9 per cent higher than the value of road vehicles (\$34.6m).

19.17 PRINCIPAL IMPORTS FROM THE UNITED KINGDOM TO QUEENSLAND, 1988-89 (\$'000)

Commodity	Value
Chemicals and related products	35,474
Road vehicles	19,901
Machinery, specialised for particular industries	11,533
Antiques	8,105
Other (a)	82,747
Total	157,760

(a) Contains items for which details are not publishable.

The United Kingdom provides Queensland with a wide range of items. While chemicals and related products accounted for 22.5 per cent of the value of all commodities, road vehicle imports remain relatively constant and in 1988-89 accounted for 12.6 per cent of all commodities, down 0.1 per cent from 1987-88.

The type of commodity being imported from New Zealand changed little during 1988-89. Paper and paper board, pulp and waste paper and wood were the major commodities and together they represented 32.4 per cent of the total value of all items from that country.

19.18 PRINCIPAL IMPORTS FROM NEW ZEALAND TO QUEENSLAND, 1988-89 (\$'000)

Commodity	Value
Paper and paperboard	31,943
Pulp and waste paper	14,576
Cork and wood	13,489
Other (a)	125,075
Total	185,083

(a) Contains items for which details are not publishable.

19.1.4 Monitoring Trading Prices

The trade price indexes measure changes in the prices of goods leaving and entering Australia over a period of time. Prices are obtained from major exporters and importers of the selected commodities included in the indexes. Commodities are priced on the basis of free on board (f.o.b.) at the port of shipment and exclude customs duty, insurance, freight and excise.

The price series used relate to specific standards, grades etc. of each selected item with the aim of monitoring price changes of representative goods of a constant quality.

19.19 EXPORT PRICE INDEX NUMBERS (a), AUSTRALIA (Base of Each Index: Year 1974-75 = 100)

Commodity group	Year		
	1986-87	1987-88	1988-89
Meat and meat preparations	370	373	381
Cereals and cereal preparations	120	119	145
Sugar and sugar preparations	94	91	111
Textile fibres and their wastes	273	434	457
Metalliferous ores and metal scrap	292	293	327
Coal, coke and briquettes	295	243	239
All groups	243	265	283

(a) Selected divisions of the Australian Export Commodity Classification.

All prices used in the indexes are expressed in Australian currency. Changes in the relative values

of the Australian dollar and overseas currencies have a direct impact on price movements for the many commodities sold or purchased in other than Australian dollars.

The export index items were selected on the basis of their values in the period 1974-75 to 1976-77. They constituted 89 per cent of the total value of exports of merchandise from Australia in that period.

During 1988-89 the index rose for the following groups: meat and meat preparations, 2.1 per cent; cereals and cereal preparations, 21.8 per cent; sugar and sugar preparations, 22.0 per cent; textile fibres and their wastes, 5.3 per cent and metalliferous ores and metal scrap, 11.6 per cent. The index showed a decrease of 1.6 per cent for prices of coal, coke and briquettes. The overall result was an increase of 6.8 per cent in the all groups index.

The import price index items were selected on the basis of their import values in the period 1978-79 to 1980-81. The index covers either directly or indirectly about 98 per cent of imports of merchandise trade in 1980-81. The index items, i.e. the commodities whose prices are directly represented in the index, constituted 84 per cent of the total value of imports of merchandise into Australia in 1980-81. Prices of commodities constituting a further 14 per cent of merchandise imports in 1980-81 are assumed to move in a similar manner to those of the directly represented commodities which therefore carry appropriately increased weights in respect of indirectly represented commodities. The weights were allocated in accordance with the average value of imports of the relevant commodities (expressed in 1981-82 prices) over the 3 years ended June 1981.

**19.20 IMPORT PRICE INDEX NUMBERS (a),
AUSTRALIA**
(Base of Each Index: Year 1981-82 = 100)

Commodity	Year		
	1986-87	1987-88	1988-89
Food and live animals, chiefly for food	178.8	162.4	149.8
Mineral fuels, lubricants and related materials	69.3	75.1	60.3
Chemicals and related materials	145.6	153.0	152.1
Manufactured articles classified chiefly by material	169.4	173.4	167.9
Machinery and transport equipment	191.4	191.9	177.0
Miscellaneous manufactured articles and articles of non-monetary gold	177.8	178.7	167.8
All groups	159.6	162.0	151.6

(a) Selected groups of the Australian Import Commodity Classification.

The index shows that import prices fell for all of the groups as follows: food and live animals,

7.8 per cent; mineral fuels, lubricants etc., 19.7 per cent; chemicals and related materials, 0.6 per cent; manufactured articles classified chiefly by material, 3.2 per cent; machinery and transport equipment, 7.8 per cent; miscellaneous manufactured articles and non-monetary gold articles, 6.1 per cent. The overall result was a decrease of 6.4 per cent in the all groups index.

A comparison of the overall rates of change of the two indexes over the past year indicates an improvement in Australia's terms of trade.

19.2 RETAIL TRADE

Retailing in Queensland has experienced many social, economic and technological changes over the past 50 years. The competitive nature of the industry has ensured its ready adaptability to changing conditions.

19.2.1 History

One of the features of settlement in Queensland is decentralisation. There have long been well developed provincial population centres in this State, e.g. Toowoomba, Maryborough, Bundaberg, Rockhampton, Mackay, Townsville and Cairns. Most had their own local department stores during the 1930s, 1940s and 1950s. By the late 1950s, however, large national companies began taking over these establishments, and rationalisation (closing of some stores mainly in regional centres) began in the late 1960s, with the big wave of rationalisation occurring in the mid-1970s.

Prior to the 1950s shopping centres in Queensland were of the 'strip type' with shops fronting directly on to a roadway. This began to change when the first 'drive-in' shopping centre in Australia was established at Chermerside in 1957. Development continued and accelerated with a spate of new suburban shopping centres being built during the 1970s.

Discount department stores appeared during the late 1960s and early 1970s, and this trend has continued. Shopping malls have also developed in recent years, contributing to a resurgence of specialised stores retailing items such as food, clothing and jewellery. The 1980s, in particular, have seen the emergence of a number of small 'chains' which have opened stores in the larger shopping centres.

Self-service

Self-service came into being during the 1940s when there was still a labour shortage after World War II and the cost of available labour was beginning to rise rapidly. 'Check-outs' were introduced at least 30 years ago, initially in food stores, and their use increased considerably with

the growth of discount department stores in the 1970s. Check-out facilities can now be encountered in almost any type of store, although there are many specialty stores offering more personalised service to their customers.

Technology

Technological changes in the retail industry over recent years have included computerised ordering of stocks, scientific merchandise control, electronic cash registers and bar code readers, with electronic funds transfer (EFT) now being introduced.

Buying Groups

Because of the advantages of buying in bulk at lower prices, many small retailers have formed buying groups or joined organisations with centralised buying and distribution functions. Beginning with food stores and electrical goods stores, this development has now spread to most areas of retailing.

Franchising

Franchising, which has shown considerable growth since the late 1970s, is a form of marketing or distribution in which the franchisor grants the franchisee the right to sell the franchisor's product, use its name, adopt its methods or copy its symbols, trademarks or architecture. Franchisees are under far more control than members of a buying group and contracts may include clauses covering not only the product, but marketing, lay-out, presentation and a variety of other conditions.

Trading Hours

During the operation of World Expo 88, extended trading hours were granted to non-exempt shops in the Brisbane City heart. The hours were from 8.15 a.m. to 9.00 p.m. Mondays to Fridays and from 8.15 a.m. to 5.30 p.m. on Saturdays, Sundays and public holidays. Following this experience, application was made to the Industrial Conciliation and Arbitration Commission of Queensland to allow modified extended hours after World Expo 88.

The application was opposed by substantial sections of the retailing industry and the commission's decision was to allow a trial period of extended trading hours in the city heart. These hours were Mondays to Thursdays 8.15 a.m. to 5.30 p.m., Fridays, except on certain holidays, 8.15 a.m. to 9.00 p.m. and Saturdays, except on certain holidays, 8.15 a.m. to 4.00 p.m. On Sundays and certain holidays, for a trial period between 6 November 1988 and 25 June 1989, non-exempt shops were allowed to trade from 10.30 a.m. to 4.00 p.m. In June 1989, these hours were confirmed by the commission as permanent for the city heart. These extended hours are not mandatory and shops trading on Sundays and certain holidays may only be staffed by persons who volunteer for work.

Trading hours in the Cairns Central Business District have also been extended. From 1 May to 31 October each year, non-exempt shops may open from 8.15 a.m. to 7.00 p.m. on Mondays to Thursdays, 8.15 a.m. to 9.00 p.m. on Fridays and 8.15 a.m. to 5.30 p.m. on Saturdays.

Trading hours have also been extended on the Gold Coast to permit Thursday evening trading until 9 p.m. as well as Monday to Saturday 8.30 a.m. to 5.30 p.m. The commission is currently hearing a further application to permit trading in Surfers Paradise until 9 p.m. 7 days a week.

19.2.2 Retail Trends

19.21 RETAIL INDUSTRY, QUEENSLAND

Industry group	Average turnover per establishment in 1985-86 prices		Percentage change, 1979-80 to 1985-86
	1979-80	1985-86	
	\$'000	\$'000	
Department and general stores	5,859	8,828	+51
Clothing, fabric and furniture stores	284	310	+9
Household appliance and domestic hardware stores	358	414	+16
Motor vehicle dealers and petrol and tyre retailers	836	921	+10
Food stores	471	568	+21
Other retailers	227	240	+6
All industries	533	596	+12

Overall, the retail industry in Queensland has grown relatively strongly between 1979-80 and 1985-86, years for which retail census information is available. In this period retail turnover (expressed in 1985-86 prices) increased by 33 per cent while between 30 June 1980 and 30 June 1986, the number of retail establishments and the total number of persons employed in the retail industry grew by 22 per cent and 27 per cent, respectively.

Average turnover per establishment (for establishments operating during the entire year) for 1985-86 in Queensland increased by \$63,000 or 11.8 per cent compared with that for 1979-80 (at 1985-86 prices). By far the largest increase of over 50 per cent occurred in department and general stores despite an actual decrease in the number of establishments during the period.

The average turnover per person employed for 1985-86 in Queensland increased by \$2,000 or 2 per cent compared with 1979-80 (at 1985-86 prices). Department and general stores recorded the largest increase of 12 per cent in average turnover per person with an actual increase in employment of 7 per cent, while food stores recorded a decrease of 6 per cent with increases in employment and

turnover of 32 per cent and 28 per cent, respectively, during the period.

19.22 RETAIL INDUSTRY BY AVERAGE TURNOVER PER PERSON EMPLOYED, QUEENSLAND

Industry group	Turnover per person employed in 1985-86 prices		Percentage change, 1979-80 to 1985-86
	1979-80	1985-86	
	\$'000	\$'000	
Department and general stores	67	75	+12
Clothing, fabric and furniture stores	72	79	+10
Household appliance and domestic hardware stores	89	98	+10
Motor vehicle dealers and petrol and tyre retailers	153	168	+10
Food stores	77	72	-6
Other retailers	66	65	-2
All industries	96	98	+2

Average turnover per head of population in Queensland increased by \$654 or 14 per cent to \$5,169 for 1985-86 compared with 1979-80 (at 1985-86 prices). The largest increase of 46 per cent occurred for the household appliance and domestic hardware group, although the 1985-86 value of \$327 is still the lowest of all industry groups. All other groups registered increases of between 12 per cent and 15 per cent with the motor vehicle group still showing the highest turnover per head of population of \$2,233.

19.23 RETAIL INDUSTRY BY AVERAGE TURNOVER PER HEAD OF POPULATION, QUEENSLAND

Industry group	Turnover per head of population in 1985-86 prices		Percentage change, 1979-80 to 1985-86
	1979-80	1985-86	
	\$'000	\$'000	
Department and general stores	368	424	+15
Clothing, fabric and furniture stores	373	423	+13
Household appliance and domestic hardware stores	224	327	+46
Motor vehicle dealers and petrol and tyre retailers	1,991	2,233	+12
Food stores	1,219	1,369	+12
Other retailers	341	393	+15
Total	4,515	5,169	+14

19.2.3 Retail Prices

Prices of goods and services remain a focus of much concern within the community. Virtually all members of society find themselves affected to some extent by changes in retail prices.

19.24 AVERAGE RETAIL PRICES OF SELECTED FOOD ITEMS, BRISBANE (a)

Item	Unit	1982-83	1988-89	Increase
		cents	cents	
Groceries etc.				
Bread, white, sliced	680 g	80	109	36
Biscuits, dry	250 g pkt	65	102	57
Breakfast cereal, corn-based	500 g pkt	107	200	87
Flour, self-raising	2 kg pkt	120	196	63
Peaches	825 g can	93	158	70
Sugar, white	2 kg pkt	108	160	48
Tea	250 g pkt	83	139	67
Coffee, instant	150 g jar	300	467	56
Dairy produce				
Milk, fresh, bottled, delivered	2 x 600 ml	66	91	38
Butter	500 g	150	174	16
Fresh vegetables				
Potatoes	1 kg	53	91	72
Onions	1 kg	59	143	142
Meat				
Rump steak	1 kg	684	924	35
Silverside, corned	1 kg	446	589	32
Lamb, leg	1 kg	452	528	17
Lamb, loin chops	1 kg	481	629	31
Pork, leg	1 kg	483	550	14
Sausages	1 kg	289	396	37

(a) Prices are the averages of the recorded prices for the four quarters of each financial year.

Source: Average Retail Prices of Selected Items, Eight Capital Cities (6403.0).

Within the food group, onions continue to move in a volatile manner and along with corn-based breakfast cereal are the items that have risen most significantly; between 1982-83 and 1988-89 the average prices for onions and cereal rose 142 and 87 per cent, respectively. Food items that have risen the least were leg of pork and butter which rose by 14 and 16 per cent, respectively, over the same period.

Since 1982-83, consumer prices in the Brisbane metropolitan area have risen by just under 51 per cent, which is a lower rise than that in all other capital cities except Canberra and Darwin. However, between 1987-88 and 1988-89 consumer prices have risen more in Brisbane than in most other capital cities with only Sydney, Adelaide and Perth being higher.

19.25 CHANGES IN CONSUMER PRICES, CAPITAL CITIES, AUSTRALIA (per cent)

City	1982-83	1987-89
	10 1988-89	10 1988-89
Sydney	52.1	8.1
Melbourne	53.0	6.8
Brisbane	50.9	7.1
Adelaide	52.1	7.3
Perth	51.9	7.4
Hobart	52.1	6.3
Canberra	50.2	6.6
Darwin	45.3	4.9

Source: Consumer Price Index (6401.0).

In Brisbane, tobacco and alcohol prices have increased the most since 1982-83 followed by transportation prices. However, between 1987-88 and 1988-89 transportation prices showed the lowest increase rising by 4.2 per cent, significantly lower than the combined rise of all items in the Consumer Price Index while tobacco and alcohol prices continued to show the highest increases rising by 10.2 per cent.

19.26 CHANGES IN CONSUMER PRICES, BRISBANE (per cent)

Group	1982-83	1987-88
	to 1988-89	to 1988-89
Food	47.9	8.6
Clothing	50.9	6.4
Housing	40.1	9.3
Household equipment and operation	52.3	6.2
Transportation	58.0	4.2
Tobacco and alcohol	66.9	10.2
Health and personal care	35.8	7.9
Recreation and education	52.7	6.2
All groups	50.9	7.1

Source: Consumer Price Index (6401.0).

19.3 SERVICE INDUSTRIES

The services sector is an important part of the national economy due to its substantial growth over recent times and its significant small business content. Because of this it has attracted considerable attention in recent years.

Quantitative data on this sector are scarce but a series of surveys in respect of 1986-87 and 1987-88 is starting to address this information gap. As service industries have previously only been surveyed in part, the degree of growth for many of these industries cannot be measured. However, comparable data are available for some industries within the services sector.

19.27 TOURISM AND PERSONAL SERVICES TURNOVER, QUEENSLAND

Industry group	Turnover in		Percentage change, 1979-80 to 1986-87
	1986-87 prices		
	1979-80	1986-87	
	\$m	\$m	
Motion picture theatres	47.2	35.2	-25
Cafes and restaurants	278.6	351.6	+26
Hotels etc. (mainly drinking places)	998.5	1,183.9	+19
Accommodation	293.8	494.8	+68
Licensed clubs	232.3	229.6	-1
Laundries and dry cleaners	45.6	44.6	-2
Hairdressers and beauty salons	76.4	137.9	+80
Motor vehicle hire (a)	n.a.	n.a.	n.a.
Travel agency services	n.a.	51.5	n.a.
Photography services	n.a.	27.0	n.a.

(a) Turnover figures by State are not available.

Service industries in Queensland (for which comparable data are available) have shown a mixture of growth and decline between 1979-80 and 1986-87. Industry groups showing the greatest growth since 1979-80, in terms of turnover at 1986-87 prices, are hairdressers and beauty salons with an 80 per cent increase and accommodation, up 68 per cent. Strong growth has also been shown in cafes and restaurants with a 26 per cent increase and hotels etc., 19 per cent. The industry group which has shown the greatest decline, in terms of 1986-87 prices, is the motion picture theatres where turnover decreased 25 per cent over the period.

Employment in service industries within Queensland showed similar trends between 1979-80 and 1986-87 with cafes and restaurants having the largest increase of 50 per cent. Hairdressers and beauty salons also showed a significant increase of 48 per cent as did the accommodation industry with a 39 per cent increase. Hotels experienced a 12 per cent increase during the period. The motion picture theatre industry was the only one to show a decrease in employment, dropping by 38 per cent between 1979-80 and 1986-87.

19.28 TOURISM AND PERSONAL SERVICES EMPLOYMENT, QUEENSLAND

Industry group	Persons employed at 30 June		Percentage change, 1980 to 1987
	1980	1987	
Motion picture theatres	1,079	667	-38
Cafes and restaurants	8,080	12,140	+50
Hotels etc. (mainly drinking places)	15,239	16,992	+12
Accommodation	8,227	11,442	+39
Licensed clubs	4,486	4,632	+3
Laundries and dry cleaners	1,624	1,649	+2
Hairdressers and beauty salons	4,512	6,664	+48
Motor vehicle hire	n.a.	674	n.a.
Travel agency services	n.a.	1,412	n.a.
Photography services	n.a.	656	n.a.

19.29 PROFESSIONAL AND BUSINESS SERVICES, QUEENSLAND, 1987-88

Industry group	Turnover	Persons employed at 30 June
	\$m	No.
Real estate agents	384	5,296
Architectural services	113	2,415
Surveying services	74	1,882
Engineering and technical services	282	4,895
Legal services	474	5,781
Accounting services	278	3,974
Computing services	94	1,722
Advertising services	392	1,688
Debt collecting and credit reporting services	15	290
Pest control services	19	463
Cleaning services	69	5,368
Security/protection and business services n.e.c.	88	2,725

Source: Professional and Business Services, Summary Statistics (8662.0).

Professional and business services were first surveyed in 1987-88 and therefore no comparable data are available.

19.4 REFERENCES

ABS publications produced by the Queensland Office:

Interstate and Foreign Trade (8502.3), annual
Retail Industry: Details of Operations (8622.3), irregular
Retail Industry: Small Area Statistics (8623.3), irregular
Retail Industry: Establishment Size Statistics (8626.3), irregular

ABS publications produced by the Canberra Office:

Exports (5432.0), monthly
Imports (5433.0), monthly
Consumer Price Index (6401.0), quarterly
Average Retail Prices of Selected Items, Eight Capital Cities (6403.0), quarterly
Export Price Index (6405.0), monthly
Import Price Index (6414.0), quarterly
Retail Industry: Summary of Operations (8613.0), irregular
Retail Industry: Details of Operations (8622.0), irregular
Selected Tourism and Personal Service Industries Summary of Operations (8650.0), irregular
Professional and Business Services, Summary Statistics (8662.0), irregular

**SUMMARY OF
QUEENSLAND STATISTICS**

Since 1860

SUMMARY OF PUBLIC

Year	State Government receipts					State Government expenditure (d)		
	Taxation (all funds) (a) (b)	From Australian Government (a) (c)	Total Consoli- dated Revenue Fund (d)	Total trust funds (d)	All receipts (d)	Consoli- dated Revenue Fund	Trust funds	All expend- iture
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1860	127	..	357	..	357	360	..	360
1865	442	..	945	86	1,031	898	21	919
1870	728	..	1,486	56	1,542	1,532	34	1,566
1875-76	1,208	..	2,527	116	2,643	2,630	84	2,714
1880-81	1,316	..	4,047	106	4,154	3,515	94	3,610
1885-86	2,459	..	5,737	234	5,970	6,180	302	6,482
1890-91	3,057	..	6,700	242	6,942	7,369	260	7,630
1895-96	3,134	..	7,283	567	7,850	7,136	527	7,663
1900-01	2,250	1,167	8,193	522	8,714	9,249	473	9,722
1905-06	1,012	1,714	7,707	848	8,555	7,451	1,030	8,482
1910-11	1,392	1,376	10,640	1,243	11,883	10,629	1,717	12,347
1915-16	2,922	1,667	15,413	2,630	18,043	15,343	3,925	19,268
1920-21	7,440	1,821	25,202	8,220	33,422	25,182	9,288	34,471
1925-26	8,694	2,436	31,200	13,518	44,717	32,309	14,581	46,890
1930-31	11,085	3,046	30,145	11,239	41,384	31,829	10,413	42,243
1935-36	14,646	3,374	30,978	15,198	46,176	32,462	14,857	47,319
1940-41	18,361	4,499	43,079	17,524	60,603	43,023	15,131	58,154
1945-46	18,968	5,566	49,549	23,362	72,911	49,519	21,441	70,960
1950-51	39,982	14,063	89,446	54,550	143,996	89,250	50,907	140,156
1955-56	74,484	23,684	151,337	100,634	251,972	154,784	112,840	267,624
1956-57	80,066	29,229	170,316	113,166	283,483	170,286	116,698	286,984
1957-58	86,580	34,980	175,911	127,355	303,266	178,940	122,322	301,262
1958-59	91,335	36,281	(f) 187,591	133,121	320,712	189,973	(f) 130,040	320,013
1959-60	115,393	27,131	(f) 203,824	142,898	346,722	204,154	(f) 144,356	348,510
1960-61	125,304	29,994	217,634	153,775	371,408	218,870	153,753	372,623
1961-62	136,009	38,784	234,650	172,477	407,128	234,431	169,613	404,043
1962-63	145,129	46,000	(f) 245,636	228,915	474,551	245,582	(f) 223,223	468,804
1963-64	155,403	48,073	260,897	249,765	510,662	260,454	243,689	504,144
1964-65	165,990	48,854	267,139	262,776	529,916	271,215	264,928	536,143
1965-66	181,660	60,662	294,502	289,627	584,129	298,022	288,701	586,723
1966-67	204,702	70,038	323,781	321,055	644,836	323,523	315,191	638,714
1967-68	232,685	76,301	(g) 376,987	355,120	(g) 732,107	(g) 376,017	348,442	(g) 724,459
1968-69	253,343	81,947	387,866	378,924	766,790	388,777	373,531	762,308
1969-70	281,306	104,191	441,074	445,278	886,352	444,618	438,071	882,689
1970-71	120,597	351,427	499,048	500,569	999,618	499,569	486,102	985,671
1971-72	168,904	403,162	595,218	581,696	1,176,913	592,506	556,955	1,149,461
1972-73	215,209	460,246	704,109	672,721	1,376,830	702,902	632,100	1,335,003
1973-74	267,946	581,830	853,676	849,734	1,703,410	855,184	802,940	1,658,125
1974-75	310,573	856,693	1,112,866	1,125,406	2,238,271	1,121,218	1,128,373	2,249,591
1975-76	397,131	1,132,545	1,349,513	1,471,173	2,820,686	1,348,799	1,344,237	2,693,036
1976-77	471,613	1,288,675	1,610,538	1,792,796	3,403,334	1,611,555	1,687,601	3,299,156
1977-78	536,800	1,468,570	1,815,953	1,881,173	3,697,126	1,816,863	1,754,292	3,571,155
1978-79	581,500	1,559,318	1,947,444	2,087,974	4,035,418	1,946,867	1,910,826	3,857,693
1979-80	649,000	1,710,571	2,206,954	2,263,384	4,470,338	2,207,893	2,143,272	4,351,165
1980-81	805,800	1,945,446	2,604,036	2,655,687	5,259,723	2,604,010	2,509,450	5,113,460
1981-82	958,700	2,208,200	3,276,756	3,361,952	6,638,708	3,276,926	3,119,235	6,396,161
1982-83	1,039,700	r 2,534,400	3,690,187	4,275,359	7,965,546	3,690,956	3,958,567	7,649,523
1983-84	1,160,400	r 2,983,600	4,212,842	5,362,082	9,574,924	4,211,919	4,905,259	9,117,178
1984-85	1,297,900	3,261,600	4,681,674	6,223,138	10,904,812	4,682,431	5,836,479	10,518,910
1985-86	r 1,373,700	r 3,471,900	5,190,941	8,765,380	13,956,321	5,190,727	9,491,849	14,682,576
1986-87	r 1,524,000	r 3,770,800	5,649,027	10,645,387	16,294,414	5,648,701	9,985,224	15,633,925
1987-88	1,922,700	3,990,600	6,308,439	8,940,270	15,248,709	6,270,304	8,584,748	14,855,052

(a) Financial assistance grants are included with taxation to 1969-70. The figures shown from 1970-71 have been calculated according to the *Classifications Manual for Government Finance Statistics* (Catalogue No. 1217.0). (b) Changes in classification occurred in 1977-78, 1980-81 and 1981-82. (c) Including interest contributions from 1900-01, road grants from 1922-23, non-recurring grants from 1934-35 and grants for local public works from 1935-36.

FINANCE STATISTICS

State gross public debt at 30 June							Local government revenue (e)	Year
Gross loan expenditure	Where payable		Total	Average rate of interest per \$100	Accumulated sinking fund	Local government revenue (e)		
	Australia	Overseas						
\$'000	\$'000	\$'000	\$'000	\$	\$'000	\$'000		
39	..	..	..	..	..	13	1860
1,370	248	2,016	2,263	2.29	..	107	1865	
311	1,390	5,352	6,743	6.50	..	55	1870	
1,200	3,912	8,986	12,899	4.75	..	174	1875-76	
1,982	4,156	22,334	26,490	4.20	..	323	1880-81	
3,846	4,418	37,224	41,642	3.90	..	1,112	1885-86	
3,112	4,458	51,754	56,211	4.05	..	1,726	1890-91	
1,184	6,160	59,864	66,025	3.90	..	1,024	1895-96	
2,424	11,408	65,664	77,071	3.68	..	1,522	1900-01	
595	14,460	70,110	84,570	3.70	..	1,412	1905-06	
3,991	16,058	78,112	94,170	3.62	10	1,808	1910-11	
6,124	21,700	95,766	117,466	3.77	518	3,458	1915-16	
8,502	50,394	111,096	161,489	3.65	882	5,775	1920-21	
9,944	72,602	132,298	204,899	4.78	2,816	6,236	1925-26	
6,684	82,153	142,309	224,462	4.79	1,555	12,782	1930-31	
10,140	104,596	140,677	245,272	4.11	1,579	15,798	1935-36	
6,715	121,224	138,965	260,189	4.08	2,594	n.a.	1940-41	
4,817	152,885	113,705	266,590	3.48	3,089	19,200	1945-46	
35,695	234,094	98,220	332,314	3.18	102	36,212	1950-51	
43,810	409,979	95,620	505,599	3.55	434	n.a.	1955-56	
46,252	443,235	95,405	538,639	3.71	214	68,608	1956-57	
46,381	475,917	95,978	571,895	3.79	77	74,020	1957-58	
53,863	507,318	99,622	606,940	3.88	283	81,419	1958-59	
59,884	544,513	100,335	644,848	3.96	210	88,538	1959-60	
60,672	581,565	103,334	684,900	4.18	301	95,197	1960-61	
62,717	623,308	104,334	727,642	4.28	327	101,625	1961-62	
64,262	661,225	108,856	770,081	4.26	641	112,859	1962-63	
71,147	710,625	110,845	821,469	4.28	744	123,966	1963-64	
79,104	771,706	107,986	879,691	4.41	664	134,567	1964-65	
79,095	836,050	100,475	936,525	4.56	278	147,588	1965-66	
82,600	947,522	64,140	1,011,662	4.71	423	159,599	1966-67	
89,003	1,015,768	61,888	1,077,656	4.74	437	175,579	1967-68	
93,950	1,090,887	57,933	1,148,820	4.82	2,658	194,591	1968-69	
100,958	1,188,037	34,670	1,222,707	5.01	1,652	201,165	1969-70	
103,332	1,244,181	33,018	1,277,199	5.24	1,726	227,077	1970-71	
135,668	1,316,123	30,877	1,347,001	5.34	415	252,450	1971-72	
146,104	1,398,540	25,957	1,424,497	5.34	1,212	302,142	1972-73	
140,058	1,462,336	22,919	1,485,255	5.55	1,413	348,193	1973-74	
202,792	1,423,397	17,626	1,441,023	6.21	1,482	433,939	1974-75	
222,954	1,523,015	14,169	1,537,185	6.92	1,461	508,197	1975-76	
247,739	1,628,434	13,272	1,641,706	7.13	5,891	610,995	1976-77	
277,695	1,741,391	10,809	1,752,200	7.38	11,465	564,494	1977-78	
270,899	1,847,854	5,571	1,853,425	7.49	10,239	606,740	1978-79	
271,531	1,924,689	5,073	1,929,762	7.68	1,825	682,374	1979-80	
276,779	2,017,296	4,352	2,021,649	8.27	2,280	796,638	1980-81	
288,799	2,110,171	1,899	2,112,070	9.12	1,540	938,026	1981-82	
297,681	2,196,256	1,645	2,197,901	9.77	1,439	1,080,092	1982-83	
334,399	2,290,573	378	2,290,951	9.81	125	1,253,582	1983-84	
331,251	2,375,923	189	2,376,112	9.99	707	1,405,818	1984-85	
360,868	2,459,161	—	2,459,161	10.32	2,313	1,507,444	1985-86	
368,323	2,477,509	—	2,477,509	10.76	2,678	1,647,532	1986-87	
368,634	2,444,925	—	2,444,925	10.55	599	1,768,066	1987-88	

(d) Gross amounts, i.e. not adjusted for inter-fund transfers. (e) Prior to 1937-38 the figures are for the calendar year ended 6 months earlier than the year shown and up to 1923 include loan receipts. All receipts of business undertakings are included. (f) Excluding amounts transferred from trust funds to offset accumulated debit balances in the Consolidated Revenue Fund. (g) Including Australian Government loan of \$19,768(000) to the Sugar Board.

SUMMARY OF PRIVATE FINANCE STATISTICS

(\$m)

Year	Trading banks			Savings banks deposits at 30 June (b)	Type of financial commitment			
	Advances (a) (b)	Deposits (a) (b)	Weekly trans- actions (c)		Housing for owner occupation	Personal	Commercial	Lease
1859-60	0.8	0.4	n.a.	—	n.a.	n.a.	n.a.	n.a.
1865-66	4.4	1.6	n.a.	(d) 0.2	n.a.	n.a.	n.a.	n.a.
1870-71	2.4	2.2	n.a.	(d) 0.8	n.a.	n.a.	n.a.	n.a.
1875-76	6.3	5.8	n.a.	(d) 1.3	n.a.	n.a.	n.a.	n.a.
1880-81	8.8	7.2	n.a.	(d) 1.9	n.a.	n.a.	n.a.	n.a.
1885-86	23.9	14.4	n.a.	(d) 2.7	n.a.	n.a.	n.a.	n.a.
1890-91	34.6	19.7	n.a.	(d) 3.3	n.a.	n.a.	n.a.	n.a.
1895-96	31.3	21.6	n.a.	4.7	n.a.	n.a.	n.a.	n.a.
1900-01	25.6	26.3	n.a.	7.8	n.a.	n.a.	n.a.	n.a.
1905-06	26.0	26.6	1.2	8.3	n.a.	n.a.	n.a.	n.a.
1910-11	30.3	39.3	2.3	12.8	n.a.	n.a.	n.a.	n.a.
1915-16	37.0	48.3	3.7	25.9	n.a.	n.a.	n.a.	n.a.
1920-21	46.6	57.8	6.2	37.2	n.a.	n.a.	n.a.	n.a.
1925-26	67.3	86.3	7.4	45.7	n.a.	n.a.	n.a.	n.a.
1930-31	64.2	87.5	5.9	44.7	n.a.	n.a.	n.a.	n.a.
1935-36	76.2	87.0	7.1	54.3	n.a.	n.a.	n.a.	n.a.
1940-41	83.0	106.9	9.5	58.2	n.a.	n.a.	n.a.	n.a.
1945-46	63.9	215.8	14.3	180.1	n.a.	n.a.	n.a.	n.a.
1950-51	181.6	351.0	78.0	197.7	n.a.	n.a.	n.a.	n.a.
1955-56	271.4	397.6	112.1	265.4	n.a.	n.a.	n.a.	n.a.
1956-57	255.3	437.1	125.5	289.2	n.a.	n.a.	n.a.	n.a.
1957-58	291.6	428.2	131.3	306.5	n.a.	n.a.	n.a.	n.a.
1958-59	287.2	452.7	140.5	333.3	n.a.	n.a.	n.a.	n.a.
1959-60	313.8	478.3	158.3	365.2	n.a.	n.a.	n.a.	n.a.
1960-61	307.7	476.7	163.8	374.3	n.a.	n.a.	n.a.	n.a.
1961-62	315.8	506.1	164.4	411.7	n.a.	n.a.	n.a.	n.a.
1962-63	331.0	549.3	185.1	470.4	n.a.	n.a.	n.a.	n.a.
1963-64	348.0	625.3	213.2	542.4	n.a.	n.a.	n.a.	n.a.
1964-65	403.5	667.8	232.9	593.0	n.a.	n.a.	n.a.	n.a.
1965-66	426.6	710.0	232.5	637.7	n.a.	n.a.	n.a.	n.a.
1966-67	540.9	754.5	256.9	700.0	n.a.	n.a.	n.a.	n.a.
1967-68	499.8	805.5	289.2	757.0	n.a.	n.a.	n.a.	n.a.
1968-69	534.3	871.8	325.3	819.0	n.a.	n.a.	n.a.	n.a.
1969-70	580.3	917.3	364.7	875.6	n.a.	n.a.	n.a.	n.a.
1970-71	615.4	979.1	405.0	943.3	n.a.	n.a.	n.a.	n.a.
1971-72	670.3	1,120.8	459.1	1,052.9	n.a.	n.a.	n.a.	n.a.
1972-73	929.8	1,566.6	597.5	1,319.9	n.a.	n.a.	n.a.	n.a.
1973-74	1,187.9	1,845.9	753.4	1,428.5	n.a.	n.a.	n.a.	n.a.
1974-75	1,247.6	2,148.9	817.9	1,618.2	n.a.	n.a.	n.a.	n.a.
1975-76	1,483.3	2,335.5	1,027.4	1,940.3	n.a.	n.a.	n.a.	n.a.
1976-77	1,678.2	2,712.6	1,230.7	2,148.7	641.2	n.a.	n.a.	n.a.
1977-78	1,940.4	2,969.1	1,385.1	2,446.5	698.5	n.a.	n.a.	n.a.
1978-79	2,145.5	3,393.0	1,517.7	2,713.3	905.8	n.a.	n.a.	n.a.
1979-80	2,509.2	3,934.8	1,883.0	2,884.6	976.9	n.a.	n.a.	n.a.
1980-81	2,817.8	4,896.3	2,356.0	3,232.3	1,106.6	n.a.	n.a.	n.a.
1981-82	3,308.7	5,590.3	3,029.6	3,463.3	1,135.8	n.a.	n.a.	n.a.
1982-83	4,096.3	5,886.6	3,567.3	4,136.1	1,232.0	n.a.	n.a.	n.a.
1983-84	4,878.8	6,067.8	4,648.7	4,708.6	1,794.5	n.a.	n.a.	n.a.
1984-85	6,123.1	6,833.6	5,772.1	5,029.3	2,083.8	n.a.	n.a.	n.a.
1985-86	6,823.8	7,645.1	6,246.9	5,238.4	1,561.1	2,358.6	6,463.2	990.4
1986-87	7,136.7	7,949.8	7,349.6	5,813.3	1,666.3	2,336.9	7,576.8	904.8
1987-88	7,642.5	8,672.1	9,744.2	7,129.2	2,917.2	3,015.1	10,655.2	1,096.0
1988-89	9,321.0	10,197.0	11,152.9	9,687.0	3,442.1	3,438.5	12,738.5	1,470.7

(a) Average weekly balances in month of June (June quarter before 1945-46). (b) From January 1989 data are not comparable with those for previous periods due to changes in reporting arrangements. (c) From 1946-47 average weekly debits to customers' accounts; earlier figures, average weekly clearings (calendar years before 1928-29). (d) Calendar year ended 6 months later than the financial year shown.

SUMMARY OF LAW, ORDER AND EDUCATION STATISTICS

Year	Police force at end of year (a)	Prisoners in gaol at end of year (b)		Higher court criminal convictions	Liquor licences in force at end of year (c)	Schools (d)	Pupils at schools (d) (e)	University students (f)
		Males	Females					
1860	n.a.	28	6	30	107	41	1,890	..
1865	392	190	20	99	365	101	9,091	..
1870	n.a.	206	17	89	618	173	16,425	..
1875	660	267	29	176	940	283	34,591	..
1880	626	301	48	171	971	415	44,104	..
1885	873	467	52	266	1,269	551	59,301	..
1890	897	580	55	275	1,379	737	76,135	..
1895	907	538	49	245	1,282	923	87,123	..
1900	885	511	52	278	1,470	1,084	109,963	..
1905	912	495	40	258	1,561	1,215	110,886	..
1910	1,050	494	33	376	1,682	1,348	112,863	..
1915	(g) 1,293	416	34	351	1,828	1,565	129,296	265
1920	(g) 1,215	329	16	203	1,682	1,771	150,780	291
1925-26	1,258	335	9	234	1,614	1,888	167,247	457
1930-31	1,329	349	10	198	1,598	1,897	175,344	778
1935-36	1,365	328	6	222	1,661	1,925	174,319	1,090
1940-41	1,543	283	4	145	1,625	1,914	163,396	1,902
1945-46	1,776	507	17	229	1,623	1,746	164,365	2,224
1950-51	2,251	468	11	346	1,686	1,810	198,755	4,245
1955-56	2,447	628	19	431	1,789	1,845	249,335	4,527
1956-57	2,514	691	22	584	1,794	1,847	261,275	5,329
1957-58	2,640	816	27	883	1,793	1,856	277,139	5,615
1958-59	2,702	906	19	915	1,797	1,853	288,826	6,718
1959-60	2,665	907	24	1,020	1,786	1,845	300,397	7,444
1960-61	2,690	921	29	1,279	1,789	1,827	308,998	8,700
1961-62	2,764	873	17	1,175	1,787	1,801	316,800	9,525
1962-63	2,812	916	30	1,187	1,802	1,783	325,869	10,507
1963-64	2,832	826	18	1,134	1,798	1,776	332,818	11,466
1964-65	2,822	987	37	1,201	1,793	1,729	340,583	12,424
1965-66	2,986	1,035	24	1,330	1,798	1,686	347,380	13,581
1966-67	3,067	1,088	18	1,279	1,808	1,667	357,576	14,821
1967-68	3,094	1,010	24	1,160	1,806	1,649	368,385	15,253
1968-69	3,190	1,095	39	1,610	1,822	1,606	375,741	15,317
1969-70	3,221	1,185	22	1,402	1,882	1,590	383,234	15,773
1970-71	3,197	1,218	18	1,727	1,969	1,578	387,745	17,584
1971-72	3,353	1,410	29	1,758	2,026	1,573	392,883	18,949
1972-73	3,518	1,547	27	1,812	2,085	1,568	399,569	18,591
1973-74	3,770	1,376	25	1,610	2,155	1,567	407,582	18,815
1974-75	3,949	1,462	21	1,803	2,214	1,562	414,179	20,701
1975-76	4,034	1,536	30	1,966	2,250	1,540	422,522	20,047
1976-77	4,230	1,498	23	1,008	2,289	1,540	429,694	20,904
1977-78	4,233	1,597	37	891	2,346	1,554	437,941	21,513
1978-79	4,132	1,697	43	946	2,446	1,584	444,045	21,958
1979-80	4,387	1,686	53	1,143	2,518	1,597	450,575	21,721
1980-81	4,554	1,733	49	1,243	2,605	1,617	460,927	22,249
1981-82	4,543	1,661	45	1,263	2,719	1,626	472,840	22,392
1982-83	4,869	1,728	45	1,434	2,830	1,636	481,568	22,528
1983-84	4,899	1,850	38	1,784	2,928	1,672	r 486,297	22,867
1984-85	4,984	1,925	74	2,177	2,968	1,689	r 489,600	23,670
1985-86	5,145	2,126	79	2,538	3,046	1,698	r 491,160	23,996
1986-87	5,381	2,261	88	2,619	3,233	1,712	r 495,059	25,359
1987-88	5,322	2,304	114	2,795	3,352	1,709	503,080	25,495
1988-89	5,573	2,335	119	2,861	3,483	1,700	513,856	27,816

(a) From 1969-70, new series. (b) From 1924-25 to 1947-48 at the middle of financial year shown. (c) The licences exclude bottlers' licences and include licensed victuallers throughout; winesellers from 1900; spirit merchants and registered clubs from 1913; sporting clubs and packets from 1934-35; ex-servicemen's clubs from 1955-56; restaurants from 1961-62; bistros, cabarets, function rooms and theatres from 1970-71; caterers' licences from 1976-77; airport licences from 1977-78; vigneron-vintners and tourist park licences from 1980-81; cultural centres from 1982-83 and historic inn licences from 1983-84. (d) From 1983-84 comprising full-time students only and including non-government special schools. (e) Net enrolment during the year until 1938 (1938-39); thereafter number on roll at end of school year until 1950, at August from 1951 and at July from 1980. Excluding preschools; including business colleges until 1931-32. (f) Enrolment for year ended middle of financial year shown. (g) At 30 June following the year shown.

SUMMARY OF POPULATION CENSUS COUNTS (a)

Particulars	April 1861	March 1901	At 30 June			
			1933	1947	1954	1961
Persons	30,059	503,266	947,534	1,106,415	1,318,259	1,518,828
Males	18,121	280,092	497,217	567,471	676,252	774,579
Females	11,938	223,174	450,317	538,944	642,007	744,249
Masculinity (b)	151.8	125.5	110.4	105.3	105.3	104.1
Age distribution (years) (c)						
0-9	8,677	126,163	178,568	214,301	286,456	324,056
10-19	4,230	106,136	183,460	171,038	200,006	274,029
20-29	7,295	90,499	163,358	176,983	190,278	191,874
30-39	5,215	76,199	140,485	167,648	192,618	204,271
40-49	3,040	50,613	120,760	137,727	166,570	189,037
50-59	1,235	29,667	78,051	116,014	126,197	146,276
60-69	295	17,560	52,336	75,493	96,441	109,051
70 and over	72	6,429	30,516	47,211	59,693	80,234
Religion						
Christian						
Anglican (d)	13,419	185,023	331,972	388,621	454,095	486,315
Baptist	—	12,252	14,991	16,399	20,113	22,254
Catholic (e)	7,676	120,663	209,315	254,988	316,962	372,350
Church of Christ	—	—	5,020	5,717	6,751	7,627
Congregational	700	9,763	8,669	8,546	9,086	9,166
Methodist	1,435	46,556	87,909	124,322	146,456	165,556
Presbyterian	3,700	57,615	106,813	121,604	151,586	173,316
Protestant (undefined)	2,319	2,994	10,179	9,543	10,175	10,149
Salvation Army	—	5,540	4,497	5,734	7,124	8,318
Uniting Church (f)	..	..	..	..	..	..
Other	—	31,369	32,307	39,853	61,337	78,112
Total	29,249	471,775	811,672	975,327	1,183,685	1,333,163
Non-Christian	454	19,861	2,201	1,915	2,409	2,694
Indefinite	43	2,967	1,896	2,959	2,397	3,084
No religion	—	7,718	1,932	4,104	3,777	4,546
Not stated	313	945	129,833	122,110	125,991	175,341
Marital status						
Never married						
Under 15 years of age	10,792	184,486	271,433	297,800	394,021	475,858
15 years and over	8,716	155,789	271,479	253,095	255,767	282,206
Total	19,508	340,275	542,912	550,895	649,788	758,064
Married	9,891	145,081	356,445	473,404	577,780	656,088
Separated not divorced	—	—	—	17,551	17,902	21,406
Divorced	—	145	1,601	5,613	7,677	9,585
Widowed	647	17,188	42,104	55,515	63,497	73,685
Not stated	13	577	4,472	3,437	1,615	—
Birthplace						
Australia	9,785	328,573	787,718	992,178	1,160,595	1,341,069
New Zealand	31	1,571	4,033	3,905	4,612	5,770
United Kingdom and Ireland	16,700	126,159	120,482	82,463	92,951	93,329
Netherlands	—	62	307	351	5,232	9,556
Germany	2,124	13,163	6,983	3,839	6,785	8,470
Italy	—	845	8,355	8,541	16,795	20,000
Other Europe	56	8,044	10,738	8,826	21,962	26,895
Asia	657	13,499	4,883	2,925	4,963	7,412
Other	706	11,350	4,035	3,387	4,364	6,327
Not stated (g)	—	—	—	—	—	—

(a) Excluding full-blood Aborigines. (b) Number of males per 100 females. (c) Recorded ages adjusted by distribution of unspecified ages. (d) Previously referred to as Church of England. (e) Including Catholic and Roman Catholic. (f) The Uniting Church was formed in 1977 from members of the Congregational, Methodist and Presbyterian Churches. (g) Included with Australian-born.

SUMMARY OF POPULATION CENSUS COUNTS (a)

Particulars	At 30 June				
	1966	1971	1976 (b)	1981	1986
Persons	1,682,688	1,827,065	2,037,194	2,295,123	2,587,315
Males	853,541	921,665	1,024,609	1,153,404	1,295,630
Females	829,147	905,400	1,012,584	1,141,719	1,291,685
Masculinity (c)	102.9	101.8	101.2	101.0	100.3
Age distribution (years) (d)					
0-9	349,385	358,004	380,173	382,362	399,060
10-19	318,567	343,266	375,481	403,434	442,150
20-29	226,676	277,540	329,776	381,794	424,195
30-39	199,008	207,719	255,090	333,645	398,503
40-49	202,863	213,142	212,290	232,911	296,203
50-59	171,507	185,368	202,894	225,689	231,268
60-69	119,987	136,603	161,638	188,178	214,867
70 and over	94,695	105,423	119,853	147,110	181,069
Religion					
Christian					
Anglican (e)	529,257	544,432	560,873	601,537	640,867
Baptist	26,870	28,329	29,919	34,323	39,099
Catholic (f)	427,859	467,203	494,344	554,912	628,906
Church of Christ	9,062	10,196	10,542	12,842	15,067
Congregational	9,949	9,627	8,045	3,616	2,878
Methodist	180,160	182,887	179,344	86,750	(g)
Presbyterian	190,343	192,079	179,074	132,525	120,239
Protestant (undefined)	10,957	23,190	20,693	24,343	24,955
Salvation Army	9,044	10,608	11,164	12,952	14,907
Uniting Church (h)	..	..	..	146,898	255,287
Other	93,305	113,260	131,759	163,259	210,419
Total	1,486,806	1,581,811	1,625,757	1,773,957	1,952,624
Non-Christian	3,325	4,066	6,142	9,989	17,544
Indefinite	4,895	3,945	7,238	11,299	10,088
No religion	11,101	110,629	154,548	229,629	303,090
Not stated	176,561	126,614	243,508	270,249	303,969
Marital status					
Never married					
Under 15 years of age	513,322	540,080	571,963	587,357	620,574
15 years and over	320,470	327,469	367,018	453,506	551,703
Total	833,792	867,549	938,981	1,040,863	1,172,277
Married	727,999	820,826	926,398	1,029,825	1,140,431
Separated not divorced	23,879	27,003	38,501	45,950	55,290
Divorced	11,859	16,231	30,022	60,245	91,566
Widowed	85,159	95,456	103,291	118,240	127,751
Not stated	—	—	—	—	—
Birthplace					
Australia	1,480,832	1,595,572	1,771,115	1,932,810	2,162,995
New Zealand	7,608	13,333	17,753	48,073	61,246
United Kingdom and Ireland	106,112	120,595	135,435	147,083	158,949
Netherlands	9,868	9,935	10,633	12,914	14,272
Germany	9,026	9,496	10,896	12,767	15,780
Italy	20,272	19,280	18,875	17,956	17,418
Other Europe	29,027	31,847	34,473	38,240	43,472
Asia	9,330	12,052	15,818	24,196	37,917
Other	10,613	14,955	22,146	28,943	39,655
Not stated (h)	—	—	—	32,141	35,611

(a) Including full-blood Aboriginals. (b) This Census was processed on a sample basis and minor discrepancies may occur between sums of the component items and totals. (c) Number of males per 100 females. (d) Recorded ages adjusted by distribution of unspecified ages. (e) Previously referred to as Church of England. (f) Including Catholic and Roman Catholic. (g) Included with Uniting Church. (h) The Uniting Church was formed in 1977 from members of the Congregational, Methodist and Presbyterian Churches. (i) Prior to 1981 included with Australian-born.

SUMMARY OF POPULATION STATISTICS

Local government area	Estimated resident population, at 30 June			Local government area	Estimated resident population, at 30 June		
	1984	1988	1989 p		1984	1988	1989 p
Albert Shire	78,180	115,702	129,851	Fitzroy Shire	5,880	7,020	7,189
Allora Shire	1,940	2,154	2,198	Flinders Shire	2,780	2,916	2,904
Aramac Shire	1,070	1,070	1,061	Gatton Shire	11,640	12,991	13,187
Atherton Shire	8,090	8,965	9,316	Gayndah Shire	2,960	2,845	2,810
Aurukun Shire	920	1,031	1,050	Gladstone City	23,990	23,026	23,006
Balonne Shire	5,070	5,129	5,157	Glengallan Shire	3,670	3,816	3,821
Banana Shire	16,110	17,135	17,072	Gold Coast City	115,980	128,456	135,163
Barcaldine Shire	1,840	1,813	1,800	Gooburrum Shire	5,570	6,176	6,507
Barcoo Shire	550	472	461	Goondiwindi Town	3,980	4,212	4,290
Bauhinia Shire	2,480	2,392	2,362	Gympie City	11,210	11,277	11,289
Beaudesert Shire	22,790	29,911	32,536	Herberton Shire	4,230	4,712	4,892
Belyando Shire	10,880	11,825	11,927	Hervey Bay City	16,960	21,151	23,404
Bendemere Shire	1,160	1,134	1,124	Hinchinbrook Shire	13,650	13,368	13,303
Biggenden Shire	1,520	1,628	1,623	Ilfracombe Shire	350	318	308
Blackall Shire	2,160	2,144	2,134	Inglewood Shire	3,040	2,983	2,963
Boonah Shire	5,930	6,232	6,309	Ipswich City	74,080	74,987	75,239
Booringa Shire	2,290	2,257	2,237	Isis Shire	3,950	4,098	4,203
Boulia Shire	580	560	549	Isisford Shire	450	363	348
Bowen Shire	14,270	13,707	13,664	Jericho Shire	1,180	1,057	1,029
Brisbane City	739,080	739,794	744,557	Johnstone Shire	17,130	17,413	17,631
Broadsound Shire	8,460	8,781	8,972	Jondaryan Shire	9,200	10,037	10,223
Bulloo Shire	530	599	607	Kilcoy Shire	2,510	2,787	2,877
Bundaberg City	32,490	32,614	32,990	Kilkivan Shire	2,700	2,781	2,781
Bungil Shire	2,160	2,044	2,023	Kingaroy Shire	9,730	10,449	10,550
Burdekin Shire	18,600	18,251	18,181	Kolan Shire	2,580	2,745	2,780
Burke Shire	1,350	1,381	1,376	Laidley Shire	6,580	7,524	7,781
Caboolture Shire	41,700	56,506	61,719	Livingstone Shire	15,120	15,956	16,369
Cairns City	38,520	41,191	42,755	Logan City	108,470	134,031	142,025
Calliope Shire	9,740	9,989	10,205	Longreach Shire	4,010	4,050	4,038
Caloundra City (a)	32,670	40,776	44,893	Mackay City	22,990	22,657	22,559
Cambooya Shire	2,340	2,702	2,795	Mareeba Shire	15,290	16,217	16,661
Cardwell Shire	7,550	8,207	8,397	Maroochy Shire	57,330	65,985	70,567
Carpentaria Shire	3,200	3,193	3,183	Maryborough City	22,710	22,896	23,024
Charters Towers City	8,000	8,475	8,577	McKinlay Shire	1,410	1,343	1,329
Chinchilla Shire	5,710	5,816	5,806	Millmerran Shire	3,110	3,169	3,159
Clifton Shire	2,360	2,407	2,414	Mirani Shire	4,820	4,911	4,903
Cloncurry Shire	3,130	3,525	3,525	Miriam Vale Shire	1,780	2,051	2,172
Cook Shire (b)	7,080	7,283	7,378	Monto Shire	3,300	3,178	3,168
Crow's Nest Shire	5,090	5,959	6,281	Moreton Shire	33,370	43,173	45,673
Croydon Shire	290	322	322	Mornington Shire	860	918	928
Dalby Town	9,720	9,727	9,717	Mount Isa City	25,030	24,104	23,998
Dalrymple Shire	3,720	4,131	4,131	Mount Morgan Shire	3,220	3,204	3,173
Diamantina Shire	290	256	251	Mulgrave Shire	35,430	45,088	48,216
Douglas Shire	5,890	7,535	8,274	Mundubbera Shire	2,400	2,264	2,254
Duaringa Shire	9,950	10,621	10,611	Murgon Shire	4,660	4,653	4,638
Eacham Shire	4,800	5,578	5,815	Murilla Shire	3,100	3,084	3,054
Eidsvold Shire	1,240	1,179	1,154	Murweh Shire	5,510	5,377	5,326
Emerald Shire	8,960	9,635	9,644	Nanango Shire	5,220	5,809	6,122
Esk Shire	9,150	9,826	10,166	Nebo Shire	1,380	2,347	2,337
Etheridge Shire	980	1,135	1,144	Noosa Shire	17,160	21,117	23,437

FOR LOCAL GOVERNMENT AREAS

Local government area	Estimated resident population, at 30 June			Local government area	Estimated resident population, at 30 June		
	1984	1988	1989 p		1984	1988	1989 p
Paroo Shire	2,660	2,690	2,674	Tiari Shire	2,380	2,698	2,736
Peak Downs Shire	2,800	3,179	3,202	Toowoomba City	76,070	79,934	80,953
Perry Shire	320	323	317	Torres Shire	6,660	7,173	7,317
Pine Rivers Shire	72,490	82,103	85,850	Townsville City	82,330	82,475	83,241
Pioneer Shire	34,680	36,912	37,744	Waggamba Shire	2,700	2,675	2,665
Pittsworth Shire	4,000	4,151	4,161	Wambo Shire	5,620	5,419	5,419
Quilpie Shire	1,380	1,347	1,325	Warroo Shire	1,270	1,197	1,176
Redcliffe City	45,580	47,177	48,025	Warwick City	9,890	10,306	10,384
Redland Shire	54,010	69,309	75,237	Whitsunday Shire (c)	9,240	10,750	11,511
Richmond Shire	1,270	1,195	1,174	Widgee Shire	12,870	14,701	15,345
Rockhampton City	55,450	58,410	58,880	Winton Shire	1,820	1,737	1,727
Roma Town	6,370	6,890	6,909	Wondai Shire	3,880	3,940	3,958
Rosalie Shire	6,140	7,125	7,237	Woocoo Shire	2,450	2,942	3,047
Rosenthal Shire	1,840	1,917	1,946	Woongarra Shire	10,910	12,612	13,717
Sarina Shire	7,250	7,818	7,907				
Stanthorpe Shire	9,580	9,707	9,795				
Tambo Shire	720	663	641				
Tara Shire	3,560	3,798	3,783				
Taroom Shire	3,260	3,229	3,191				
Thuringowa City	25,310	34,384	36,048	Queensland (d)	2,523,900	2,743,765	2,830,198

(a) Previously Landsborough Shire. (b) Including Weipa Town. (c) Previously Proserpine Shire. (d) Including unincorporated islands, off-shore areas and migratory.

SUMMARY OF POPULATION (a) STATISTICS

Year	At 30 June	Mean for year ended 31 December	Population at 31 December				Year ended 31 December			
			Persons	Males	Females	Masculinity (b)	Natural increase	Net migration	Total increase (c)	Annual increase rate (d)
1860	n.a.	25,788	28,056	16,817	11,239	149.6	758	3,778	4,536	..
1865	n.a.	80,250	86,921	53,292	33,629	158.5	1,799	11,544	13,343	25.4
1870	n.a.	112,217	115,272	69,221	46,051	150.3	3,260	2,851	6,111	5.8
1875	n.a.	161,724	169,105	102,161	66,944	152.6	2,602	12,160	14,762	8.0
1880	n.a.	208,130	211,040	124,013	87,027	142.5	5,179	641	5,820	4.5
1885	n.a.	309,134	316,681	186,866	129,815	143.9	5,437	9,657	15,094	8.5
1890	n.a.	386,803	392,116	223,252	168,864	132.2	9,769	858	10,627	4.4
1895	n.a.	436,528	443,064	248,865	194,199	128.1	9,722	3,351	13,073	2.5
1900	n.a.	490,081	493,847	274,684	219,163	125.3	9,054	-1,522	7,532	2.2
1905	529,454	528,928	531,482	291,807	239,675	121.8	8,123	-1,576	6,547	1.5
1910	594,734	591,591	599,016	325,513	273,503	119.0	10,425	10,746	21,171	2.4
1915	696,222	692,699	685,067	366,047	319,020	114.7	12,604	-9,336	3,268	2.7
1920	748,660	745,957	750,624	396,555	354,069	112.0	12,309	2,177	14,486	1.8
1925	840,621	836,844	844,842	444,330	400,512	110.9	12,738	10,020	22,758	2.4
1930	912,112	910,319	916,736	481,559	435,177	110.7	11,484	3,116	14,600	1.6
1935	968,401	966,654	971,297	508,348	462,949	109.8	8,837	2,616	11,453	1.2
1940	1,027,961	1,026,541	1,031,452	536,712	494,740	108.5	11,209	148	11,357	1.2
1945	1,077,124	1,076,610	1,084,864	556,829	528,035	105.5	17,254	-645	16,609	1.0
1950	1,196,185	1,191,081	1,205,418	620,329	585,089	106.0	18,629	16,470	35,099	2.1
1955	1,350,017	1,344,445	1,358,858	696,544	662,314	105.2	21,045	12,332	33,377	2.5
1956	1,381,591	1,377,393	1,392,573	714,288	678,285	105.3	20,223	13,492	33,715	2.5
1957	1,413,085	1,408,732	1,420,501	726,623	693,878	104.7	22,084	5,844	27,928	2.0
1958	1,439,199	1,436,156	1,449,337	740,017	709,320	104.3	22,417	6,419	28,836	2.0
1959	1,468,237	1,464,469	1,477,161	753,906	723,255	104.2	23,250	4,574	27,824	1.9
1960	1,495,927	1,491,114	1,502,286	766,448	735,838	104.2	22,843	2,282	25,125	1.7
1961	1,527,514	1,516,334	1,540,251	784,711	755,540	103.9	23,881	14,084	37,965	2.5
1962	1,550,982	1,551,249	1,562,845	795,010	767,835	103.5	22,490	104	22,594	1.5
1963	1,577,867	1,578,309	1,595,446	810,535	784,911	103.3	22,664	9,937	32,601	2.1
1964	1,610,698	1,610,809	1,626,525	825,775	800,750	103.1	20,461	10,618	31,079	1.9
1965	1,644,534	1,644,028	1,659,423	841,926	817,497	103.0	19,433	13,465	32,898	2.0
1966	1,674,324	1,674,151	1,687,062	854,986	832,076	102.8	18,003	9,636	27,639	1.7
1967	1,699,982	1,701,047	1,715,803	868,549	847,254	102.5	19,956	8,785	28,741	1.7
1968	1,728,996	1,730,614	1,747,724	883,587	864,137	102.3	19,112	12,809	31,921	1.9
1969	1,763,087	1,764,206	1,779,690	898,857	880,833	102.0	20,790	11,176	31,966	1.8
1970	1,792,743	1,795,394	1,812,784	914,631	898,153	101.8	20,475	12,619	33,094	1.9
1971	1,851,485	1,844,386	1,874,930	944,899	930,031	101.6	23,631	34,844	62,146	3.4
1972	1,898,478	1,898,942	1,924,658	970,145	954,513	101.6	22,653	19,729	49,728	2.7
1973	1,951,951	1,952,285	1,981,634	998,847	982,787	101.6	21,335	27,829	56,976	3.0
1974	2,008,340	2,007,472	2,032,973	1,024,704	1,008,269	101.6	19,724	23,565	51,339	2.6
1975	2,051,362	2,051,820	2,072,325	1,043,639	1,028,686	101.5	19,982	11,279	39,352	1.9
1976	2,092,375	2,091,743	2,110,431	1,061,986	1,048,445	101.3	18,004	13,738	38,106	1.8
1977	2,129,839	2,130,182	2,151,026	1,081,423	1,069,603	101.1	18,527	17,451	40,595	1.9
1978	2,172,047	2,172,269	2,191,586	1,101,246	1,090,340	101.0	17,963	17,770	40,560	1.9
1979	2,214,771	2,215,258	2,239,699	1,124,997	1,114,702	100.9	18,857	23,858	48,113	2.2
1980	2,265,935	2,267,615	2,301,702	1,156,231	1,145,471	100.9	18,605	37,632	62,003	2.8
1981	2,345,208	2,345,236	2,387,943	1,200,504	1,187,439	101.1	21,898	59,376	86,241	3.7
1982	2,424,586	2,424,221	2,456,475	1,235,548	1,220,927	101.2	22,589	41,665	68,532	2.9
1983	2,482,282	2,481,388	2,503,285	1,259,140	1,244,145	101.2	25,029	17,507	46,810	1.9
1984	2,523,859	2,524,646	2,547,078	1,281,035	1,266,043	101.2	23,041	16,360	43,793	1.7
1985	2,571,218	2,571,491	2,597,100	1,306,321	1,290,779	101.2	21,808	23,976	50,022	2.0
1986	2,624,595	2,623,771	2,649,694	1,332,348	1,317,346	101.1	22,510	28,366	52,594	2.0
1987 r	2,676,765	2,677,166	2,706,643	1,359,163	1,347,480	100.9	20,504	36,445	56,949	2.1
1988	2,743,765	2,744,735	2,782,763	1,396,213	1,386,550	100.7	21,758	54,362	76,120	2.8

(a) Excluding full-blood Aboriginals prior to 1961 except for 'natural increase' which excludes Aboriginals prior to 1962. Estimated population changed in 1971 from a census count basis to a usual residence basis. (b) Number of males per 100 females. (c) After 1970, discrepancies between the sum of natural increase and net migration and total population increase are due to inter-censal adjustments. (d) The rate of increase during the previous 12 months; for the years prior to 1951, the average (compound) rate of increase during the previous 5 years.

SUMMARY OF BIRTHS, DEATHS, MARRIAGES AND DIVORCES STATISTICS

Year	Number (a)				Rate per 1,000 mean population (a)				Deaths under 1 year of age (a)	
	Births (b)	Deaths (b)	Marriages	Divorces absolute (c)	Births (b)	Deaths (b)	Marriages	Divorces	Number	Rate per 1,000 live births
1860	1,236	478	278	n.a.	47.93	18.54	10.78	n.a.	141	114.08
1865	3,532	1,733	1,074	n.a.	44.01	21.60	13.38	n.a.	580	164.21
1870	4,905	1,645	879	n.a.	43.71	14.66	7.83	n.a.	526	107.24
1875	6,706	4,104	1,487	n.a.	41.47	25.38	9.19	n.a.	1,025	152.85
1880	8,196	3,017	1,547	2	39.38	14.50	7.43	0.01	865	105.54
1885	11,672	6,235	2,842	1	37.76	20.17	9.19	—	1,733	148.47
1890	15,407	5,638	3,195	8	39.83	14.58	8.26	0.02	1,548	100.47
1895	14,874	5,152	2,821	4	34.07	11.80	6.46	0.01	1,356	91.17
1900	14,801	5,747	3,371	12	30.20	11.73	6.88	0.02	1,456	98.37
1905	13,626	5,503	3,173	4	25.76	10.40	6.00	0.01	1,029	75.52
1910	16,169	5,744	4,768	20	27.33	9.71	8.06	0.03	1,017	62.90
1915	20,163	7,559	6,135	28	29.11	10.91	8.86	0.04	1,297	64.33
1920	20,256	7,947	6,667	45	27.15	10.65	8.94	0.06	1,281	63.24
1925	20,283	7,545	6,471	85	24.24	9.02	7.73	0.10	917	45.21
1930	18,939	7,455	6,199	119	20.80	8.19	6.81	0.13	757	39.97
1935	17,688	8,851	8,280	149	18.30	9.16	8.57	0.15	659	37.26
1940	20,412	9,203	10,287	240	19.88	8.97	10.02	0.23	721	35.32
1945	26,713	9,459	9,905	897	24.81	8.79	9.20	0.83	795	29.76
1950	29,028	10,399	10,304	784	24.37	8.73	8.65	0.66	719	24.77
1955	32,352	11,307	10,098	801	24.06	8.41	7.51	0.60	656	20.28
1956	32,409	12,186	9,934	703	23.53	8.85	7.21	0.51	737	22.74
1957	33,763	11,679	10,271	682	23.97	8.29	7.29	0.48	732	21.68
1958	33,872	11,455	10,255	759	23.59	7.98	7.14	0.53	657	19.40
1959	35,599	12,349	10,581	739	24.31	8.43	7.23	0.50	721	20.25
1960	35,213	12,370	10,227	696	23.62	8.30	6.86	0.47	740	21.01
1961	36,637	12,756	10,392	779	24.16	8.41	6.85	0.51	733	20.01
1962	35,776	13,286	10,665	920	23.06	8.56	6.88	0.59	763	21.33
1963	36,012	13,348	11,443	910	22.82	8.46	7.25	0.58	733	20.35
1964	35,049	14,588	11,766	981	21.76	9.06	7.30	0.61	679	19.37
1965	33,615	14,182	13,007	1,052	20.45	8.63	7.91	0.64	599	17.82
1966	32,903	14,900	13,339	1,031	19.65	8.90	7.97	0.62	587	17.84
1967	34,692	14,736	13,634	1,074	20.39	8.66	8.02	0.63	678	19.54
1968	35,190	16,078	14,860	1,135	20.33	9.29	8.59	0.66	716	20.35
1969	36,576	15,786	15,669	1,236	20.73	8.95	8.88	0.70	691	18.89
1970	37,530	17,055	16,082	1,507	20.90	9.50	8.96	0.84	672	17.91
1971	39,970	16,339	16,538	1,404	21.67	8.86	8.97	0.76	766	19.16
1972	39,251	16,598	16,066	1,731	20.67	8.74	8.46	0.91	697	17.76
1973	38,067	16,732	16,490	1,694	19.50	8.57	8.45	0.87	666	17.50
1974	37,852	18,128	16,086	1,833	18.86	9.03	8.01	0.91	606	16.01
1975	36,403	16,421	15,230	2,684	17.74	8.00	7.42	1.31	547	15.03
1976	35,243	17,239	16,703	9,611	16.85	8.24	7.99	4.59	535	15.18
1977	34,935	16,408	15,737	7,293	16.40	7.70	7.39	3.42	478	13.68
1978	34,530	16,567	15,431	6,106	15.90	7.63	7.10	2.81	439	12.71
1979	35,220	16,363	16,082	5,811	15.90	7.39	7.26	2.62	377	10.70
1980	35,001	16,396	17,157	6,219	15.44	7.23	7.57	2.74	383	10.94
1981	38,935	17,037	18,305	6,470	16.60	7.26	7.81	2.76	406	10.43
1982	40,599	18,010	18,928	6,770	16.75	7.43	7.81	2.79	425	10.47
1983	42,085	17,056	18,645	7,474	16.96	6.87	7.51	3.01	417	9.91
1984	40,446	17,405	19,039	8,056	16.02	6.89	7.54	3.19	364	9.00
1985	40,437	18,629	17,810	6,816	15.73	7.24	6.93	2.65	411	10.16
1986	40,371	17,861	18,030	7,042	15.39	6.81	6.87	2.68	351	8.69
1987	39,365	18,861	18,265	6,918	14.70	7.05	6.82	2.58	366	9.30
1988	40,561	18,803	18,850	7,690	14.78	6.85	6.87	2.80	339	8.36

(a) Excluding full-blood Aboriginals prior to 1962. (b) Prior to 1978 births and deaths were on a State of registration basis; from 1978 a State of usual residence basis. (c) Including nullities for 1914 to 1934 and 1940 to 1943.

SUMMARY OF LABOUR FORCE AND WAGES STATISTICS

Year	Civilian labour force at August (a)						Award rate of pay index (b) adult males
	Employed persons	Unemployed persons	Total labour force	Civilian population aged 15 years and over	Unemployment rate	Participation rate	
	'000	'000	'000	'000	%	%	
1910	..	..	..	..	..	..	1.8
1915	..	..	..	..	..	..	2.0
1920	..	..	..	..	..	..	3.2
1925	..	..	..	..	..	..	3.6
1930	..	..	..	..	..	..	3.3
1935	..	..	..	..	..	..	3.1
1940	..	..	..	..	..	..	3.6
1945	..	..	..	..	..	..	4.2
1946	..	..	..	..	..	..	4.2
1947	..	..	..	..	..	..	4.7
1948	..	..	..	..	..	..	5.2
1949	..	..	..	..	..	..	5.6
1950	..	..	..	..	..	..	6.1
1951	..	..	..	..	..	..	7.5
1952	..	..	..	..	..	..	8.9
1953	..	..	..	..	..	..	9.3
1954	..	..	..	..	..	..	9.6
1955	..	..	..	..	..	..	9.9
1956	..	..	..	..	..	..	10.4
1957	..	..	..	..	..	..	10.8
1958	..	..	..	..	..	..	11.1
1959	..	..	..	..	..	..	11.7
1960	..	..	..	..	..	..	12.3
1961	..	..	..	..	..	..	12.7
1962	..	..	..	..	..	..	12.8
1963	..	..	..	..	..	..	13.1
1964	..	..	..	..	..	..	13.3
1965	..	..	..	..	..	..	14.6
1966	666.4	9.9	676.2	1,165.1	1.5	58.0	15.3
1967	679.0	13.2	692.2	1,192.9	1.9	58.0	15.8
1968	689.0	14.8	703.8	1,222.7	2.1	57.6	16.5
1969	712.1	15.5	727.6	1,256.1	2.1	57.9	17.7
1970	731.7	15.6	747.2	1,283.4	2.1	58.2	18.8
1971	742.8	15.3	758.1	1,301.2	2.0	58.3	21.2
1972	765.2	18.2	783.4	1,304.5	2.3	58.4	23.3
1973	795.9	15.0	810.9	1,387.3	1.9	58.5	26.9
1974	821.3	21.8	843.1	1,435.7	2.6	58.7	34.5
1975	840.0	42.3	882.3	1,474.8	4.8	59.8	41.3
1976	847.3	48.1	895.4	1,512.2	5.4	59.2	47.6
1977	876.0	57.4	933.4	1,549.3	6.2	60.2	52.6
1978	881.5	63.0	944.6	1,580.1	6.7	59.8	56.1
1979	906.4	55.3	961.7	1,624.8	5.7	59.2	60.5
1980	942.2	60.1	1,002.2	1,673.4	6.0	59.9	64.9
1981	978.9	59.9	1,038.7	1,732.5	5.8	60.0	73.9
1982	988.1	68.8	1,056.8	1,789.7	6.5	59.1	85.6
1983	980.3	110.2	1,090.5	1,839.0	10.1	59.3	89.5
1984 r	1,008.1	108.9	1,116.9	1,882.5	9.7	59.3	97.9
1985 r	1,058.7	104.3	1,163.1	1,929.9	9.0	60.3	100.0
1986	1,111.1	114.9	1,226.0	1,985.8	9.4	61.7	106.2
1987	1,129.7	115.3	1,244.9	2,039.8	9.3	61.0	109.8
1988	1,199.3	94.6	1,293.9	2,106.3	7.3	61.4	115.0
1989	1,281.2	90.4	1,371.6	2,183.2	6.6	62.8	122.7

(a) Change of definition in 1978 and 1986. (b) Base: June 1985 = 100.0.

SUMMARY OF WELFARE AND HEALTH STATISTICS

Year	Pensioners at 30 June (a)		Public hospitals and nursing homes (b)				Psychiatric institution patients (b)		
	Age	Invalid	Number	Staff (c)	Beds	Inpatients treated	Expendi- ture (d)	Admis- sions	At end of year
							\$'000		
1860	..	..	6	n.a.	n.a.	421	7	..	..
1865	..	..	7	n.a.	n.a.	1,811	20	68	89
1870	..	..	13	n.a.	366	2,074	34	84	188
1875	..	..	20	n.a.	574	4,080	58	231	356
1880	..	..	29	n.a.	917	4,537	74	254	553
1885	..	..	47	n.a.	1,411	10,417	170	296	786
1890	..	..	54	n.a.	1,709	13,763	204	360	1,099
1895	..	..	59	n.a.	1,918	14,675	191	310	1,393
1900	..	..	71	n.a.	2,182	18,766	239	411	1,728
1905	..	..	75	n.a.	2,392	20,123	227	370	1,942
1910	9,894	492	81	914	2,572	26,069	307	417	2,267
1915	12,049	2,954	97	1,359	3,138	37,426	517	484	2,451
1920	13,019	4,960	102	1,758	3,616	48,503	874	571	2,814
1925-26	16,250	6,800	119	2,610	4,755	63,288	1,287	525	3,126
1930-31	22,376	9,707	122	3,173	5,690	72,485	1,438	485	3,185
1935-36	25,493	11,377	119	3,697	6,434	95,571	1,848	602	3,401
1940-41	35,168	8,644	118	4,937	7,607	124,356	2,934	596	3,772
1945-46	34,808	9,807	119	5,844	8,293	147,387	3,982	685	3,772
1950-51	48,075	10,740	131	8,280	9,244	168,412	9,989	930	4,295
1955-56	66,199	12,165	140	9,785	10,705	200,369	19,685	1,238	4,735
1956-57	69,938	13,113	139	10,366	11,481	207,235	22,435	1,391	4,657
1957-58	72,804	14,230	139	10,608	11,293	216,573	23,800	1,421	4,610
1958-59	75,085	15,397	138	10,965	11,756	222,820	26,090	1,526	4,624
1959-60	82,196	11,605	139	11,609	12,422	224,603	27,456	1,453	4,364
1960-61	89,144	13,084	139	12,320	12,376	221,804	29,691	1,357	4,311
1961-62	93,657	14,650	140	12,643	12,458	233,351	31,516	1,616	4,272
1962-63	96,148	15,876	140	13,007	12,545	234,939	32,816	1,750	4,199
1963-64	98,408	16,893	141	13,222	12,668	244,019	35,357	1,754	4,005
1964-65	100,054	17,402	144	13,592	12,949	251,222	37,937	1,785	4,022
1965-66	101,608	17,818	143	13,975	13,273	254,865	40,298	1,586	3,978
1966-67	103,981	18,408	144	14,263	13,420	259,888	43,383	1,680	3,910
1967-68	108,070	19,621	145	14,555	13,628	267,631	46,909	1,541	3,736
1968-69	110,989	21,370	146	15,118	13,481	272,934	50,783	1,924	3,828
1969-70	122,547	23,984	139	13,645	12,331	273,377	52,336	2,646	3,470
1970-71	128,817	21,772	140	13,849	12,308	277,130	63,851	2,924	3,364
1971-72	132,000	22,825	137	14,196	12,353	287,563	73,667	3,384	3,001
1972-73	145,036	24,945	136	14,927	12,480	300,070	88,148	3,579	2,778
1973-74	158,628	25,827	140	16,055	12,901	303,322	109,033	3,560	3,018
1974-75	166,454	27,464	144	17,241	12,983	314,148	158,020	3,646	3,056
1975-76	175,603	29,856	142	17,809	12,820	323,150	209,646	3,536	2,938
1976-77	183,992	32,592	144	18,541	12,797	328,587	249,427	3,963	2,891
1977-78	193,268	32,453	143	19,447	13,050	332,405	275,538	7,985	3,261
1978-79	198,017	34,706	142	20,575	13,307	349,109	322,879	7,954	2,992
1979-80	202,487	36,818	155	21,082	13,634	366,531	361,029	5,191	2,664
1980-81	207,089	35,555	155	21,606	14,242	385,975	454,846	5,394	2,433
1981-82	210,317	33,492	158	23,743	14,613	406,218	565,572	5,735	2,323
1982-83	213,844	32,390	163	25,128	15,289	419,610	669,750	5,736	2,282
1983-84	211,205	34,896	163	25,846	15,219	420,554	749,327	5,543	2,112
1984-85	207,583	36,977	163	26,399	14,920	420,661	797,551	4,591	1,941
1985-86	207,328	39,144	161	26,074	14,806	412,969	807,541	5,668	1,455
1986-87	208,356	41,689	160	26,374	14,806	423,641	883,082	6,252	1,447
1987-88	210,818	44,313	160	26,628	14,903	438,949	1,142,876	6,958	1,409

(a) Since 1939-40, invalid pensioners have been transferred to the age pension on reaching the qualifying age. (b) From 1969-70, new series. (c) To 1959-60, average number employed during year; 1960-61 to 1968-69, number at end of year; from 1969-70, full-time equivalent at end of year. (d) Excluding loan expenditure. Including outpatient expenditure.

SUMMARY OF AGRICULTURAL

Season	Sugar				Maize (a) (c)		Wheat (a)	
	Area cut for crushing (a)	Cane produced (a)	Sugar mills (b)	Raw sugar made	Area harvested	Grain produced	Area harvested	Grain produced
	hectares	'000 tonnes	No.	'000 tonnes	hectares	'000 tonnes	hectares	'000 tonnes
1860-61	..	..	..	..	618	n.a.	79	n.a.
1865-66	n.a.	n.a.	n.a.	n.a.	2,527	n.a.	837	n.a.
1870-71	885	n.a.	39	3	6,491	n.a.	1,170	1
1875-76	3,103	n.a.	66	6	15,666	n.a.	1,642	3
1880-81	5,507	n.a.	83	16	17,850	36	4,429	6
1885-86	15,603	n.a.	166	57	29,033	40	2,134	1
1890-91	16,272	n.a.	110	70	40,226	60	4,166	6
1895-96	22,570	n.a.	64	87	40,663	61	5,241	3
1900-01	29,401	862	58	94	51,789	62	32,093	32
1905-06	38,887	1,439	51	155	46,021	55	48,302	31
1910-11	38,300	1,870	51	214	73,192	113	43,187	28
1915-16	38,226	1,172	45	142	59,276	51	37,920	11
1920-21	36,075	1,360	34	170	46,865	51	71,759	101
1925-26	76,759	3,727	37	494	62,424	86	67,177	54
1930-31	89,858	3,586	35	525	69,677	116	110,202	139
1935-36	92,477	4,288	33	620	63,685	89	96,975	73
1940-41	106,553	5,264	33	771	83,086	113	130,342	155
1945-46	92,971	4,625	32	655	55,217	73	158,840	223
1950-51	106,702	6,799	32	894	45,514	77	226,130	239
1955-56	147,812	8,754	31	1,154	43,765	69	235,419	406
1956-57	146,064	9,122	31	1,191	50,831	88	145,668	192
1957-58	147,704	9,090	31	1,276	49,471	80	186,414	181
1958-59	144,153	9,897	31	1,376	45,892	93	284,901	438
1959-60	121,297	8,563	31	1,237	52,529	103	276,455	368
1960-61	132,432	8,824	31	1,341	53,573	98	280,284	299
1961-62	150,633	9,166	31	1,336	63,042	121	303,386	327
1962-63	156,807	12,293	31	1,798	64,460	129	371,872	508
1963-64	162,708	11,686	31	1,674	67,420	112	379,436	606
1964-65	182,496	14,515	31	1,885	68,109	124	415,014	621
1965-66	197,234	13,763	31	1,913	61,950	82	385,972	474
1966-67	216,506	15,762	31	2,238	61,112	126	496,702	972
1967-68	214,819	15,970	31	2,250	59,785	121	597,555	746
1968-69	221,082	17,694	31	2,646	43,981	69	723,814	1,143
1969-70	204,762	14,936	31	2,114	46,186	88	608,668	405
1970-71	211,511	16,466	31	2,376	51,725	104	333,897	120
1971-72	224,407	18,410	31	2,670	44,546	97	555,990	722
1972-73	232,338	18,087	31	2,714	34,913	70	470,622	405
1973-74	215,937	18,279	31	2,406	27,002	56	394,702	526
1974-75	243,231	19,421	31	2,728	28,675	72	488,500	692
1975-76	245,795	21,069	30	2,751	28,720	78	576,152	830
1976-77	276,554	22,269	30	3,163	32,898	77	582,005	794
1977-78	280,449	22,331	30	3,209	28,733	80	606,791	569
1978-79	237,680	20,135	30	2,749	34,122	111	746,956	1,962
1979-80	255,358	19,860	30	2,807	41,205	98	733,287	846
1980-81	274,259	22,540	30	3,149	42,566	123	726,964	485
1981-82	301,658	23,588	30	3,250	47,548	151	941,113	1,482
1982-83	302,503	23,115	30	3,325	50,923	87	767,043	754
1983-84	291,973	22,723	30	3,012	55,081	175	1,005,879	1,922
1984-85	297,765	23,910	30	3,349	81,151	207	921,007	1,579
1985-86	288,325	22,003	30	3,209	63,222	176	972,727	1,691
1986-87	286,967	23,466	29	3,209	38,348	118	794,582	833
1987-88	291,169	23,200	28	3,246	36,930	124	646,140	718
1988-89	298,205	25,586	28	3,483	36,482	132	768,230	1,550

(a) Including establishments with agricultural activity if they had, or were expected to have, an estimated value of agricultural operations of \$1,500 or more from 1976-77, \$2,500 or more from 1981-82 and \$20,000 or more from 1986-87. (b) Number of mills which actually operated during each season. Prior to 1895-96 the figures include a number of juice mills. (c) Figures up to 1967-68 are for the calendar year ended 6 months earlier than the year shown.

PRODUCTION STATISTICS

Hay and green forage (a) (d)	Cotton (a) (c)		Bananas (a)		Pineapples (a)		Total area under crop (a) (f)	Season
	Area harvested	Raw cotton produced (e)	Total area	Production	Total area	Production		
hectares	hectares	'000 kg	hectares	tonnes	hectares	tonnes	'000 hectares	
n.a.	6	n.a.	..	..	..	..	1	1860-61
n.a.	193	66	..	..	..	..	6	1865-66
n.a.	5,938	740	137	n.a.	73	n.a.	21	1870-71
n.a.	677	142	98	n.a.	35	n.a.	31	1875-76
n.a.	251	57	166	914	66	881	46	1880-81
16,897	20	7	418	2,108	148	2,066	80	1885-86
16,451	6	2	1,579	27,941	292	4,454	91	1890-91
19,490	200	39	1,585	18,873	343	6,384	115	1895-96
33,970	..	..	2,515	29,491	380	7,197	185	1900-01
41,929	69	16	2,508	31,878	747	8,586	212	1905-06
76,172	186	22	2,104	14,250	878	13,937	270	1910-11
117,953	29	2	3,305	15,393	1,501	15,613	295	1915-16
95,816	67	7	3,634	15,215	1,582	14,004	315	1920-21
127,197	16,213	2,598	5,976	32,818	1,617	15,291	418	1925-26
109,067	9,167	2,540	7,296	38,965	2,243	16,951	463	1930-31
182,497	22,236	3,203	3,440	22,023	2,339	22,573	540	1935-36
265,920	16,698	1,872	3,332	19,787	2,902	36,290	702	1940-41
263,446	3,115	295	3,817	16,409	3,117	27,823	737	1945-46
254,239	1,195	182	2,780	15,139	3,707	42,454	841	1950-51
304,292	5,378	931	2,879	15,901	4,984	68,396	1,052	1955-56
277,317	4,588	640	2,353	13,336	4,813	56,509	998	1956-57
316,566	4,194	603	2,284	11,253	5,268	62,520	1,050	1957-58
289,343	4,246	675	2,497	13,082	5,772	80,945	1,151	1958-59
325,390	8,147	1,608	2,574	16,155	4,920	73,951	1,182	1959-60
387,240	14,911	2,473	2,414	16,079	4,360	60,945	1,234	1960-61
386,962	10,881	1,691	2,395	16,790	4,168	61,470	1,296	1961-62
402,698	14,298	2,018	2,372	18,543	4,177	65,111	1,406	1962-63
439,960	11,519	1,278	2,380	17,374	4,412	70,158	1,473	1963-64
481,691	5,483	1,015	2,166	19,483	4,615	68,684	1,599	1964-65
522,582	5,445	1,642	2,188	19,076	5,161	77,693	1,651	1965-66
526,426	4,519	1,911	2,235	20,549	5,985	95,559	1,849	1966-67
586,019	4,706	3,032	2,382	22,429	6,214	107,429	1,973	1967-68
611,559	5,394	4,553	2,340	25,223	6,286	100,385	2,164	1968-69
726,945	5,406	4,351	2,284	27,535	6,355	100,097	2,296	1969-70
575,899	5,213	3,109	2,462	32,564	6,352	116,895	1,901	1970-71
451,603	6,896	6,637	2,603	29,922	6,292	127,479	2,137	1971-72
541,582	8,008	4,809	2,601	34,542	6,218	125,838	2,090	1972-73
459,553	7,105	6,588	2,279	35,888	6,177	114,417	1,905	1973-74
389,648	7,386	6,396	2,118	31,621	5,823	110,118	2,001	1974-75
342,004	5,966	4,985	2,128	36,398	5,838	102,666	2,117	1975-76
289,740	10,286	7,718	2,065	30,615	5,845	111,248	2,121	1976-77
323,258	10,977	10,871	2,224	32,194	5,944	98,230	2,211	1977-78
337,127	14,442	14,110	2,511	44,245	6,358	104,881	2,396	1978-79
383,011	20,550	19,786	2,647	44,746	6,755	123,050	2,440	1979-80
438,454	24,182	22,548	2,817	53,761	6,543	123,220	2,614	1980-81
362,682	28,809	27,234	3,154	57,146	6,324	125,422	2,805	1981-82
421,871	26,805	28,602	3,183	61,362	5,961	110,941	2,690	1982-83
366,438	32,903	38,580	3,264	67,714	5,959	114,734	3,042	1983-84
377,933	51,895	51,932	3,553	72,856	6,246	124,344	3,091	1984-85
488,688	41,230	51,039	4,041	61,795	6,302	131,473	3,274	1985-86
635,341	30,996	40,248	4,521	64,298	6,325	142,288	3,087	1986-87
648,147	80,918	72,099	4,265	79,183	6,266	146,463	2,928	1987-88
570,862	53,280	71,259	4,256	104,795	6,653	154,419	2,896	1988-89

and from 1968-69 for the calendar year ended 6 months later than the year shown. Details of the 1968 season not appearing in the table are: maize, 48,643 hectares, 93(000) tonnes and cotton, 4,913 hectares, 3,785(000) kilograms. (d) Figures from 1971-72 include area of pasture cut for hay. (e) Figures for the years 1900-01 to 1963-64 were compiled by the Cotton Marketing Board. (f) Figures from 1971-72 include areas of pasture harvested for seed and cut for hay.

SUMMARY OF LAND AND

Year	Land		Livestock at end of year (a) (b)				
	Alienated	Leased	Meat cattle (c)	Milk cattle (c)	All cattle	Sheep	Pigs
	'000 hectares	'000 hectares	'000	'000	'000	'000	'000
1860	44	n.a.	n.a.	n.a.	433	3,449	7
1865	216	n.a.	n.a.	n.a.	848	6,595	15
1870	378	n.a.	n.a.	n.a.	1,077	8,164	31
1875	706	n.a.	n.a.	n.a.	1,813	7,228	46
1880	1,845	n.a.	n.a.	n.a.	3,163	6,936	66
1885	4,492	n.a.	n.a.	n.a.	4,163	8,994	56
1890	4,985	n.a.	n.a.	n.a.	5,558	18,007	97
1895	5,751	n.a.	n.a.	n.a.	6,822	19,857	101
1900	6,439	113,811	n.a.	n.a.	4,078	10,339	122
1905	7,147	97,187	n.a.	n.a.	2,964	12,535	164
1910	9,483	119,328	n.a.	n.a.	5,132	20,332	152
1915	11,017	134,690	4,278	503	4,781	15,950	118
1920	10,393	131,869	5,782	673	6,455	17,405	104
1925	9,940	123,159	5,670	767	6,437	20,663	200
1930	10,357	127,634	4,423	1,041	5,464	22,542	218
1935	11,328	134,740	4,655	1,378	6,033	18,060	305
1940	11,264	138,772	4,764	1,447	6,210	23,936	436
1945	11,251	143,724	5,100	1,443	6,542	18,944	415
1950	11,232	145,453	5,373	1,361	6,734	17,478	375
1955	11,232	147,481	6,001	1,329	7,330	22,116	373
1956	11,232	147,178	6,138	1,324	7,462	23,190	395
1957	11,231	147,334	5,963	1,224	7,187	22,274	423
1958	11,237	147,848	5,687	1,197	6,884	22,148	400
1959	11,260	147,410	5,829	1,183	7,012	23,332	429
1960	11,319	149,091	5,847	1,157	7,004	22,135	448
1961	11,378	149,174	5,942	1,156	7,098	22,125	433
1962	11,485	148,621	6,090	1,143	7,234	22,811	402
1963	11,752	148,250	6,282	1,120	7,402	24,337	388
1964	12,215	149,455	6,334	1,058	7,393	24,016	406
1965	12,787	148,850	5,930	958	6,888	18,384	417
1966	13,911	147,887	6,020	899	6,919	19,305	468
1967	15,245	146,276	6,526	835	7,361	19,948	520
1968	18,783	143,979	6,910	758	7,668	20,324	535
1969	21,424	141,459	6,808	707	7,515	16,446	480
1970	23,290	139,848	7,278	667	7,944	14,774	491
1971	24,292	138,787	8,375	646	9,021	14,604	535
1972	25,305	137,658	9,191	604	9,795	13,346	542
1973	27,958	134,357	9,767	529	10,297	13,119	441
1974	29,039	133,696	10,364	515	10,879	13,908	400
1975	29,840	132,486	10,844	503	11,347	13,599	409
1976	30,941	129,804	11,036	470	11,506	13,304	441
1977	31,508	129,019	11,059	432	11,490	13,438	463
1978	35,002	129,487	10,462	398	10,859	13,592	487
1979	32,476	128,465	9,957	375	10,332	12,163	510
1980	33,353	127,476	9,561	364	9,925	10,620	502
1981	33,923	125,462	9,416	366	9,782	12,344	513
1982	n.a.	n.a.	8,981	369	9,349	12,225	551
1983	n.a.	n.a.	8,783	372	9,154	13,033	556
1984	n.a.	n.a.	9,051	362	9,413	14,042	563
1985	n.a.	n.a.	9,303	359	9,662	14,311	585
1986	n.a.	n.a.	8,675	337	9,011	14,627	579
1987	n.a.	n.a.	8,504	322	8,825	14,367	617
1988	n.a.	n.a.	8,682	312	8,994	14,880	611

(a) Including establishments with agricultural activity if they had, or were expected to have, an estimated value of agricultural operations of \$1,500 or more from 1976-77, \$2,500 or more from 1981-82 and \$20,000 or more from 1986-87. (b) From 1942, figures are at 31 March of the following year. (c) Figures from 1946 include stock kept for meat production by dairy farmers as meat cattle. (d) Horses not on rural holdings and all mules and donkeys are excluded after 1941. (e) From 1924 to 1935 and from 1941, figures are for the financial year ended 30 June following the year shown. In earlier years the figures

LIVESTOCK STATISTICS

Horses (d)	Wool (e) (greasy equivalent)		Butter production (f)		Cheese production (f)		Year
	Quantity	Value	Quantity	Value	Quantity	Value	
'000	'000 kg	\$'000	tonnes	\$'000	tonnes	\$'000	
24	2,271	888	n.a.	n.a.	n.a.	n.a.	1860
51	5,557	1,771	n.a.	n.a.	n.a.	n.a.	1865
83	17,510	2,052	n.a.	n.a.	n.a.	n.a.	1870
121	14,591	2,732	n.a.	n.a.	n.a.	n.a.	1875
179	15,984	2,775	n.a.	n.a.	n.a.	n.a.	1880
260	24,203	3,559	n.a.	n.a.	n.a.	n.a.	1885
366	30,549	5,049	907	n.a.	77	n.a.	1890
469	49,572	5,974	1,688	n.a.	835	n.a.	1895
457	29,342	4,394	3,937	n.a.	900	n.a.	1900
431	31,828	5,300	9,217	n.a.	1,216	n.a.	1905
594	63,163	11,816	14,178	2,668	1,881	186	1910
687	59,322	12,534	11,547	3,488	1,988	338	1915
742	52,077	14,352	18,484	8,400	5,221	1,066	1920
638	66,672	21,986	28,576	9,844	5,707	1,180	1925
482	82,581	14,080	43,418	11,958	6,191	770	1930
442	64,770	16,576	52,581	12,005	4,150	540	1935
443	97,388	23,546	54,404	15,296	5,322	798	1940
367	78,584	21,728	46,524	18,678	12,218	2,805	1945
307	70,156	177,636	48,680	31,379	8,818	3,104	1950
261	88,003	106,268	49,320	43,214	7,701	3,727	1955
255	103,267	155,044	42,087	36,419	7,252	3,348	1956
243	92,703	107,672	33,118	30,129	5,258	2,488	1957
239	99,404	90,150	41,997	35,563	8,352	4,075	1958
234	107,137	109,146	39,875	38,247	8,628	5,004	1959
224	106,862	101,718	31,778	30,880	7,338	3,865	1960
217	104,477	101,274	36,383	32,588	9,118	4,483	1961
212	105,976	115,462	37,195	32,791	10,365	5,090	1962
207	115,841	141,458	36,071	33,965	9,644	5,340	1963
201	114,045	117,218	33,486	32,255	8,662	5,153	1964
190	87,440	90,961	31,837	29,208	8,061	4,667	1965
182	92,380	93,190	33,736	30,278	10,465	5,860	1966
181	102,885	94,874	28,824	25,385	10,061	5,669	1967
176	112,040	108,060	19,542	17,211	8,104	4,370	1968
173	89,064	69,783	22,784	19,524	9,295	5,006	1969
165	76,554	44,916	18,773	17,658	7,684	4,600	1970
n.a.	83,160	61,732	18,193	18,442	8,251	5,586	1971
n.a.	70,195	123,512	15,857	14,470	8,753	6,157	1972
n.a.	63,833	107,417	11,699	10,343	9,225	6,866	1973
n.a.	66,262	81,301	10,360	9,621	10,066	8,788	1974
142	66,316	90,597	10,965	10,241	12,809	10,888	1975
152	64,395	109,749	7,573	8,111	11,461	10,315	1976
162	59,272	106,889	4,837	5,828	10,106	9,889	1977
171	63,831	127,428	5,644	7,140	12,562	12,951	1978
176	59,001	138,554	3,520	4,647	11,328	16,471	1979
178	46,480	116,970	2,795	4,369	10,676	15,363	1980
164	60,674	150,829	3,209	6,043	12,778	21,327	1981
165	54,015	136,725	3,881	7,820	12,483	22,320	1982
166	65,607	184,059	5,371	10,355	13,507	23,826	1983
162	67,791	216,554	4,415	7,841	13,418	24,112	1984
160	65,524	220,062	3,320	5,840	14,684	27,327	1985
126	74,973	292,449	3,703	n.a.	13,946	n.a.	1986
137	78,204	476,902	3,487	n.a.	15,198	n.a.	1987
130	76,294	455,241	3,687	n.a.	14,434	n.a.	1988

differ somewhat from those published by the Australian Statistician, who made certain adjustments to the State records. Prior to 1907, exports are taken for production, converting scoured to greasy by multiplying by 2, except in 1860 and 1865, when greasy and scoured were not separated in Customs returns. (f) From 1924, figures are for the year ended 30 June following the year shown. Values include subsidy or bounty payable from 1942-43 to 1974-75.

SUMMARY OF

Year	Raw sugar production				Wool (b)	
	Average net price per tonne (a)			Proportion of Queensland production exported	Quantity sold	Average price per kilogram greasy (c)
	Australian sales	Overseas sales	Total pooled sugar			
\$	\$	\$	%	tonnes	cents	
1860	..	..	..	..	n.a.	n.a.
1865	n.a.	..	n.a.	..	n.a.	n.a.
1870	n.a.	..	n.a.	..	n.a.	n.a.
1875-76	n.a.	..	n.a.	..	n.a.	n.a.
1880-81	n.a.	..	n.a.	..	n.a.	n.a.
1885-86	n.a.	..	n.a.	..	n.a.	n.a.
1890-91	n.a.	..	n.a.	..	n.a.	n.a.
1895-96	18.95	..	18.95	..	n.a.	n.a.
1900-01	18.95	..	18.95	..	n.a.	11.18
1905-06	19.90	..	19.90	..	n.a.	18.17
1910-11	18.45	..	18.45	..	n.a.	18.67
1915-16	35.43	..	35.43	..	n.a.	21.58
1920-21	59.71	..	59.71	..	n.a.	22.27
1925-26	51.18	22.22	38.44	44	n.a.	30.67
1930-31	53.15	16.24	38.39	39	68,988	17.04
1935-36	47.24	15.63	31.86	48	56,499	25.60
1940-41	45.37	22.19	33.73	50	89,738	24.36
1945-46	43.11	33.25	39.97	32	87,938	29.17
1950-51	48.32	64.61	55.64	44	77,427	260.39
1955-56	92.32	75.93	83.30	53	86,655	122.79
1956-57	105.46	81.33	91.58	56	110,581	154.49
1957-58	106.59	90.22	96.93	57	96,617	119.55
1958-59	107.77	77.57	89.19	61	102,981	92.53
1959-60	111.07	79.35	93.33	55	113,543	105.13
1960-61	123.07	78.61	96.24	60	110,410	98.12
1961-62	122.98	74.15	94.47	58	111,487	99.99
1962-63	123.12	80.69	94.01	68	111,768	111.18
1963-64	120.07	129.41	126.19	65	120,677	124.08
1964-65	118.84	82.51	94.02	68	116,980	105.43
1965-66	120.02	66.17	83.24	67	90,042	106.92
1966-67	119.33	56.54	81.69	72	92,316	103.47
1967-68	140.54	58.43	82.07	73	101,780	95.89
1968-69	140.94	61.84	80.24	76	111,483	99.71
1969-70	140.84	79.50	97.75	70	87,305	82.68
1970-71	138.08	86.45	100.63	72	72,857	60.84
1971-72	136.51	99.27	108.35	75	79,176	73.37
1972-73	134.93	112.27	117.80	75	61,610	178.30
1973-74	132.40	129.58	130.39	71	54,761	176.43
1974-75	129.90	304.79	259.78	74	61,220	126.80
1975-76	126.20	276.88	237.34	73	58,387	139.91
1976-77	136.20	242.89	218.15	76	57,551	174.73
1977-78	149.90	198.47	187.38	77	51,352	185.76
1978-79	190.10	220.70	212.66	74	51,443	205.51
1979-80	236.60	302.44	285.25	74	48,509	239.06
1980-81	253.80	411.05	375.52	77	38,823	264.26
1981-82	264.60	278.40	275.29	77	56,818	259.02
1982-83	293.10	201.92	222.61	77	55,105	265.25
1983-84	315.40	r 241.98	258.76	77	62,851	290.48
1984-85	335.30	r 195.67	r 225.73	78	65,230	323.51
1985-86	341.50	190.20	(f) 223.06	78	63,805	341.44
1986-87	373.80	r 244.50	275.21	76	70,041	399.40
1987-88	400.10	254.11	287.42	77	71,564	617.57
1988-89	420.20	307.50	333.50	77	67,255	620.81

(a) Queensland sugar only, including "excess" sugar. (b) Wool sold at auction by National Council of Wool Selling Brokers. (c) Estimated on an average bale weight of 150 kilograms prior to 1925-26. (d) For human consumption only. Slaughtering in slaughterhouses estimated up to 1900-01. (e) Average

MARKETING STATISTICS

<i>Meat</i>					<i>Average price of steers, bullocks and bulls (e)</i>	<i>Year</i>
<i>Livestock slaughtered (d)</i>						
<i>Cattle (including calves)</i>	<i>Sheep (including lambs)</i>	<i>Pigs</i>	<i>Chickens</i>			
'000	'000	'000	'000	\$		
18	57	2	n.a.	n.a.	1860	
61	178	5	n.a.	n.a.	1865	
67	529	7	n.a.	n.a.	1870	
89	342	10	n.a.	n.a.	1875-76	
128	454	13	n.a.	n.a.	1880-81	
195	711	20	n.a.	n.a.	1885-86	
216	951	29	n.a.	n.a.	1890-91	
510	2,110	87	n.a.	n.a.	1895-96	
503	861	129	n.a.	n.a.	1900-01	
219	598	187	n.a.	n.a.	1905-06	
379	1,751	169	n.a.	n.a.	1910-11	
653	1,316	216	n.a.	n.a.	1915-16	
449	461	158	n.a.	n.a.	1920-21	
776	635	310	n.a.	n.a.	1925-26	
647	1,671	408	n.a.	n.a.	1930-31	
857	971	552	n.a.	15.78	1935-36	
1,117	1,273	703	n.a.	22.14	1940-41	
798	1,465	472	n.a.	30.03	1945-46	
1,181	745	460	n.a.	61.52	1950-51	
1,502	1,186	459	n.a.	72.92	1955-56	
1,641	1,270	438	n.a.	73.08	1956-57	
1,542	1,378	462	n.a.	81.38	1957-58	
1,883	1,633	521	n.a.	95.88	1958-59	
1,527	2,113	530	n.a.	114.22	1959-60	
1,469	2,924	554	n.a.	118.24	1960-61	
1,584	2,417	597	n.a.	95.22	1961-62	
1,804	2,125	604	5,128	98.39	1962-63	
1,857	2,407	606	7,181	111.62	1963-64	
1,960	2,933	623	8,076	116.07	1964-65	
1,888	2,769	640	9,272	133.11	1965-66	
1,677	2,154	666	10,635	141.68	1966-67	
1,664	2,491	735	12,190	149.65	1967-68	
1,823	2,724	800	12,952	152.58	1968-69	
1,680	2,937	757	14,175	156.05	1969-70	
1,590	2,906	742	15,689	163.57	1970-71	
1,708	3,418	794	15,525	172.69	1971-72	
2,004	2,453	964	16,546	206.73	1972-73	
1,740	1,321	829	19,055	211.03	1973-74	
2,046	1,279	634	17,764	97.61	1974-75	
2,521	1,400	667	19,044	124.90	1975-76	
2,829	1,506	703	21,166	150.46	1976-77	
3,148	1,480	747	24,962	147.76	1977-78	
3,296	1,442	721	28,414	322.02	1978-79	
2,606	1,378	813	33,577	409.28	1979-80	
2,148	1,332	838	32,390	393.42	1980-81	
2,610	1,300	812	31,068	332.41	1981-82	
2,454	1,359	863	34,781	412.75	1982-83	
2,384	1,310	921	33,614	470.79	1983-84	
2,311	1,225	965	36,804	511.79	1984-85	
2,428	1,412	1,009	41,709	530.38	1985-86	
2,663	1,542	1,075	46,375	449.30	1986-87	
2,673	1,610	1,114	46,340	456.06	1987-88	
2,320	1,594	1,157	46,914	524.62	1988-89	

prices of livestock, Brisbane saleyards. Prior to 1986-87, prices shown are for bullocks only. (f) Excluding government assistance of \$20,831,495 paid to Queensland mills.

SUMMARY OF MINERAL, TIMBER AND

Year	Mineral and quarrying production (a)							Coal '000 tonnes	Mineral sands concentrates tonnes
	Approximate metal content								
	Gold	Silver	Lead	Copper	Tin	Zinc			
	kg	kg	tonnes	tonnes	tonnes	tonnes			
1860	85	..	..	1	..	..	..	13	..
1865	543	..	..	733	..	..	..	34	..
1870	2,863	..	..	1,356	..	..	..	23	..
1875	8,763	..	..	1,701	3,183	..	..	33	..
1880	6,919	n.a.	n.a.	331	2,025	..	..	59	..
1885	7,780	n.a.	n.a.	1,362	2,314	..	..	213	..
1890	15,982	n.a.	n.a.	188	2,112	..	..	344	..
1895	15,747	6,999	369	441	1,504	..	..	328	..
1900	21,027	3,514	208	390	799	..	..	505	..
1905	18,433	18,715	2,461	7,337	2,806	..	..	538	..
1910	13,729	26,786	2,430	16,650	2,100	..	..	885	..
1915	7,767	7,457	494	20,020	1,512	..	1,041	..	..
1920	4,828	8,530	1,736	16,152	1,057	..	1,128	..	..
1925	1,443	11,990	5,319	3,972	719	174	1,196	..	..
1930	243	2,171	235	2,977	429	—	1,112	..	..
1935	3,203	74,933	33,481	2,947	845	4,482	1,069	..	..
1940	3,945	135,793	48,890	7,019	904	30,059	1,306	..	..
1945	1,966	3,506	—	15,248	661	—	1,661	13,629	..
1950	2,745	91,464	39,802	5,330	610	26,214	2,358	14,946	..
1955	2,001	136,720	49,597	32,369	782	17,413	2,791	42,836	..
1960	2,434	159,303	58,441	84,081	899	24,785	2,693	74,491	..
1961	2,015	120,768	46,007	67,512	1,372	33,732	2,827	69,695	..
1962	2,107	174,195	63,675	80,400	1,094	45,421	2,844	78,245	..
1963	2,133	192,906	67,782	84,557	1,215	37,943	3,296	101,958	..
1964	3,139	173,297	62,921	75,931	1,517	38,180	3,841	96,329	..
1965	2,394	144,189	50,470	61,375	1,195	31,472	4,221	106,325	..
1966	4,330	192,582	66,593	73,809	1,719	44,288	4,739	133,176	..
1967	2,974	212,507	77,666	52,283	1,675	51,853	4,754	162,006	..
1968-69	2,396	332,563	138,048	82,314	1,147	98,330	7,514	193,322	..
1969-70	2,424	391,420	152,752	95,339	1,275	111,185	9,540	314,345	..
1970-71	2,497	367,190	148,507	122,595	1,013	108,455	11,074	288,784	..
1971-72	2,583	288,127	123,939	121,848	1,070	110,498	14,068	200,360	..
1972-73	1,742	292,884	122,149	135,283	1,342	117,525	18,842	171,974	..
1973-74	2,158	313,998	131,763	177,652	1,556	119,739	19,898	224,873	..
1974-75	1,380	361,598	141,616	168,153	1,681	133,100	23,845	253,452	..
1975-76	1,329	380,867	151,167	156,566	1,692	131,704	24,182	228,826	..
1976-77	1,212	488,761	172,663	156,392	1,454	120,853	25,544	195,099	..
1977-78	990	469,109	163,185	160,234	2,061	120,315	25,416	129,018	..
1978-79	635	476,217	157,629	173,839	2,030	127,956	26,507	128,319	..
1979-80	480	427,786	151,060	169,646	2,725	122,620	27,233	191,954	..
1980-81	901	405,775	139,656	169,953	2,999	115,593	32,356	161,810	..
1981-82	824	454,876	170,914	175,236	3,147	152,122	34,276	142,395	..
1982-83	766	501,274	185,423	147,298	2,041	182,541	35,812	163,680	..
1983-84	1,801	522,666	196,368	159,648	1,975	211,934	44,036	183,509	..
1984-85	4,394	532,165	193,179	180,251	1,952	223,796	54,288	273,457	..
1985-86	10,936	570,281	208,149	168,549	1,227	229,563	63,997	378,750	..
1986-87	13,107	490,255	195,488	182,853	700	264,551	68,820	509,370	..
1987-88	19,211	524,878	202,117	157,818	386	242,279	65,819	463,533	..
1988-89	27,360	494,868	190,236	180,696	168	231,908	(i) 74,118	479,057	..

(a) State Department of Mines figures up to 1951, mining census figures thereafter. (b) From 1925 to 1967 the figures are for the financial year ended 30 June following. (c) Australian-grown only and excluding timber sawn and used in plywood and case mills. (d) Commercial production. Prior to 1905 excluding edible fisheries production. From 1905 to 1971-72, edible fisheries production, pearls, pearl-shell, trochus-shell and tortoise-shell, beche-de-

FISHERIES PRODUCTION STATISTICS

Bauxite	Timber production (b)						Fisheries production (b) (d)	Year
	Total value at mine	Sawn timber (c)				Plywood and veneer		
		Pine	Other					
'000 tonnes	\$'000	cubic metres	\$'000	cubic metres	\$'000	\$'000	\$'000	
..	42	n.a.	n.a.	n.a.	n.a.	..	—	1860
..	304	n.a.	n.a.	n.a.	n.a.	..	1	1865
..	968	n.a.	n.a.	n.a.	n.a.	..	—	1870
..	3,143	n.a.	n.a.	n.a.	n.a.	..	14	1875
..	2,270	n.a.	n.a.	n.a.	n.a.	..	125	1880
..	2,770	n.a.	n.a.	n.a.	n.a.	..	213	1885
..	5,284	73,930	422	47,423	293	..	194	1890
..	4,871	46,352	206	40,677	214	..	155	1895
..	6,360	142,035	568	93,570	454	..	267	1900
..	7,453	113,194	475	61,261	302	..	149	1905
..	7,420	169,615	1,008	105,147	709	..	377	1910
..	6,650	211,729	1,538	130,314	1,086	..	332	1915
..	7,236	201,316	2,944	119,617	1,725	..	587	1920
..	4,025	166,651	2,566	144,038	2,495	..	848	1925
..	2,482	68,177	962	70,610	1,024	176	689	1930
..	5,775	166,739	2,061	128,862	1,684	1,067	691	1935
..	10,211	249,100	3,154	199,687	2,624	1,868	783	1940
..	8,710	171,833	2,766	214,639	3,504	1,726	1,113	1945
..	32,698	140,321	3,954	394,412	11,768	4,815	2,125	1950
..	53,785	137,735	6,082	426,207	20,072	9,870	3,298	1955
(e) 43	75,216	147,367	7,784	418,807	23,986	10,897	3,176	1960
41	64,441	125,398	6,564	348,733	17,812	10,531	3,668	1961
20	74,232	139,413	7,136	346,684	17,992	10,497	4,231	1962
292	84,084	148,075	7,620	379,466	19,508	11,367	4,726	1963
455	97,287	154,520	8,024	371,473	20,914	11,941	5,737	1964
664	98,964	136,784	7,733	363,637	24,007	10,174	6,086	1965
989	138,483	133,731	7,731	329,690	22,920	10,154	6,959	1966
2,855	140,577	138,148	8,090	318,667	21,062	12,745	7,308	1967
4,193	209,273	157,382	n.a.	334,540	n.a.	(f) 13,919	8,089	1968-69
5,375	278,145	154,584	n.a.	343,474	n.a.	(f) 15,772	8,034	1969-70
6,611	293,751	n.a.	n.a.	n.a.	n.a.	n.p.	10,985	1970-71
8,009	318,835	161,708	n.a.	291,758	n.a.	n.p.	11,380	1971-72
7,773	399,167	167,807	n.a.	285,424	n.a.	n.p.	(g) 12,112	1972-73
9,005	583,483	154,752	n.a.	274,943	n.a.	23,834	(g) 14,553	1973-74
10,849	802,878	170,095	n.a.	288,617	n.a.	12,636	(g) 11,828	1974-75
8,831	988,583	156,824	n.a.	263,900	n.a.	n.p.	(h) 16,351	1975-76
9,982	1,189,698	162,947	n.a.	297,175	n.a.	n.p.	(h) 33,677	1976-77
8,957	1,191,570	157,090	n.a.	249,378	n.a.	n.p.	(h) 39,143	1977-78
8,095	1,405,149	188,031	n.a.	250,037	n.a.	n.p.	58,214	1978-79
9,377	1,852,466	203,981	n.a.	235,715	n.a.	n.p.	(h) 62,789	1979-80
7,937	1,917,585	189,227	n.a.	246,103	n.a.	n.p.	(h) 86,292	1980-81
8,705	2,089,831	189,288	n.a.	285,697	n.a.	n.p.	n.a.	1981-82
5,816	2,296,956	166,548	n.a.	239,001	n.a.	n.p.	n.a.	1982-83
7,961	2,632,296	161,896	n.a.	215,791	n.a.	n.p.	n.a.	1983-84
8,360	3,500,343	171,474	n.a.	234,474	n.a.	n.p.	n.a.	1984-85
7,170	4,192,282	196,793	n.a.	232,475	n.a.	n.a.	n.a.	1985-86
7,893	4,345,175	210,555	n.a.	225,706	n.a.	n.p.	n.a.	1986-87
8,449	4,106,543	256,197	n.a.	217,934	n.a.	n.a.	n.a.	1987-88
9,548	4,612,446	315,495	n.a.	225,163	n.a.	n.a.	n.a.	1988-89

mer and whales. From 1972-73 edible fisheries production only. (e) Including production for years prior to 1960. (f) Sales and transfers. (g) Excluding oysters. (h) Excluding oysters and rock lobsters. (i) Production for 53 weeks ending 1 July 1989.

SUMMARY OF MANUFACTURING

Year	Manufacturing (b)						
	Establishments	Workers (c)			Salaries and wages paid (d)	Capital values (e)	
		Males	Females	Persons		Machinery and plant	Land and buildings
	No.	No.	No.	No.	\$'000	\$'000	\$'000
1860	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1865	47	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1870	471	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1875	575	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1880	565	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1885	1,069	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1890	1,308	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1895	1,384	n.a.	n.a.	18,554	n.a.	(k) 10,856	(k)
1900	2,053	n.a.	n.a.	25,606	n.a.	8,062	6,410
1905	1,890	n.a.	n.a.	21,389	n.a.	7,058	5,194
1910	1,542	26,720	6,774	33,494	5,540	8,275	5,792
1915	1,749	33,741	7,675	41,416	8,240	12,135	8,487
1920	1,766	35,016	7,144	42,160	12,977	16,428	12,018
1925-26	1,854	41,074	7,929	49,003	18,534	24,204	15,401
1930-31	2,047	32,522	6,861	39,383	13,658	26,227	17,679
1935-36	2,417	36,039	8,729	44,768	16,227	29,537	19,737
1940-41	2,908	46,257	10,716	56,973	23,838	32,310	23,787
1945-46	2,882	53,406	11,977	65,383	35,231	31,768	26,933
1950-51	4,715	76,666	17,466	94,132	83,982	55,170	44,714
1955-56	5,305	83,877	17,532	101,409	141,703	118,784	89,404
1960-61	5,809	85,278	18,162	103,440	179,907	180,134	145,410
1961-62	5,756	82,559	17,570	100,129	182,035	185,241	153,225
1962-63	5,828	85,028	18,586	103,614	191,196	191,586	167,573
1963-64	5,887	89,772	19,695	109,467	213,916	206,720	183,947
1964-65	5,899	93,738	20,989	114,727	247,061	254,478	201,675
1965-66	5,948	94,204	21,419	115,623	262,437	364,490	238,249
1966-67	5,956	93,945	21,839	115,784	276,093	477,149	257,619
1967-68	6,099	95,952	22,809	118,761	299,768	481,555	277,643
1968-69	4,032	88,546	21,686	110,232	309,276	n.a.	n.a.
1969-70	3,847	88,408	22,101	110,509	332,119	n.a.	n.a.
1970-71 (l)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1971-72	4,001	91,241	23,127	114,368	425,939	n.a.	n.a.
1972-73	4,212	92,861	23,484	116,345	483,447	n.a.	n.a.
1973-74	4,290	93,777	24,783	118,560	596,419	n.a.	n.a.
1974-75	4,250	92,034	22,845	114,879	739,177	n.a.	n.a.
1975-76	3,122	92,289	21,936	114,225	874,056	n.a.	n.a.
1976-77	3,001	90,975	21,782	112,757	981,583	n.a.	n.a.
1977-78	2,838	90,315	21,396	111,711	1,034,588	n.a.	n.a.
1978-79	2,886	91,200	21,759	112,959	1,125,060	n.a.	n.a.
1979-80	3,170	93,636	21,970	115,606	1,253,012	n.a.	n.a.
1980-81	3,291	94,319	21,796	116,115	1,410,213	n.a.	n.a.
1981-82	3,555	99,429	23,288	122,717	1,700,379	n.a.	n.a.
1982-83	3,440	92,389	22,257	114,646	1,786,294	n.a.	n.a.
1983-84	3,451	88,760	21,678	110,438	1,812,786	n.a.	n.a.
1984-85	3,392	87,593	22,347	109,940	1,933,881	n.a.	n.a.
1985-86 (l)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1986-87	4,090	91,713	26,222	117,935	2,263,306	n.a.	n.a.
1987-88	4,624	97,335	30,209	127,544	2,545,442	n.a.	n.a.

(a) Direct comparisons with figures prior to 1968-69 are not possible because of changes in the census units, the scope of the censuses and the items of data. (b) From 1975-76, excluding single-establishment enterprises with fewer than four persons employed. Excluding 'heat, light and power'. (c) Before 1964-65, average number of workers employed during operating period; 1965-66 to 1986-87, average number employed during whole year; and from 1986-87, employment as at 30 June. (d) Excluding drawings of working proprietors. (e) Book values, less any depreciation reserve. (f) From 1968-69 turnover, i.e. sales of goods, plus transfers out and other operating revenue. (g) Output, less value of goods consumed in process of production. From 1968-69 value

INDUSTRY STATISTICS (a)

		Heat, light and power (h)							
Output (f)	Production (g)	Generating works				Sales of electricity and gas (j)		Year	
		Establish- ments	Workers (c) (i)	Salaries and wages paid (d)	Machinery and plant (e)	Land and buildings (e)			
\$'000	\$'000	No.	No.	\$'000	\$'000	\$'000	\$'000		
n.a.	n.a.	..	..	..	..	..	..	1860
n.a.	n.a.	..	..	..	..	..	..	1865
n.a.	n.a.	1	n.a.	n.a.	n.a.	n.a.	n.a.	1870	
n.a.	n.a.	3	n.a.	n.a.	n.a.	n.a.	n.a.	1875	
n.a.	n.a.	6	n.a.	n.a.	n.a.	n.a.	n.a.	1880	
n.a.	n.a.	10	n.a.	n.a.	n.a.	n.a.	n.a.	1885	
n.a.	n.a.	14	n.a.	n.a.	n.a.	n.a.	n.a.	1890	
9,166	n.a.	13	144	n.a.	(k) 551	(k)	132	1895	
15,602	n.a.	25	347	n.a.	947	159	231	1900	
15,924	n.a.	21	316	n.a.	918	226	337	1905	
31,154	n.a.	21	450	122	988	300	430	1910	
49,769	17,465	26	663	213	1,967	405	1,121	1915	
77,864	28,576	29	1,036	460	2,803	504	1,703	1920	
89,143	31,760	43	1,493	720	6,249	910	2,658	1925-26	
77,774	24,723	57	1,091	538	5,973	1,031	3,072	1930-31	
92,713	29,627	65	1,073	563	5,936	1,292	3,159	1935-36	
137,402	41,646	64	814	490	4,694	1,402	5,072	1940-41	
177,479	58,211	63	1,148	794	5,612	1,730	7,474	1945-46	
421,241	147,540	61	1,444	1,691	13,300	3,202	16,784	1950-51	
720,054	248,661	73	1,915	3,217	52,770	15,801	35,446	1955-56	
948,644	325,123	73	1,975	4,412	85,005	22,906	55,118	1960-61	
957,129	334,569	68	1,980	4,656	89,261	26,039	58,032	1961-62	
1,089,319	361,009	67	1,999	4,635	88,999	25,911	60,190	1962-63	
1,249,739	420,673	68	2,005	4,846	101,587	27,573	61,710	1963-64	
1,293,466	455,351	63	1,940	5,297	95,840	31,877	68,657	1964-65	
1,460,031	518,688	62	1,958	5,609	112,968	35,310	74,058	1965-66	
1,568,173	566,488	57	2,153	6,116	124,244	37,043	78,910	1966-67	
1,722,249	626,696	55	2,091	6,187	149,675	37,855	88,365	1967-68	
1,868,803	659,897	30	8,996	31,758	n.a.	n.a.	157,816	1968-69	
2,021,793	712,857	28	9,239	34,063	n.a.	n.a.	167,571	1969-70	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	(l) 1970-71	
2,433,420	870,782	28	9,544	47,154	n.a.	n.a.	205,939	1971-72	
2,844,833	1,012,595	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1972-73	
3,260,936	1,220,174	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1973-74	
4,074,967	1,618,730	28	9,549	81,870	n.a.	n.a.	335,789	1974-75	
4,564,221	1,800,088	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1975-76	
5,261,290	1,991,434	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1976-77	
5,525,413	2,090,444	18	10,617	122,809	n.a.	n.a.	652,748	1977-78	
6,590,922	2,322,426	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1978-79	
8,303,657	2,692,294	17	11,674	157,172	n.a.	n.a.	912,129	1979-80	
9,666,541	3,049,245	18	12,482	187,207	n.a.	n.a.	887,159	1980-81	
10,590,192	3,448,170	18	13,297	226,426	n.a.	n.a.	1,010,448	1981-82	
10,715,479	3,445,095	19	13,541	268,233	n.a.	n.a.	1,277,638	1982-83	
11,706,491	3,700,629	19	13,581	292,816	n.a.	n.a.	1,569,131	1983-84	
12,920,648	4,385,491	18	13,171	308,756	n.a.	n.a.	1,795,950	1984-85	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	(l) 1985-86	
14,848,481	5,052,913	12	11,055	344,600	n.a.	n.a.	2,298,000	1986-87	
17,254,681	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1987-88	

added, i.e. turnover plus increase (or less decrease), in value of stocks less purchases, transfers in and selected expenses. (h) Electricity and gas works.
(i) Number on payroll on payday nearest 30 June, including administration and distribution staff. (j) Valued at prices paid by consumers. From 1968-69
turnover, i.e. sales of electricity and gas and other operating revenue. (k) Value of land and buildings included with machinery and plant. (l) Manu-
facturing census not conducted.

SUMMARY OF TRANSPORT AND

Year	Railways					Metropolitan (d) transport (passengers)		
	Lines open	Passenger journeys (a)	Goods and livestock carried (b)	Earnings	Working expenses	Capital account (c)	Rail	Municipal buses
	kilometres	'000	'000 tonnes	\$'000	\$'000	\$'000	'000	'000
1860	..	..	..	..	..	..	..	..
1865	34	17	3	11	7	536	..	..
1870	333	36	25	143	137	4,385	..	..
1875	428	138	52	322	184	5,859	..	..
1880	1,025	194	140	615	332	9,991	n.a.	..
1885	2,306	1,369	552	1,467	888	18,532	n.a.	..
1890-91	3,549	2,731	905	1,817	1,291	30,203	n.a.	..
1895-96	3,862	2,274	1,167	2,171	1,289	33,519	n.a.	..
1900-01	4,508	4,761	1,739	2,634	2,116	39,479	n.a.	..
1905-06	5,049	4,569	1,951	3,092	1,727	43,482	n.a.	..
1910-11	6,225	8,299	3,348	5,461	3,126	51,798	n.a.	..
1915-16	7,994	13,939	4,076	7,491	5,490	73,677	n.a.	..
1920-21	9,257	14,908	3,930	10,559	10,097	87,114	n.a.	..
1925-26	10,042	28,384	5,188	14,874	12,920	108,224	22,170	..
1930-31	10,507	22,009	3,920	12,954	10,160	125,872	17,118	..
1935-36	10,569	25,244	4,739	13,395	10,434	76,106	20,229	..
1940-41	10,569	26,194	5,690	16,830	13,427	80,806	21,055	1,651
1945-46	10,569	38,200	5,850	23,833	20,888	83,092	28,799	5,464
1950-51	10,557	34,118	7,297	39,544	38,878	98,520	27,601	23,765
1955-56	10,390	35,647	8,311	62,626	67,747	148,690	29,748	35,428
1960-61	10,177	28,876	8,109	73,059	77,154	197,755	24,582	33,200
1961-62	9,780	26,701	8,284	72,318	76,297	205,745	22,890	33,431
1962-63	9,780	26,082	8,876	75,244	75,592	212,809	22,414	34,444
1963-64	9,582	25,903	9,953	84,260	78,468	223,252	22,512	36,193
1964-65	9,310	25,215	10,192	81,321	80,758	233,911	22,254	37,327
1965-66	9,310	25,979	10,211	84,178	84,370	246,699	23,227	33,864
1966-67	9,222	26,371	10,348	87,864	84,561	258,543	23,703	29,225
1967-68	9,374	26,591	11,312	94,019	87,717	268,025	24,065	29,973
1968-69	9,373	28,165	13,184	102,451	91,720	278,494	25,771	42,307
1969-70	9,357	28,515	14,671	108,831	96,831	288,271	26,317	71,297
1970-71	9,329	29,536	15,665	110,165	105,494	301,957	27,621	65,220
1971-72	9,560	31,946	19,267	124,782	120,110	316,529	30,184	58,724
1972-73	9,560	32,145	24,666	137,745	133,841	331,671	30,500	58,656
1973-74	9,560	33,723	25,401	149,844	162,525	349,538	32,003	55,915
1974-75	9,780	36,632	30,208	183,687	228,490	368,097	34,821	49,078
1975-76	9,844	34,278	33,118	230,492	266,351	380,393	32,448	48,052
1976-77	9,796	31,054	34,237	262,561	299,868	403,961	29,296	47,830
1977-78	9,787	29,231	34,155	273,551	337,762	428,732	27,526	48,708
1978-79	9,789	27,275	36,542	310,418	365,070	465,184	25,850	47,978
1979-80	9,904	29,482	38,440	352,700	422,503	488,435	28,006	46,446
1980-81	9,932	31,873	41,504	416,796	486,126	516,052	30,330	41,341
1981-82	9,969	34,237	43,659	520,265	588,051	558,449	32,592	42,525
1982-83	9,979	34,749	43,706	549,859	664,548	592,348	33,135	44,556
1983-84	10,231	37,602	53,113	717,956	725,049	641,999	35,833	42,753
1984-85	10,231	38,897	65,452	882,540	774,755	687,105	37,432	41,725
1985-86	10,225	41,504	73,599	965,963	848,125	728,580	40,246	41,751
1986-87	10,210	39,950	75,169	1,028,871	900,254	770,879	38,886	41,066
1987-88	10,089	46,228	74,893	991,422	894,656	799,275	44,953	43,512
1988-89	10,094	50,943	80,508	1,107,125	931,236	832,093	49,418	47,985

(a) Until 1922-23, journeys made by season ticket holders were not included. (b) Until 1895-96, carriage of livestock was not included. From 1930-31 to 1953-54, includes some duplication due to transfers between the uniform gauge and 1,067 millimetre systems. (c) From 1 July 1931, the capital account was reduced by \$56,000,000 under *The Railway Capital Indebtedness Reduction Act of 1931*. (d) From 1966-67, figures are for the Brisbane Statistical Division. (e) Figures from 1978 were obtained from the Grants Commission, prior figures were from local authorities. (f) All accidents were reported until 30 June 1957. From July 1957 only accidents causing death or personal injury or causing more than a prescribed value of damage are included; the value of damage being \$50 from July 1957, \$100 from May 1969, \$300 from January 1976 and \$1,000 from October 1978. (g) Prior to 1957-58 all accidents

COMMUNICATION STATISTICS

Constructed roads at end of year (e)	Road traffic accidents				Motor vehicles		Postal and telecommunications revenue (j)	Year
	Total accidents (f)	Casualty accidents (g)	Persons killed	Persons injured (h)	On register at end of year	Revenue collected (i)		
kilometres					'000	\$'000	\$'000	
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	10	1860
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	57	1865
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	65	1870
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	124	1875
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	162	1880
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	358	1885
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	445	1890-91
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	463	1895-96
n.a.	n.a.	n.a.	n.a.	n.a.	..	..	630	1900-01
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	720	1905-06
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,143	1910-11
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,437	1915-16
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2,460	1920-21
n.a.	n.a.	n.a.	n.a.	n.a.	53.3	408	3,147	1925-26
(k) 48,041	n.a.	n.a.	n.a.	n.a.	90.8	1,034	3,851	1930-31
(k) 53,549	6,040	2,266	165	2,652	107.6	1,430	4,402	1935-36
n.a.	8,537	2,878	147	3,405	128.4	2,065	5,395	1940-41
n.a.	7,233	2,854	169	3,656	143.3	1,935	9,188	1945-46
82,233	15,884	4,557	218	5,512	240.8	5,200	12,326	1950-51
91,556	37,803	7,116	298	9,170	326.3	10,675	21,682	1955-56
114,946	17,506	5,424	353	7,607	418.6	15,385	35,194	1960-61
116,084	20,321	5,915	341	8,137	431.7	17,110	35,698	1961-62
(l) 115,334	22,123	6,345	420	8,779	459.0	18,797	38,298	1962-63
118,763	25,625	7,113	441	10,089	497.4	21,879	41,498	1963-64
123,417	28,073	7,205	461	10,343	536.1	24,889	47,399	1964-65
125,870	29,885	7,037	475	10,099	563.4	25,326	50,769	1965-66
(l) 125,315	29,961	6,909	481	9,801	588.5	30,519	54,762	1966-67
(l) 124,883	31,397	7,125	476	10,015	620.9	35,228	62,308	1967-68
126,713	30,507	7,212	525	10,252	649.9	37,650	74,678	1968-69
127,232	28,113	7,501	527	10,350	686.1	40,166	81,638	1969-70
128,759	31,168	8,194	580	11,440	726.5	41,892	94,353	1970-71
129,171	31,468	8,105	579	11,295	774.0	44,278	110,428	1971-72
130,500	29,889	8,043	625	10,903	827.0	48,579	127,475	1972-73
131,412	30,486	8,469	603	11,276	889.7	53,622	150,157	1973-74
132,364	29,829	8,120	583	10,835	918.0	55,157	183,071	1974-75
132,897	29,201	8,183	600	10,950	1,012.2	76,071	267,391	1975-76
134,175	24,303	7,609	587	9,940	1,067.2	83,871	310,596	1976-77
133,295	26,613	7,968	560	10,444	1,129.6	88,177	326,611	1977-78
134,586	18,726	7,866	641	10,605	1,183.4	106,603	365,461	1978-79
137,785	17,396	7,688	605	10,037	1,256.9	108,434	421,599	1979-80
138,405	16,485	7,724	559	9,951	1,355.6	113,521	490,050	1980-81
141,211	16,759	7,795	609	9,970	1,439.5	169,197	575,006	1981-82
142,195	15,219	7,084	537	9,126	1,496.1	194,740	691,847	1982-83
143,728	15,850	7,126	506	9,146	1,533.5	211,158	784,928	1983-84
148,136	17,038	7,572	535	9,609	1,546.1	253,933	885,146	1984-85
150,188	16,828	7,426	502	9,557	1,567.4	266,089	1,024,630	1985-86
151,761	15,958	6,893	436	9,038	1,575.3	280,435	1,132,270	1986-87
152,952	16,048	7,100	474	9,144	1,616.2	344,468	1,347,926	1987-88
n.y.a.	16,940	7,200	478	9,258	1,693.4	403,039	n.a.	1988-89

involving death or any injury; from 1 July 1957, accidents involving death or injury requiring medical treatment. (h) Prior to 1957-58 all cases of injury are included. From 1957-58 only cases of injury requiring medical treatment are included. (i) From 1980-81, motor vehicle taxes excluding fines and fees for service. (j) Revenue credited to Queensland up to 1941-42; thereafter actual collections are shown. Radio revenue excluded from 1 July 1949. From July 1975 the figures are the combined revenue of Australia Post and Telecom. (k) Calendar year ended 6 months earlier than the year shown. (l) Decrease due to re-survey.

SUMMARY OF EXTERNAL

Year	Imports (a)		Exports (a)		Wool (d)	
	Foreign	Interstate	Foreign (b) (c)	Interstate	'000 kg	\$'000
	\$'000	\$'000	\$'000	\$'000		
1860	115	1,352	1	1,044	..	..
1865	1,444	3,478	491	1,816	1,138	396
1870	875	2,267	1,336	3,731	8,070	1,019
1875	2,781	3,727	2,040	5,656	7,968	1,569
1880	2,052	4,113	1,836	5,055	7,822	1,361
1885	6,152	5,976	3,470	6,975	18,712	2,739
1890	5,189	4,312	4,929	12,144	21,704	3,644
1895	5,496	4,000	7,266	10,674	25,957	3,117
1900	8,199	5,446	8,264	10,825	17,123	2,571
1905	6,313	6,195	6,697	17,006	16,022	2,655
1910	10,856	n.a.	16,258	n.a.	46,450	8,357
1915-16	14,002	n.a.	16,212	n.a.	38,627	7,844
1920-21	23,681	n.a.	30,341	n.a.	45,892	12,434
1925-26	27,546	n.a.	47,170	n.a.	79,770	25,888
1930-31	11,342	n.a.	32,478	n.a.	76,986	13,350
1935-36	15,726	40,588	39,104	28,714	63,911	15,741
1940-41	14,453	53,810	50,490	44,138	55,364	15,361
1945-46	24,493	66,697	54,169	48,470	73,881	24,261
1950-51	134,799	174,747	320,564	91,888	83,915	206,123
1955-56	123,460	322,891	304,276	181,178	79,196	96,834
1956-57	97,768	360,704	380,754	206,323	110,255	170,827
1957-58	98,994	403,526	312,966	192,177	100,391	133,535
1958-59	95,474	407,565	339,927	207,390	94,032	91,687
1959-60	101,717	470,255	362,585	231,521	115,052	126,237
1960-61	122,554	455,211	327,555	240,025	106,996	108,345
1961-62	97,723	443,304	344,885	235,664	110,550	116,037
1962-63	134,233	552,605	404,980	269,785	106,345	119,548
1963-64	161,683	665,970	544,977	300,486	113,975	146,880
1964-65	199,516	723,730	488,222	324,606	111,140	127,479
1965-66	240,349	700,526	462,596	382,732	97,188	106,703
1966-67	193,677	710,084	499,967	385,436	84,494	93,153
1967-68	236,768	774,269	562,928	405,750	98,141	98,828
1968-69	288,599	859,021	677,456	495,501	103,674	109,197
1969-70	294,102	935,694	773,519	547,784	91,104	85,309
1970-71	321,638	998,732	789,180	530,924	63,625	47,339
1971-72	270,484	1,058,040	980,954	524,300	68,804	50,233
1972-73	311,448	1,201,620	1,305,569	586,002	73,187	104,231
1973-74	542,646	1,395,836	1,380,764	725,260	51,271	108,790
1974-75	580,051	1,424,004	2,046,407	683,805	46,226	62,676
1975-76	634,893	1,673,843	2,322,021	727,377	54,030	77,534
1976-77	835,771	2,156,864	2,815,608	972,090	67,772	122,965
1977-78	887,179	2,386,429	2,821,362	1,114,078	43,780	87,204
1978-79	1,028,010	2,865,974	3,300,109	1,412,182	51,641	112,393
1979-80	1,321,062	3,272,286	4,261,697	1,596,660	50,661	124,007
1980-81	1,882,815	3,813,455	4,501,290	1,750,529	36,770	102,958
1981-82	2,179,752	4,502,960	4,414,453	1,888,993	38,334	112,169
1982-83	1,994,608	4,440,625	4,470,871	1,863,332	37,347	104,681
1983-84	2,086,861	4,767,048	5,473,451	2,057,611	40,592	124,951
1984-85	2,315,492	5,093,724	6,602,936	2,135,838	44,951	153,137
1985-86	2,649,953	5,900,312	r 7,670,770	2,464,716	48,156	183,664
1986-87	2,503,854	6,055,860	r 7,806,306	2,587,035	54,674	230,820
1987-88	r 2,845,214	6,721,190	r 8,167,357	3,176,760	44,287	271,732
1988-89	3,788,425	8,318,040	9,088,931	3,637,278	44,464	323,572

(a) Excluding specie. (b) From July 1978 recorded on a 'State of origin' basis, not on a 'State of final shipment' basis as previously. (c) From July 1985 excluding non-merchandise trade. (d) Including the equivalent, in terms of greasy wool, of wool exported after scouring or carbonising; but excluding noils

TRADE STATISTICS

Foreign exports (b)							Year
Butter	Meat	Sugar		Coal			
'000 kg	\$'000	\$'000	tonnes	\$'000	tonnes	\$'000	
..	..	..	..	..	226	—	1860
..	..	..	..	..	2	—	1865
..	..	23	..	..	252	1	1870
..	..	5	(e) 314	18	2,843	4	1875
..	..	46	(e) 161	8	2,735	4	1880
..	..	85	(e) 1,533	56	18,094	22	1885
2	—	278	(e) 2,048	74	43,639	63	1890
16	2	1,922	(e) 7,710	229	1,185	5	1895
469	78	2,697	(e) 5,056	137	12,759	20	1900
3,207	581	1,320	221	5	8,411	8	1905
7,808	1,503	3,288	27	1	700	1	1910
1,068	272	5,533	5	—	35	—	1915-16
11,824	5,928	7,446	1	—	98,365	243	1920-21
16,605	4,809	6,914	198,604	4,413	2,089	4	1925-26
30,655	7,063	5,288	210,529	3,869	30,971	51	1930-31
34,577	7,623	5,367	304,583	5,480	1,172	2	1935-36
34,098	9,163	11,081	378,485	9,668	n.a.	n.a.	1940-41
27,920	10,945	8,487	139,887	5,300	n.a.	n.a.	1945-46
25,192	16,983	26,560	387,928	28,967	n.a.	n.a.	1950-51
27,978	19,148	59,325	594,678	48,598	108	2	1955-56
18,929	11,154	54,140	679,068	56,552	10,870	184	1956-57
11,498	6,327	45,672	714,510	69,314	17,512	156	1957-58
22,965	13,678	87,625	810,960	63,771	28	1	1958-59
21,209	15,132	78,841	706,144	52,793	46,117	422	1959-60
11,166	6,737	59,581	799,945	69,322	51,915	358	1960-61
14,552	7,670	78,663	846,684	66,965	303,384	2,334	1961-62
13,087	6,924	93,312	1,152,995	89,823	233,709	2,008	1962-63
15,984	8,880	104,061	1,124,674	154,616	816,697	7,450	1963-64
13,825	9,214	118,206	1,279,558	111,632	1,201,447	10,684	1964-65
9,864	6,360	116,073	1,258,657	92,819	1,648,387	14,523	1965-66
12,149	7,158	118,533	1,645,675	98,113	1,702,578	14,822	1966-67
8,638	5,245	117,850	1,601,555	95,616	2,307,245	21,336	1967-68
1,972	1,199	131,589	2,047,013	116,253	3,959,705	33,700	1968-69
2,136	1,189	160,988	1,352,409	110,993	5,569,019	53,194	1969-70
1,815	1,079	168,122	1,541,336	145,216	6,862,875	73,228	1970-71
3,726	3,597	211,746	1,974,163	206,241	8,993,729	99,534	1971-72
3,827	3,376	323,559	2,062,841	245,459	14,503,770	159,751	1972-73
3,879	3,489	297,261	1,761,037	217,870	15,420,141	193,758	1973-74
2,880	3,295	173,048	1,971,295	632,846	17,443,235	374,715	1974-75
2,554	2,795	253,732	1,975,996	561,335	15,423,983	586,432	1975-76
1,442	1,777	314,108	2,532,195	629,991	18,526,027	749,651	1976-77
1,506	1,987	380,465	2,449,713	528,213	20,177,112	848,201	1977-78
1,536	1,897	634,141	1,827,107	444,160	19,296,373	814,935	1978-79
1,771	2,429	664,362	2,188,121	661,387	20,972,102	920,502	1979-80
609	1,130	553,898	2,545,586	1,136,206	23,210,246	1,059,506	1980-81
1,850	5,566	553,095	2,496,840	758,026	24,133,591	1,239,237	1981-82
1,725	5,324	621,851	2,541,843	554,668	25,853,432	1,563,687	1982-83
2,384	7,641	685,216	2,353,917	619,481	32,090,341	1,839,638	1983-84
2,696	8,052	679,268	2,520,148	572,862	46,446,291	2,707,162	1984-85
2,341	7,228	832,005	2,597,407	600,719	51,638,032	3,130,233	1985-86
1,932	6,002	1,005,376	2,464,590	632,978	55,257,464	3,246,974	1986-87
2,367	7,199	r 1,103,328	2,703,148	667,687	58,320,995	r 2,882,619	1987-88
2,245	5,788	1,069,826	3,316,162	852,930	55,382,640	2,742,751	1988-89

and wool waste prior to 1964-65. (c) Chiefly refined sugar.

SUMMARY OF PRICE

Year	Industry price index numbers, Brisbane (building materials)		Consumer Price Index, Brisbane (a)			
	Materials used in house building (all groups)	Materials used in building other than house building (all groups)	All groups	Food	Clothing	Housing
1910-11	..	..	..	..	..	..
1915-16	..	..	7.8	7.6	5.8	..
1920-21	..	..	11.3	9.8	10.6	..
1925-26	..	..	10.0	8.5	8.7	..
1930-31	..	..	8.7	6.9	7.4	..
1935-36	..	..	8.4	6.9	6.4	..
1940-41	..	..	10.0	7.9	8.7	..
1945-46	..	..	11.6	8.5	12.2	..
1946-47	..	..	12.0	8.8	12.9	..
1947-48	..	..	12.6	9.8	13.8	..
1948-49	..	..	13.9	11.6	15.4	12.7
1949-50	..	..	15.1	12.5	17.7	13.9
1950-51	..	..	16.9	14.1	20.4	15.2
1951-52	..	..	20.6	18.6	24.5	16.8
1952-53	..	..	22.5	20.6	26.0	18.9
1953-54	..	..	22.9	21.3	26.3	19.2
1954-55	..	..	23.1	21.4	26.4	19.8
1955-56	..	..	23.9	22.2	26.6	20.9
1956-57	..	..	25.2	22.9	27.3	22.4
1957-58	..	..	25.7	23.3	28.1	23.5
1958-59	..	..	26.5	24.7	28.5	24.3
1959-60	..	..	27.2	25.6	29.2	25.1
1960-61	..	..	28.2	26.8	30.0	26.1
1961-62	..	..	28.6	26.9	30.4	26.6
1962-63	..	..	28.7	26.7	30.5	27.3
1963-64	..	..	29.0	27.4	30.7	27.5
1964-65	..	..	30.1	29.1	31.1	28.2
1965-66	..	..	31.5	31.1	31.5	30.0
1966-67	100.0	100.0	32.3	31.6	32.2	30.8
1967-68	103.4	102.2	33.4	32.7	33.0	32.6
1968-69	105.6	105.1	34.1	33.1	33.6	33.8
1969-70	109.4	110.3	35.1	34.0	34.6	34.9
1970-71	115.2	116.4	36.9	35.8	36.0	36.4
1971-72	124.8	124.4	39.3	37.6	38.0	39.7
1972-73	133.8	130.4	41.6	40.3	40.4	42.1
1973-74	152.2	149.0	47.3	48.1	45.7	46.3
1974-75	187.0	186.6	54.6	52.0	55.2	54.4
1975-76	218.5	216.3	61.7	57.1	64.4	62.5
1976-77	243.5	241.2	70.5	63.7	74.2	72.7
1977-78	265.1	260.9	77.1	70.3	82.0	80.4
1978-79	281.3	278.6	83.4	77.6	87.8	85.8
1979-80	315.0	(b) 100.0	91.5	89.8	93.8	91.6
1980-81	363.7	113.2	100.0	100.0	100.0	100.0
1981-82	407.2	126.3	110.7	109.2	108.2	113.0
1982-83	447.1	141.4	122.9	119.6	116.3	128.0
1983-84	482.8	151.7	131.7	128.7	122.6	135.9
1984-85	514.6	159.4	137.9	134.9	128.9	143.6
1985-86	(c) 100.0	169.6	149.0	145.3	139.9	150.3
1986-87	104.6	179.7	161.8	156.8	153.0	156.8
1987-88	112.0	194.4	173.1	162.9	165.0	164.0
1988-89	123.8	213.7	185.4	176.9	175.5	179.3

(a) Base of each index, 1980-81 = 100.0 except for 'recreation and education', base: March quarter 1982 = 100.0. 'C' Series Index numbers are shown to 1947-48; thereafter Consumer Price Index numbers are shown. There is no direct line of continuity between the two indexes and the group headings are

INDEX STATISTICS

Consumer Price Index, Brisbane (a)

<i>Household equipment and operation</i>	<i>Transportation</i>	<i>Tobacco and alcohol</i>	<i>Health and personal care</i>	<i>Recreation and education</i>	<i>Year</i>
..	..	..	..	..	1910-11
..	..	..	..	..	1915-16
..	..	..	..	..	1920-21
..	..	..	..	..	1925-26
..	..	..	..	..	1930-31
..	..	..	..	..	1935-36
..	..	..	..	..	1940-41
..	..	..	..	..	1945-46
..	..	..	..	..	1946-47
..	..	..	..	..	1947-48
21.9	..	..	..	..	1948-49
23.2	..	..	..	..	1949-50
25.5	..	..	..	..	1950-51
29.7	..	..	..	..	1951-52
31.9	..	..	..	..	1952-53
32.5	..	..	..	..	1953-54
32.7	..	..	..	..	1954-55
32.7	..	..	..	..	1955-56
34.0	..	..	..	..	1956-57
34.5	..	..	..	..	1957-58
34.8	..	..	..	..	1958-59
35.3	..	..	..	..	1959-60
35.5	..	..	..	..	1960-61
36.0	..	..	..	..	1961-62
36.0	..	..	..	..	1962-63
35.6	..	..	..	..	1963-64
36.0	..	..	..	..	1964-65
36.7	..	..	..	..	1965-66
37.2	31.9	..	..	..	1966-67
37.9	32.9	..	..	..	1967-68
39.1	34.0	..	..	..	1968-69
39.6	34.5	..	..	..	1969-70
40.8	38.1	..	..	..	1970-71
42.8	40.8	..	..	..	1971-72
44.6	41.9	42.6	32.9	..	1972-73
48.6	45.8	47.1	38.4	..	1973-74
58.2	54.6	54.4	47.2	..	1974-75
67.5	63.7	65.7	44.1	..	1975-76
73.5	70.0	71.1	79.6	..	1976-77
79.4	74.5	74.4	95.0	..	1977-78
85.0	81.9	88.8	84.8	..	1978-79
90.5	91.9	94.1	89.8	..	1979-80
100.0	100.0	100.0	100.0	..	1980-81
110.2	112.2	109.5	114.1	..	1981-82
122.1	124.7	123.4	134.1	107.3	1982-83
131.3	137.4	135.0	133.5	113.5	1983-84
138.8	145.8	144.5	121.9	118.9	1984-85
152.2	158.4	156.1	134.0	129.3	1985-86
163.1	175.0	170.0	153.4	142.0	1986-87
175.2	189.0	186.8	168.7	154.3	1987-88
186.0	197.0	205.9	182.1	163.9	1988-89

comparable only in a broad sense. (b) Base: year 1979-80 = 100.0. Replaces previous index which had a base of 1966-67 = 100.0. (c) Base: year 1985-86 = 100.0. Replaces previous index which had a base of 1966-67 = 100.0.

GROSS VALUE OF PRODUCTION STATISTICS (\$'000)

Year	Crops	Livestock disposals	Livestock products	Total agriculture	Forestry, fishing and hunting	Mining (a)	Manufacturing (net value) (b)
1911	6,372		24,912	31,284	2,904	7,430	11,094
1915	10,046		41,104	51,150	3,352	6,794	15,510
1920	20,772		48,284	69,056	5,724	7,042	23,378
1925-26	25,106		52,204	77,310	5,778	3,906	33,762
1930-31	25,642		43,092	68,734	3,260	2,658	27,057
1935-36	24,760		42,144	66,904	5,470	4,860	31,366
1940-41	36,776		62,476	99,252	6,882	8,516	43,289
1941-42	35,548		61,678	97,226	6,160	8,656	49,661
1942-43	41,264		78,986	120,250	6,162	8,564	58,089
1943-44	45,012		82,350	127,362	7,386	7,168	60,421
1944-45	49,268		77,442	126,710	6,742	7,080	61,804
1945-46	51,626		78,638	130,264	7,118	7,242	60,539
1946-47	41,052		88,058	129,110	9,620	7,808	70,673
1947-48	64,264		128,782	193,046	9,822	11,258	85,773
1948-49	76,614		145,444	222,058	11,242	10,666	107,079
1949-50	81,826		192,982	274,808	11,624	14,436	122,708
1950-51	84,842		286,378	371,220	14,100	22,038	150,919
1951-52	94,424		214,048	308,472	19,440	22,224	182,659
1952-53	142,248		275,322	417,570	19,100	36,974	196,419
1953-54	146,982		271,904	418,886	21,358	36,802	220,509
1954-55	155,862		265,164	421,026	20,626	45,032	240,121
1955-56	152,496		274,096	426,592	22,618	55,872	256,160
1956-57	162,028		324,066	486,094	24,804	61,860	276,799
1957-58	171,530		258,618	430,148	24,660	52,926	287,916
1958-59	191,310		287,252	478,562	22,006	56,706	310,931
1959-60	183,354		315,350	498,704	22,900	80,376	324,783
1960-61	203,442		300,770	504,212	23,190	89,120	341,255
1961-62	210,550		287,880	498,430	20,054	83,100	350,595
1962-63	252,478		322,802	575,281	21,094	93,482	380,966
1963-64	294,434		365,214	659,648	23,500	100,970	441,873
1964-65	270,639		357,066	627,706	25,022	103,783	478,423
1965-66	274,221		343,904	618,125	25,689	106,901	542,996
1966-67	318,954		370,430	689,383	25,806	146,080	592,607
1967-68	308,922		370,298	679,221	26,123	148,876	657,853
1968-69	356,912		428,110	785,022	28,041	155,788	659,897
1969-70	305,602	264,613	132,853	703,067	27,930	229,970	712,857
1970-71	349,323	218,709	108,203	676,236	32,303	245,746	n.a.
1971-72	421,889	244,034	129,539	795,462	33,819	239,208	870,782
1972-73	434,603	310,989	195,603	941,195	38,477	322,103	1,012,595
1973-74	519,459	360,254	182,871	1,062,585	36,820	503,099	1,220,174
1974-75	868,191	193,273	163,790	1,225,254	38,469	672,336	1,618,730
1975-76	851,854	243,151	180,968	1,275,972	46,594	773,764	1,800,088
1976-77	890,677	319,607	207,789	1,418,072	66,595	896,106	1,991,434
1977-78	824,619	372,210	210,589	1,407,418	75,217	985,872	2,090,444
1978-79	1,097,281	868,396	241,704	2,207,381	100,030	1,137,231	2,322,426
1979-80	1,129,259	965,088	258,270	2,352,617	109,994	1,510,779	2,692,294
1980-81	1,452,137	711,720	247,578	2,411,436	n.a.	1,445,863	3,074,868
1981-82	1,472,311	832,322	314,496	2,619,128	n.a.	1,510,565	3,448,170
1982-83	1,267,886	784,575	321,341	2,373,802	n.a.	1,811,443	3,445,095
1983-84	1,743,833	993,982	381,210	3,119,025	n.a.	1,928,690	3,700,629
1984-85	1,695,068	1,045,121	408,382	3,148,571	n.a.	2,602,332	4,385,491
1985-86	1,670,977	1,056,712	415,693	3,143,382	n.a.	3,104,791	n.a.
1986-87	r 1,623,277	1,349,452	503,153	r 3,475,882	n.a.	3,226,905	5,052,913
1987-88	1,824,024	1,405,716	705,270	3,935,009	n.a.	2,970,165	n.a.
1988-89	2,330,868	1,503,225	714,078	4,548,171	n.a.	n.y.a.	n.a.

(a) From 1968-69 'value added'. (b) Net value, including heat, light and power until 1967-68. From 1968-69 'value added'. From 1975-76, excluding single-establishment enterprises with fewer than four persons employed.

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RECENT INFORMATION

Some recent information which has come to hand since the various chapters were sent to press is given in summarised form below. For later statistics on the subjects dealt with in the chapters, reference should, in general, be made to other ABS publications.

Chapter 4 GOVERNMENT AND ADMINISTRATION

By-elections were held on 28 July 1990 for the State seats of Landsborough and Sherwood following the resignations of sitting members.

Ms J.M. Sheldon (Liberal) won the seat of Landsborough, formerly held by the Hon. M.J. Ahern (National). In Sherwood, Mr D.A. Dunworth (Liberal) replaced Mr A. Innes (Liberal).

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