

South Australian Year Book



1977

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SOUTH AUSTRALIAN
YEAR BOOK
1977

Malcolm Harrington

As part of the Silver Jubilee celebrations Her Majesty Queen Elizabeth the Second visited South Australia, disembarking at Glenelg on 20 March 1977. To commemorate the visit Her Majesty was presented with a sterling silver medallion, a gift from the City of Glenelg, by his Worship the Mayor of Glenelg, Mr. Donald Mason.



*South
Australian
Year Book*

No. 12 : 1977

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*Deputy Commonwealth Statistician
and Government Statist*

AUSTRALIAN BUREAU OF STATISTICS
SOUTH AUSTRALIAN OFFICE

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PREFACE

The *South Australian Year Book* is a general reference work presenting an authoritative and comprehensive statistical and descriptive portrayal of South Australia. It includes studies of the historical and geographical background and of the social, physical and financial development of the State culminating in a picture of South Australia as it is today.

This volume, the twelfth issue of the Year Book, includes special articles on Eclipses, Archaeology, the Passenger Motor Vehicle Industry, and Kangaroo Island. Other items of special interest are Electoral Districts Boundaries Commission, Rundle Mall, Statistical Divisions and Subdivisions, Population Projections, 1976 Census, Consumer Protection, Medibank, and the Milk Price Equalisation Scheme. Some chapters or portions of chapters have been condensed to make room for the additional material but in such cases appropriate cross-references are given indicating in which earlier volumes the more complete information may be found. A list of special articles which appeared in previous issues is shown on page 803.

Other official statistics of South Australia are published in different media, each chosen as the most appropriate to meet a particular need, whether this be for a compact reference guide, or for more detailed historical or up-to-date data, either on a specific subject or embracing wider fields.

A comprehensive range of statistics is published also by the Australian Statistician covering the whole of Australia (but giving some broad details about the States) and by other Deputy Commonwealth Statisticians for their respective States. The details of such publications are available at each office of the Bureau.

This Office maintains an Information Service, which, on request, supplies available statistical information and advice on which publications are appropriate, and a library in which all publications of the Australian Bureau of Statistics are available for reference. Businessmen, government officers and members of the public are invited to make use of these services.

I gratefully acknowledge the valuable assistance given by contributors of special articles and by the Government Printer and his staff. My thanks are tendered to the staff of this Bureau especially Mr A. J. Cattermole, B.Ec., under whose direction the Year Book was compiled by Mr G. D. Carey, B.Ec., A.A.S.A. (Senior).

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METRICATION

In this publication quantities are shown in metric units.

| | | |
|--------------------|---|---------------------------|
| 1 millimetre | = | 0·03937 inches |
| 1 metre | = | 3·28083 feet |
| 1 kilometre | = | 0·621371 miles |
| 1 hectare | = | 2·47105 acres |
| 1 square kilometre | = | 0·386102 square miles |
| 1 kilogram | = | 2·20462 pounds (lb) |
| 1 tonne | = | 0·984207 ton |
| 1 tonne | = | 36·7437 bushels of wheat |
| 1 tonne | = | 44·0925 bushels of barley |
| 1 tonne | = | 55·1156 bushels of oats |
| 1 cubic metre | = | 35·3147 cubic feet |
| 1 cubic metre | = | 423·776 super feet |
| 1 cubic metre | = | 27·4961 bushels |
| 1 litre | = | 0·219969 gallons |

EXPLANATORY NOTES

In general, statistics in this volume relate to South Australia. A few tables, which are appropriately footnoted, include details for the Northern Territory.

Values are shown in Australian dollars (\$) or \$A) and cents unless another currency is specified.

In tables any discrepancies between totals and sums of components are because of rounding.

Symbols Used

| | |
|---------------|---|
| <i>n.a.</i> | not collected, not available for publication |
| .. | not applicable |
| <i>n.e.c.</i> | not elsewhere classified |
| <i>n.e.i.</i> | not elsewhere included |
| <i>n.e.s.</i> | not elsewhere specified |
| — | nil or less than half the final digit shown |
| * | figures not yet available |
| <i>p</i> | preliminary |
| ——— | break in continuity of series (where drawn across a column between two consecutive figures) |

Citation of Acts

Acts of the Commonwealth Parliament are cited in *italics* with the relevant year in roman type *e.g. Census and Statistics Act 1905.*

Acts of the South Australian Parliament are cited in roman type *e.g. Licensing Act, 1967-1976.*

PART 1

NATURAL ENVIRONMENT

1.1 DESCRIPTION

Size and Location

The State of South Australia has the Southern Ocean to the south and is flanked on the other sides by land. It lies south of the 26th parallel of south latitude and has as a western boundary the 129th meridian of east longitude. The eastern boundary, north of the River Murray, corresponds with the 141st meridian, while to the south, between the river and the sea, the boundary lies approximately three kilometres to the west of this meridian.

The State is approximately 1 201 kilometres from east to west at the northern boundary and 1 143 kilometres at the head of the Great Australian Bight; from north to south it varies from 630 kilometres near the western extremity to approximately 1 325 kilometres near the eastern boundary; its coastline, excluding islands, measures approximately 3 540 kilometres. South Australia covers a total area of 984 375 square kilometres (one-eighth of the area of the Australian continent); however, approximately one-third of this area has no significant economic use and over one-half is devoted to extensive pastoral pursuits. Approximately 99 per cent of the population live south of the 32nd parallel.

A comparison of the areas, length of coastline and standard time of the various States and Territories is shown in the following table. The areas and length of coastline were determined by the Division of National Mapping by manually digitising these features from the 1:250 000 map series of Australia. This means

that only features of measurable size at this scale were considered. About 60 000 points were digitised at an approximate spacing of 0.5 km. These points were joined by chords as the basis for calculation of areas and coastline lengths by computer.

Area, Coastline and Standard Times, Australia

| State or Territory | Estimated Area (a) | | Length of Coastline (a) | Standard Time | |
|--|----------------------|--------------------------|-------------------------|-------------------|-----------------|
| | Total | Percentage of Total Area | | Meridian Selected | Ahead of G.M.T. |
| | '000 km ² | | km | | Hours |
| New South Wales | 802 | 10.43 | 1 900 | 150°E | (b) 10.0 |
| Victoria | 228 | 2.96 | 1 800 | 150°E | (b) 10.0 |
| Queensland | 1 727 | 22.48 | 7 400 | 150°E | 10.0 |
| South Australia | 984 | 12.81 | 3 700 | 142°30'E | (b) 9.5 |
| Western Australia | 2 526 | 32.87 | 12 500 | 120°E | 8.0 |
| Tasmania | 68 | 0.88 | 3 200 | 150°E | (b) 10.0 |
| Northern Territory | 1 346 | 17.52 | 6 200 | 142°30'E | 9.5 |
| Australian Capital Territory | 2 | 0.03 | 35 | 150°E | (b) 10.0 |
| Australia | 7 682 | 100.00 | 36 735 | .. | .. |

(a) As determined by the Division of National Mapping.

(b) Because of 'daylight saving' an hour should be added from late October to early March.

Standard Time

In terms of The Standard Time Act, 1898 South Australia has used 'the mean time of the meridian of longitude one hundred and forty-two and a half degrees east of Greenwich' as standard time since 1 May 1899. This time, known in Australia as Central Standard Time, is nine hours thirty minutes ahead of Greenwich Mean Time. Queensland, New South Wales and Victoria use the meridian of longitude 150° east of Greenwich as standard time, one hour thirty minutes ahead of Western Standard Time. Tasmania uses the meridian of longitude 150° east of Greenwich as standard time, one hour thirty minutes behind Eastern Standard Time. The Northern Territory uses the meridian of longitude 142°30' east of Greenwich as standard time, one hour thirty minutes behind Eastern Standard Time.

Before 1 February 1895 the meridian of Adelaide 138° 35' east (*i.e.* 9 hours 14 minutes ahead of Greenwich) was used to determine standard time in South Australia and subsequently from 1 February 1895 to 30 April 1899 the meridian of longitude 150° east of Greenwich was used.

During the 1939-45 War daylight saving in summer time was introduced in South Australia under National Security Regulations. Summer time was fixed at one hour in advance of standard time from 2 a.m. on 29 March 1942, from 2 a.m. on 27 September 1942, from 2 a.m. on 28 March 1943 and from 2 a.m. on 3 October 1943.

Under the Daylight Saving Act, 1971 daylight saving was introduced for the first time in the 1960s and was introduced on 31 October 1971 and remained in force until 1977. During this period 'South Australian Standard Time' was adopted. In 1978 the Australian Standard Time, was adopted.

The Daylight Saving Act Amendment Act, 1972, assented to on 12 October 1972, provided for the observance of daylight saving in the Summer of 1972-73, and in each subsequent summer, from the last Sunday in October until the first Sunday in March, South Australian summer time being adopted during this period.

A special article on the basis of timekeeping and the determination of time standards was included on pages 1-2 of the *South Australian Year Book 1973*. An article on the determination of the time of sunrise and sunset was included on pages 3-5 of the same issue.

Physical Features

South Australia is a land of generally low relief, the inland area being largely covered by featureless plains, or sand and gibber deserts. Approximately 50 per cent of the State is less than 150 metres above sea level and over 80 per cent is less than 300 metres. Even the dominant mountains, the Mount Lofty-Flinders Ranges system, nowhere exceed 1 200 metres and have at no point proved difficult barriers to communication.

On the other hand the pattern of communication and development has been greatly influenced by the nature of the coastline, the south-easterly trend of which is interrupted by two major indentations, Spencer Gulf and Gulf St Vincent. These two relatively shallow depressions cut into the settled areas a distance of approximately 300 and 150 kilometres respectively. The resultant natural divisions earlier tended to develop their own centres and many ports were constructed along the coast in spite of the fact that, with the exception of the area between Port Lincoln and Fowlers Bay, the nature of the coastline is not particularly accommodating to port development.

Kangaroo Island, approximately 480 kilometres in circumference and covering 4 350 square kilometres, is the predominant island off the South Australian coastline. There are, however, approximately 100 islands in all, relatively few of which are utilised.

The effect of the vast ocean area to the south is a more temperate climate than would be suggested by the latitude while the trend of the coastline exposes the coastal areas to the westerly rain-bearing air streams.

The most important mountains are the Mount Lofty-Flinders Ranges system. Kangaroo Island structurally belongs to these ranges which, together with parallel subsidiary ranges, extend north from Cape Jervis some 800 kilometres to the northern end of Lake Torrens. In the south the rounded hills of the Mount Lofty Ranges are of comparatively low altitude with Mount Lofty, the highest peak, being 727 metres. The western side of these ranges presents steep scarps to the Adelaide plains while on the eastern side more gentle slopes merge into the Murray Basin.

To the north the Flinders Ranges are of greater height and sharper outline than their southern counterpart. St Mary Peak of 1 166 metres is the highest point. North of Peterborough there is a divergence from the main range which stretches *via* the Olary Ridges to the Barrier Range and Broken Hill. In the far north the ranges again diverge; one spur circling the northern end of Lake Torrens and the other ending north of Lake Frome. The Flinders Ranges contain some unusual basins of which Wilpena Pound is perhaps the best known.

The Mount Lofty-Flinders chain has an important climatic influence which results in higher rainfall on the plains to the west of the ranges, and in the ranges themselves, with relatively dry conditions in the Murray Basin.

The western half of the State is largely occupied by a low plateau over which an intermittent series of low ranges, including the Warburton, Stuart, Denison, Peake and Everard Ranges, stretch from the Flinders to the somewhat higher Musgrave Ranges in the far north-west. Mount Woodroffe (1 440 metres), the highest point in the State, is located in the Musgrave Ranges.

The comparatively low hills of the Gawler Ranges form the northern side of the Eyre Peninsula triangle, and to the west of Whyalla lie the economically important Middleback Ranges. Isolated peaks of volcanic origin are found in the extreme south-east of the State.

The River Murray, which drains approximately one-seventh of Australia, enters the sea in South Australia and is the State's only major river. The fall of the Murray is very slight, dropping less than 22 metres over the 642 kilometres between the border and the sea. For the 216 kilometres to Overland Corner the river occupies a wide valley and then passes through a narrower steeper-sided valley to Lakes Alexandrina and Albert at its heavily silted mouth.

Surrounding the northern Flinders Ranges is a series of vast lakes which are in reality lakes only after particularly heavy rainfall, normally appearing as shallow depressions with a salt or clay encrusted surface. Lake Eyre, the largest of these, is 15 metres below mean sea level and is fed by a series of intermittently flowing rivers, including the Finke, the Diamantina and Cooper Creek, which traverse the plains of the north-east, constituting one of the largest areas of internal drainage in the world. To the south of Lake Eyre are Lakes Gairdner, Frome and Torrens, the last named being 240 kilometres in length.

General Geological Background

The physiography of the State very accurately outlines the geological features, the areas of higher relief being the basement rocks protruding as cores or ridges through the flat-lying younger sediments of the basin areas.

The main physiographic feature is the Kangaroo Island-Mount Lofty-Flinders Ranges arc of hills, which, although of no great elevation, extend over a distance of 800 kilometres. The rocks of this arc, which are predominantly ancient sediments, have been folded and faulted in a spectacular manner providing many classic examples of textbook tectonics; they owe their present prominence to repeated fold and uplift movements throughout geological time. The hills of the chain rise from the coastal plains of Gulf St Vincent to the west, the plains of the Murray River to the east, and the Lake Frome and Lake Eyre plains in the north-east and north. The basement rocks are also exposed to the west of Spencer Gulf, but are more completely levelled off, and constitute a geological shield of greater antiquity than the Mount Lofty arc.

In the far north-west of the State, the ancient basement is again exposed in the east-west trending hills of the Musgrave and Everard Ranges. These ranges form the northern boundary of the Great Victoria Desert which, with the great coastal Nullarbor Plain, covers the western half of the State.

There is thus a broad geological picture of ancient crystalline or partly crystalline folded rocks forming highland chains and provinces, surrounded by relatively young and soft flat-lying sediments which have accumulated in deep troughs and basins during periodic transgressions and regressions of the sea throughout most of geological time.

It is in the hard rock provinces that are found the deposits of minerals and rocks which have played an important role in the industrial development of the State. The basin areas are important as sources of artesian water and are the areas in which important oil and natural gas discoveries have been made.

In general, the younger sediments of the basin areas do not provide good agricultural soils except in the higher rainfall areas of the south and south-east of the State, while the best agricultural lands lie in the hard rock provinces of the Gawler-Barossa-Clare regions of the central ranges where relatively good rainfall is associated with more mature soil conditions.

A more complete discussion on the geology of South Australia was included on pages 3-18 of the *South Australian Year Book 1970*.

Seismicity

The most active area of the Australian continent is that of the South Australian seismic zones. The South Australian area has been monitored since 1962 by a small network of stations operated by the University of Adelaide.

The South Australian epicentres occur mainly in two belts, the major one being within the Adelaide Geosyncline and referred to as the Adelaide Seismic Zone. It extends from Kangaroo Island through the Mt Lofty and Flinders Ranges to Leigh Creek in the north. The epicentres generally follow the ranges and also the western boundary of the Upper Proterozoic Sequence and the fold trends in that part of the Geosyncline curving around to the east of Lake Torrens. The other main South Australian seismic zone is on Eyre Peninsula.

A discussion on earthquakes in South Australia was included on pages 18-19 of the *South Australian Year Book 1970*.

Eclipses*

There is no predictable natural event to surpass a total solar eclipse as a dramatic spectacle. Over a period of an hour, the new Moon crosses the disc of the Sun, producing an ever-diminishing crescent until totality is complete, leaving visible only the faint solar chromosphere and corona. After a few fleeting minutes, the bright photosphere reappears as the Moon recedes until, after the final hour, the whole Sun appears again.

The lunar eclipse, although commonly observable, does not compare with a solar eclipse either as a spectacle or as a scientific tool. The roles of Earth and Moon are reversed with the shadow of the Earth eclipsing the full Moon.

Geometry of Eclipses

In order to understand eclipses assume that the Moon and the Sun orbit a stationary Earth. In this geocentric picture, the Sun appears to move around the Earth once a day because of the rotation of the Earth about its axis, but in

*Contributed by R. W. Clay and J. S. Mugford, University of Adelaide

addition, over a year the Sun also moves once around the sky past the background of more distant 'fixed' stars. In its annual journey, the Sun travels in a plane known as the plane of the ecliptic and its apparent path (the ecliptic) passes through all the constellations of the zodiac. The Moon travels a rather similar journey but only takes about one thirteenth as long, and returns in just less than a calendar month. The plane which contains the orbit of the Moon is close to the plane of the ecliptic, a fact which is crucial to the frequent occurrence of eclipses. Figure 2 illustrates the arrangement from both the convenient geocentric and conventional heliocentric viewpoints.

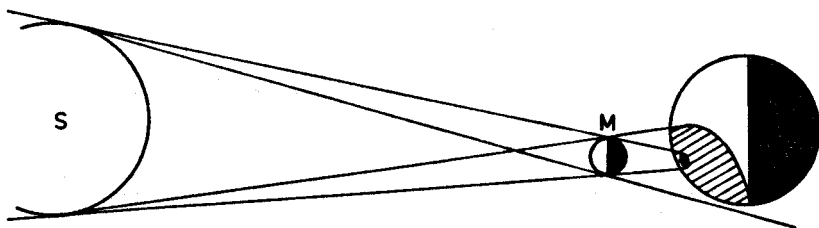


Figure 1

The geometry of a total solar eclipse. A small region on Earth is in total shadow and a much larger region sees the Sun partially eclipsed

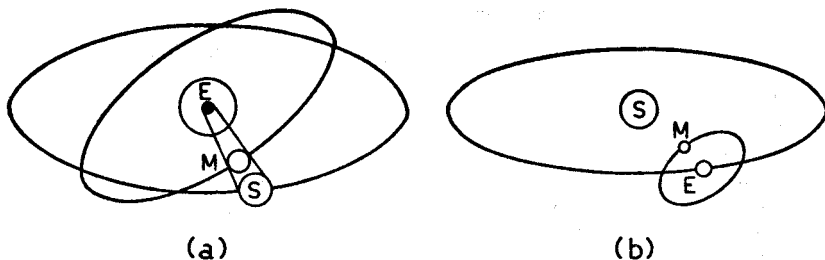


Figure 2

A solar eclipse from (a) a geocentric point of view and (b) the more conventional heliocentric picture. Note that eclipses occur only where the planes of the two orbits cross (at nodes)

Viewed from the Earth, the orbits of the Moon and the Sun cross at a small angle (about 5°). The points where these planes cross are known as nodes and when Moon and Sun are simultaneously at a node, an eclipse must occur since they then both appear in line. If both the lunar and solar orbits were in the same plane, an eclipse would occur twice a month as the Moon completed each orbit, a solar eclipse at new Moon and a lunar one at full Moon. However,

since the Sun and Moon appear to us as small objects in the sky, and do not orbit in the same plane they do not always eclipse even though the angle between their orbits is quite small.

Figures 3(a) and 3(b) show the positions in the sky of the Sun and Moon to illustrate the eclipse of 23 October 1976. The Sun's orbit for the whole of 1976 is shown, together with the lunar orbit for late October. Celestial co-ordinates are used (right ascension and declination), which can be thought of as lines of longitude and latitude, relative to the background of stars. Notice that the orbits cross (a node) in late October but the Sun and Moon do not pass the node at the same time. They are in fact closest on 23 October, but in this system of co-ordinates they do not appear eclipsed. However, our co-ordinates are referred to the centre of the Earth and viewed from a certain point on the Earth, the apparent position of the Moon (which is relatively close to us) will coincide with that of the Sun (an effect known as parallax) and from that place on Earth a central eclipse will be observed. The diagram shows that in this case, the Moon will travel south of the Sun and to make them coincide it is necessary to be south of the equator of the Earth.

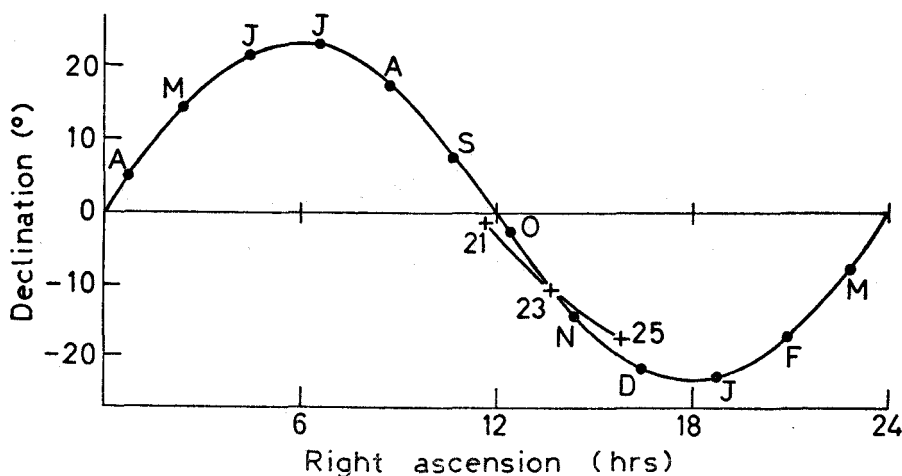


Figure 3(a)

The position of the Sun and Moon in celestial co-ordinates. The path of the Sun is shown for a full year and that of the Moon from noon South Australian time on 21 October 1976, to noon on 25 October 1976

The eclipse travels across the Earth at the speed of the Moon shadow, which is roughly 3 000 km per hour, however, since the Earth rotates in the same direction, the velocity relative to the surface can be as low as half this and depends on the latitude of the observer. The spherical form of the Earth also causes the shadow to speed up relative to the surface as it approaches the edge of the Earth.

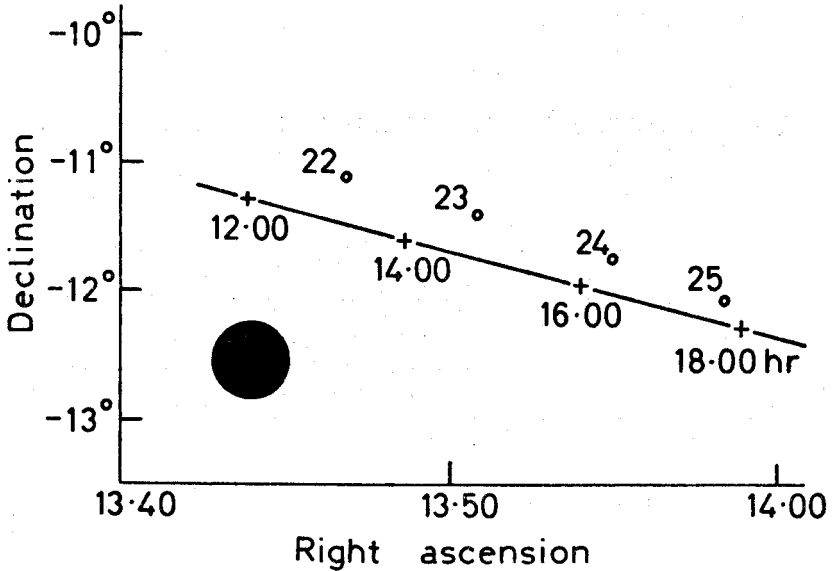


Figure 3(b)

An enlargement of figure 3(a) showing the path of the Sun (circles) from 22-25 October 1976 (positions shown at local noon) and that of the Moon (crosses) on 23 October (local times shown). The apparent size of the Sun (and Moon) is indicated. Notice that the Moon passes the Sun in the afternoon of 23 October 1976. As explained in the text the Moon moves south of the Sun and it is necessary to be at places south of the terrestrial equator to observe totality (see Figure 1)

Solar eclipses are further complicated by the orbit of the Moon around the Earth. This orbit is elliptical and the distance of the Moon from the surface of the Earth varies appreciably. As a result the apparent size of the Moon changes over an orbit. The average apparent size of the Moon is slightly less than that of the Sun but, if the Moon is appropriately placed in its orbit, its disc may appear larger than that of the Sun and a total solar eclipse may be observed. Other central solar eclipses are, at best, annular with the solar disc never being completely covered, a ring of photospheric light always remaining visible.

Observers outside the central line of the total eclipse see the Moon pass across only part of the solar disc and light from the solar disc is always observed. These partial eclipses are visible over a very large area compared to totality and are commonly observed. On 23 October 1976, Adelaide experienced a partial eclipse with rather less than 7 per cent of the solar disc remaining visible. This reduction in light intensity is well within the adaptation of normal eyes and such eclipse effects are not particularly spectacular. Figure 4 illustrates the appearance of partial and total eclipses.

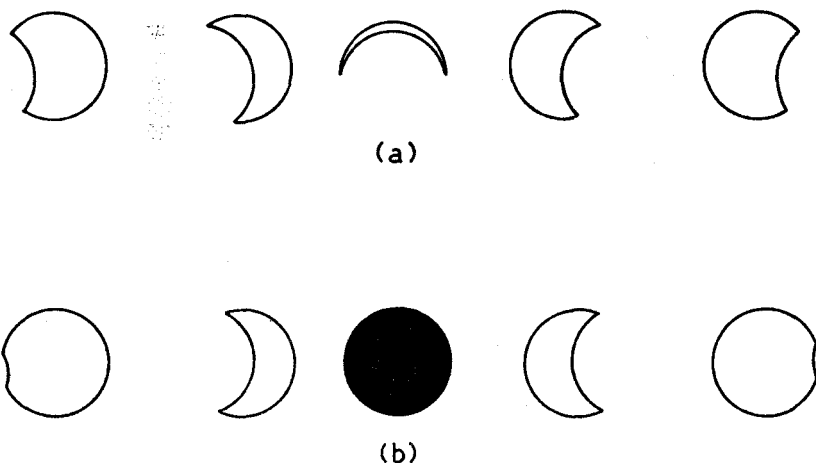


Figure 4

The appearance of the Sun at successive times for (a) a partial eclipse and (b) a total eclipse. The full sequence lasts approximately two hours and totality, if it occurs, may last up to about seven minutes

In the twentieth century, 228 solar eclipses will occur and 145 will be observed as central eclipses somewhere on Earth. Approximately 43 per cent of central eclipses are total, the others are annular. The longest a total eclipse may last is about 7.5 minutes; this depends on the position of the Moon in its orbit and the place on Earth where the eclipse is observed.

Since the orbits of the Moon and Earth are very regular, eclipses occur in cycles. One in particular, the Saros cycle, was known to the Babylonians. In this cycle eclipses repeat after 18 years and 10 days somewhere on Earth, with every third repeat being quite close to the first in geographical location. At any one time, a number of such cycles may be operating. The 23 October eclipse is part of a Saros cycle which included an eclipse visible in Northern Australia on 21 September 1922.

Eclipses in History

It is possible to imagine how the startling suddenness of an eclipse in early times could have brought terror and led to predictions of imminent war, pestilence or death of a monarch. The early Chinese explanation was that a dragon was swallowing the Sun and was to be frightened away with drums and fireworks. Interestingly enough, astronomers still use the symbol of the dragon for that region of the Sun's orbit where eclipses occur.

There is some argument about which is the first recorded eclipse which can be verified. Some authors quote a total eclipse seen in India 3102 BC, others 2940 BC in Babylon, and others 2226 BC in China. Eclipses have, on occasions, caused battles to take dramatic turns. Thucydides records the destruction of the

Athenian fleet, delayed by soothsayers' warnings, when about to sail from Syracuse, 27 August 413 BC. The Roman poet Quintus Ennius says that the eclipse of 21 June 168 BC encouraged the Romans and discouraged the Macedonians in their forthcoming encounter.

The exact dating of eclipses has helped in pinpointing dates in history as well as locating the relative positions of the Sun and Moon by knowing where totality occurred. This dating has also helped correct dates given in the King James translation of the Bible. An eclipse recorded in Amos VIII: 9 is given to have been 787 BC but the nearest eclipse which passed over Samaria could only have been 763 BC. The Babylonians accurately recorded eclipses from 747 BC which helped the discovery of the 18 year Saros cycle of eclipses. As early as 500 BC they must have been able to calculate not only the times of eclipses, but also changes of speed in the motion of the Moon and the apparent change in the Sun's speed (actually the Earth's). They could have found the position and motion of the nodes—the points on the ecliptic at which eclipses can occur. Their records have enabled modern scientists to study the small acceleration of the Moon's orbit.

In recent times ancient eclipses have been calculated and tabled in a monumental work by Oppolzer starting with 1208 BC, and including all eclipses for over 3 000 years.

Scientific Importance of Eclipses

Solar eclipses afford us an invaluable opportunity to make studies which would otherwise be impossible. Of course, the Sun itself is the subject of close study at eclipse time. The chromosphere, the relatively cool region of the Sun immediately above the bright photosphere, is extremely difficult to study normally because it is faint and is very close to the photosphere. As a result, processes occurring there are not well understood. Also, the tenuous hot corona, or outer atmosphere of the Sun, can be studied more easily at eclipse time and its relationship with surface features explored. The corona is important since the Earth orbits within its outer regions and coronal processes affect ways in which the Sun influences our terrestrial environment. In addition to supplying most of our energy, the Sun intimately affects our weather. Its ultra-violet and X-ray emissions provide ozone in the atmosphere to protect us from excessive solar effects and an ionosphere which makes much of our long distance radio communication possible.

Eclipses cause the sudden cessation of solar radiations and result in a predictable sharp, short shock which affects solar-sensitive components of our environment. These shocks are used to study the way that processes first react to the removal of solar radiation and then rebuild as the Sun returns.

When the Sun is eclipsed, it is possible to observe celestial objects in the general vicinity of the Sun. This affords a unique opportunity to search for comets whose orbits take them close to the Sun and would otherwise be unobservable. Also, the Sun is a very massive body and, as such, attracts objects to itself by gravity. A number of theories of gravity predict that light too is appreciably deflected by the presence of mass and important work has been done at times of solar eclipses to study the amount of deflection suffered by starlight in passing close to the Sun. These experiments are delicate and difficult but generally have favoured theories such as Einstein's General Theory of Relativity.

The 1976 Eclipse

Observations made at the time of the recent eclipse observed in South Australia covered most of the aspects described above.

Experiments were attempted to study the spectrum of the chromosphere (the so-called flash spectrum) of the Sun at the start and end of totality and also that of the corona at totality. The density of the corona falls off rapidly with distance from the Sun and photographs were taken to measure this change.

As the ultra-violet light and X-radiation from the Sun is cut off from the upper atmosphere of the Earth, the molecules there change their states and the upper atmosphere changes its physical characteristics. Studies were made to give information on the ozone concentration in the upper atmosphere and also to study the free electric charges there which make up our ionosphere.

Even the pressure of the Earth's atmosphere may be affected and delicate work was done to study these small variations.

Viewing Eclipses

The risk of permanent damage to the retina of the eyes at the spot used for focussing makes viewing an eclipse both difficult and dangerous. Authorities are obliged to emphasise this risk in the public interest. No description of technique is immune to misunderstanding, but for small risk for a once-in-a-lifetime experience, there are ways by which partial and total phases could be observed briefly.

Two layers of completely exposed and fully developed black and white film, mounted in a wide card surround, can be used for a one or two second look occasionally during a partial eclipse stage. A pin-hole camera, or projection onto a screen through one half of a pair of binoculars gives a very satisfactory and safe view. Direct vision is possible only during totality.

The best way to view the partial phases of an eclipse is with photographs taken during the event, using a solar filter. Various commercial types are available. Some of these filters do not cut out infra-red radiation and are not suitable for direct viewing through the camera, and lining up is therefore difficult. Typical filters allow only about 0.0001 of the visible light through.

For the public in general, the best visual effects are probably obtained by the television coverage available. This is safe and a good, cloudless view can almost be guaranteed. However, few people who have witnessed the splendour of a solar eclipse, even under poor conditions, would be prepared to replace the personal experience with a television system.

1.2 CLIMATE AND METEOROLOGY

In the Southern Hemisphere, because of the extensive ocean areas and the absence of a broad land mass connecting the Antarctic with the tropical regions, the southern continents are not subject to the same range of weather extremes that are experienced in northern countries at similar latitudes. The ameliorating effect of this land-sea distribution is particularly noticeable in southern South Australia.

Briefly, the basic features of the South Australian climate are hot, dry summers with relatively mild nights, and cool but not severe winters with most rainfall occurring during the months of May, June, July and August.

METEOROLOGICAL OBSERVATIONS

Meteorological services throughout Australia are administered by the Commonwealth Bureau of Meteorology and the Regional Office of the Bureau in Adelaide directs operations throughout the State. In South Australia daily weather reporting stations are established at nearly 80 representative localities and there are over 900 rainfall recording stations.

Station weather observations telegraphed several times a day provide the basic information for the weather forecasting and warning services provided by the Regional Forecasting Centre, Adelaide. These observations are also collated in bulletins, maps and reports issued for public information. The reports include climatic surveys which are studies of climatic variations over defined regions of the State.

RAINFALL

Average Annual Rainfall

South Australia is by far the driest of the Australian States and Territories with just over four-fifths of the State receiving an average of less than 250 millimetres of rain annually. An indication of the shortage of rain in the State is given in the following table which compares the relative distribution of rainfall in South Australia and in Australia as a whole.

Distribution of Rainfall, South Australia and Australia

| Average Annual Rainfall | Proportion of Total Area | |
|-------------------------------------|--------------------------|--------------|
| | South Australia | Australia |
| | Per cent | Per cent |
| Under 250 mm | 82.6 | 38.8 |
| 250 mm and under 400 mm | 9.1 | 19.8 |
| 400 mm and under 500 mm | 4.5 | 11.2 |
| 500 mm and under 600 mm | 2.6 | 9.5 |
| 600 mm and under 750 mm | 0.8 | 7.5 |
| 750 mm and under 1 000 mm | 0.4 | 6.2 |
| 1 000 mm and over | (a) | 7.0 |
| Total | 100.0 | 100.0 |

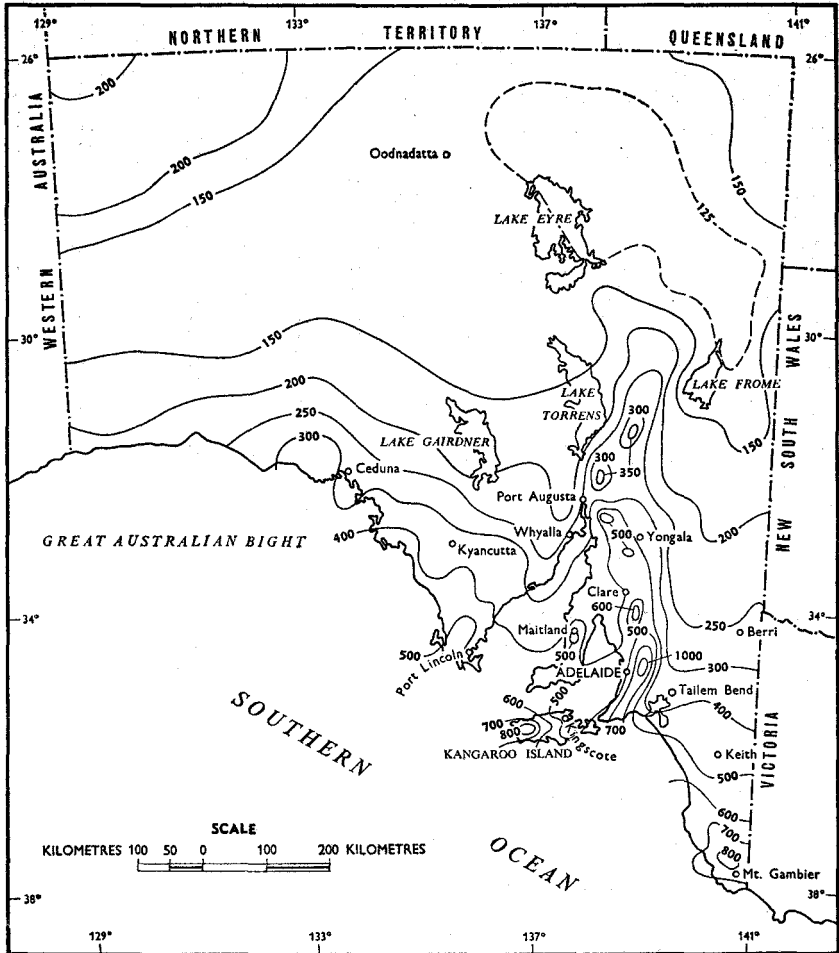
(a) Less than 0.05 per cent—an area of the order of 750 hectares in the Mount Lofty Ranges.

Over the southern half of South Australia the main source of rain is from showers associated with unstable moist westerly airstreams occurring fairly regularly during winter. The wettest part of the State is in the Mount Lofty Ranges, immediately east of Adelaide in the vicinity of Stirling, where the average annual rainfall is about 1 200 millimetres. The Flinders Ranges have the effect of extending a strip area of higher rainfall well to the north.

As can be seen from the map below, the isohyets generally show highest annual averages along the ranges and southern parts of the coast. Averages fall off rapidly to less than 250 millimetres within 150 to 250 kilometres inland, and then decrease more gradually to below 125 millimetres in the vicinity of Lake Eyre. This area is the driest part of Australia, and there have been protracted periods when the average there has been less than 75 millimetres.

SOUTH AUSTRALIA AVERAGE ANNUAL RAINFALL

Based on all years of records
Isohyets in millimetres



Average monthly rainfalls at seventeen selected recording stations are shown in the table below. The average number of days receiving 0.2 millimetres or more of rain is also shown.

Average Rainfall and Days of Rain: Selected Stations, South Australia

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|---|------|------|------|------|-----|------|------|------|-------|------|------|------|-------|
| AVERAGE RAINFALL (a) (millimetres) | | | | | | | | | | | | | |
| Adelaide | 20 | 21 | 24 | 44 | 69 | 72 | 66 | 62 | 51 | 44 | 31 | 26 | 531 |
| Berri | 17 | 22 | 11 | 17 | 28 | 26 | 24 | 27 | 27 | 24 | 20 | 19 | 262 |
| Ceduna | 11 | 15 | 18 | 22 | 40 | 40 | 41 | 39 | 27 | 26 | 21 | 21 | 321 |
| Clare | 26 | 26 | 25 | 48 | 76 | 80 | 81 | 80 | 71 | 56 | 36 | 30 | 635 |
| Keith | 19 | 24 | 22 | 35 | 56 | 52 | 54 | 57 | 51 | 44 | 32 | 26 | 472 |
| Kingscote .. | 15 | 18 | 18 | 37 | 60 | 73 | 79 | 65 | 46 | 37 | 24 | 19 | 491 |
| Kyancutta .. | 13 | 18 | 14 | 22 | 37 | 41 | 44 | 43 | 32 | 27 | 23 | 20 | 334 |
| Maitland .. . | 18 | 22 | 20 | 44 | 64 | 70 | 66 | 63 | 50 | 42 | 28 | 22 | 509 |
| Mount Gambier | 25 | 34 | 33 | 62 | 75 | 77 | 102 | 92 | 67 | 62 | 45 | 37 | 711 |
| Oodnadatta .. | 21 | 24 | 14 | 10 | 16 | 13 | 11 | 8 | 10 | 10 | 9 | 12 | 158 |
| Port Augusta .. | 15 | 17 | 17 | 19 | 26 | 27 | 20 | 23 | 22 | 23 | 18 | 16 | 243 |
| Port Lincoln .. | 14 | 15 | 19 | 37 | 58 | 74 | 78 | 67 | 49 | 35 | 23 | 18 | 487 |
| Port Pirie .. . | 19 | 19 | 17 | 29 | 40 | 41 | 33 | 36 | 34 | 32 | 23 | 21 | 344 |
| Stirling | 39 | 37 | 43 | 96 | 143 | 183 | 161 | 156 | 124 | 99 | 61 | 48 | 1 190 |
| Tailem Bend .. | 19 | 24 | 21 | 28 | 43 | 40 | 40 | 41 | 39 | 38 | 28 | 27 | 388 |
| Whyalla | 20 | 25 | 17 | 18 | 28 | 26 | 22 | 25 | 25 | 25 | 23 | 21 | 275 |
| Yongala | 22 | 21 | 17 | 27 | 37 | 41 | 40 | 46 | 38 | 33 | 27 | 24 | 373 |
| AVERAGE NUMBER OF DAYS OF RAIN (b) | | | | | | | | | | | | | |
| Adelaide | 4 | 4 | 5 | 9 | 13 | 15 | 16 | 16 | 13 | 11 | 8 | 6 | 120 |
| Berri | 3 | 4 | 3 | 6 | 8 | 9 | 11 | 10 | 7 | 7 | 5 | 4 | 77 |
| Ceduna | 3 | 3 | 3 | 6 | 10 | 12 | 12 | 11 | 8 | 7 | 6 | 4 | 85 |
| Clare | 5 | 5 | 5 | 10 | 12 | 15 | 16 | 16 | 12 | 11 | 8 | 7 | 122 |
| Keith | 4 | 4 | 4 | 9 | 12 | 13 | 15 | 15 | 12 | 11 | 8 | 6 | 113 |
| Kingscote .. . | 4 | 4 | 4 | 10 | 14 | 16 | 19 | 18 | 13 | 11 | 8 | 7 | 129 |
| Kyancutta .. | 4 | 4 | 4 | 7 | 12 | 12 | 14 | 14 | 10 | 9 | 7 | 5 | 102 |
| Maitland .. . | 4 | 5 | 5 | 10 | 13 | 15 | 17 | 16 | 12 | 11 | 8 | 6 | 122 |
| Mount Gambier | 7 | 8 | 9 | 14 | 17 | 18 | 21 | 20 | 17 | 16 | 13 | 10 | 170 |
| Oodnadatta .. | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 30 |
| Port Augusta .. | 3 | 3 | 3 | 5 | 7 | 7 | 10 | 9 | 6 | 6 | 6 | 4 | 69 |
| Port Lincoln .. | 4 | 5 | 5 | 11 | 15 | 17 | 19 | 19 | 13 | 12 | 8 | 6 | 134 |
| Port Pirie .. . | 3 | 3 | 3 | 6 | 8 | 10 | 11 | 10 | 8 | 7 | 6 | 4 | 79 |
| Stirling | 6 | 7 | 7 | 13 | 15 | 17 | 18 | 18 | 15 | 14 | 11 | 9 | 150 |
| Tailem Bend .. | 4 | 5 | 4 | 9 | 12 | 13 | 13 | 13 | 11 | 10 | 8 | 6 | 108 |
| Whyalla | 3 | 3 | 3 | 5 | 6 | 7 | 9 | 8 | 6 | 6 | 5 | 4 | 65 |
| Yongala | 4 | 4 | 4 | 7 | 10 | 12 | 14 | 13 | 9 | 8 | 7 | 5 | 97 |

(a) For all years of record to end of 1974. (b) Days receiving 0.2 millimetres or more. Other than for Adelaide (see page 23) figures relate to standard 30 year period 1931-1960.

Seasonal Distribution of Rainfall

Those areas of the State with the higher average annual totals also show a marked winter maximum of rainfall. From November to March the fall is slight, but rarely is completely absent. However, a high rate of evaporation during the summer means that in general these summer rains are not significant from the agricultural point of view. The first significant falls generally arrive during April or May; June, July and August are usually the wettest months, with rains tending to show a marked decrease during September and October.

By contrast, the occurrence of rain over interior districts is quite erratic, but southern parts of the interior still exhibit a discernible trend for winter maxima. Records collected over the years from this northern half of the State show that heavy rains of up to 75 millimetres may occur in any month of the year, but on the other hand at least two or three months without any significant rain at all are experienced practically every year.

Rainfall Intensity

Long sustained periods of intense rainfall are rare in South Australia. However, occasionally there are very intense falls lasting only a few minutes—for example in Adelaide several falls at a rate of more than 100 millimetres an hour over a five-minute period have been recorded. These would have been thunder-storm rains, and intense falls can cause considerable damage to crops and to light or freshly worked soils.

The most notable falls of rain which have occurred within a period of 24 hours ending at 9 a.m. were at:

| | |
|--|--------|
| Ardrossan (18 February 1946) | 206 mm |
| Oodnadatta (9 February 1976) | 200 mm |
| Carpa, 25 km SW of Cowell, (18 February 1946) | 199 mm |
| Hesso, 50 km NW of Port Augusta, (18 February 1946) .. | 187 mm |
| Wilmington (1 March 1921) | 181 mm |
| Wynbring, 100 km W of Tarcoola, (28 February 1921) . . . | 178 mm |

Other Yorke Peninsula towns besides Ardrossan also recorded over 175 millimetres on 18 February 1946. These, however, are very much below the 24-hour falls which have been recorded in tropical parts of Queensland and Western Australia. Crohamhurst in Queensland once recorded 907 millimetres in one day, and more than twenty other centres in Queensland have had daily readings exceeding 600 millimetres.

Snow and Hail

The occurrence of snow in South Australia is infrequent and is mainly confined to the Mount Lofty Ranges and southern Flinders Ranges. Most falls are very light and do not persist for a very long period because of the relative warmth of the ground. Collated reports of snow in the Mount Lofty Ranges show a total of 128 days of snow experienced over a period of 133 years to the end of 1973. While most falls have occurred during the months June to September, snow has been experienced as early as 25 April (1916) and as late as 3 December (1955).

Hail falls most frequently about the southern coasts and ranges during the winter. Further to the north, hail can be experienced with summer thunderstorms and some of the largest hailstones have been reported from northerly parts of the State. Tornadoes and tornadic squalls are, in almost all cases, accompanied by hail.

Floods

Various areas of South Australia are prone to localised flooding. However, most local flooding is associated with intense rainfall, and consequently, is of comparatively short duration. Exceptions have occurred in parts of the south-east and far north of the State where, because of topography and other soil factors, stretches of water can persist for days and even weeks.

Extensive rises in the River Murray levels have at times caused damage to levees and installations along the banks. During 1956, following an excessive snow melt in the Australian Alps, prolonged flooding was experienced in many areas adjacent to the main course.

Droughts

When dry conditions persist over wide areas for long periods of time, drought, the worst of all Australian climatic hazards, is experienced. The worst years in South Australia were 1863-67, 1896-98, 1901-03, 1913-16, 1926-30, 1939-40, 1943-45, 1959-62 and 1965 in the interior, and 1859-60, 1884-86, 1895-98, 1911-15, 1928-29, 1943-45, 1959 and 1967 in the settled areas.

The driest year in terms of actual rainfall was 1967, when an all-time low figure for the year of 257 millimetres was recorded in Adelaide. However, the 1914 drought is generally recognised as being the most severe experienced, and in that year districts where drought was almost unknown were seriously affected. The average wheat yield fell to only 0.09 tonnes per hectare, little more than one tenth of the yield in previous seasons. In places the River Murray was just a series of waterholes.

The northern areas suffer more frequent droughts than areas near the coast. In 1896 the track north-west of Port Augusta was closed to all traffic because of the drought stricken nature of the country. At about this time the drought was particularly severe in the north-east of the State, and this pastoral country was entering its eighth consecutive year of drought before relief rains fell in March 1902.

A more detailed discussion with special reference to rainfall deciles was included on pages 8-10 of the *South Australian Year Book* 1967. Further details of droughts appear in the Bureau of Meteorology publications *Droughts in Australia* by J. C. Foley (Bulletin No. 43) and *Rainfall Deciles as Drought Indicators* by W. J. Gibbs and J. V. Maher (Bulletin No. 48).

Rainfall Probability

A special article on rainfall probability, *i.e.* the likelihood, expressed as a percentage, that a minimum rainfall will be received during a stipulated period, was included on pages 6-9 of the *South Australian Year Book* 1966.

TEMPERATURE

Seasonal Temperature Conditions

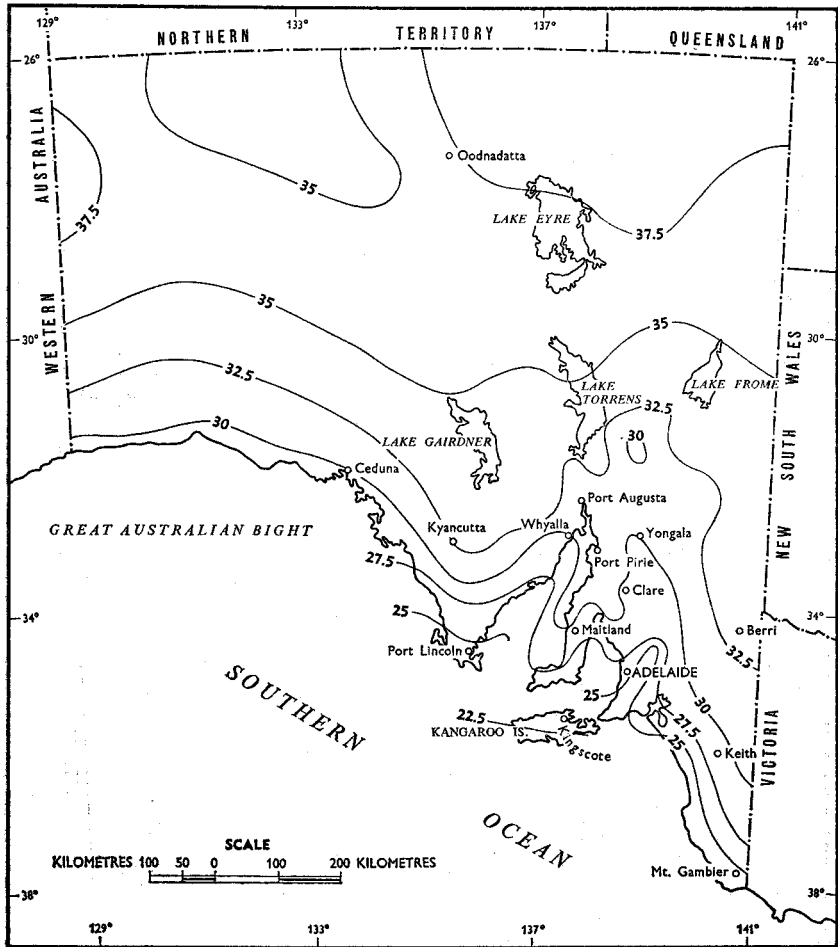
Air temperature is normally recorded under standard conditions in a Stevenson Screen. Isotherms of the average maximum temperatures in a mid-summer month (January) and of the average minimum temperature in a mid-winter month (July) are shown on the maps on pages 17 and 18 respectively. The isotherms are more or less parallel to the coastline but the cooling effect associated with higher altitudes of the Mount Lofty and Flinders Ranges is clearly shown.

From December to February it is generally warm to hot throughout the State but sea breezes frequently bring some relief to the coastal districts. In locations more than 75 kilometres inland maximum daily temperatures usually exceed 32.5°C and are quite often over 37.5°C. In general, areas to the north of the 32.5°C isotherm on the January map average more than 20 days annually during which the maximum temperature exceeds 37.5°C; while it is only on the extreme south-east coastal fringe and Kangaroo Island where the average number of such 'very hot days' is less than five a year. Air masses prevalent at this time of the year are relatively dry; hence cooling during the night is marked—a fall of 10°C to 20°C from day to night is usual.

During March temperatures begin to fall and continue to do so during April and May, the first frosts of the year often being experienced during this period. The three coldest months are June, July and August, with the coldest areas along the highlands. In those parts of the State east and south-east of the ranges, the mean temperature for the latter months is near or just below 10°C, and these low temperatures cause vegetation growth to become very slow, although it does not cease altogether.

SOUTH AUSTRALIA
 MEAN MAXIMUM TEMPERATURE: JANUARY

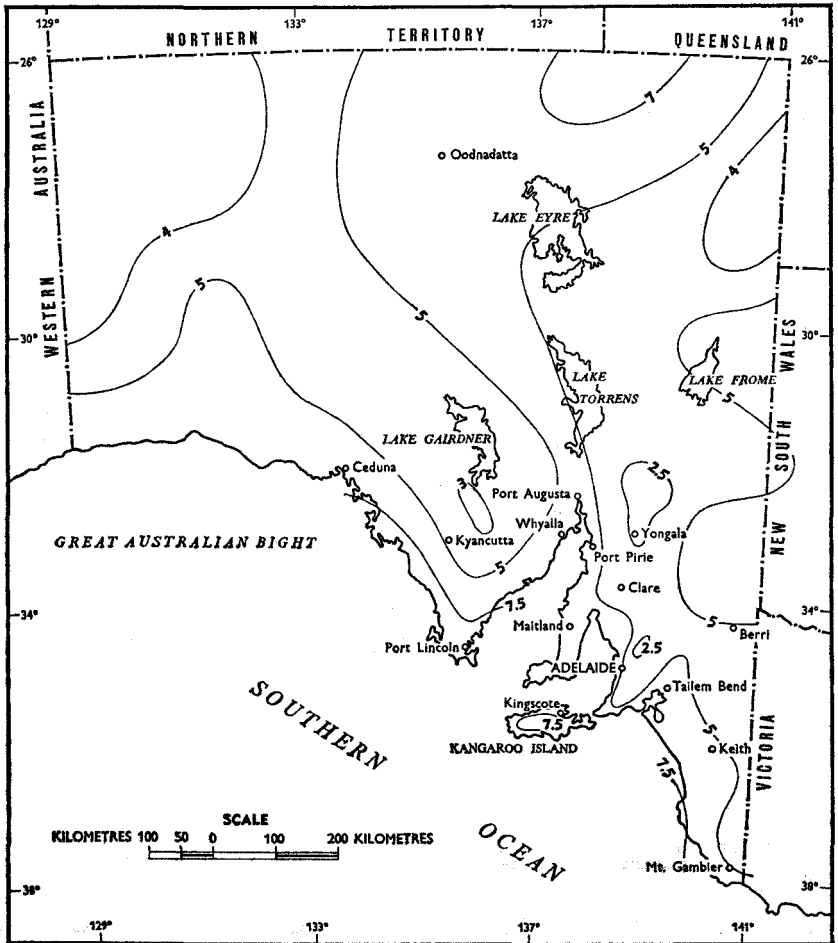
Based on all years of records
 Isotherms in ° Celsius



In the spring months, September to November, with gradually rising temperatures and longer hours of sunshine, crops and pastures grow rapidly. In this period severe frosts are sometimes experienced and these can cause considerable damage to fruit crops during the bud, flower and small fruit stages. When hot, dry, northerly winds persist over the State for two or more consecutive days, developing crops may suffer stress.

**SOUTH AUSTRALIA
MEAN MINIMUM TEMPERATURE: JULY**

Based on all years of records
Isotherms in ° Celsius



Monthly mean maximum and minimum temperatures at seventeen selected recording stations within the State are shown in the following tables. These are based as nearly as possible on a standard period except for the figures for Adelaide which are based on all years of record.

Mean Maximum Temperatures: Selected Stations, South Australia

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|--------------|------|------|------|------|------|------|------|------|-------|------|------|------|------|
| °Celsius | | | | | | | | | | | | | |
| Adelaide | 29.6 | 29.4 | 26.9 | 22.7 | 18.7 | 15.8 | 15.0 | 16.4 | 18.9 | 22.1 | 25.2 | 27.8 | 22.4 |
| Berri | 31.1 | 30.2 | 28.1 | 22.5 | 18.9 | 15.7 | 15.4 | 17.2 | 20.7 | 23.4 | 26.8 | 29.7 | 23.3 |
| Ceduna | 28.5 | 27.4 | 26.6 | 23.7 | 20.6 | 18.2 | 17.0 | 18.3 | 21.4 | 23.3 | 25.8 | 27.2 | 23.2 |
| Clare | 29.3 | 29.0 | 26.3 | 21.1 | 16.9 | 13.6 | 12.9 | 14.6 | 17.5 | 20.8 | 22.0 | 27.7 | 21.2 |
| Keith | 30.1 | 28.8 | 26.9 | 21.9 | 17.6 | 15.4 | 14.7 | 15.7 | 18.5 | 21.5 | 24.2 | 27.3 | 21.9 |
| Kingscote | 23.5 | 23.2 | 22.0 | 19.5 | 17.2 | 15.2 | 14.3 | 14.8 | 16.3 | 18.3 | 20.4 | 22.1 | 18.9 |
| Kyancutta | 32.9 | 31.8 | 30.1 | 24.9 | 21.1 | 17.8 | 16.9 | 18.4 | 21.8 | 25.2 | 28.3 | 30.7 | 25.0 |
| Maitland | 28.9 | 27.2 | 25.4 | 21.7 | 17.4 | 15.6 | 13.8 | 14.9 | 17.5 | 20.7 | 24.2 | 25.3 | 21.1 |
| Mt Gambier | 24.9 | 23.8 | 22.6 | 18.6 | 15.5 | 13.7 | 12.8 | 13.8 | 15.8 | 17.4 | 19.7 | 22.3 | 18.4 |
| Oodnadatta | 37.4 | 36.1 | 33.4 | 27.9 | 22.8 | 19.7 | 19.3 | 21.6 | 26.1 | 29.7 | 33.4 | 35.9 | 28.6 |
| Port Augusta | 32.1 | 31.3 | 29.8 | 25.2 | 21.2 | 17.7 | 17.1 | 19.1 | 22.6 | 25.3 | 28.3 | 30.5 | 25.0 |
| Port Lincoln | 24.9 | 24.5 | 23.6 | 21.0 | 18.6 | 16.3 | 15.6 | 16.3 | 18.2 | 19.7 | 21.4 | 23.2 | 20.3 |
| Port Pirie | 31.9 | 31.4 | 29.6 | 24.6 | 20.2 | 17.1 | 16.3 | 17.9 | 21.4 | 24.6 | 27.7 | 30.0 | 24.4 |
| Stirling | 24.9 | 24.3 | 22.8 | 18.0 | 14.4 | 11.6 | 10.6 | 11.8 | 14.6 | 16.9 | 19.9 | 22.6 | 17.7 |
| Tailem Bend | 29.6 | 28.3 | 26.8 | 22.6 | 18.7 | 16.0 | 15.4 | 16.6 | 20.0 | 22.1 | 24.8 | 27.2 | 22.3 |
| Whyalla | 28.8 | 28.2 | 26.6 | 23.5 | 20.2 | 17.9 | 16.4 | 17.7 | 20.2 | 23.3 | 25.3 | 26.6 | 22.9 |
| Yongala | 30.6 | 29.5 | 27.1 | 21.4 | 16.8 | 13.4 | 12.4 | 13.4 | 17.8 | 21.7 | 25.5 | 28.3 | 21.5 |

Mean Minimum Temperatures: Selected Stations, South Australia

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|--------------|------|------|------|------|------|------|------|------|-------|------|------|------|------|
| °Celsius | | | | | | | | | | | | | |
| Adelaide | 16.4 | 16.6 | 15.1 | 12.7 | 10.3 | 8.3 | 7.3 | 7.8 | 9.0 | 10.9 | 12.9 | 14.9 | 11.8 |
| Berri | 15.2 | 14.9 | 13.4 | 10.1 | 7.8 | 6.1 | 5.3 | 5.9 | 7.7 | 9.9 | 12.1 | 14.2 | 10.2 |
| Ceduna | 14.5 | 14.6 | 12.8 | 10.3 | 8.5 | 7.3 | 6.6 | 6.1 | 7.7 | 9.6 | 11.8 | 13.7 | 10.3 |
| Clare | 13.8 | 13.8 | 11.4 | 8.3 | 5.8 | 4.4 | 3.3 | 3.9 | 5.2 | 7.3 | 10.2 | 12.3 | 8.3 |
| Keith | 12.6 | 12.3 | 10.7 | 9.1 | 7.4 | 6.1 | 5.1 | 5.2 | 6.6 | 7.8 | 9.4 | 11.2 | 8.6 |
| Kingscote | 14.6 | 15.1 | 14.1 | 12.2 | 10.6 | 9.3 | 8.3 | 8.1 | 8.9 | 10.2 | 11.7 | 13.3 | 11.4 |
| Kyancutta | 14.1 | 13.8 | 12.2 | 9.2 | 7.2 | 5.3 | 4.7 | 4.8 | 6.1 | 8.3 | 10.4 | 12.7 | 9.1 |
| Maitland | 14.9 | 14.6 | 13.6 | 11.7 | 9.3 | 7.6 | 6.3 | 6.7 | 7.8 | 9.5 | 11.5 | 12.9 | 10.5 |
| Mt Gambier | 10.3 | 10.9 | 9.7 | 7.8 | 6.8 | 5.4 | 4.7 | 4.9 | 5.8 | 6.8 | 7.8 | 9.4 | 7.5 |
| Oodnadatta | 22.4 | 21.8 | 19.0 | 14.3 | 9.7 | 6.8 | 6.0 | 7.1 | 10.4 | 14.7 | 18.1 | 20.8 | 14.3 |
| Port Augusta | 18.7 | 18.7 | 17.0 | 13.3 | 10.1 | 7.7 | 6.8 | 7.8 | 9.9 | 12.6 | 15.1 | 17.3 | 12.9 |
| Port Lincoln | 15.3 | 15.5 | 14.8 | 12.8 | 11.0 | 9.4 | 8.5 | 8.4 | 9.2 | 10.6 | 12.2 | 13.9 | 11.8 |
| Port Pirie | 17.1 | 17.2 | 15.7 | 12.5 | 10.2 | 8.2 | 7.4 | 7.8 | 9.4 | 11.6 | 13.8 | 15.8 | 12.2 |
| Stirling | 11.5 | 11.6 | 10.6 | 8.6 | 6.8 | 5.3 | 4.6 | 4.8 | 5.9 | 7.1 | 8.7 | 10.2 | 7.9 |
| Tailem Bend | 13.7 | 13.6 | 11.9 | 9.7 | 8.2 | 6.2 | 5.3 | 5.9 | 7.2 | 8.8 | 10.7 | 12.3 | 9.5 |
| Whyalla | 18.6 | 18.3 | 16.9 | 13.9 | 10.3 | 8.3 | 6.9 | 7.8 | 9.8 | 12.1 | 14.5 | 15.9 | 12.8 |
| Yongala | 13.2 | 12.9 | 10.8 | 7.2 | 4.5 | 2.9 | 2.3 | 2.1 | 4.0 | 6.2 | 9.1 | 11.4 | 7.2 |

The highest temperature recorded in South Australia was 50.7°C at Oodnadatta on 2 January 1960, and the lowest —8.2°C at Yongala on 20 July 1976.

HUMIDITY

'Relative humidity' at a particular temperature is the ratio of the actual vapour pressure to the saturated vapour pressure (at that temperature) expressed as a percentage. Since relative humidity depends not only on the actual water vapour

content of the air, but also on air temperature, there is a tendency for highest relative humidities to be associated with low temperatures during the early morning hours, and conversely, the lowest relative humidity values tend to occur during the warmest part of the afternoon when measurements of under 20 per cent are not uncommon.

The average index of mean relative humidity has been derived from the ratio of the average 9 a.m. vapour pressure to the saturation vapour pressure at the average mean temperature. Being thus related to the mean temperature this value of relative humidity is a good approximation of the daily mean.

With an average index of mean relative humidity of under 35 per cent in summer increasing to about 50 per cent in winter, the far northern parts of the State experience the lowest values of relative humidity in South Australia. By comparison, most southern parts of the State have an average index of mean relative humidity of about 45 per cent to 55 per cent in summer, increasing to about 70 per cent to 80 per cent in winter.

SUNSHINE AND CLOUD

The annual average sunshine total (as determined from records of sunshine and average cloudiness) ranges from about 2 000 hours along parts of the southern coastal fringe to 3 500 hours near the northern border of the State. Adelaide has an average of just over 2 500 hours a year.

December and January tend to be the sunniest months with daily averages reaching a maximum of about 10.5 hours over interior districts. During the June and July winter months daily averages are still as high as seven hours in the far north interior, but over the southern coastal fringe the daily average of just over eight hours for summer is reduced to about three hours during winter.

WIND

During the summer months winds from the southern quadrants are the most prevalent and a well defined sea breeze is common along the whole of the coastal fringe from October right through to about April and May. During the winter months the north-westerly predominates, but the proportion of west to south-west winds is also relatively high.

South Australia is not subject to the type of sustained wind storms associated with tropical cyclones as in Queensland and tropical Western Australia. However, gales do occur from time to time along the coast during the winter and cause minor damage to buildings and foreshore works. Probably the most noteworthy storm was on 11 April 1948 when wind averaged over 60 km/h for six hours in central and south-eastern districts, the naval frigate *Barcoo* was grounded at Glenelg and the Glenelg jetty was wrecked. Frequent gusts over 100 km/h and a strongest gust of 130 km/h were recorded in Adelaide.

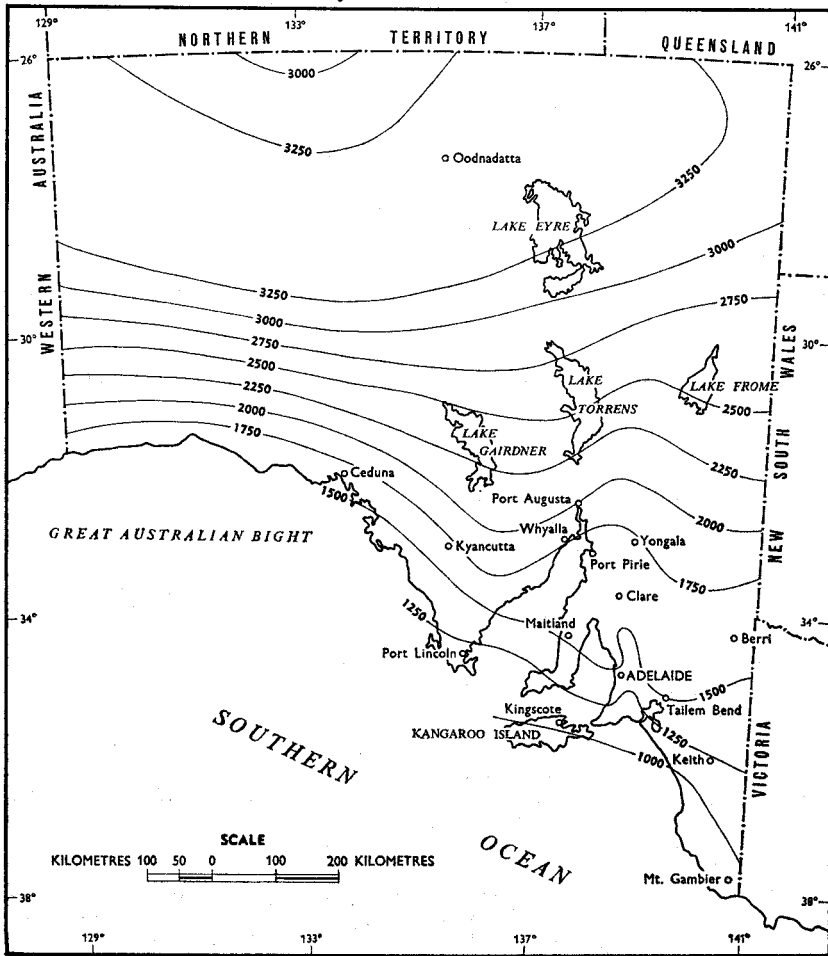
Most violent wind squalls are associated with thunderstorms and usually last only a few minutes. It was during such squalls that the highest wind gusts were recorded in South Australia—158 km/h at Woomera on 4 November 1969, 148 km/h at Leigh Creek on 3 December 1953 and also at Adelaide on 13 July 1964.

EVAPORATION

In South Australia most measurements of evaporation have been made with tanks, each 0.91 metres internal diameter and 0.91 metres deep, sunk into the soil so that the rim is only 25 millimetres or so above the surface.

SOUTH AUSTRALIA
AVERAGE ANNUAL EVAPORATION

Based on all years of records in millimetres



However, early in 1967 a change-over to the standard American Class A pan was made. These pans, 1.22 metres in diameter and 0.3 metres deep, are placed above ground level on wooden stands. As yet there are insufficient years of record to compute averages of the measurements.

The annual average evaporation using the sunken tank method has varied from under 1 000 millimetres along the south-east coastal fringe to more than 3 250 millimetres over a large area around and to the west of Oodnadatta in the far north (see map on page 21). About half the area of the State has an evaporation rate exceeding 2 500 millimetres a year, and this high rate is all the more significant when it is considered that the average annual rainfall over most of the northern half is less than 150 millimetres. A critical survey of the evaporation network and methods of observation, together with tabulations of the results of Australian observations appear in the Bureau of Meteorology publication *Evaporation in Australia* (Bulletin No. 44).

CLIMATE OF ADELAIDE

The longest continuous series of weather observations in the Southern Hemisphere started in Adelaide in November 1836 when Sir George Kingston commenced rain gauge readings at his property on the corner of Grote Street and West Terrace. Unfortunately, the earliest figures were mislaid and records are available only from the beginning of 1839. No other regular observations were made until Sir Charles Todd arrived to fill the post of Superintendent of Telegraphs and Government Astronomer in 1856. During the first year or two, observations were made at his private residence in Adelaide and, for some months, in Government House grounds.

In May 1860 the Observatory on West Terrace was completed and the instruments were moved to that site. For over 100 years the observational site at Adelaide has remained practically unchanged. Minor shifts occurred in 1940 and 1962 but these were within 100 metres of the original observatory site.

Temperature records at Adelaide date from 1858 when readings were first taken from a thermometer placed in a screen known as a Greenwich Stand which failed to protect the thermometer fully from reflected radiation. In 1887 a new series of readings using a standard Stevenson Screen was introduced and this showed maximum temperatures during the warmer months to be 1° to 1.5°C lower on average. Other temperatures were not significantly affected. Both screens were in continuous operation until 1948 when use of the Greenwich Stand was discontinued. However, the Greenwich Stand readings remained the official record until 1948, thus there is a slight discontinuity in the temperature records in that year and means are weighted towards the Greenwich Stand method of measurement.

Adelaide is the driest of Australia's capital cities, having less rainfall and a lower relative humidity than any other capital. Summer maximum temperatures are high and the record of 47.6°C in the Greenwich Stand on 12 January 1939 is the highest recorded in any of the capital cities.

Temperature

In the summer months, Adelaide maximum temperatures frequently exceed 30°C and from time to time 'heat waves', with readings at or near 35°C for several consecutive days, are experienced. The outstanding heat wave was in

January 1939 when fourteen days out of fifteen exceeded 30°C and of those fourteen days thirteen exceeded 35°C and six exceeded 40°C. During this heat wave the record temperature of 46·8°C recorded on 26 January 1858 was exceeded, first on 10 January 1939 when the temperature reached 47·2°C and then two days later on 12 January when the highest ever temperature of 47·6°C (46·1°C in the Stevenson Screen) was recorded.

July is the coldest month, when the mean maximum is only 15°C with the extreme lowest minimum recorded in the Greenwich Stand being 0°C (0·6°C in the Stevenson Screen) on 24 July 1908. August is only slightly warmer than July, but after August steadily rising temperatures are experienced.

Climatological Data, Adelaide

(1) Temperature and Relative Humidity

| Month | Temperature | | | | Relative Humidity (9 a.m.) | | | |
|-----------------|-------------|------------------|---------|-----------------|----------------------------|------|----------------------|---------------------|
| | Maximum | | Minimum | | Mean | Mean | Highest Monthly Mean | Lowest Monthly Mean |
| | Mean | Highest Recorded | Mean | Lowest Recorded | | | | |
| Years of Record | 119 | 119 | 119 | 119 | 119 | 108 | 108 | 108 |
| | °C | °C | °C | °C | °C | % | % | % |
| January .. . | 29·6 | 47·6 | 16·4 | 7·3 | 23·0 | 41 | 59 | 29 |
| February .. . | 29·4 | 45·3 | 16·6 | 7·5 | 23·0 | 44 | 63 | 30 |
| March .. . | 26·9 | 43·6 | 15·1 | 6·6 | 21·0 | 47 | 62 | 29 |
| April .. . | 22·7 | 37·0 | 12·7 | 4·2 | 17·7 | 57 | 72 | 37 |
| May .. . | 18·7 | 31·9 | 10·3 | 2·7 | 14·5 | 67 | 77 | 49 |
| June .. . | 15·8 | 25·6 | 8·3 | 0·3 | 12·1 | 75 | 84 | 63 |
| July .. . | 15·0 | 26·6 | 7·3 | 0·0 | 11·1 | 76 | 87 | 66 |
| August .. . | 16·4 | 29·4 | 7·8 | 0·2 | 12·1 | 70 | 80 | 54 |
| September .. . | 18·9 | 35·1 | 9·0 | 0·4 | 14·0 | 61 | 72 | 44 |
| October .. . | 22·0 | 39·4 | 10·9 | 2·3 | 16·5 | 52 | 67 | 29 |
| November .. . | 25·2 | 45·3 | 12·9 | 4·9 | 19·1 | 45 | 64 | 31 |
| December .. . | 27·8 | 45·9 | 14·9 | 6·1 | 21·3 | 42 | 56 | 31 |
| Year .. | 22·4 | 47·6 | 11·8 | 0·0 | 17·1 | 56 | 87 | 29 |

(2) Rainfall and Wind

| Month | Rainfall | | | | Wind | | | |
|-----------------|----------|----------------------------------|--------------------|-----------------------|---------------|--------------|----------------------|--------|
| | Mean | Highest Monthly and Yearly Total | Highest in One Day | Mean Days of Rain (a) | Average Speed | Highest Gust | Prevailing Direction | |
| | | | | | | | 9 a.m. | 3 p.m. |
| Years of Record | 137 | 137 | 137 | 137 | 21 | 59 | 58 | 58 |
| | mm | mm | mm | No. | km/h | km/h | | |
| January .. . | 20 | 84 | 58 | 4 | 13 | 116 | SW | SW |
| February .. . | 21 | 155 | 141 | 4 | 12 | 106 | NE | SW |
| March .. . | 24 | 117 | 89 | 5 | 11 | 126 | S | SW |
| April .. . | 44 | 154 | 80 | 9 | 11 | 130 | NE | SW |
| May .. . | 69 | 197 | 70 | 13 | 11 | 113 | NE | NW |
| June .. . | 72 | 218 | 54 | 15 | 12 | 108 | NE | N |
| July .. . | 67 | 138 | 44 | 16 | 12 | 148 | NE | NW |
| August .. . | 62 | 157 | 57 | 16 | 13 | 121 | NE | SW |
| September .. . | 51 | 148 | 40 | 13 | 13 | 111 | NNE | SW |
| October .. . | 44 | 133 | 57 | 11 | 13 | 121 | NNE | SW |
| November .. . | 31 | 113 | 75 | 8 | 13 | 130 | SW | SW |
| December .. . | 26 | 101 | 61 | 6 | 13 | 121 | SW | SW |
| Year .. | 531 | 786 | 141 | 121 | 12 | 148 | NE | SW |

Climatological Data, Adelaide (continued)

(3) Other Conditions

| Month | Mean Daily Sunshine | Clear Days (b) | Mean Amount of Cloud (c) | Days of Fog | Days of Lightning | Amount of Evaporation (d) | Vapour Pressure 9 a.m. | Mean Barometric Pressure (e) |
|-----------------|---------------------|----------------|--------------------------|-------------|-------------------|---------------------------|------------------------|------------------------------|
| Years of Record | 94 | 58 | 107 | 76 | 104 | 97 | 108 | 119 |
| | Hours | No. | No. | No. | No. | mm | mb | mb |
| January . . . | 9.9 | 12.4 | 3.1 | 0.0 | 2.0 | 236 | 11.9 | 1 013.2 |
| February . . . | 9.3 | 10.9 | 3.3 | 0.0 | 1.7 | 191 | 12.5 | 1 014.3 |
| March . . . | 7.9 | 10.9 | 3.5 | 0.0 | 1.7 | 159 | 12.0 | 1 017.2 |
| April . . . | 6.0 | 6.6 | 4.5 | 0.0 | 1.4 | 96 | 11.5 | 1 019.8 |
| May . . . | 4.8 | 4.6 | 5.1 | 0.4 | 1.5 | 58 | 10.8 | 1 020.1 |
| June . . . | 4.2 | 4.0 | 5.3 | 1.1 | 1.5 | 37 | 10.0 | 1 019.8 |
| July . . . | 4.3 | 3.6 | 5.2 | 1.3 | 1.4 | 37 | 9.5 | 1 019.9 |
| August . . . | 5.3 | 4.9 | 4.9 | 0.6 | 1.7 | 53 | 9.7 | 1 019.0 |
| September . . . | 6.2 | 5.7 | 4.6 | 0.2 | 1.7 | 81 | 10.0 | 1 017.6 |
| October . . . | 7.2 | 5.7 | 4.5 | 0.0 | 2.6 | 128 | 10.2 | 1 016.0 |
| November . . . | 8.6 | 6.6 | 4.2 | 0.0 | 3.0 | 172 | 10.5 | 1 015.1 |
| December . . . | 9.4 | 9.0 | 3.7 | 0.0 | 2.2 | 219 | 11.3 | 1 013.3 |
| Year . . . | 6.9 | 85.0 | 4.3 | 3.6 | 22.4 | 1 467 | 10.5 | 1 017.1 |

(a) Days receiving 0.2 mm or more of rain. (b) With less than two-eighths cloud. (c) Scale 0 (clear) to 8 (overcast) at 9 a.m. and 3 p.m. daily. (d) From Standard Australian Tank (period 1870-1966). (e) Mean of 9 a.m. and 3 p.m. readings corrected to sea-level.

Rainfall

Adelaide's summer rainfall is light and unreliable. The average monthly fall from January to March is under 25 millimetres and completely rainless months in this period are not uncommon. In fact, each of the five months December to April has at some time been recorded as completely dry, and in the period January to March 1893 there were sixty-nine consecutive rainless days. On the other hand, heavy rain is occasionally experienced at this time of the year and on 7 February 1925 rainfall was 141 millimetres—a record for one day.

Each month from May to September rainfall averages over 50 millimetres and in this period the rain is fairly reliable. June is the wettest month, but the average is still under 75 millimetres for the month.

The 137 year annual rainfall average is 531 millimetres, and annual totals have ranged from a low of 257 millimetres in 1967 to a high of 786 millimetres in 1851.

Other Conditions

Relative humidity in Adelaide is at its lowest in January when the average 9 a.m. reading (which approximates the average for the whole 24 hours) is 39 per cent. This low value of the relative humidity reduces the severity of heat waves in Adelaide. In fact, the relative humidity is very low for most months of the year, only becoming higher in winter, with the average at 9 a.m. reaching 75 per cent in June and July.

Adelaide is not subject to violent sustained wind storms. The prevailing wind during the day in summer is a south-westerly sea breeze which is well defined throughout the months October to April. Another common wind during summer, known locally as the 'gully wind', blows from the east or south-east out

of the Adelaide hills (more particularly at night) and becomes very strong and gusty at times. In winter the prevailing wind during the day is north-westerly with a high proportion of south-westerlies.

WEATHER CONDITIONS IN SOUTH AUSTRALIA: 1975 and 1976

Summer 1974-75

Little rainfall was recorded in the settled areas during summer and the interior districts reported deficiencies during December and January which were offset by heavy rains during February. The seasonal rainfall recorded in Adelaide was 49 millimetres compared to the long-term summer average of 66 millimetres. Heavy rains in the Far North during February boosted summer rainfall aggregates to about 80 per cent above normal for that District but all other seasonal district averages were below normal. The North West District average was close to normal because it received twice the normal February rainfall. However, the North East District, which also accrued above average rain in February, was about 30 per cent deficient. Most districts in the settled areas reported summer deficiencies of between 40 and 90 per cent.

The heaviest falls in the purely pastoral areas were 166 millimetres at Ibunga and 157 millimetres at Marree in the Far North District but most totals were between 40 millimetres and 90 millimetres in the Far North and North West Districts while they were mostly between 30 millimetres and 70 millimetres in the North East District. Outstanding gaugings in the settled areas were 114 millimetres at Barton and 105 millimetres at Yalata. However, throughout the remainder of the Western Agricultural District most aggregates were less than 35 millimetres. Amounts of between 35 millimetres and 75 millimetres were fairly general over Kangaroo Island, the Adelaide Plains, the Lower South East and Mount Lofty Ranges, but elsewhere gaugings of less than 35 millimetres were most common and amounts of less than 15 millimetres were gauged throughout the Upper Murray and Murray Mallee Districts.

A hot spell during late January and early February was offset by long periods of slightly below normal temperatures when easterly wind regimes and occasional influxes of southerly air kept nearly all mean maxima and minima to within 1°C of normal. There were few exceptions, but of these Adelaide and Georgetown were noteworthy in that the mean summer maxima were 2.3°C and 1.6°C below normal.

The dry summer followed a month of very little rain and the fire danger caused concern. One large bushfire burned thousands of hectares of grazing land in the North West District. More than forty fires broke out during the hot spell of the first week in February and of these, one on Kangaroo Island burned out nineteen farms and destroyed cattle and thousands of sheep. In contrast to the fires, floods disrupted communications in the interior districts during mid-February.

Autumn 1975

Districts near the coast received rainfall up to 30 per cent above the autumn normal. However, deficiencies ranged from about 10 to 25 per cent in the Upper North and Murray Districts, and from 33 per cent in the North West to 64 per cent and 85 per cent in the North East and Far North, respectively. The purely pastoral areas recorded below normal rainfall during March, April

and May. However, March rainfall totals were above average throughout the settled areas and more than twice the normal March rainfall was received throughout the South East, Yorke Peninsula, Kangaroo Island and the Central Districts. This was in direct contrast to April when all districts received rainfall deficits. During May the inland districts and those east of the Flinders Ranges, except the Lower South East, received below normal rainfall while coastal districts reported above normal amounts for May.

Most stations in the Upper North and Murray Districts received less than 80 millimetres during autumn. Aggregates were generally between 80 millimetres and 120 millimetres throughout the Lower North, Yorke Peninsula and the Upper South East. They mainly ranged from 120 millimetres to 180 millimetres on Kangaroo Island and over the Adelaide Plains, County Light and southern Eyre Peninsula. Falls of between 180 millimetres to 240 millimetres were common throughout the Lower South East. Most of the Western Agricultural District received totals of between 60 millimetres and 100 millimetres while 200 millimetres to 300 millimetres were received at most stations in the Mount Lofty Ranges. The heaviest falls were 442 millimetres at Stirling and 433 millimetres at Uraidla.

A transition from summer conditions to typical autumn weather occurred during mid-March when south-westerly wind regimes were common during the last fortnight. Marked fluctuations in both maximum and minimum temperatures occurred during the first week of April and a pronounced warm spell from 13 to 18 April was largely offset by a cold spell from 22 to 25 April. In May, hot spells occurred on 5 and 6, and 20 to 22 May and, although several days and nights were substantially warmer than normal, May temperatures overall were close to the average. Mean autumn maxima were generally within 1°C of normal. Mean autumn minima were also within 1°C of normal at most centres but a few stations scattered over the State reported mean minima of up to 1.2°C above normal.

Some noteworthy events were recorded; many stations in the Central District received their highest March rainfall totals since 1910. Among those were Adelaide, Stirling and Uraidla. On 12 May, a storm surge with a heavy swell, caused by persistently strong south-westerly winds through the Bight region, washed over a levee at Port MacDonnell. The sea reached more than 300 metres inland, flooding dozens of houses and shops. The surge also caused considerable damage along the Victor Harbor foreshore.

Winter 1975

Clear skies, overnight frosts and predominantly dry days were experienced throughout June. However, July was characterised by frequent showers and above normal rainfall in most districts. August rainfall was slightly below normal in nearly every district, the only exceptions being the Far North and North East Districts where thunderstorms and heavy rain disrupted surface transport.

Winter rainfall was 10 per cent above normal in the Far North and close to normal in the Lower South East District. It was between 30 and 40 per cent below normal in the Lower Murray and Lower North, and it was from 15 to 30 per cent below normal in other districts.

Most stations in the interiors recorded 30 millimetres to 50 millimetres of rain. In the settled areas amounts of between 20 millimetres and 300 millimetres

were common over Kangaroo Island, the Mount Lofty Ranges and the Lower South East District. Light falls of 50 millimetres to 100 millimetres were recorded at most stations in the Upper North and the Murray districts while elsewhere gaugings of between 100 millimetres and 150 millimetres were fairly general.

Mean winter maximum temperatures were from 0.5°C to 1.5°C above normal at most stations while overnight temperatures were generally within 1°C of normal. A hot spell, late in July, produced many record maximum temperatures for that month.

Spring 1975

Heavy rains flooded roads, railways and airstrips in country areas and the interior during October. Numerous centres including Kingoonya, Oodnadatta, Coober Pedy and Marree were isolated. However, the rains also boosted cereal prospects in agricultural areas.

All districts received above average spring rainfall. In the Upper Murray, Upper North, Far North, North West and North East Districts most stations received about two to two and a half times the normal for the season. In the Western Agricultural, Lower North, Lower Murray, Murray Mallee and County Light surpluses of 50 to 100 per cent were general, while in other districts the rainfall was about 20 to 50 per cent above normal. The highest gaugings were taken at Stirling (343 millimetres) and Mount Burr (335 millimetres). Over the Mount Lofty Ranges and parts of the Lower South East District recordings of about 200 millimetres to 300 millimetres were common. Slightly lesser amounts of 175 millimetres to 250 millimetres were general throughout the Lower North, County Light, Kangaroo Island and the remainder of the Upper South East District. Gaugings of between 125 millimetres and 175 millimetres were recorded elsewhere except in the Far North and North West interior districts where variable amounts of about 50 millimetres to 150 millimetres were recorded.

Mean spring maximum temperatures were generally within 1°C of normal, but persistent cloud cover resulted in overnight temperatures which were about 1°C to 2°C above normal for the most part.

Summer 1975-76

Exceptional rains in interior regions caused widespread flooding and seriously disrupted surface and air transport. Towns and station properties north of Port Augusta became isolated by floodwaters.

Above normal rainfall was experienced in interior regions during December and January. During February more than eight times the normal rainfall was received in the Far North District. In the purely pastoral areas, summer rainfall ranged from twice the normal in the North West to more than five times the normal in the Far North District. In the Far North and North East Districts gaugings ranged from 94 mm at Ilbunga to 375 mm at Moomba. Amounts were more variable in the North West District with readings of 20 to 30 mm recorded around Lake Gairdner while 342 mm were gauged at Ernabella.

In the settled areas, summer rainfall was about 20 to 45 per cent above normal in the Western Agricultural, Upper North and Kangaroo Island Districts, about 20 to 25 per cent below normal in the Lower North, Yorke Peninsula and Murray Mallee Districts and was within 15 per cent of normal elsewhere.

Amounts were variable in the Western Agricultural and Upper North Districts where several stations received in excess of 100 mm. Many readings in the Upper North, Kangaroo Island, Lower South East, Mount Lofty Ranges and parts of the Western Agricultural District recorded about 60 mm to 100 mm. Lesser amounts of about 25 to 50 mm were gauged at most stations on Yorke Peninsula and readings of 40 to 80 mm were taken in other parts. Violent thunderstorms on 25 February caused power blackouts and local flooding in several Adelaide suburbs.

Due to the unusually wet conditions in the extreme north of the State mean maximum temperatures were about 2°C to 3°C below normal near the Northern Territory border. They were close to normal throughout the remainder of the State. Mean summer minimum temperatures were about 1°C above normal.

Autumn 1976

Prolonged dry spells during autumn aggravated the danger of bushfires. During April fires caused considerable damage near Angaston, at Montacute and Wilpena Pound.

Autumn rainfall was below normal throughout the State. In the purely pastoral areas the North East District was 15 per cent deficient, while the Far North and North West Districts were 72 and 83 per cent below normal, respectively. Autumn averages were 44 mm in the North East, 12 mm in the Far North and only 7 mm in the North West District.

In the settled areas deficiencies ranged from 38 per cent in the Lower South East to 78 per cent in the Murray Mallee District. The highest readings of between 100 mm and 132 mm were taken along the coast in the Lower South East District. Throughout the remainder of that district and over the Adelaide Plains, Mount Lofty Ranges and Kangaroo Island most falls were in the 45 mm to 90 mm category. In the Western Agricultural, Lower North, Yorke Peninsula, County Light and Upper South East Districts gaugings of 25 mm to 50 mm were most common. Amounts of 15 mm to 30 mm were recorded at the majority of stations in the Upper North and Murray Districts.

Mean maximum and minimum temperatures at most stations were close to normal for the months of March and April. During May, mean maximum temperatures were mainly about 2°C to 5°C below normal except in the southern settled areas where most were within 1°C of normal. Mean autumn maxima and minima were within 1°C of normal at most centres, but several stations throughout the State recorded mean autumn minima which were 1°C to 2°C below normal.

Winter 1976

Drought conditions prevailed over much of South Australia as a dry autumn was followed by a dry winter. The North West of the State had its driest winter since records began in 1913.

Winter rainfall was below average in all districts. In the purely pastoral areas, the Far North Districts average rainfall was 90 per cent below normal while the North West and North East Districts were 85 per cent and 64 per cent deficient, respectively. Winter district average rainfall was 4 mm in the Far North, 8 mm in the North West and 17 mm in the North East District.

In the settled areas deficiencies ranged from 65 per cent in the Upper Murray Valley to 17 per cent on Kangaroo Island. Most inland stations recorded less than 100 mm during the winter. Falls gradually increased to 150 mm on parts of the West Coast. The highest falls were recorded in the Lower South East, Kangaroo Island and Mount Lofty Ranges where recordings were generally between 150 mm and 250 mm.

Mean maximum temperatures for the winter were close to normal during each month of the season. Mean maximum temperatures during June were below normal in the interiors by 1°C to 2°C but were close to normal in the settled areas. Temperatures during July were more variable with stations reporting mean minima up to 4°C below normal. August mean minima were generally close to normal. Mean seasonal minimum temperatures were close to normal in the settled areas but 1°C to 2°C below normal in the interiors.

On 20 July, Yongala recorded a minimum temperature of -8.2°C , the lowest minimum temperature recorded in the State.

Spring 1976

Rainfall in September was below normal in most districts with only eastern areas being above normal. However, good rains in October completely changed the outlook for feed and crops with most districts receiving above normal rain. Many stations in northern districts received their highest October rainfall.

The central districts of Yorke Peninsula, Kangaroo Island and the Adelaide Plains were the only areas where the spring rainfall was slightly below normal. Average district spring rainfall ranged from an excess of 126 per cent in the Far North District to a deficit of 17 per cent over the Adelaide Plains.

Many stations in the Upper Murray Valley, Upper North and the interior districts received two to three times their normal rainfall for the season. Yunta in the North East District received 259 mm, four times its normal spring rainfall. Falls of 150 mm to 250 mm were common in the Upper and Lower North, Mount Lofty Ranges, the Upper and Lower South East Districts while lesser amounts of 100 mm to 200 mm were general in most other areas.

Mean spring maximum temperatures were 1°C to 2.5°C below normal except for small areas near the central and south east coasts where mean maxima were within 1°C of normal.

Mean minimum temperatures were within 1°C of normal throughout South Australia.

1.3 NATURAL RESOURCES

MINERALS

Barite is obtained from about twenty localities in Adelaidean rocks in the Flinders Ranges. The company that operated Oraparinna mine was the largest producer of industrial grade barite in Australia before it went into receivership. Oil drilling grade barite is mined from Willyama Complex rocks at Mount Mulga, north of Olary.

The largest part of Australian reserves of gypsum are located in South Australia. The deposits have in general formed in coastal basins, the largest of these occurring at Lake MacDonnell and on Kangaroo Island. Other deposits, mainly of seed gypsum, are found inland at Moonabie, Lake Fowler, Cooke Plains and along the River Murray.

High grade kaolin is produced from weathered shales at Birdwood and altered metasediments at Williamstown in the Mount Lofty Ranges. Sillimanite and damourite are also obtained from the open-cut at Williamstown. White burning plastic clays are mined near Adelaide at Golden Grove and One Tree Hill and clay for refractory and ceramic uses are supplied from Woocalla, Tregolana and Longwood.

High quality dolomite for steel making is quarried at Ardrossan and for glass making at Tantanoola.

Feldspar is being mined by two operators from pegmatites north of Olary. Flint for ceramic and grinding purposes is harvested from the beaches near Port MacDonnell and screened from clay at Longwood.

Conditions in South Australia are ideal for the production of salt from sea water by solar evaporation. Large solar salt works are located at Dry Creek (near Adelaide), Port Price (Gulf St Vincent), and Whyalla. Salt is also harvested from several saline lakes, in particular Lake Bumbunga and Lake MacDonnell.

The opal fields at Coober Pedy and Andamooka supply most of the world's precious opal. The estimated value of raw opal production in South Australia was \$22 million in 1976. Most of this is exported to Hong Kong, Japan, the USA and Germany.

South Australia contains many deposits of limestone and apart from quarries worked for construction purposes the main deposits are at Rapid Bay for steel making, Angaston and Klein Point for cement, Mount Gambier for whiting and building stone, and Penrice for chemicals. The Coffin Bay lime sand operations have closed down.

Magnesite is mined on a small scale, north-west of Copley.

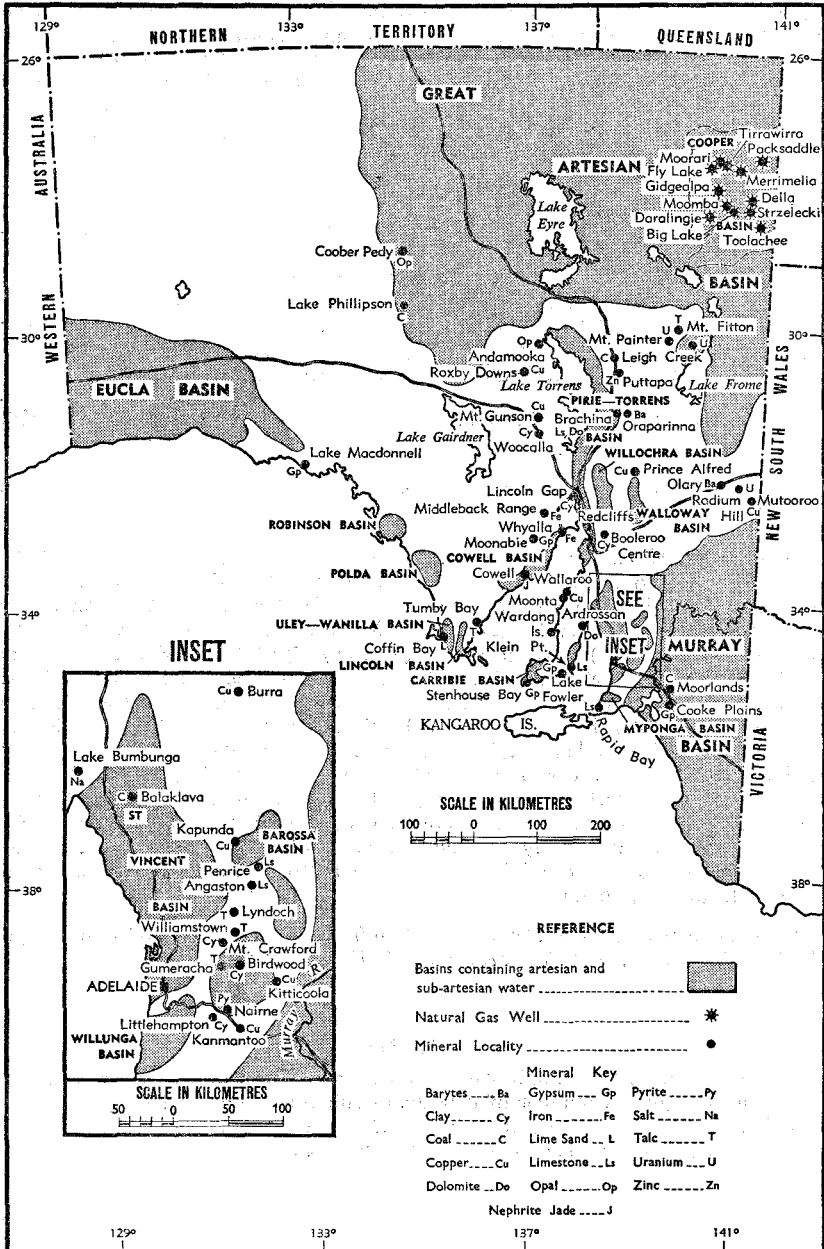
Monumental stone is produced from white marble at Angaston, black granite from Black Hill, blue granite from Kingston, brown granite from Sienna, and red granite from Calca. Billiard table slate and paving stone is supplied from Mintaro and a new operation in the northern Flinders Ranges. Walling and paving stone is also obtained from Willunga and Wistow.

Nephrite jade occurs as lenses and pods, north-west of Cowell and banded calcite for ornamental purposes has formed in narrow veins near Warrioota in the Flinders Ranges.

Talc is produced from Mount Fitton in the Flinders Ranges and Gumeracha and Lyndoch in the Adelaide Hills.

Iron ore, South Australia's most important mineral is mined in the Middleback Ranges of upper Eyre Peninsula. These ranges lie to the west of Whyalla, a coastal port with a steelworks and shipbuilding facilities, and extend discontinuously from Iron Knob in the north to Iron Duke nearly 65 kilometres to the

SOUTH AUSTRALIA
MINERAL RESOURCES AND
ARTESIAN WATER



REFERENCE

- Basins containing artesian and sub-artesian water
 - Natural Gas Well
 - Mineral Locality
- Mineral Key
- | | | | | | |
|---------------|---------|-----------|---------|---------|---------|
| Barytes |Ba | Gypsum |Gp | Pyrite |Py |
| Clay |Cy | Iron |Fe | Salt |Na |
| Coal |C | Lime Sand |L | Talc |T |
| Copper |Cu | Limestone |Ls | Uranium |U |
| Dolomite |Dm | Opal |Op | Zinc |Zn |
| Nephrite Jade |J | | | | |

south. In excess of 150 million tonnes of ore have been mined since 1900. Currently production is at the rate of approximately 4 million gross tonnes per annum with a waste to ore ratio of 3.3:1.

Copper ore, which was a major income earner for South Australia from the 1840s to the 1920s, is again becoming an important contributor to the economy as the result of increased exploration by the Mines Department and private industry. Copper ore is being mined at Burra and Mount Gunson by open-cut mining methods and, up until recently, at Kanmantoo. Kanmantoo Mine is 55 kilometres south-east of Adelaide and was being mined at the rate of 870 000 tonnes of 1 per cent copper ore a year until 30 June 1976 when the mine was placed on a care and maintenance basis, pending improvement in world copper prices. The Mount Gunson Mine is 145 kilometres north-west of Port Augusta and 56 kilometres south-east of Woomera and is being mined at the annual rate of approximately 500 000 tonnes of ore of more than 2 per cent copper. Both mines produced copper sulphide concentrates for export. The Burra Mine is 161 kilometres north of Adelaide and has the treatment capacity for approximately 300 000 tonnes of ore per annum of 1.5 per cent copper. The copper oxide produced at Burra is a premium product and is used for the production of fertilisers, agricultural chemicals and copper sulphate.

High grade zinc ore is being mined at Puttapa 30 kilometres south of Leigh Creek.

Substantial deposits of uranium have been discovered in the Lake Frome region but no mining has commenced.

Permian sub-bituminous coal has recently been defined by drilling at Lake Phillipson, 80 kilometres south of Coober Pedy. The deposit consists of a number of seams in two main elongate troughs which together total approximately 2 000 million tonnes, the largest of South Australia's known deposits. The Leigh Creek (Triassic) and Inkerman (Tertiary lignite) deposits are held by the Electricity Trust of South Australia, and together these total 1 000 million tonnes. All other known coal deposits near the surface are Tertiary lignites and their combined total is less than 1 000 million tonnes. Leigh Creek is the only deposit which is being mined at present and to date approximately 33 million tonnes of coal has been mined for power generation at the Playford Power Station in Port Augusta. Large deposits occur in both the Cooper Basin and Pedirka Basin but these are very deep (1 000—2 000 metres). An *in situ* process is most likely for the utilisation of this coal and, in the case of the Cooper Basin, no mining can be attempted before the gas or oil is depleted from the structure.

A special article on the Minerals of South Australia was included on pages 21-39 of the *South Australian Year Book* 1975.

PETROLEUM RESOURCES

Before the late 1940s South Australia had no satisfactory indigenous source of primary energy. A number of deposits of sub-bituminous coal including those at Leigh Creek, Moorlands, Balaklava and Lake Phillipson were known but none of these were considered worthy of development.

Industrial unrest in the late 1940s led to a growing awareness of the State's dependence on eastern States coal and foreign oil and led to the development of the Leigh Creek coalfield.

The search for petroleum was actively encouraged and assisted from the mid-1950s. This culminated in the discovery of the Gidgealpa gas field in 1963 by Santos Limited and the then Delhi Australian Petroleum Limited.

Following the discovery of a second major gas field at Moomba, a pipeline was constructed from Moomba to Adelaide and came into operation late in 1969.

There was a revival of petroleum exploration activity in the very early 1970s as a result of a number of farmouts being negotiated for various areas of the Cooper Basin. Following further gas discoveries an agreement was made with the Australian Gas Light Company Limited to supply gas to the Sydney area, conditional upon the discovery and proving of sufficient gas to meet their requirements and needs over a 25 year period. The required amount of gas was shown to exist by late 1972 with the discovery of new gas fields. Some sixteen gas fields in the Cooper Basin have been proven and will be brought into production over the next 25 years. The Cooper Basin has potential for still further petroleum discoveries.

Total reserves of petroleum are estimated to be 100 000 million cubic metres of natural gas and 50 million cubic metres of petroleum liquids.

Legislation was passed to expand the role of the Pipeline Authority of South Australia (PASA), formerly the Natural Gas Pipeline Authority of South Australia, to become the buyer of gas at the Cooper Basin gas treatment plant at Moomba and the seller of gas at the city gate. PASA has negotiated contracts for increased supplies of gas to Adelaide; its former role was as a transporter of gas only.

UNDERGROUND WATER

South Australia is not endowed with a generous rainfall. Only the southern portion of the State, approximately that part south of Port Augusta, receives more than 250 millimetres of rain annually and of this, only quite small areas of the South East and the Adelaide Hills have an annual rainfall exceeding 600 millimetres. The northern part of the State, comprising approximately three-quarters of the total area, is largely arid with an average annual rainfall of less than 250 millimetres. As a consequence South Australia is notably deficient in rivers. There is only one large permanent river, the River Murray, flowing through it while the few streams commencing in the Flinders and Mount Lofty Ranges are short, and seasonal in flow.

Water supply for the metropolitan area of Adelaide is derived from reservoirs in nearby ranges and from the River Murray. Reticulation of surface supplies now covers most of the Adelaide Plains, Yorke Peninsula and portions of Eyre Peninsula and the Upper South East (see map on page 400). In addition there are a number of small areas whose reticulated supplies are derived from ground-water sources by means of bores.

Groundwater suitable for various purposes is available in many areas. Pressure water, also referred to as artesian water, is generally confined to the several sedimentary basins located throughout the State. The largest of these, the Great

Artesian Basin, 1 700 000 square kilometres in area, of which 310 000 square kilometres lie in the north-east part of South Australia, covers nearly one-third of the State. The intake area for the principal water-bearing bed lies along the western margins of the highlands in eastern New South Wales and Queensland and natural outlets for the water are mound springs which, in South Australia, lie to the west and south of Lake Eyre. Deep bores are necessary to tap these waters and very large flows have been obtained. However, the water is generally unsuitable for irrigation because of its chemical composition and its use is confined to watering stock.

The Murray Basin covers 73 000 square kilometres in South Australia and extends into Victoria and New South Wales. The southern and central portions of the Basin contain waters suitable for all purposes while the water quality deteriorates steadily in a north and north-westerly direction from the southern intake area. Very large yields can often be developed from the bryozoal limestone aquifers at shallow depths and also in some places from sand dune and other local aquifers. Groundwater is used to supply the towns throughout the southern area and is also developed for irrigation and stock. At Padthaway near Naracoorte increasing use is being made of flood irrigation for vines and pastures from a high-yielding shallow aquifer.

The Eucla Basin in the south-west of the State lies partly in South Australia and partly in Western Australia. However, because of the low fertility of the area the Basin is of little importance although some of the water, which is of poor quality, is used for watering stock.

The Adelaide Plains Basin is part of the larger St Vincent Basin, lying between the Mount Lofty Ranges and the shores of Gulf St Vincent. Good quality water is obtainable in certain portions of this Basin; it is heavily used for market gardening on the northern Adelaide Plains. The danger of serious depletion of the aquifers by overpumping in this area has been recognised and use is now subject to government control. In the Adelaide metropolitan area groundwater is used from time to time to supplement reticulated reservoir water. Bores constructed for this purpose have been pumped to an aggregate rate of 45 megalitres a day for up to seven months.

The Pirie-Torrens Basin is a long narrow basin lying west of the Flinders Ranges between Port Broughton and Port Augusta and extending north to the northern end of Lake Torrens. The variable quality of the water from this basin, however, limits its use mainly to watering stock. The high salinity of the Cowell Basin on the west coast of Spencer Gulf causes it to be little used and of minor interest only. Several small basins, Walloway, Willochra, Willunga, Milang, Myponga, Hindmarsh Tiers and others are utilised to various extents for stock and pastoral uses and where the water is suitable it is being increasingly used for irrigation.

Groundwater outside the well-defined sedimentary basins is often available in useful quantities but its location is not so readily defined. Many bores in folded rocks of the Mount Lofty Ranges and elsewhere provide water supplies for towns, farms and for domestic purposes. Much of the extensive water reticulation of Eyre Peninsula is derived from shallow groundwater basins; Lincoln Basin, Uley-Wanilla Basin and Poldia Basin together yielding more than 13 megalitres a day.

It is estimated that the usage of underground water in South Australia exceeds 750 megalitres daily for all purposes. The exploration for, and development of, underground water resources is a continuing responsibility of the South Australian Department of Mines which provides the services of geologists and an extensive drilling organisation.

SOILS

General

There are many kinds of soils in South Australia ranging from free-flowing sands such as the coastal dunes, to the shrinking and swelling clays of which good examples are found near Bordertown and Tanunda, while some show a marked textural contrast with depth, such as the sand over clay soils of the South East. Not only do these soils differ in their visible attributes, such as their colour, texture, stoniness and degree of slope, but also in the properties, largely unseen, of their chemistry, their relations to air and water, and to the micro-organisms which form the soil flora and fauna.

Undoubtedly the most widespread deficiency is phosphorus—low phosphorus contents are typical of South Australian soils. The gravelly ironstone soils of Kangaroo Island and parts of the Adelaide Hills are among the most impoverished in the world, containing only between 5 and 40 parts per million of phosphorus in their surface soils, whereas the red-brown earths in their natural state contained 200 to 300 parts per million. These figures do not compare favourably with those for the soils of Great Britain, in which 600 parts per million of phosphorus is common. However, soils are changed by the treatment they receive and the phosphorus content of soils in some areas has been so built up over the years that its residual effect is now sufficient to produce a good cereal crop without the further addition of superphosphate.

On the other hand, prolonged clean cultivation in vineyards and frequent cropping in wheatland areas causes deterioration of the structure of surface soils and depletion of nitrogen. The latter deficiency can be remedied by the proper use of legumes, such as medics and clovers, during the pasture phase of the crop rotation in wheatlands. Nitrogen is one of the most mobile of the nutrient elements in soil and is highly susceptible to differences in management.

Some soils which seem to be unique to Australia, such as the mallee soils or calcareous earths, are well represented in this State. The irrigated horticultural settlements established on these soils along the River Murray have been notably successful, but where dry land arable farming is practised these soils are susceptible to wind erosion.

There are other important features that affect plant growth, such as acidity and alkalinity, supply of trace elements and so on. Information about these and their importance in different localities can be obtained from the South Australian Department of Agriculture and Fisheries and in a bulletin published by the Department entitled *Soils of South Australia's Farm Lands*. The extent of country covered by the different soil groups is illustrated by the *Atlas of Australian Soils* which is being compiled by the Division of Soils, Commonwealth Scientific and Industrial Research Organization (CSIRO). The first sheet of this Atlas, published in 1960, includes the areas of higher rainfall country in South Australia and refers to the many soil surveys made in this State.

A special article on the Soils of South Australia was included on pages 21-31 of the *South Australian Year Book 1969*.

Building Soils

The building soils of Adelaide and environs are of varying qualities as to stability and bearing capacity. In certain locations shrinking and swelling soils have resulted in considerable foundation failures. These soils, commonly known as Bay of Biscay soils, occur at their worst in areas adjacent to the Mount Lofty Ranges. The best building soils are found in areas along the coast and in a small area to the east of the city.

1.4 FLORA AND FAUNA

FLORA

A broad division of vegetation types is formed by Goyder's Line which represents approximately the 250 millimetre annual isohyet. To the north of the Line, in the Eremaean Province, lies about 80 per cent of the State, experiencing arid to desert conditions where short, erratic growing seasons prevail. Areas to the south, in the temperate region, have climates geared to an equable seasonal cycle of winter rainfall and summer drought.

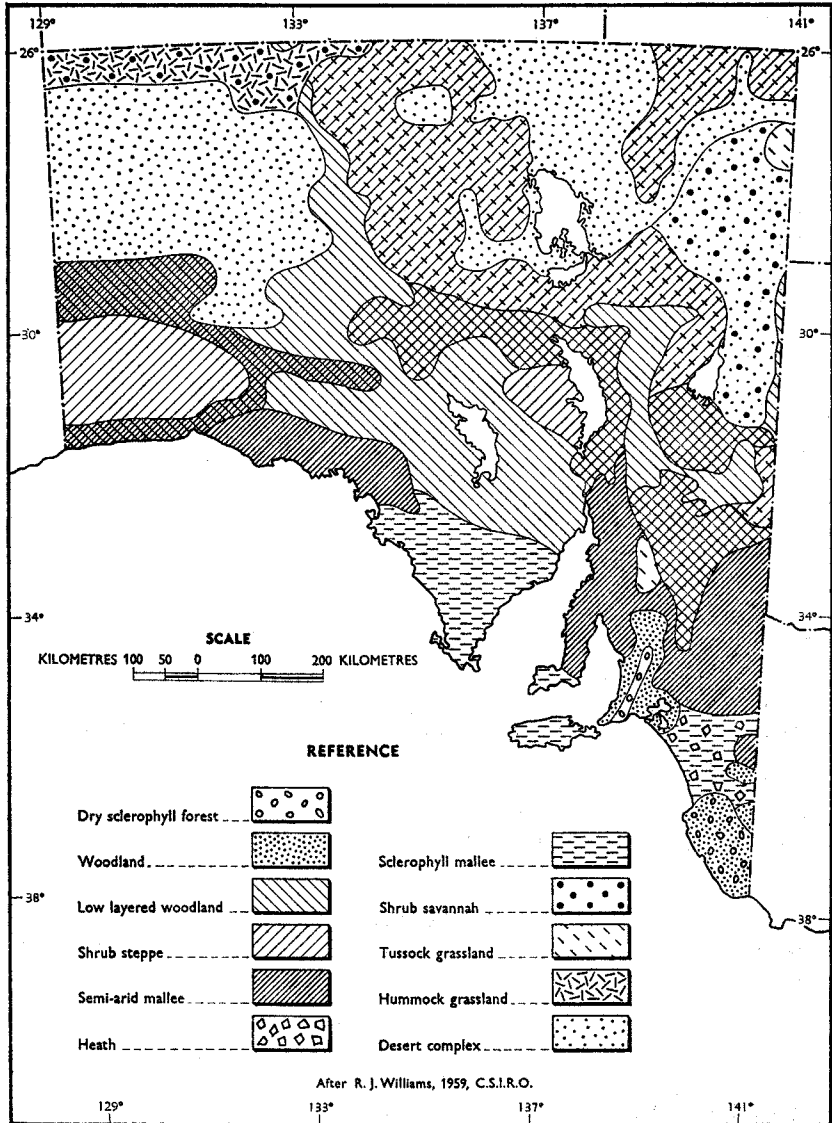
Eremaean Areas

These vast areas of inland South Australia are not well known botanically. Vegetation ranges structurally from low layered woodland, through shrub savannah, to exceedingly sparse vegetation of very low stature (shrub steppe). As in arid situations elsewhere throughout the world, therophytes are well represented and after rain these may transform the scene with prolific but transient herbage. The woody perennial vegetation is of genera adapted to the dry conditions. Predominant trees and shrubs are frequently species of *Acacia* (mulga, myall, ironwood) *Cassia*, *Grevillea* etc. but other genera (*Hakea*, *Myoporum*, *Casuarina*, and less frequently *Eucalyptus*) are often involved. Some species such as the desert oak achieve a stature comparable with large temperate zone trees. Chenopod shrubs (Blue Bush, Salt Bush) are often prominent in the shrub stratum, and *Triodia* (Porcupine Grass) in the herbaceous cover, but there is considerable diversity in the Eremaean flora. The development of cattle and sheep grazing industries and overstocking for long periods, especially in times of drought, has led to the depletion of, and alteration to, much of the vegetation of this area.

Temperate Areas

In general, vegetation characteristics of the temperate zone of South Australia succeed each other in a fairly predictable sequence from the highest to the lowest rainfalls. Under the high and intermediate rainfalls (about 750-1 000 millimetres) dry sclerophyll forest is well developed, particularly in the Mount Lofty Ranges, where it constitutes a western outlier of the dry sclerophyll forest system occurring in eastern Australia. *Eucalyptus obliqua* and *Eucalyptus baxteri* predominate, but other species such as *Eucalyptus rubida* (the candlebark) are sometimes

SOUTH AUSTRALIA
VEGETATION MAP



prominent. Such forest is replete with lesser trees *Acacia melanoxylon* (blackwood) at a lower canopy level and a rich array of sclerophyllous shrubs and sub-shrubs beneath. Most species have generic analogues in equivalent dry sclerophyll forests of both eastern and western Australia. Sclerophyll forest in South Australia has been cut over extensively and is being invaded by aliens. Lower rainfall areas down to about 400 millimetres per annum support mainly savannah woodlands and layered woodlands with South Australian bluegum (*Eucalyptus leucoxyton*) and peppermint gum (*Eucalyptus odorata*) as predominant trees. Associated trees include river redgum (*Eucalyptus camaldulensis*) especially along river and creek frontages, sheoak (*casuarina* spp.), and manna gum (*Eucalyptus viminalis*). In these vegetations the grass stratum is expressed and the shrub stratum rather suppressed. These vegetations are now almost entirely replaced by agricultural areas.

In some places on the lower rainfall extreme of the temperate zone, variant vegetations occurred. These included substantial conifer (*callitris* spp.) and conifer-eucalypt forests and woodlands (particularly in the Flinders Ranges), and areas of pure savannah, as once occurred about Burra.

The simple division of the State into Eremaean and temperate areas needs qualifying on two counts:

(i) *Heath*. Certain higher rainfall temperate areas do not support the expected vegetation as a consequence of limiting soil fertility. The Coonalpyn Downs area is an example. Here low nutrient dune fields are superimposed on the landscape and support only a heath vegetation where the rainfall regime is suitable for woodland. Such 'light land' is the scene of contemporary agricultural expansion.

(ii) *Mallee*. Intercalated between the Eremaean and temperate systems proper, there is developed in South Australia extensive mallee vegetation, dominated by eucalypts, the various stems of which all rise from underground lignotubers. The term 'mallee' refers both to eucalypt species exhibiting this growth habit, and to vegetation dominated by such species. Mallee vegetation is associated in its temperate reaches with heath, and in its Eremaean extensions with various vegetation types.

A more detailed description of the vegetation was included on pages 26-37 of the *South Australian Year Book* 1967 and should be referred to for a description of the plant species included in the vegetation formations shown in the map on page 37 of this issue.

FAUNA

South Australia, centrally situated and sharing borders with every other mainland State, is in a sense the zoological cross-roads of the continent. A number of typically western, eastern, and northern species extend to some point within the State, which has few species that are uniquely South Australian.

Only 7.8 per cent of South Australia—a fragmented, southern fringe—is favoured with an annual rainfall of 400 or more millimetres; more than 80 per cent receives 250 millimetres or less. The moister areas are restricted mainly to three peninsulas, to Kangaroo Island and the extreme south-east, and these are divided by gulfs, straits, and stretches of drier country. Further north, the semi-arid to arid zone is deeply cut into and split by Spencer Gulf and the central

highlands. Because of this geographical background the distribution of South Australian fauna, notably of birds and reptiles, is very complex.

Highly developed agriculture in the limited favourable areas and the wide-spread pastoral occupation beyond have depleted the fauna, particularly the mammals. A series of national parks and reserves is being established which will preserve samples of the various habitat types and, it is hoped, their indigenous fauna. The National Parks and Wildlife Service controls over 3 million hectares on the mainland (see Part 6.4), and administers the Flinders Chase Reserve (549 square kilometres) on Kangaroo Island which is free from the introduced fox.

The land mammals of South Australia at the time of European settlement numbered about 90 species—some 38 per cent of the total Australian mammal fauna. The two monotremes have survived; the spiny ant-eater is wide-spread but nowhere common, while the platypus (once found in the River Onkaparinga as well as in the River Murray) is extremely rare except where it has been introduced in Flinders Chase. The marsupials have been affected most severely; more than a quarter of the 50 or so species are now extinct in South Australia although a number of these survive beyond the State. Originally the marsupial fauna was relatively rich with some 45 per cent of the total number of Australian species represented.

Marsupials that are still common are the brushtailed possum (*Trichosurus vulpecula*) and the western grey kangaroo (*Macropus fuliginosus*). In the dry interior the red kangaroo (*Megaleia rufa*) at times greatly increases in numbers, probably because of changes caused by livestock grazing and the provision of extra water. Today South Australia is almost the sole custodian of the hairy-nosed wombat (*Lasiorchinus latifrons*) which is still numerous in the far west of the State but elsewhere the species has been reduced to a few small isolated colonies.

Of the native placental mammals possibly one of the 15 or so species of bats and three or four of the 18 rodents have become extinct.

A special article on the mammals of South Australia was included on pages 42-9 of the *South Australian Year Book* 1970.

About 400 of the 700 species of Australian birds have been recorded in the State, a number that includes 40 or more vagrants and non-breeding visitors. Many species have declined greatly since settlement but probably not more than two have become extinct. The diminutive Kangaroo Island emu disappeared soon after the European settlement and the night or spinifex parrot (*Geopsittacus occidentalis*) is probably extinct in South Australia.

Many species of birds can be observed close to Adelaide in the Mount Lofty Ranges and on Kangaroo Island. Mallee areas with their lower rainfall are moderately rich in bird life although the removal of native flora has caused the disappearance of many in certain districts. Within the State may be found the boundaries between numerous western and eastern species and sub-species of birds.

A special article on the birds of South Australia was included on pages 28-40 of the *South Australian Year Book* 1972.

Well over 100 species of reptiles have been recorded. Of the few that are peculiar to the State, the white dragon lizard (*Amphibolurus maculosus*) found on the salt-encrusted margins of Lake Eyre and other inland playas is of particular interest. Undescribed species of lizards are known to occur in the Flinders Ranges. A special article on the reptiles of South Australia was included on pages 32-42 of the *South Australian Year Book* 1973.

The nineteen species of frogs include one that is restricted to the State. This number is only 16 per cent of the Australian frog fauna (123 species) and reflects, in large degree, the predominantly arid nature of the State.

Marine and freshwater fishes number about 390 species—not a very rich fauna for a State with a coastline of 4 000 kilometres. There is, however, an abundance of certain species of economic importance. A special article on the freshwater fish of South Australia was included on pages 27-34 of the *South Australian Year Book* 1971.

The insects of the coastal regions show affinities with those of similar regions to the east and west, while many of the restricted number of species of the inland extend widely through arid Australia.

Among insect groups that are prominent elsewhere in Australia but are scarce in this State are butterflies and cicadas, while insects that depend on permanent streams or swamps, such as dragonflies and caddisflies, are rather poorly represented. Similarly, few species of freshwater crustaceans occur. In eastern and western Australia hosts of wasps, native bees, jewel beetles and other insects are attracted to the flowers of native shrubs in spring and summer. These insects are less numerous in South Australia largely because of the nature and limited extent of the bushland.

Among the restricted range of insects of the arid interior are a number of interesting forms. Of these certain desert-adapted grasshoppers (*Acridiidae*) are notable. Other groups with specialised species are lacewings (*Neuroptera*) and beetles and moths. Some are never abundant but the populations of others may fluctuate enormously. Moths can prolong the pupal stage to survive dry periods and may emerge in great numbers after heavy rain.

A special article on the insects of South Australian homes and gardens was included on pages 32-42 of the *South Australian Year Book* 1976.

1.5 ARCHAEOLOGY*

Evidence of ancient Man in Australia is widely distributed across the South Australian landscape. It occurs as stone tools, cooking stones, ash, shell and other encampment residues, or as paintings in caves, engravings upon exposures of rock, cairns and alignments of stone and scars upon the trunks of older trees. The subjection of this material to careful analysis by archaeologists shows it to be an important and revealing documentation about the pre-colonial past.

The following is a review of archaeological work in South Australia; it examines evidence from a continent-wide perspective and where necessary, introduces matter from neighbouring regions.

*Contributed by G. L. Pretty, South Australian Museum.

After many decades of intensive research, scientists and technologists have now developed several techniques for deriving precise ages and meaningful analysis of archaeological material. The use of mapped distributions of phenomena, the employment of careful excavation at key points, and the subjection of the evidence to both deductive and inductive reasoning are essential for meaningful analysis of this material.

The most commonly asked questions on archaeology in South Australia are:

- (1) how long has Man been in South Australia and where did he come from;
- (2) what cultural changes have taken place in South Australia since earliest times; and
- (3) how does this relate to the Australian Aborigines.

Before considering these questions, it is important to take note of certain provisos. Firstly, archaeology is still a very small and new science in South Australia. The State appointed its first full-time archaeologist in 1965. Although extremely important archaeological observations were made by several workers from the beginning of the century, overall progress has been slow. This has been very much the result of the lack of appropriate scientific support techniques until recently. Secondly, archaeological discussion often seems more concerned with certain sorts of 'inessentials' such as stone tools, than with the identity of their makers or the causes of the events which led their makers to change. However, better means of ordering cultural remains in time are now in common use, and the causes of prehistoric change figure more in archaeologists' discussions now than their mere order in time.

Time and Culture

The life of ancient hunter-gatherer Man in South Australia appears to extend back to the closing stages of the Pleistocene epoch, something in excess of 30 000 years ago. 'Hunter-gatherers' were communities which depended upon the collection of plants, nuts, fruits and the hunting of animals for food. A great number of historic tribal societies fall into this category and as a social and political organisation are distinguished from 'villagers' who depended upon domesticated plants and animals for their existence. Both are distinguished from 'civilisations' who depend upon complex social organisations to control and redistribute their means of existence.

Hunters and gatherers have a special interest for archaeologists because they represent Man's oldest and longest lived mode of existence. This is currently thought to have had its beginnings in Africa over one and three quarter million years ago, and has only been finally extinguished in Australia in our lifetime. Village communities and civilisations have beginnings which are traceable back a few thousand years and so by comparison they seem to have emerged only recently. The varieties and inner-workings of hunting-gathering communities therefore exert a deserved influence upon scientists and the preservation of these communities in their purest form in historic tribal Australia constitutes a unique challenge for Australian archaeologists to explore and clarify.

In seeking to understand and monitor the life of ancient hunter-gatherers, archaeologists pay as much attention to the distribution of water, plants and animals as cultural remains, since these natural phenomena exerted close controls upon the distribution and density of human settlement. Archaeologists also

pay careful attention to the physical form and appearance of fossil Man, since this seems to have exerted as much influence as man-made cultural artefacts in differentiating Man in ways that can be distinguished by archaeologists.

South Australia's utility as an ancient habitat seems to have been governed by water which has always exerted a greater influence than topography. Historically, the better watered and more hospitable parts of the State seem to have been the coastline and the more temperate regions south and east of the two major inland sea gulfs. Another comparatively well watered region seems to have been the Cooper-Diamantina stream basin in the far north. The remainder and greater part of the State, principally its north-west sector, seems always to have been arid and sparsely populated.

During the geological period we call the Pleistocene epoch, commencing about two million years ago and terminating 8-10 000 years ago, the global distribution of land and sea was continually altered by ice ages. The effects of these in South Australia at certain periods were to extend the coastline into what is the present submerged continental shelf. One of these lower stands of the sea is shown in the diagram on page 43.

It would appear to convert the two major ocean gulfs of the present day into low-lying valleys. The further effects of these causes upon the present day South Australian inland drainage system of lakes and rivers is still imperfectly known. Present opinions are that the distribution of lakes and rivers are much older than the Pleistocene geologically and are unlikely to have suffered undue alteration during that epoch. It is, however, agreed that changes of climate in the form of lower evaporation rates would have freshened up the lakes, and brought about marked effects upon the distribution of plants and animals. This would have had parallel effects upon hunting and gathering by ancient Man.

In an essentially stable landscape, occupied over tens of millenia by Man whose life was governed by relatively unchanging environmental controls, it should be possible to encounter habitation sites used by Man and maintained across vast expanses of time. The field evidence supports this as it is not uncommon in Australia to encounter sites which yield material at least 20 000 years old. As a theatre for clarifying the detail of ancient hunter-gatherer existence therefore, Australia has some unique and significant advantages.

Man's Existence in South Australia

Within Australia recent work has uncovered human remains and cultural remains from contexts extending back 30 000 years. Some stone artefacts made by Man have come from contexts claimed to be as old as 70 000 years. In South Australia, the oldest human remains have come from contexts which appear to parallel those which have been dated to 30 000 years before Pleistocene (B.P.).

The Australian situation is placed into better perspective when compared against the ancient human sequences of Indonesia. From Java it is possible to obtain a particularly long and important human fossil record which goes back to the early Pleistocene. It seemed matched in its antiquity solely by the African fossil sequence. Like the African sequence, it yields specimens of modern Man (*Homo sapiens*) of his precendent form (*Homo erectus*) and signs of a still earlier ancestral form (*Meganthropus*). This sequence appears to be at least three quarters of a million years old, but could exceed this

SOUTH AUSTRALIA: PROBABLE COASTLINE DURING THE LATE PLEISTOCENE

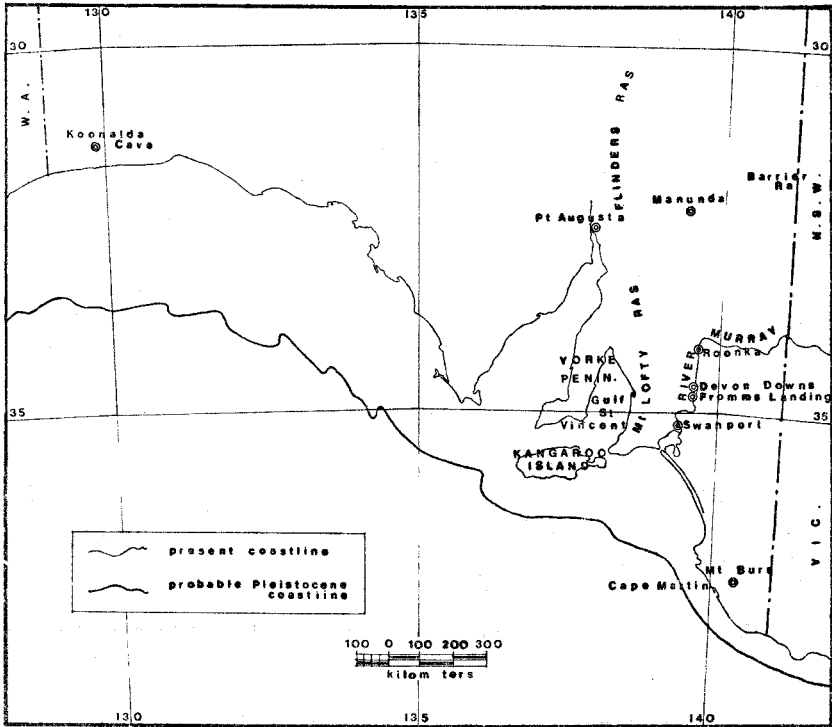


figure. Tools do not appear at the beginning of the sequence and when they do their relationship with their original fossil makers is uncertain. Geology suggests that they were made by representatives of *Homo erectus*. The type name given to this tool industry is Patjitanian.

The significance of this for Australia lies in the geographical closeness of Java to Australia and in Java's status as one of the two major global centres of human evolution. Despite its proximity, Australia is separated from Indonesia by an extremely effective geographical barrier, a deep gulf, and its success as an obstacle to migrating living forms is demonstrated by the completely differing animals and vegetation found on either side of it. For many years it has been accepted that Man must be a relatively recent settler, a migrant of some 20 millenia ago, when low sea levels reduced the oceanic barrier to its minimum. The recent discoveries of longer fossil and industrial

traditions in Australia, however, has enforced a more critical re-examination of this idea. Both records are being pushed back much further in time than the closing phases of the Pleistocene and begin to show some parallels with the Indonesian sequence.

Man's success in bridging oceanic gulfs that prevented the free interchange of animal forms, explains something about his cultural status which is far more important than his toolmaking capacity. To establish the moment of this feat's accomplishment, and to recover some evidence for Man's physical appearance and fossil status at that time, will improve our knowledge of Australia and will enhance our knowledge of human history in general.

The advent of Man in Australia has once more become an open question. Recent Australian finds of fossil Man, which have helped to confirm the status of the older finds of years ago, are all representative of the most recent, *Homo sapiens*, form in the human evolutionary sequence. They compare so well with the finds in Java and Borneo that the term 'Australoid' has been applied to the group as a whole. The antiquity of the oldest of them has been assessed at 25 000 years by radiocarbon. These finds have been made principally in the Murray-Darling basin of western New South Wales and northern Victoria. The two major sites, Lake Mungo and Kow swamp, are already widely known publicly. Tool traditions and some settlement patterns have been found in association with these fossils and can be related to them. The stone component of the tool industry, principally choppers and scrapers, is discussed more fully below.

The recent finds of far older tool industries of a completely different character in the Maribyrnong Valley of southern Victoria, however, direct our attention to the Javanese sequence. These industries include simple but distinct appointed instruments which are called 'Polyhedrons'. They seem to represent a truly fossil and extinct technology because they have no discernible descendants in the tool traditions of the later Pleistocene. More significantly, they bear a close similarity to certain distinctive tools of the ancient Javanese Patjitanian. The implications of this parallelism at this stage are suggestive only, but deserve careful attention. It would seem that the possibility of antecedents to *Homo sapiens* in Australia can be seriously considered.

The diagram on page 45 shows the parallelism which is emerging between the Indonesian and Australian sequences and which makes older constructs about the antiquity and origins of Australian Man so much more difficult to hold.

Close study of the Australian fossil remains themselves has not been without its surprises. There are still too few of these for adequate study, however a consensus of opinion is emerging. This appears to pivot on the need to accept a greater complexity of physical form for the ancient Australians than is implied by the recent populations. Comparatively modern forms go back very far while comparatively primitive forms come forward almost to the close of the Pleistocene. Moreover, both forms appear to have co-existed at the same time in the same region. This co-existence of variant populations in a common cultural environment runs counter to orthodox notions about cultural and biological development being dependent on each other. Nevertheless at the moment it is suspected that in late Pleistocene, Australia appeared to have a human type which exhibits traces of two separate

prior strands. One of these seems to have survived into the modern era as a widely dispersed group with relatives in Tasmania and in Melanesia, while the other survived as the principal strand in the historic Australian population.

Fossil human remains have been recovered recently from the Lower Murray Valley in South Australia from soil contexts that correlate with the soils that have produced Pleistocene Man in western New South Wales. Their antiquity and identity have still to be confirmed. Although nothing has been found which can compare with the extreme ancientness of the Victorian artefact finds, study of the material emerging from confirmed late Pleistocene contexts in South Australia give cause for speculation.

At present, three sites are being investigated and together they straddle the full breadth of the State at its southern margin. Considered as a group they each show considerable differences. They thus invite identification as relatives deriving from an ancient and established common stock rather than colonies of recently arrived immigrants. For the present, they constitute the oldest vestiges of a cultural tradition whose changing character is only beginning to emerge through excavation.

Cultural Changes in South Australia

Excavations and surveys in South Australia now provide a substantial human record. This record spans the period of time during which the State's landscape changed to assume its present form as the Pleistocene epoch came to its close. This change which split Kangaroo Island from the mainland (together with Tasmania and New Guinea), seems to have brought about a redistribution in the pattern of human settlement. In order to traverse this expanse of time and space adequately, it is necessary to select certain key themes and areas namely, (1) a review over what is known from the Pleistocene, (2) the two regions, the Murray-Darling basin and the South East of the State, for which there are reasonable records, and (3) the areas of art and the structure of long-perished societies.

An Emerging Pattern of Pleistocene Existence

In South Australia intensive investigations have now been carried out at three points. The first of these is on Kangaroo Island, where several localities have been explored. The second is on the Nullarbor Plain, where the deep cave at Koonalda has been investigated, and the third is in the Lower Murray Valley where one site, Roonka, has produced evidence of occupancy during the Pleistocene.

Circumstantial evidence for the Pleistocene existence of Man in Australia was first assembled over thirty years ago on Kangaroo Island. There, attention was drawn to the possible relationships borne by finds of distinct stone tools to ancient and higher stands of the sea. The relationships of these tools to others from South East Asia, where they were also considered to be extremely old, was remarked upon.

The form of the tools collected from these sites is interesting and can be divided into two principal classes. The first is a series of hammers or crushing stones, derived from smooth rounded pebbles or boulders, which exhibit almost no trace of prior preparation and are identifiable solely by the faceting and bruising to their surface caused by their use. Some flattish lower

millstones have also been found. The other principal class of tool is a heavy chopping and cutting instrument made by removing flakes of stone from one face of a block or boulder in order to create an even cutting edge. The choppers assume various forms according to whether they are made from blocks, large fragments of stone or boulders. As tools they appear to have been simply and readily fashioned with multi-purpose functions and probably hand held.

The original investigators on Kangaroo Island identified these stone tools as belonging to the Pleistocene and the name Kartan was given to the industry as a whole. Further work on the mainland prompted the suggestion that these industries recurred in ancient contexts there and that they were followed by subsequent traditions of a differing character. These were called the Tartangan, the Pirrian, the Mudukian and the Murundian. Each of these could be characterised by their possession of distinct tool inventories. As a sequence they were assigned to the post-Pleistocene period.

The past decade of excavation in other parts of Australia has considerably modified and clarified that original succession. In the process the Kangaroo Island situation, as originally defined, came to assume an increasingly aberrant appearance. Recognising that much of the earlier work took the form of collecting from land surface exposures, the island's resubjection to investigation by excavation was ordered recently. The renewed work began in 1972 and the results have still to appear. Preliminary indications suggest that the archaeological situation is much more complex than was suggested by the earlier work. A greater range of sites have been found and additional classes of flaked tools have been uncovered. This has reduced some of the contrasts between Kangaroo Island and the mainland which the classic work of 40 years ago had come to imply.

Two additional classes of tools, scrapers and a rude but effective axe equipped with hafting notches, have helped to implant the island more effectively into the wider context of Pleistocene Australia. Most importantly, radiocarbon has given definition to parts of that sequence, confirming its Pleistocene age and suggesting that, although cut off from the mainland by rising sea levels, Kangaroo Island, like Tasmania, supported a population of its own for some time afterwards. The cause of its extinction, long before the advent of the Europeans, remains conjectural.

Another and differing aspect of Pleistocene life in South Australia has been presented by recent work in deep caves on the Nullarbor Plain. Radiocarbon has shown Man to have been in established occupancy for several millennia longer during the Pleistocene here than at any other locality. It also shows that this area was completely deserted well before the Pleistocene came to a close. The dates began at 31 000 B.P. and conclude shortly after 14 000 B.P.

Koonalda, the principal site so far investigated, is a large cave system with evidence of industrial activity and art but has not yielded evidence of habitation. This is interesting because it suggests the site to be a Pleistocene quarry and art grotto of a type already known in other continents, but hitherto not expected as occurring in Australia.

The stone found in this region is particularly suited for the carefully controlled flaking of fine stone tools. At this period, however, stone implement-making shows little evidence of sophistication. This, together with the presence

of a high proportion of partly fashioned tools and quarry debris, has tended to conceal the technological relationships between this and other Australian industrial traditions of the same age.

The associated art consists principally of linear patterns incised into the cave walls. There is some evidence also for sanctioned pathways on the cave floor made by marking and repositioning certain rubble boulders. The wall engravings are simple repeated patterns of lines, some of them cross hatched, and are distributed fairly widely along both walls of one subterranean chamber. The same cave walls are pocked by holes left behind by the mining of flintstone nodules for tool making. No clear parallels to this art have come from any other Australian site.

Cultural Evolution in the Murray-Darling Basin

The presence of Pleistocene Man on the Nullabor and the character of the remains therefore constitute something of an enigma to archaeologists at the moment. The confirmation of Man's presence in the Lower Murray, while it has taken a long time to confirm, is less surprising in view of the already proved importance of the large Murray-Darling Basin as a cradle of ancient Australian cultural development. The principal value of this river basin system to archaeologists has been its remoteness from the coast and therefore its invulnerability to the destructive effects upon ancient sites by the retreats and advances of the sea. It is not, however, without considerable problems of its own, most of them brought about by the cutting and filling effects of streams and floods upon the landscape. Several points in the basin in New South Wales, Victoria and South Australia have now been tested, and broad cross-country parallels are being demonstrated.

The greatest value of the Basin is in showing the uninterrupted continuity of basic hunter-gatherer modes of existence as the Pleistocene passed into the Recent.

Settlement and Economy

Save for occasional lakes and minor channels, the vast extent of the Murray-Darling Basin is virtually uninterrupted by landscape relief of any kind until the slopes of its hilly margins are met. This means that the open range pattern of existence followed by hunter-gatherers would make for relatively little diversity. The field evidence for settlement and economies supports this.

Occupancy appears to have taken the form of open air campsites selected to obtain maximum advantage from natural shelter and supplementing it with built structures where this proved inadequate. Water rather than shelter was the principal determinant and this in turn governed the sites of ancient settlement. Stray finds of artefacts and even fire places can be found virtually anywhere. In some places, where uncompacted drifts of soil have accumulated close by rivers and lakes, sites have been found which preserve sustained and well stratified sequences of habitation detritus.

Examination of this detritus provides an immensely long record of attachment to hunter-gatherer ways. Except where climate and population controls have intervened, there exists a continuous record of ash, cooking stones and the residues of fish, shell fish, mammals and useful plants. A tradition so seemingly lacking in innovation therefore requires a look beyond the food quest for other possible explanations and focal points of human energy

and artifice. There is some evidence of an interest in inventing and improving the instruments of everyday existence but even this fails to account for a human spirit so obviously at rest in its world order.

Technology

The evidence of industrial activity is full of interest. Available evidence shows a tradition which evidences an extremely ancient facility for innovation but seems to have evolved slowly thereafter and in inconspicuous detail by contrast with the rapid technological revolutions that have characterised the cultural histories of less isolated continents.

Assessed in its broadest terms, the industrial record is interesting for showing extraordinary continuity and conservatism at some points and considerable change and innovation at others. The conservatism is shown in the food pounding and grinding tools which seem to have changed little in their essential form from the Pleistocene onwards. No doubt there was no need for their form to change given that their functions remained constant. Conservatism may also be illustrated by the record of the stone axes. While Australia's possession of the oldest notched and polished axes in the world (20 000 years old) is an archaeological fact of fairly recent currency, it would appear that the form of axes changed very little over the millenia to follow. This picture still needs considerable filling out because although the distribution of ground-finished axes is wide, it is far from continent wide and the best dated specimens still tend to cluster within the last three millenia. To date, no firmly dated specimens of ground-finished axes have come from South Australia.

Sharp tools of stone, manufactured by flaking techniques, have shown more of a tendency to change. Assuming that the flaked blocks, pebbles and fragments from Kangaroo Island and adjacent coasts are still the oldest, examination of the Murray-Darling Basin discloses a somewhat similar tradition developing in parallel.

The principal tools fall into two major classes. One of them is a type prepared from large heavy blocks of stone which are fashioned into roughly oval shapes around a sharp steep margin. The tendency of many of these blocks to assume a steep sided or domed appearance when stood on their base has caused them to be called 'Horsehoof' choppers. They are generally regarded as having functioned as hand-held chopping tools. The other major tool class is comprised of 'Scrapers' fashioned from selected fragments of stone with their overall shape and edges improved by chipped finish. These served a variety of functions of the cutting and scraping sort, and these functions in turn governed the shape of the tool. Archaeologists have called this technology the Australian Core Tool and Scraper Tradition.

The four major tool families of chopper, scraper, pounder/grinder, and axe maintained a continuity of tradition in ancient Australia from the Pleistocene right through to the period of European colonisation. The sole major and transforming interruption of this record was the simultaneous introduction of a series of finely made and highly differentiated flaked tools about seven millenia ago. These fulfilled the functions of tipping projectiles or serving as cutting edge elements to tools of a composite construction. The tradition spread to South Australia about 5 000 years ago. In greater part it appears to have passed out of the scene about 1 000 years ago, presumably having given way to technologically superior objects of materials other than stone. It is called the 'Small Tool Tradition'.

These tools compare to similar traditions which seem to appear in other parts of the world at the same time. They are referred to sometimes as Mesolithic, sometime as late Stone Age, and sometimes as Epipalaeolithic industries. In form they subdivide into three principal classes: backed blades, points, and chisels. There can be a number of variants within each class. The points and the backed blades are all thought to relate to the tipping of spears, although cutting and piercing uses have also been proposed. The chisels, the most widely distributed class, functioned as a general purpose woodworking instrument.

Reviewing both successive traditions as they developed in the Murray-Darling Basin confirms the impression that, notwithstanding its effect upon the distribution and continuity of occupancy for coastal sites, the geographical and climatic effects of the closing Pleistocene had little effect upon human cultural traditions in southern Australia. When change did occur, its cause cannot be attributed to climate. This picture of continuous evolution is reflected in a number of sites in South Australia. It is demonstrated by the sites which have been excavated in the Lower Murray Valley. They include rock shelters, such as at Devon Downs and Fromms Landing, as well as open sites such as Tartanga.

The interruptions and dislocations of this process by the rising post-Pleistocene seas can also be observed at coastal sites in the South East. Open air camps have been found in ancient dune systems beneath recent beach sand. Archaeological material has come from each level. The record has been enhanced by excavations in rock shelters and surveys of material collected from exposed and eroding land surfaces. The overall picture now seems well enough defined for its wider application and testing in other parts of the State.

The Australian bone tool industry, viewing the continent as a whole, extends back into time almost as far as the stone tools. The earliest finds from south-western Western Australia and western New South Wales fall into two principal classes—either for pinning and piercing or for the tipping of projectiles. Although those occurring in South Australia are all post-Pleistocene, they fall into both classes. It has been strongly argued that some of them were used as gorges for catching fish, but the evidence is ambiguous. Also deserving of mention is the use of bone, together with teeth and shells, as beads, pendants and other forms of body ornament, but very few of these have been found.

The recent findings of wooden implements from archaeological contexts is of striking importance. Excavations in a peat swamp not far from Millicent have yielded parts of pointed wooden stakes, wooden spears and clearly identifiable boomerangs from contexts dating back to 9000 years B.P. The field work however has only recently been completed and the material is still in the course of restoration.

Significant developments were taking place in regions surrounding Australia throughout the span of time covered by the Small Tool Tradition. The tradition's swiftness of spread across the continent, its appearance of having appeared fully formed as a comparatively sophisticated technology without signs of local ancestry, and its similarity to a large family of stone tool traditions with a wide spread across South East Asia and beyond, have for long pointed to its origin as lying somewhere outside Australia.

This has created a problem for Australian archaeologists because the period of this tradition's appearance in Australia marks a period where South East Asia and Melanesia underwent significant transformations in technology and economy. Agriculture was well established in South East Asia and Melanesia in the sixth and fifth millennia before Present; pottery had already been in widespread use for some 2 000 years, and metallurgy was just developing. Moreover, these inventions' distribution was not restricted to cultivating and village dwelling peoples for it is known that metal, pottery and grain were used by hunter-gatherer communities in the same places. Therefore it is not possible to explain why similar technological traditions failed to spread into Australia. Also, commencing some 3 000 years ago, substantial and far reaching redistributions of populations took place throughout Melanesia and the Pacific Ocean.

These trans-oceanic migrations of seafarers, the best known being the historic Polynesians, have proved to have affected every conceivable island group in the Pacific. It seems extraordinary that the vast continental bulk of the Australian continent should yield no real traces of them. Not only has Australia sustained the longest lived and the least modified hunter-gatherer tradition, but that in order to retain its integrity, it must have demonstrated a highly selective preference for certain kinds of technology and may also have resisted cultural innovations. This constitutes a severe challenge to the assumption that a superior culture inevitably replaces its inferiors.

Art and the Disposal of the Dead

Although radiocarbon has put a beginning and an end to the art history of Koonalda Cave, the picture elsewhere is nowhere near as clear. Nevertheless the bare outline of a style evolution is beginning to emerge.

The two principal media are paintings and engravings. Although paintings are distributed widely throughout the State, their association with recent surviving tribal communities in remote areas and their tendency to fade in areas where the tribes have gone, tend to support their assignment to a later period.

The rock engravings however are another matter. Wide in their distribution throughout the State, they are generally regarded as relics of ancient ritual practice. They tend to occur in the more arid areas and their relative infrequency in the more southern, cooler and wetter parts is curious. Rock engravings occur widely throughout Australia as a whole and broad regional differences have been noted. Save for a few sites in New Guinea, however, they are not reported from neighbouring regions.

The engravings tend to occur on flat sloping rock surfaces. They consist of tableaux of massed symbols varying in density and composition. Many symbols are identifiable as the tracks of creatures including Man, and the above-ground outline of small-footed reptiles. There are a number of accompanying figures whose identity has defied conjecture. There is no evidence of motif organisation that would suggest pictorial or serial meaning. The inference has therefore been drawn that it was the physical act of making pictures on rock at any one of these points which fulfilled the art's purpose. This has justified its attribution to ritual practice.

In South Australia, the sites which have received most careful study are those located in the low-lying broken country that runs out north-east from the Flinders Ranges to the Barrier Ranges of western New South Wales. One relatively confined drainage system, the Manunda, has been paid systematic attention. There, an association has been noted between rock art sites, water sources and camp sites. The similarity of this with the layout of historic Australian ritual centres has been pointed out. These sites are striking for the richness and density of their art in an area which is arid, relatively inhospitable, and ever since first explored, has seemed remarkable for its lack of evidence of Aboriginal inhabitants.

Little is known about the age and internal development of this art. Working from stylistic analysis, one of its components, localised arrays of straight line gashes, are considered to be older than any of the pictorial motifs. This makes interesting comparison with the linearity of patterning found in Koonalda. Whether the general inventory of pictorial symbols exhibits internal evolution, however, remains unknown. Dating this art has proved difficult as the exposure of these sites' situation has tendered to deny them a relationship with any dateable material. Most engravings have taken on a patina identical to the rock they are found on which implies some antiquity.

There are two hints of a chronology. One is the presence of a site in northern Tasmania which implies an establishment before the post-Pleistocene rise in sea level. This should make it older than 10 000 years. The other comes from the Northern Territory, where fragments of engraved rock shelter ceiling have been excavated in contexts dated between 6-7 000 years ago.

In archaeology, it has been investigation of the accommodation and equipping of the dead which, more than anything, has given richness of detail and identity to the life of the ancients. Tombs have yielded up mortal remains, thereby permitting reconstruction of their original physical appearance. Tombs have also frequently yielded up complete and undamaged specimens of objects which the general perishing effects of time on other archaeological sites has destroyed. In recent decades, studies of ancient skeletons excavated in Africa, Europe, America and Asia have made impressive contributions to our picture of ancient hunter-gatherer Man. Australia has constituted something of a gap in this picture from its lack of suitable material for study. Recent work is beginning to repair this deficiency.

The recovery of complete and undisturbed tombs of the ancient hunters and gatherers is particularly important however, as these societies were usually small and formally organised communities for whom the death of any one member constituted a shock to the entire community. The obsequies of death therefore, tended often to pictorially act out the felt relationship deprived of the living by the deceased. Recovering these relationships by analysis often captures a glimpse of a society in action, which attention solely to tools and food remains, could never conceivably hint at.

The mortal remains of ancient people have been frequently reported in South Australia, but the only part of the State for which there is good information is near the River Murray. The principal site so far reported on was located at Swanport where it was investigated in 1911. Further finds have been made at several points upstream since then, but their significance awaits

final assessment. A review of the evidence so far from all sites suggests that attitudes towards the dead saw considerable change in evolution over the past ten to eighteen millenia. There are signs of an evolution in burial modes, as entombment in sactioned places gave way to delayed sealing of the pits and finally to disposal within the bounds of the camp itself. There appear to be grounds for differentiating socially between the very young, the mature and the old; there is some evidence for a dual division of society and for the conferring of some form of special status upon certain people. This has been a significant advance in our knowledge of ancient Australian society and raises several points of interest to the evolution of hunter-gatherer societies in other continents.

Protohistory

Probably less is known about the final phase of South Australian prehistory than any other phase of the State's archaeology, which is surprising considering that archaeological material for this period is likely to be richer, more plentiful and densely distributed than for any earlier period. A significant proportion of field monuments such as stone circles and scarred trees must belong to this phase.

Despite these apparent advantages, archaeologists have gleaned little from this period. Where it has been investigated, the archaeological record has seemed very sparse. The excavators of the River Murray rockshelters have all noted the poverty of artefactual evidence in the topmost levels. Save for chipped stone-wood working chisels all the characteristic types of the Small Tool Tradition have disappeared. The principal material of the sites is food refuse. The same picture seems to hold for most sites so far excavated, and the inference placed upon this is that Man's adaption to his environment had become so complete, that familiarity with the ways of creatures and plants and artefacts derived of perishable materials had come to substitute for the stone tools of earlier times. Putting this terminal phase into chronological terms means a span of time covering the last thousand to 1 500 years before Present.

Some additional tool forms appear to make their first appearance. They include skin flensers of slate and crude choppers made from smashed water worn pebbles. They do not, however, alter the overall picture greatly.

This knowledge that the traditional necessities of archaeological analysis, stone tools, are rare in deposits of the last thousand years may have tended to discourage archaeologists from paying much attention to it. Until recently and before the invention of radiocarbon dating, most archaeological periods obtained their identity and antiquity from the distinctive character of the imperishable cultural material they contained. The situation today, however, is completely transformed and radiocarbon permits the identification of finds and archaeological phenomena of many kinds. There seems no good reason, therefore, why the systematic identification and investigation of recent sites should not be resumed.

Some notion of what this investigation could yield can be gained from study of the excavations in Kongarati Cave in 1934. This cave is situated on the east coast of the Gulf St Vincent just south of Adelaide.

Trowelling and sieving trenches into its floor brought to light an immense amount of well preserved vegetable materials and food remains. This has contributed significantly to the knowledge of Aborigines in this area and in many instances added to the earliest recorded descriptions of these people. Important finds include fragments of fishing nets, portions of wooden spears, and the remains of friction drills for making fire. The store of artefacts for the historic Aborigines is not rich enough to permit the overlooking of evidence like this.

Serious attempts are being made to identify and map the monuments of the immediately prehistoric or, as it is often called, the protohistoric period. Serious attempts are also being made to study and describe collections of artefacts and collections of early manuscript records. However, at the moment no one is subjecting this phase to deliberate archaeological enquiry and it remains the least justified and therefore most grave of gaps in the State's archaeological record.

Acknowledgments

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Stone choppers, Pleistocene type, Kangaroo Island.



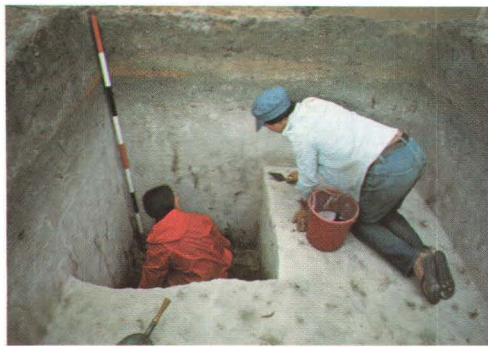
Stone hammer and food mortar, Pleistocene type, Kangaroo Island.



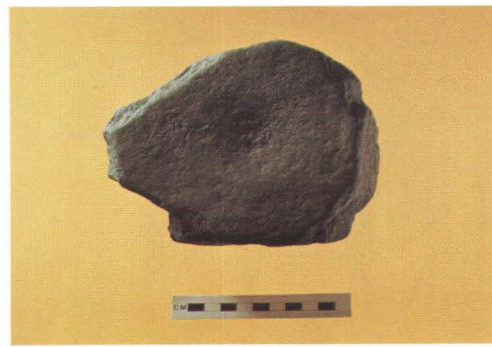
R. J. Lampert
Waisted stone axes, Pleistocene type, Kangaroo Island.



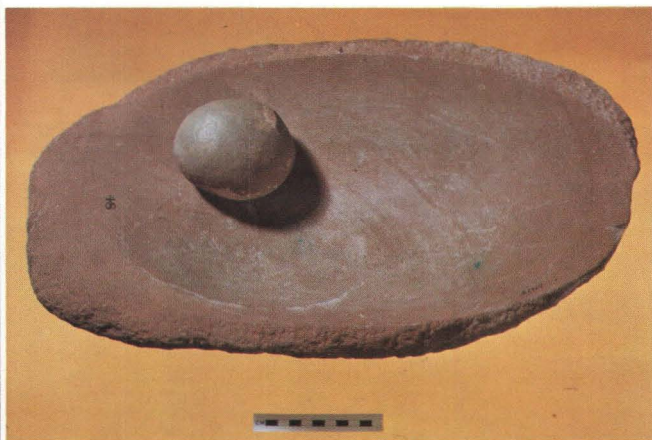
Stone axes, waisted and edge ground, Late Pleistocene, South Australia.



R. J. Lampert
View of pit and soil profile at Pig's Waterhole, Kangaroo Island.



Food mortar with pit, Late Prehistoric, Lower Murray Valley.



Pebble grinder and millstone dish, Late Prehistoric, Murray-Darling Basin.



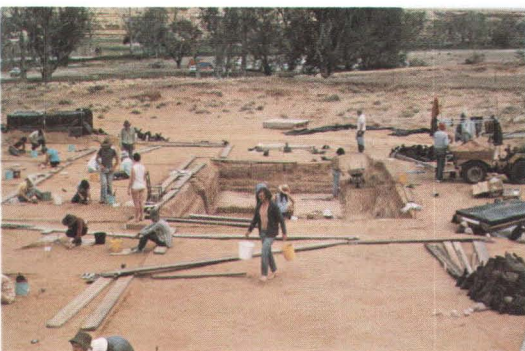
Pair of stone slab grindstones for seed, Protohistoric, Central Australia.



D. Jacka
The main chamber-gallery of Koonalda Cave looking towards entrance. Excavated pit is by the figure at lower right.



S. A. Gallus
Specimen of the linear patterns incised into the chamber-gallery walls, Koonalda Cave.



Lloyd Chilman
Roonka Flat Dune, principal trench in course of excavation.



Flake scrapers (above) and core scrapers (below), principal tool classes of the Australian Core Tool and Scraper Tradition.



Backed blades. Points (above) and geometric microlithic (below), Australian Small Tool Tradition.



Projectile points, lanceolate, Australian Small Tool Tradition.



Flake scraper chisels, Australian Small Tool Tradition.



Flake scraper chisels, microlithic, Australian Small Tool Tradition.



Bone projectile points, Australian Small Tool Tradition.



Bone pins and awls, Post-Pleistocene, Lower Murray Valley.

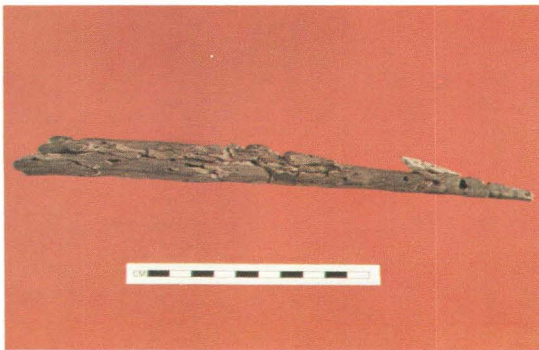


R. Leubbers

Wing fragment of wooden boomerang from peat swamp, dated to c. 9500 B.P. South East of South Australia.



Pendant from fossil oyster shell, biperforated, Post-Pleistocene, Lower Murray Valley.



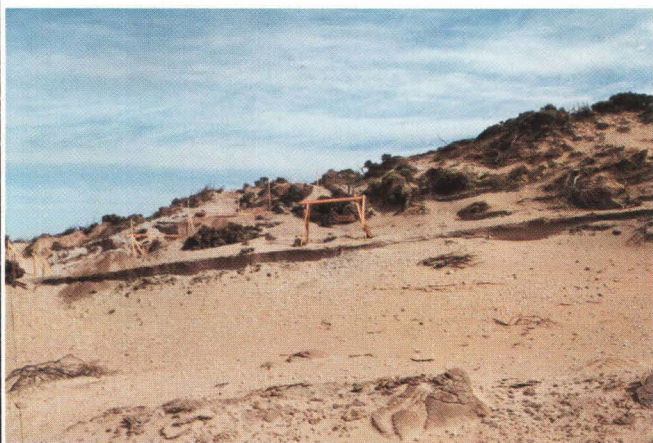
R. Leubbers

Barbed tip of wooden spear from peat swamp, dated to c. 8000 B.P. South East of South Australia.



R. Leubbers

Excavation of peat swamp, South East of South Australia.



R. Leubbers
Excavation of coastal dune, South East of
South Australia.



G. L. Pretty
Ancient rock engravings, Manunda Creek
region.



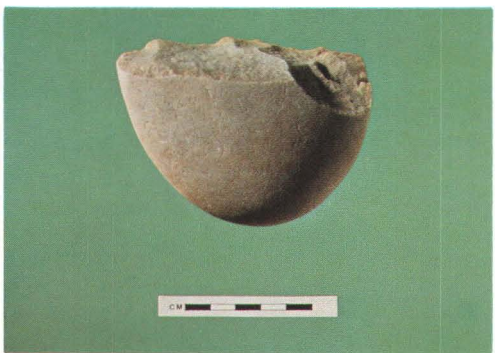
G. L. Pretty
Ancient engraving of a lizard, Salt Creek,
Olary District.



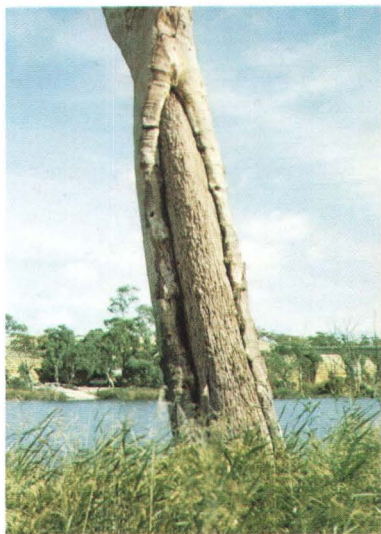
G. L. Pretty
Stone circle, Protohistoric, Olary district.



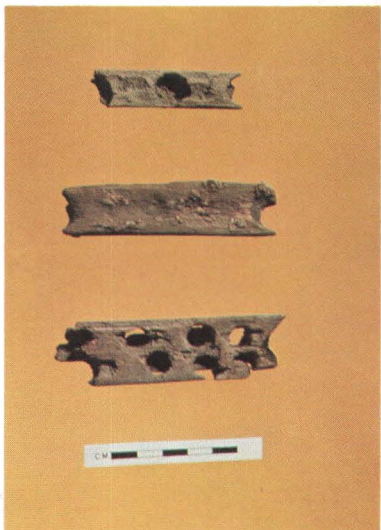
G. L. Pretty
Remains of bough shelter, Protohistoric, Olary district.



Chopper from broken beach pebble, Protohistoric, from coastal dune south of Adelaide.



G. L. Pretty
Trunk of tree scarred by removal of bark for canoe, Protohistoric, Lower Murray Valley.



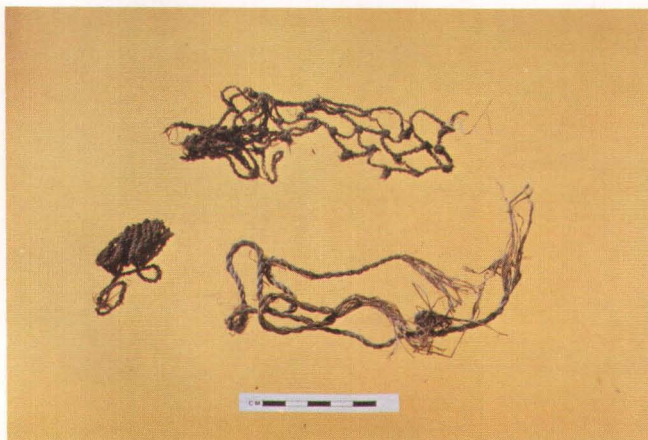
Fragments of fire drill apparatus, Protohistoric, Kongarati Cave, coast south of Adelaide.



Slate flensing tool, Protohistoric, Adelaide.



Fragments of wooden spears, Protohistoric, Kongarati Cave, coast south of Adelaide.



Fragments of netting, Protohistoric, Kongarati Cave, coast south of Adelaide.

PART 2

EXPLORATION AND COLONISATION

EXPLORATION BEFORE COLONISATION

The Dutch made the first recorded discovery of Australia in 1606 on the Gulf of Carpentaria, and Dutch ships were sighting Western Australia from 1616 onwards. It was in 1627 that the first part of the South Australian coast was discovered when the *Gulden Zeepaard* under the command of Francois Thyssen examined the coastline from Cape Leeuwin to the islands of St Francis and St Peter in the far west of South Australia. On board the *Gulden Zeepaard* was Pieter Nuyts, 'Councillor Extraordinary of India', after whom this area was named 'A Landt Van P. Nuyts'.

As the South Australian coast presented no evidence of prospects for trade, the Dutch, being essentially a trading nation, were not inclined to closer investigation. Indeed, so little interest was displayed in this section of the Australian coastline that it was 165 years before the next recorded sighting of South Australia was made, and this was by a French explorer.

Rear-Admiral D'Entrecasteaux, who had been searching all around Australia for the lost French explorer La Perouse, sighted land south of Cape Leeuwin in December 1792 and examined the cliffs of the Great Australian Bight. He sailed to the head of the Bight, but then after so many miles of barren coast abandoned hope of finding anything other than desolate country, and sailed south for Van Diemen's Land (Tasmania). The early impressions of the South Australian coast were therefore most unfavourable and tended to discourage further investigation.

The British who followed were far more interested in the possibility of colonisation to help ease their population problem at home, and consequently, once the effects of early discouragement had worn off, they began to take an interest in South Australia as a possible site for a new colony. Lieutenant James Grant was the first British explorer to sail along the South Australian coast, sighting the extreme easterly shores of South Australia about 1800. While in Cape Town he had been informed of the discovery of Bass Strait and was instructed to sail through it in the *Lady Nelson* on his way to Port Jackson. Sailing along the extreme south-east coast he named Cape Banks, Cape Northumberland, Mount Schank and Mount Gambier.

The first notable British contribution to the exploration of the South Australian coast came, however, with the voyages of Matthew Flinders in the *Investigator*. With the support of the President of the Royal Society, Sir Joseph Banks, Flinders sailed from England on 18 July 1801. On his voyage of circumnavigation of the Australian continent he thoroughly explored the coast of South Australia between January and April 1802. In addition he discovered the Gulfs and Central Highlands, thus solving the question of whether a north-south strait divided the Australian continent in two. More important was the fact that Flinders reported very promising country for settlement. Many places along the coast carry the names given by Flinders; several of these were named after places in his home county of Lincolnshire, e.g. Port Lincoln, Sleaford, the Althorpes and Boston Bay, while others include unusual names such as Backstairs Passage, The Pages, and Antechamber Bay. Flinders was in fact the first man to explore South Australian waters between Nuyts Archipelago and Encounter Bay. It was at Encounter Bay on 8 April 1802 that he met Captain Nicolas Baudin, the French explorer, heading along the coast from the east in *Le Geographe*.

Baudin, in command of *Le Geographe* and accompanied by *Le Naturaliste*, left Le Havre in October 1800 with instructions to explore several specified regions including the then unknown portion of the southern coastline of Australia. After being delayed in the East Indies and Van Diemen's Land, Baudin sailed westward and charted the mainland coast from Western Port to Encounter Bay, where he met Flinders. The object of Baudin's expedition was to make scientific discoveries on behalf of Napoleon, but he had wasted considerable time *en route*. Thus most of the South Australian mainland coast was discovered before him by Grant and Flinders, and he was the original explorer of only a small section between Cape Banks and Encounter Bay. Some French names still remain, for example Lacepede Bay, Guichen Bay and Rivoli Bay. After the meeting at Encounter Bay, Baudin sailed further westward and along the northern shore of Kangaroo Island to Murat Bay, before being forced to abandon further exploration and to return to Port Jackson in June 1802. However, after re-equipping his expedition and with the addition of another ship (*Casuarina*) for charting work in shallow waters, Baudin returned to the South Australian coast by way of King Island in Bass Strait. Leaving King Island on 27 December Baudin in *Le Geographe* and Freycinet in command of *Casuarina* headed direct for Kangaroo Island where they circumnavigated the whole island and charted its coast, being the first to chart its southern and western shores. This was to be the last major contribution made by an official French expedition to exploration of the South Australian coast.

Although these discoveries on the South Australian coast did not lead to any immediate colonisation, there began an increasing series of visits by sealing vessels

to Kangaroo Island. A group of American sealers built a schooner on the island in 1804, while wild gangs of sealers and runaway convicts were forming settlements from 1806 onwards. In addition, French exploration in the area had led to a fear on the part of the British authorities that it might result in French colonisation, and, although not greatly valuing the area for itself, the British would have found it an embarrassment to have the French settled on the Australian continent. As a result, in 1804, the British sent Grimes, a government surveyor, to Kangaroo Island to report on it as a possible site for colonisation. The Grimes Report was most unfavourable, stating that the soil was poor and that the island lacked fresh water. On the other hand, in 1819 a Captain Sutherland visited the island and wrote an over-optimistic report on its future. It was this report which later led the South Australian Company into establishing their first station there in 1836.

In the period between 1804 and 1836 a number of further discoveries took place at various parts of the South Australian coastline by Captains Dillon (1815-16), Goold (1827-28), Hart (1831-33), and Jones (1833-34), together with the discovery of Lake Alexandrina by a group of sealers in 1828. Reports of this period were marked by contradictions regarding the suitability of South Australia for settlement. However, contradictory as were these accounts reaching England, they managed to convince the founders of South Australia even before 1830 that the available fertile land was more than adequate for the founding of a colony.

The most significant explorations of the period immediately before colonisation were those of Captain Charles Sturt, who explored the Murray River from New South Wales down to its mouth; traversed Lake Alexandrina and located the Goolwa channel, reaching the western shore of the Murray mouth on 12 February 1830. Captain Sturt's journey has become something of an epic in Australian history; with a small party of soldiers and convicts he rowed 2 700 kilometres on the Rivers Murrumbidgee, Darling and Murray. They suffered from desperate weariness, endured a distressing lack of provisions, and were periodically attacked by Aborigines. However, the main object of Sturt's journey was accomplished; the settling of the long insoluble 'problem of the rivers' of south-eastern Australia. But the real significance to South Australia was more than the mere settling of what was little more than an academic question, for his discoveries opened up 3 200 kilometres of navigable inland waterway and gave to Gulf St Vincent, which lay so near the mouth of the Murray, a new significance. It was the age of canal building in Europe and of the development of the Mississippi in America, so that navigable water was considered of prime importance. The exuberance felt by everyone interested in South Australia at such a discovery is typified by the Wakefield theorists who believed that the entire produce of eastern Australia would eventually be shipped from this area. In fact the Murray became the grand attraction of the scheme. However, Sturt's own fervour at this stage was somewhat cooler than that of interested persons in England for there was one great disappointment which marred his discovery—the Murray lacked a sufficiently safe navigable mouth. Sturt found that the Murray flowed into a series of shallow lakes and a sand-blocked mouth. So little did Sturt's contemporaries understand the earth movements and land formation of the area, that their only

conclusion was that there must somewhere be another channel emptying the waters of the Murray into the sea. So, the 'problem of the rivers' was replaced by the 'mystery of the Murray mouth'—and official action was to be taken promptly to solve this mystery.

Governor Darling of New South Wales sent Captain Collet Barker to the southern coast to try to solve the mystery of the Murray. Barker, landing at Noarlunga on 17 April 1831 ascended Mount Lofty and then returned to his ship, the *Isabella*, and examined Port Adelaide. After landing again at Rapid Bay, he crossed the hills to the Murray, thus proving that the river had no westerly outlet. Barker's expedition came to a tragic end when, under mysterious circumstances, he was apparently murdered at the Murray mouth by the usually peaceable Narrinyeri natives. This was the first of a long series of tragic deaths, mainly arising out of navigational difficulties, in the area of the Murray mouth which tended to discourage navigation later. Barker's party, however, reported fertile country in the region and the existence of a pass from the Murray mouth to Rapid Bay on Gulf St Vincent. While Barker's expedition proved without doubt that there was no really navigable connection between the Murray and the sea, it added to the rapidly growing volume of favourable accounts of the fertility of the region around Gulf St Vincent. Interested people in England were so obsessed with the geographical fact of the great Murray waterway opening up the centre of Australia that they barely registered the unfavourable accounts of its egress to the sea.

Probably the greatest encouragement for the settlement of South Australia came from Charles Sturt himself who, after his return to Sydney in May 1830, wrote *Two Expeditions into the Interior of Southern Australia* (published in 1833), in which he said: 'My eye never fell on a country of more promising aspect, or more favourable position, than that which occupies the country between the lake and the ranges of St Vincent's Gulf, and continuing northward from Mount Barker, stretches away without visible boundary'. This glowing report, together with that of Barker's expedition, was welcomed by those in England seeking a suitable site to establish a colony where the principles of the Wakefield Plan could be applied without restriction. Sturt spared no efforts in converting opinion to the potentialities of South Australia and, as well as his *Two Expeditions*, he wrote a private letter to the Colonial Office on 17 February 1834. Sturt actually marked the present position of the Outer Harbor at Port Adelaide as the proper and natural site for the capital. 'It is in the angle formed by the creek with the coastline that I would recommend the formation of a township, . . . because it appears to me that when the distant interior shall be occupied and communication established with the lake and valley of the Murray, the banks of this creek will be the proper and natural site for the capital . . . The level country to the north would be overspread, the valley of the Murray would be peopled, every available spot would be located, and its numerous ramifications would afford pasture for thousands of cattle'. In his reasons for this opinion he showed more foresight than he was to do later when, in disagreement with Colonel Light, he supported those who wished to move the capital to Encounter Bay.

Colonel William Light, who had been appointed Surveyor-General of the new colony, sailed from England in the *Rapid* on 4 May 1836 with instructions

to select a site for the capital of the colony. After a brief visit to Encounter Bay, which he found unsuitable, he landed at Nepean Bay on Kangaroo Island where some South Australian Company ships had already established a settlement. From here Light explored the east coast of Gulf St Vincent. Then, pressed for time by the unexpected arrival of the new settlers, he was able to make only a quick trip to Port Lincoln and a brief inspection of part of the west coast of Gulf St Vincent before, in concurrence with Sturt's earlier opinion, he decided that the most suitable site for Adelaide was on the banks of the small, but centrally situated, River Torrens.

COLONISATION

The colonisation of South Australia was in itself an experiment involving certain new principles and was to represent a turning point in British colonial policy. The period was conducive to colonisation as in Britain there was widespread unemployment and poverty, the popular remedy for which was emigration. Nevertheless the somewhat revolutionary nature of the plans was to result in seven years of negotiation and considerable modification of early ideas before the colonisation of South Australia was finally approved.

The theoretician was Edward Gibbon Wakefield, whose ideas were contained in a number of writings including the now famous *A Letter from Sydney* series, written in 1829 while he was imprisoned in Newgate Gaol. Wakefield's plans involved three broad principles: the sale of land; the use of the receipts for sponsoring emigrants; and the granting of some measure of self-government. Drawing on developments in New South Wales Wakefield argued that the then current system of giving away vast tracts of land to settlers resulted in an imbalance between land and labour. It was therefore desirable to restrict land distribution and increase the labour supply, and this could be done by selling land at a suitably high price to prevent all labourers becoming landowners and by devoting the proceeds to free passage for a carefully selected labour force.

At the same time, following conflicting observations by early explorers, encouraging reports of the South Australian coastline filtering in from traders and seamen gave rise to moves for the practical application of Wakefield's ideas for the founding of a colony in South Australia.

The first attempt to form a colony was made by Robert Gouger who, having met Wakefield in Newgate Gaol in 1829, was so impressed with his ideas as to approach certain interested parties with a view to purchasing a tract of land in South Australia. He was unable, however, to gain sufficient support to interest the Colonial Office in his plans. In 1830 the National Colonization Society was formed with Gouger as its secretary. The Society served to further disseminate Wakefield's principles, but was not directly associated with plans for a colony in South Australia.

Renewed interest in colonisation followed the first of Captain Sturt's enthusiastic reports of the land of the lower Murray and in 1831 a group of intending settlers, still enthused with the ideas of Wakefield, formed the South Australian Land Company. A committee headed by Colonel Robert Torrens approached the

British Government for a charter and then made preparation for the first voyage. The Government was not prepared to grant the necessary territory, and negotiation continued until 1833 when the Company finally conceded that the Government was unlikely to approve any plans involving a chartered colony.

From the same core of enthusiasts who had supported this and earlier ventures there emerged in 1834 the South Australian Association. This group was prepared to abandon hopes for a chartered colony, conceding the issue of self-government, provided that the enabling legislation accommodated Wakefield's other principles for land sales and migration. The passage of the legislation was by no means smooth; the scheme was new and involved untried principles, and knowledge of the territory was still extremely limited. Doubts on the suitability of the site were to be largely dispelled by the writings and personal representations of Sturt and the confirmatory expedition by Barker, and finally in July 1834 legislation for a colony in South Australia was put before Parliament. This legislation represented a considerable compromise on earlier plans.

The South Australian Colonization Act (4 & 5 William IV. Cap. 95) was assented to on 15 August 1834; the persistent efforts of Gouger, Torrens, and many others for a settlement in South Australia had finally borne fruit, and at least some of the ideas of Wakefield were to be tried. The territory allotted under the Act embraced 802 508 square kilometres, with the western boundary the 132nd meridian of east longitude and the other boundaries virtually as they are today. The colony was to be opened to settlement by British subjects, but under no condition were convicts to be admitted, making South Australia the only State to be settled entirely by free persons. Authority was to be divided, with the Colonial Office through the Governor controlling all affairs of government except land sales and immigration, these fields being reserved to a Board of Commissioners. Provision was made for self-government upon the population reaching 50 000. All land alienated by the Crown was to be sold at a price of not less than '12 shillings' (\$1.20) per acre and the whole of the proceeds used in 'conducting the emigration of poor persons from Great Britain and Ireland'.

Although Parliament was prepared to authorise the experiment it was not prepared to finance it; the colony was to be self-supporting. The Commissioners were accordingly authorised to borrow \$400 000 against future general revenue to finance the founding of the colony and the establishment of government, and \$100 000 against the sale of land to start the migration program. Finally, the Act contained two conditional clauses which were to harass the whole venture and served to delay colonisation another twelve months. The first of these conditions, which were to be satisfied before the Commissioners could exercise their general powers, required that government securities to the value of \$40 000 be lodged as a guarantee for the venture. Secondly land to the value of \$70 000 was to be sold before settlement.

A Board of Commissioners with Torrens as chairman was appointed early in 1835. The Board immediately offered land in the new colony at \$2 an acre including rights to a city acre with every 80 acres of rural land. In spite of considerable publicity, unsurveyed land in an unknown colony proved difficult to sell, and with less than half the land sold the price was reduced to the permitted

minimum of \$1.20 an acre. Finally, George Fife Angas, a member of the Board, together with two others took up the balance of the land on behalf of the South Australian Company, which was then in the process of being formed.

In December 1835 with sufficient land sold and with the \$40 000 guarantee lodged with the Treasury, the Commissioners were free to begin the business of colonisation. The South Australian Company was formed in January 1836, and in February two ships of the Company, the *John Pirie* and the *Duke of York*, sailed for Kangaroo Island to establish a settlement. Another Company ship the *Lady Mary Pelham* followed later.

The *Cygnets* carrying the Deputy Surveyor, G. S. Kingston and his staff left at the end of March and the *Rapid* with Colonel William Light, Surveyor-General, on board departed at the beginning of May. One of Light's most important tasks was to choose a site for the first settlement and details of his early movements are given on pages 58-9. The first Company vessels reached Kangaroo Island in July, and colonists arrived at Adelaide from early November. The first Governor of the colony, Captain John Hindmarsh RN, arrived at Holdfast Bay on 28 December 1836 and the new colony was officially proclaimed on the same day. By this time some 300 colonists were already in residence. Hindmarsh was to remain in the colony for eighteen months, a period marked by political feuding and very little progress.

The one outstanding feature of the first two years was the work of Light. Expected to carry out difficult tasks with an inadequate staff Light first had to contend with opposition to his choice of a site for Adelaide. His views prevailed and the city was surveyed to his plan and the land was allotted by March 1837. There were 700 one-acre lots in Adelaide south of the River Torrens and 342 one-acre lots in North Adelaide. Victoria Square was situated in the centre of the City and there were four other squares in Adelaide as well as one in North Adelaide. An important feature in Light's plan was the extensive parklands surrounding the City.

The survey of country land for the preliminary purchasers proceeded very slowly and it was not until May 1838 that the first ballot for country sections was held. At the same time the survey staff were becoming increasingly disgruntled with the unrealistic demands of the Commissioners and in June almost the entire staff resigned. Light died in October 1839.

While the preliminary survey was in progress the settlers remained in Adelaide where their energies and resources were largely devoted to speculation in town lands and in land orders, and where supplies had to be imported with a corresponding outflow of capital. Superimposed on this situation was the continual arrival of new immigrants who served only to increase the volume of the unemployed.

Much of the inactivity of the colony was brought about by constant clashes between Hindmarsh and the Resident Commissioner J. H. Fisher, which finally led to the dismissal of Fisher and the recall of Hindmarsh in July 1838. It was realised that the divided authority as incorporated in the Colonization Act was impracticable, and the next Governor, Colonel George Gawler, was authorised to represent both the Crown and the Commissioners.

Appalled at the stagnation of the colony, Gawler immediately undertook a liberal spending program. Surveying was considerably increased with the result that 200 000 hectares had been surveyed by mid-1841. At the same time

an extensive public building and works program provided relief for the unemployed. Generally Gawler created a renewed state of optimism which remained until 1840 when land values were depreciated and sales declined. Immigrants continued to arrive throughout this period.

Most of Gawler's expenditure was met by bills drawn on the Commissioners in London. In 1841 a situation was reached where the Commissioners could no longer honour these bills and Gawler was summarily replaced by Captain George Grey. The Imperial Parliament met the bulk of the debts, and in 1842 the Board of Commissioners was abolished. Thus the small measure of independence which the Board represented disappeared and South Australia became an ordinary Crown Colony.

The term of office of Grey was in contrast to that of Gawler, with Grey imposing rigid economies. Public expenditure was cut and considerable unemployment with its accompanying hardships followed. Speculation ceased and the unemployed gradually left Adelaide to be absorbed on the lands which Gawler had opened up. By this time the flow of immigrants had ceased with the suspension of the assisted migration scheme.

By 1844 the colony was producing wheat in excess of its needs and when Major Robe succeeded Grey as Lieutenant-Governor in 1845, South Australia finally became self-supporting. Moreover prosperity was on the doorstep; copper had been located at Kapunda in 1843 and a major find was made at Burra in 1845. Heavy immigration followed these discoveries and continued until the Victorian gold rush. Copper soon became the principal export, with wool providing a complementary cargo. In addition, the repeal of the Imperial Corn Laws in 1846 and the Navigation Acts in 1849 strengthened the export trade in grain.

The discovery of gold in Victoria in 1851 had a two-fold influence on the development of South Australia. In the first place it drained off a large proportion of the skilled artisans and forced the closing of the copper mines. Secondly it gave great impetus to agriculture when the price of wheat rose sharply—the feeding of the miners became as attractive a proposition as was the actual mining. Four years later, when the miners returned, many of the more fortunate purchased land with their winnings.

At the same time political changes were taking place and in 1856 South Australia attained self-government.

EXPLORATION AFTER COLONISATION

Only a minor portion of the area proclaimed as South Australia was to prove economically viable, but extensive exploration with its accompanying hardships was necessary to establish this fact. Post-colonisation exploration was of two forms; the first being the continuous process of discovery as settlers sought grazing and crop lands and sometimes mineral resources, and the second the more deliberate activities of the professional explorers as they sought to cover vast distances through unknown terrain.

The earliest exploratory moves of the colonists were directed towards establishing an overland route between Adelaide and Encounter Bay, and in discovering a north-easterly passage to the River Murray that would by-pass

the Mount Lofty Ranges. Contact was first made with Encounter Bay in about July 1837 by Colonel Light and J. H. Fisher, and in December of the same year an expedition by Strangways and Hutchinson played a further important part in making contact with the River Murray by driving a bullock cart across the ranges to Encounter Bay, and then exploring the Murray mouth, the Goolwa channel and the southern part of Lake Alexandrina. The north-easterly route to the Murray was first traversed successfully early in 1838. Penetration of the Mount Lofty Ranges began in 1837, and by the end of the year parties had crossed the ranges and descended to Lake Alexandrina.

From the beginning of 1838, attempts were made to open up stock routes from the eastern States. Joseph Hawdon and Charles Bonney were the first to make an overland cattle drive to Adelaide. Leaving Hawdon's station near Albury on 13 January 1838 with a party of seven men, they took a route which followed the Murray for much of the way, and reached Adelaide in eleven weeks with the cattle in good condition and only four head out of 300 lost *en route*. At the same time, Edward John Eyre was making a similar cattle drive, but after unsuccessfully trying to find a suitable trail south of the Murray, he was forced to make his way back to the Loddon River and then follow the trail taken by Hawdon and Bonney. In another journey starting in 1838, Eyre became the first to bring sheep overland to Adelaide, driving 1 000 sheep and 600 cattle along the Hawdon trail. Charles Sturt was another to make an early stock drive to Adelaide, while Bonney in 1839 pioneered an alternative route which followed the south-east coast of the State and crossed the Murray above Lake Alexandrina.

Other parts of the State were also attracting attention. A section of Yorke Peninsula was visited in 1838, and in the following year a number of expeditions were made into the hinterland of Port Lincoln. Thus by 1840 the area within a 80 kilometre radius of Adelaide had been explored for pastoral, farming and mineral lands. Settlers had also ventured by boat along the Murray, by boat to Port Lincoln and thence inland, and by boat and overland to Yorke Peninsula. Reports by drovers who came down the Murray suggested that the land on the other side of the Murray was of little immediate value. It was soon to be realised, however, that very different conditions prevailed in the Lower South East, and by the mid-1840s this area was supporting a considerable sheep population.

Knowledge of the arid interior and of the far west coast was to be obtained from a number of major expeditions, the first such venture being led by Edward John Eyre. In 1839 Eyre journeyed north to Mount Arden, at the head of Spencer Gulf, where he established a base camp. From Mount Arden he made the first sighting of the dry bed of Lake Torrens. Crossing to Port Lincoln, Eyre proceeded up the west coast of the peninsula which came to bear his name, passed through Streaky Bay, and came to within 80 kilometres of the Western Australian border. The return journey to Mount Arden camp was made across the top of Eyre Peninsula.

The interest of the colonists was now divided between the country to the northward, including Eyre's new-found lake, and the possibility of establishing an overland stock route to Western Australia. Eyre having just returned from the desolate country of the Great Australian Bight showed little enthusiasm for the latter idea, and in June 1840 set out for the north. From Mount Arden he

made three attempts to penetrate beyond the lakes, but after following the Flinders Ranges to Mount Hopeless and making a number of observations, he concluded that Lake Torrens was a giant horseshoe-shaped salt lake forming an impassable barrier. This erroneous belief was to persist for eighteen years.

Thwarted in his efforts to go north, Eyre decided to attempt the western crossing. Leaving Mount Arden the party separated, one group going direct to Streaky Bay while Eyre went down to Port Lincoln. The party reformed at Streaky Bay and moved to Fowlers Bay, where a camp was established in November 1840. After a number of preliminary explorations around the Bight, Eyre and a small party set out for King George Sound (Albany) in February 1841, having sent the remainder of the party back to Adelaide. Eyre arrived at King George Sound in July after an extremely tortuous crossing.

In 1842 and 1843 the Surveyor-General, Colonel Frome, made two trips to the Lake Torrens region in an attempt to determine the nature of the area. However, after reaching a 'desert-like' Lake Frome (which he believed to be part of Lake Torrens) he turned back, making two short thrusts to the east on the return journey. Frome had seen enough to be able to report that there was no country as far as the meridian 141° (and probably much beyond it) available for either agricultural or pastoral purposes.

Captain Charles Sturt, whose earlier journey down the Murray had helped precipitate the colonisation of South Australia, was again to contribute to South Australian exploration. Considerable mystique had developed concerning Central Australia, including the rumoured presence of an inland sea, and in August 1844 Sturt set out from Adelaide in an effort to unveil this area. Hoping to avoid the supposed horseshoe lake, Sturt followed the Murray and Darling Rivers to Menindee. After passing through Broken Hill and seeing Eyre's Mount Hopeless from the other side of the lakes, the party moved to Mount Poole some 300 kilometres north of Menindee. Here they rested for six months while waiting for rain to fall. In July 1845 Sturt set off in a north-westerly direction crossing Sturt's Stony Desert and the north-east corner of the State. Although temporary relief was provided by Eyre Creek, the course of which they followed for some considerable distance, the desert nature of the subsequent terrain forced the party to turn back when very close to their central goal, and only 800 kilometres from the Gulf of Carpentaria. A second assault on the desert also failed, although Sturt explored along Cooper Creek for almost 150 kilometres before returning to the base camp and thence to Adelaide in January 1846.

In 1846 John Horrocks led a small party north from his station. Penwortham, through the Flinders Ranges *via* Horrocks Pass (so named by the party) and on to a camp site at Depot Creek. The party had brought with them the only camel then in the colony, the first time one had been used for exploration work in Australia. From Depot Creek Horrocks made two trips, the first of about 30 kilometres and the second about 100 kilometres to Lake Dutton where, jostled by his camel, he accidentally shot himself, thus bringing the expedition to an early end, but not before he had formed the opinion that there was no suitable pastoral land in that direction. Horrocks died of his wounds about three weeks later.

Further to the west a small expedition led by John Darke explored country to the north and east of the Gawler Ranges, and concluded that there was no useful land for settlers in this region. On his way home to Port Lincoln, Darke

was mortally wounded by natives near what is now known as Darke Peak. In 1857 Stephen Hack explored the country west of Lake Gairdner and found useful pastoral country at the south-western end of the Gawler Ranges.

At about this time the northern lakes again became a centre of interest. In 1856 there had been considerable rainfall in the area, and when the Deputy Surveyor-General, G. W. Goyder, visited Lake Torrens he found an inland sea surrounded by excellent vegetation. Goyder's glowing report was, however, discounted by a return journey the following year. Indeed the extremely fickle seasons experienced in the north were to lead to many conflicting reports as the explorers and settlers moved northwards. Between 1857 and 1859 several exploratory expeditions visited the region of Lake Torrens and it was during this period that the myth of the horseshoe lake was destroyed. Knowledge of the lakes district was extended by B. H. Babbage, who discovered Lake Eyre in 1858, and Major P. E. Warburton, who located the first stock crossing. A. C. Gregory, coming south from Queensland in search of Leichhardt, passed between the lakes *en route* to Adelaide in 1858.

At the same time parties were searching for pastoral country in the north, with the most extensive search being made by John McDouall Stuart in 1858. Stuart, who had been in Sturt's party in 1844, set out from Mount Arden, passed to the west of Lake Torrens, and circled north of Coober Pedy, returning to Mount Arden *via* Fowlers Bay. In the meantime the South Australian Government was offering a reward for the first successful north-south crossing of the continent, and after making two exploratory journeys to the north in 1859, Stuart set out in March 1860 to attempt such a crossing.

Stuart had an advantage over Sturt in that the intervening years had revealed the lakes to be passable and thus he was virtually able to begin his expedition at Chambers Creek at the southern tip of Lake Eyre, and to pass through known country as far as The Neales watercourse. Stuart reached the MacDonnell Ranges in the Northern Territory in April, and later the same month estimated that he had reached the centre of the continent. His attempt to reach the northern coastline was thwarted however, and in June he turned back. In a second attempt in 1861 he followed the same route and this time reached Newcastle Waters before being forced to return. At his third attempt Stuart was successful, reaching the sea on 24 July 1862 and establishing a route which was to be followed by the Overland Telegraph ten years later. A special article on the Overland Telegraph Line was included on pages 526-31 of the *South Australian Year Book* 1972.

While Stuart was making his second attempt to reach the north, the ill-fated Burke and Wills expedition was crossing the continent further to the east. Their journey took them across the north-east corner of the State along much the same path as that followed by Sturt some seventeen years earlier. In 1861 and 1862 parties led by Alfred Howitt, who left from Melbourne, John McKinlay from Adelaide, were to pass through the same area in search of Burke and Wills. After finding traces of the expedition on Cooper Creek, McKinlay pushed east and then north, to reach the Gulf of Carpentaria.

The construction of the Overland Telegraph between 1870 and 1872, and the subsequent maintenance of this link between Adelaide and Darwin, naturally led to minor exploration of the adjacent country. At this stage attention turned to the land between the telegraph line and the settlements of Western Australia.

Foremost among the explorers of this region, and whose paths brought them within South Australia, were John Forrest and William Ernest Giles. In March 1870 Forrest left Perth for Adelaide, covering much the same path as Eyre had taken 30 years earlier. Forrest crossed South Australian territory again in 1874 when he travelled from Geraldton in Western Australia across the centre of the continent, coming down the Alberga watercourse to Peake telegraph station.

Giles had set out from the Overland Telegraph in 1873 at a point north of Oodnadatta, but was forced to return after covering approximately half the distance to the western seaboard. He tried again in May 1875, this time going south from Beltana to Port Augusta and then to Ooldea on a route which forty years later was to be closely followed by the east-west railway. From Ooldea the party went north for over 170 kilometres before again striking out to the west. Giles reached Perth in November, and three months later left Geraldton to return to South Australia on a route similar to that taken by Forrest two years earlier, arriving at Peake telegraph station in August 1876.

In 1873 W. C. Gosse, returning from an unsuccessful attempt to reach Perth from Alice Springs, discovered and named the Musgrave Ranges.

A number of persons other than those mentioned contributed to the exploration of the State, both in the period discussed and subsequently. The inhospitable nature of the country meant that many areas had to await the coming of the aeroplane before an accurate physical description could be recorded. One such expedition was that led by Donald Mackay in 1935 when the western half of the State north of the east-west railway line was aerially surveyed.

CONSTITUTION AND GOVERNMENT

3.1 SYSTEM OF GOVERNMENT

South Australia is one of the six Australian States (originally constituted by Acts of the Imperial Parliament) which at Federation in 1901 ceded many of their powers on matters of national importance (e.g. international affairs and defence) to the Commonwealth of Australia. From time to time other powers on matters of local importance have been delegated to local governing bodies. As a result the people of South Australia are subject to the laws of a three-tier system of government. In addition statutory powers within specified fields are exercised by certain public corporations such as the State Bank of South Australia, the Electricity Trust of South Australia, the South Australian Housing Trust and the South Australian Meat Corporation.

Both the Commonwealth and the South Australian Parliaments are bicameral: in each the leader of the Government (the Prime Minister of the Commonwealth and the Premier of South Australia) is seated in the Lower House and in each the Upper House has restricted powers concerning money Bills.

Electorates

The State is a single multi-member electorate for elections for both the Commonwealth (Senate) and South Australian (Legislative Council) Parliaments. There are ten members elected from South Australia to the Commonwealth Senate; these members are elected for a period of six years with half of them generally retiring each three years.

After the next general election, the South Australian Legislative Council will consist of twenty-two members elected for a term of six years, with eleven generally retiring each three years. At present there are twenty-one Legislative Councillors, eleven having been elected under the present system which was introduced by the Constitution and Electoral Acts Amendment Act, 1973 and ten under the system which applied before the election of 12 July 1975.

Although it is the respective Parliaments alone which have the power to make changes in the number, size, and distribution of electorates, it is customary to appoint electoral commissions to recommend in these matters.

The terms of the Commonwealth Constitution provide for changes in House of Representatives electorates in certain eventualities. Because of a prescribed relationship between population and the distribution of House of Representatives electorates, Commonwealth electoral commissions are usually appointed after each Census to consider the effect of changes in the distribution of population and, if necessary, to suggest alterations to the boundaries and distribution amongst the States of Lower House electorates.

In South Australia the boundaries of electorates are defined in a schedule to the State Constitution, and these have been changed from time to time on the recommendations of various electoral commissions which were appointed at irregular intervals with specific instructions as to how they should divide up the State. However, following an amendment to the Constitution in 1975, a permanent Electoral Commission was appointed in 1976 with instructions to divide the State into forty-seven House of Assembly electoral districts, each district having the same number of electors, with a maximum tolerance of ten per cent from the electoral quota. This Commission also has the duty to review boundaries periodically to maintain equal numbers of electors in electorates.

Party System

Most members of both the Commonwealth and the South Australian Parliaments are elected by the voters from candidates pre-selected and endorsed by the major political parties. Once policy has been determined at a party meeting, members generally observe party solidarity; speaking, voting, and acting in accordance with that policy both in and out of Parliament whether the party be in government or in opposition.

Cabinet and Executive Government

Both in the Commonwealth and in South Australia, executive government is based on the system which was evolved in Britain in the eighteenth century and which is generally known as 'cabinet' or 'responsible' government. Its main principles are that the head of the State, Her Majesty the Queen (or her representative, the Governor-General or Governor, acting on her behalf) should perform governmental acts on the advice of her ministers; that she should choose her principal Ministers of State from members of Parliament belonging to the party or coalition of parties commanding a majority in the popular House; that the Ministry so chosen should be collectively responsible to that House for the government of the State; and that the Ministry should resign if it ceases to command a majority there.

The cabinet system operates chiefly by means of constitutional conventions, customs or understandings and through institutions that do not form part of the legal structure of government at all. The executive power of the Commonwealth is exercisable by the Governor-General and that of South Australia by the Governor, each being advised by an executive council which only meets for formal purposes. The whole policy of a Ministry is in practice determined by some or all of the Ministers of State, meeting without the Governor-General or Governor under the chairmanship of the Prime Minister or Premier. This group of Ministers is known as the Cabinet.

The Cabinet

The Cabinet does not form part of the legal mechanism of government. Its meetings are private and deliberative, the actual Ministers of the day alone are present, no records of the meetings are made public and the decisions taken have in themselves no legal effect. At present the twelve senior Ministers of the Commonwealth Government constitute the Cabinet and other Ministers only attend Cabinet meetings when required, but from 1972 to 1975 all Ministers were members of the Cabinet. In South Australia, all twelve Ministers are members of Cabinet.

As Ministers are the leaders of the party or parties commanding a majority in the popular House, the Cabinet substantially controls not only the general legislative program of Parliament, but the whole course of Parliamentary proceedings. In effect, though not in form, the Cabinet, by reason of the fact that all Ministers are members of the Executive Council, is also the dominant element in the executive government of the State. In summoning, proroguing or dissolving Parliament, the Governor-General or the Governor is usually guided by the advice tendered him by the Cabinet through the Prime Minister or Premier, although legally the discretion is vested in the Governor-General or Governor himself.

Executive Council

The Executive Council is usually presided over by the Governor-General or Governor, the members holding office during his pleasure. All Ministers of State must be members of the Executive Council. Commonwealth Ministers remain members of the Executive Council on leaving office, but are not summoned to attend its meetings, for it is an essential feature of the cabinet system that attendance should be limited to the Ministers of the day.

The meetings of the Executive Council are formal and official in character and a record of proceedings is kept by the Secretary or Clerk. At Executive Council meetings the decisions of Cabinet are, where necessary, given legal form, appointments are made, resignations accepted, proclamations issued and regulations approved.

Appointment of Ministers

Legally, Ministers hold office during the pleasure of the Governor-General or Governor, but in practice the discretion of the Queen's representative in the

choice of Ministers is limited by the conventions on which the Cabinet system rests. When a Ministry resigns the Crown's custom is to send for the leader of the party which commands, or is likely to be able to command a majority in the popular House, and to commission him, as Prime Minister or Premier, to 'form a Ministry'—that is, to nominate other persons to be appointed as Ministers of State and to serve as his colleagues in the Cabinet.

Committees

At one stage in the consideration of every Bill each House resolves itself into Committee for freer discussion of proposed legislation than would be possible under the rules of formal debate usually applied in Parliament.

In addition there is a Committee system whereby a limited number of Members inquire into and report on particular matters thus enabling a greater volume of work to be handled more effectively. There are Joint Committees, consisting of members of both Houses, and each House has committees to attend to its own functions. Standing Committees (*e.g.* the South Australian Public Works Standing Committee) consider matters of a continuing or recurring nature, and *ad hoc* committees are formed to inquire into and report on specific matters as they arise.

Party representation on Joint and House Committees is usually proportionate to representation in Parliament or the appropriate House respectively.

Administration

The pattern of public administration in South Australia is determined by the division and delegation of statutory authority already mentioned. Various aspects and areas of administration are attended to by Commonwealth and South Australian Government departments, by local government authorities, and by public corporations deriving authority and responsibility from either Commonwealth or South Australian legislation. Within this framework numerous boards and committees exercise administrative and, in some cases, judicial powers.

These various levels of administration are largely interdependent and complementary. Some items of Commonwealth legislation are completely, or almost completely, administered by State authorities, often in matters in which (the Commonwealth and the State having concurrent powers) Commonwealth legislation either supplements or supersedes State legislation, *e.g.* the Births, Deaths and Marriages Registration Branch applies the *Marriage Act* 1961 in this State. Performance of State functions by Commonwealth authorities is neither as frequent nor as extensive, but there are instances of the provision of services or facilities, *e.g.* the Commonwealth Electoral Office maintains the House of Assembly electoral roll; State land tax may be paid at Post Offices.

Judicature

The degree to which South Australians are subject to the jurisdiction of Commonwealth and South Australian courts respectively varies with the type of action. Most criminal and civil actions are heard, at least originally, in State courts, but many individuals are subject exclusively to jurisdiction of Commonwealth courts in industrial matters.

Generally speaking, the decisions of the lower courts (the South Australian Magistrates and Local Courts) may be the subject of appeal to the State Supreme Court, and the decisions of this higher court, acting in either its original or appellate jurisdiction, may be the subject of appeal to the High Court of Australia.

Included in the jurisdiction of the High Court of Australia is the review of legislation to test its constitutional validity.

3.2 COMMONWEALTH GOVERNMENT

Federation

The Commonwealth of Australia was proclaimed on 1 January 1901 in 'An Act to constitute the Commonwealth of Australia', a statute of the Imperial Parliament, which received Royal Assent in July 1900. The draft constitution, which was enacted with only minor amendment, had been prepared at inter-colonial conferences during 1897, 1898, and 1899, and was accepted at referenda during 1899 by South Australia, New South Wales, Victoria, Queensland and Tasmania, and in 1900 by Western Australia.

Separation of Powers

The Constitution provides, in sections 52, 69, 86, 90 and 115, for certain powers to be vested exclusively in the Commonwealth Government and, in section 51, for certain specified fields of interest to be common to both the Commonwealth and State Governments; in cases of conflicting legislation, that of the former prevails to the extent of the inconsistency. All other fields of interest remain the exclusive province of the State Governments until amendment is made to the Constitution Act or until the State Parliaments cede particular powers.

Financial Resources

Since Federation the distribution of financial resources between the Commonwealth and State Governments has been an almost constant problem. Under the original terms of the Constitution three-quarters of the net revenues from the duties of customs and excise, for ten years, was returned to the States; provision also existed for general and particular grants to the States. Significant changes have been made in the distribution of financial resources since 1910. These are reviewed in some detail in Part 11—Public Finance.

COMMONWEALTH LEGISLATURE

The Constitution provides that 'the legislative power of the Commonwealth shall be vested in a Federal Parliament, which shall consist of the Queen, a Senate, and a House of Representatives'. Provision for constitutional amendment includes a requirement that a proposed amendment must be submitted to a referendum.

Franchise

Qualifications for franchise are possessed by any British subject, not under eighteen years of age and not disentitled on other grounds, who has lived in Australia for six months continuously. Residence in a subdivision for a period of one month before enrolment is necessary to enable a qualified person to enrol. Enrolment and voting are compulsory except that the compulsory enrolment provisions do not relate to Aboriginal natives of Australia.

A member of the Defence Forces on service outside Australia who is a British subject not less than eighteen years of age and has lived in Australia for six months continuously is entitled to vote at Commonwealth elections, whether enrolled or not.

Persons of unsound mind, attainted of treason, convicted and under sentence for any offence punishable by imprisonment for one year or longer or, persons who are holders of temporary entry permits under the *Migration Act 1958* or are prohibited immigrants under that Act are excluded from the franchise.

Membership

Qualifications necessary for membership of either House of the Commonwealth Parliament are possessed by any British subject, eighteen years of age or over, who has resided in Australia for at least three years and who is, or is qualified to become, an elector. The principal reasons for disqualification of persons otherwise eligible as members of either House are; membership of the other House, allegiance to a foreign power, being attainted of treason, being convicted and under sentence for any offence punishable by imprisonment for one year or longer, being an undischarged bankrupt or insolvent, holding office of profit under the Crown (with certain exceptions), or having pecuniary interest in any agreement with the Public Service of the Commonwealth except as a member of an incorporated company of more than twenty-five persons.

EXECUTIVE GOVERNMENT**Governor-General**

On 11 July 1974 His Excellency the Hon. Sir John Robert Kerr, AK, GCMG, GCVO, QC, was sworn in as the eighteenth Governor-General of the Commonwealth. His authority as the Queen's representative is derived from Letters Patent, Instructions under the Royal Sign Manual and Signet, and the relevant sections of the Commonwealth Constitution.

Executive Council

Members of the Federal Executive Council are chosen, summoned and sworn by the Governor-General and hold office during his pleasure. All Ministers are members. Councillors usually retain membership for life but it is customary for attendance at meetings to be limited to Ministers of the day.

Ministry

Members of the forty-fourth Ministry (the second Fraser Ministry) are listed below.

Fraser Ministry at 6 September 1977**Inner Cabinet***Prime Minister*

The Rt Hon. J. M. Fraser, CH, MP (Vic.)

Deputy Prime Minister, Minister for National Resources and Minister for Overseas Trade

The Rt Hon. J. D. Anthony, MP (NSW)

Treasurer

The Hon. P. R. Lynch, MP (Vic.)

Minister for Primary Industry and Leader of the House

The Hon. I. McC. Sinclair, MP (NSW)

Minister for Administrative Services, Leader of the Government in the Senate and Vice-President of the Executive Council

Senator the Hon. R. G. Withers (WA)

Minister for Industry and Commerce

Senator the Hon. R. C. Cotton (NSW)

Minister for Employment and Industrial Relations and Minister Assisting the Prime Minister in Public Service Matters

The Hon. A. A. Street, MP (Vic.)

Minister for Transport

The Hon. P. J. Nixon, MP (Vic.)

Minister for Education and Minister Assisting the Prime Minister in Federal Affairs

Senator the Hon. J. L. Carrick (NSW)

Minister for Foreign Affairs

The Hon. A. S. Peacock, MP (Vic.)

Minister for Defence

The Hon. D. J. Killen, MP (Qld)

Minister for Social Security

Senator the Hon. M. G. C. Guilfoyle (Vic.)

Outer Ministry*Minister for Special Trade Negotiations and Minister Assisting the Prime Minister*

The Hon. J. W. Howard, MP (NSW)

Minister for Health

The Hon. R. J. D. Hunt, MP (NSW)

Minister for Immigration and Ethnic Affairs

The Hon. M. J. R. MacKellar, MP (NSW)

Minister for Aboriginal Affairs and Minister Assisting the Treasurer

The Hon. R. I. Viner, MP (WA)

Minister for the Northern Territory and Minister Assisting the Minister for National Resources

The Hon. A. E. Adermann, MP (Qld)

Minister for Post and Telecommunications and Minister Assisting the Treasurer

The Hon. E. L. Robinson, MP (Qld)

Minister for Construction and Minister Assisting the Minister for Defence

The Hon. J. E. McLeay, MP (SA)

Minister for Environment, Housing and Community Development

The Hon. K. E. Newman, MP (Tas.)

Minister for Science

Senator the Hon. J. J. Webster (Vic.)

Minister for the Capital Territory and Minister Assisting the Prime Minister in the Arts

The Hon. A. A. Staley (Vic.)

Attorney-General

Senator the Hon. P. D. Durack (WA)

Minister for Productivity, Minister Assisting the Prime Minister in Women's Affairs and Minister Assisting the Minister for Employment and Industrial Relations

The Hon. I. M. Macphee (Vic.)

Minister for Business and Consumer Affairs

The Hon. W. C. Fife, MP (NSW)

Minister for Veterans' Affairs

Senator the Hon. R. V. Garland, MP (WA)

Salaries and Allowances

From 1 June 1976 the annual salary for each member has been \$21 250 with an electorate allowance of either \$5 400 or \$6 750 depending on the area of the member's electorate. Senators receive an electoral allowance of \$5 400.

The following additional payments are also made:

Prime Minister—\$28 250 plus expense allowance of \$12 000;

Deputy Prime Minister—\$14 250 plus expense allowance of \$6 000;

Ministers (Inner Cabinet)—\$11 750 plus expense allowance of \$5 000;

- Ministers (Outer Ministry)—\$10 500 plus expense allowance of \$5 000;
- Speaker (House of Representatives)—\$10 500 plus expense allowance of \$5 000;
- President (Senate)—\$10 500 plus expense allowance of \$5 000;
- Chairman of Committees (House of Representatives)—\$4 500 plus expense allowance of \$1 000;
- Chairman of Committees (Senate)—\$4 500 plus expense allowance of \$1 000;
- Leader of the Opposition (House of Representatives)—\$11 750 plus expense allowance of \$5 000;
- Deputy Leader of the Opposition (House of Representatives)—\$8 500 plus expense allowance of \$4 750;
- Leader of the Opposition (Senate)—\$8 500 plus expense allowance of \$4 750;
- Deputy Leader of the Opposition (Senate)—\$3 500 plus expense allowance of \$1 000;
- Government Whip (House of Representatives)—\$3 250;
- Other Whips (House of Representatives)—\$2 500;
- Whips (Senate)—\$2 500;
- Assistant Whips (House of Representatives and Senate)—\$600.

Superannuation

The *Parliamentary Retiring Allowances Act* 1948 provides for the payment of retirement benefits on the retirement or death of persons who have served as members of the Commonwealth Parliament.

All members are required to contribute for a parliamentary retiring allowance at the rate of 11·5 per cent of the monthly amount of their parliamentary allowance. Members who retire involuntarily are eligible for a retiring allowance after eight years service (or less in certain circumstances), while those who retire voluntarily and have attained the age of forty-five years are eligible after twelve years service. Where there is no entitlement to a retiring allowance the benefit is a lump sum payment comprising a refund of contributions plus a supplement, the amount of which depends on length of service and whether retirement is involuntary or voluntary.

A former Prime Minister who is over the age of forty-five years and has held office as Prime Minister for not less than two years is entitled on retirement, in addition to the normal parliamentary retiring allowance, to a non-contributory Prime Minister's retiring allowance.

A parliamentary annuity is payable to the widow or widower of a serving member or of a former member in receipt of a retiring allowance at the rate of five-sixths of the retiring allowance that was or would have been payable to the deceased. The widow or widower of a Prime Minister is entitled to an additional

annuity at the rate of one-half the additional retiring allowance that was or would have been payable to the former Prime Minister. An orphans annuity is payable to a dependent child if both parents have died.

THE SENATE

The Senate is the Upper House. Originally it was intended that this House should protect the rights and interests of the States, but with the growth of the parliamentary system of party-line voting, its role has become mainly that of a house of review.

Representation

At present the Senate consists of sixty-four members—ten from each State, two from the Australian Capital Territory and two from the Northern Territory. The original provision was that each State, voting as a single electorate, should elect six Senators but by the Representation Act of 1948, which was effective for the 1949 elections, the number was raised to ten. By the *Senate (Representation of Territories) Act 1973*, the number of Senators was increased from sixty to sixty-four with the addition of two Senators from both the Australian Capital Territory and the Northern Territory. The Territories were represented in the Senate for the first time following the general election of 13 December 1975. Except in extraordinary circumstances each Senator is elected for a term of six years, five from each State and all Territory Senators retiring every three years.

Following the rejection of vital legislation by the Senate in April 1974, the Governor-General, on the advice of the Prime Minister, dissolved both Houses of Parliament. This meant that at the general election held on 18 May 1974, all of the sixty Senate seats as well the 127 House of Representatives seats were contested. A further double dissolution followed the deferral of Supply by the Senate in November 1975, and the subsequent general election for both Houses was held on 13 December 1975.

After the election of 13 December 1975 representation in the Senate was as follows:

| State or Territory | ALP | LP | NCP | Others |
|----------------------------------|----------|----------|-----|-------------|
| New South Wales | 5 | 4 | 1 | — |
| Victoria | 4 | 4 | 2 | — |
| Queensland | 4 | 3 | 3 | — |
| South Australia | 4 | 5 | — | 1(a) |
| Western Australia | 4 | 5 | 1 | — |
| Tasmania | 4 | 5 | — | 1(b) |
| Australian Capital Territory .. | 1 | 1 | — | — |
| Northern Territory | 1 | — | 1 | — |

(a) Liberal Movement (LM). Senator later rejoined the Liberal Party of Australia.

(b) Independent.

ALP Australian Labor Party LP Liberal Party of Australia NCP National Country Party

The members representing South Australia in the Senate are:

To Retire 30 June 1978:

Cameron, Donald Newton (ALP)
 Young, Harold William (LP)
 McLaren, Geoffrey Thomas (ALP)
 Messner, Anthony John (LP)
 Hall, Raymond Steele (LP)

To Retire 30 June 1981:

Davidson, Gordon Sinclair (LP)
 Bishop, the Hon. Reginald (ALP)
 Jessop, Donald Scott (LP)
 Cavanagh, the Hon. James Luke
 (ALP)
 Laucke, the Hon. Condor Louis
 (LP)

Elections for the Senate: Voting, South Australia

| Date of Election | Electors Enrolled | Votes Recorded | | Informal Votes | |
|------------------|----------------------|----------------|---------------------------------------|----------------|------------------------------------|
| | | Number | Percentage of Electors Enrolled | Number | Percentage of Votes Recorded |
| 10 December 1949 | 434 224 | 420 437 | 96.82 | 48 838 | 11.62 |
| 28 April 1951 | 440 454 | 427 593 | 97.08 | 24 792 | 5.80 |
| 9 May 1953 | 453 496 | 437 583 | 96.49 | 21 297 | 4.87 |
| 10 December 1955 | 462 747 | 444 827 | 96.13 | 39 802 | 8.95 |
| 22 December 1958 | 490 930 | 473 832 | 96.52 | 36 677 | 7.74 |
| 9 December 1961 | 521 396 | 501 312 | 96.15 | 28 284 | 5.64 |
| 5 December 1964 | 551 341 | 528 464 | 95.85 | 39 421 | 7.46 |
| 25 November 1967 | 594 480 | 568 823 | 95.68 | 32 864 | 5.78 |
| 21 November 1970 | 639 807 | 609 268 | 95.23 | 42 306 | 6.94 |
| 18 May 1974 | 750 308 | 722 434 | 96.28 | 82 191 | 11.38 |
| 13 December 1975 | 789 004 | 759 369 | 96.24 | 75 540 | 9.95 |

Voting System

Before the election in 1949 the system of preferential voting was used for Senate elections, but for the 1949 and subsequent elections a system of proportional representation has been used. This system was discussed in detail on pages 55-6 of the *South Australian Year Book 1971*.

THE HOUSE OF REPRESENTATIVES

Representation

The members of the House of Representatives (the Lower House) are elected in single-member electorates. The number of electorates into which a State is divided is determined by the proportion that the population of the State bears to the population of the Commonwealth as a whole. Section 24 of the Constitution provides that the number of members in the House of Representatives shall be as nearly as possible twice the number of Senators and prescribes the formula to be used, 'until the Parliament otherwise provides', for allocating to each State its share of the available seats, but stipulates that no original State shall have less than five members in the House. In addition one member is elected from the Northern Territory and two members are elected from the Australian Capital Territory. Preferential voting is used for elections for the House of Representatives.

After the election of 13 December 1975 representation in this House was as follows:

| Party | NSW | Vic. | Qld | SA | WA | Tas. | ACT | NT | Total |
|---------------|-----|------|-----|----|----|------|-----|----|-------|
| ALP | 17 | 10 | 1 | 6 | 1 | — | 1 | — | 36 |
| LP | 19 | 19 | 9 | 6 | 9 | 5 | 1 | — | 68 |
| NCP | 9 | 5 | 8 | — | — | — | — | 1 | 23 |

ALP Australian Labor Party LP Liberal Party of Australia NCP National Country Party

House of Representatives, 1975 Election

Voting and Party Representation in South Australian Electorates

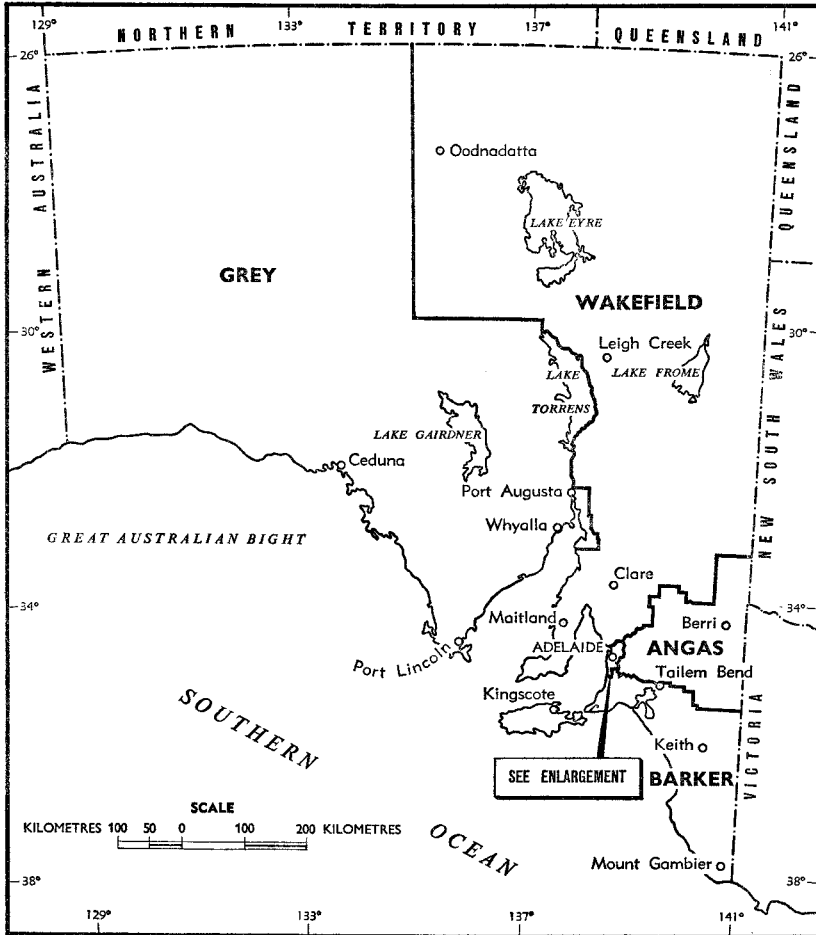
| Electorate | Electors on Roll | Electors Voting | Successful Candidates | | |
|-------------------------|------------------|-----------------|-----------------------|-------|------------------------|
| | | | Name | Party | First Preference Votes |
| Adelaide | 62 416 | 59 421 | Hurford, C. J. | ALP | 28 621 |
| Angas | 59 054 | 56 883 | Giles, G. O'H. | LP | 37 981 |
| Barker | 66 395 | 64 409 | Porter, J. R. | LP | 36 894 |
| Bonython | 87 805 | 84 362 | Nicholls, M. H. | ALP | 41 363 |
| Boothby | 63 249 | 60 701 | McLeay, Hon. J. E. | LP | 34 664 |
| Grey | 61 051 | 58 211 | Wallis, L. G. | ALP | 28 182 |
| Hawker | 62 253 | 60 059 | Jacobi, H. R. | ALP | 29 036 |
| Hindmarsh | 65 047 | 62 432 | Cameron, Hon. C. R. | ALP | 32 978 |
| Kingston | 76 260 | 73 766 | Chapman, H. G. P. | LP | 34 893 |
| Port Adelaide | 62 008 | 59 812 | Young, M. J. | ALP | 34 701 |
| Sturt | 72 159 | 69 975 | Wilson, I. B. C. | LP | 37 087 |
| Wakefield | 51 307 | 49 338 | Kelly, Hon. C. R. | LP | 32 070 |

Elections for the House of Representatives: Voting, South Australia

| Date of Election | Electors Enrolled | Votes Recorded | | Informal Votes | |
|----------------------------|-------------------|----------------|---------------------------------|----------------|------------------------------|
| | | Number | Percentage of Electors Enrolled | Number | Percentage of Votes Recorded |
| 29 May 1954 | 455 872 | (a)357 854 | (a)96·77 | 8 812 | 2·46 |
| 10 December 1955 | 462 747 | 444 827 | 96·13 | 18 050 | 4·06 |
| 22 December 1958 | 490 930 | 473 832 | 96·52 | 15 619 | 3·30 |
| 9 December 1961 | 521 396 | 501 312 | 96·15 | 15 629 | 3·12 |
| 30 November 1963 | 541 536 | 523 135 | 96·60 | 13 963 | 2·67 |
| 26 November 1966 | 585 465 | 563 341 | 96·22 | 16 220 | 2·88 |
| 25 October 1969 | 624 626 | 599 719 | 96·01 | 20 562 | 3·43 |
| 2 December 1972 | 671 081 | 644 211 | 96·00 | 16 845 | 2·61 |
| 18 May 1974 | 750 308 | 722 434 | 96·28 | 20 311 | 2·81 |
| 13 December 1975 | 789 004 | 759 369 | 96·24 | 18 201 | 2·40 |

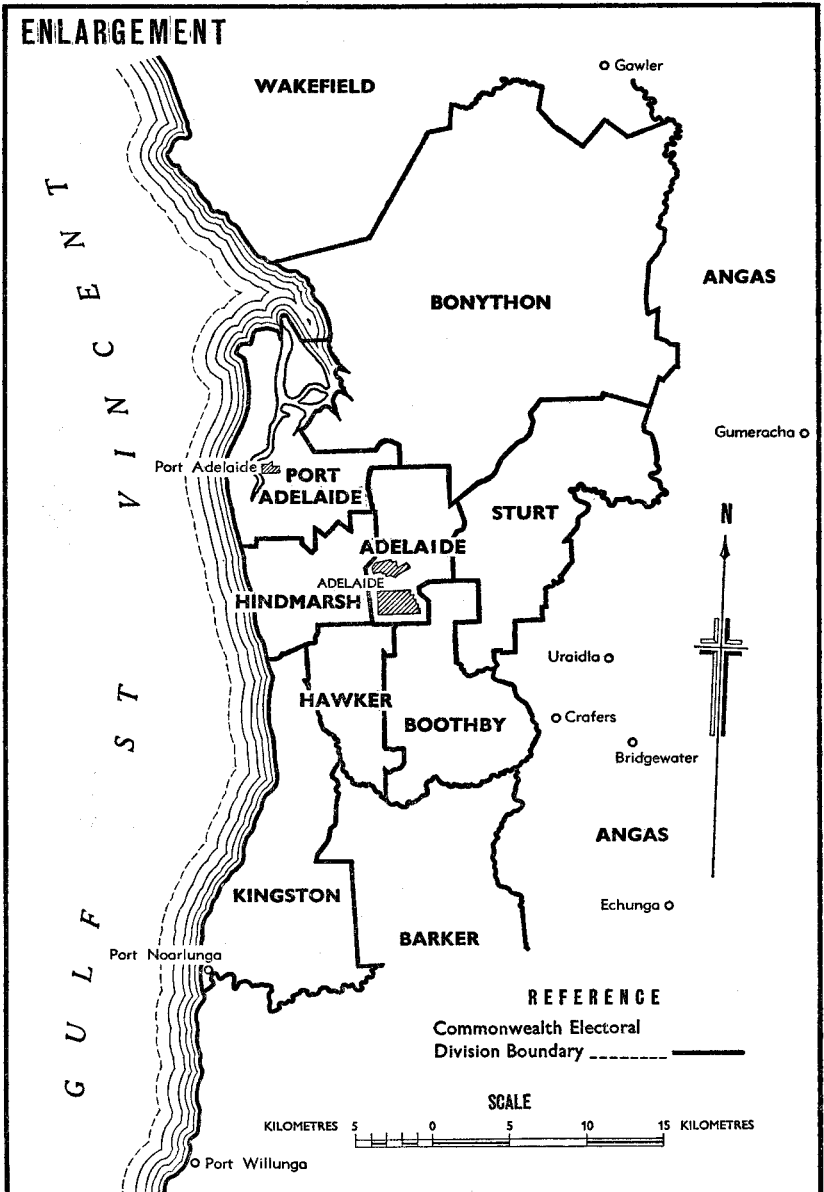
(a) Contested electorates only.

SOUTH AUSTRALIA
COMMONWEALTH ELECTORAL DIVISIONS
As proclaimed 21 November 1968



PORTION OF SOUTH AUSTRALIA COMMONWEALTH ELECTORAL DIVISIONS

As proclaimed 21 November 1968



REFERENDA

Alteration to the Constitution must be initiated in the Commonwealth Parliament and requires the approval of a majority of electors voting in a majority of the States as well as a majority of all the electors voting in the Commonwealth as a whole.

Of the thirty-two proposals so far submitted to the people of Australia for amendment to the Constitution, only five have been approved (one in each of 1906, 1910, 1928, 1946 and 1967). In addition proposals concerning compulsory overseas military service were submitted to the people in 1916 and 1917 respectively; both proposals failed to gain the necessary majority of votes.

At the most recent referendum, held at the same time as the general election of 18 May 1974, four alterations to the Constitution were proposed. All four proposals were defeated.

3.3 GOVERNMENT OF SOUTH AUSTRALIA

The Constitution Act, 1855-1856, which inaugurated the system of responsible government in South Australia, was passed and came into force on 24 October 1856. A summary of early constitutional history and the introduction of responsible government was included on pages 60-2 of the *South Australian Year Book* 1971.

VICE-REGAL REPRESENTATION

Sir Douglas Ralph Nicholls, KCVO, OBE was sworn in as the Queen's representative in South Australia on 1 December 1976. However, following a long period of illness and on medical advice Sir Douglas Nicholls retired from office on 30 April 1977. Keith Douglas Seaman, OBE was sworn in as the Queen's representative in South Australia on 1 September, 1977.

The title of the vice-regal representative has been varied from time to time. The first three holders of the Office were styled 'Governor and Commander-in-Chief', the next two, 'Lieutenant-Governor', and the following two, 'Captain-General and Governor-in-Chief'. The title then reverted to its original form until Federation in 1901. Since then, because of the appointment of a 'Governor-General and Commander-in-Chief in and over the Commonwealth', the holder of the State office has been described simply as 'Governor', and this title is used in the following table, which lists occupants of the office since the foundation of South Australia.

As titular head of the Government of South Australia the Governor exercises powers, duties, and functions, similar to those of a constitutional sovereign. On the one hand he is indirectly responsible to the Imperial Parliament through the Secretary of State for Foreign and Commonwealth Affairs, and on the other hand he usually acts on the advice of his Ministers, who take the responsibility for their advice. Nevertheless, the Governor retains important spheres of discretionary action and is thus enabled to maintain something of a safeguard against malpractice and injustice, particularly in extreme circumstances. To ensure continuity of services, the Governor has power to appropriate up to one per cent of the total amount appropriated from the State's general revenue by the Appropriation Acts for public service without specific Parliamentary authority.

Governors of South Australia

| Name | From | To |
|--|------------------|-------------------|
| Captain John Hindmarsh, RN, KH .. | 28 December 1836 | 16 July 1838 |
| Lt-Col George Gawler, KH | 17 October 1838 | 15 May 1841 |
| George Grey | 15 May 1841 | 25 October 1845 |
| Lt-Col Frederick Holt Robe | 25 October 1845 | 2 August 1848 |
| Sir Henry E. F. Young | 2 August 1848 | 20 December 1854 |
| Sir Richard G. MacDonnell, CB | 8 June 1855 | 4 March 1862 |
| Sir Dominick Daly | 4 March 1862 | 19 February 1868 |
| Rt Hon. Sir James Fergusson, Bart .. | 16 February 1869 | 18 April 1873 |
| Sir Anthony Musgrave, KCMG | 9 June 1873 | 29 January 1877 |
| Lt-Gen. Sir Wm F. D. Jervois, GCMG, CB | 2 October 1877 | 9 January 1883 |
| Sir Wm C. F. Robinson, GCMG | 19 February 1883 | 5 March 1889 |
| Rt Hon. the Earl of Kintore, PC, GCMG | 11 April 1889 | 10 April 1895 |
| Sir Thomas F. Buxton, Bart, GCMG .. | 29 October 1895 | 29 March 1899 |
| Rt Hon. the Lord Tennyson, KCMG .. | 10 April 1899 | 17 July 1902 |
| Sir George R. Le Hunte, KCMG | 1 July 1903 | 18 February 1909 |
| Admiral Sir Day Hort Bosanquet, GCVO, KCB | 18 February 1909 | 22 March 1914 |
| Lt-Col Sir Henry L. Galway, KCMG, DSO | 18 April 1914 | 30 April 1920 |
| Lt-Col Sir Wm E. G. Archibald Weigall, KCMG | 9 June 1920 | 30 May 1922 |
| Lt-Gen. Sir George T. M. Bridges, KCB, KCMG, DSO | 4 December 1922 | 4 December 1927 |
| Brig-Gen. the Hon. Sir A. G. A. Hore- Ruthven, VC, KCMG, CB, DSO .. | 14 May 1928 | 26 April 1934 |
| Maj-Gen. Sir W. J. Dugan, KCMG, CB, DSO | 28 July 1934 | 23 February 1939 |
| Sir Charles M. Barclay-Harvey, KCMG | 12 August 1939 | 26 April 1944 |
| Lt-Gen. Sir C. W. M. Norrie, KCMG, CB, DSO, MC | 19 December 1944 | 19 June 1952 |
| Air Vice-Marshal Sir Robert A. George, KCMG, KCVO, KBE, CB, MC | 23 February 1953 | 7 March 1960 |
| Lt-Gen. Sir Edric M. Bastyan, KCMG, KCVO, KBE, CB | 4 April 1961 | 1 June 1968 |
| Maj-Gen. Sir James W. Harrison, KCMG, CB, CBE | 4 December 1968 | 16 September 1971 |
| Sir Mark L. Oliphant, KBE | 1 December 1971 | 1 December 1976 |
| Sir Douglas R. Nicholls, KCVO, OBE .. | 1 December 1976 | 30 April 1977 |
| Keith Douglas Seaman, OBE | 1 September 1977 | |

A Governor is normally appointed for a term of five years, but he can be reappointed for one or more subsequent terms. At present he is granted a basic salary of \$20 000 a year and an expense allowance which is altered in accordance with the Consumer Price Index number for Adelaide. The amount appropriated from Consolidation Revenue for the Governor's salary and allowances for 1976-77 was \$50 200. The Governors' Pension Act, 1976 provides for a pension to be paid to former Governors and to the spouses of deceased Governors.

In the absence or prolonged illness of a Governor other persons have been appointed to administer the government of the State. These persons have been variously styled 'Lieutenant-Governor', 'Deputy-Governor', 'Deputy Lieutenant-Governor', and 'Administrator', and several of them have held office more than once. The eighteen persons so appointed have been:

| Name | Occupancy of Office | | Occasions in Office | Total Period | |
|--|---------------------|-------------|------------------------|--------------|--------|
| | First | Most Recent | | Years | Days |
| George Milner Stephen | 16/7/1838 | 17/10/1838 | 1 | — | 93 |
| Boyle Travers Finnis | 20/12/1854 | 8/6/1855 | 1 | — | 170 |
| Lt-Col Francis G. Hamley . . | 19/2/1868 | 16/2/1869 | 1 | — | 364 |
| Maj. James Harwood Roche . | 6/4/1870 | 5/5/1870 | 1 | — | 29 |
| Hon. Sir Richard D. Hanson | 7/12/1872 | 9/6/1873 | 1 | — | 184 |
| Rt Hon. Sir Samuel J. Way, Bart | 29/1/1877 | 17/11/1915 | 65 | 6 | 117 |
| William W. Cairns, CMG . . . | 24/3/1877 | 17/5/1877 | 1 | — | 54 |
| Hon. James P. Boucaut . . . | 26/10/1885 | 16/9/1897 | 9 | — | 263 |
| Hon. William H. Bunday . . . | 30/7/1888 | 9/8/1888 | 1 | — | 10 |
| Hon. Sir G. J. R. Murray, KCMG | 25/9/1916 | 9/2/1942 | 103 | 6 | 47 |
| Hon. Thomas Slaney Poole . . | 20/3/1925 | 22/11/1925 | 2 | — | 240 |
| Hon. Sir H. Angus Parsons . | 11/6/1935 | 19/2/1942 | 6 | — | 54 |
| Hon. Sir J. Mellis Napier, KCMG | 21/4/1942 | 17/5/1973 | 179 | 9 | 140 |
| Hon. Sir Herbert Mayo | 15/10/1946 | 9/1/1965 | 25 | — | 187 |
| Hon. Sir G. S. Reed | 24/7/1951 | 4/11/1957 | 5 | — | 31 |
| Hon. J. J. Bray | 25/6/1968 | 5/8/1973 | 8 | — | 72 |
| Hon. D. S. Hogarth | 8/7/1971 | 8/7/1971 | 1 | — | 1 |
| Walter R. Crocker, CBE | 7/9/1973 | 2/5/1977 | 25 | — | (a)146 |

(a) Excludes period of occupancy from 2 May 1977.

CABINET AND EXECUTIVE GOVERNMENT

In South Australia all Ministers are members of the Cabinet and all Ministers are *ex officio* members of the Executive Council. Although the Governor may, subject to any law enacted by the Legislature, appoint other persons to the Executive Council, membership is in practice limited to Ministers of the day.

The Constitution Act of 1855-1856 provided that every Minister must be a member of either the Legislative Council or the House of Assembly or become a member within three months of appointment. However, in 1873 an amendment was made to the Act authorising the Governor to appoint an Attorney-General from outside Parliament; this provision was retained until 1953, and four Attorneys-General were so appointed.

The maximum number of Ministers has been varied from time to time. In 1856 the number was five; in 1873, six; 1901, four; 1908, six; 1953, eight; 1965, nine; 1970, ten; 1973, eleven; and 1975, twelve. In 1908 it was specified that no more than four Ministers were to be in the House of Assembly, but in

1953 this limit was increased to five, in 1965 to six, in 1970 to seven and in 1973 to eight. This restriction on the number of Ministers from the lower House was removed by the Constitution Act Amendment Act (No. 2), 1975, and now it is permissible for all Ministers to be selected from the House of Assembly.

The Constitution of 1856 provided for salary payments to Ministers only and salary payments to other members did not commence until 1887. The 1976-77 appropriation for salaries and allowances for twelve Ministers is \$421 430 which includes salaries and allowances received by Ministers as members.

Cabinet, as such, has no legal powers. Some Cabinet decisions result in the initiation and subsequent enactment of legislation; other decisions become legally binding through ratification by Executive Council or through powers vested in individual Ministers for the administration and control of their respective departments of government. In addition to government departments, statutory authorities also come under some degree of ministerial or parliamentary oversight.

Premiers

Since 1856 the following thirty-six persons have held the office of Premier.

Premiers of South Australia

| Name | Dates of Office | Total Period in Office | |
|---------------------------------|---|---------------------------|------|
| | | Years | Days |
| Hon. Boyle T. Finnis | 24/10/1856- 21/8/1857 | — | 301 |
| Hon. John Baker | 21/8/1857- 1/9/1857 | — | 11 |
| Hon. Robert R. Torrens | 1/9/1857- 30/9/1857 | — | 29 |
| Hon. Richard D. Hanson | 30/9/1857- 9/5/1860 | 2 | 222 |
| Hon. Thomas Reynolds | 9/5/1860- 8/10/1861 | 1 | 152 |
| Hon. G. M. Waterhouse | 8/10/1861- 4/7/1863 | 1 | 269 |
| Hon. Francis S. Dutton | 4/7/1863- 15/7/1863; 22/3/1865- 20/9/1865 | — | 193 |
| Hon. Sir Henry Ayers, KCMG | 15/7/1863- 4/8/1864; 20/9/1865-23/10/1865; 3/5/1867- 24/9/1868; 13/10/1868- 3/11/1868; | | |
| | 22/1/1872- 22/7/1873 | 4 | 35 |
| Hon. Arthur Blyth | 4/8/1864- 22/3/1865; 10/11/1871- 22/1/1872; | | |
| | 22/7/1873- 3/6/1875 | 2 | 254 |
| Hon. John Hart, CMG | 23/10/1865- 28/3/1866; 24/9/1868-13/10/1868; | | |
| | 30/5/1870-10/11/1871 | 1 | 339 |
| Hon. James P. Boucaut, QC | 28/3/1866- 3/5/1867; 3/6/1875- 6/6/1876; | | |
| | 26/10/1877- 27/9/1878 | 3 | 11 |
| Hon. H. B. Strangways | 3/11/1868- 30/5/1870 | 1 | 208 |
| Hon. John Colton | 6/6/1876-26/10/1877; 16/6/1884- 16/6/1885 | 2 | 142 |
| Hon. William Morgan | 27/9/1878- 24/6/1881 | 2 | 270 |
| Hon. John C. Bray | 24/6/1881- 16/6/1884 | 2 | 358 |
| Hon. Sir J. W. Downer, KCMG, QC | 16/6/1885- 11/6/1887; 15/10/1892- 16/6/1893 | 2 | 239 |

Premiers of South Australia (continued)

| Name | Dates of Office | Total Period in Office | |
|--|--|---------------------------|------|
| | | Years | Days |
| Hon. Thomas Playford | 11/6/1887- 27/6/1889; 19/8/1890- 21/6/1892 | 3 | 323 |
| Hon. J. A. Cockburn | 27/6/1889- 19/8/1890 | 1 | 53 |
| Hon. F. W. Holder | 21/6/1892-15/10/1892; 8/12/1899- 15/5/1901 | 1 | 274 |
| Rt Hon. C. C. Kingston, QC | 16/6/1893- 1/12/1899 | 6 | 168 |
| Hon. V. L. Solomon | 1/12/1899- 8/12/1899 | — | 7 |
| Hon. J. G. Jenkins | 15/5/1901- 1/3/1905 | 3 | 290 |
| Hon. Richard Butler | 1/3/1905- 26/7/1905 | — | 147 |
| Hon. Thomas Price | 26/7/1905- 5/6/1909 | 3 | 314 |
| Hon. A. H. Peake | 5/6/1909- 3/6/1910; 17/2/1912- 3/4/1915; 14/7/1917- 8/4/1920 | 6 | 312 |
| Hon. John Verran | 3/6/1910- 17/2/1912 | 1 | 259 |
| Hon. Crawford Vaughan | 3/4/1915- 14/7/1917 | 2 | 102 |
| Hon. Sir H. N. Barwell, KCMG | 8/4/1920- 16/4/1924 | 4 | 8 |
| Hon. John Gunn | 16/4/1924- 28/8/1926 | 2 | 134 |
| Hon. Lionel L. Hill | 28/8/1926- 8/4/1927; 17/4/1930- 13/2/1933 | 3 | 160 |
| Hon. R. L. Butler | 8/4/1927- 17/4/1930; 18/4/1933- 5/11/1938 | 8 | 210 |
| Hon. R. S. Richards | 13/2/1933- 18/4/1933 | — | 64 |
| Hon. Sir Thomas Playford, GCMG | 5/11/1938- 10/3/1965 | 26 | 125 |
| Hon. F. H. Walsh | 10/3/1965- 1/6/1967 | 2 | 83 |
| Hon. D. A. Dunstan, QC | 1/6/1967- 17/4/1968; 2/6/1970- | | |
| Hon. R. S. Hall | 17/4/1968- 2/6/1970 | 2 | 47 |

Ministry

The Ministry is the sixty-fourth to hold office. The members at 6 October 1977 were:

Premier, Treasurer and Minister of Immigration and Ethnic Affairs

Hon. Donald Allan Dunstan, QC, MP

Deputy Premier, Minister of Works, Minister for the Environment and Minister of Marine

Hon. James Desmond Corcoran, MP

Minister of Mines and Energy and Minister for Planning

Hon. Hugh Richard Hudson, MP

Minister of Health and Minister Assisting the Deputy Premier

Hon. Donald Hubert Louis Banfield, MLC

Minister of Transport and Minister of Local Government

Hon. Geoffrey Thomas Virgo, MP

*Minister of Lands, Minister of Irrigation, Minister of Repatriation and
Minister of Tourism, Recreation and Sport*
Hon. Thomas Mannix Casey, MLC

Minister of Education
Hon. Donald Jack Hopgood, MP

Minister of Agriculture, Minister of Forests and Minister of Fisheries
Hon. Brian Alfred Chatterton, MLC

Minister of Labour and Industry
Hon. John David Wright, MP

Minister of Community Welfare
Hon. Ronald George Payne, MP

Attorney-General and Minister of Public and Consumer Affairs
Hon. Peter Duncan, MP

Chief Secretary and Minister Assisting the Premier
Hon. Donald William Simmons, DFC, MP

PARLIAMENT

Parliament is summoned, prorogued, or dissolved, by proclamation issued by the Governor. The two Houses of Parliament are the Legislative Council (Upper House) and the House of Assembly (Lower House). The following table gives the dates and the number of House of Assembly sitting days for Parliamentary sessions in recent years.

| Parliamentary Session | Period | House of Assembly Sitting Days |
|-----------------------|-----------------|--------------------------------|
| 1969 | 17/6/69-5/12/69 | 65 |
| 1970-71 | 14/7/70-8/4/71 | 75 |
| 1971-72 | 13/7/71-6/4/72 | 74 |
| 1972 | 8/7/72-24/11/72 | 54 |
| 1973 | 19/6/73-27/6/73 | 4 |
| 1973-74 | 24/7/73-28/3/74 | 69 |
| 1974-75 | 23/7/74-18/6/75 | 74 |
| 1975-76 | 5/8/75-19/2/76 | 45 |

Voting System

Members for both Houses are elected by secret ballot; the preferential system of voting is used. In filling the vacancy for each House of Assembly District the candidate who has received the largest number of first preference votes is elected if this number constitutes an absolute majority (*i.e.* greater than one-half of the total formal votes). If no candidate has received an absolute majority of first preference votes a second count is made in which the second preferences of the candidate who has received the fewest first preference votes are distributed. This distribution of second preferences of the successive candidate with the fewest votes is repeated until one candidate has received an absolute majority of votes.

For Legislative Council elections before 12 July 1975, the State was divided into five 4-member electoral districts with two members for each district

retiring at each Legislative Council election. The first vacancy in each district was filled in the same manner as those in the single-member House of Assembly districts discussed above. The second vacancy in each district was filled by re-arranging all ballot papers according to first preferences and allotting each ballot paper of the first elected candidate according to the second preferences. If a candidate then had an absolute majority he was elected, otherwise subsequent counts were made eliminating candidates with the fewest votes until one remaining candidate had received an absolute majority.

However, as a result of the passing of the Constitution and Electoral Acts Amendment Act, 1973, the number of electorates and the voting system has been changed for Legislative Council elections commencing with the election of 12 July 1975. This Act has increased the number of members of the Legislative Council from twenty to twenty-two and has introduced a system of proportional representation with the whole of the State as a single multi-member electoral district. Under the new system electors register preferences for groups of candidates rather than individuals (although a group may contain only one candidate) and a candidate's election depends on the proportion of votes his group obtains and his position within the group on the ballot paper. Because an optional preference voting system applies it is not necessary for electors to indicate preferences for each group in order to register formal votes.

Members, Qualifications, and Privileges

Certain requirements must be met before a person qualifies for membership of the South Australian Parliament. The following persons are not eligible for membership of either House: Judges, persons under the age of eighteen, aliens, members of the Commonwealth Parliament, persons who are not residents of South Australia, holders of contracts for the Public Service, occupants of offices of profit under the Crown, persons of unsound mind, persons attainted of treason, undischarged bankrupts and insolvent persons, and, amongst others, persons under sentence for any offence punishable by imprisonment for at least a year. Other requirements applicable only to one House or the other are mentioned on pages 90-1 and 92.

Each member is required to take an oath or make an affirmation of allegiance to the Crown before being permitted to sit or vote in Parliament. All members of the Parliament are entitled to such privileges, immunities, and powers as were held by members of the House of Commons on 24 October 1856, the date on which the Constitution Act came into force.

Franchise

The franchises for the separate Houses are shown on pages 91 and 92. South Australia was the first, at the general election of 25 April 1896, of the Australian States to give voting rights to women, and the existence of this provision in this State contributed to the decision to include full adult franchise in proposals for Federation. For the first eighty-five years of responsible government voting for both Houses of Parliament was voluntary but the Electoral Act Amendment Act of 1942 made voting for the House of Assembly compulsory for persons whose names appear on the House of Assembly Electoral Roll.

Number of Members and Electorates

Alterations made to the number of members and number of electorates for each of the two Houses are shown in the following table.

| Date | Legislative Council | | House of Assembly | |
|-----------------|---------------------|-------------|-------------------|-------------|
| | Members | Electorates | Members | Electorates |
| 1856 | 18 | 1 | 36 | 17 |
| 1863 | 18 | 1 | 36 | 18 |
| 1875 | 18 | 1 | 46 | 22 |
| 1882 | 24 | 4 | 46 | 22 |
| 1884(a) | 24 | 4 | 52 | 26 |
| 1890 | 24 | 4 | 54 | 27 |
| 1902 | 18 | 4 | 42 | 13 |
| 1912(b) | 18 | 4 | 40 | 12 |
| 1915 | 20 | 5 | 46 | 19 |
| 1938 | 20 | 5 | 39 | 39 |
| 1970 | 20 | 5 | 47 | 47 |
| 1975 | 21 | 1 | 47 | 47 |

(a) Separate representation for Northern Territory.

(b) Cession of Northern Territory to Commonwealth Government control.

Functions of Parliament

The function of Parliament is to legislate for the peace, order, and good government of the State. Principal among the tasks of Parliament is the raising of revenue and the appropriation of funds for the development and maintenance of the State through its public services.

Legislation may be initiated by any member in either House except that money Bills must be initiated by Ministers of the Crown in the House of Assembly; the Legislative Council may suggest amendments to money Bills although it may not effect such amendments itself. Most Bills are initiated by the Government as a result of the deliberations of Cabinet. The Opposition and Independent members usually confine their activities to examination, criticism, and amendment, of Government measures. Legislation, other than to amend the Constitution, may be passed by a simple majority of the votes of the members present.

Constitutional Amendment

Alteration to the Constitution Act is in the hands of Parliament itself. An alteration to the Constitution requires at the second and third readings of the Bill acceptance by a majority of all the members (not only those present or voting) of each House voting separately.

Deadlocks

A deadlock results from the refusal by the Upper House to pass the same (or substantially the same) Bill during two consecutive Parliaments, provided that a general election for the Lower House has been held between the refusals and that on the second occasion an absolute majority of all the members of the Lower House voted in favour of the Bill at its second and third readings. In the event of a deadlock between the Houses, provision is made for the dissolution of both Houses.

Life of Parliament

The term of office of each Parliament is generally three years from the day on which it first meets for the dispatch of business but it may be prorogued or dissolved by the Governor before the expiration of this period.

Legislation introduced in 1933 extended the life of the twenty-eighth Parliament to five years and in 1937 the Constitution Act was amended for each subsequent Parliament to have a life of five years. However, the twenty-ninth Parliament repealed this provision and re-introduced three-year Parliaments.

Salaries and Allowances

Salaries and allowances for members of Parliament are determined periodically by the Parliamentary Salaries Tribunal, pursuant to the provisions of the Parliamentary Salaries and Allowances Act, 1965-1974.

The annual salary from 1 January 1977 is \$19 770 per member with allowances of between \$2 960 and \$6 800 depending on the area of the member's electorate and the distance from the City of Adelaide. The following additional payments are also made:

Premier and Treasurer—\$19 770, plus expense allowance of \$3 075.

Deputy Premier—\$12 580, plus expense allowance of \$2 485.

Leader of the Government in the Legislative Council—\$11 980, plus expense allowance of \$2 365.

Other Ministers—\$10 790, plus expense allowance of \$2 075.

President of Legislative Council and Speaker of House of Assembly—each \$6 470, plus expense allowance of \$775.

Chairman of Committees, House of Assembly—\$3 240, plus expense allowance of \$345.

Leader of the Opposition, House of Assembly—\$10 790, plus expense allowance of \$2 075.

Leader of the Opposition, Legislative Council—\$4 200, plus expense allowance of \$655.

Deputy Leader of the Opposition, House of Assembly—\$4 200.

Government Whip—\$2 165.

Opposition Whip—\$2 165.

In addition allowances are paid to the members of the various Parliamentary Committees.

Superannuation

All members are required to contribute to a Superannuation Fund established under the Parliamentary Superannuation Act, 1974, which provides for the payment of superannuation pensions to persons, or widows or widowers or eligible children of persons, who have served as members of the State Parliament. No member can qualify for a pension until he has served a minimum of six years.

The standard contribution to this fund is 11·5 per cent of salary, presently \$2 154 a year, with optional additional contributions available to all Ministers and Officers of Parliament and Members of Parliamentary Committees. According to the length of service the pension payable to ordinary members varies between 41·2 per cent of salary (presently \$7 717 a year) and 75 per cent of salary (presently \$14 048 a year). Greater amounts of pension accrue to those members who have made additional contributions based on additional salary as a Minister or an office holder.

At 30 June 1976 there were sixty-eight contributors to the fund; thirty-one ex-members and nineteen widows were in receipt of pensions.

Cost of Parliamentary Government

The following table shows, in broad groups, the expenditure incurred in the operation of the parliamentary system in South Australia, comprising the Governor, the Ministry, the Legislative Council, House of Assembly and electoral activities.

Cost of Parliamentary Government, South Australia

| Particulars | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------|---------|---------|---------|
| | | | \$'000 | |
| Governor's Establishment | 237 | 261 | 352 | 324 |
| Ministry | 196 | 268 | 304 | 407 |
| Parliament: | | | | |
| Legislative Council (a) | 213 | 275 | 310 | 443 |
| House of Assembly (a) | 487 | 633 | 719 | 946 |
| Other (b) | 1 167 | 1 445 | 2 004 | 2 372 |
| Total Parliament | 1 867 | 2 353 | 3 033 | 3 761 |
| Electoral | 349 | 277 | 156 | 627 |
| Royal Commissions, Select Committees, etc. | 28 | 31 | 51 | 89 |
| Total | 2 677 | 3 190 | 3 895 | 5 207 |

(a) Allowances to members (including Ministers' salaries as members), travelling and other expenses.

(b) Government contribution to members' superannuation funds, printing, reporting staff, library, etc.

LEGISLATIVE COUNCIL

Members and Electorates

Before the passing of the Constitution and Electoral Acts Amendment Act, 1973, each member of the Legislative Council, in addition to fulfilling the general requirements mentioned on page 87, must have attained the age of thirty years, have been a British subject, and have resided in the State for at least three years. For the purpose of electing members to the Council the State was divided into five electorates each having four members. Each electorate normally elected two members every three years, and each member occupied his seat for a minimum of six years. When a casual vacancy occurred because of the death, resignation or disqualification of a member, such a casual vacancy was filled, at a by-election in the particular electorate, for the unexpired portion of the previous member's term.

The Constitution and Electoral Acts Amendment Act, 1973, assented to on 22 November 1973, increased the number of members in the Legislative Council from twenty to twenty-two and reduced the number of electorates to one with the whole State becoming a single electorate with members elected on a proportional representation basis. This amendment will not become fully effective for two general elections as only half the Legislative Councillors retire at each election and eleven members (not ten as previously) are now elected at each general Legislative Council election. At the general election of 12 July 1975, eleven members were elected to the Legislative Council and at present there are twenty-one members in this House. In future casual vacancies will be filled by a person chosen at a joint sitting of the members of both the Legislative Council and House of Assembly.

Franchise

Voting for the Legislative Council is voluntary for those persons whose names are on the Legislative Council Electoral Roll. Under the Constitution and Electoral Acts Amendment Act, 1973, all names which appear on the House of Assembly Electoral Roll are included on the Legislative Council Electoral Roll. Thus, all electors entitled to vote at House of Assembly elections are entitled also to vote at Legislative Council elections. Qualifications for House of Assembly electors are discussed below.

President and Chairman of Committees

At the first meeting of the Council in each Parliament the members choose one from among their number to fill the position of President and Chairman of Committees. The person so elected is then entitled to a casting vote only.

HOUSE OF ASSEMBLY

Seat of Government

The House of Assembly can be regarded as the more important Chamber in that the Government of the day holds its position as such only so long as it controls a majority in this House. When it no longer controls such a majority in vital issues, particularly 'money Bills', the Government must resign or go to the polls. Once defeated in the Lower House on a 'money Bill' the Government is unable to finance the administration of the State.

Franchise

A British subject at least eighteen years of age who:

- (i) has lived continuously in Australia for at least six months, and in South Australia for at least three months, and in a Subdivision for at least one month immediately preceding the date of his or her claim for enrolment; or
- (ii) is or has been (as qualified by the Constitution Act) a member of the Commonwealth Naval, Military or Air Force, or a member of the Mercantile Marine, during any war in which the Commonwealth is or has been engaged;

is entitled to vote at an election for a Member of the House of Assembly if, at the time of the election, he or she is enrolled on the Electoral Roll for a

Subdivision of the Assembly District in which the election is held, and is not of unsound mind.

Persons convicted of an offence punishable with imprisonment for one year or more and persons attainted of treason are entitled to the same voting rights as ordinary citizens under the provisions of the Constitutional Act Amendment Act, 1976.

Enrolment for the House of Assembly is not compulsory but in practice, as a consequence of the operation of the Commonwealth and House of Assembly Joint Electoral Rolls, most persons enrolling for the Commonwealth Electoral Roll are also enrolled for the House of Assembly.

Membership

Subject to the exclusions mentioned on page 87 election to the House of Assembly is open to those eligible to vote in an election for the House. Members of this House are elected for a maximum of three years, for single-member districts. The seat of a member becomes vacant through his death, resignation or disqualification and, usually, is filled at a by-election.

Electorates and Electoral Distribution

The present allocation of twenty-eight metropolitan and nineteen country electorates for the House of Assembly was introduced on 12 March 1970 with the proclamation of the Constitution Act Amendment Act, 1969. Before this date there were thirteen metropolitan and twenty-six country House of Assembly electoral districts. The first election incorporating the present boundaries was held on 30 May 1970.

The Electoral Districts Boundaries Commission, constituted by the Constitution Act Amendment Act (No. 5), 1975 has determined new electoral boundaries for the House of Assembly. The State is now divided into thirty-three metropolitan and fourteen country seats.

The Commission differs from previous commissions for redistribution of electoral boundaries in that each of those commissions was created by the Parliament to make a single report and recommendation to the Parliament. The boundaries so recommended did not become effective unless the recommendation was approved by the Parliament. However, the present Commission has perpetual succession and a common seal as a corporate entity. The reports made by the Commission do not require validating legislation and become operative three months after publication of the Commission's Order.

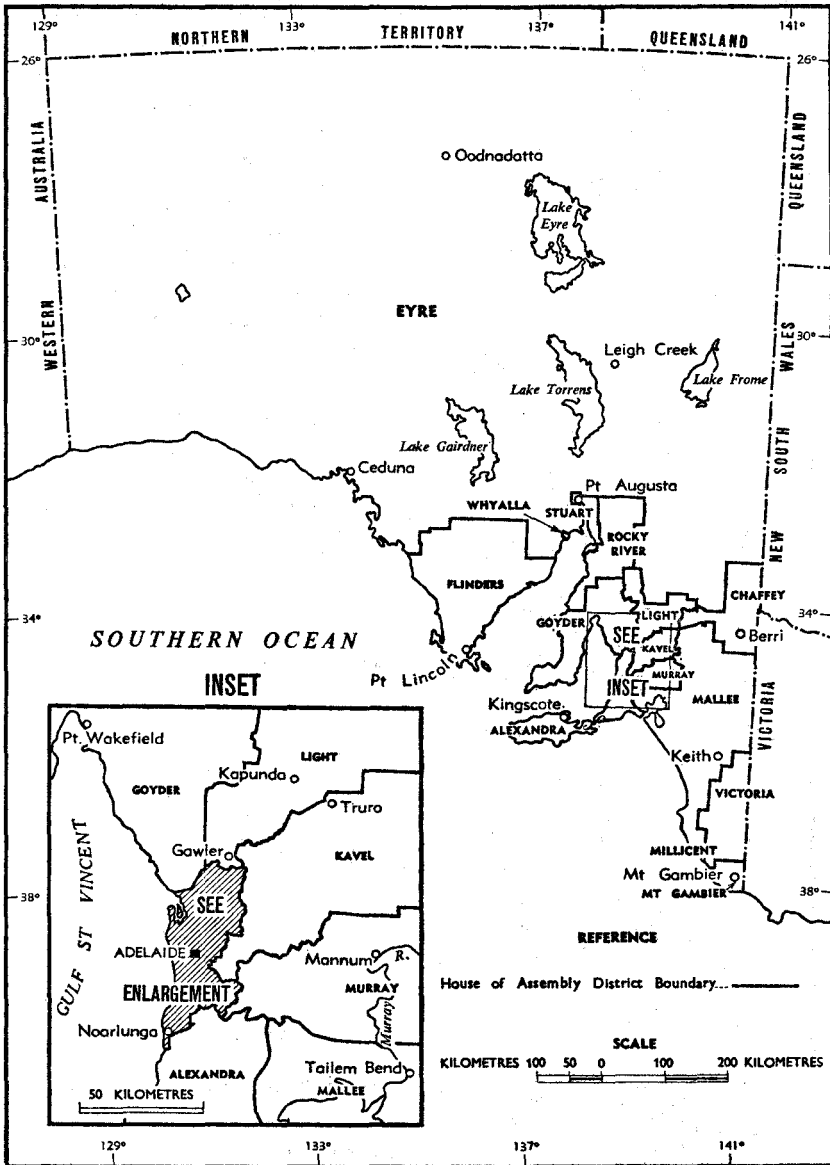
Under the Act any elector may, within one month of the Commission's Order, appeal to the Full Court of the Supreme Court.

Officers and their Functions

A Speaker presides over the House, and his election is the first business when a Parliament first meets. He presides over debate, maintains order, represents the House officially, communicates its wishes and resolutions, defends its privileges when necessary, and applies its procedure. The Speaker may exercise a casting vote only. There is also a Chairman of Committees elected by the House at the beginning of each Parliament; he presides over the deliberations of the House in Committee and acts as Deputy Speaker when required.

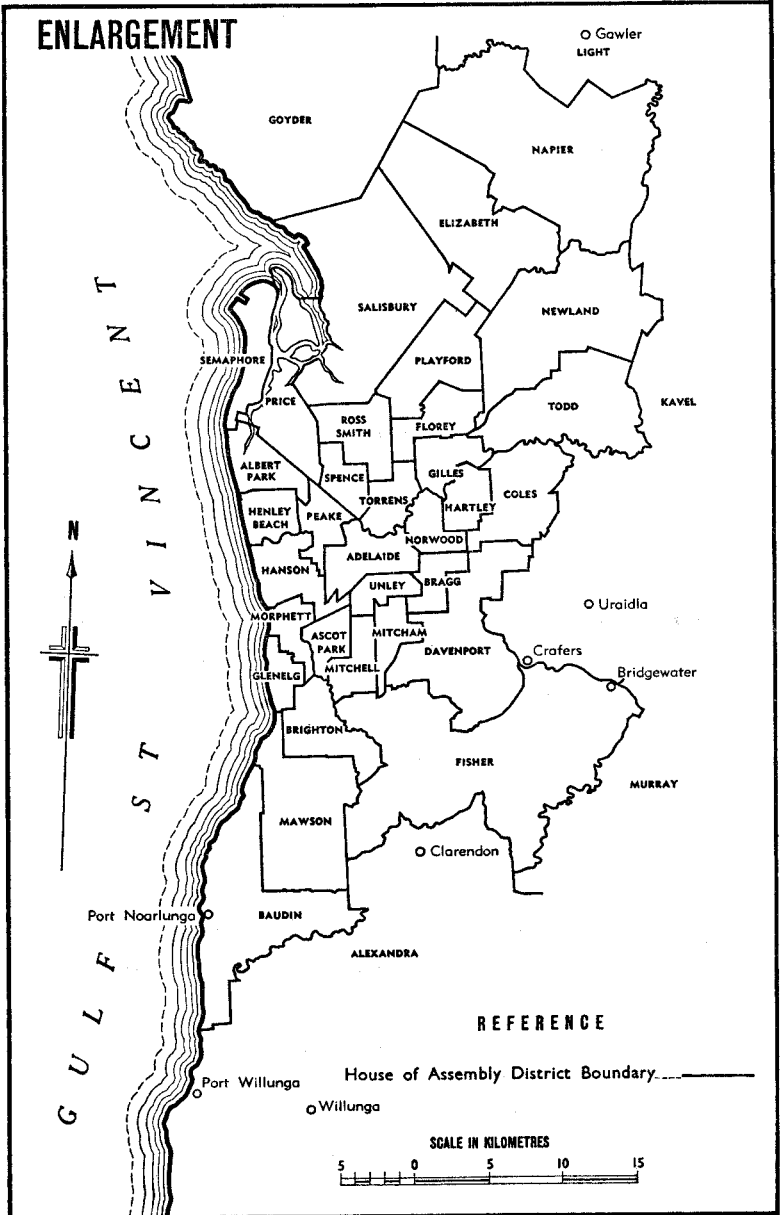
SOUTH AUSTRALIA
SOUTH AUSTRALIAN ELECTORAL DISTRICTS

Operative from 23 August 1977



PORTION OF SOUTH AUSTRALIA
SOUTH AUSTRALIAN ELECTORAL DISTRICTS

Operative from 23 August 1977



Other officers of the Parliament include the Leader and Deputy Leader of the Opposition in either House and the various party whips whose function is to ensure that their party members are present in the House for divisions and other important business.

ELECTIONS AND PARTY REPRESENTATION

The following table gives details of the numbers of electors on the Electoral Rolls and voting in contested electorates for all general elections from 1947 to 1975.

South Australian Parliament: Voting at Elections, 1947 to 1975

| Date | Legislative Council | | | House of Assembly | | |
|-------------------------|-----------------------|-----------------|----------|-----------------------|-----------------|----------|
| | Contested Electorates | | | Contested Electorates | | |
| | Electors Enrolled | Electors Voting | Per Cent | Electors Enrolled | Electors Voting | Per Cent |
| 8 March 1947 | 155 847 | 124 826 | 80.10 | 306 059 | 285 765 | 93.37 |
| 4 March 1950 | 68 347 | 52 954 | 77.48 | 311 658 | 290 306 | 93.15 |
| 7 March 1953 | 97 968 | 79 373 | 81.02 | 354 273 | 336 592 | 95.01 |
| 3 March 1956 | 22 963 | 16 002 | 69.69 | 299 048 | 280 811 | 93.90 |
| 7 March 1959 | 86 278 | 70 007 | 81.14 | 426 340 | 400 531 | 93.95 |
| 3 March 1962 | 118 218 | 98 786 | 83.56 | 444 197 | 417 462 | 93.98 |
| 6 March 1965 | 186 899 | 149 910 | 80.21 | 542 436 | 513 064 | 94.59 |
| 2 March 1968 | 275 701 | 262 328 | 95.15 | 609 626 | 575 948 | 94.48 |
| 30 May 1970 | — | — | — | 635 533 | 603 952 | 95.03 |
| 10 March 1973 | 383 758 | 357 971 | 93.28 | 696 290 | 655 937 | 94.20 |
| 12 July 1975 | 771 414 | 719 753 | 93.30 | 771 414 | 721 770 | 93.56 |

The following table shows the Party representation in both Houses of the South Australian Parliament resulting from each general election from 1947. The Liberal Movement has now been disbanded with the Hon. M. B. Cameron (LC), Hon. J. A. Carnie (LC) and L. D. Boundy (MHA) rejoining the Liberal Party of Australia. A new Party, the New Liberal Movement, has been formed with R. R. Millhouse (MHA) as its leader.

South Australian Parliament: Party Representation at Elections, 1947 to 1975

| Date | Legislative Council | | | House of Assembly | | |
|-------------------------|---------------------|----|-------|-------------------|----|-------|
| | ALP | LP | Other | ALP | LP | Other |
| 8 March 1947 | 4 | 16 | — | 13 | 23 | 3 |
| 4 March 1950 | 4 | 16 | — | 12 | 23 | 4 |
| 7 March 1953 | 4 | 16 | — | 14 | 21 | 4 |
| 3 March 1956 | 4 | 16 | — | 15 | 21 | 3 |
| 7 March 1959 | 4 | 16 | — | 17 | 20 | 2 |
| 3 March 1962 | 4 | 16 | — | 19 | 18 | 2 |
| 6 March 1965 | 4 | 16 | — | 21 | 17 | 1 |
| 2 March 1968 | 4 | 16 | — | 19 | 19 | 1 |
| 30 May 1970 | 4 | 16 | — | 27 | 20 | — |
| 10 March 1973 | 6 | 13 | 1 | 26 | 18 | 3 |
| 12 July 1975 | 10 | 9 | (a)2 | 23 | 20 | (b)4 |

(a) Liberal Movement. (b) 2 Liberal Movement, 1 Country Party, 1 Independent.

ALP Australian Labor Party LP Liberal Party of Australia

At the general election held on 12 July 1975 there were forty-seven electorates represented in the House of Assembly, twenty-eight metropolitan and nineteen country. The table below shows the electoral returns for that general election.

House of Assembly: Party Representation, 1975

| Electorate | Electors on Roll | Electors Voting | Successful Candidate | | |
|--------------------------|------------------------|--------------------|-----------------------------|-------|------------------------------|
| | | | Name | Party | First Preference Votes |
| Metropolitan: | | | | | |
| Adelaide | 17 483 | 15 940 | Wright, Hon. J. D. | ALP | 9 048 |
| Albert Park | 18 520 | 17 282 | Harrison, C. A. | ALP | 10 025 |
| Ascot Park | 16 906 | 15 919 | Virgo, Hon. G. T. | ALP | 8 925 |
| Bragg | 16 364 | 15 026 | Tonkin, D. O. | LP | 7 596 |
| Brighton | 19 990 | 18 814 | Hudson, Hon. H. R. | ALP | 9 394 |
| Coles | 21 003 | 19 892 | Corcoran, Hon. J. D. | ALP | 10 010 |
| Davenport | 19 277 | 18 006 | Brown, D. C. | LP | 9 293 |
| Elizabeth | 19 595 | 18 053 | Duncan, Hon. P. | ALP | 11 619 |
| Fisher | 21 040 | 19 670 | Evans, S. G. | LP | 8 255 |
| Florey | 21 858 | 20 525 | Wells, C. J. | ALP | 12 006 |
| Gilles | 19 187 | 17 939 | Slater, J. W. | ALP | 8 626 |
| Glennelg | 18 650 | 17 353 | Mathwin, J. | LP | 6 429 |
| Hanson | 19 784 | 18 325 | Becker, H. T. | LP | 7 232 |
| Henley Beach | 20 744 | 19 436 | Broomhill, Hon. G. R. | ALP | 9 780 |
| Mawson | 33 440 | 31 435 | Hopgood, Hon. D. J. | ALP | 16 051 |
| Mitcham | 17 341 | 16 181 | Millhouse, R. R. | LM | 6 820 |
| Mitchell | 17 880 | 16 886 | Payne, Hon. R. G. | ALP | 8 765 |
| Norwood | 18 010 | 16 335 | Dunstan, Hon. D. A., QC | ALP | 8 643 |
| Peake | 17 277 | 16 225 | Simmons, Hon. D. W., DFC | ALP | 8 341 |
| Playford | 25 412 | 23 762 | McRae, T. M. | ALP | 13 473 |
| Price | 16 915 | 15 891 | Whitten, G. T. | ALP | 8 944 |
| Ross Smith | 16 646 | 15 499 | Jennings, J. J. | ALP | 9 458 |
| Salisbury | 19 075 | 17 696 | Groth, R. W. | ALP | 10 398 |
| Semaphore | 18 740 | 17 822 | Olson, J. W. | ALP | 11 813 |
| Spence | 16 680 | 15 515 | Abbott, R. K. | ALP | 10 364 |
| Tea Tree Gully | 30 764 | 29 105 | Byrne, Mrs M. V. | ALP | 15 331 |
| Torrens | 17 302 | 15 905 | Coumbe, J. W. H. | LP | 6 144 |
| Unley | 16 422 | 15 195 | Langley, G. R. A. | ALP | 7 579 |
| Country: | | | | | |
| Alexandra | 13 075 | 12 224 | Chapman, W. E. | LP | 6 270 |
| Chaffey | 12 416 | 11 652 | Arnold, P. B. | LP | 6 281 |
| Eyre | 10 073 | 9 004 | Gunn, G. M. | LP | 6 478 |
| Flinders | 11 832 | 11 185 | Blacker, P. D. | CP | 5 561 |
| Frome | 8 612 | 7 889 | Allen, E. C. | LP | 4 242 |
| Gouger | 10 594 | 10 039 | Russack, E. K. | LP | 4 580 |
| Goyder | 10 776 | 10 310 | Boundy, L. D. | LM | 4 563 |
| Heysen | 12 932 | 12 092 | Wotton, D. C. | LP | 5 588 |
| Kavel | 10 850 | 10 344 | Goldsworthy, E. R. | LP | 5 292 |
| Light | 12 199 | 11 519 | Eastick, B. C. | LP | 5 211 |

House of Assembly: Party Representation, 1975 (continued)

| Electorate | Electors on Roll | Electors Voting | Successful Candidate | | |
|-----------------------------|------------------------|--------------------|----------------------|-------|------------------------------|
| | | | Name | Party | First Preference Votes |
| Country: (continued) | | | | | |
| Mallee | 10 772 | 10 231 | Nankivell, W. F. | LP | 5 040 |
| Millicent | 11 607 | 11 080 | Vandeeper, M. S. | LP | 4 195 |
| Mount Gambier | 12 452 | 11 805 | Allison, H. | LP | 4 084 |
| Murray | 12 136 | 11 530 | Wardle, I. A. | LP | 6 078 |
| Pirie | 11 095 | 10 537 | Connelly, Hon. E. | IND | 4 351 |
| Rocky River | 10 394 | 10 030 | Venning, H. M. | LP | 4 151 |
| Stuart | 14 692 | 13 624 | Keneally, G. F. | ALP | 8 847 |
| Victoria | 11 093 | 10 390 | Rodda, W. A. | LP | 6 500 |
| Whyalla | 11 509 | 10 653 | Brown, M. J. | ALP | 6 735 |

ALP Australian Labor Party CP Country Party LM Liberal Movement
LP Liberal Party of Australia IND Independent

Speaker: The Hon. E. Connelly, MP

Chairman of Committees: G. R. A. Langley, MP

Leader of the Opposition: D. O. Tonkin, MP

Deputy Leader of the Opposition: E. R. Goldsworthy, MP

Government Whip: The Hon. G. R. Broomhill, MP

Opposition Whip: S. G. Evans, MP

Clerk of the House of Assembly: A. F. R. Dodd

The members of the Legislative Council after the general election of 12 July 1975 were as follows:

| | |
|-------------------------------|---------------------------|
| Banfield, Hon. D. H. L. (ALP) | DeGaris, Hon. R. C. (LP) |
| Blevins, Hon. F. T. (ALP) | Dunford, Hon. J. E. (ALP) |
| Burdett, Hon. J. C. (LP) | Foster, Hon. N. K. (ALP) |
| Cameron, Hon. M. B. (LM) | Geddes, Hon. R. A. (LP) |
| Carnie, Hon. J. A. (LM) | Hill, Hon. C. M. (LP) |
| Casey, Hon. T. M. (ALP) | Laidlaw, Hon. D. H. (LP) |
| Chatterton, Hon. B. A. (ALP) | Levy, Hon. J. A. W. (ALP) |
| Cooper, Hon. J. M. (ALP) | Potter, Hon. F. J. (LP) |
| Cornwall, Hon. J. R. (ALP) | Sumner, Hon. C. J. (ALP) |
| Creedon, Hon. C. W. (ALP) | Whyte, Hon. A. M. (LP) |
| Dawkins, Hon. M. B. (LP) | |

President and Chairman of Committees: Hon. F. J. Potter, MLC

Leader of the Opposition: Hon. R. C. DeGaris, MLC

Clerk of the Legislative Council: I. J. Ball

Court of Disputed Returns

In South Australia, provision is made in the Electoral Act, 1929-1976, for the constitution of a Court of Disputed Returns which has jurisdiction to hear and determine all questions of disputed returns affecting either House of the State Parliament which are referred to it by the House concerned. No return on an election writ may be disputed, except by a petition to this Court. A subsidiary function of the Court is to hear petitions for exoneration from liability for failure to file certain electoral returns or vouchers under Part XIV of the Electoral Act.

The Court is constituted by the senior puisne Judge of the Supreme Court, or where he is not available by the puisne Judge next in order of seniority who is available.

The Court sits as an open court, usually at Parliament House Adelaide, and has power, *inter alia*:

- (a) to compel the attendance of witnesses and the production of documents;
- (b) to examine witnesses upon oath;
- (c) subject to any Supreme Court rules, to regulate the form and mode of its own proceedings;
- (d) to declare that any person who was returned as elected was not duly elected;
- (e) to declare any candidate duly elected who was not returned as elected;
- (f) to declare any election void;
- (g) to dismiss or uphold any petition in whole or in part;
- (h) to award any costs; and
- (i) to punish any contempt of its authority.

Most cases have related to House of Assembly elections. Since 1857, the Court of Disputed Returns has considered twenty-one petitions referred to it by the House of Assembly concerning the election of twenty-six members of that House. The Court's decisions in these cases are summarised hereunder:

| | |
|---|----|
| Election voided and member unseated | 15 |
| Member unseated but other candidate declared to be duly elected | 2 |
| Petitions unsuccessful | 2 |
| Petitions dismissed | 6 |
| Petition withdrawn | 1 |

REFERENDA

Since the inception of responsible government in South Australia in 1856 seven referenda have been held—the first in 1896 and subsequent ones in 1898, 1899, 1911, 1915, 1965 and 1970—and ten proposals have been submitted.

Three proposals related to education (1896) of which only one was approved; three were constitutional (1898 and 1899)—all approved; one related to Parliamentary salaries (1911)—not approved; one related to bar-room closing hours (1915)—favoured 6 p.m. closing; one related to the establishment of a lottery (1965)—approved; and one related to extended shopping hours in the metropolitan area (1970)—not approved.

The last referendum, held on 19 September 1970, asked House of Assembly electors in the Adelaide Metropolitan Planning Area and the Municipality of Gawler 'Are you in favour of shops in the Metropolitan Planning Area and the Municipality of Gawler being permitted to remain open for trading until 9 p.m. on Fridays?' Of the 463 629 electors qualified to vote 177 296 voted 'Yes' and 190 826 voted 'No'.

ADMINISTRATION

Committee of Inquiry into the Public Service

The Committee of Inquiry into the Public Service of South Australia was appointed by Cabinet on 14 May 1973 to examine and report on the role, structure, management and staffing of the South Australian Public Service and to recommend any action considered necessary to improve the effectiveness, economy and efficiency of the Service.

In April 1975 the Committee of Inquiry published its comprehensive report which, *inter alia*, laid down suggested guidelines for the regrouping of a number of departments. Major departmental changes since the report have been:

Creation of the Department of Further Education.

Creation of the Department of Economic Development.

Creation of the Department of Housing and Urban Affairs resulting from the amalgamation of the office of the Minister of Mines and Energy and the Minister for Planning, the State Planning Office, the Urban Land Price Control Unit and the office of the South Australian Land Commission.

Creation of the Department of Legal Services resulting from the amalgamation of the Attorney-General's Department, Crown Law Department and the Local and District Criminal Courts Department.

Creation of the Department of Services and Supply resulting from the amalgamation of the Government Printing Department, Chemistry Department, State Supply Department and the Automatic Data Processing Controlling Authority.

Amalgamation of the Public Actuary, State Taxes and Superannuation Departments with the Treasury Department.

Amalgamation of the Registrar-General's and Valuation Departments with the Department of Lands.

Amalgamation of the Department of Fisheries with the Department of Agriculture, to form the Department of Agriculture and Fisheries.

Amalgamation of the Botanic Garden Department with the Department of Environment and Conservation, the name of which was subsequently changed to the Department for the Environment.

Amalgamation of the Minister of Agriculture Department with the Department of Agriculture and Fisheries.

Amalgamation of the Minister of Education Department with the Department of Education.

Amalgamation of the Minister of Works Department with the Engineering and Water Supply Department.

Discontinuance of the Chief Secretary's Department and amalgamation of it with the Hospital's Department.

The South Australian Public Service consists of thirty-two departments. In the following list, the departments have been grouped according to Ministerial control.

PREMIER, TREASURER AND MINISTER OF IMMIGRATION AND ETHNIC AFFAIRS

Hon. Donald Allan Dunstan, QC, MP

| | |
|------------------------------------|----------------------------------|
| Premier's Department | Department of the Public Service |
| Treasury Department | Board |
| Department of Economic Development | Art Gallery Department |

DEPUTY PREMIER, MINISTER OF WORKS, MINISTER FOR THE ENVIRONMENT AND MINISTER OF MARINE

Hon. James Desmond Corcoran, MP

| | |
|---|----------------------------------|
| Engineering and Water Supply Department | Public Buildings Department |
| Department for the Environment | Department of Marine and Harbors |

MINISTER OF MINES AND ENERGY AND MINISTER FOR PLANNING

Hon. Hugh Richard Hudson, MP

| | |
|------------------|---|
| Mines Department | Department of Housing and Urban Affairs |
|------------------|---|

MINISTER OF HEALTH AND MINISTER ASSISTING THE DEPUTY PREMIER

Hon. Donald Hubert Louis Banfield, MLC

| | |
|----------------------|-----------------------------|
| Hospitals Department | Department of Public Health |
|----------------------|-----------------------------|

MINISTER OF TRANSPORT AND MINISTER OF LOCAL GOVERNMENT

Hon. Geoffrey Thomas Virgo, MP

| | |
|-------------------------|---------------------|
| Department of Transport | Highways Department |
|-------------------------|---------------------|

MINISTER OF LANDS, MINISTER OF IRRIGATION, MINISTER OF REPATRIATION AND MINISTER OF TOURISM, RECREATION AND SPORT

Hon. Thomas Mannix Casey, MLC

| | |
|---------------------|---|
| Department of Lands | Department of Tourism, Recreation and Sport |
|---------------------|---|

MINISTER OF EDUCATION

Hon. Donald Jack Hopgood, MP

| | |
|---------------------------------|----------------------|
| Education Department | Libraries Department |
| Department of Further Education | |

MINISTER OF AGRICULTURE, MINISTER OF FORESTS AND MINISTER OF FISHERIES

Hon. Brian Alfred Chatterton, MLC

Woods and Forests Department

Department of Agriculture and Fisheries

MINISTER OF LABOUR AND INDUSTRY

Hon. John David Wright, MP

Department of Labour and Industry

MINISTER OF COMMUNITY WELFARE

Hon. Ronald George Payne, MP

Department for Community Welfare

ATTORNEY-GENERAL AND MINISTER OF PUBLIC AND CONSUMER AFFAIRS

Hon. Peter Duncan, MP

Department of Legal Services
Electoral Department

Supreme Court Department
Department of Public and Consumer Affairs

CHIEF SECRETARY AND MINISTER ASSISTING THE PREMIER

Hon. Donald William Simmons, DFC, MP

Police Department
Department of Correctional Services

Department of Services and Supply
Auditor-General's Department

THE OMBUDSMAN

The office of the Ombudsman is established under the Ombudsman Act, 1972-1974. The Ombudsman is empowered to investigate complaints from members of the public concerning the administrative acts of State Government departments, State statutory authorities and local government councils.

The jurisdiction of the Ombudsman does not extend to Commonwealth Government departments or authorities, judicial decisions, police actions, or actions by private individuals or companies.

A complaint to the Ombudsman is usually made by the person or enterprise directly affected by an administrative act, although, if the complainant is unable, a Member of the South Australian Parliament or some other person may act on his behalf. Complaints may be by telephone or personal visit, but it is preferable for a complaint to be in writing giving full details including copies of any correspondence with the authority concerned.

The Ombudsman has the powers of a royal commission but conducts his investigations in private. Complainants are informed of the final result of any inquiry and where appropriate progress reports are given while an investigation is proceeding. The Ombudsman service is provided free-of-charge.

During 1975-76, 1 047 complaints were registered and of those fully investigated, approximately 22 per cent were found to be justified fully or in part.

LEGISLATION

During 1976, 117 Public Acts were passed by the South Australian Parliament. Details of some of the more important legislation passed during this period are given below.

- City of Adelaide Development Control Act, 1976 (No. 110). An Act to provide for the imposition of development control within the City of Adelaide and to establish a City of Adelaide Planning Commission.
- Community Welfare Act Amendment Act, 1976 (No. 111) amended the Community Welfare Act, 1972-1975 to provide for the licensing of baby-sitting agencies and children's homes caring for young people up to eighteen years.
- Constitution Act Amendment Act, 1976 (No. 68) amended the Constitution Act, 1934-1975 to allow convicted offenders the same voting rights as ordinary citizens.
- Licensing Act Amendment Act (No. 2), 1976 (No. 75) amended the Licensing Act, 1967-1976 to provide for the relaxation of trading hours to enable the holder of a full publican's licence to trade between the hours of 5.00 a.m. and 12 midnight on any day (except Sunday, Christmas Day, or Good Friday).
- Local Government Act Amendment Act, 1976 (No. 77) amended the Local Government Act, 1934-1975 to provide for universal adult franchise in local government elections and polls.
- Further Education Act, 1976 (No. 17). An Act to make provision for the administration of further education in this State by an autonomous department separate from the Education Department but subject to the control of the Minister of Education.
- Off-shore Waters (Application of Laws) Act, 1976 (No. 28). An Act to apply the civil and criminal law of the State to certain off-shore waters in the vicinity of the State.
- Racial Discrimination Act, 1976 (No. 108). An Act to prohibit discrimination on the ground of race and to repeal the Prohibition of Discrimination Act, 1966-1975.
- Racing Act, 1976 (No. 104). An Act to consolidate and extend the legislation regulating the racing industry in this State and to provide for controlling authorities to control each of the three codes of racing.
- South Australian Grants Commission Act, 1976 (No. 38). An Act to establish a South Australian Grants Commission to provide grants to local government authorities, these grants to be payable out of moneys to be provided by the Commonwealth Government.
- South Australian Health Commission Act, 1976 (No. 76). An Act to establish a South Australian Health Commission to provide for the administration of hospitals and health services and to repeal the Hospitals Act, 1934-1971 and the Health and Medical Services Act, 1949-1974.
- Statutes Amendment (Capital Punishment Abolition) Act, 1976 (No. 115). An Act to abolish capital punishment in South Australia.

State Opera of South Australia Act, 1976 (No. 73). An Act to establish the State Opera of South Australia and to constitute a board of management of its affairs.

Succession Duties Act Amendment Act, 1976 (No. 72) amended the Succession Duties Act, 1929-1975 to remove the burden of succession duty on property passing between spouses and on all bequests to benevolent institutions.

Water Resources Act, 1976 (No. 19). An Act to provide for the assessment, conservation and development of the water resources of the State and for the control and management of their utilisation and quality.

OVERSEAS REPRESENTATION

South Australia is represented in London by the Agent-General for South Australia, at South Australia House, 50 Strand, London. As official representative of the State, it is the function of the Agent-General to work in close co-operation with the High Commissioner for Australia, to keep the State Government informed of political and economic developments overseas, to promote industrial development and investment in South Australia, to encourage immigration to the State and to foster trade with the United Kingdom and other countries. The present Agent-General and Trade Commissioner is Mr W. M. Scriven.

INTERSTATE REPRESENTATION

The South Australian Tourist Bureau maintains offices at 402 George Street, Sydney, NSW, and at 8 Royal Arcade, Melbourne, Victoria, to foster and facilitate tourist travel to South Australia.

CONSULAR REPRESENTATIVES

There are twenty-two countries represented in South Australia by consuls, vice-consuls, consular-agents or consul-generals.

Austria: John A. Nelson, Consul-General

Belgium: Robert E. Porter, Consul (a)

Britain: William S. Ashford, OBE, Consul-General (b)
James E. Pepper, Vice-Consul (Commercial) (b)

Denmark: Trevor R. Taylor, Consul

Dominican Republic: Peter H. D. Lathlean, Consul

Finland: Colin C. Verco, OBE, Consul

France: Dr Rex J. Lipman, Consul

Germany: Bruce R. Macklin, OBE, Consul

Greece: Athanasias A. Camilos, Consul-General (b)

Italy: Dr Rubens A. Fedele, Vice-Consul

Japan: J. Langdon Parsons, Consul-General

Lebanon: Archie M. Hambour, Consul

Liberia: William B. Coombs, Consul

Mexico: Robert W. Clampett, Consul

Netherlands: Vacant

Norway: John N. Howe, Consul

Peru: Max J. Hill, Consul

Philippines: J. Rolfe Sabine, Consul

Portugal: Raymond F. Walters, Consul (c)

Sweden: Mrs June Tanner, Consul

Switzerland: Paul A. Richter, Vice-Consul

United States of America: William J. McGovern, Consular-Agent

(a) Dean of the Consular Corps.

(b) Consul de Carriere.

(c) Secretary, Consular Corps.

STATE EMBLEMS

A description of the South Australian Coat-of-Arms, the State Badge, the State Flag and the Floral Emblem together with coloured illustrations was included on pages 94-5 of the *South Australian Year Book 1970*.

On 27 September 1970 the hairy-nosed wombat (*Lasiorhinus latifrons*) was adopted as South Australia's official Faunal Emblem.

3.4 PUBLIC CORPORATIONS

A public corporation is defined, for statistical purposes, as a body (other than a local government authority or body whose receipts and payments are included in the public accounts of the Commonwealth, a State, or a Territory) created by or under legislation to carry out an activity or activities on behalf of a Government, or a body in which a Government has a controlling interest.

Some authorities, such as marketing boards which are set up by Acts of Parliament, are not regarded as public corporations because their activities are carried out on behalf of industries rather than on behalf of any Government.

Most public corporations have independent powers for the recruitment of staff. All possess greater administrative and financial autonomy than government departments but there is a wide variation in the degree of autonomy accorded, in various aspects, to different authorities.

Activities carried out by public corporations include tertiary education, hospital services, power supply, public transport, banking services, fire control, irrigation and drainage in rural areas, control and regulation of milk supply, slaughtering of animals for human consumption, housing development, off-course totalisators and lotteries, and investigation of problems relating to the development of mineral resources.

In appropriate parts of this Year Book reference is made to the activities of most of the public corporations which operate in South Australia.

3.5 LOCAL GOVERNMENT

LOCAL GOVERNMENT AUTHORITIES

Local Government Areas: Number, Size and Status

At 1 January 1977 there were 133 local government areas in South Australia including the site of Monarto which was constituted as a municipality under the Monarto Development Commission Act, 1973 with the Commission as the corporation and council of the municipality. Each local government area, with the exception of Monarto, is controlled by a council consisting of members elected by local ratepayers and exercising powers under the Local Government Act, 1934-1976.

The total area incorporated in local government areas at 1 January 1977 was 151 524 square kilometres; this is only slightly above 15 per cent of the total area of the State but contains almost 99 per cent of the State population.

There are two major types of local government areas—district council areas and municipalities. Usually district council areas consist predominantly of rural land but contain one or more towns. Generally, to qualify for proclamation as a municipality an area must be used predominantly for either residential, business, industrial, or manufacturing purposes (or a combination of these purposes), and be able to support itself financially. Some municipalities are constituted as cities, the qualification being 15 000 inhabitants for metropolitan municipalities (the twenty-one local government areas which form the metropolitan area as defined under the Local Government Act and which, before June 1966, corresponded to the statistical Urban Adelaide) and 10 000 persons in other areas.

Of the 133 local government areas at 1 January 1977, 39 were municipalities (including 25 cities) and 94 were district council areas.

The Governor may create, abolish, or vary the size, status, or organisation of, any local government area or portion thereof, provided certain requirements are satisfied. Such alterations usually stem from petition by ratepayers or a council.

As a result of legislation passed in 1969 district councils may apply to the Governor for mayoral status; in previous years only municipal councils had mayors. Since the legislation thirteen district councils, Berri, Clare, Gumeracha, Kanyaka-Quorn, Kapunda, Kingscote, Meadows, Millicent, Loxton, Penola, Strathalbyn, Victor Harbor and Waikerie have been granted mayoral status.

Functions of Local Government

The Local Government Act, 1934-1976 prescribes most of the 'powers and authorities' which each council shall or may exercise 'for the good government' and 'the management of the affairs' of its area, but some functions devolve from other Acts. To enable it to sue and be sued and to participate in transactions involving the purchase and sale of land and other property each council is constituted as a corporate body.

The functions performed by councils vary somewhat with the area concerned, but there are general functions which are common to them all. Many of these functions receive more detailed attention in the parts of this book dealing with

the appropriate subjects, *e.g.* road construction and maintenance in Part 8.3, Physical Development; health services and Local Boards of Health in Part 6.5, Social Environment, and libraries in Part 6.4, Social Environment. Among the many other functions of local governing authorities are the provisions of street lighting, the licensing and inspection of slaughterhouses, the maintenance of cemeteries, the maintenance of foreshores and jetties, the control of the location of industries (especially noisy trades), the prevention of fires within certain areas, and the policing of provisions relating to vermin and weeds. Councils also employ social workers and carry out functions in relation to social welfare.

Organisation and Representation

Whereas a municipality must be divided into at least two areas known as wards, a district council need not have wards; however, only four district councils have undivided areas. No council may comprise less than five members, and each ward in a municipality must be represented by two councillors. No district council area may be divided into more than ten wards, and the number of councillors for each ward is established by proclamation.

A candidate for election as a councillor must be an adult British subject owning or occupying ratable property within the area for which he seeks election. Special magistrates, undischarged bankrupts, persons holding contract or employment under the council, persons under sentence for crimes, persons overdue with council rates and any associated fines and persons of unsound mind are ineligible for election.

Each year half the number of councillors retire. In councils with wards one councillor from each ward, the one who has been 'the longest in office without re-election', retires; in other councils the councillors who did not retire one year do so the next. In all cases a retiring councillor is eligible for re-election.

Any municipality may apply to add no less than three and no more than six aldermen to its council. The qualifications for councillors apply to aldermen, except that aldermen are not bound by the limits of wards, and an alderman must have served at least one year as a member of the council. Although the functions of aldermen are not specifically defined the concept is that they should impartially consider the interests of the area as a whole and so resolve any conflict which may arise between sectional interests represented by councillors.

Mayors of municipalities and of certain district councils are elected annually on the same basis as aldermen. The chairman of a district council is chosen annually by councillors from among their number.

Allowances

Council members, other than mayor or chairman, are not paid salaries or allowances, but may be reimbursed any expenses incurred in the performance of council business, and in the case of district councils, may be reimbursed the cost of travelling to and from council meetings.

The mayor or chairman receives an annual allowance which is determined at a council meeting in July of each year. This allowance, payable in advance, is to compensate for any expenses he is likely to incur in the execution of his official duty in the current financial year.

Franchise

British subjects, over the age of eighteen, who either own or occupy ratable property within an area are eligible to be enrolled for, and to vote at, elections for that area provided that they are not in arrears with their rates. The lawful spouse of an owner is deemed to be the occupier. Companies or corporations owning or occupying ratable property within the area are entitled to nominate up to three persons to vote on their behalf at the elections for that area, depending on the method of valuation; the entitlement is for the nomination of one vote for each \$300 of annual (improved) value or \$2 000 of unimproved (land) value or part of either, up to three voters for any one property. Special provision is also made to allow certain defence personnel to vote.

Under the provisions of the Local Government Act, 1934-1976 universal adult franchise will apply in local government elections and polls from 2 July 1977. A person will be entitled to enrol as an elector if he is enrolled as an elector for the House of Assembly in respect of an address within the area, or if he is a ratepayer in respect of ratable property within the area. A body corporate will be enrolled under the name of a nominated agent. The Electoral Commissioner will supply local government authorities with current lists of electors drawn from the State electoral roll.

Officers and their Functions

Each council may appoint any officers it considers necessary to carry out its duties, including special constables to facilitate the maintenance of law and order within its area. Each council must appoint a town clerk (in a municipality) or a district clerk (in a district council) as the chief executive officer, and an auditor.

Employment in local government administration is now regarded as a career; most town and district clerks are full-time employees, and councils are required to employ in those positions only those persons who have passed examinations qualifying them for the work. The town or district clerk maintains the voters roll and in many cases is appointed returning officer for elections. The characteristics of particular areas determine to some extent the nature of the duties performed by town and district clerks; they often undertake a very wide variety of functions, especially in smaller areas, where even the part-time employment of specialist officers for particular tasks is not warranted. Continuity of service between councils for long service leave and other purposes is provided for in the Local Government Act. The Minister of Local Government sets a minimum standard of superannuation benefits which must be made available to council employees. Other officers employed in local government are required to hold appropriate qualifications; these include engineers, overseers, building surveyors and inspectors, health inspectors and authorised weed officers.

The auditor for each council is appointed for a term of two years. He is not eligible for appointment unless he holds a Local Government Auditor's Certificate of competence issued by the Local Government Auditors Examining Committee.

Whenever a council itself undertakes a new assessment of property values within its area it is required under the Local Government Act to appoint a valuer who recommends to the council a valuation of each property for rating purposes. A ratepayer may appeal against a council's valuation of his own

property or that of another ratepayer. Instead of undertaking its own assessment of property values it is now not uncommon for a council to adopt the valuations of the Valuer-General. When this is done a council avoids the necessity of employing a valuer but a fee for each valuation is payable to the Valuer-General. There is no right of appeal to the council against valuations so based; in respect of the Government unimproved valuation the right of appeal lies against the Valuer-General when the valuation is made.

Finance

Local government authorities derive their revenue from many different sources, including sundry licences and fines, but the principal sources are rates, loans raised against the security of future rates, and government grants. The relative importance of these sources of revenue varies between areas and through time within areas, e.g. in closely settled well developed areas rate revenue is usually predominant; in large sparsely settled areas government grants, mainly for road-works, may at times be the chief item of revenue; in areas being rapidly and extensively developed for housing or industrial purposes both government grants and loan funds may be prominent.

Specific purpose Commonwealth Government grants, generally, are not made direct to local government authorities but are administered by appropriate State Government departments. The most important example of this is the distribution of portion of Commonwealth Aid Roads Grant to local government authorities by the Highways Department in conjunction with the State Treasury.

The Commonwealth Government makes available to the States for sharing by local government authorities an agreed percentage of income tax collected by the Commonwealth. The amounts payable to each State are determined on the recommendation of the Commonwealth Grants Commission. The basis on which the States make the funds available to local government authorities must be agreed to by the Commonwealth Government and must include an approved distribution on a *per capita* basis with the balance distributed on an equalisation basis. South Australia will be making 30 per cent of the State amount available to local government authorities on a *per capita* basis.

A large proportion of local government expenditure from both loan funds and other revenue is for the construction and maintenance of roads, footpaths, and stormwater drains. Further information is contained in Part 11.5, Local Government Finance.

South Australian Local Government Grants Commission

The South Australian Local Government Grants Commission was established in 1976 under the provisions of the South Australian Local Government Grants Commission Act, 1976.

The Commission's main function is to recommend to the Minister the councils to which grants should be made and the amount of such grants. It has, for the purpose of its inquiries, the powers of a commission appointed under the Royal Commissions Act, 1917.

The Commission is required to ensure that all funds provided are distributed each year and that as far as possible, any grant to a council will be sufficient to enable the council to function at a standard not appreciably below similar councils. The grants recommended by the Commission are required to be free from any direction as to specific use.

The recommendations of the Commission must be forwarded to the Minister who may refer them back requesting further consideration. The Commission is required to reconsider its recommendation in the light of the request and following this the Minister, even though no amendments are made to original recommendations, must approve of those recommendations.

Recommendations for 1976-77 were made by an interim Commission pending the constitution of the South Australian Local Government Grants Commission.

Royal Commission into Local Government Areas

A royal commission appointed in 1973 to inquire into local government boundaries recommended that seventy-four new councils be created to replace the, then existing, 137 bodies. After considering the recommended changes, the South Australian Parliament decided against a compulsory imposition of the proposed alterations.

Local Government Advisory Commission

The Local Government Advisory Commission was established by Act of Parliament in 1976. The Commission comprises a Chairman who must be a person holding judicial office, one member being the person holding or acting in the position of Secretary for Local Government and another member appointed by the Governor.

The Commission is required to approve proposals for voluntary amalgamations of councils submitted to it and to advise the Minister on any matter relating to any petition or counter petitions referred to it for investigation.

The Commission has the powers of a royal commission.

3.6 TOWN AND REGIONAL PLANNING

Legislation

In 1920 the South Australian Parliament passed the Town Planning and Development Act which followed the Control of Subdivision of Land Act of 1917. These Acts were the first of their kind in Australia. The Act of 1920 made provision for the preparation of town planning schemes and by-laws, for the appointment of a Government Town Planner and a Town Planning Department. The Department prepared plans for various areas, including Colonel Light Gardens and the townships of Iron Knob and Barmera. The Acts of 1917 and 1920 were repealed by the Town Planning Act, 1929 which dealt only with the control of land subdivision.

The Town Planning Act, 1929 was amended in 1955 to provide for a Town Planning Committee which was required to prepare a plan to guide the future development of the metropolitan area of Adelaide. The Committee considered the probable future population of the metropolitan area, the provision of public transport, adequacy of highways, provision of open spaces such as parks and sports grounds, the zoning of industrial districts, and the subdivision of land in relation to the economic provision of sewerage, water supply, electricity and gas services.

The Metropolitan Development Plan, together with its accompanying Report on the Metropolitan Area of Adelaide, was laid before both Houses of Parliament in October 1962, and an amendment to the Town Planning Act followed in 1963. The amendment required the Committee to call for and consider objections to the Plan as submitted to Parliament and the Committee was authorised to make regulations to implement the Plan.

The Planning and Development Act, which came into operation in 1967, repealed the Town Planning Act. It established an eleven-member State Planning Authority (with the Director of Planning as Chairman) and an independent Planning Appeal Board of four members. Provisions were made for the Planning Authority to implement and review the 1962 Development Plan, to prepare similar plans for other parts of the State and in conjunction with local government authorities to determine broad policies to guide the growth of towns and cities throughout the State.

The Planning and Development Act Amendment Act, 1971 reconstituted the State Planning Authority to include a wider representation of experts in the fields of local government, conservation and aesthetics. Further amendments in 1972, 1973 and 1975 permitted the appointment of permanent commissioners to the Planning Appeal Board, established special interim provisions for the City of Adelaide, enabled the State Planning Authority to acquire and develop land within the Port Adelaide District Business Zone and prohibited subdivision of land within the Hills Face Zone.

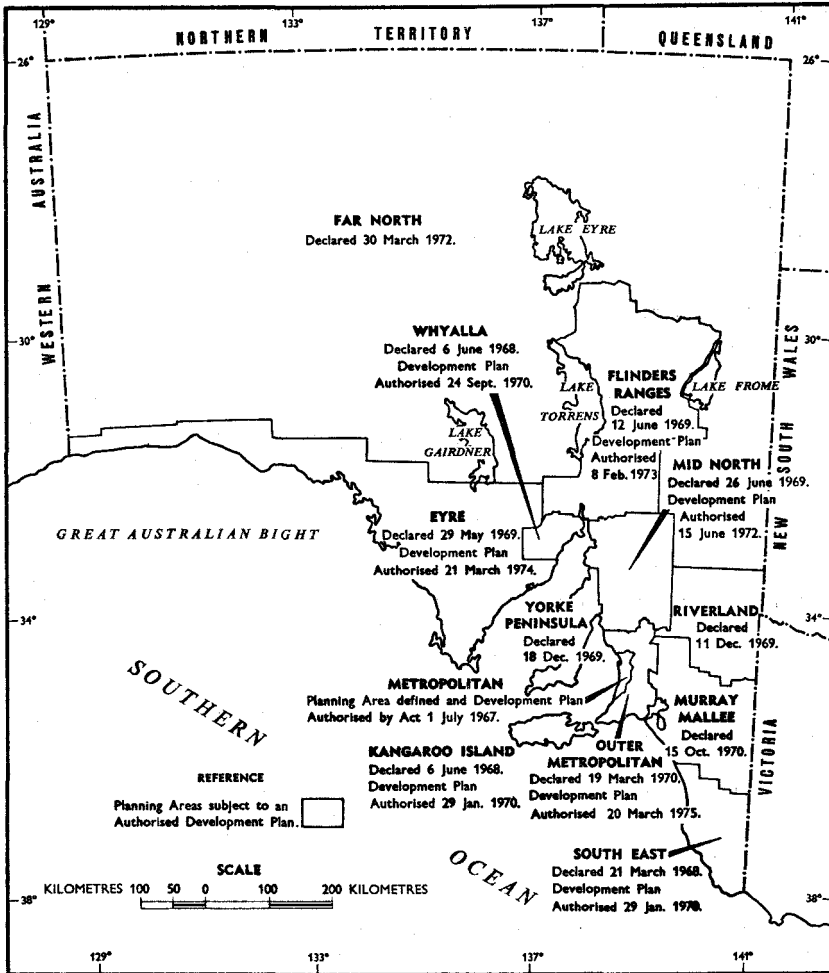
Development Plans

Twelve planning areas have been declared covering the whole of the State. Development plans have been authorised for eight of these areas, namely, Metropolitan (1 July 1967), South East (29 January 1970), Kangaroo Island (29 January 1970), Whyalla (24 September 1970), Mid North (15 June 1972), Flinders Ranges (8 February 1973), Eyre (21 March 1974) and Outer Metropolitan (20 March 1975). Work on preparing development plans for the remaining areas of the State is well advanced. In some parts of the State, such as in the Metropolitan area and Whyalla, the planning emphasis is on controlled development, whereas in the Flinders Ranges and Kangaroo Island, conservation of the natural resources and beauty of the area is being stressed.

The process of preparing a development plan involves a considerable amount of public participation. Local councils, government departments and interested groups and individuals are consulted during the preparation of the plan, and the general public is given the opportunity to comment on it during a two month public exhibition period. Following the receipt of any representations the State Planning Authority submits the development plan to the Minister in its original or amended form. The Minister in turn forwards the plan to the Governor with his recommendation for action.

The Governor may decide to authorise the plan, reject it, amend it, on the basis of the representations received or send it back to the Authority for further consideration. Although rather a lengthy process, it does mean that the public has an opportunity to participate in the future development and conservation of the State.

SOUTH AUSTRALIA PLANNING AREAS



Where existing development plans need to be updated or revised, a similar process is put in motion for the preparation of a supplementary development plan. In Metropolitan Adelaide a supplementary development plan to amend the alignment of a number of major transportation routes was authorised on 4 November 1971. A supplementary development plan to redevelop 5.5 hectares of land at Hackney was authorised on 14 December 1972 and another for the control of coastal development in the District Council of Willunga was authorised on 12 July 1973. The latter plan proposes a centre at Aldinga and revises

road and rail transportation proposals. Also, within the Metropolitan Planning Area the Mt Lofty Ranges Supplementary Development Plan was authorised on 20 February 1976 and the Black Hill Supplementary Development Plan on 4 November 1976.

The Metropolitan Development Plan and the Supplementary Development Plans with their reports must be read together to obtain a complete picture of the proposed routes, details of which were outlined on pages 334-5 of the *South Australian Year Book 1973*.

The City of Adelaide Development Control Act, 1976 came into operation on 1 March 1977. It provides for control of development within the City by the City Council and the City of Adelaide Planning Commission. The Act also provides for a City of Adelaide Planning Appeals Tribunal.

Development Control

Control of development in accordance with a development plan is by regulation and the State Planning Authority or the appropriate local government body can recommend to the Minister that regulations be made. Such regulations may, for example, deal with land use zoning or reservation of land for acquisition for a particular purpose. The regulations must be exhibited publicly and opportunity given for objections to be lodged before submission to the Minister. Any person aggrieved by a decision given under a regulation may appeal to the Planning Appeal Board with a subsequent right of appeal to the Land and Valuation Court.

Most local councils in Metropolitan Adelaide have gazetted zoning regulations to control development within their areas. A number of councils in country areas have also taken steps to introduce zoning regulations. Many local authorities operate interim development control powers delegated to them by the State Planning Authority.

The State Planning Authority directly controls development in the Hills Face Zone, comprising the high land overlooking Metropolitan Adelaide between Gawler and Sellicks Beach. The intention is to retain the rural character of the area. The State Planning Authority has interim development control over the area between Adelaide and Monarto, the Flinders Ranges Planning Area, the area around the proposed Redcliff petrochemical works, Kangaroo Island, some small portions of Metropolitan Adelaide and land fronting the River Murray.

The Authority is empowered to buy land, either by agreement or compulsorily, to assist in promoting development in accordance with the development plan, and a Planning and Development Fund is provided to assist the Authority in carrying out this function.

By 31 December 1976, 4 580 hectares of land had been acquired by the State Planning Authority for major open spaces and regional parks in the Adelaide Area at a cost of \$8 820 000. Work was proceeding on the development of Regency Recreation Park at Islington, north of Adelaide.

In other parts of the State a total of 4 346 hectares of land had been acquired by the Authority by the end of 1976 at a cost of \$1 434 900.

The control of land subdivision throughout the State, with the exception of the City of Adelaide where there is no control, is vested in the Director of Planning and the local government authority in the area in which the land is situated. If permission to subdivide is refused, there is a right of appeal to the Planning Appeal Board.

The Minister for Planning is responsible for the administration of the Planning and Development Act and the Director of Planning heads the State Planning Office.

Monarto

A new city to cater for over 100 000 people is to be established in the vicinity of Murray Bridge, 80 kilometres south-east of Adelaide.

The Murray New Town (Land Acquisition) Act, 1972 authorised the State Planning Authority to acquire an area of not more than 10 000 hectares within 30 kilometres of Murray Bridge for the purpose of establishing a new city. Subsequently the area was changed to 16 000 hectares. A site for the city, named Monarto, has now been acquired and detailed planning has been completed. Commencement of development work has been deferred initially for eighteen months because of lack of funds.

The Monarto Development Commission is responsible for the implementation of the project. The new city has been planned with a broad economic base and will eventually attain self-government status. Development control around the site of the new city is the responsibility of the State Planning Authority.

Coast Protection

The Coast Protection Act, 1972-75 provides for the conservation and protection of the State's coastline, including its foreshore and beaches. A coast Protection Board of six members has been established under the chairmanship of the Director of Planning. Its objectives are broadly to protect and restore the coast, to develop any part of it for enjoyment by the public and to carry out research.

The Board makes grants to local government authorities to assist them with conservation projects and to help carry out work within the boundaries of the appropriate coast protection districts. Work would include the provision of boating facilities, protecting embankments, car park areas and other public amenities. Loss of sand from several metropolitan beaches is a major problem and the Board is devoting technical and financial resources to a sand replenishment program.

Coast protection districts may be established for any part of the coast, after which management plans are to be prepared setting out the measures needed to protect the coast and secure its most appropriate use. Proposed developments that are contrary to the management plan may be refused by the Board subject to right of appeal to the Planning Appeal Board.

Two coast protection districts, Metropolitan and Yorke, were declared in 1973; Fleurieu coast protection district and South East were declared in 1974 and 1976 respectively. The declaration of the remaining three districts Eyre, Spencer and Kangaroo Island coast protection districts will follow.

The management plan for the Metropolitan coast protection district which extends from Sellicks Beach to Port Gawler is expected to be completed in 1977. This will be followed by the management plan for the Yorke district which includes the coastline from Port Gawler to the northern boundary of the District Council of Port Broughton. As a first step to commencing preparation of a management plan for the Fleurieu district, which extends south from the northern boundary of the hundred of Myponga to the centre of the Murray Mouth, consultants have been commissioned to undertake a study report of the district which will be completed in 1977.

In 1975-76 the Coast Protection Board expended \$1 127 000 on foreshore protection repairs, improvements and restoration and the purchase of land. Much of this work was undertaken by local government bodies who contributed a further \$276 000 towards the cost of the works. At 30 June 1976, a further \$1 247 000 had been committed to approved but, at that time, uncompleted projects.

RUNDLE MALL

Background

Since the 1939-45 War the suggestion that Rundle Street be converted to a pedestrian mall had been raised at various times by planners, politicians and the general public.

An essential ingredient for the success of a shopping mall is a high level of retail activity, and compared with other Australian capital cities the inner-city area of Adelaide has retained a greater proportion of metropolitan trade.

In recent years as the metropolitan area has expanded north, north-east and south regional shopping centres have been established at Marion, Elizabeth, Tea Tree Gully and West Lakes. Each of these centres has had the effect of reducing the growth of retailing in Rundle Street, and in a metropolitan context the proportion of trade fell steadily.

Nevertheless, the major retail stores in Rundle Street were able to maintain a wider variety of merchandising at their City stores than in the regional centres and this, together with the ring of short-term car parks with direct store access, the good radial public transport system and the concentration of office and commercial employment adjacent to Rundle Street, contributed to their continued retail vitality.

The continued decentralisation of retailing with suburban growth and the desire to revitalise the City for the promotion of cultural and people-orientated facilities were the principal reasons for the creation of the Rundle Mall.

Traffic Study

In November 1972 the State Government asked the City of Adelaide Development Committee to look at the proposal for a mall. At the Committee's request State Cabinet authorised the Director-General of Transport to carry out a study into the traffic and transport aspects of converting Rundle Street into a pedestrian mall.

A working group was established to study the effect on traffic circulation in the adjacent street system; access to public transport, taxi services and car parks by shoppers; goods delivery to shops without rear access and the provision for emergency and essential services to the mall area.

In September 1973 a report was forwarded to the Minister of Transport and Local Government from the working group which concluded that there were no insurmountable traffic problems to the closure of Rundle Street and its conversion to a pedestrian mall. The report went on to recommend that the Adelaide City Council should carry out further studies on all aspects of the mall.

Viability Studies

Late in 1973, the Lord Mayor of Adelaide formed a Steering Committee to supervise consultant studies into the commercial and social viability of a pedestrian mall.

These studies examined retail potential, accessibility as regards additional car parks and better public transport services and the attitudes of retailers and the general public. Extensive attitude surveys were conducted which found that 93 per cent of pedestrians favoured a mall and 52 per cent of householders questioned and 60 per cent of shoppers questioned at suburban shopping centres stated they would visit Rundle Street more often if it were a mall.

Retailers were in favour of the mall only if it were carefully planned and of high quality and provided it could be shown that customer traffic would not be affected. They also favoured a full mall rather than only partial exclusion of vehicles.

Mall Design Studies

The initial design report envisaged a pavement of one metre square granite slabs in a two-tone pattern with the granite repeated in above ground fixtures and laid on a concrete base extending over the whole street width. The estimated cost in May 1974 was \$1.2 million (excluding work on the sewer main).

This report was formally endorsed by the Adelaide City Council but subsequently rejected by the State Government on the basis of high cost and a preference for flexible low cost paving materials using the existing road surface as a base.

The State Government then commissioned pavement and sub-base studies to test a wide variety of materials including coloured bitumen, bricks, tiles and granite slabs. A report entitled 'Evaluation of Pavement Materials and Associated Services' was published in December 1974 which dealt not only with paving materials but also with sub-base composition, stormwater drainage, the problems of the ninety-year old sewer main, other service relocations and the planting of trees in the mall. The report also included a range of cost estimates for mall construction.

The general conclusions were that:

- (1) there was no need for a concrete sub-base, the paving material could be laid directly over the roadway either using cement mastic, or preferably a dry sand/cement mixture for bedding the paving material;

- (2) a flexible surface using small units such as bricks or interlocking blocks was preferred. Surface should be hard and absorbent with grey colours avoided because of staining problems;
- (3) the ninety-year old sewer should have its joints reconstructed in lieu of a complete new sewer, saving approximately \$300 000, with trees planted in large underground tubs so they can be lifted out and rested periodically to recuperate from the environment in Rundle Street;
- (4) the existing stormwater drainage system could be adapted at pavement level to cope with run-off from the mall;
- (5) the total cost was estimated at between \$630 000 (interlocking blocks) and \$830 000 (brick on edge) at December 1974 values.

A new design for the mall, under the guidance of the Steering Committee was commissioned and it was this design with several modifications which was finally constructed.

The concept was to create an informal nostalgic atmosphere, using antique furnishings in keeping with the predominantly 19th century building facades. The paving material, of hard-burnt buff-coloured clay bricks, was laid in stretcher bond across the mall from shop front to shop front.

The oriental plane tree (*Platanus orientalis* var. *digitata*) was carefully selected for its light and attractive foliage and some of these were planted in large underground tubs.

In addition English Ash trees were planted in the centre of the mall in raised tubs and American hackberry (*Celtis occidentalis*) in the rest of the raised tubs.

As an experiment, three trees, Japan Pagoda tree (*Sophora japonica*), Sugarberry hackberry (*Celtis laevigata*), and Queensland box (*Tristania conferta*) were planted directly into the ground.

Furnishings include an information booth at each end of the mall, wire mesh seating attached to the raised planter boxes, an antique fountain, three sculptures by Adelaide artists (two avant-garde and one figurative) and provision for three or four outdoor eating areas. This plus the presence of a number of fruit barrows, flower stalls and newspaper kiosks has enhanced the informal appearance of the mall (as distinct from the 'decorated' effect of formal beds and borders so evident in many overseas malls).

Rundle Street Mall Act, 1975-1976

In January 1975 the State Government in consultation with the Adelaide City Council prepared a Bill for Parliament authorising the Rundle Mall, based on agreements between the three parties (State Government, Adelaide City Council and retail traders) and giving effect to all necessary steps to implement the mall. Cost sharing was to be as follows:

- (a) Capital cost. One-third in cash by the State Government up to a limit of \$300 000, the other two-thirds by way of loans raised by the Adelaide City Council up to a limit of \$600 000 with one-half of the

interest and capital recovery paid by the Council and the other half paid from funds derived by a special rate levied on rate payers in the vicinity of Rundle Street.

- (b) Maintenance of the mall was to be the responsibility of the Adelaide City Council, with promotion and operation being a charge to the Special Rate.

The State Government subsequently agreed to pay one-third of the Mall Manager's expenses on a year by year basis.

The main provisions of the Rundle Street Mall Act, 1975-1976 dealt with the following:

- (1) road closure to traffic and regulation by permit of vehicle entry for certain purposes and at specified times and penalties for non-compliance;
- (2) financial provisions, enabling the State Government to pay its share, and to permit the Adelaide City Council to raise loans for the purpose;
- (3) enabling the Adelaide City Council to levy a special rate, which may be a differential rate—in fact it was varied by type of business and by location;
- (4) authorising the Adelaide City Council to carry out the works;
- (5) authorising a car park to be built at the corner of Rundle Street and Pulteney Street and including the terms and date by which the State Government would make the site available to the Adelaide City Council.

The Act was subsequently amended by the Rundle Street Mall Act Amendment Act, 1976 to increase capital funding from \$900 000 to \$1.2 million and to change the name of the mall to Rundle Mall.

Construction of the Mall

In March 1975 the Engineering and Water Supply Department began reconstructing the sewer joints. This involved the re-directing of bus services to adjoining parallel streets permanently, and involved temporary closure to traffic of sections of Rundle Street. This work was completed by mid-year and the road re-opened to traffic.

Following this there was a lengthy period of inactivity during which the design approved by the Adelaide City Council was reassessed and construction recommenced with the relocation of services, augmentation of underground stormwater capacity and full scale trial sections of paving.

The Adelaide City Council had hoped that the mall would be completed by March 1976 in time for the 1976 Festival of Arts but pavement laying did not commence until 21 January 1976.

The brick paving was expedited by using a special frame on wheels which spanned across the street, formed the profile and fed gauged bricks to the pavers. While the Festival of Arts deadline was not met, it was possible to open an essentially completed mall on 1 September 1976.

Mall Committee and Management

The Mall Manager is responsible to the Committee and his expenses (including an office and one female assistant) are paid from funds credited to the Committee. Income is derived from the Special Rate, permit and licence fees, rental of mall space and annual contributions from the State Government equivalent to one-third of direct management costs. The annual budget of the Committee must be approved by Council.

There are presently two sub-committees, one on advertising and promotion, the other looking into the commercial viability of the outdoor eating areas.

The Opening Ceremony

The Premier of South Australia, the Hon. D. A. Dunstan, QC, formally commissioned the mall on 1 September 1976 when he switched on the nineteenth century fountain, connected for the occasion with a supply of champagne.

The mall opening was accompanied by an intensive publicity campaign *via* the press, radio and television, and the State Government organised free buses to the mall from the suburbs for a limited period afterwards.

On-Mall Entertainment

Immediately after the commissioning, the State Government and Mall Committee sponsored a series of 'Sundays in the Mall', organised by staff of the Adelaide Festival Theatre Trust.

Other entertainment has been provided by the Committee since then on an informal basis such as hired street musicians moving through the lunch time crowds as troubadours. Store promotions featuring rock groups and professional entertainers, visiting groups such as the Maori singers and unscheduled performances by itinerants or fund raisers have all contributed to the liveliness of the mall.

Outdoor Eating Areas

In early 1977 a cafe proprietor agreed to operate an outdoor eating area on a three month trial basis with seven tables and a temporary serving booth.

Three other areas are designated for pavement cafes but so far suitable operators have not been found for them. Tables, umbrellas and chairs are owned by the Committee and will be hired out to the operators. They lock into slots in the mall pavement and cannot be removed.

The Queen's Walk

On Wednesday 23 March 1977 Her Majesty Queen Elizabeth II strolled down the mall with Prince Philip in a festive atmosphere amid huge crowds of people.

PART 4

LAND SETTLEMENT

4.1 LAND TENURE

IDENTIFICATION OF LAND AND REGISTRATION OF TITLE

To facilitate the identification of land, the southern portion of the State encompassing all the arable land and certain pastoral areas has been subdivided into counties and these in turn have been generally subdivided into smaller units known as hundreds.

The first Surveyor-General, Colonel Light, had been instructed by the Colonisation Commissioners to divide the colony into towns and counties, and in 1842 the first nine counties were proclaimed. As the administration was having considerable difficulty in regulating the leasing of unsold lands for pasturage it was proposed in 1846 that boundaries of areas smaller than counties be created and the system of hundreds used in some counties in England was adopted.

The boundaries of early counties and hundreds followed natural features. As further counties and hundreds were declared, natural features suitable for boundary delineation were not always available and in most cases the boundaries were set parallel to lines of longitude and latitude.

In 1887 an area of 100 000 hectares was declared to provide for the town and irrigation area of Renmark on the River Murray. Similar areas were subsequently surveyed and proclaimed adjacent to other sections of the river.

There are currently forty-nine counties covering 23 per cent of the State, the last of these being declared in 1933. The counties have an average size of 463 000 hectares, varying from County Light, north of Adelaide, with 217 470 hectares to County Jervois on Eyre Peninsula with 959 000 hectares.

Counties are generally subdivided into hundreds, although four northern counties remain undivided and a number of others are only partly subdivided. There is considerable variation in the size of hundreds, while the number of hundreds in a completely subdivided county varies from eight in Counties Alfred and Kintore to thirty-four in County Jervois. New hundreds are created from time to time, the present total being 534. Hundreds are further subdivided into sections which in turn may be divided into allotments or occasionally blocks.

Land is therefore, for the purposes of title, identified by the county, hundred, and section, and, where appropriate, block or allotment within which it falls. Land in towns and in proclaimed irrigation areas may further be identified as falling within that town or area.

Torrens System of Land Registration

Land transactions in South Australia are conducted under the Torrens System of land registration as provided by the Real Property Act, 1886-1975. This system, first introduced by the Real Property Act, 1858, was named after its author, Sir Robert Torrens, who was at that time Registrar-General of the Colony.

The Torrens System provides that the matter of title to land shall be a government responsibility. Each piece of land is represented by a certificate of title which, with very few (and in practice unimportant) exceptions, is guaranteed by the State. Retrospective examination which is necessary with general law title is eliminated and the costs and time involved in conveyancing can thus be kept to a minimum.

The following table shows details of mortgages, transfers and other transactions relating to land under the Real Property Act, 1886-1975 for each of the four years to 1975.

Real Property Act Transactions, South Australia

| Item | 1972 | 1973 | 1974 | 1975 |
|---|---------|---------|---------|---------|
| | | | \$'000 | |
| Amount lent on mortgages | 460 460 | 579 263 | 739 239 | 855 614 |
| Amount discharged | 206 707 | 300 753 | 344 695 | 317 438 |
| Value of property transferred (a) | 503 600 | 897 100 | 874 000 | 920 100 |
| | | | Number | |
| Certificate of title: | | | | |
| Issues (b) | 16 611 | 21 163 | 24 923 | 23 492 |
| Transfers | 48 137 | 63 778 | 51 645 | 50 728 |
| Mortgages (c): | | | | |
| Registrations | 50 050 | 61 173 | 52 570 | 52 993 |
| Discharges | 45 933 | 58 229 | 51 567 | 49 365 |

(a) Includes sales and gifts of real and personal property, but excludes sales of shares and securities, devises by will, conveyances by which no beneficial interest passes, and gifts for religious or educational purposes.

(b) Includes limited titles and some replacement of old documents without charge of ownership of land.

(c) Includes mortgages of Crown and other leases.

The Real Property (Registration of Titles) Act, 1945-1975 provides for the small proportion of land remaining under the general law to be converted to the Torrens System and this transition is still in progress in certain areas.

SYSTEMS OF TENURE

CURRENT TENURE

In the table below, occupied land in South Australia is classified according to its present form of tenure. Thus 'Area sold, dedicated, etc.' does not represent the accumulated total of all alienated lands as certain alienated lands repurchased by the Crown are currently held under leases.

At 30 June 1976 land in South Australia was occupied as follows:

| | Area Hectares | Proportion Per Cent |
|--|-------------------|------------------------|
| Area sold, dedicated, etc.; | | |
| Sold | 6 328 950 | 6.43 |
| Free grants | 378 497 | 0.39 |
| Dedicated (a) | 127 782 | 0.13 |
| Under agreement to purchase | 84 358 | 0.09 |
| Total | 6 919 587 | 7.04 |
| Area under lease and licence (b); | | |
| Perpetual | 8 472 373 | 8.61 |
| Pastoral | 50 687 904 | 51.50 |
| Other | 527 318 | 0.54 |
| Total | 59 687 595 | 60.65 |
| Area in occupation 66 607 182 67.69 | | |
| Remainder of State; | | |
| Lakes and lagoons | 3 198 943 | 3.25 |
| Open for allotment or selection | 1 227 | 0.01 |
| Other vacant land (c) | 28 630 326 | 29.05 |
| Total area of State | 98 437 678 | 100.00 |

(a) Includes State forest reserves.

(b) Includes areas held under Mining Acts.

(c) Includes surveyed roads, railways and other reserves, 9 304 439 hectares; of which 7 936 542 hectares are set apart as Aboriginal reserves.

In 1901 the area sold, granted and leased, *i.e.* the area occupied, was 37 934 751 hectares, increasing to 57 472 548 in 1924, but falling to 52 370 744 in 1931 because of decreased areas under pastoral lease. Since 1931 there has been a fairly steady increase to the present figure of 66 607 182 hectares.

LAND ADMINISTRATION

Approximately 90 per cent of the occupied area of South Australia comprises Crown land held under lease and as such is controlled by the Department of Lands. This Department is charged with the general administration of Crown

lands, and with making available under appropriate tenure newly developed lands and such lands as come into the hands of the Crown by resumption, expiry, surrender or forfeiture of existing tenure. The consent of the Minister of Lands (or the Minister of Irrigation in the case of irrigated lands) is required before the transfer, mortgage or sublease of any of the forms of tenure administered by the Department.

Land available for leasing is allotted by the Land Board and, in the case of pastoral lands, by the Pastoral Board, who interview applicants and make allotments on merit. The Boards also advise the Minister on matters connected with land settlement.

Leases and licences under the various mining Acts are issued and supervised by the Department of Mines, while the Woods and Forests Department and the Engineering and Water Supply Department are responsible for the issuing of leases over reserves and areas under their control.

METHODS OF ALIENATING LAND

Sales under Agreement to Purchase

There is provision for Crown lands to be alienated through an agreement to purchase. The purchase money is payable over varying terms not exceeding sixty-four years and the purchaser must comply with certain special conditions concerning the improvement and the development of the land, including the fencing of the property within the first five years. It is not necessary for an agreement to run the full term as, subject to the Minister's approval, purchase may be completed after six years provided the purchaser has complied with all the necessary conditions. Land allotted under Agreements to Purchase amounted to 31 hectares in 1975-76.

Sales at Auction

Certain Crown lands may be sold at auction for cash. These include town lands, suburban lands exempt from the operations of the Land Board, and Crown lands which have been offered for lease and not taken up within two years. Town lands so sold are subject to limitations on resale and conveyance through mortgage during the first six years, and it is usually conditional that improvements, for an agreed function and of a certain minimum value, be erected within a stipulated period.

Free Grants and Reservations

A free grant of Crown lands may be made for any public purpose. Of the 378 497 hectares thus alienated at 30 June 1976, 310 798 hectares had been granted for the Weapons Research Establishment. Lands may also be dedicated and reserved for a variety of purposes such as forest reserves, Aboriginal reserves, national parks, conservation parks, recreation parks, parklands and schools.

METHODS OF LEASING AND LICENSING LAND

Leases for Limited Terms

Pastoral lands outside the counties and large areas in the northern counties are held under pastoral leases granted for terms of forty-two years (except in the case of previously unoccupied lands when the term is twenty-one years) or for

shorter terms where the land may be required for other purposes. Under the conditions of these leases the lessee must expend in improvements a sum as recommended by the Pastoral Board and must comply with certain conditions on stocking. Rent is based on the carrying capacity of the land, the distance from markets and the proximity of transport facilities, and, in the case of recent leases, is reviewed every seven years. Such lands may be reallocated to the same lessees on expiry of the existing terms.

Persons may be granted a permit to search for water and if successful may take up a lease of 250 square kilometres of land. Such leases are granted for forty-two years at a nominal rental for the first ten years and a low rental thereafter. Conditions of stocking are also modified.

In certain circumstances, for example, where land has not been surveyed or its potential is uncertain, or where permanent alienation is not desirable, miscellaneous leases are issued for periods up to twenty-one years. Certain business and industrial sites may also be held under miscellaneous lease. Annual licences may be granted over Crown lands for certain industrial sites, grazing areas, fishermen's residences, holiday shack sites and other approved purposes.

Land reserved for the Woods and Forests Department was leased for cultivation or grazing purposes for a period not exceeding forty-two years. At 30 June 1976, 267 hectares of forest land were under lease.

Perpetual Leases

Leases in perpetuity may be offered over Crown lands which have been surveyed or delineated on the public maps. The lessee is required to provide boundary fencing and may be required to clear and render available for cultivation a certain proportion of the land within a specified period.

In certain cases special perpetual leases are available under which no rent is payable for the first four years, and with less than full rent over the next six years.

Sections in government controlled irrigation areas are offered on perpetual lease and, if the land has not been cultivated previously, rents and water rates are payable on a sliding scale for the first three years. Certain improvements are required to be made. Town allotments in irrigation areas may be offered under perpetual lease either at auction, by calling applications, or may be let on annual licence. Allotments may also be offered at auction for cash or for agreement to purchase. Allotments not sold at auction may be sold by private contract.

During 1975-76, 1339 hectares in irrigation areas were allotted under perpetual leases.

MINING CLAIMS, LEASES AND LICENCES

Legislation

The granting of leases and licences and the pegging of new claims is governed by the Mining Act, 1971-1976. A total of 306 private mines were current at 30 June 1976. Mineral royalties received by the Department of Mines during 1975-76 amounted to \$2 310 304.

The following table shows tenements held under Mining Acts for the last five years.

**Tenements Held Under Mining Acts, South Australia
At 30 June**

| Particulars | 1972 | 1973 | 1974 | 1975 | 1976 |
|--|-------|-------|-------|-------|-------|
| Mineral claims | 1 394 | 1 330 | 415 | 159 | 90 |
| Precious stones claims | 1 015 | 1 810 | 1 472 | 918 | 993 |
| Leases | 1 183 | 1 188 | 1 477 | 1 425 | 1 361 |
| Exploration licences (a) | 117 | 71 | 60 | 73 | 80 |
| Petroleum licences and permits | 23 | 24 | 21 | 17 | 15 |

(a) Formerly Special Mining Leases under the repealed Mining Act, 1930-1962.

Minerals Resumed

The mineral rights on private land have been resumed by the Crown so that all minerals are now the property of the Crown and there are no 'lands with the mineral rights alienated from the Crown' with different conditions applying to them. However, if minerals (other than extractive minerals) which have been resumed under the Mining Act, 1971-1976 are mined at any time in the future, upon application any royalties collected upon the minerals recovered are payable to the person so divested of his property in minerals.

A royalty of 2.5 per cent (5 per cent for extractive minerals) of the value of the minerals, immediately upon recovery from the earth, is payable to the Minister of Mines and Energy on all minerals (except precious stones) recovered and sold or used for commercial purposes. No royalty is payable on precious stones. Royalty for extractive minerals is payable to the Extractive Areas Rehabilitation Fund.

Extractive Minerals

Extractive minerals are defined as sand, gravel, stone, shell, shale or clay but not fire-clay, bentonite or kaolin. No person is permitted to peg claims for extractive minerals on freehold land other than the person who, immediately before the operation of the Mining Act, 1971-1976 held the mineral rights or had rights to mine the minerals by holding a claim or lease over the deposit. Normal pegging rights apply to extractive minerals on other than freehold land or exempt land, and also apply to other minerals on freehold land.

Under the present Act, all the royalties collected from the mining of extractive minerals are paid into the Extractive Areas Rehabilitation Fund to be used in rehabilitating land disturbed by the mining of or searching for extractive minerals. The Fund may also be used for research into methods of mining engineering and practice with a view to reducing environmental damage or impairment. Receipts into this Fund during 1975-76 amounted to \$463 874.

General Conditions

A current miners right or, in the case of precious stones, a precious stones prospecting permit must be held by every prospector to authorise the pegging of the appropriate class of claim.

At least three weeks notice of entry for prospecting or mining purposes must be given to the landowner if the land is freehold or held on perpetual lease.

Three weeks notice must also be given to the landowner before 'declared equipment' can be used on his land. In either case the landowner may lodge an objection with the Warden's Court.

A claim (other than a precious stones claim) has a maximum term of twelve months, is not transferable and must be converted to a lease before minerals can be removed for sale or used for commercial purposes.

A mining lease may be granted after twenty-eight days notice in the *South Australian Government Gazette* for a term of up to twenty-one years with certain rights of renewal. A mining lease is transferable with the Minister's consent and an annual rent is payable on a mining lease. Nineteen-twentieths of the rent collected on a lease on freehold land is paid to the landowner.

Exploration licences replaced Special Mining Leases as used under the previous Act. They have a maximum life of two years and a maximum area of 2 500 square kilometres and are subject to the terms agreed. Twenty-eight days notice must be given in the *South Australian Government Gazette* before an exploration licence is granted.

Mining leases and exploration licences are granted only under conditions which give proper consideration to the protection of the natural environment.

4.2 LAND SETTLEMENT SCHEMES

CLOSER SETTLEMENT

There is provision in the Crown Lands Act for acquisition of land for subdivision to encourage closer settlement. Such land is divided into blocks and offered under conditional agreements to purchase with payment over thirty-five and sixty-four year periods.

No land has been purchased for closer settlement since 1952-53, by which time 384 298 hectares had been purchased at a cost of \$5 730 400, including 21 008 hectares set apart for returned service personnel from the 1914-18 War, 1 302 hectares for forest and water conservation purposes and 10 758 hectares purchased in connection with the reclamation of River Murray swamp lands.

At 30 June 1976 a total of 50 822 hectares of closer settlement lands were held under agreement to purchase or lease.

MARGINAL AREAS ASSISTANCE

The excessive opening up of the drier marginal lands for wheat growing resulted in many settlers in these areas being forced to leave their holdings, particularly in the 1930s.

Investigations showed that if the settlers were to succeed, cereal growing would need to be replaced by grazing. The Commonwealth Government established a Marginal Lands Improvement Fund to assist this development. The money was used to purchase properties from certain settlers with a view to enlarging the holdings of others, to provide fencing and water supplies and to pay small grants to settlers vacating holdings in which there was no equity.

The Fund was provided by the Commonwealth Government under the *Wheat Industries Assistance Act 1938*. An amount of \$1 426 000 was allocated to South Australia. By arrangement with the Commonwealth Government the rentals and income from sales of improvements on marginal lands which had been subject to adjustments under the above Fund are retained as an additional fund to be used for assistance to settlers in marginal areas. Receipts for 1975-76 amounted to \$27 600.

During 1967-68 an amount of \$150 000 was transferred from this Fund to the Farmers Assistance Fund. No advances were made from this fund during 1975-76. The balance of the Fund at 30 June was \$423 687.

CROWN LANDS DEVELOPMENT

The Crown Lands Development Act, 1943-1973, administered by the Department of Lands, provides for the development of Crown lands, or lands which the Department may purchase, and for the allotment of such lands to suitable settlers.

A substantial proportion of the land under the Act was developed with the object of inclusion in the War Service Land Settlement Scheme. Properties not accepted for the scheme were subsequently allotted under the Act, and since then a number of individual properties have been surrendered to the Crown for development and re-allotment to the former holders.

ASSISTANCE FOR RETURNED SERVICE PERSONNEL

1914-18 WAR

Following the 1914-18 War the State Minister for Repatriation was authorised to acquire land for the purpose of re-settling discharged servicemen. Such land could be purchased by agreement or acquired compulsorily, whether held in fee simple or under Crown lease. Crown lands could also be set apart for this purpose. The land acquired was subdivided where appropriate and offered under agreement to purchase, perpetual lease or a term lease. Provision was also made for the discharging of existing mortgages on freehold properties already held by ex-servicemen, with fresh mortgages in favour of the Minister of Repatriation.

In all, 3 801 ex-servicemen were settled under this Act with 3 008 settling in 'dry lands' and 793 in irrigation areas.

1939-45 WAR AND KOREA-MALAYA OPERATIONS

War Service Land Settlement

Under the War Service Land Settlement Scheme, provision was made for the settlement on rural holdings of certain ex-servicemen from the 1939-45 War and Korea and Malaya operations.

Suitable Crown land was made available and other land was acquired. This land was subdivided and developed to a stage where it could be brought into production by the individual settler within a reasonable time. Basic structural improvements were provided and it was then offered to eligible settlers on perpetual lease. Credit facilities are available to these settlers for working capital, the purchase of stock and equipment, and the effecting of further improvements.

During the first year after allotment in the case of 'dry lands' settlers, and the first year after an irrigation holding became self-supporting the settler was granted a living allowance and was exempted from the payment of rent or interest in respect of the holding, and of payments on account of principal or interest in respect of advances, other than advances for working capital. Provisions exist for a settler on 'dry lands' to convert property to freehold after a period of ten years by the payment of a fixed purchase price and the repayment of all advances. There is no provision for freeholding in government irrigation areas.

The following table shows for recent years the number of farms allotted and total expenditure under the War Service Land Settlement Scheme.

War Service Land Settlement, South Australia
Farms Allotted and Total Expenditure to 30 June

| Particulars | 1973 | 1974 | 1975 | 1976 |
|---|---------------|----------------|----------------|----------------|
| Farms allotted: | | | | |
| Number | 1 032 | 1 032 | 1 032 | 1 032 |
| Area ('000 hectares) | 285 | 285 | 285 | 285 |
| Expenditure: | | | | |
| | | \$'000 | | |
| State | 8 452 | 8 671 | 9 173 | 9 638 |
| Commonwealth Government; | | | | |
| Acquisition of land | 6 837 | 6 837 | 6 846 | 6 846 |
| Development and improvement of land | 31 684 | 31 701 | 31 686 | 31 682 |
| Provision of credit facilities | 38 765 | 40 011 | 41 458 | 42 544 |
| Other | 14 071 | 14 496 | 15 143 | 15 875 |
| Total expenditure by Commonwealth Government | 91 357 | 93 045 | 95 133 | 96 947 |
| Total expenditure | 99 809 | 101 716 | 104 307 | 106 585 |

The Department of Lands administers the War Service Land Settlement Scheme on behalf of the Commonwealth Government. The Commonwealth Government provides the funds and meets the costs of the scheme with the exception of administration costs and two-fifths of any losses, which are met by the South Australian Government.

All large scale development operations under the scheme have now been completed. The principal areas settled are in the South East, on Kangaroo Island, Eyre Peninsula, and in irrigation areas along the River Murray.

Loans and Allowances (Agricultural Occupations) Scheme

The Commonwealth Government through the State Bank of South Australia provided financial assistance for the establishment or re-establishment of ex-servicemen in agricultural occupations. Loans were made for a variety of purposes and non-repayable allowances were made where income during the course of re-establishment proved to be inadequate. The payment of allowances and the advancing of new loans ceased in 1956-57 by which date loans totalling \$2 009 096 had been made to 1 288 ex-servicemen, and allowances totalling \$649 218 had been granted to 2 264 ex-servicemen.

An additional Marginal Lands Improvement Fund was established in 1943 from which expenditure of \$416 476 had been made to 30 June 1976 by the **Department of Lands**.

SOUTH AUSTRALIAN LAND COMMISSION

The South Australian Land Commission was established in November 1973 under the provisions of the Land Commission Act, 1973. The functions of the Commission are to acquire, manage and develop land for present and future urban expansion with the primary objective of providing land for persons with limited financial resources.

Financial assistance has been provided by the Commonwealth Government under the *Urban and Regional Development (Financial Assistance) Act 1974*. At 30 June 1976 the Commission had received advances of \$40 949 000 for the acquisition of land and land development purposes and grants of \$2 034 000 for Metropolitan Open Space purposes.

Advances from the Commonwealth Government are repayable over a period of thirty years from the date of the advance together with interest at the long-term bond rate current at the date of the advance. Grants are made on the basis of \$2 for each \$1 of expenditure from State funds. The State's share of expenditure was provided out of funds of the State Planning Authority.

Land purchased or acquired by the Commission for urban purposes at 30 June 1976 was 4 223 hectares within localities designated for urban development in the Metropolitan Development Plan, 33 hectares in country towns and 1 747 hectares of land within localities designated for Metropolitan Open Space.

During 1975-76 the Commission extended its operations to the country with the acquisition of land at Nairne and Mount Gambier and the commencement of development at Mount Gambier.

Since first releasing fully serviced allotments on to the market on 11 April 1975 at Happy Valley, the Commission has sold, to 30 June 1976, a total of 1 120 allotments at Happy Valley, Salisbury North, Morphett Vale and Bolivar.

PRIVATE LAND DEVELOPMENT SCHEMES

The most important private scheme in South Australia has been a project, begun in 1949 by the Australian Mutual Provident Society, to develop a large area of land in the south-east of the State in what was previously known as the Ninety Mile Desert. The development of this area was made possible by the discovery that the retarded nature of the country was caused by certain soil deficiencies, and that these deficiencies could be overcome by the addition of trace elements (mainly copper sulphate and zinc sulphate) to the soil.

Large tracts of unimproved land were obtained either by purchasing existing leases or by Crown allotment. Intending settlers were employed by the Society in the development work, covering a period of approximately five years, and were then allotted a holding over which they had a perpetual lease title. The Society provided finance for the purchase and for stock, plant and working expenses. In all, 38 880 hectares were taken up by employees of the Society.

In addition to the development of land for employees a large area was developed to various stages and sold to the public; sales in this category amounted to 132 435 hectares.

ADVANCES TO THE RURAL SECTOR GOVERNMENT ADVANCES

Advances Administered by State Bank

In addition to advances made under schemes mentioned above, the State Bank administers certain funds provided by the State for rural development.

Under the Advances to Settlers Act, 1930-1972, the Bank makes advances to settlers for a variety of purposes including general improvements, the purchase of livestock and the discharging of existing mortgages. The Loans to Producers Act, 1927-1962 empowers the Bank to make advances for certain developmental projects and the purchase of certain capital equipment. The Bank also administers Acts providing loans for the construction of vermin-proof fencing, general fencing and the laying of water piping.

Marginal Dairy Farms Reconstruction Scheme

The Marginal Dairy Farms (Agreement) Act, 1971 ratified an Agreement between the South Australian and Commonwealth Governments to overcome the problem of low incomes within the dairy industry, particularly in the case of producers relying on the sale of milk or cream for manufacturing purposes.

The scheme provides for farmers whose farms have insufficient potential to become viable economic units, while based on the sale of milk or cream for manufacturing purposes, to voluntarily sell their land to the State at market value. The State may then dispose of the land on the basis of the most profitable and economic land use, particularly with a view to building other rural properties to economic levels. The scheme also provides for development/diversification loans in respect of an existing dairy, interest free loans for the on-farm purchase and installation of refrigerated bulk milk vats and loans to dairy factories to facilitate the collection, storage and processing of refrigerated bulk milk.

At 30 June 1976, 212 applications had been received of which 147 were approved and forty-seven declined. Funds for the scheme are provided by the Commonwealth Government when required. At 30 June 1976, \$960 265 had been expended on the purchase of dairy farms and other assistance to approved applicants.

Rural Industry Assistance Scheme

The Rural Industry Assistance (Special Provisions) Act, 1971 effects an agreement between the Commonwealth and South Australian Governments for a scheme of assistance to help restore to a profitable basis those farms and farmers with a capability to service commitments and reach a stage of commercial viability within a reasonable time. The scheme provides for carry-on finance, debt reconstruction, farm build-up and rehabilitation loans.

Carry-on finance and debt reconstruction are designed to assist the farmer who, although having sound prospects on a long-term basis, has used all of his cash and credit resources and cannot meet his financial commitments. Advances for carry-on finance and/or debt reconstruction bear interest at the rate of not less than 4 per cent a year.

Farm build-up is to assist the process whereby farms which are too small to be profitable can be enlarged to an economic unit. Interest on advances is chargeable at a rate of not less than 6.25 per cent a year.

Funds were provided initially by the transfer of the balance of the Primary Producers Debt Adjustment Fund (\$804 636) to the Rural Industry Fund. Other contributions to the Fund are made by the Commonwealth Government in accordance with the Agreement and at 30 June 1976, \$20 500 000 had been received. The State is liable for the repayment to the Commonwealth Government of 75 per cent of the moneys made available by the Commonwealth Government for the purpose of the scheme together with interest at the rate of 6 per cent a year.

Total advances from the Fund by way of repayable loans to 30 June 1976 amounted to \$26 538 000.

Details of the number of applications received and the expenditure involved are shown in the following table.

Rural Industry Assistance: South Australia, Applications, Approvals and Expenditures from Commencement of Operations to 30 June 1976^(a)

Debt reconstruction:

| | |
|-------------------------------------|--------------|
| Applications received | 1 044 |
| Applications declined | 655 |
| Applications approved | 358 |
| Total assistance approved | \$12 574 155 |
| Expenditure to 30 June 1976 | \$12 084 020 |
| Average assistance approved | \$33 754 |

Farm build-up:

| | |
|-------------------------------------|--------------|
| Applications received | 765 |
| Applications declined | 299 |
| Applications approved | 390 |
| Total assistance approved | \$15 484 091 |
| Expenditure to 30 June 1976 | \$14 265 037 |
| Average assistance approved | \$36 577 |

Rehabilitation:

| | |
|--|----------|
| Applications received/approved | 11 |
| Total assistance approved | \$17 500 |
| Expenditure to 30 June 1976 | \$17 807 |

(a) Commenced 27 May 1971.

Fruitgrowing Reconstruction Scheme

The Fruitgrowing Industry (Assistance) Act, 1972 effects an agreement between the Commonwealth and South Australian Governments for a scheme of assistance to horticulturalists to remove redundant plantings of trees of the varieties used in the production of canning peaches, pears, apricots, and fresh apples and pears. Growers are entitled to maximum levels of assistance of \$202 per hectare for canning fruits and \$142 per hectare for fresh fruits.

Assistance is provided initially in the form of a secured loan bearing interest at the rate of 6.25 per cent a year. The grower is obliged to enter into an undertaking that for the next five years he will not replant on the property from which the trees have been removed, any trees of the type specified. On compliance with the undertaking interest will be rebated, securities discharged and the loan converted into a grant.

Funds made available by the Commonwealth to 30 June 1976 were \$220 000 of which \$206 000 has been advanced to growers.

Beef Industry Assistance Scheme

The Beef Industry Assistance Act, 1975 provides for financial assistance to specialist beef producers for carry-on finance to assist the producer to reach commercial viability.

Funds totalling \$3 million were allocated to the scheme comprising \$1.5 million from State funds and a matching dollar for dollar advance by the Commonwealth Government.

The scheme provides for loans up to a maximum of \$10 000 for servicing essential carry-on requirements and interest at the rate of 4 per cent a year with repayment over a maximum period of 7 years. No repayment of principal would be required during the first year of operation. Interest for the corresponding period would be capitalised.

At 30 June 1976, seventy-four applications for assistance had been approved and repayable advances of \$554 000 had been made to beef producers.

Farmers Assistance Fund

The Primary Producers Emergency Assistance Act, 1967 provides a means of servicing the essential carry-on requirements of primary producers suffering loss as a result of drought, fire, flood, frost, animal or plant disease, insect pest or other natural calamity. Assistance is given to enable such persons to continue in the business of primary production where no other source of financial assistance is available to them and who, by virtue of the assistance, have a reasonable prospect of being able to continue in the business of primary production.

Payments and/or direct grants may also be made towards the cost of fodder or water for starving stock including the transport of livestock to and from agistment and for any other purpose deemed necessary.

The first \$1.5 million expenditure in any calamity is to be borne from State funds.

Loans bear interest at the rate charged by the State Bank of South Australia in respect of overdraft loans made to primary producers at the time of making the advance.

Financial Details

The following table gives details of total advances made to the rural sector by government authorities and balances outstanding at 30 June 1976.

Advances to Settlers, South Australia

| Particulars | Advances made during 1975-76 | Total Advance at 30 June 1976 | Principal Outstanding at 30 June 1976 | |
|---|------------------------------|-------------------------------|---------------------------------------|-------------------|
| | | | Persons | Amount |
| | \$ | \$ | Number | \$ |
| Department of Lands: | | | | |
| Advances to soldier settlers | — | 10 143 560 | 161 | 136 339 |
| Advances under closer settlement Acts | — | 5 461 033 | 131 | 105 310 |
| Settlement of returned service personnel (1939-45 War) (a) | 1 068 785 | 42 404 904 | 573 | 7 347 240 |
| Advances under Crown Lands Development Act | — | 2 985 623 | 40 | 530 539 |
| Advances in drought affected areas | 14 330 | 836 613 | 33 | 56 810 |
| Advances under Marginal Dairy Farms Reconstruction Scheme (a) | 638 092 | 925 279 | 118 | 845 433 |
| Advances under Rural Industry Assistance Scheme (a) | 4 750 395 | 26 545 137 | 682 | 18 099 979 |
| Advances under Fruitgrowing Reconstruction Scheme (a) | 56 852 | 212 471 | 148 | 212 471 |
| Advances under Beef Industry Assistance Scheme | 554 612 | 574 612 | 66 | 555 000 |
| Advances to soldier settlers; Irrigation | — | 2 096 348 | 48 | 58 063 |
| State Bank of South Australia: | | | | |
| Advances to settlers for improvements (b) | 116 196 | 4 454 559 | 298 | 1 322 099 |
| Advances under vermin and fencing Acts (c) | 4 968 | 2 982 711 | 37 | 72 340 |
| Advances under loans to producers Acts | 3 043 620 | 33 776 510 | 110 | 14 332 280 |
| Total | 10 247 850 | 131 399 360 | 2 445 | 43 673 903 |

(a) Advances made from funds provided by the Commonwealth Government.

(b) Adjustment of cancelled and re-allotted holdings.

(c) Vermin proof fencing and loans for fencing and water piping.

PRIVATE INSTITUTIONAL ADVANCES

Many financial institutions advance funds for rural development.

At July 1976 the major trading banks had advances outstanding to residents of South Australia employed in agriculture, dairying and grazing, of \$106.2 million. At June 1976 branches of major pastoral finance companies located in South Australia had \$65.0 million outstanding on similar advances.

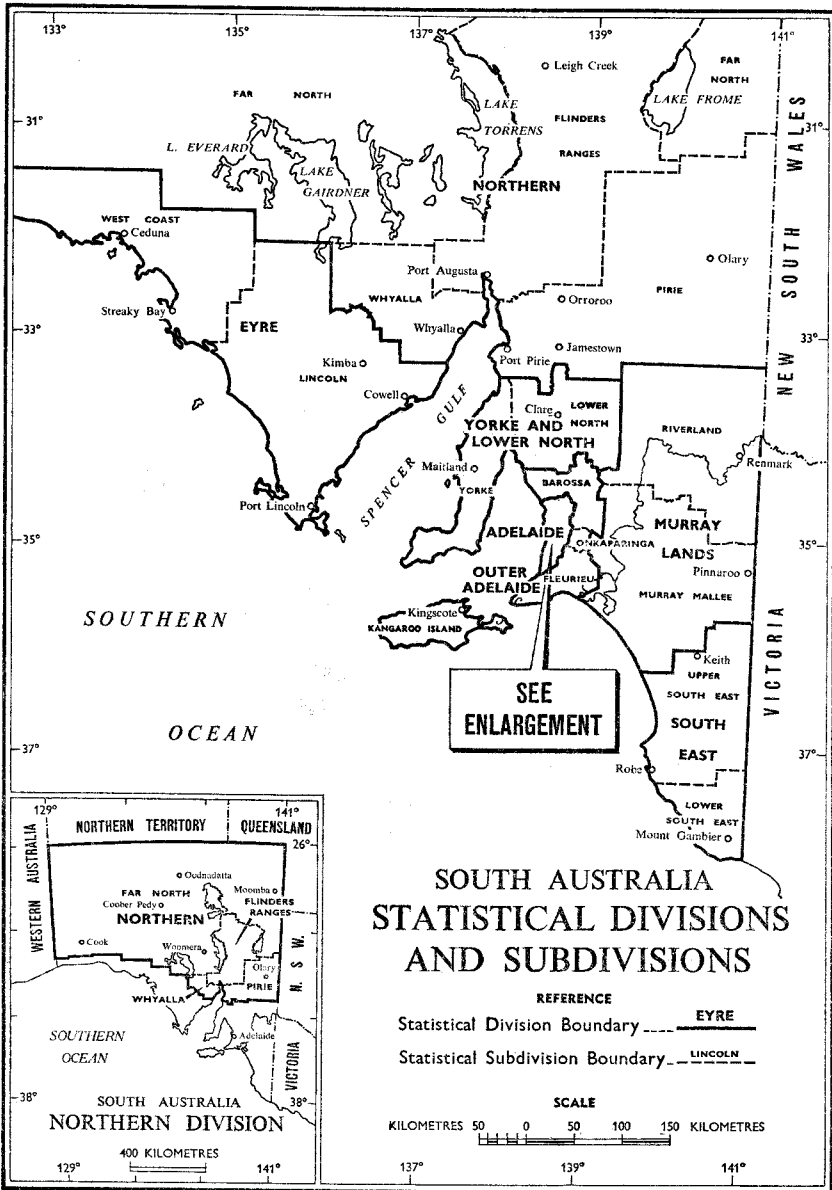
4.3 STATISTICAL DIVISIONS AND SUBDIVISIONS

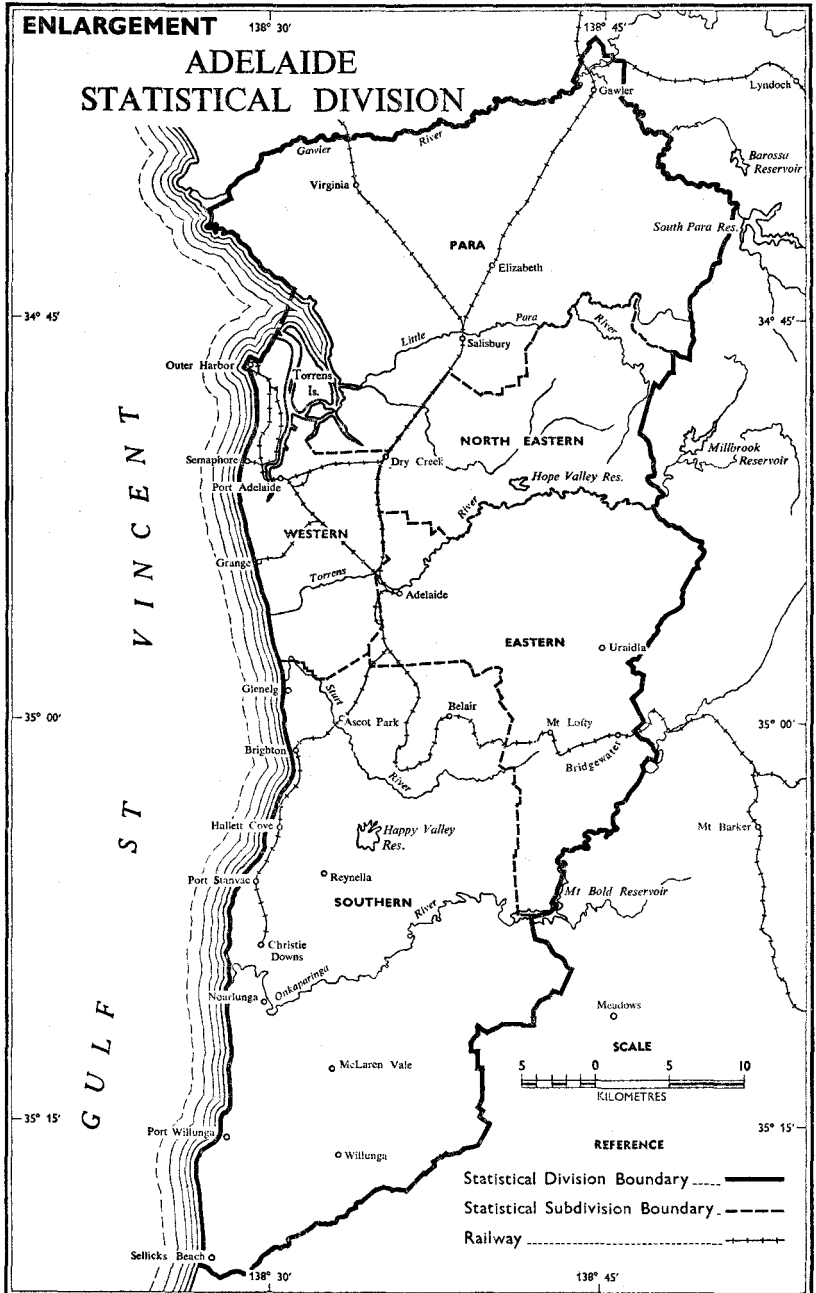
For the purpose of presenting the statistical series of South Australia, the State is divided into a number of areas which are entitled statistical divisions.

PREVIOUS STATISTICAL DIVISIONS

Statistical series for South Australia have been published at various times under two different sets of statistical divisions—'Primary' Statistical Divisions, the boundaries of which have followed the boundaries of proclaimed counties, and 'Census' Statistical Divisions, where boundaries for the most part have followed the boundaries of local government areas.

Before 1889 agricultural statistics were published for counties from at least 1851, and local government areas from 1854. Publication of statistics by 'Primary' Statistical Divisions commenced in 1889 on the basis of five statistical divisions made up of thirty-eight counties. In 1920-21 an additional division was created





to limit the number of counties in each division (as the number had by this time increased to forty-eight) and the number of 'Primary' divisions remained at six from that date.

Early population census results were published on the basis of local government areas and counties, but for the 1891 and 1901 Censuses the five 'Primary' Statistical Divisions were used. The Census of 1911, which was the first conducted by the Commonwealth Government, reverted to the use of counties for published results whereas subsequent censuses, up to and including 1947, were published using local government areas. Details of the 1954 and subsequent population censuses have been published by 'Census' Statistical Divisions.

For the 1966 Census an additional division, the Adelaide Statistical Division, was delineated to embrace the area expected to contain the urban development of Adelaide during a period of at least twenty years.

Although, ideally, statistical division boundaries should remain unchanged over time so as to enable comparisons to be made of constant areas, growth in certain statistical divisions, together with the adoption of the Adelaide Statistical Division for the 1966 Population Census, made it desirable to review the boundaries and to select a new group of statistical divisions.

The new statistical divisions were designed to represent closely allied and meaningful areas of production and community interest and where areas smaller than divisions were considered to be important, subdivisions were introduced.

These statistical divisions and subdivisions were adopted for the publication of official statistics from 1 January 1971.

NEW DIVISIONS AND SUBDIVISIONS

From 1 July 1976 new statistical divisions and subdivisions have been adopted for the publication of official statistics. Maps showing the new statistical divisions and subdivisions are included on pages 133 and 134.

Until recently there was little uniformity in the regions used by various organisations in undertaking their own functions, with Government departments and authorities and private organisations determining their own regional boundaries. This led to at least two important difficulties, namely:

- (1) planners and others interested in the overall development of an area found it exceedingly difficult to obtain a complete picture of the existing services and conditions in that area. When contacting individual departments, they found dissimilarities in the areas used which often led to an inability to obtain the required information on a consistent basis;
- (2) the task of the Statistician in providing required statistical information was made virtually impossible with each organisation requiring statistics for their own arbitrarily designed areas.

In an attempt to overcome these problems, the Committee on Uniform Regional Boundaries for Government Departments (CURB) was established to investigate and report on:

'the advantages and disadvantages of requiring Government departments with, or intending to develop, regional operations, to adopt uniform

regional boundaries . . . (and) if uniform regional boundaries are considered desirable, the Committee should recommend the criteria to be used in establishing boundaries, (and) the boundaries to be adopted

The acceptance of the Committee's recommendations will lead to the gradual introduction of a uniform regional system. Therefore, the Bureau has decided to alter the previous statistical divisions and subdivisions and adopt those described on pages 137-143. Even though the new divisions are not, in every case, identical with regions proposed for use by the CURB Committee, in all cases they are directly convertible to these regions.

Since the CURB regions now form the basis of the Bureau's new statistical divisions and subdivisions it is sufficient here to briefly examine CURB criteria for delineating regions. Also, the descriptions of statistical divisions which follow later will precis the regional descriptions of the CURB Committee Report.

Regions were delimited by the CURB Committee (and hence by the Statistician) using two complementary approaches. Firstly, areas could be determined that constituted formal regions. These were distinguished by the relative homogeneity of selected aspects of the area. Specific criteria examined in this regard were:

- population distribution, density and change,
- production statistics,
- dominant occupations, industrial and rural,
- socio-economic status; ethnicity, family status,
- physical characteristics, relief, soils, climate, water availability,
- existing administrative, planning and institutional boundaries,
- existing political boundaries (*e.g.* local government),
- character of the urban foci or nodes.

An alternative approach used was to determine regional boundaries based on a nodal concept. Thus, nodal regions were defined based on the interaction of functional linkages with usually the regions having some nodal or focal point. In this case, criteria examined by the Committee included:

- government department service areas,
- newspaper circulation,
- telephone traffic,
- retail trading flows,
- service areas for other commercial purposes,
- traffic flows,
- population movement, temporary as in commuting and leisure trips, or more permanent as in migration, both internal and external.

Since these approaches are to a large extent complementary, all the Committee's regions, both urban and rural show a combination of formal and nodal features. After first identifying the broad patterns of the formal attributes throughout the State, the nodal attributes as suggested by shopping patterns, newspaper circulation etc. were examined to either reinforce or else modify the original proposals. The nodal attributes were very important in delimiting the country regions.

It can be seen that there were many similarities in the way the CURB Committee delimited its regions compared to what the Bureau did to determine

its previous statistical divisions. Thus, it is not surprising to find that there is a deal of comparability between the previous statistical divisions and those introduced here based on the CURB regions.

The basic framework of the old and new systems for obtaining statistical divisions remains the same. In both cases, the divisions and subdivisions are mainly amalgamations of complete local government areas. Therefore it is possible to obtain a broad comparability over time based on the new boundaries by regrouping local government area data. Such comparisons are valid for all metropolitan areas but, because of the inclusion of some unincorporated areas from the north of the State (which was formerly a separate distinct region) with regions other than the new Far North Statistical Subdivision, it will not be possible to obtain an extra comparison for some country areas. However, the unincorporated areas involved in this reshuffle are not densely populated and have little economic activity, which should enable users of the data to make fairly accurate comparisons.

The Adelaide Statistical Division retains exactly the same boundary now as under the old area groupings. Originally introduced by the Bureau as a basis for the publication of the 1966 Population Census results, this area boundary has remained constant since then.

DESCRIPTIONS OF DIVISIONS AND SUBDIVISIONS

Adelaide Statistical Division

The Adelaide Statistical Division embraces the centre of population, secondary industry and commerce of the State. It is bounded on the west by the sea, the north by the Gawler River and the east and south by the Mount Lofty Ranges.

Soils are mainly hard red duplex soils (red-brown earths) but there are areas of hard yellow duplex soils (podzolic soils) in the cooler hills east of the city and hard brown calcareous earths on the plains north of the city. A large part of the area of the Division has been cleared for urban and agricultural purposes. In the areas not cleared natural vegetation varies from open woodland of the savannah forest type (peppermint and blue gum) on the plains and lower foothills to stringy bark in the higher ranges. Rainfall varies considerably throughout the Division with average annual falls of 400 millimetres to 510 millimetres on the plains to the north and west of the city and along the coastal fringe to the south. Recordings are generally between 530 millimetres and 690 millimetres in the foothills to the south-east of the city, and in the northern and southern sections of the hills increasing to 760 millimetres or more with a maximum of approximately 1 200 millimetres at Stirling in the highest part of the Ranges.

Rural activity is largely confined to the outer areas of this Division with emphasis on those products which are consumed by the city dweller *e.g.* milk, vegetables and fruit with areas of vineyards to the south.

Outer Adelaide Statistical Division

Barossa Statistical Subdivision

Included in this Subdivision are the northern extremes of the Mount Lofty Ranges and the Barossa Valley. The Subdivision extends westwards to Gulf St Vincent encompassing the area to the north of the Adelaide Plains.

The hills regions have large areas of shallow soils and rocky outcrops while the valleys consist mostly of hard red duplex soils (red-brown earths), whereas the plains to the west contain sandy surfaced brown calcareous earths (mallee soils). Natural vegetation varies considerably throughout the region ranging from river red gum and stringybark on the hills through savannah woodlands, (principally blue gum and sheoak) to various mallee eucalypts. Average rainfall varies between 300 and 660 millimetres with the higher falls in the Barossa Valley.

The Barossa Valley is intensively planted to vineyards and the area produces a large proportion of the wine manufactured in the State. The remaining area of this Subdivision is devoted to cereal growing and sheep farming.

Kangaroo Island Statistical Subdivision

In addition to Kangaroo Island itself this Subdivision includes a few small islands around its coastline.

Soils are mainly gravelly, hard yellow duplex soils with calcareous sands and shallow red-brown sandy soils on limestone along the southern coast. Natural vegetation consists of mallee, sheoak, teatree, wattle, honeysuckle and yacca. Average rainfall varies from 760 millimetres on the western end of the plateau to 460 millimetres in the Kingscote area.

The raising of sheep for wool is the main industry of this Subdivision with prime lambs and meat cattle also being significant; some cereals are also grown in the drier areas. Fishing, both commercial and recreational, is an important industry in this area. The entire western end of the Subdivision is one of Australia's largest flora and fauna reserves.

Onkaparinga Statistical Subdivision

The hills of the central Mount Lofty Ranges extending eastwards to their extremities constitute this Subdivision. The topography is naturally rugged with steep hills characterising the area.

Soils consist of a variety of hard yellow duplex soils including ironstone gravelly forms, deep leached sands and hard red duplex soils. Natural vegetation includes stringy bark, candlebark, blackwood, blue and red gum, together with a rich array of associated sclerophyllous shrubs. The region receives a high annual rainfall (up to 1020 millimetres along the western border).

Surrounding the Adelaide Hills communities of Mount Barker, Hahndorf, Oakbank, Nairne and Woodside are fertile agricultural areas used for dairying, horticulture and grazing. Most of this agricultural land lies within the watersheds of metropolitan reservoirs, within which there are strict controls on subdivision and development.

Fleurieu Statistical Subdivision

This Subdivision contains the hills and plains of the southern Mount Lofty Ranges through to the coast bordering the Southern Ocean including the western lakes district of Lake Alexandrina. Throughout, the topography is characterised by rolling hills and undulating country.

In the range area the soils consist of hard yellow and red duplex soils while brown calcareous earths predominate in the lakes district. Natural vegetation includes river red gum, blue gum, peppermint, sheoak and many

types of shrubs and grasses. Intensive pine plantations have replaced large areas of natural forest. The region receives a relatively high annual rainfall (ranging from 330 millimetres in the south to 850 millimetres in the north).

The main activities in this predominantly rural Subdivision are dairying, meat and wool production while some wheat and barley are grown on the plains surrounding Strathalbyn.

Yorke and Lower North Statistical Division

Yorke Statistical Subdivision

Yorke Subdivision embraces Yorke Peninsula and a small area to the north extending as far as Port Broughton. The countryside is mainly flat to undulating and is predominantly arable.

Brown calcareous earths (mallee soils) and shallow loams on limestone predominate in this area but calcareous sands are found on the foot of the peninsula and hard red duplex soils in the north-central portion. Natural vegetation consists of various types of mallee eucalypts, shrubs and grasses. Native pine and broombush are interspersed in some areas, while dryland teatree and other small shrubs are found in association with the mallee in the southern part of the Subdivision. Annual rainfall ranges between 300 and 510 millimetres with the majority of the Subdivision receiving an average of more than 360 millimetres.

This is essentially a cereal, wool and prime lambs producing district with some diversification into cattle and pigs.

Lower North Statistical Subdivision

This Subdivision is characterised by alternate mountain ranges and broad valleys which tend in a north-south direction, with the western boundary being the Hummock Range rising to about 300 metres. The area extends eastwards from this Range and includes the fertile areas surrounding Clare-Watervale, and further east, the Eudunda Range and its associated plains.

Soils in these ranges and valleys are hard duplex varieties (red-brown earths) and cracking clays are present. In the uncleared areas the natural vegetation consists of various mallee eucalypts, shrubs and grasses interspersed with native pine, dryland teatree and in the wetter parts some river red gums. Average rainfall varies between 300 and 660 millimetres with the lower falls in areas near Gulf St Vincent and higher falls recorded around the Clare-Watervale area.

Wheat and sheep are the major rural activities throughout the region with sheep grazing predominating in the eastern portions and on the higher upland ridges. The Clare-Watervale area is extensively planted to vineyards.

Murray Lands Statistical Division

Riverland Statistical Subdivision

Soils are sandy brown calcareous earths (mallee soils) although near the River Murray there are shallow brown soils over limestone and grey clays along the River flats. Natural vegetation is predominantly mallee eucalypt, acacia and dryland teatree with scattered patches of native pine and sheoak.

Average rainfall varies between 200 and 480 millimetres with the higher falls occurring in the extreme west of the Subdivision.

Irrigation areas are scattered along the River Murray, in many cases extending no further than 3 or 5 kilometres from the River. These areas contain extensive orchards, both citrus and stone fruits, and produce over half the State's total production of these items. Large areas are also planted with vines, the grapes from which are used mainly in the production of wines and brandy with the remainder being dried. Cereals are grown in the mallee region to the south of the River and in the area adjacent to the Eudunda Range while sheep raising is spread throughout the Subdivision. Industry in the Subdivision is largely confined to processing the agricultural produce of the river area e.g. wineries, fruit canning, fruit packing.

Extending from the Eudunda Range eastward to the South Australia-Victoria border the Riverland Subdivision includes areas up to 60 kilometres north of the River Murray and the typical mallee country to the south of the River.

Murray Mallee Statistical Subdivision

This Subdivision extends from the lower reaches of the River Murray to the South Australia-Victoria border. The north-western side of the area is made up of the steep slopes of the ranges as they fall away to the River while the remainder is more typically mallee and undulating. Most of the lagoon known as the Coorong makes up the south-western boundary and the south-eastern corner forms part of the Ninety Mile Desert.

The soils consist of sandy brown calcareous earths with light drift brown sand rises interspersed with sharper rises: there are some sandy duplex soils and deep leached sands in the south together with dark clay soils along the River flats. Natural vegetation is mainly mallee eucalypt, dwarf native pine, broombush and wattle together with shrubs and grasses. Average rainfall varies between 250 and 430 millimetres with the higher falls recorded near the coastline and becoming less reliable in the north of the Subdivision.

There are large numbers of dairy cattle concentrated on the lower reaches of the River Murray and the reclaimed River flats. In the balance of the Subdivision, cereal crops tend to be grown mainly on the western sides of the River with sheep grazing predominating on the eastern side. Barley is also grown in the southern areas nearer the South Australia-Victoria border. Secondary industry is mainly confined to factories processing the agricultural products of the area e.g. milk processing, butter manufacturing, flour milling, but there is some production of agricultural implements.

South East Statistical Division

Upper South East Statistical Subdivision

The region between the coast and the South Australia-Victoria border with the northern boundary near Keith and the southern boundary just north of Penola constitutes the Upper South East Subdivision. The area is characterised by many dunes and ridges that generally lie parallel to the coast.

Deep leached sands are associated with the dunes of the north while in the south there are considerable areas of dark clay soils. The Subdivision encompasses part of the Ninety Mile Desert scheme where previously inferior

sandy yellow duplex soils have been changed to highly productive soils by the use of superphosphate and trace elements. Natural vegetation consists of heath, mallee eucalypt, yacca, dwarf honeysuckle and broombush in the north grading through to red, blue, pink and swamp gum in the south. In the north the rainfall varies between 400 and 510 millimetres with a gradual increase to 610 millimetres in the south.

The country is mainly devoted to grazing with sheep distributed throughout and cattle concentrated in the higher rainfall areas to the south. Crops are more important in the drier northern area where wheat, barley and considerable quantities of oats are grown. Southern rock lobster is taken by pots in the coastal waters adjoining this Subdivision.

Lower South East Statistical Subdivision

The south-east corner of the State, south of Penola, forms this Subdivision. The country is generally undulating but interspersed with ranges of low hills which run parallel to parts of the coastline.

Considerable areas of dark clay soils occupy the plains between the ranges. As there is virtually no natural drainage, extensive artificial drainage has been necessary to reduce the level of the water table to permit cropping and the cultivation of pasture. The natural vegetation consists of red, blue and swamp gum with native grasses. Average rainfall varies from 610 millimetres in the north through to 790 millimetres in the extreme south.

With its high rainfall and fertile soils, the majority of this area has been sown to pasture, making year-round grazing possible. This has led to the development of substantial fat lamb, beef, dairying and dairy products industries. The sawmills and paper and by-products factories in this Subdivision use large quantities of softwood which comes from the extensively planted *pinus radiata* forests of the area. In the coastal waters southern rock lobster is an important product.

Eyre Statistical Division

Lincoln Statistical Subdivision

This Subdivision takes in all but the north-western areas of Eyre Peninsula and extends further north to the Gawler Ranges. There are several ranges of hills in the Subdivision with peaks ranging in height from 150 to 495 metres. Along the west coast large areas are taken up by salt lakes.

Soils vary considerably, with red-brown sands on limestone in the west and sandy yellow duplex soils (red-brown earths) in the east, brown sands in the centre and brown calcareous earths in the north-east. Natural vegetation is mainly mallee eucalypt and broombush with shrubs and grasses, but there are areas of sugar gum with bottlebrush, heath and acacia along with isolated red gums. While average rainfall varies between 280 and 610 millimetres, the majority of the Subdivision receives less than 510 millimetres.

Cereal crops dominate the Subdivision's production with nearly 400 000 hectares sown, while sheep are raised, both for wool and prime lamb markets. Fishing is a major industry in the Subdivision with tuna being the most important catch. Port Lincoln, the largest town in the Subdivision, provides bulk handling facilities to dispose of the crops, a large abattoir to facilitate the processing of export lambs, and a fish cannery.

West Coast Statistical Subdivision

The West Coast Subdivision embraces the north-western areas of Eyre Peninsula and the far west coastal region. In the east the land is gently undulating merging into the flat Nullabor Plain on the far west coast which rises 70 metres from the sea.

Soils vary from thin calcareous loamy soils on the limestone plateau of the Nullabor Plain, to brown calcareous earths in the central and eastern areas with red-brown sandy soils in the south-east. East of the Nullabor Plain natural vegetation consists of mallee eucalypt, broombush, saltbush, bluebush and open woodlands of sheoak and teatree. The Nullabor Plain, while treeless, maintains vast open expanses of scattered saltbush and bluebush. Average rainfall varies from 400 millimetres east of Ceduna to less than 200 millimetres in the far west.

The area under cultivation is devoted exclusively to the growing of cereal crops (in the south-east) and pastures for grazing sheep.

Northern Statistical Division

Whyalla Statistical Subdivision

Whyalla and the iron ore areas of the Middleback Ranges together with the arid lands in the west bounded by the Gawler Ranges and in the north by the salt lakes, Lake Gairdner and Lake Macfarlane, form this Subdivision. The region is flat with low ranges in the west and north-west.

In the main, soils are brown calcareous earths with areas of shallow compact loamy soils in the north-west and crusty red duplex soils north of Whyalla. Average rainfall is less than 300 millimetres throughout and natural vegetation is typically scattered mulga, saltbush and bluebush.

The main feature of the Subdivision is the industrial centre of Whyalla where blast furnaces and steel works are supplied with iron ore from the neighbouring Middleback Ranges. The Whyalla shipyards are one of the largest in Australia where ships of over 50 000 tonnes have been constructed.

Pirie Statistical Subdivision

Lying east of Spencer Gulf and the southern and central Flinders Ranges, the Pirie Subdivision extends to the South Australia-New South Wales border. It includes the coastal plains around Port Pirie, and the plains and low-lying hills to the far east and north-east.

A wide range of soils are present in the region—saline clay soils and brown calcareous earths on the Pirie Plains, red duplex soils in the western rural areas and brown calcareous earths and loams in the semi-arid far north and east. Natural vegetation varies considerably with the different climatic and topographic conditions of the region. The steep ridges and gorges near Mount Remarkable to the north-east of Port Pirie are heavily wooded and patches of savannah woodland, principally blue gum and native pine, can be found in south-western areas. Further east and north mallee eucalypts, shrubs and grasses together with open shrubby plains give way to saltbush and bluebush with scattered mulga. Average rainfall varies from 500 millimetres in the higher western areas to 150 millimetres in the north-east.

In the main, the country is devoted to sheep grazing but only sparsely towards the border. Crops are limited to the more climatically favourable south-western areas. At Port Pirie is the site of the world's largest zinc smelter, which treats lead, silver and zinc ores from Broken Hill (NSW).

Flinders Ranges Statistical Subdivision

As well as the Flinders Ranges, this Subdivision includes Port Augusta, the pastoral areas south of the Ranges and extends west to Lake Torrens, north to Marree and east to Lake Frome. The land varies from flat along the eastern boundary to the rounded hills and valleys in the south through to the mountainous peaks and rocky outcrops of the North Flinders Ranges.

Soils are chiefly of shallow calcareous loam but brown calcareous earths occur along the eastern perimeter and in the north soils are crusty red duplex soils. Some areas in the south have scattered savannah woodland (native pine) as natural vegetation while in the southern parts of the Flinders Ranges there are patches of eucalypt trees. In the northern areas mainly drought resistant shrubs and grasses survive the arid climate. Average rainfall varies from 400 millimetres in the south to 151 millimetres at Marree.

This Subdivision contains the town of Leigh Creek where sub-bituminous coal is mined by the open-cut method and almost the entire output of the field is used at the Port Augusta powerhouse to generate electricity. Rural activity is limited to sheep and cattle grazing in the southern areas of the Subdivision.

Far North Statistical Subdivision

The Far North Subdivision is the largest in the State. The whole area is fairly flat apart from the Musgrave Ranges in the north-west which in places exceed 1 000 metres.

No part of the Subdivision receives more than an average annual rainfall of 200 millimetres; large areas receive no useful falls for very long periods and high daytime temperatures experienced over a large part of the year cause rapid surface evaporation. As a result, this region cannot support agriculture to any extent, but an area of more than 41 million hectares is leased for pastoral purposes and carries over 100 000 beef cattle and one million sheep.

The soils are varied in character, sometimes capable of growing vegetation but unproductive in the absence of adequate rainfall. In this Subdivision are found the thin calcareous loam soils of the Nullarbor Plain, the desert sand hills, the gibber deserts, the sand plains and the spinifex areas. The native vegetation consists of those shrubby species which have become adapted to the climatic conditions of the region. The trees are scattered mulga with some native pines on the hills and areas of saltbush and bluebush. Large areas in the north-west and north-east are almost devoid of vegetation, being merely sand or gibber deserts.

Within the Subdivision are two notable industries—natural gas is piped to Adelaide from the Cooper Basin in the north-east, and extensive opal fields exist at Coober Pedy and Andamooka.

PART 5

POPULATION

5.1 THE CENSUS

Early 'musters' PRE-FEDERATION ACTIVITY

Population returns in one form or another have existed from a very early period in the history of Australia. The earliest enumerations were known as 'musters', and although the actual results of very few of them have been preserved, it is probable that during the early days of colonisation they were of frequent occurrence. The first official 'muster' was taken in 1788 soon after the new settlement at Sydney Cove was formed, and in 1803 the first 'muster' of convicts in Van Diemen's Land (now Tasmania) was conducted.

Development of the Census

The first regular census in Australia was taken in New South Wales in November 1828, and included the population of Moreton Bay (now Queensland) but not Van Diemen's Land (Tasmania). Details of the names, ages and civil conditions of the inhabitants were sought. The next census was taken in 1833, and was followed by another in 1836, when arrangements were made for the enumeration of the population of the newly-established settlement at Port Phillip (Victoria). The first censuses taken in Tasmania, Victoria and Queensland as separate colonies were in 1841, 1854 and 1861 respectively. The first recognised census in South Australia was taken in 1844 and in Western Australia in 1848. The 1881 census was the first simultaneous census taken in Australia and formed part of the first simultaneous census of the British Empire.

CENSUSES OF AUSTRALIA

Under the Commonwealth of Australia Constitution Act of 1900, 'Census and Statistics' became Commonwealth Government functions and with the passing of the empowering legislation, the *Census and Statistics Act* 1905, all censuses of Australia have been taken under the authority of this Act and the regulations made thereunder. The first Australian census collected under the Act was that of 1911; subsequent censuses were taken in the years 1921, 1933, 1947, 1954, 1961, 1966, 1971 and 1976, while the next census is planned for 1981. The Act provides that the census should be taken by means of a householder's schedule delivered to every dwelling and that this schedule should contain particulars of the dwelling and its inmates.

Periodicity and Date of the Census

The *Census and Statistics Act* 1905 provided that the Census should be taken 'in the year one thousand nine hundred and eleven and in every tenth year thereafter'. But in 1930 this was amended by the addition of the words 'or at such other time as is prescribed'. Because of the economic depression prevailing in 1931 the third Australian census was not taken until 1933, and because of war conditions the fourth Australian census was not taken until 1947. Consideration was then given to the practicability of holding future censuses in the series of years originally envisaged. However, it was considered that the interval of years from 1947 to 1951 was too short; therefore it was decided to take the fifth census in 1954 at the mid-point of the period from 1947 to 1961. The sixth census was held in 1961. Because of the administrative demand for more frequent counts of the population the seventh census was held in 1966, the eighth in 1971 and the ninth in 1976.

The *Census and Statistics Act* provides that 'the Census day shall be a day appointed for that purpose by proclamation', but the actual date is not specified. The census is conducted on a *de facto* basis, *i.e.* it records the population actually in Australia at the place where located on census day (as distinct from a *de jure* basis, which records the population according to place of usual residence). However, for the 1976 Census there is facility to extract population details on a *de jure* basis from the local government level to the whole State. In the selection of census day every endeavour is made to choose a date when there is a minimum displacement of population. In 1911 and 1921, census day was near the beginning of April, but in 1933 and subsequently, census day has been at the end of June because this time has fulfilled the condition mentioned and is otherwise suitable, being the end of a financial year and of a quarterly period used extensively for statistical purposes.

Scope of the Census

The census covers the population and dwellings of Australia.

Persons excluded from results of Censuses up to 1966 were:

- (i) diplomatic representatives of other Governments and their families and staffs having diplomatic immunity in accordance with international practice;
- (ii) full-blood Aborigines, pursuant to Section 127 of the Constitution which specifically excluded them from the count of the population.

Diplomatic representatives, families and staffs are still excluded but, following the results of a referendum held in 1967, Section 127 of the Constitution was

repealed and full-blood Aborigines were included in the census from 1971. In 1971 Census publications, where 1966 figures are also shown, these figures have been amended to include full-blood Aborigines and thus provide comparability: this can be done for all tables other than those on the labour force.

Broadly the principle is to record at the census babies born at or before midnight of census day and to exclude persons dying before midnight of census day. Travellers on ships in or between Australian ports at midnight of census day are also included.

For census purposes the Act defines a dwelling as 'a building, erection, or tenement, whether permanent or temporary, which is wholly or partly used for the purpose of human habitation and includes any ship or other vessel in any port of the Commonwealth or in any inland waters thereof, or any ship or vessel on a passage between any two Commonwealth ports.' Section 10 (2) provides that 'where a building is let, sub-let, or held in different apartments and occupied by different persons or families, each part so let, sub-let, or held and used for the purpose of human habitation shall be deemed a dwelling'. Measurable characteristics such as 'class' of dwelling, materials of outer walls, number of inmates in relation to number of rooms, facilities and rentals are recorded.

The census data on occupied dwellings are obtainable from the completed householder's schedules. However, census collectors are responsible for recording, from personal observations or inquiry, particulars also of dwellings which are unoccupied on census day, including those temporarily unoccupied or those used for 'holiday purposes'. Dwellings excluded from census results are those occupied by accredited persons having diplomatic immunity. Dwellings occupied solely by full-blood Aborigines also were excluded at censuses before 1971.

Australian Parliamentary Representation and the Census

The *Representation Act* 1948 obliges the Chief Electoral Officer to ascertain the number of people in Australia and in each of the States from time to time for the purpose of determining the number of Members of the House of Representatives to be chosen from each State, all 'Statistical Officers' being authorised and required to furnish all the information the Chief Electoral Officer needs for this purpose.

After each census the Chief Electoral Officer requests the Australian Statistician to supply the information required for the purposes of the *Representation Act*. From such information the Chief Electoral Officer prepares the requisite certificate and this is published in the *Australian Government Gazette*.

A more detailed description outlining the history, purposes, legal basis, organisation and publication of the results of the population census in Australia was included on pages 77-86 of the *South Australian Year Book* 1968.

5.2 POPULATION GROWTH AND DISTRIBUTION

The population of South Australia had reached 17 366 persons at the first Census on 26 February 1844. In 1861, twenty-five years after the first settlers arrived, the population was 126 830 and this figure had more than doubled by the Census in 1881. By 1921 the population was almost 500 000 persons and it is estimated to have reached 1 000 000 persons in January 1963. The population at 30 June 1976 was 1 261 600 persons.

South Australia's population as recorded at the 1971 and 1976 Censuses has been adjusted for underenumeration utilising results from a post-enumeration survey conducted after each census to measure the degree of census error. Net underenumeration was derived by comparing results from the census and the survey for the same individuals and identifying omissions and duplications in the census. Upward adjustments made were 1.02 per cent for 1971 and 1.35 per cent for 1976. The 1971 Census figure is subject to further revision consequent upon reconciliation of intercensal recordings of natural increase and migration.

For practical reasons, characteristics of the population as recorded at the two Censuses (see later tables) have not been adjusted.

Population: South Australia, Censuses 1844 to 1976

| Census Date | Population (a) | | | Average Annual Increase | |
|-----------------------|----------------|---------|-----------|-------------------------|----------|
| | Males | Females | Persons | Number | Per Cent |
| 1844 26 February. . . | 9 686 | 7 680 | 17 366 | .. | .. |
| 1846 26 February. . . | 12 670 | 9 720 | 22 390 | 2 512 | 14.47 |
| 1851 1 January. . . . | 35 302 | 28 398 | 63 700 | 8 262 | 36.90 |
| 1855 31 March | 43 720 | 42 101 | 85 821 | 5 530 | 8.68 |
| 1861 8 April | 65 048 | 61 782 | 126 830 | 6 835 | 7.96 |
| 1866 26 March | 85 334 | 78 118 | 163 452 | 7 324 | 5.78 |
| 1871 2 April | 95 236 | 90 189 | 185 425 | 4 395 | 2.69 |
| 1876 26 March | 109 841 | 102 687 | 212 528 | 5 421 | 2.92 |
| 1881 3 April | 145 113 | 130 231 | 275 344 | 12 563 | 5.91 |
| 1891 5 April | 161 920 | 153 292 | 315 212 | 3 987 | 1.45 |
| 1901 31 March | 180 485 | 177 861 | 358 346 | 4 313 | 1.37 |
| 1911 3 April | 207 358 | 201 200 | 408 558 | 5 021 | 1.40 |
| 1921 4 April | 248 267 | 246 893 | 495 160 | 8 660 | 2.12 |
| 1933 30 June. | 290 962 | 289 987 | 580 949 | 7 149 | 1.44 |
| 1947 30 June. | 320 031 | 326 042 | 646 073 | 4 652 | 0.80 |
| 1954 30 June. | 403 903 | 393 191 | 797 094 | 21 574 | 3.34 |
| 1961 30 June. | 491 406 | 480 081 | 971 487 | 24 913 | 3.13 |
| 1966 30 June. | 550 196 | 544 788 | 1 094 984 | 24 699 | 2.54 |
| 1971 30 June (b). . . | 592 100 | 593 500 | 1 185 600 | 18 100 | 1.65 |
| 1976 30 June (b). . . | 629 900 | 631 700 | 1 261 600 | 15 200 | 1.28 |

(a) Excludes full-blood Aborigines before 1961 Census.

(b) 1971 and 1976 Census figures have been adjusted for underenumeration. Persons enumerated at these Censuses were 1 173 707 and 1 244 756 respectively.

In the following table, increases in the population have been classified as *recorded natural increase* (the excess of recorded births over recorded deaths) and *other increase* (which consists mainly of the excess of arrivals over departures, either from overseas or interstate). As from June 1971, intercensal estimates of overseas migration exclude short-term (less than one year) movements, consistent with the measurement of interstate migration. Annual average increases which are given for each 10-year period since 1861 show some important aspects of the development of the State, namely:

- (i) the net migration, especially of males, away from South Australia following the mineral discoveries in other States in the 1880s and early 1890s;
- (ii) the slow growth during the economic depression of the 1930s when natural increase fell to a particularly low level; and
- (iii) the high rate of migration in the post 1939-45 War period up to 1960.

Increases in the Population, South Australia^(a)

| Period | Recorded Natural Increase | | | Other Increase (b) | | | Total Increase |
|------------------------|---------------------------|-----------|-----------|--------------------|-----------|------------|----------------|
| | Males | Females | Persons | Males | Females | Persons | Persons |
| Annual Average: | | | | | | | |
| 1881-1890 | 3 349 | 3 535 | 6 884 | (-) 1 488 | (-) 1 141 | (-) 2 629 | 4 255 |
| 1891-1900 | 2 832 | 3 024 | 5 856 | (-) 973 | (-) 567 | (-) 1 540 | 4 316 |
| 1901-1910 | 2 665 | 2 745 | 5 410 | (-) 44 | (-) 404 | (-) 448 | 4 962 |
| 1911-1920 | 3 508 | 3 614 | 7 122 | 366 | 926 | 1 292 | 8 414 |
| 1921-1930 | 3 131 | 3 300 | 6 431 | 1 201 | 714 | 1 915 | 8 346 |
| 1931-1940 | (c) 1 787 | (c) 1 929 | (c) 3 716 | (-) 860 | (-) 397 | (-) 1 257 | 2 459 |
| 1941-1950 | (c) 3 977 | (c) 4 026 | (c) 8 003 | 2 705 | 1 671 | 4 376 | 12 379 |
| 1951-1960 | 5 631 | 5 923 | 11 554 | 6 279 | 5 585 | 11 864 | 23 418 |
| 1961-1970 | 5 980 | 6 401 | 12 381 | 4 206 | 4 975 | 9 181 | 21 562 |
| Year: | | | | | | | |
| 1971 | 6 487 | 6 823 | 13 310 | 2 720 | 2 438 | 5 158 | 18 468 |
| 1972 | 5 822 | 6 258 | 12 080 | 900 | 1 081 | 1 981 | 14 061 |
| 1973 | 4 973 | 5 599 | 10 572 | 3 918 | 3 162 | 7 080 | 17 652 |
| 1974 | 4 761 | 5 184 | 9 945 | (d) 8 130 | (d) 8 216 | (d) 16 346 | 26 291 |
| 1975 | 4 746 | 5 293 | 10 039 | (-) 2 480 | (-) 3 873 | (-) 6 353 | 3 686 |

(a) Excludes full-blood Aborigines before 1961. (b) Figures post-1970 exclude short-term overseas migration. (c) Deaths of defence personnel (except those registered on civil registers during 1940 and 1941) not deducted in calculating natural increase. (d) Includes Darwin evacuees living in this State following the effects of Cyclone Tracy.

Rate of Increase of Population, South Australia and Australia^(a)

| Period | South Australia | | | Australia | | |
|-------------------------|---------------------------|----------------|----------------|---------------------------|----------------|----------------|
| | Recorded Natural Increase | Other Increase | Total Increase | Recorded Natural Increase | Other Increase | Total Increase |
| Annual Average: | | | | | | |
| 1881-1890 | 22.67 | (-) 8.66 | 14.01 | 19.96 | 14.23 | 34.19 |
| 1891-1900 | 16.90 | (-) 4.44 | 12.46 | 16.91 | 0.71 | 17.62 |
| 1901-1910 | 14.70 | (-) 1.22 | 13.48 | 15.29 | 1.00 | 16.29 |
| 1911-1920 | 15.99 | 2.90 | 18.89 | 15.77 | 4.20 | 19.97 |
| 1921-1930 | 11.87 | 3.53 | 15.40 | 12.97 | 5.23 | 18.20 |
| 1931-1940 | (b) 6.33 | (-) 2.14 | 4.19 | (b) 7.92 | 0.60 | 8.52 |
| 1941-1950 | (b) 12.50 | 6.83 | 19.33 | (b) 12.04 | 4.34 | 16.38 |
| 1951-1960 | 13.81 | 14.18 | 27.99 | 13.71 | 8.73 | 22.44 |
| 1961-1970 (c) | 11.57 | 8.58 | 20.15 | 11.79 | 5.75 | 17.53 |

(a) Rate per 1 000 of mean population. (b) Deaths of defence personnel (except those registered on civil registers during 1940 and 1941) not deducted in calculating natural increase. (c) Excludes full-blood Aborigines before 1961.

The State's rate of population increase was slower than the Australian rate in every decade from 1881-90 to 1931-40. In the next two decades the steep rise in the rate of net migration enabled an above-average growth rate to be achieved, and this was maintained until 1966. Since 1966 however, the State's growth rate has generally been below the Australian rate.

Estimates of the population of the State for the last ten years are given in the following table. The total increase for each year and the rate of growth are also shown.

Estimated Population at 31 December, South Australia^(a)

| Year | Males | Females | Persons | Total Increase for Year | Rate of Growth |
|----------|---------|---------|-----------|-------------------------|----------------|
| | | | | | Per cent |
| 1966 | 554 000 | 549 800 | 1 103 700 | 20 684 | 1·92 |
| 1967 | 559 300 | 556 700 | 1 115 900 | 12 186 | 1·10 |
| 1968 | 566 700 | 565 400 | 1 132 100 | 16 211 | 1·45 |
| 1969 | 574 700 | 574 700 | 1 149 400 | 17 238 | 1·52 |
| 1970 | 584 400 | 585 900 | 1 170 200 | 20 855 | 1·81 |
| 1971 | 597 200 | 598 400 | 1 195 600 | 18 500 | 1·55 |
| 1972 | 603 900 | 605 800 | 1 209 700 | 14 100 | 1·17 |
| 1973 | 612 800 | 614 500 | 1 227 300 | 17 700 | 1·44 |
| 1974 (b) | 625 700 | 627 900 | 1 253 600 | 26 300 | 2·10 |
| 1975 | 628 000 | 629 400 | 1 257 300 | 3 700 | 0·30 |

(a) Figures before 1971 include an estimate of short-term overseas migration and exclude adjustment for census underenumeration.

(b) Includes an estimated 9 400 former Darwin residents living in this State following the effects of Cyclone Tracy.

Intercensal estimates of population are derived by adding to the population ascertained at the Census the recorded natural increase and the allocation to the State of portion of the net gain to Australia by overseas migration; gains and corresponding losses that result from movement between South Australia and other States are also taken into account, in so far as they are recorded as transfers of residence under family allowance procedures or Commonwealth Government electoral procedures, supplemented by results of any special count or sample survey. Estimates before 1971 have been revised according to Census results.

The estimates show that over the last ten years the greatest annual increase occurred during 1974. This increase was 26 300 persons which included an estimated 9 400 persons resident in this State as a result of Darwin's Cyclone Tracy disaster on 24 December 1974. Of these 9 400 persons it was estimated that 8 100 were evacuees and 1 300 were usual residents of the Northern Territory temporarily residing in South Australia when the cyclone struck. In 1975 the low annual increase of 3 700 persons can be attributed in part to the return of these residents to Darwin.

The estimated mean population for South Australia is calculated for the years ended 30 June and 31 December. Estimates for the last 10 years are shown in the next table.

Estimated Mean Population, South Australia^(a)

| Year | Year Ended 30 June | | | Year Ended 31 December | | |
|------|--------------------|------------|--------------|------------------------|------------|--------------|
| | Males | Females | Persons | Males | Females | Persons |
| 1967 | 553 800 | 549 300 | 1 103 100 | 556 800 | 553 100 | 1 110 000 |
| 1968 | 559 400 | 556 300 | 1 115 700 | 562 600 | 560 200 | 1 122 800 |
| 1969 | 566 500 | 564 800 | 1 131 400 | 570 500 | 569 500 | 1 140 000 |
| 1970 | 574 800 | 574 300 | 1 149 100 | 579 200 | 579 500 | 1 158 600 |
| 1971 | 587 600 | 588 700 | 1 176 300 | 592 500 | 593 700 | 1 186 200 |
| 1972 | 596 800 | 598 100 | 1 194 900 | 600 500 | 601 900 | 1 202 400 |
| 1973 | 604 200 | 605 800 | 1 210 000 | 608 400 | 610 100 | 1 218 500 |
| 1974 | 612 600 | 614 200 | 1 226 800 | (b)617 400 | (b)619 000 | (b)1 236 400 |
| 1975 | (b)622 300 | (b)624 300 | (b)1 246 600 | 625 500 | 627 400 | 1 252 900 |
| 1976 | 627 600 | 629 000 | 1 256 500 | | | |

(a) Mean populations 1971 to 1976 include adjustment for census underenumeration and exclude short-term overseas migration. These figures are preliminary and subject to further adjustment.

(b) Adjusted to include former Darwin residents living in this State following the effects of Cyclone Tracy.

EARLY HISTORY OF SETTLEMENT

A detailed description of early settlement in South Australia together with information on the 1851 Census was included on pages 116-7 of the *South Australian Year Book 1970*.

DISTRIBUTION OF POPULATION

For the purpose of presenting population and dwelling statistics urban centres are delimited by methods first adopted at the Census of June 1966 and applied uniformly throughout Australia.

At each Census of Population and Housing a boundary is drawn around each population cluster of 1 000 or more persons (or around known holiday resorts of less population if they contain 250 or more dwellings of which at least 100 are occupied). These clusters are named urban centres and the population and dwellings enumerated therein are classified as urban for statistical purposes.

In delimiting urban centres with 25 000 or more population the basic criterion used is *population density*. The geographic units classified according to the density criterion are collection districts, the smallest units available. These areas vary in size and shape, but as far as possible they have been designed to ensure that significant urban development in large rural collection districts is split off as a separate collection district. Particular rules apply to contiguous areas with special functions, such as airports, sporting areas and industrial areas, which do not meet the density criterion. A gap in urban development which is less than three kilometres (by the shortest rail or road distance) between the edge of one area of urban development and another is ignored and the urban areas are treated as contiguous; two urban areas separated by a gap of three or more kilometres are treated as separate urban areas even if the gap comprises mainly reserved land or a natural barrier.

The boundary of such an urban centre is, therefore, the peripheral boundary of an aggregate of contiguous urban collection districts, the densities of which

are at least 200 persons per square kilometre. The boundary is a moving one which reflects the process of urbanisation. The use of objective criteria enables valid comparisons to be made between one urban centre and another, and between the population for an urban centre at one census with the population at succeeding censuses.

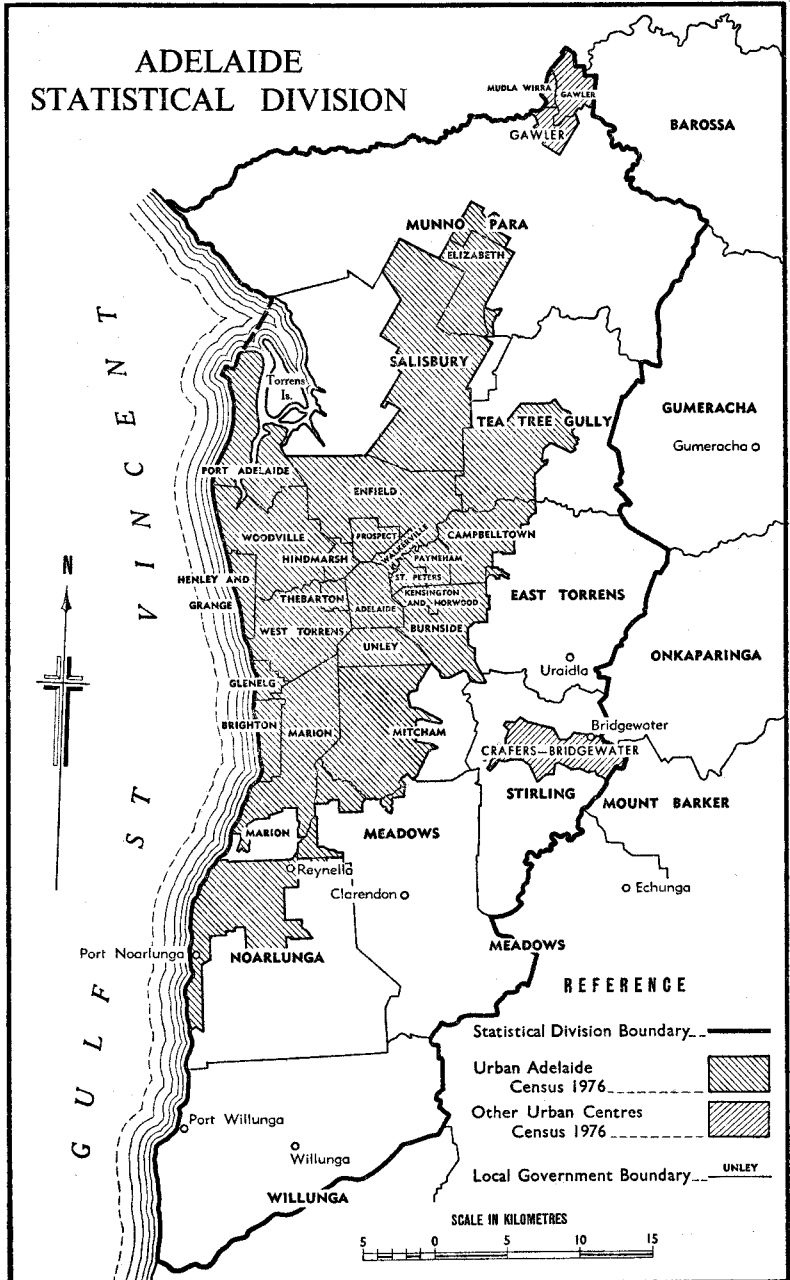
When delimiting urban centres of less than 25 000 population the urban centres are delimited subjectively (by the inspection of aerial photographs, by field inspection and/or by consideration of any other information that is available). All continuous urban growth is included, together with close but non-contiguous development which could be clearly regarded as part of the centre.

Around Adelaide (and all other urban centres with a population of at least 25 000) two boundaries have been defined. The outer one, which is fixed, circumscribes the area in close economic and social contact with the main city, and which contains the anticipated urban development of the city for a period of at least twenty to thirty years. This boundary defines the Adelaide Statistical Division (see map on page 152). The inner boundary indicates the area which, at the time of each census, meets the criteria for urban areas described above. As urbanisation proceeds, this boundary will move outwards to encompass peripheral development. This boundary defines Urban Adelaide.

At the 1966 Census, Urban Adelaide contained nearly all the metropolitan area as defined at the 1961 Census, and, in addition, included the City of Elizabeth and large portions of the Cities of Salisbury and Tea Tree Gully, and small parts of Munno Para and East Torrens District Councils. Results of the 1971 Census showed that Urban Adelaide had extended to encompass the whole of the urban area of Reynella-Port Noarlunga and fringe development particularly in northern suburbs (see map on page 152). The area of Urban Adelaide at 30 June 1971 was 554.9 square kilometres and the population was 809 482 persons (68.97 per cent of the State population). A further 183 187 (15.61 per cent) were in other urban areas.

The first results released from the 1976 Census have been analysed to determine the collection districts comprising Urban Adelaide at 30 June 1976. A map of Urban Adelaide is shown on page 152. At 30 June 1976 the population of Urban Adelaide was 857 066 persons (68.85 per cent of the State population) and a further 198 777 persons (15.97 per cent) lived in other urban areas.

In 1921 the rural population was 195 054 and at that time represented 39.4 per cent of the total population (42.1 per cent of males and 36.7 per cent of females). There were 214 762 persons classified as living in rural areas at the 1933 Census but the total had fallen slightly to 200 065 in 1961, and the proportion of the total population was down to 20.6 per cent (21.7 per cent of males and 19.6 per cent of females). Further falls occurred during 1961-66 and 1966-71. The total rural population was 190 167 persons at 30 June 1966, and the proportion of the total population had fallen further to 17.4 per cent. Figures for the 1971 Census showed a further decline in the rural population to 179 148 persons (15.3 per cent). In the five years to 1976, however, the rural population rose to 187 546. Although this was a decline in percentage terms to 15.1 per cent of the State population, it was the first absolute increase since the 1947 to 1954 intercensal period. The 1971 and 1976 figures quoted above exclude any adjustment for underenumeration.



Urban and Rural Population, South Australia^(a)
Censuses 1921 to 1976

| Census | Urban | | | | Rural | | Total (including Migratory) |
|----------------|--------------|----------|-----------|----------|---------|----------|-----------------------------------|
| | Adelaide (b) | | Other (c) | | Number | Per Cent | |
| | Number | Per Cent | Number | Per Cent | | | |
| 1921 | 255 375 | 51-57 | 41 637 | 8-41 | 195 054 | 39-39 | 495 160 |
| 1933 | 312 619 | 53-81 | 51 456 | 8-86 | 214 762 | 36-97 | 580 949 |
| 1947 | 382 454 | 59-20 | 65 911 | 10-20 | 196 007 | 30-34 | 646 073 |
| 1954 | 483 508 | 60-66 | 110 107 | 13-82 | 201 133 | 25-23 | 797 094 |
| 1961 | 587 957 | 60-66 | 177 380 | 18-30 | 200 065 | 20-64 | 969 340 |
| 1966 | (b)728 279 | 66-51 | 174 964 | 15-98 | 190 167 | 17-37 | 1 094 984 |
| 1971 (d) | 809 482 | 68-97 | 183 187 | 15-61 | 179 148 | 15-26 | 1 173 707 |
| 1976 (d) | 857 066 | 68-85 | 198 777 | 15-97 | 187 546 | 15-07 | 1 244 756 |

(a) Excludes full-blood Aborigines before the 1966 Census.

(b) See text for definition of Urban Adelaide.

(c) 'Other Urban' up to the 1947 Census comprised all municipalities outside Urban Adelaide. For the 1954 and 1961 Censuses non-municipal towns of 1 000 or more persons were also included, but in 1961 municipalities of less than 1 000 persons were excluded. The 1966, 1971 and 1976 figures comprise clusters of 1 000 or more persons and a small number of holiday resorts which are regarded as urban on a dwelling density basis.

(d) The figures are not adjusted for census underenumeration.

Population by 1966 Residence: South Australia, Census 30 June 1971^(a)

| 1966 Residence | 1971 Residence (South Australia) | | | | | |
|------------------------------------|----------------------------------|----------------|----------------|---------------|---------------|----------------|
| | Urban | | | Rural | | |
| | Males | Females | Persons | Males | Females | Persons |
| Same address in 1966 as in 1971 .. | 245 742 | 256 398 | 502 140 | 53 066 | 47 593 | 100 659 |
| Moved from 1966 residence in: | | | | | | |
| South Australia: | | | | | | |
| Urban | 110 075 | 115 359 | 225 434 | 10 949 | 10 946 | 21 895 |
| Rural | 13 213 | 14 154 | 27 367 | 10 472 | 9 444 | 19 916 |
| New South Wales: | | | | | | |
| Urban | 4 877 | 4 911 | 9 788 | 567 | 504 | 1 071 |
| Rural | 478 | 480 | 958 | 202 | 139 | 341 |
| Victoria: | | | | | | |
| Urban | 5 211 | 5 207 | 10 418 | 761 | 649 | 1 410 |
| Rural | 799 | 769 | 1 568 | 300 | 241 | 541 |
| Queensland: | | | | | | |
| Urban | 1 544 | 1 544 | 3 088 | 222 | 183 | 405 |
| Rural | 268 | 233 | 501 | 98 | 56 | 154 |
| Western Australia: | | | | | | |
| Urban | 1 236 | 1 158 | 2 394 | 154 | 130 | 284 |
| Rural | 256 | 218 | 474 | 121 | 97 | 218 |
| Tasmania: | | | | | | |
| Urban | 602 | 610 | 1 212 | 32 | 29 | 61 |
| Rural | 103 | 120 | 223 | 30 | 18 | 48 |
| Northern Territory: | | | | | | |
| Urban | 803 | 703 | 1 506 | 123 | 93 | 216 |
| Rural | 128 | 111 | 239 | 45 | 35 | 80 |
| ACT: | | | | | | |
| Urban | 350 | 325 | 675 | 27 | 19 | 46 |
| Rural | 19 | 15 | 34 | — | — | — |
| Overseas | 33 856 | 33 072 | 66 928 | 1 468 | 1 335 | 2 803 |
| Not stated | 6 481 | 6 439 | 12 920 | 1 428 | 1 141 | 2 569 |
| Total | 426 041 | 441 826 | 867 867 | 80 065 | 72 652 | 152 717 |

(a) Excludes persons aged under 5 years and persons who were not usual residents of the dwelling in which they were enumerated. The figures are not adjusted for census under enumeration.

The second table on page 153 shows the population of South Australia at the 1971 Census by their 1966 residence. At the 1971 Census there were 992 669 persons in urban areas of South Australia. Excluding non-usual residents and persons under 5, 57·86 per cent of the urban population were at the same address in 1966 (i.e. 502 140 out of 867 867). There were also 179 148 persons in rural areas of South Australia. Again excluding non-usual residents and persons under 5, 65·91 per cent of the rural population were at the same address in 1966 (i.e. 100 659 out of 152 717).

The population of statistical divisions and subdivisions at the 1971 and 1976 Censuses is shown in the following table.

Population of Statistical Divisions and Subdivisions, South Australia (a)

| Statistical Division and Subdivision | Census 30 June | |
|--|------------------|------------------|
| | 1971 | 1976 |
| Adelaide: | | |
| Para | 90 340 | 107 349 |
| North Eastern | 118 991 | 143 814 |
| Western | 220 494 | 213 445 |
| Eastern | 213 524 | 209 248 |
| Southern | 199 344 | 226 576 |
| Total Adelaide | 842 693 | 900 432 |
| Outer Adelaide: | | |
| Barossa | 22 396 | 25 021 |
| Kangaroo Island | 3 156 | 3 266 |
| Onkaparinga | 11 152 | 12 769 |
| Fleurieu | 15 332 | 17 677 |
| Total Outer Adelaide | 52 036 | 58 733 |
| Yorke and Lower North: | | |
| Yorke | 20 359 | 20 641 |
| Lower North | 19 002 | 18 782 |
| Total Yorke and Lower North | 39 361 | 39 423 |
| Murray Lands: | | |
| Riverland | 28 970 | 30 069 |
| Murray Mallee | 28 084 | 29 325 |
| Total Murray Lands | 57 054 | 59 394 |
| South East: | | |
| Upper South East | 18 559 | 18 211 |
| Lower South East | 37 290 | 39 487 |
| Total South East | 55 849 | 57 698 |
| Eyre: | | |
| Lincoln | 24 457 | 25 843 |
| West Coast | 6 160 | 6 623 |
| Total Eyre | 30 617 | 32 466 |
| Northern: | | |
| Whyalla | 33 447 | 34 950 |
| Pirie | 32 669 | 31 771 |
| Flinders Ranges | 18 281 | 19 502 |
| Far North | 9 810 | 9 020 |
| Total Northern | 94 207 | 95 243 |
| Total State (including migratory) | 1 173 707 | 1 244 756 |

(a) The figures are not adjusted for census underenumeration.

Statistical Districts

At the 1976 Census, around each urban centre of at least 25 000 persons, a further boundary (the statistical district boundary) was defined to contain the anticipated growth of the urban centre for a period of at least 20 years. This fixed boundary (as distinct from the urban boundary which is continuously moving) delimits an area which for general statistical purposes is free from the practical problems imposed by a moving boundary, but which nevertheless represents the town or city in a wider sense. In selected cases, statistical district boundaries were delineated around urban centres below 25 000 persons where existing local government area boundaries were clearly inadequate in indicating the extent of urban development.

Population at 30 June, Statistical Districts, South Australia^(a)

| Statistical District | Census at 30 June | | Percentage Increase |
|-------------------------|-------------------|--------|---------------------|
| | 1971 | 1976 | 1971-1976 |
| | | | Per cent |
| Mount Gambier | 18 084 | 19 453 | 7.6 |
| Murray Bridge | 8 437 | 9 980 | 18.3 |
| Port Augusta | 13 038 | 14 261 | 9.4 |
| Port Lincoln | 9 392 | 10 272 | 9.4 |
| Port Pirie | 15 456 | 15 005 | -2.9 |
| Whyalla | 32 129 | 33 825 | 5.3 |

(a) Population figures have not been adjusted for census underenumeration.

Population in and near Adelaide

Urban Adelaide as defined for the 1976 Census comprises 19 complete local government areas and part of each of seven others.

Qualification for city status within the metropolitan local government areas (as defined in the Local Government Act) is dependent on the population reaching 15 000 persons, but a subsequent fall in population below this level (as has occurred in the City of Kensington and Norwood) does not bring loss of city status.

Over the past decade there has been a considerable fall in the population of the City of Adelaide, and lesser falls in all of the older municipalities close to the city, namely Prospect, Hindmarsh, Thebarton, Unley, Kensington and Norwood and St Peters. The greatest proportionate increases in population have occurred in the local government areas of Munno Para and Salisbury (generally north of the city); Campbelltown and Tea Tree Gully (north-east); Meadows, Mitcham and Noarlunga (south-west). Recently, development at West Lakes has brought about a substantial increase in Woodville's population.

Although figures for Urban Adelaide, defined according to the density criteria, are not available for the 1947 and 1954 Censuses, there appears to have been a continual increase in the proportion of the total State population residing in Urban Adelaide until the 1971 Census. At the 1961 Census, the population of Urban Adelaide defined according to the density criteria is estimated to have been 580 449 persons or 59.9 per cent of the total State population and this figure had increased to 728 279 (66 per cent) at the Census, 30 June 1966.

After the 1966 Census the gap in development between Urban Adelaide and Urban Reynella-Port Noarlunga so narrowed as to enable these two areas to be regarded as contiguous at the 1971 Census. This amalgamation, together with the inclusion of further peripheral development, resulted in an increase to 809 482 persons (69 per cent of the State population). Preliminary results from the 1976 Census indicate that there has been very little alteration to the population distribution since 1971.

Population at 30 June, Adelaide Statistical Division^(a)

| Local Government Area | Census | | | |
|--------------------------------------|---------|---------|-----------|---------|
| | 1961 | 1966 | 1971 | 1976 |
| Adelaide (C) | 23 051 | 18 619 | 16 313 | 13 774 |
| Brighton (C) | 20 337 | 22 638 | 22 583 | 21 407 |
| Burnside (C) | 36 266 | 38 776 | 39 339 | 38 461 |
| Campbelltown (C) | 20 945 | 32 083 | 37 942 | 41 252 |
| East Torrens (DC) | 3 664 | 3 822 | 4 202 | 4 800 |
| Elizabeth (C) | (b) | 32 956 | 33 389 | 33 721 |
| Enfield (C) | 72 427 | 80 336 | (c)77 435 | 73 505 |
| Gawler (M) | 5 639 | 5 703 | 5 495 | 6 070 |
| Glenelg (C) | 14 492 | 14 763 | 15 237 | 14 413 |
| Henley and Grange (C) | 11 680 | 14 146 | 16 128 | 16 589 |
| Hindmarsh (M) | 12 914 | 11 367 | 10 306 | 8 691 |
| Kensington and Norwood (C) | 13 476 | 11 943 | 11 081 | 9 651 |
| Marion (C) | 58 464 | 66 984 | 67 572 | 67 283 |
| Meadows (DC) (part) | 2 242 | 2 824 | 5 128 | 12 191 |
| Mitcham (C) | 46 793 | 52 889 | 57 746 | 59 887 |
| Mudla Wirra (DC) (part) | 111 | 155 | 186 | 522 |
| Munno Para (DC) | 3 154 | 14 279 | 20 179 | 22 360 |
| Noarlunga (C) | 5 492 | 14 214 | 28 464 | 47 354 |
| Payneham (C) | 14 930 | 16 847 | 17 543 | 17 545 |
| Port Adelaide (C) | 38 923 | 39 846 | 38 968 | 36 024 |
| Prospect (C) | 22 184 | 21 415 | 20 934 | 19 485 |
| Salisbury (C) | 35 715 | 35 766 | 56 279 | 77 477 |
| Stirling (DC) | 7 075 | 7 552 | 8 359 | 10 753 |
| St Peters (M) | 11 727 | 11 339 | 10 675 | 9 304 |
| Tea Tree Gully (C) | 5 887 | 21 315 | 36 708 | 56 050 |
| Thebarton (M) | 12 884 | 12 303 | 11 831 | 10 315 |
| Unley (C) | 40 280 | 39 735 | 39 928 | 37 016 |
| Walkerville (M) | 4 464 | 4 593 | (c) 7 208 | 7 207 |
| West Torrens (C) | 40 681 | 46 233 | 50 097 | 47 992 |
| Willunga (DC) (part) | 2 210 | 2 190 | 2 614 | 4 041 |
| Woodville (C) | 71 039 | 73 930 | 72 806 | 75 276 |
| Not incorporated | — | — | (d) 18 | 16 |
| Total | 659 146 | 771 561 | 842 693 | 900 432 |

(a) Figures have not been adjusted for Census underenumeration. Excludes full-blood Aborigines before 30 June 1966. (b) Elizabeth (C) was constituted out of Salisbury (C) in July 1964. (c) Comparisons with previous censuses is affected by transfer in July 1970 of the Suburb of Vale Park (approximately 2 200 persons) from Enfield (C) to Walkerville (M). (d) Torrens and Garden Islands included in Adelaide Statistical Division subsequent to 1966 Census.

(C) Municipality with city status (M) Municipality (DC) District Council

In addition to Urban Adelaide there are two urban centres within the Adelaide Statistical Division, Urban Gawler with a population of 8 596 persons at the 1976 Census and Urban Crafers-Bridgewater with a population of 6 600 persons.

Population Beyond the Adelaide Statistical Division

Only a very small proportion (16 per cent) of South Australia's population is located in urban centres outside of the capital city compared with the three eastern States, New South Wales, Victoria and Queensland. Whereas, in each of the eastern States, there are at least four centres outside the capital city with a population in excess of 20 000, Whyalla with a population of 33 426 at the Census of 30 June 1976 is the only such centre in South Australia.

The following table illustrates the change in the population of urban centres outside the Adelaide Statistical Division between 1971 and 1976.

Population of Urban Centres: South Australia, Censuses 1971 and 1976 (a)

| Urban Centre | Census at 30 June | | Urban Centre | Census at 30 June | |
|-------------------------|-------------------|-------|---------------------------|-------------------|--------|
| | 1971 | 1976 | | 1971 | 1976 |
| Angaston | 1 813 | 1 734 | Mount Gambier .. | 17 934 | 19 292 |
| Balaklava | 1 114 | 1 237 | Murray Bridge.. | 7 441 | 8 740 |
| Barmera | 1 687 | 1 946 | Naracoorte | 4 429 | 4 571 |
| Berri | 2 713 | 2 890 | Nuriootpa | 2 468 | 2 808 |
| Bordertown | 1 979 | 1 983 | Penola | 1 293 | 1 254 |
| Burra | 1 276 | 1 201 | Peterborough | 3 023 | 2 760 |
| Ceduna | 2 070 | 2 327 | Port Augusta | 12 224 | 13 092 |
| Clare | 2 099 | 2 260 | Port Broughton | 508 | 654 |
| Coober Pedy | 1 394 | 1 903 | Port Elliot | 566 | 768 |
| Crystal Brook | 1 181 | 1 410 | Port Lincoln | 9 158 | 10 272 |
| Goolwa | 681 | 1 148 | Port MacDonnell | 585 | 712 |
| Jamestown | 1 331 | 1 325 | Port Pirie | 15 456 | 15 005 |
| Kadina | 2 828 | 2 849 | Quorn | 1 008 | 1 048 |
| Kapunda | 1 261 | 1 362 | Renmark | 3 278 | 3 371 |
| Keith | 1 212 | 1 191 | Strathalbyn | 1 535 | 1 701 |
| Kingscote | 1 011 | 1 121 | Streaky Bay. | 914 | 1 008 |
| Kingston (SE) | 1 173 | 1 250 | Tailem Bend | 1 982 | 1 999 |
| Lobethal | 1 377 | 1 422 | Tanunda | 1 939 | 2 254 |
| Loxton | 2 663 | 2 786 | Victor Harbor | 3 527 | 4 279 |
| Maitland | 1 020 | 1 017 | Waikerie | 1 252 | 1 611 |
| Mannum | 2 043 | 2 137 | Walleroo | 2 097 | 2 045 |
| Millicent | 5 075 | 5 471 | Whyalla | 32 109 | 33 426 |
| Moonta | 1 570 | 1 751 | Woomera | (b) 4 082 | 2 958 |
| Mount Barker | 2 475 | 3 204 | | | |

(a) Outside Adelaide Statistical Division. For definition of 'urban' see pages 150-1. Population figures have not been adjusted for census underenumeration.

(b) Included Maralinga in 1971.

Since 1971 most urban centres have experienced population growth; this is most evident in the River Murray towns, the Lower South East and the West Coast. The 'Iron Triangle' is somewhat of an enigma in that Whyalla and Port Augusta continued to expand, whereas Port Pirie's population declined.

PROJECTIONS OF THE POPULATION

This section contains summary results of a set of projections of the population of South Australia and the Adelaide Statistical Division for the years 1976 to 2001. They were prepared for the State Government before the 1976 Census using as a base the estimated age distribution at 30 June 1975, in the case of South Australia, and 30 June 1971 for the Adelaide Statistical Division.

The projections were made using the component method *i.e.* a base population classified by sex and age is brought forward year by year by applying assumptions about future trends in fertility, mortality and the characteristics of interstate, intrastate and overseas migration. In the projection models used for both South Australia and Adelaide Statistical Division, three levels of migration (based on a study of past trends) were used representing a high, 'most likely' and low expectation of migration—only the figures incorporating the 'most likely' level are used in the following tables.

The assumptions employed in the latest set of projections are given below.

Fertility

For South Australia the age-specific fertility rates were adjusted downward for 1976 and 1977 consistent with achievement of a net reproduction rate equal to 0.975 by 1977 and thereafter were held constant. A masculinity rate of 1.055 was applied.

For the Adelaide Statistical Division the age-specific fertility rates (seven per cent lower than those for the State) were adjusted commensurately with the South Australian figures to 1977 and then held constant.

Mortality

The South Australian average age-specific mortality rates 1970-72 (as related to the 1971 Census) were used over the whole projection period for both areas.

Migration

In net terms, the projections for the State provide for an intake of 3 000 interstate and overseas migrants as from 1977. This 'most likely' level is consistent with post-1970 experience and consists of a net overseas migration intake of 4 500 persons per annum and a net outflow of 1 500 persons per annum interstate. The age-sex composition used is applicable to the relevant migration data during the period 1971-1975.

The Adelaide Statistical Division's share of the State's migration was assessed to be the same as that experienced during the period 1966-1971, (82.1 per cent of the State's net overseas migration settled in the Division and 69.6 per cent of the State's net interstate loss emanated from the Division). With respect to intrastate migration, the 1966-1971 information was upgraded to 1976 by data from the Bureau's annual internal migration survey and thereafter held constant at 1 800 persons per annum. In net terms the Adelaide Statistical Division is assumed to receive 4 450 persons per annum from all migration sources over the period.

Over the twenty-five year projection period it is expected that the rate of population growth will continue to decline for both South Australia and the Adelaide Statistical Division. The Adelaide Statistical Division will increase its share of the State's population but at a far slower rate than that experienced in the last two decades. With a net reproduction rate of less than one and limited migration, the age structure of the State's population will change quite significantly *e.g.* the percentage of population aged less than five years will decline from 8.3 per cent to 6.9 per cent over the period while those aged 65 and over will increase from 8.9 per cent to 11.0 per cent.

Population Projections, South Australia

| At 30 June | South Australia | | | | Adelaide Statistical Division | | | |
|----------------|-----------------|---------|-----------|---------------------------------|-------------------------------|---------|-----------|---------------------------------|
| | Males | Females | Persons | Average Annual Rate of Increase | Males | Females | Persons | Average Annual Rate of Increase |
| | | | | Per cent | | | | Per cent |
| | | Number | | | | Number | | |
| 1976 | 619 300 | 623 000 | 1 242 300 | — | 441 900 | 458 600 | 900 400 | — |
| 1981 | 649 700 | 655 000 | 1 304 700 | 0.98 | 466 200 | 484 500 | 950 700 | 1.09 |
| 1986 | 681 100 | 688 600 | 1 369 700 | 0.98 | 491 100 | 511 300 | 1 002 500 | 1.07 |
| 1991 | 710 100 | 720 000 | 1 430 100 | 0.87 | 514 700 | 536 800 | 1 051 500 | 0.96 |
| 1996 | 735 100 | 747 200 | 1 482 300 | 0.72 | 536 600 | 560 400 | 1 096 900 | 0.85 |
| 2001 | 756 300 | 770 300 | 1 526 600 | 0.59 | 556 700 | 582 100 | 1 138 800 | 0.75 |

Projected Age Distribution, South Australia

| Age Group (Years) | 1976 | 1981 | 1986 | 1991 | 1996 | 2001 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0-4 | 102 700 | 104 500 | 110 200 | 110 800 | 108 100 | 105 500 |
| 5-9 | 109 700 | 103 700 | 105 700 | 111 400 | 112 000 | 109 200 |
| 10-14 | 114 800 | 111 000 | 105 200 | 107 200 | 112 900 | 113 500 |
| 15-19 | 118 300 | 115 000 | 111 400 | 105 600 | 107 600 | 113 300 |
| 20-24 | 107 600 | 116 300 | 113 200 | 109 500 | 103 800 | 105 800 |
| 25-29 | 100 800 | 108 000 | 116 800 | 113 700 | 110 000 | 104 300 |
| 30-34 | 83 100 | 103 500 | 111 100 | 119 800 | 116 700 | 113 100 |
| 35-39 | 71 100 | 84 400 | 104 900 | 112 400 | 121 100 | 117 900 |
| 40-44 | 65 300 | 71 400 | 84 700 | 105 000 | 112 400 | 121 000 |
| 45-49 | 72 500 | 65 000 | 71 100 | 84 200 | 104 100 | 111 400 |
| 50-54 | 71 900 | 71 000 | 63 900 | 69 800 | 82 500 | 101 900 |
| 55-59 | 59 700 | 69 000 | 68 200 | 61 400 | 67 100 | 79 300 |
| 60-64 | 53 700 | 55 900 | 64 600 | 63 800 | 57 500 | 62 900 |
| 65-69 | 41 400 | 48 200 | 50 200 | 57 900 | 57 100 | 51 700 |
| 70-74 | 29 400 | 34 600 | 40 200 | 41 900 | 48 200 | 47 500 |
| 75 and over | 40 300 | 43 000 | 48 400 | 55 700 | 61 100 | 68 400 |
| Total | 1 242 300 | 1 304 700 | 1 369 700 | 1 430 100 | 1 482 300 | 1 526 600 |

5.3 BIRTHS AND DEATHS

Compulsory registration of births and deaths was first provided in South Australia in 1842 when an Act 'for registering births, deaths and marriages in the Province of South Australia' was passed. Current legislation is contained

in the Births, Deaths and Marriages Registration Act, 1966-1975 which came into operation on 1 January 1968 and the administration of the Act is the responsibility of the Principal Registrar of Births, Deaths and Marriages. For registration purposes the State is divided into twenty-two registration districts each of which has a registry office in the charge of a District Registrar.

The Principal Registrar maintains a register of all live births and of all deaths registered in the State and each District Registrar maintains, in a register, duplicate copies of the registrations of births and deaths which occurred in the district under his jurisdiction. Up to the end of 1967 separate registers were kept of still births, which were not included in the registration or statistics of either live births or of deaths. Compulsory registration of still births was introduced in South Australia in 1937.

The current legislation does not require the Principal Registrar to maintain a register of still births, but it provides for a 'Medical Certificate of Cause of Perinatal Death' to be filled in and forwarded to the Principal Registrar by the attending medical practitioner in respect of a 'child not born alive of at least twenty weeks gestation or four hundred grams weight'. The 'perinatal' certificates are also required from attending medical practitioners for children dying within twenty-eight days of birth.

The birth of each live-born child is required to be registered by a parent within sixty days of the date of birth. Registration of a live birth after the expiration of sixty days following the date of birth requires also the payment of a fee and a declaration in a form prescribed by the Act.

A death is required to be registered within fourteen days of the date of death by the occupier of the building or place in which the death occurred. Special provisions and penalties exist for the late registration of a death. A body may not be buried unless the undertaker is in possession of a 'Notice of signing of Medical Certificate of Cause of Death' signed by a medical practitioner or of an order by a coroner for burial, and the undertaker is required within seven days of the disposal of the body to notify the Principal Registrar of such disposal.

Births and deaths of Aborigines when registered are incorporated in registers, but to the end of 1965 were excluded from statistics where there was definite indication that they were of full-blood. Statistics of births and deaths for 1966 and subsequent years cover all registrations.

In accordance with international practice, statistics for a period are on the basis of the births and deaths which were registered during that period. However, numbers registered in a period usually differ from the number of occurrences in the same period and, mainly because of the longer period allowed for registration, such variations generally are more apparent in birth than in death figures.

BIRTHS

The South Australian birth rate per thousand of mean population during 1975 was 16.15 compared with the Australian rate of 17.21 per thousand. This was also the lowest rate recorded by any of the Australian States or Territories for the same period. Although there has been no lower post-war rate recorded, there

was a period from 1931 to 1939 inclusive when the rate remained below this 1975 level and the lowest ever recorded rate of 14.14 was established in 1935.

The difference between births which actually occurred and those registered during the five years to 1975 is shown in the following table. The masculinity rate, *i.e.*, the number of male births per hundred female births, is also shown.

Live Births Occurred and Registered, South Australia

| Year | Total Live Births Occurred (a) | Live Births Registered | | | | Masculinity (c) |
|---------------|--------------------------------|------------------------|----------|--------|---------|-----------------|
| | | Total | Rate (b) | Males | Females | |
| 1971 | 22 760 | 22 996 | 19.55 | 11 797 | 11 199 | 105.34 |
| 1972 | 21 785 | 21 844 | 18.37 | 11 299 | 10 545 | 107.15 |
| 1973 | 20 182 | 20 407 | 16.97 | 10 475 | 9 932 | 105.47 |
| 1974 | 19 923 | 20 181 | 16.52 | 10 489 | 9 692 | 108.22 |
| 1975 | 19 011 | 19 986 | 16.15 | 10 212 | 9 774 | 104.48 |

(a) Figures are subject to the addition of late registrations, particularly to 1975.

(b) Number per 1 000 of mean population. (c) Number of male births per 100 female births.

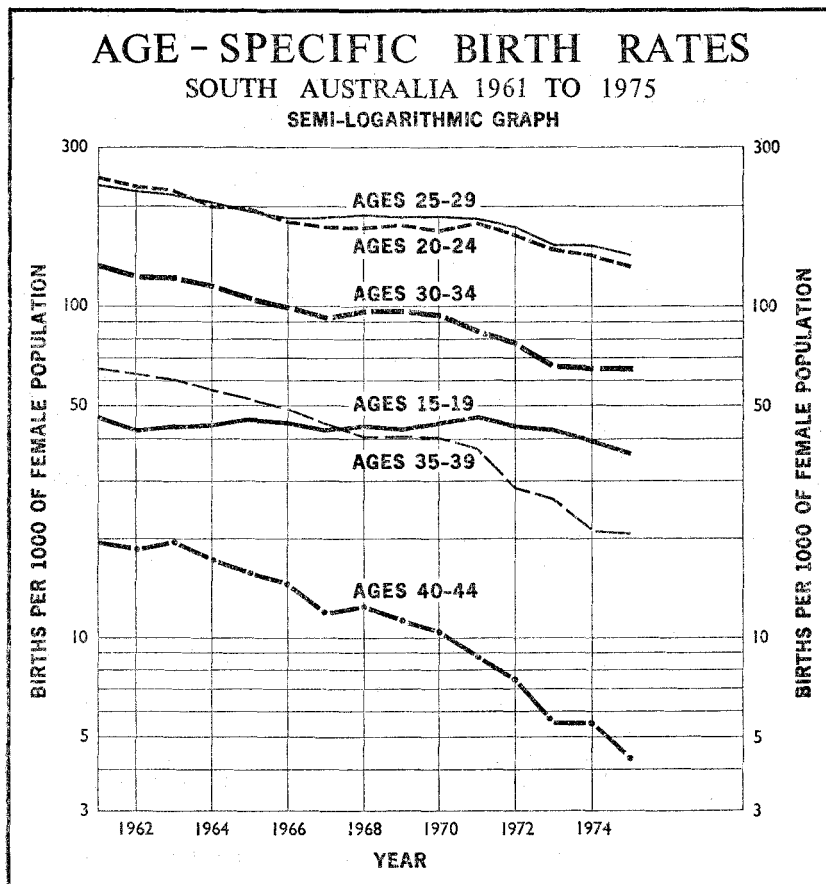
Age-specific Birth Rates

One significant feature of age-specific birth rates as shown in the table below is that whereas in 1961, females in the 20-24 years age group accounted for the highest number of births this can now be attributed to those in the 25-29 years age group. Also, a general decline in the fertility of women of all ages is evident, and this is particularly marked in the older age groups. In accordance with this, total fertility has decreased, reflecting the tendency toward smaller families.

Age-specific Birth Rates and Total Fertility, South Australia(a)

| Year | Age Group (Years) | | | | | | Total Fertility | |
|------------|-------------------|--------|--------|--------|-------|-------|-----------------|-------|
| | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | | 45-49 |
| | Annual Rates | | | | | | | |
| 1947(b) .. | 30.30 | 174.83 | 202.30 | 136.20 | 77.07 | 22.57 | 1.62 | 3.22 |
| 1954(b) .. | 41.85 | 212.75 | 206.60 | 123.19 | 65.83 | 26.76 | 0.84 | 3.39 |
| 1961(b) .. | 46.66 | 246.12 | 235.33 | 135.45 | 65.04 | 19.54 | 1.48 | 3.75 |
| 1966(b) .. | 44.56 | 178.73 | 181.58 | 99.31 | 49.30 | 14.62 | 0.75 | 2.84 |
| 1971(b) .. | 46.63 | 178.04 | 184.68 | 84.26 | 37.45 | 8.72 | 0.55 | 2.70 |
| 1972 ... | 43.98 | 164.26 | 174.82 | 78.12 | 28.60 | 7.53 | 0.52 | 2.49 |
| 1973 ... | 42.93 | 149.52 | 155.23 | 66.06 | 26.47 | 5.45 | 0.58 | 2.23 |
| 1974 ... | 39.97 | 142.17 | 152.17 | 65.70 | 21.12 | 5.51 | 0.22 | 2.13 |
| 1975 ... | 36.07 | 136.42 | 149.68 | 64.38 | 20.34 | 4.34 | 0.34 | 2.06 |

(a) Number of live births per 1 000 of female population in each age group. Excludes particulars of full-blood Aborigines before 1966. (b) Census year.



Gross and Net Reproduction Rates

The gross reproduction rate is an indication of the number of live females that can be expected to be born to a woman through her child-bearing period. The net reproduction rate, which is a measure of the degree to which the population can replace itself, is derived from the gross reproduction rate by taking into account the females who fail to survive to the end of their child-bearing period. The following table indicates that the net reproduction rate has been steadily decreasing, reaching a level of 0.978 in 1975. This level is lower than the point at which women produce only one female child to take their place in the reproductive cycle and, excluding the impact of migration, if this trend continues, zero population growth will ultimately be reached. It should be realised, however, that these figures are not a forecast of what can be anticipated but only a hypothetical projection of what will happen if the given conditions upon which they have been based continue to apply.

Gross and Net Reproduction Rates, South Australia^(a)

| Year | Gross Reproduction Rate | Net Reproduction Rate | |
|---------|-------------------------------|-----------------------|---|
| | | Rate | Mortality Experience on which Rate is Based |
| 1961(b) | 1.841 | 1.781 | 1960 to 1962 |
| 1966(b) | 1.368 | 1.323 | |
| 1967 | 1.342 | 1.304 | |
| 1968 | 1.337 | 1.296 | 1965 to 1967 |
| 1969 | 1.351 | 1.310 | |
| 1970 | 1.346 | 1.305 | |
| 1971(b) | 1.314 | 1.276 | 1970 to 1972 |
| 1972 | 1.098 | 1.067 | |
| 1973 | 1.086 | 1.055 | |
| 1974 | 1.026 | 0.997 | |
| 1975 | 1.007 | 0.978 | |

(a) Excludes particulars of full-blood Aborigines before 1966. (b) Census year.

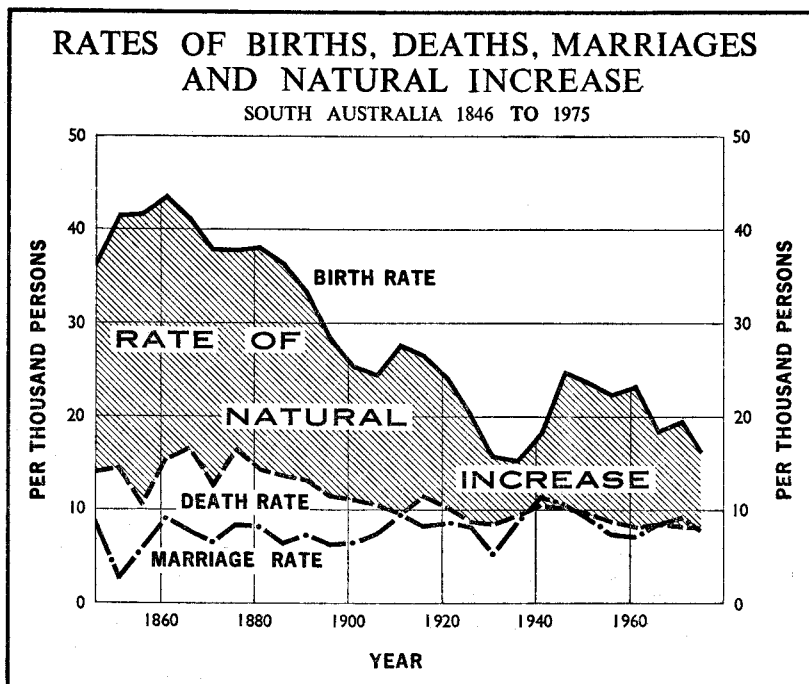
Ex-nuptial Births and Legitimations

Since 1960 there has been a marked increase in the number and rate of ex-nuptial births. For the previous forty years, the rate remained relatively steady at about three per hundred live births, but in recent years the rate has increased sharply, reaching a record level of 9.72 per hundred live births in 1975.

The legitimation of an ex-nuptial child upon the subsequent marriage of the parents which was first provided for in South Australia by the Legitimation Act, 1898, the provisions of which were later incorporated in the Births and Deaths Registration Act, was possible only if there was no legal impediment to the marriage of the parents at the time of the birth of the child. The *Marriage Act* 1961, which came into operation on 1 September 1963, provides for the legitimation of a child upon the subsequent marriage of the parents whether or not there was a legal impediment to the marriage at the time of the birth of the child. Legitimations under this Act take place whether or not the child was living at the time of marriage, and the child is considered legitimate from the date of birth or, in the case of a child born before 1 September 1963, at that date.

Ex-nuptial Live Births and Legitimations, South Australia

| Year | Ex-nuptial Births | | | Rate per 100 Live Births | Legitimations |
|------|-------------------|---------|-------|--------------------------------|---------------|
| | Males | Females | Total | | |
| 1971 | 898 | 884 | 1 782 | 7.75 | 337 |
| 1972 | 931 | 872 | 1 803 | 8.25 | 296 |
| 1973 | 921 | 879 | 1 800 | 8.82 | 280 |
| 1974 | 988 | 891 | 1 879 | 9.31 | 305 |
| 1975 | 1 025 | 918 | 1 943 | 9.72 | 326 |



Confinements and Live Births

In the table below confinements in each of the years 1972 to 1975 have been shown in relation to age group of the mother and nuptiality.

Confinements: Age Group of Mother and Nuptiality, South Australia

| Age Group | Number of Confinements (a) | | | | Percentage of Total in each Category | | | |
|----------------------|----------------------------|---------------|---------------|---------------|--------------------------------------|--------------|--------------|--------------|
| | 1972 | 1973 | 1974 | 1975 | 1972 | 1973 | 1974 | 1975 |
| NUPTIAL CONFINEMENTS | | | | | | | | |
| 10-14 | 1 | — | — | — | 0.0 | — | — | — |
| 15-19 | 1 602 | 1 502 | 1 419 | 1 274 | 8.1 | 8.1 | 7.9 | 7.1 |
| 20-24 | 7 408 | 6 923 | 6 635 | 6 469 | 37.3 | 37.6 | 36.6 | 36.2 |
| 25-29 | 7 132 | 6 766 | 6 927 | 6 991 | 35.9 | 36.7 | 38.2 | 39.1 |
| 30-34 | 2 591 | 2 240 | 2 313 | 2 357 | 13.0 | 12.2 | 12.8 | 13.2 |
| 35-39 | 877 | 808 | 652 | 645 | 4.4 | 4.4 | 3.6 | 3.6 |
| 40-44 | 230 | 173 | 167 | 125 | 1.2 | 0.9 | 0.9 | 0.7 |
| 45 and over | 19 | 21 | 6 | 11 | 0.1 | 0.1 | 0.0 | 0.1 |
| Not stated | — | 1 | — | — | — | 0.0 | — | — |
| Total | 19 860 | 18 434 | 18 119 | 17 872 | 100.0 | 100.0 | 100.0 | 100.0 |

Confinements: Age Group of Mother and Nuptiality, South Australia (continued)

| Age Group | Number of Confinements (a) | | | | Percentage of Total in each Category | | | |
|--------------------------------|----------------------------|--------------|--------------|--------------|--------------------------------------|--------------|--------------|--------------|
| | 1972 | 1973 | 1974 | 1975 | 1972 | 1973 | 1974 | 1975 |
| EX-NUPTIAL CONFINEMENTS | | | | | | | | |
| 10-14 | 9 | 14 | 14 | 20 | 0.5 | 0.8 | 0.8 | 1.0 |
| 15-19 | 760 | 813 | 798 | 777 | 42.4 | 45.6 | 42.8 | 40.4 |
| 20-24 | 573 | 520 | 557 | 601 | 32.0 | 29.2 | 29.9 | 31.2 |
| 25-29 | 273 | 239 | 300 | 307 | 15.2 | 13.4 | 16.1 | 15.9 |
| 30-34 | 110 | 129 | 120 | 144 | 6.1 | 7.2 | 6.4 | 7.5 |
| 35-39 | 40 | 55 | 53 | 57 | 2.2 | 3.1 | 2.8 | 2.9 |
| 40-44 | 26 | 11 | 16 | 17 | 1.4 | 0.6 | 0.9 | 0.9 |
| 45 and over | — | — | 2 | 1 | — | — | 0.1 | 0.1 |
| Not stated | — | 2 | 3 | 1 | — | 0.1 | 0.2 | 0.1 |
| Total | 1 791 | 1 783 | 1 863 | 1 925 | 100.0 | 100.0 | 100.0 | 100.0 |

(a) Includes only those confinements which resulted in one or more live births.

The next table shows the number of confinements and live births for 1974 and 1975 classified separately for single births and multiple births in which at least one issue was live-born.

Confinements and Live Births: Class of Birth, South Australia

| Particulars | 1974 | | | | 1975 | | | |
|-------------------------------|------------------|---------------|--------------|---------------|------------------|---------------|--------------|---------------|
| | Confinements (a) | Live Births | | | Confinements (a) | Live Births | | |
| | | Male | Female | Total | | Male | Female | Total |
| Nuptial: | | | | | | | | |
| Single births | 17 940 | 9 294 | 8 646 | 17 940 | 17 704 | 9 024 | 8 680 | 17 704 |
| Twins | 176 | 202 | 150 | 352 | 165 | 159 | 171 | 330 |
| Triplets | 2 | 2 | 4 | 6 | 3 | 4 | 5 | 9 |
| Quadruplets | 1 | 3 | 1 | 4 | — | — | — | — |
| Total nuptial | 18 119 | 9 501 | 8 801 | 18 302 | 17 872 | 9 187 | 8 856 | 18 043 |
| Ex-nuptial: | | | | | | | | |
| Single births | 1 846 | 967 | 879 | 1 846 | 1 907 | 1 009 | 898 | 1 907 |
| Twins | 17 | 21 | 12 | 33 | 18 | 16 | 20 | 36 |
| Triplets | — | — | — | — | — | — | — | — |
| Total ex-nuptial | 1 863 | 988 | 891 | 1 879 | 1 925 | 1 025 | 918 | 1 943 |
| Total | 19 982 | 10 489 | 9 692 | 20 181 | 19 797 | 10 212 | 9 774 | 19 986 |

(a) Includes only those confinements which resulted in one or more live births.

Multiple births registered in South Australia during 1975 comprised 183 cases of twins and 3 cases of triplets, representing an average of 9.4 multiple confinements per 1 000 confinements. There is a marked tendency for multiple births to be of the same sex, there being 127 cases of twins of the same sex registered during the year compared with only 56 cases of one male and one female.

Nuptial confinements classified according to the relative age groups of the parents, and ex-nuptial confinements classified to the age group of the mother are shown for 1975 in the following table.

Confinements: Relative Ages of Parents, South Australia, 1975(a)

| Age Group of Father (Nuptial Births) (Years) | Age Group of Mother (Years) | | | | | | | Total (b) |
|--|-----------------------------|--------------|--------------|--------------|------------|------------|----------------|---------------|
| | Under 20 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45 and over | |
| Under 20 | 245 | 39 | 4 | — | — | — | — | 288 |
| 20-24 | 781 | 2 618 | 345 | 13 | 4 | — | — | 3 761 |
| 25-29 | 214 | 3 226 | 4 065 | 298 | 22 | 2 | — | 7 827 |
| 30-34 | 27 | 472 | 2 091 | 1 150 | 85 | 5 | 1 | 3 831 |
| 35-39 | 3 | 80 | 382 | 679 | 267 | 18 | 1 | 1 430 |
| 40-44 | 1 | 20 | 70 | 154 | 182 | 49 | 2 | 478 |
| 45-49 | 1 | 8 | 28 | 40 | 59 | 39 | 5 | 180 |
| 50 and over | — | 4 | 4 | 19 | 25 | 12 | 2 | 66 |
| Not stated | 2 | 2 | 2 | 4 | 1 | — | — | 11 |
| Mothers: | | | | | | | | |
| Married | 1 274 | 6 469 | 6 991 | 2 357 | 645 | 125 | 11 | 17 872 |
| Unmarried | 797 | 601 | 307 | 144 | 57 | 17 | 1 | 1 925 |
| Total | 2 071 | 7 070 | 7 298 | 2 501 | 702 | 142 | 12 | 19 797 |

(a) Includes only those confinements which resulted in one or more live births. (b) Includes not stated.

The table which follows shows the number of confinements classified by duration of marriage and previous issue. Previous issue is the number of live-born children of the existing marriage born before the current confinement.

Nuptial Confinements: Duration of Marriage and Previous Issue of Mother South Australia, 1975

| Duration of Marriage | Number of Confinements (a) | Previous Issue of Marriage | | | | | | |
|----------------------|----------------------------------|----------------------------|--------------|--------------|------------|------------|------------|---------------|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 and over |
| Under 1 year | 1 782 | 1 691 | 85 | 5 | — | — | — | — |
| 1 year | 2 053 | 1 750 | 285 | 14 | 2 | 1 | — | — |
| 2 years | 2 428 | 1 427 | 962 | 36 | 2 | — | — | — |
| 3 years | 2 660 | 1 151 | 1 360 | 141 | 7 | 1 | — | — |
| 4 years | 2 311 | 683 | 1 314 | 278 | 32 | 3 | — | — |
| 5 years | 1 863 | 413 | 1 021 | 376 | 42 | 5 | — | — |
| 6 years | 1 359 | 214 | 619 | 416 | 90 | 16 | 2 | — |
| 7 years | 950 | 122 | 369 | 360 | 83 | 7 | 5 | — |
| 8 years | 666 | 59 | 216 | 270 | 90 | 20 | 6 | 3 |
| 9 years | 462 | 21 | 115 | 195 | 99 | 24 | 4 | 3 |
| 10 years | 338 | 14 | 68 | 135 | 86 | 20 | 13 | 2 |
| 11 years | 225 | 14 | 29 | 74 | 61 | 36 | 5 | 7 |
| 12 years | 202 | 16 | 25 | 72 | 48 | 21 | 10 | 5 |
| 13 years | 161 | 9 | 20 | 44 | 37 | 28 | 12 | 11 |
| 14 years | 106 | 5 | 13 | 21 | 29 | 23 | 11 | 4 |
| 15 years and over | 302 | 16 | 19 | 49 | 74 | 70 | 35 | 39 |
| Not stated | 4 | 1 | — | 2 | — | — | — | 1 |
| Total | 17 872 | 7 606 | 6 520 | 2 488 | 782 | 275 | 103 | 75 |

(a) Includes previous issue not stated.

Between 1966 and 1975 the number of nuptial first live births rose from 6 997 to 7 606 (i.e., from 36.93 to 42.15 per cent of total nuptial births registered). Over the same period the number of fourth or subsequent children born into existing marriages declined from 3 407 to 1 235, a fall from 17.98 to 6.52 per cent of total nuptial births registered. These figures reflect the decline in the average number of children born into the family unit.

The following table illustrates a trend, which has been apparent since 1964, towards a longer period after marriage before the birth of the first child. In particular, there has been a decrease in the percentage of nuptial first live births to women who had been married less than two years, from 66.21 per cent in 1966 to 45.24 per cent in 1975. A corresponding increase is evident in the two to four years duration of marriage groups; from 23.78 per cent to 42.87 per cent.

Only existing marriages are taken into account, therefore some inclusions in the table relate to the first birth of an existing marriage to a mother who has had a child or children by a previous marriage.

**Nuptial First Live Births: Duration of Marriage of Parents
South Australia**

| Duration of Marriage | Nuptial First Live Births | | | | Percentage of Total | | | |
|----------------------------|---------------------------|--------------|--------------|--------------|---------------------|---------------|---------------|---------------|
| | 1972 | 1973 | 1974 | 1975 | 1972 | 1973 | 1974 | 1975 |
| Under 5 months | 653 | 611 | 535 | 500 | 8.13 | 8.05 | 7.01 | 6.57 |
| 5 months | 513 | 463 | 399 | 308 | 6.39 | 6.10 | 5.23 | 4.05 |
| 6 months | 425 | 332 | 317 | 243 | 5.29 | 4.37 | 4.16 | 3.20 |
| 7 months | 159 | 119 | 119 | 98 | 1.98 | 1.57 | 1.56 | 1.29 |
| 8 months | 135 | 119 | 116 | 92 | 1.68 | 1.57 | 1.52 | 1.21 |
| 9 months | 206 | 161 | 161 | 141 | 2.57 | 2.12 | 2.11 | 1.85 |
| 10 months | 165 | 165 | 145 | 160 | 2.05 | 2.17 | 1.90 | 2.10 |
| 11 months | 178 | 174 | 186 | 149 | 2.22 | 2.29 | 2.44 | 1.96 |
| Total under 1 year | 2 434 | 2 144 | 1 978 | 1 691 | 30.30 | 28.24 | 25.93 | 22.23 |
| 1 year | 1 942 | 1 823 | 1 679 | 1 750 | 24.18 | 24.01 | 22.01 | 23.01 |
| 2 years | 1 462 | 1 430 | 1 467 | 1 427 | 18.20 | 18.84 | 19.23 | 18.76 |
| 3 years | 980 | 1 005 | 1 061 | 1 151 | 12.20 | 13.24 | 13.91 | 15.13 |
| 4 years | 531 | 489 | 663 | 683 | 6.61 | 6.44 | 8.69 | 8.98 |
| 5 years | 285 | 273 | 335 | 413 | 3.55 | 3.60 | 4.39 | 5.43 |
| 6 years | 177 | 156 | 169 | 214 | 2.20 | 2.05 | 2.21 | 2.82 |
| 7 years | 77 | 108 | 97 | 122 | 0.96 | 1.42 | 1.27 | 1.60 |
| 8 years and over | 139 | 163 | 179 | 154 | 1.73 | 2.15 | 2.35 | 2.03 |
| Not stated | 5 | 1 | 1 | 1 | 0.06 | 0.01 | 0.01 | 0.01 |
| Total | 8 032 | 7 592 | 7 629 | 7 606 | 100.00 | 100.00 | 100.00 | 100.00 |

DEATHS

The 9 947 deaths registered in South Australia during 1975 was the third highest number ever recorded, contrasting with the lowest crude death rate yet recorded of 8.04 per thousand of mean population. Although crude death rates in excess

of 16.0 were recorded in the 1860s, the rate has not exceeded 9.0 since 1956. Other fluctuations in the number of deaths and the crude death rate over time can be seen in the Statistical Summary, Appendix A.

Deaths: Numbers Registered and Rates, South Australia

| Year | Number Registered | | | Crude Death Rate (a) | | |
|---------------|-------------------|---------|---------|----------------------|---------|---------|
| | Males | Females | Persons | Males | Females | Persons |
| 1971 | 5 310 | 4 376 | 9 686 | 9.04 | 7.43 | 8.23 |
| 1972 | 5 477 | 4 287 | 9 764 | 9.23 | 7.19 | 8.21 |
| 1973 | 5 501 | 4 334 | 9 835 | 9.18 | 7.18 | 8.18 |
| 1974 | 5 728 | 4 508 | 10 236 | 9.42 | 7.39 | 8.40 |
| 1975 | 5 466 | 4 481 | 9 947 | 8.86 | 7.22 | 8.04 |

(a) Number of deaths per 1 000 of estimated mean population.

Deaths: Numbers Registered in Age Groups, South Australia

| Age Group | Males | | | Females | | | Persons | | |
|------------------------|-------|-------|-------|---------|-------|-------|---------|--------|-------|
| | 1973 | 1974 | 1975 | 1973 | 1974 | 1975 | 1973 | 1974 | 1975 |
| Under 1 year | 174 | 188 | 129 | 102 | 124 | 93 | 276 | 312 | 222 |
| 1 year | 16 | 17 | 15 | 13 | 9 | 11 | 29 | 26 | 26 |
| 2 years | 12 | 8 | 12 | 6 | 5 | 8 | 18 | 13 | 20 |
| 3 years | 11 | 5 | 13 | 4 | 7 | 4 | 15 | 12 | 17 |
| 4 years | 7 | 6 | 7 | 6 | 3 | 6 | 13 | 9 | 13 |
| Total under 5 years .. | 220 | 224 | 176 | 131 | 148 | 122 | 351 | 372 | 298 |
| 5-9 years | 20 | 23 | 22 | 14 | 12 | 18 | 34 | 35 | 40 |
| 10-14 years | 13 | 20 | 21 | 12 | 11 | 14 | 25 | 31 | 35 |
| 15-19 years | 95 | 113 | 102 | 29 | 24 | 31 | 124 | 137 | 133 |
| 20-24 years | 67 | 83 | 77 | 20 | 28 | 18 | 87 | 111 | 95 |
| 25-29 years | 57 | 63 | 68 | 18 | 29 | 24 | 75 | 92 | 92 |
| 30-34 years | 46 | 43 | 63 | 20 | 39 | 26 | 66 | 82 | 89 |
| 35-39 years | 61 | 87 | 63 | 29 | 33 | 32 | 90 | 120 | 95 |
| 40-44 years | 97 | 106 | 92 | 63 | 53 | 66 | 160 | 159 | 158 |
| 45-49 years | 202 | 234 | 191 | 115 | 96 | 113 | 317 | 330 | 304 |
| 50-54 years | 317 | 320 | 330 | 151 | 171 | 164 | 468 | 491 | 494 |
| 55-59 years | 438 | 451 | 400 | 195 | 188 | 220 | 633 | 639 | 620 |
| 60-64 years | 593 | 611 | 625 | 304 | 302 | 317 | 897 | 913 | 942 |
| 65-69 years | 723 | 728 | 739 | 374 | 360 | 374 | 1 097 | 1 088 | 1 113 |
| 70-74 years | 759 | 774 | 734 | 502 | 521 | 486 | 1 261 | 1 295 | 1 220 |
| 75-79 years | 660 | 670 | 671 | 667 | 700 | 664 | 1 327 | 1 370 | 1 335 |
| 80-84 years | 614 | 615 | 568 | 746 | 739 | 781 | 1 360 | 1 354 | 1 349 |
| 85-89 years | 383 | 394 | 373 | 616 | 672 | 630 | 999 | 1 066 | 1 003 |
| 90-94 years | 114 | 140 | 120 | 230 | 291 | 295 | 364 | 431 | 415 |
| 95 years and over .. . | 22 | 29 | 31 | 78 | 91 | 86 | 100 | 120 | 117 |
| All ages | 5 501 | 5 728 | 5 466 | 4 334 | 4 508 | 4 481 | 9 835 | 10 236 | 9 947 |

A long established trend of increases in the number of deaths at the higher ages has been offset to some degree by a decrease in those in the younger age groups. The effect of this trend related to the changes in age distribution of the population

is illustrated in the next tables, which show age-specific death rates, *i.e.* deaths in each age group expressed as a rate per 1 000 of the population in that age group. Because age constitution of the population is known accurately only at censuses, the periods shown are those with a census date as their centre.

Age-specific Death Rates: Males, South Australia^(a)

| Age Group (Years) | Death Rate (b) | | | | | | | |
|----------------------|----------------|---------|---------|---------|---------|---------|---------|---------|
| | 1880-82 | 1900-02 | 1920-22 | 1932-34 | 1946-48 | 1953-55 | 1960-62 | 1970-72 |
| 0-4 | 51-85 | 32-12 | 19-98 | 9-90 | 8-09 | 6-41 | 5-82 | 4-66 |
| 5-9 | 3-33 | 2-81 | 2-33 | 1-18 | 1-00 | 0-52 | 0-50 | 0-43 |
| 10-14 | 2-59 | 1-85 | 1-55 | 1-08 | 0-68 | 0-65 | 0-46 | 0-38 |
| 15-19 | 4-48 | 2-88 | 2-41 | 1-69 | 1-42 | 1-50 | 1-08 | 1-48 |
| 20-24 | 4-85 | 4-19 | 3-47 | 2-35 | 1-44 | 1-88 | 1-37 | 1-55 |
| 25-29 | 6-32 | 5-16 | 3-67 | 2-51 | 1-59 | 1-70 | 1-59 | 1-12 |
| 30-34 | 7-51 | 5-30 | 3-97 | 2-51 | 1-88 | 1-57 | 1-62 | 1-41 |
| 35-39 | 9-00 | 6-77 | 5-12 | 3-23 | 2-41 | 2-29 | 2-08 | 2-04 |
| 40-44 | 12-25 | 8-50 | 6-10 | 4-73 | 3-63 | 3-56 | 3-43 | 3-15 |
| 45-49 | 16-10 | 10-26 | 8-37 | 6-82 | 6-12 | 5-48 | 5-44 | 5-49 |
| 50-54 | 17-29 | 14-19 | 11-58 | 9-82 | 10-74 | 10-16 | 9-24 | 9-37 |
| 55-59 | 25-28 | 20-74 | 18-99 | 15-11 | 16-28 | 15-71 | 15-75 | 16-01 |
| 60-64 | 31-77 | 30-23 | 26-02 | 24-98 | 26-08 | 24-33 | 24-39 | 25-10 |
| 65-69 | 46-67 | 47-24 | 41-62 | 36-14 | 40-08 | 39-31 | 37-84 | 41-00 |
| 70-74 | 63-52 | 64-27 | 62-49 | 57-07 | 60-79 | 62-59 | 59-47 | 64-42 |
| 75-79 | 92-49 | 89-66 | 105-50 | 92-60 | 97-69 | 94-55 | 88-56 | 96-09 |
| 80-84 | 138-02 | 140-35 | 158-90 | 147-86 | 145-56 | 141-64 | 135-85 | 142-39 |
| 85 and over .. | 247-47 | 246-96 | 269-50 | 257-03 | 248-89 | 235-84 | 227-39 | 230-02 |
| All ages | 15-76 | 12-03 | 10-75 | 9-29 | 10-87 | 9-80 | 9-00 | 9-31 |

(a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

(b) Average annual number of deaths per 1 000 of population at ages shown.

Age-specific Death Rates: Females, South Australia^(a)

| Age Group (Years) | Death Rate (b) | | | | | | | |
|----------------------|----------------|---------|---------|---------|---------|---------|---------|---------|
| | 1880-82 | 1900-02 | 1920-22 | 1932-34 | 1946-48 | 1953-55 | 1960-62 | 1970-72 |
| 0-4 | 45-36 | 27-20 | 16-29 | 8-29 | 7-12 | 5-01 | 3-93 | 3-39 |
| 5-9 | 3-28 | 2-02 | 2-30 | 1-04 | 0-54 | 0-45 | 0-35 | 0-32 |
| 10-14 | 2-49 | 1-64 | 1-32 | 0-88 | 0-38 | 0-42 | 0-30 | 0-29 |
| 15-19 | 4-16 | 3-47 | 2-71 | 1-25 | 0-75 | 0-52 | 0-37 | 0-65 |
| 20-24 | 5-59 | 4-16 | 2-91 | 2-36 | 1-04 | 0-63 | 0-58 | 0-48 |
| 25-29 | 8-01 | 5-00 | 3-95 | 2-73 | 1-65 | 0-85 | 0-70 | 0-60 |
| 30-34 | 7-67 | 5-66 | 4-18 | 2-66 | 1-91 | 0-99 | 0-96 | 0-91 |
| 35-39 | 10-29 | 6-90 | 5-27 | 3-85 | 2-03 | 1-79 | 1-33 | 1-18 |
| 40-44 | 9-76 | 7-85 | 4-99 | 4-10 | 3-48 | 2-56 | 1-80 | 1-86 |
| 45-49 | 11-65 | 8-20 | 6-42 | 5-80 | 4-59 | 3-65 | 3-03 | 2-95 |
| 50-54 | 13-09 | 10-83 | 9-18 | 8-06 | 7-09 | 5-88 | 5-22 | 4-60 |
| 55-59 | 14-86 | 14-08 | 10-65 | 11-24 | 10-33 | 9-04 | 7-82 | 7-41 |
| 60-64 | 24-30 | 20-45 | 18-07 | 17-68 | 14-97 | 14-06 | 12-74 | 12-16 |
| 65-69 | 36-27 | 35-51 | 33-15 | 27-16 | 25-22 | 23-01 | 21-05 | 20-32 |
| 70-74 | 53-10 | 53-80 | 46-20 | 42-19 | 42-17 | 40-35 | 35-52 | 33-42 |
| 75-79 | 93-21 | 87-96 | 83-56 | 75-53 | 72-07 | 72-20 | 58-28 | 57-60 |
| 80-84 | 94-83 | 126-07 | 131-63 | 121-15 | 121-57 | 109-92 | 108-61 | 99-42 |
| 85 and over .. | 161-90 | 222-58 | 232-84 | 233-59 | 214-35 | 215-80 | 199-38 | 186-55 |
| All ages | 13-97 | 10-25 | 9-00 | 8-23 | 9-19 | 8-31 | 7-38 | 7-50 |

(a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

(b) Average annual number of deaths per 1 000 of population at ages shown.

CAUSES OF DEATH

The classification of causes of deaths in Australia since 1907 has been based on the International Lists of Causes of Deaths (ICD). From time to time revisions to these lists have affected the comparability of the figures. Up to 1949 the effect of these revisions had been negligible but the introduction in 1950 of the Sixth Revision of the ICD introduced major changes which, together with the adoption of more flexible rules for selecting the underlying cause where certificates of cause of death showed more than one cause, affected the comparability of figures for years before 1950 with those for 1950 and later. A complete classification of causes of deaths for each State and Territory of Australia for 1950 according to both the Fifth and Sixth Revisions was published by the Australian Statistician in Demography 1950, Bulletin No. 68. The Seventh Revision adopted in Australia in 1958 did not affect comparability significantly.

The Eighth Revision brought into use in Australia in 1968 provided a few changes to the structure of the tabular list, e.g. the transferring of cerebrovascular diseases from the section covering diseases of the nervous system and sense organs to that covering diseases of the circulatory system. Comparability has not been affected greatly by the changes with the exception of the categories within the section now entitled 'Certain Causes of Perinatal Morbidity and Mortality'—the Seventh Revision title was 'Certain Diseases of Early Infancy'. Seventh Revision classification in this section was related to the condition in the infant whereas the Eighth Revision provides primarily for classification wherever possible to maternal diseases or conditions or to the circumstances of the birth rather than to the resultant condition in the infant. ICD Eighth Revision code numbers have been shown where appropriate in the tables which follow.

In the following table, deaths registered in 1975 are shown classified according to the abbreviated list of the Eighth Revision together with the percentages from each cause and the rate per 10 000 of mean population.

Causes of Death: South Australia, 1975

| Abbreviated Classification (a) | ICD Code Number | Number of Deaths | Proportion of Total | Rate per 10 000 of Mean Population |
|--|--------------------------|------------------|---------------------|------------------------------------|
| | | | Per cent | |
| 4 Enteritis and other diarrhoeal | 008, 009 | 23 | 0-23 | 0-19 |
| 5 Tuberculosis of respiratory system | 010-012 | 4 | 0-04 | 0-03 |
| 6 Other tuberculosis including late effects | 013-019 | 4 | 0-04 | 0-03 |
| 11 Meningococcal infection | 036 | 1 | 0-01 | 0-01 |
| 17 Syphilis and its sequelae | 090-097 | 3 | 0-03 | 0-02 |
| 18 Other infective and parasitic diseases | { Remainder 000-136 } | 17 | 0-17 | 0-14 |
| 19 Malignant neoplasms | 140-209 | 1 910 | 19-20 | 15-43 |
| 20 Benign and unspecified neoplasms | 210-239 | 11 | 0-11 | 0-09 |
| 21 Diabetes mellitus | 250 | 161 | 1-62 | 1-30 |
| 22 Avitaminoses and other nutritional deficiency | 260-269 | 6 | 0-06 | 0-05 |
| 23 Anaemias | 280-285 | 18 | 0-18 | 0-15 |
| 24 Meningitis | 320 | 3 | 0-03 | 0-02 |
| 26 Chronic rheumatic heart disease | 393-398 | 9 | 0-09 | 0-72 |
| 27 Hypertensive disease | 400-404 | 88 | 0-89 | 0-71 |
| 28 Ischaemic heart disease | 410-414 | 3 054 | 30-70 | 24-67 |
| 29 Other forms of heart disease | 420-429 | 422 | 4-24 | 3-42 |
| 30 Cerebrovascular disease | 430-438 | 1 404 | 14-12 | 11-34 |
| 31 Influenza | 470-474 | 6 | 0-06 | 0-05 |

Causes of Death: South Australia, 1975 (continued)

| Abbreviated Classification (a) | ICD Code Number | Number of Deaths | Proportion of Total | Rate per 10 000 of Mean Population |
|---|------------------------------------|------------------|---------------------|------------------------------------|
| | | | Per cent | |
| 32 Pneumonia | 480-486 | 214 | 2.15 | 1.73 |
| 33 Bronchitis, emphysema and asthma | 490-493 | 346 | 3.48 | 2.80 |
| 34 Peptic ulcer | 531-533 | 44 | 0.44 | 0.36 |
| 35 Appendicitis | 540-543 | 2 | 0.02 | 0.02 |
| 36 Intestinal obstruction and hernia | 550-553, 560 | 35 | 0.35 | 0.28 |
| 37 Cirrhosis of liver | 571 | 117 | 1.18 | 0.95 |
| 38 Nephritis and nephrosis | 580-584 | 85 | 0.85 | 0.69 |
| 39 Hyperplasia of prostate | 600 | 18 | 0.18 | 0.15 |
| 40, 41 Complications of pregnancy, childbirth and puerperium | 630-678 | 3 | 0.03 | 0.02 |
| 42 Congenital anomalies | 740-759 | 94 | 0.95 | 0.76 |
| 43 Birth injury, difficult labour and other anoxic and hypoxic conditions | 764-768, 772, 776 | 38 | 0.38 | 0.31 |
| 44 Other causes of perinatal mortality | 760-763, 769-771, 773-775, 777-779 | 60 | 0.60 | 0.49 |
| 45 Symptoms and ill-defined conditions | 780-796 | 93 | 0.94 | 0.75 |
| 46 All other diseases | Residual | 806 | 8.10 | 6.51 |
| 47 Motor vehicle accidents | E810-E823 | 340 | 3.42 | 2.75 |
| 48 All other accidents | E800-E807, E825-E949 | 261 | 2.62 | 2.11 |
| 49 Suicide and intentional self-inflicted injuries | E950-E959 | 149 | 1.50 | 1.21 |
| 50 All other external causes | E960-E999 | 18 | 0.18 | 0.15 |
| Total all causes | | 9 947 | 100.00 | 80.36 |

(a) No deaths were recorded in 1975 in the following categories: 1 Cholera (000), 2 Typhoid fever (001), 3 Bacillary dysentery and amoebiasis (004, 006), 7 Plague (020), 8 Diphtheria (032), 9 Whooping cough (033), 10 Streptococcal throat and scarlet fever (034), 12 Acute poliomyelitis (040-043), 13 Smallpox (050), 14 Measles (055), 15 Typhus and other rickettsioses (080-083), 16 Malaria (084), 25 Active rheumatic fever (390-392).

The following table shows for 1975 the main causes of deaths in selected age groups.

Main Causes of Death: Age Groups, South Australia, 1975

| International Classification Number | Age Group and Cause of Death | Deaths | Proportion of Total Deaths in Age Groups | Proportion of Total Deaths from the Specified Cause |
|-------------------------------------|--|--------|--|---|
| | 0-4 Years | No. | % | % |
| 740-759 | Congenital anomalies | 76 | 25.5 | 80.8 |
| 760-763, 769-771, 773-775, 777-779 | Other perinatal causes, including maternal conditions, prematurity, etc. | 60 | 20.1 | 100.0 |
| 780-796 | Symptoms and ill-defined conditions | 44 | 14.8 | 47.3 |
| 764-768, 772, 776 | Birth injury, difficult labour, etc. | 38 | 12.7 | 100.0 |
| E800-E999 | Accidents, poisonings, violence | 21 | 7.1 | 2.7 |
| | Other causes | 59 | 19.8 | .. |
| | 5-14 Years | | | |
| E800-E999 | Accidents, poisonings, violence | 41 | 54.7 | 5.4 |
| 140-209 | Malignant neoplasms | 10 | 13.3 | 0.5 |
| 740-759 | Congenital anomalies | 3 | 4.0 | 3.19 |
| | Other causes | 21 | 28.0 | .. |

Main Causes of Death: Age Groups, South Australia, 1975 (continued)

| International Classification Number | Age Group and Cause of Death | Deaths | Proportion of Total Deaths in Age Groups | Proportion of Total Deaths from the Specified Cause |
|-------------------------------------|--|--------|--|---|
| | | No. | % | % |
| | 15-24 Years | | | |
| E800-E999 | Accidents, poisonings, violence | 185 | 81.2 | 24.1 |
| 140-209 | Malignant neoplasms | 16 | 7.0 | 0.8 |
| 320-389 | Diseases of nervous system and sense organs | 8 | 3.5 | 7.5 |
| 480-493 | Pneumonia, bronchitis, emphysema, asthma | 4 | 1.7 | 0.7 |
| | Other causes | 15 | 6.6 | .. |
| | 25-34 Years | | | |
| E800-E999 | Accidents, poisonings, violence | 99 | 54.7 | 12.9 |
| 140-209 | Malignant neoplasms | 36 | 19.9 | 1.9 |
| 393-398, 410-429 | Heart disease | 10 | 5.5 | 0.3 |
| 480-493 | Pneumonia, bronchitis, emphysema, asthma | 5 | 2.8 | 0.9 |
| | Other causes | 31 | 17.1 | .. |
| | 35-44 Years | | | |
| 140-209 | Malignant neoplasms | 74 | 29.3 | 3.9 |
| E800-E999 | Accidents, poisonings, violence | 70 | 27.7 | 9.1 |
| 393-398, 410-429 | Heart disease | 53 | 20.9 | 1.5 |
| 430-438 | Cerebrovascular disease | 16 | 6.3 | 1.1 |
| | Other causes | 40 | 15.8 | .. |
| | 45-54 Years | | | |
| 393-398, 410-429 | Heart disease | 274 | 34.3 | 7.7 |
| 140-209 | Malignant neoplasms | 224 | 28.1 | 11.7 |
| E800-E999 | Accidents, poisonings, violence | 79 | 9.9 | 10.3 |
| 430-438 | Cerebrovascular disease | 64 | 8.0 | 4.6 |
| 571 | Cirrhosis of liver | 43 | 5.4 | 36.7 |
| 480-493 | Pneumonia, bronchitis, emphysema, asthma | 31 | 3.9 | 5.5 |
| | Other causes | 83 | 10.4 | .. |
| | 55-64 Years | | | |
| 393-398, 410-429 | Heart disease | 603 | 38.6 | 16.9 |
| 140-209 | Malignant neoplasms | 425 | 27.2 | 22.3 |
| 430-438 | Cerebrovascular disease | 162 | 10.4 | 11.5 |
| E800-E999 | Accidents, poisonings, violence | 80 | 5.1 | 10.4 |
| 480-493 | Pneumonia, bronchitis, emphysema, asthma | 63 | 4.0 | 11.3 |
| 571 | Cirrhosis of liver | 37 | 2.4 | 31.6 |
| | Other causes | 192 | 12.3 | .. |
| | 65-74 Years | | | |
| 393-398, 410-429 | Heart disease | 954 | 40.9 | 26.8 |
| 140-209 | Malignant neoplasms | 525 | 22.5 | 27.5 |
| 430-438 | Cerebrovascular disease | 310 | 13.3 | 22.1 |
| 480-493 | Pneumonia, bronchitis, emphysema, asthma | 144 | 6.2 | 25.7 |
| 440-448 | Diseases of arteries, arterioles and capillaries | 73 | 3.1 | 21.3 |
| E800-E999 | Accidents, poisonings, violence | 62 | 2.7 | 8.1 |
| 250 | Diabetes mellitus | 52 | 2.2 | 32.3 |
| | Other causes | 213 | 9.1 | .. |
| | 75 Years and Over | | | |
| 393-398, 410-429 | Heart disease | 1 665 | 39.5 | 46.7 |
| 430-438 | Cerebrovascular disease | 843 | 20.0 | 60.0 |
| 140-209 | Malignant neoplasms | 594 | 14.1 | 31.1 |
| 480-493 | Pneumonia, bronchitis, emphysema, asthma | 288 | 6.8 | 51.4 |
| 440-448 | Diseases of arteries, arterioles and capillaries | 234 | 5.5 | 68.4 |
| E800-E999 | Accidents, poisonings, violence | 118 | 2.8 | 15.4 |
| 250 | Diabetes mellitus | 74 | 1.8 | 46.0 |
| | Other causes | 403 | 9.5 | .. |

The long-term trends in deaths and death rates from some of the main causes are discussed in the following pages. One of the factors affecting these trends has been the reduction of mortality in early childhood. This improvement has

increased the number of persons reaching higher ages where the risk from degenerative diseases is greatest; consequently deaths from degenerative diseases now constitute a higher proportion of deaths than formerly.

Infectious Diseases

Deaths from certain infectious diseases over the period 1915 to 1975 are shown in the following table.

Deaths from Certain Infectious Diseases, South Australia^(a)

| Period | Respiratory Tuberculosis (010-012) | Typhoid Fever (001) | Scarlet Fever (034-1) | Diphtheria (032) | Whooping Cough (035) | Acute Poliomyelitis (040-043) | Measles (055) |
|-----------------------------------|--|---------------------------|-----------------------------|---------------------|----------------------------|-------------------------------------|------------------|
| Annual Average: | | | | | | (b) | |
| 1915-19 | 339 | 311 | 4 | 94 | 21 | | 14 |
| 1920-24 | 330 | 28 | 9 | 70 | 28 | 9 | 7 |
| 1925-29 | 313 | 12 | 2 | 25 | 13 | 3 | 12 |
| 1930-34 | 261 | 7 | 2 | 12 | 13 | 3 | 6 |
| 1935-39 | 211 | 4 | 1 | 27 | 11 | 6 | 2 |
| 1940-44 | 190 | 3 | 2 | 30 | 10 | 2 | 9 |
| 1945-49 | 161 | 1 | 1 | 7 | 8 | 9 | 6 |
| 1950-54 | 81 | — | — | 1 | 2 | 23 | 3 |
| 1955-59 | 43 | — | — | 1 | 1 | 2 | 3 |
| 1960-64 | 32 | — | — | — | 1 | 1 | 2 |
| 1965-69 | 20 | — | — | — | — | — | 2 |
| 1970-74 | 8 | — | — | — | — | — | — |
| 1975 | 4 | — | — | — | — | — | — |

(a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

(b) Not separately recorded.

In 1956 a poliomyelitis immunisation program began and since then the incidence of and deaths from this disease have declined (see Part 6.5).

There has been a long-term downward trend in deaths from respiratory tuberculosis. This has been assisted by the introduction in March 1952 of compulsory chest X-ray surveys of the population, enabling early detection and therefore more effective treatment of the disease. Of those diseases shown in the preceding table, in 1975 there were four deaths from respiratory tuberculosis.

The decline in the incidence of deaths from infectious diseases can be attributed to several factors, the more important being advances in medical science, improved hygiene and the general acceptance of immunisation of infants and young children against such diseases as diphtheria and whooping cough.

Malignant Neoplasms

For 1950 and subsequent years, deaths from malignant neoplasms (generally known as 'cancer') have included those deaths classified to neoplasms of lymphatic and haematopoietic tissues (ICD 200-209). This latter group, which accounted for 187 of the 1910 deaths attributed to malignant neoplasms in 1975, includes such diseases as lymphosarcoma, Hodgkin's disease, leukaemia and multiple myeloma.

The following table shows deaths from malignant neoplasms according to site of the disease for selected years.

Malignant Neoplasms: Deaths, Site of Disease, South Australia^(a)

| Site of Disease | 1960 | 1965 | 1970 | 1974 | 1975 |
|--|----------|-------|-------|-------|-------|
| | Number | | | | |
| Malignant neoplasm of: | | | | | |
| Buccal cavity and pharynx (140-9) | 21 | 20 | 35 | 38 | 33 |
| Digestive organs and peritoneum (150-9) | 425 | 479 | 546 | 616 | 583 |
| Respiratory system (160-3) | 130 | 201 | 291 | 336 | 381 |
| Skin (172, 173) | 28 | 34 | 44 | 38 | 48 |
| Breast (174) | 120 | 107 | 146 | 155 | 171 |
| Uterus (180-2) | 66 | 61 | 52 | 50 | 55 |
| Other female genital organs (183, 184) | 39 | 47 | 63 | 49 | 61 |
| Male genital organs (185-7) | 74 | 84 | 110 | 108 | 142 |
| Urinary organs (188, 189) | 67 | 88 | 79 | 76 | 88 |
| Brain and nervous system (191, 192) | 32 | 50 | 43 | 58 | 54 |
| Other and unspecified sites (170, 171, 190, 193-9) | 48 | 84 | 83 | 106 | 107 |
| Neoplasms of lymphatic and haematopoietic tissue (200-9) | 97 | 128 | 160 | 210 | 187 |
| Total deaths (140-209) | 1 147 | 1 383 | 1 652 | 1 840 | 1 910 |
| | Rate (b) | | | | |
| Buccal cavity and pharynx (140-9) | 0.22 | 0.19 | 0.30 | 0.31 | 0.27 |
| Digestive organs and peritoneum (150-9) | 4.50 | 4.50 | 4.72 | 5.06 | 4.71 |
| Respiratory system (160-3) | 1.38 | 1.89 | 2.51 | 2.76 | 3.08 |
| Skin (172, 173) | 0.30 | 0.32 | 0.38 | 0.31 | 0.39 |
| Breast (174) | 1.27 | 1.01 | 1.26 | 1.27 | 1.38 |
| Uterus (180-2) | 0.70 | 0.57 | 0.45 | 0.41 | 0.44 |
| Other female genital organs (183, 184) | 0.41 | 0.44 | 0.54 | 0.40 | 0.49 |
| Male genital organs (185-7) | 0.78 | 0.79 | 0.95 | 0.89 | 1.15 |
| Urinary organs (188, 189) | 0.71 | 0.83 | 0.68 | 0.62 | 0.71 |
| Brain and nervous system (191, 192) | 0.34 | 0.47 | 0.37 | 0.48 | 0.44 |
| Other and unspecified sites (170, 171, 190, 193-9) | 0.51 | 0.79 | 0.72 | 0.87 | 0.86 |
| Neoplasms of lymphatic and haematopoietic tissue (200-9) | 1.03 | 1.20 | 1.38 | 1.72 | 1.51 |
| Total rate (140-209) | 12.14 | 13.00 | 14.26 | 15.10 | 15.43 |

(a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966. (b) Per 10 000 of mean population.

The next table indicates a steady increase in deaths from malignant neoplasms and the table of age-specific death rates which follows shows how the rate increases with age. Therefore, the increase over the period in the all ages rate is partly because of the increasing proportion of the population in the higher age groups.

Deaths from Malignant Neoplasms (140-209), South Australia^(a)

| Period | Number of Deaths | | | Death Rate (b) | | |
|------------------------|------------------|---------|---------|----------------|---------|---------|
| | Males | Females | Persons | Males | Females | Persons |
| Annual Average: | | | | | | |
| 1950-54 | 462 | 483 | 945 | 12.11 | 12.96 | 12.53 |
| 1955-59 | 565 | 519 | 1 084 | 12.79 | 12.06 | 12.43 |
| 1960-64 | 656 | 617 | 1 273 | 13.16 | 12.58 | 12.88 |
| 1965-69 | 820 | 698 | 1 518 | 14.77 | 12.67 | 13.72 |
| 1970-74 | 958 | 784 | 1 742 | 16.13 | 13.17 | 14.64 |
| Year: | | | | | | |
| 1971 | 912 | 748 | 1 660 | 15.53 | 12.70 | 14.11 |
| 1972 | 970 | 791 | 1 761 | 16.35 | 13.27 | 14.81 |
| 1973 | 975 | 821 | 1 796 | 16.27 | 13.61 | 14.93 |
| 1974 | 1 055 | 785 | 1 840 | 17.36 | 12.86 | 15.10 |
| 1975 | 1 052 | 858 | 1 910 | 17.05 | 13.83 | 15.43 |

(a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

(b) Number of deaths per 10 000 of mean population.

Malignant Neoplasms: Age-specific Death Rates, South Australia^(a)

| Age Group (Years) | Death Rate (b) | | | | | |
|----------------------|----------------|---------|---------|---------|---------|---------|
| | 1932-34 | 1946-48 | 1953-55 | 1960-62 | 1965-67 | 1970-72 |
| MALES | | | | | | |
| 0-4 | — | 0.49 | 1.18 | 1.02 | 1.14 | 1.27 |
| 5-14 | 0.12 | 0.51 | 1.05 | 0.82 | 0.97 | 0.79 |
| 15-24 | 0.31 | 0.07 | 1.64 | 0.86 | 0.90 | 0.90 |
| 25-34 | 1.05 | 1.18 | 1.21 | 1.33 | 1.62 | 1.24 |
| 35-44 | 3.36 | 2.57 | 4.63 | 4.29 | 3.72 | 5.36 |
| 45-54 | 8.65 | 12.35 | 10.42 | 11.57 | 15.09 | 14.80 |
| 55-64 | 35.41 | 32.77 | 33.43 | 36.52 | 43.46 | 43.94 |
| 65-74 | 89.18 | 82.62 | 69.54 | 83.67 | 87.28 | 101.64 |
| 75 and over .. | 147.57 | 143.98 | 149.45 | 142.29 | 151.06 | 175.14 |
| All ages .. | 11.40 | 13.60 | 12.54 | 12.86 | 14.09 | 15.69 |
| FEMALES | | | | | | |
| 0-4 | 0.30 | 0.41 | 1.24 | 0.79 | 0.57 | 0.57 |
| 5-14 | 0.13 | 0.23 | 0.34 | 0.79 | 0.55 | 0.38 |
| 15-24 | 0.25 | 0.40 | 0.72 | 0.46 | 0.82 | 0.56 |
| 25-34 | 1.49 | 1.74 | 1.99 | 2.16 | 1.70 | 2.39 |
| 35-44 | 6.32 | 4.42 | 5.95 | 6.66 | 5.68 | 4.88 |
| 45-54 | 16.86 | 15.39 | 12.67 | 16.69 | 16.14 | 15.83 |
| 55-64 | 34.61 | 30.12 | 32.91 | 28.19 | 30.33 | 30.90 |
| 65-74 | 55.98 | 57.21 | 52.26 | 52.24 | 49.90 | 55.38 |
| 75 and over .. | 115.15 | 108.52 | 98.41 | 99.76 | 94.61 | 102.54 |
| All ages .. | 11.37 | 13.12 | 12.64 | 12.68 | 12.30 | 13.13 |

(a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

(b) Average annual number of deaths per 10 000 of population at ages shown.

Cerebrovascular Disease

The increase in both numbers and rates of deaths from cerebrovascular disease (commonly referred to as 'a stroke') is further evidence of the effect of the increased proportion of the population at higher ages.

Although the rate generally has fallen since 1954, deaths from this cause still constituted 19.98 per cent of deaths of persons aged seventy-five years and over in 1975. During the period 1930-34 deaths classified to this cause were only 8.6 per cent of all deaths, but during 1970-74 they were 14.0 per cent of all deaths.

Deaths from Cerebrovascular Disease (430-438), South Australia^(a)

| Period | Number of Deaths | | | Death Rate (b) | | |
|------------------------|------------------|---------|---------|----------------|---------|---------|
| | Males | Females | Persons | Males | Females | Persons |
| Annual Average: | | | | | | |
| 1930-34 | 201 | 231 | 432 | 6.94 | 8.01 | 7.47 |
| 1935-39 | 231 | 294 | 525 | 7.84 | 9.95 | 8.90 |
| 1940-44 | 271 | 368 | 639 | 8.96 | 12.03 | 10.51 |
| 1945-49 | 321 | 431 | 752 | 9.92 | 13.21 | 11.57 |
| 1950-54 | 404 | 553 | 957 | 10.62 | 14.82 | 12.70 |
| 1955-59 | 481 | 614 | 1 095 | 10.89 | 14.27 | 12.55 |
| 1960-64 | 490 | 645 | 1 135 | 9.83 | 13.16 | 11.48 |
| 1965-69 | 567 | 731 | 1 298 | 10.21 | 13.26 | 11.73 |
| 1970-74 | 582 | 808 | 1 390 | 9.82 | 13.58 | 11.70 |
| Year: | | | | | | |
| 1971 | 611 | 832 | 1 443 | 10.40 | 14.12 | 12.26 |
| 1972 | 587 | 792 | 1 379 | 9.89 | 13.29 | 11.59 |
| 1973 | 585 | 779 | 1 364 | 9.76 | 12.91 | 11.34 |
| 1974 | 550 | 817 | 1 367 | 9.05 | 13.39 | 11.22 |
| 1975 | 570 | 834 | 1 404 | 9.24 | 13.44 | 11.34 |

(a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

(b) Number of deaths per 10 000 of mean population.

Diseases of the Heart

The following table shows the number of deaths attributed to heart disease and rates per 10 000 of the mean population since 1940.

The percentage of total deaths classified to heart disease increased from 25.5 per cent in the period 1940-44 to 36.1 per cent during 1970-74. Over the same period the rate per 10 000 of population increased from 26.1 to 30.1. Apart from the effect of the ageing population, there are other difficult-to-measure factors which have influenced this large increase, namely changes in the mode of certification and classification, and improvement both in diagnosis and certification; therefore any comparison of numbers, rates and percentages of deaths from this cause over the period ought only be made with caution.

Deaths from Diseases of the Heart (393-398, 410-429), South Australia^(a)

| Period | Number of Deaths | | | Death Rate (b) | | |
|------------------------|------------------|---------|---------|----------------|---------|---------|
| | Males | Females | Persons | Males | Females | Persons |
| Annual Average: | | | | | | |
| 1940-44 | 886 | 704 | 1 590 | 29.29 | 23.02 | 26.14 |
| 1945-49 | 1 094 | 822 | 1 916 | 33.84 | 25.15 | 29.47 |
| 1950-54 | 1 342 | 996 | 2 338 | 35.22 | 26.70 | 31.01 |
| 1955-59 | 1 519 | 1 111 | 2 630 | 34.38 | 25.81 | 30.15 |
| 1960-64 | 1 776 | 1 245 | 3 021 | 35.61 | 25.42 | 30.56 |
| 1965-69 | 2 036 | 1 432 | 3 468 | 36.69 | 25.97 | 31.35 |
| 1970-74 | 2 080 | 1 503 | 3 583 | 35.06 | 25.24 | 30.14 |
| Year: | | | | | | |
| 1971 | 1 976 | 1 445 | 3 421 | 33.64 | 24.53 | 29.08 |
| 1972 | 2 074 | 1 456 | 3 530 | 34.95 | 24.43 | 29.68 |
| 1973 | 2 105 | 1 484 | 3 589 | 35.13 | 24.59 | 29.84 |
| 1974 | 2 108 | 1 555 | 3 663 | 34.68 | 25.48 | 30.07 |
| 1975 | 2 034 | 1 531 | 3 565 | 32.97 | 24.67 | 28.81 |

(a) Deaths of full-blood Aborigines where identified in registrations were excluded before 1966.

(b) Number of deaths per 10 000 of mean population.

External Causes

In the table which follows, deaths from selected categories of external cause (accidents, poisonings and violence) are shown for recent years.

Deaths: External Causes (Accidents, Poisonings and Violence), South Australia

| Year | Cause | | | | | | | Total Deaths for Causes (E800-E999) |
|----------------|---|---|-----------------------------------|------------------------------|---|---|---|-------------------------------------|
| | Motor Vehicle Traffic Accidents (E810-E819) | Accidental Drownings (E830, E832, E910) | Accidental Poisonings (E850-E877) | Accidental Falls (E880-E887) | Suicide and Intentional Self-inflicted Injury (E950-E959) | Homicide and Injury Purposely Inflicted (E960-E969) | Other External Causes (Balance E800-E999) | |
| MALES | | | | | | | | |
| 1971 | 213 | 35 | 5 | 35 | 87 | 9 | 66 | 450 |
| 1972 | 212 | 41 | 4 | 39 | 94 | 10 | 75 | 475 |
| 1973 | 214 | 36 | 1 | 34 | 79 | 5 | 75 | 444 |
| 1974 | 298 | 23 | 4 | 42 | 95 | 9 | 85 | 556 |
| 1975 | 249 | 41 | 3 | 48 | 103 | 9 | 77 | 530 |
| FEMALES | | | | | | | | |
| 1971 | 88 | 4 | 3 | 63 | 35 | 13 | 30 | 236 |
| 1972 | 81 | 6 | 2 | 60 | 33 | 7 | 12 | 201 |
| 1973 | 90 | 11 | 6 | 66 | 42 | 3 | 51 | 269 |
| 1974 | 86 | 7 | 2 | 61 | 39 | 14 | 26 | 235 |
| 1975 | 82 | 5 | 2 | 59 | 46 | 9 | 34 | 237 |

Motor vehicle traffic accident deaths are considerably fewer than deaths caused by either heart disease, cerebrovascular disease or malignant neoplasms. However

it ranks with the other major causes when considered in terms of 'life years lost'. In 1975 there were 228 deaths from all causes of persons in the 15-24 years age group and of these 53.5 per cent were caused by motor vehicle traffic accidents.

**Deaths: External Causes (Accidents, Poisonings and Violence), Age Groups
South Australia, 1975**

| Age Groups | Cause | | | | | | | Total Deaths for Causes (E800-E999) |
|-------------------------|---|---|-----------------------------------|------------------------------|---|---|---|-------------------------------------|
| | Motor Vehicle Traffic Accidents (E810-E819) | Accidental Drownings (E830, E832, E910) | Accidental Poisonings (E850-E877) | Accidental Falls (E880-E887) | Suicide and (Intentional) Self-inflicted Injury (E950-E959) | Homicide and Injury Purposely Inflicted (E960-E969) | Other External Causes (Balance E800-E999) | |
| MALES | | | | | | | | |
| Under | | | | | | | | |
| 15 years .. | 22 | 11 | — | — | 1 | 3 | 12 | 49 |
| 15-24 years .. | 101 | 9 | 2 | 3 | 21 | — | 14 | 150 |
| 25-34 years .. | 34 | 5 | — | — | 26 | 1 | 14 | 80 |
| 35-44 years .. | 20 | 4 | — | — | 14 | 3 | 12 | 53 |
| 45-54 years .. | 26 | 3 | — | 3 | 18 | 1 | 5 | 56 |
| 55-64 years .. | 25 | 5 | — | 4 | 9 | — | 11 | 54 |
| 65-74 years .. | 15 | 2 | — | 8 | 11 | 1 | 5 | 42 |
| 75 years and over | 6 | 2 | 1 | 30 | 3 | — | 4 | 46 |
| Total .. | 249 | 41 | 3 | 48 | 103 | 9 | 77 | 530 |
| FEMALES | | | | | | | | |
| Under | | | | | | | | |
| 15 years .. | 14 | 3 | 1 | 1 | — | 1 | 5 | 25 |
| 15-24 years .. | 21 | 1 | — | — | 5 | 2 | 6 | 35 |
| 25-34 years .. | 5 | — | 1 | — | 7 | 2 | 4 | 19 |
| 35-44 years .. | 4 | — | — | — | 7 | 1 | 5 | 17 |
| 45-54 years .. | 8 | — | — | — | 8 | 1 | 6 | 23 |
| 55-64 years .. | 12 | — | — | 1 | 8 | 2 | 3 | 26 |
| 65-74 years .. | 8 | 1 | — | 3 | 7 | — | 1 | 20 |
| 75 years and over | 10 | — | — | 54 | 4 | — | 4 | 72 |
| Total .. | 82 | 5 | 2 | 59 | 46 | 9 | 34 | 237 |

INFANT MORTALITY

The infant mortality rate, *i.e.* the number of deaths of children under one year to every 1 000 live births, has shown a marked decline from 148.77 in 1875-79 to 15.62 in 1970-74. The two lowest rates recorded in this State were 13.52 in 1973 and 11.11 in 1975. The number of infant deaths and infant death rates for selected years since 1851 are shown in the Statistical Summary, Appendix A.

The fall in infant mortality is attributable to many factors, but the most important are reflected in the falling neo-natal death rate. This is partly because of better pre-natal care and obstetric management, which have led to safer births, and to the neo-natal intensive care units at major maternity hospitals which have brought about a high survival rate for small and immature infants.

Infant Mortality: Age at Death, South Australia

| Year | Under 1 Day | 1 Day and under 1 Week | 1 Week and under 4 Weeks | 4 Weeks and under 3 Months | 3 Months and under 6 Months | 6 Months and under 12 Months | Total under 12 Months | |
|----------------|----------------|------------------------------|--------------------------------|----------------------------------|-----------------------------------|------------------------------------|-----------------------|----------|
| | | | | | | | Number | Rate (a) |
| MALES | | | | | | | | |
| 1971 | 79 | 52 | 14 | 19 | 26 | 14 | 204 | 17.29 |
| 1972 | 90 | 54 | 11 | 12 | 31 | 14 | 212 | 18.76 |
| 1973 | 67 | 40 | 10 | 23 | 22 | 12 | 174 | 16.61 |
| 1974 | 75 | 57 | 13 | 13 | 19 | 11 | 188 | 17.92 |
| 1975 | 56 | 26 | 7 | 16 | 15 | 9 | 129 | 12.63 |
| FEMALES | | | | | | | | |
| 1971 | 72 | 40 | 12 | 15 | 13 | 10 | 162 | 14.47 |
| 1972 | 54 | 31 | 18 | 20 | 17 | 15 | 155 | 14.70 |
| 1973 | 35 | 23 | 9 | 19 | 9 | 7 | 102 | 10.27 |
| 1974 | 46 | 26 | 11 | 12 | 14 | 15 | 124 | 12.79 |
| 1975 | 35 | 11 | 13 | 11 | 12 | 11 | 93 | 9.52 |
| PERSONS | | | | | | | | |
| 1971 | 151 | 92 | 26 | 34 | 39 | 24 | 366 | 15.92 |
| 1972 | 144 | 85 | 29 | 32 | 48 | 29 | 367 | 16.80 |
| 1973 | 102 | 63 | 19 | 42 | 31 | 19 | 276 | 13.52 |
| 1974 | 121 | 83 | 24 | 25 | 33 | 26 | 312 | 15.46 |
| 1975 | 91 | 37 | 20 | 27 | 27 | 20 | 222 | 11.11 |

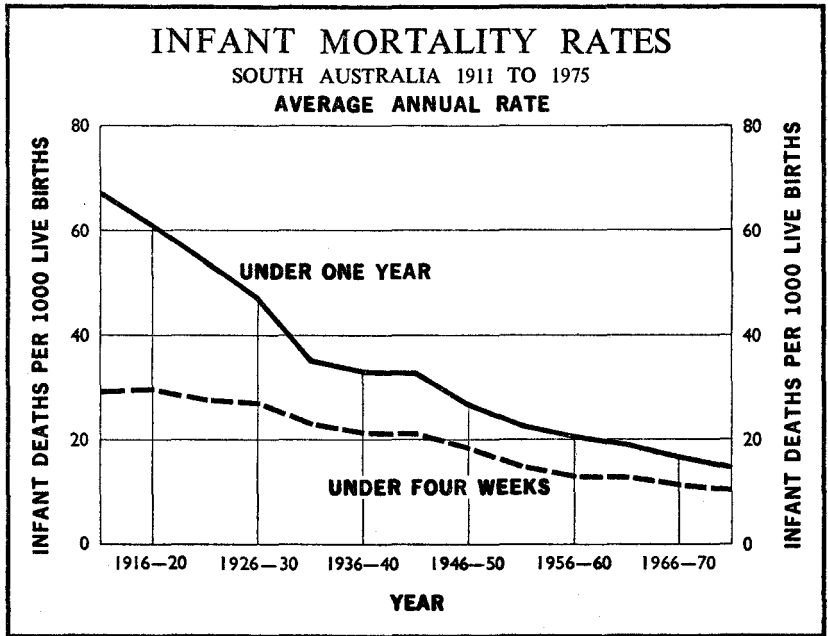
(a) Rate per 1 000 live births.

The causes of infant deaths in 1975 classified according to age group are shown in the following table.

Infant Mortality: Causes in Age Groups, South Australia, 1975

| Cause of Death | Age Group | | | | | Total under 12 Months |
|---|-----------------|--------------------------------|----------------------------------|-----------------------------------|------------------------------------|--------------------------------|
| | Under 1 Week | 1 Week and under 4 Weeks | 4 Weeks and under 3 Months | 3 Months and under 6 Months | 6 Months and under 12 Months | |
| Infective and parasitic diseases (000-136) | — | 4 | — | — | 5 | 9 |
| Diseases of nervous system and sense organs (320-389) | — | 1 | — | — | 1 | 2 |
| Diseases of respiratory system (460-519) | 2 | 1 | — | 1 | 3 | 7 |
| Congenital anomalies (740-759) | 30 | 8 | 14 | 4 | 3 | 59 |
| Perinatal causes: | | | | | | |
| Maternal diseases and conditions (760-763) | 7 | — | — | — | — | 7 |
| Difficult labour (764-768) | 3 | 1 | — | — | — | 4 |
| Conditions of placenta and cord (770-771) | 15 | — | — | — | — | 15 |
| Haemolytic disease (774-775) | 1 | — | — | — | — | 1 |
| Anoxic and hypoxic conditions n.e.c. (776) | 31 | 1 | — | — | — | 32 |
| Immaturity, unqualified (777) | 13 | — | — | — | — | 13 |
| Other perinatal causes (769, 772, 773, 778) | 24 | 2 | — | — | — | 26 |
| Sudden death (cause unknown) (795) | — | 1 | 11 | 21 | 6 | 39 |
| All other diseases | 2 | 1 | 1 | — | 2 | 6 |
| Accidents, poisonings, violence (E800-E999) | — | — | 1 | 1 | — | 2 |
| Total all causes | 128 | 20 | 27 | 27 | 20 | 222 |

Statistics of infant mortality shown in the previous table are inclusive of the neo-natal segment of perinatal deaths which are discussed in the following paragraphs. It should be noted that owing to reconciliation difficulties between the sources of information from which the data is compiled, minor differences will be noted when comparing neo-natal deaths with infant deaths under four weeks shown in this section.



PERINATAL DEATHS

Perinatal deaths comprise:

- (a) *Foetal deaths*: a child not born alive, of at least twenty weeks gestation or 400 grams weight;
- (b) *Neo-natal deaths*: a live-born child dying within twenty-eight days after birth.

Legislation which became effective from the beginning of 1968 requires a Medical Certificate of Cause of Perinatal Death to be filled in by the attending

medical practitioner and forwarded to the Principal Registrar. Before 1968 neo-natal deaths were not separated for registration purposes from other deaths. However, from 1937 to 1967 a separate register of all still births (foetal deaths) was maintained by the Principal Registrar; registration of a still birth was compulsory and related to any child which after the twenty-eighth week of gestation did not breathe or show any signs of life at any time after being completely expelled from its mother. Only total numbers of the registered still births were recorded and no detailed statistics were compiled.

**Foetal Deaths, Neo-natal Deaths and Perinatal Deaths: Number and Rate
South Australia**

| Year | Males | | Females | | Total | |
|-----------------------------|--------|-------|---------|-------|--------|-------|
| | Number | Rate | Number | Rate | Number | Rate |
| FOETAL DEATHS (a) | | | | | | |
| 1971 | 142 | 11.89 | 108 | 9.55 | 250 | 10.75 |
| 1972 | 119 | 10.42 | 110 | 10.32 | 229 | 10.37 |
| 1973 | 120 | 11.33 | 124 | 12.33 | 244 | 11.82 |
| 1974 | 119 | 11.22 | 117 | 11.93 | 236 | 11.56 |
| 1975 | 92 | 8.93 | 97 | 9.83 | 189 | 9.37 |
| NEO-NATAL DEATHS (b) | | | | | | |
| 1971 | 143 | 12.12 | 123 | 10.98 | 266 | 11.57 |
| 1972 | 156 | 13.81 | 103 | 9.77 | 259 | 11.86 |
| 1973 | 115 | 10.98 | 70 | 7.05 | 185 | 9.07 |
| 1974 | 144 | 13.73 | 84 | 8.67 | 228 | 11.30 |
| 1975 | 89 | 8.72 | 59 | 6.04 | 148 | 7.41 |
| PERINATAL DEATHS (c) | | | | | | |
| 1971 | 285 | 23.87 | 231 | 20.43 | 516 | 22.20 |
| 1972 | 275 | 24.08 | 213 | 19.99 | 488 | 22.11 |
| 1973 | 235 | 22.18 | 194 | 19.29 | 429 | 20.77 |
| 1974 | 263 | 24.79 | 201 | 20.49 | 464 | 22.73 |
| 1975 | 181 | 17.56 | 156 | 15.80 | 337 | 16.70 |

(a) Foetal death rate is the number of foetal deaths per 1 000 of the total of live births and foetal deaths.

(b) Neo-natal death rate is the number of neo-natal deaths per 1 000 live births.

(c) Perinatal death rate is the number of perinatal deaths per 1 000 of the total of live births and foetal deaths.

Despite the improvements which have already been achieved, infant and perinatal mortality still presents one of the most challenging areas for medical and scientific research. Rh incompatibility is now a declining cause of death as a direct result of prophylactic immunisation. In Adelaide, research on placental efficiency and foetal anoxia has enabled pre-natal detection of impending danger, so that treatment can prevent damage or death of the foetus. Falling death rates attributable to placental disorders and anoxia is evidence of this.

Perinatal Deaths: Causes of Death, South Australia

| Cause of Death | 1972 | 1973 | 1974 | 1975 |
|---|------------|------------|------------|------------|
| Chronic circulatory and genito-urinary disease in mother | 2 | — | 1 | 2 |
| Other maternal conditions unrelated to pregnancy | 15 | 14 | 7 | 10 |
| Toxaemias of pregnancy | 37 | 39 | 34 | 19 |
| Maternal ante- and intrapartum infection | 10 | 4 | 3 | 1 |
| Difficult labour with abnormality of bones, organs or tissues of pelvis . . | 2 | 2 | 1 | 4 |
| Difficult labour with disproportion . . . | 2 | 1 | 2 | 2 |
| Difficult labour with malposition of foetus | 7 | 8 | 3 | 4 |
| Difficult labour with abnormality of forces of labour | 7 | — | 4 | 2 |
| Difficult labour with other and unspecified complications | 5 | 1 | 1 | 1 |
| Other complications of pregnancy and child-birth | 44 | 53 | 67 | 37 |
| Conditions of placenta | 91 | 75 | 93 | 69 |
| Conditions of umbilical cord | 19 | 29 | 18 | 19 |
| Birth injury without mention of cause . . | 4 | 3 | 1 | 3 |
| Haemolytic disease of new-born | 14 | 11 | 2 | 5 |
| Anoxic and hypoxic conditions not elsewhere classified | 68 | 55 | 79 | 42 |
| Other conditions of foetus and new-born | 56 | 32 | 56 | 38 |
| Congenital anomalies | 91 | 82 | 78 | 67 |
| Infections of foetus and new-born | 2 | 4 | 1 | 4 |
| Other diseases of foetus and new-born . . | 11 | 16 | 12 | 8 |
| External causes of injury to new-born . . | 1 | — | 1 | — |
| Total | 488 | 429 | 464 | 337 |

EXPECTATION OF LIFE

The expectation of life at age x is defined as the average number of years lived after age x by each of a group of persons aged exactly x years. Because detailed information of the age structure and mortality experience of the population is required, the calculation of the expectation of life for each age is generally based on a period which spans a population census (the only time at which a sufficiently accurate age distribution is available).

The table which follows shows the expectation of life at specified ages in Australia based on mortality experience in the decade to 1910 and for the three years spanning each of the Censuses of 1921, 1933, 1947, 1954, 1961, 1966 and 1971. Generally, the figures shown in the table indicate that the number of years which people of all ages in Australia can expect to live has increased steadily since the turn of the century.

Expectation of Life, Australia

| Age | 1901-10 | 1920-22 | 1932-34 | 1946-48 | 1953-55 | 1960-62 | 1965-67 | 1970-72 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| MALES | | | | | | | | |
| 0 | 55.2 | 59.2 | 63.5 | 66.1 | 67.1 | 67.9 | 67.6 | 67.8 |
| 5 | 57.9 | 60.4 | 62.6 | 63.8 | 64.3 | 64.8 | 64.4 | 64.5 |
| 10 | 53.5 | 56.0 | 58.0 | 59.0 | 59.5 | 59.9 | 59.5 | 59.7 |
| 15 | 49.0 | 51.4 | 53.4 | 54.3 | 54.7 | 55.1 | 54.6 | 54.8 |
| 20 | 44.7 | 47.0 | 48.8 | 49.6 | 50.1 | 50.4 | 50.0 | 50.2 |
| 25 | 40.6 | 42.7 | 44.4 | 45.0 | 45.5 | 45.8 | 45.4 | 45.6 |
| 30 | 36.5 | 38.4 | 39.9 | 40.4 | 40.9 | 41.1 | 40.7 | 40.9 |
| 35 | 32.5 | 34.2 | 35.5 | 35.8 | 36.3 | 36.5 | 36.0 | 36.2 |
| 40 | 28.6 | 30.1 | 31.1 | 31.2 | 31.7 | 31.8 | 31.4 | 31.6 |
| 45 | 24.8 | 26.0 | 26.9 | 26.8 | 27.2 | 27.4 | 27.0 | 27.1 |
| 50 | 21.2 | 22.2 | 22.8 | 22.7 | 22.9 | 23.1 | 22.8 | 22.9 |
| 55 | 17.7 | 18.5 | 19.0 | 18.8 | 19.0 | 19.2 | 18.8 | 18.9 |
| 60 | 14.3 | 15.1 | 15.6 | 15.4 | 15.5 | 15.6 | 15.3 | 15.4 |
| 65 | 11.3 | 12.0 | 12.4 | 12.3 | 12.3 | 12.5 | 12.2 | 12.2 |
| 70 | 8.7 | 9.3 | 9.6 | 9.6 | 9.6 | 9.8 | 9.5 | 9.5 |
| 75 | 6.6 | 6.9 | 7.2 | 7.2 | 7.3 | 7.5 | 7.3 | 7.3 |
| 80 | 5.0 | 5.0 | 5.2 | 5.4 | 5.5 | 5.6 | 5.5 | 5.5 |
| FEMALES | | | | | | | | |
| 0 | 58.8 | 63.3 | 67.1 | 70.6 | 72.8 | 74.2 | 74.2 | 74.5 |
| 5 | 60.8 | 63.6 | 65.6 | 67.9 | 69.6 | 70.8 | 70.6 | 71.0 |
| 10 | 56.4 | 59.2 | 61.0 | 63.1 | 64.8 | 65.9 | 65.8 | 66.1 |
| 15 | 51.9 | 54.6 | 56.3 | 58.3 | 59.9 | 61.0 | 60.8 | 61.2 |
| 20 | 47.5 | 50.0 | 51.7 | 53.5 | 55.1 | 56.2 | 56.0 | 56.4 |
| 25 | 43.4 | 45.7 | 47.2 | 48.7 | 50.2 | 51.3 | 51.2 | 51.5 |
| 30 | 39.3 | 41.5 | 42.8 | 44.1 | 45.4 | 46.5 | 46.3 | 46.7 |
| 35 | 35.4 | 37.3 | 38.4 | 39.5 | 40.7 | 41.7 | 41.6 | 41.9 |
| 40 | 31.5 | 33.1 | 34.0 | 34.9 | 36.0 | 37.0 | 36.9 | 37.2 |
| 45 | 27.6 | 29.0 | 29.7 | 30.5 | 31.4 | 32.3 | 32.3 | 32.6 |
| 50 | 23.7 | 24.9 | 25.6 | 26.1 | 27.0 | 27.9 | 27.8 | 28.1 |
| 55 | 19.9 | 21.0 | 21.6 | 22.0 | 22.8 | 23.6 | 23.6 | 23.8 |
| 60 | 16.2 | 17.2 | 17.7 | 18.1 | 18.8 | 19.5 | 19.5 | 19.7 |
| 65 | 12.9 | 13.6 | 14.2 | 14.4 | 15.0 | 15.7 | 15.7 | 15.9 |
| 70 | 10.0 | 10.4 | 11.0 | 11.1 | 11.6 | 12.2 | 12.2 | 12.4 |
| 75 | 7.6 | 7.7 | 8.2 | 8.3 | 8.7 | 9.2 | 9.2 | 9.4 |
| 80 | 5.7 | 5.6 | 6.0 | 6.0 | 6.3 | 6.7 | 6.7 | 6.9 |

5.4 MIGRATION

Powers and Legislation of the Commonwealth Government

Under the Constitution, the Commonwealth Parliament is empowered to make laws with respect to immigration, emigration, aliens and the influx of criminals.

Immigration into Australia is regulated by the *Migration Act* 1958 which came into force on 1 June 1959. The *Aliens Act* 1947 provides that a register of aliens shall be maintained for every State or mainland Territory of Australia and that, unless exempted, aliens sixteen years of age and over are

required to register with the Department of Immigration and Ethnic Affairs. Under the provisions of the *Australian Citizenship Act* 1948 aliens may, upon application, be granted citizenship; generally, this is after three years residence but may be earlier under certain circumstances. Legislation and conditions of immigration into Australia and of naturalisation are discussed in detail in the *Official Year Book of Australia*.

Assisted Migration

From early colonial times free or assisted passages were given to large numbers of migrants from Britain, and to lesser numbers from other countries. Responsibility for migrant recruitment and transport was originally with the Colonial Governments, then the States, and in 1920-21 was transferred to the Commonwealth Government.

After the 1939-45 War, Australia and Britain entered into agreements to provide free passages for ex-servicemen and assisted passages for other British migrants. The first agreement ended in 1955, but the assisted passage agreement continued until 1972. Since then Australia has provided unilateral assistance for British migrants.

Large-scale assisted migration from Europe began with Australian participation in the resettlement of Displaced Persons under the auspices of the International Refugee Organisation. Agreements with a number of European countries, either directly or through the agency of the Inter-Governmental Committee for European Migration, resulted in a preponderance of European assisted migration to Australia over the next twenty-five years. During this time Australia developed unilateral arrangements to assist other migrants from Europe, the United States and elsewhere.

Since May 1973 there has been a uniform policy on assisted migration from all countries, with priority given to the close dependent relatives of Australian residents and to persons whose skills are needed in Australia.

Assisted settler arrivals from January 1947 to June 1976 totalled 2 027 493 of whom 1 121 722 arrived under British schemes. Of the total, 228 203 stated on arrival that their proposed destination was South Australia.

Overseas Arrivals and Departures

Since 1924 the movements of overseas travellers have been classified into two main categories according to declared intention regarding residence short-term and long-term (including permanent). For short-term movements, overseas visitors and Australian residents are identified separately.

The principal categories of travellers according to stated purpose of travel are as follows:

Permanent movement; consisting of persons arriving with stated intent to settle permanently in Australia, and Australian residents departing with stated intent to reside permanently abroad.

Long-term movement; consisting of the arrival of visitors and the departure of residents with stated intent to stay (in Australia or in a country abroad respectively) for twelve months or more; and the departure of visitors and the return of Australian residents who have stayed (in Australia or in a country abroad respectively) for twelve months or more.

Short-term movement; consisting of all other movements, including the movement of Australian troops irrespective of period of stay.

The following table gives details for 1975 of overseas arrivals and departures of persons whose state of residence had been or was intended to be South Australia. For departures, State of residence refers to the State in which the traveller regards himself as living or as last having lived. State of intended residence for arrivals is derived from the intended address given by settlers and Australian residents returning after a journey abroad. Particularly in relation to the former, this information does not necessarily refer to the State in which a traveller will eventually establish a permanent residence.

Overseas Arrivals and Departures: Mode of Transport and Category of Traveller, State of Residence, South Australia, 1975

| Category of Traveller | By Sea | | By Air | | Total |
|--|--------------|--------------|---------------|---------------|---------------|
| | Males | Females | Males | Females | |
| ARRIVALS | | | | | |
| Assisted settlers | 258 | 274 | 847 | 897 | 2 276 |
| Other settlers | 95 | 108 | 816 | 925 | 1 944 |
| Total permanent | 353 | 382 | 1 663 | 1 822 | 4 220 |
| Long-term residents returning | 255 | 268 | 1 798 | 1 871 | 4 192 |
| Long-term visitors arriving | 12 | 11 | 663 | 456 | 1 142 |
| Total permanent and long-term | 620 | 661 | 4 124 | 4 149 | 9 554 |
| Short-term residents returning | 845 | 1 005 | 27 248 | 30 017 | 59 115 |
| Short-term visitors arriving | 224 | 254 | 8 262 | 9 171 | 17 911 |
| Total arrivals | 1 689 | 1 920 | 39 634 | 43 337 | 86 580 |
| DEPARTURES | | | | | |
| Former settlers | 206 | 208 | 984 | 1 032 | 2 430 |
| Other residents | 48 | 45 | 389 | 418 | 900 |
| Total permanent | 254 | 253 | 1 373 | 1 450 | 3 330 |
| Long-term residents departing | 300 | 340 | 2 217 | 2 062 | 4 919 |
| Long-term visitors departing | 38 | 40 | 878 | 702 | 1 658 |
| Total permanent and long-term | 592 | 633 | 4 468 | 4 214 | 9 907 |
| Short-term residents departing | 1 148 | 1 382 | 28 104 | 31 567 | 62 201 |
| Short-term visitors departing | 159 | 195 | 7 699 | 7 642 | 15 695 |
| Total departures | 1 899 | 2 210 | 40 271 | 43 423 | 87 803 |

Australian Citizenship

The status of 'Australian Citizen' was created under the *Nationality and Citizenship Act 1948* which came into force on 26 January 1949. The relevant Act is now the *Australian Citizenship Act 1948* and under its provisions all migrants, regardless of origin, are required to satisfy uniform requirements for the granting of citizenship.

In the table which follows, numbers of migrants granted citizenship are shown according to previous citizenship. From 1974 citizens of the United Kingdom (and colonies) and other Commonwealth nations were included for the first time. Before 1 December 1973 these persons were granted citizenship by registration.

Previous Citizenship of Persons Granted Australian Citizenship, South Australia

| Nationality | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 |
|--|-------|-------|-------|-------|-------|--------|
| Austrian | 51 | 46 | 31 | 25 | 14 | 41 |
| Cypriot | .. | .. | .. | .. | 4 | 57 |
| Czechoslovak | 18 | 19 | 76 | 104 | 57 | 111 |
| Dutch | 311 | 180 | 165 | 187 | 108 | 258 |
| Finnish | 23 | 11 | 12 | 18 | 19 | 31 |
| French | 29 | 16 | 32 | 61 | 35 | 91 |
| German | 253 | 161 | 161 | 279 | 132 | 416 |
| Greek | 550 | 608 | 626 | 961 | 671 | 1 520 |
| Hungarian | 55 | 52 | 25 | 23 | 22 | 41 |
| Indian | .. | .. | .. | .. | 20 | 99 |
| Irish | .. | .. | .. | .. | 1 | 68 |
| Italian | 684 | 534 | 453 | 739 | 435 | 1 109 |
| Lebanese | 17 | 19 | 27 | 49 | 27 | 95 |
| Malaysian | .. | .. | .. | .. | 19 | 60 |
| Maltese | .. | .. | .. | .. | 3 | 117 |
| Polish | 88 | 164 | 120 | 104 | 71 | 109 |
| South African | .. | .. | .. | .. | 15 | 65 |
| Spanish | 21 | 29 | 7 | 26 | 27 | 68 |
| Sri Lankan | .. | .. | .. | .. | 7 | 49 |
| Swiss | 4 | 6 | 9 | 10 | 15 | 27 |
| Turkish | 13 | 6 | 25 | 32 | 16 | 57 |
| UK and colonies, citizens of | .. | .. | .. | .. | 238 | 5 430 |
| US American | 8 | 5 | 9 | 22 | 25 | 37 |
| Yugoslav | 253 | 207 | 244 | 370 | 224 | 673 |
| Stateless | 75 | 21 | 25 | 49 | 34 | 54 |
| Other | 142 | 126 | 128 | 153 | 136 | 345 |
| Total | 2 595 | 2 210 | 2 175 | 3 212 | 2 375 | 11 028 |

There were 1 804 certificates of citizenship granted in 1974 and 9 212 in 1975. The 9 212 certificates issued included 1 816 children. Each certificate covers the new citizen and his/her children who are included under the *Australian Citizenship Act 1948*. At 30 May 1976, 36 879 registered adult aliens were residing in South Australia.

Entry for Residence

From January 1975, all persons living overseas other than New Zealand citizens who wish to come to Australia as settlers have had to obtain visas for entry. Under a reciprocal agreement with New Zealand, citizens of that country may enter Australia without prior authority and if travelling direct from New Zealand are not required to hold passports.

Australian migration policy enables priority to be given to 'family reunion' which involves spouses and dependent children (normally under eighteen years of age) and aged parents of permanent residents of Australia.

Sponsorship is necessary and nominations may also be accepted in respect of parents of working age provided that they are regarded as able to maintain themselves satisfactorily in Australia without becoming a charge on public funds. Persons whose entry is approved within the scope of 'family reunion' rules are required to meet only health and character requirements.

Nominations in favour of, applications from, refugees, displaced persons or those whose circumstances warrant special consideration on compassionate grounds may be considered under relaxed eligibility rules and selection standards in the light of their particular circumstances.

Citizens of the United Kingdom, Ireland or Canada may be considered for entry on a sponsored or unsponsored basis where close association with a permanent resident of Australia or a former close association with Australia can be shown. The people concerned must be self-supporting with the intention of retiring in Australia, and be able to meet all migrant standards excluding the need to have specific skills or qualifications.

Applications may be lodged overseas by intending migrants seeking entry on the basis of their having specific skills or qualifications which are recognised in Australia and listed as being in demand in this country. Applicants in this class may also be nominated if they have relatives or friends in Australia and they are required to meet all the requirements laid down for migrant entry, namely, that they be in sound health and of good character, have the personal qualities to enable them to fit into the Australian community, and will be economically viable in Australia.

5.5 CHARACTERISTICS OF THE POPULATION

Statistics relating to characteristics of the population of South Australia are derived from information obtained at each population census. The only characteristics available from the 1976 Census in time for this publication are those of age, sex, marital status and birthplace. Information from the 1971 Census on a variety of other topics is shown in the following section. Figures for censuses before 1966 exclude full-blood Aborigines.

Sex Distribution

The masculinity of the population of South Australia, *i.e.* the number of males to each 100 females at each census is shown below.

| Census Year | Masculinity | Census Year | Masculinity |
|-------------|-------------|-------------|-------------|
| 1844 | 126.1 | 1901 | 101.5 |
| 1846 | 130.4 | 1911 | 103.1 |
| 1851 | 124.3 | 1921 | 100.6 |
| 1855 | 103.8 | 1933 | 100.3 |
| 1861 | 105.3 | 1947 | 98.2 |
| 1866 | 109.2 | 1954 | 102.7 |
| 1871 | 105.6 | 1961 | 102.3 |
| 1876 | 107.0 | 1966 | 101.0 |
| 1881 | 111.4 | 1971 | 99.7 |
| 1891 | 105.6 | 1976 | 99.3 |

Before the 1971 Census the only census at which masculinity was less than 100 was 1947. The lower rate at the 1947 Census was partly attributable to the loss of male lives in the 1939-45 War, while the subsequent increase was mainly because of the predominantly male migration inflow of the early post-war period. This is shown very clearly in the following table which gives

masculinity in five-yearly age groups at the six Censuses 1947 to 1976. The larger number of males in the younger age groups reflects the fact that the masculinity of births is consistently over 100 while the higher male death rate is reflected in the very low masculinity ratios of the older age groups. In recent years the predominance of females in the upper age groups has more than offset the greater number of males in the younger age groups.

**Masculinity of Population According to Age, South Australia
Censuses 1947 to 1976**

| Age Last Birthday (Years) | 1947 | 1954 | 1961 | 1966 | 1971 | 1976 |
|---------------------------------|--------|--------|--------|--------|--------|--------|
| 0-4 | 104.30 | 104.46 | 103.21 | 105.73 | 105.07 | 106.10 |
| 5-9 | 106.18 | 104.85 | 104.98 | 104.01 | 105.61 | 105.35 |
| 10-14 | 104.60 | 105.38 | 105.75 | 105.26 | 103.90 | 106.27 |
| 15-19 | 100.43 | 105.27 | 105.55 | 104.70 | 103.43 | 102.43 |
| 20-24 | 95.29 | 113.81 | 109.21 | 103.05 | 99.73 | 101.12 |
| 25-29 | 96.70 | 111.99 | 110.23 | 104.00 | 103.03 | 100.69 |
| 30-34 | 99.26 | 106.65 | 110.78 | 105.49 | 101.34 | 101.48 |
| 35-39 | 101.27 | 105.80 | 105.31 | 108.13 | 103.85 | 101.59 |
| 40-44 | 107.23 | 107.05 | 104.86 | 104.43 | 107.41 | 104.48 |
| 45-49 | 99.93 | 110.99 | 107.65 | 104.45 | 103.07 | 107.51 |
| 50-54 | 89.83 | 104.54 | 106.49 | 104.43 | 101.38 | 101.91 |
| 55-59 | 96.52 | 91.53 | 105.42 | 101.79 | 101.44 | 98.88 |
| 60-64 | 93.65 | 87.94 | 88.90 | 97.59 | 94.03 | 95.13 |
| 65-69 | 88.05 | 87.80 | 77.48 | 80.52 | 88.85 | 86.56 |
| 70-74 | 83.07 | 81.72 | 78.01 | 68.46 | 71.06 | 78.19 |
| 75-79 | 77.76 | 73.53 | 71.88 | 69.06 | 59.34 | 60.26 |
| 80-84 | 70.90 | 66.71 | 62.44 | 60.33 | 56.42 | 47.38 |
| 85-89 | 65.19 | 62.38 | 59.06 | 52.12 | 48.27 | 45.09 |
| 90 and over . . . | 56.17 | 53.08 | 40.60 | 41.25 | 38.44 | 35.73 |
| All ages | 98.16 | 102.72 | 102.32 | 100.99 | 99.73 | 99.30 |

Age Distribution

Details of the age distribution of the population are of particular importance because, as well as revealing changes which have occurred in the age structure from one census to the next, they also supply basic material for the calculation of fertility rates, mortality rates, annuity rates and probabilities of survival.

Age distribution of the population at the two most recent censuses are given in the following table. Large absolute changes in population occurred in the age groups 25-29, which increased by 22 765, and 40-44, which fell by 8 460. The movement in these two age groups is partly because of the post 1939-45 War birth rate increase and the low birth rates of the depression years of the early 1930s respectively. The decrease in the lower age groups can in part be explained by the sharp decline in fertility in recent years.

The median age of the population of South Australia at the 1954 Census was 29.6 years, falling to 28.3 at the 1961 Census and 26.5 at the 1971 Census; this trend had reversed by the 1976 Census when the median age rose to 27.5 years (males 26.8 and females 28.3).

**Age Distribution of Population, South Australia
Censuses 1971 and 1976**

| Age Last Birthday (Years) | 30 June 1971 | | | 30 June 1976 (a) | | | Increase |
|------------------------------|--------------|---------|-----------|------------------|---------|-----------|-----------|
| | Males | Females | Persons | Males | Females | Persons | Persons |
| 0-4 | 55 308 | 52 641 | 107 949 | 52 158 | 49 158 | 101 316 | (-) 6 633 |
| 5-9 | 58 274 | 55 179 | 113 453 | 57 427 | 54 511 | 111 938 | (-) 1 515 |
| 10-14 | 60 358 | 58 090 | 118 448 | 59 952 | 56 416 | 116 368 | (-) 2 080 |
| 15-19 | 54 334 | 52 532 | 106 866 | 59 169 | 57 765 | 116 934 | 10 068 |
| 20-24 | 49 144 | 49 278 | 98 422 | 52 104 | 51 528 | 103 632 | 5 210 |
| 25-29 | 40 647 | 39 450 | 80 097 | 51 609 | 51 253 | 102 862 | 22 765 |
| 30-34 | 34 791 | 34 330 | 69 121 | 41 729 | 41 122 | 82 851 | 13 730 |
| 35-39 | 33 572 | 32 327 | 65 899 | 36 009 | 35 444 | 71 453 | 5 554 |
| 40-44 | 37 937 | 35 319 | 73 256 | 33 108 | 31 688 | 64 796 | (-) 8 460 |
| 45-49 | 37 673 | 36 551 | 74 224 | 37 201 | 34 603 | 71 804 | (-) 2 420 |
| 50-54 | 31 686 | 31 256 | 62 942 | 35 773 | 35 101 | 70 874 | 7 932 |
| 55-59 | 28 917 | 28 507 | 57 424 | 29 557 | 29 891 | 59 448 | 2 024 |
| 60-64 | 22 295 | 23 711 | 46 006 | 26 188 | 27 530 | 53 718 | 7 712 |
| 65-69 | 16 408 | 18 467 | 34 875 | 19 307 | 22 305 | 41 612 | 6 737 |
| 70-74 | 11 042 | 15 540 | 26 582 | 13 118 | 16 777 | 29 895 | 3 313 |
| 75-79 | 7 236 | 12 194 | 19 430 | 7 672 | 12 731 | 20 403 | 973 |
| 80-84 | 4 277 | 7 581 | 11 858 | 4 149 | 8 674 | 12 823 | 965 |
| 85-89 | 1 690 | 3 501 | 5 191 | 1 893 | 4 198 | 6 091 | 900 |
| 90 and over | 462 | 1 202 | 1 664 | 586 | 1 640 | 2 226 | 562 |
| Not stated | — | — | — | 1 481 | 2 243 | 3 724 | .. |
| Total | 586 051 | 587 656 | 1 173 707 | 620 190 | 624 578 | 1 244 768 | 71 061 |

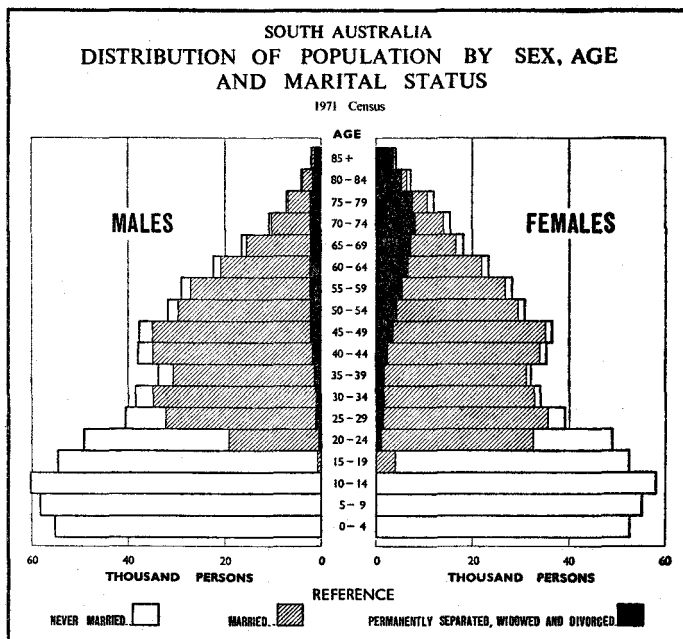
(a) Population as enumerated, not adjusted for underenumeration.

The next table shows that the proportion of the population under 15 years of age fell markedly between 1901 and 1947, rose significantly between 1947 and 1961 but since then has continued to fall. The proportion of the population 15 years and under 65 years showed an upward trend to 1947, maintained a fairly stable level of approximately 61 per cent, until recently when the upward trend has again become evident. The proportion of the population 65 years and over continued to rise over the period 1901 to 1954, fell slightly between 1954 and 1961 but again rose by 1976.

**Proportional Age Distribution of Population, South Australia
Censuses 1901 to 1976**

| Census | Males | | | Females | | | Persons | | |
|--------|----------------|-----------------------|-------------------|----------------|-----------------------|-------------------|----------------|-----------------------|-------------------|
| | Under 15 Years | 15 Years and Under 65 | 65 Years and Over | Under 15 Years | 15 Years and Under 65 | 65 Years and Over | Under 15 Years | 15 Years and Under 65 | 65 Years and Over |
| | Per cent | | | | | | | | |
| 1901 | 36.0 | 60.0 | 4.0 | 35.9 | 59.8 | 4.3 | 35.9 | 59.9 | 4.2 |
| 1911 | 31.1 | 64.4 | 4.5 | 31.3 | 63.8 | 4.9 | 31.2 | 64.1 | 4.7 |
| 1921 | 32.2 | 62.8 | 5.0 | 31.3 | 63.5 | 5.2 | 31.7 | 63.2 | 5.1 |
| 1933 | 26.8 | 66.6 | 6.6 | 26.0 | 66.6 | 7.4 | 26.4 | 66.6 | 7.0 |
| 1947 | 25.1 | 67.0 | 7.9 | 23.5 | 67.0 | 9.5 | 24.3 | 67.0 | 8.7 |
| 1954 | 29.2 | 62.9 | 7.9 | 28.6 | 61.3 | 10.1 | 28.9 | 62.1 | 9.0 |
| 1961 | 31.4 | 61.2 | 7.4 | 30.7 | 59.1 | 10.2 | 31.1 | 60.1 | 8.8 |
| 1966 | 30.7 | 62.4 | 7.0 | 29.5 | 60.5 | 10.0 | 30.1 | 61.4 | 8.5 |
| 1971 | 29.7 | 63.3 | 7.0 | 28.2 | 61.8 | 10.0 | 29.0 | 62.5 | 8.5 |
| 1976 | 27.3 | 65.1 | 7.6 | 25.7 | 63.6 | 10.7 | 26.5 | 64.4 | 9.1 |

The following diagram shows details of the sex, age and marital status of the population at the 1971 Census.



Marital Status

The marital status of the population was ascertained at the censuses, when a statement of never married, married, married but permanently separated (legally or otherwise), widowed, or divorced was required in respect of every person enumerated.

In 1976 the number of persons who were stated to have been never married represented 44.2 per cent of the total population, a lower proportion than in 1971. Married persons in 1976 represented 47.5 per cent of the total compared with 47.0 per cent in 1971.

At the 1971 Census 80.4 per cent of widowed persons were female and this proportion had increased to 81.6 per cent in 1976. The disparity between the number of widowed males and widowed females is the result of the greater longevity of females coupled with the usually younger age at marriage.

Marital Status of Population, South Australia
Censuses 1966 and 1971

| Marital Status | 30 June 1966 | | | | 30 June 1971 | | | |
|-----------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|
| | Males | | Females | | Males | | Females | |
| | Number | Per Cent | Number | Per Cent | Number | Per Cent | Number | Per Cent |
| Never married: | | | | | | | | |
| Under 15 years of age | 168 881 | 30.69 | 160 866 | 29.53 | 173 940 | 29.68 | 165 910 | 28.23 |
| 15 years of age and over | 110 983 | 20.17 | 81 906 | 15.03 | 113 130 | 19.30 | 85 163 | 14.49 |
| Total never married | 279 864 | 50.87 | 242 772 | 44.56 | 287 070 | 48.99 | 251 073 | 42.72 |
| Married | 249 571 | 45.36 | 249 290 | 45.76 | 275 465 | 47.00 | 276 232 | 47.01 |
| Married but permanently separated | 5 503 | 1.00 | 6 214 | 1.14 | 6 565 | 1.12 | 7 204 | 1.23 |
| Widowed | 11 019 | 2.00 | 41 658 | 7.65 | 11 364 | 1.94 | 46 617 | 7.93 |
| Divorced | 4 239 | 0.77 | 4 854 | 0.89 | 5 587 | 0.95 | 6 530 | 1.11 |
| Total | 550 196 | 100.00 | 544 788 | 100.00 | 586 051 | 100.00 | 587 656 | 100.00 |

Country of Birth

The Australian-born content of the population in South Australia was 85.7 per cent in 1911, 88.3 per cent in 1921, 90.3 per cent in 1933, and 93.3 per cent in 1947. Overseas migration had lowered the proportion of Australian-born persons to 86.1 per cent by 1954, while in 1976 the proportion was down to 76.3 per cent. The proportion of the population born in the United Kingdom, including the Republic of Ireland, fell from 11.0 per cent in 1911 to 5.1 per cent in 1947 and rose to 12.7 per cent in 1976.

Country of Birth of Population, South Australia
Censuses 1966 and 1971

| Country of Birth | 30 June 1966 | | 30 June 1971 | | Increase |
|--|------------------|----------------|----------------|------------------|---------------|
| | Persons | Males | Females | Persons | Persons |
| Australia | 849 036 | 439 365 | 454 273 | 893 638 | 44 602 |
| New Zealand | 2 188 | 1 657 | 1 569 | 3 226 | 1 038 |
| Europe: | | | | | |
| United Kingdom and Republic of Ireland | 122 030 | 74 929 | 73 091 | 148 020 | 25 990 |
| Germany | 16 213 | 7 582 | 7 828 | 15 410 | (-)803 |
| Greece | 14 660 | 7 716 | 7 001 | 14 717 | 57 |
| Italy | 30 848 | 17 675 | 14 753 | 32 428 | 1 580 |
| Netherlands | 12 443 | 6 252 | 5 491 | 11 743 | (-)700 |
| Poland | 7 253 | 4 271 | 2 787 | 7 058 | (-)195 |
| Yugoslavia | 6 352 | 5 269 | 3 662 | 8 931 | 2 579 |
| Other | 22 606 | 12 863 | 9 952 | 22 815 | 209 |
| Total Europe | 232 405 | 136 557 | 124 565 | 261 122 | 28 717 |
| Other countries | 11 355 | 8 472 | 7 249 | 15 721 | 4 366 |
| Total born outside Australia | 245 948 | 146 686 | 133 383 | 280 069 | 34 121 |
| Total | 1 094 984 | 586 051 | 587 656 | 1 173 707 | 78 723 |

From the 1976 Census preliminary figures for country of birth are Australian born 930 005 persons, United Kingdom and Republic of Ireland born 154 680 persons and all other countries 133 566 persons. (Not stated 26 517 persons).

Religion

Information on the religious affiliations of the population is obtained only at population censuses. There is, however, no legal obligation to answer the question on religion and at the 1971 Census respondents representing approximately 6 per cent of the South Australian population chose not to answer.

1966 details of religion are excluded from the following table because of lack of comparability in question wording and schedule design between 1966 and 1971. Figures from the 1976 Census relating to religious denomination are not yet available.

Religious Denomination of Population, South Australia Census 30 June 1971

| Religious Denomination | Males | Females | Persons | Persons Percentage of Total |
|---|----------------|----------------|------------------|-----------------------------------|
| Christian: | | | | |
| Baptist | 10 146 | 11 864 | 22 010 | 1.9 |
| Brethren | 573 | 619 | 1 192 | 0.1 |
| Catholic, Roman (a) | 57 861 | 55 950 | 113 811 | 9.7 |
| Catholic (a) | 63 147 | 65 208 | 128 355 | 10.9 |
| Churches of Christ | 10 368 | 12 434 | 22 802 | 1.9 |
| Church of England | 138 951 | 147 803 | 286 754 | 24.4 |
| Congregational | 6 929 | 8 309 | 15 238 | 1.3 |
| Lutheran | 30 702 | 31 939 | 62 641 | 5.3 |
| Methodist | 102 778 | 112 550 | 215 328 | 18.3 |
| Orthodox | 17 194 | 15 442 | 32 636 | 2.8 |
| Presbyterian | 19 416 | 20 504 | 39 920 | 3.4 |
| Salvation Army | 3 838 | 4 349 | 8 187 | 0.7 |
| Seventh Day Adventist | 1 271 | 1 604 | 2 875 | 0.2 |
| Protestant (undefined) | 12 921 | 13 686 | 26 607 | 2.3 |
| Other (including Christian undefined) | 11 342 | 12 178 | 23 520 | 2.0 |
| Total Christian | 487 437 | 514 439 | 1 001 876 | 85.4 |
| Non-Christian: | | | | |
| Hebrew | 552 | 579 | 1 131 | 0.1 |
| Other | 1 199 | 853 | 2 052 | 0.2 |
| Total Non-Christian | 1 751 | 1 432 | 3 183 | 0.3 |
| Indefinite | 2 091 | 1 660 | 3 751 | 0.3 |
| No religion | 57 868 | 38 006 | 95 874 | 8.2 |
| No reply | 36 904 | 32 119 | 69 023 | 5.9 |
| Total | 586 051 | 587 656 | 1 173 707 | 100.0 |

(a) So described in individual census schedules.

The Church of England has always had the greatest number of adherents, its relative importance having been fairly consistent since 1866 when it accounted for 31.8 per cent of answers compared with 24.4 per cent in 1971.

Changes in the pattern of religious affiliation appear to some extent attributable to migratory movements. This is particularly noticeable in the case of Catholics (*i.e.* persons described as either Catholics or Roman Catholics) who accounted for only 14.3 per cent of the answers in 1933 compared with 20.6 per cent in 1971, thus reflecting the pattern of post-war migration.

Period of Residence in Australia

The post-war migration flow into Australia is shown by the number of persons who have taken up residence in Australia since the late 1940s.

**Period of Residence in Australia of Persons in South Australia
Censuses 1966 and 1971**

| Period of Residence in Australia | 30 June 1966 | | | 30 June 1971 | | | |
|----------------------------------|----------------|----------------|------------------|----------------|----------------|------------------|--------------|
| | Males | Females | Persons | Residents | | | Visitors |
| | | | | Males | Females | Persons | Persons |
| Under 1 year | 12 235 | 11 062 | 23 297 | 7 686 | 7 460 | 15 146 | } 2 123 |
| 1 year and under 2 | 10 332 | 9 742 | 20 074 | 8 309 | 8 034 | 16 343 | |
| 2 years and under 3 | 8 834 | 8 262 | 17 096 | 6 950 | 6 724 | 13 674 | |
| 3 years and under 4 | 5 961 | 5 757 | 11 718 | 4 962 | 4 721 | 9 683 | |
| 4 years and under 5 | 4 349 | 4 441 | 8 790 | 6 032 | 6 003 | 12 035 | |
| 5 years and over | 87 919 | 73 586 | 161 505 | 103 438 | 92 166 | 195 604 | } 466 |
| Not stated | 1 935 | 1 533 | 3 468 | 6 887 | 7 005 | 13 892 | |
| Born outside Australia | 131 565 | 114 383 | 245 948 | 144 264 | 132 113 | 276 377 | 3 692 |
| Born in Australia | 418 631 | 430 405 | 849 036 | 439 365 | 454 273 | 893 638 | .. |
| Total | 550 196 | 544 788 | 1 094 984 | 583 629 | 586 386 | 1 170 015 | 3 692 |

At the 1971, and previous censuses, details of period of residence in Australia were sought from overseas born. In 1947 there were 43 552 residents in South Australia (including visitors) who were not born in Australia and only 5 per cent of these had lived in Australia for less than five years. By 1954 the number of such persons had risen to 110 605, of whom 51 per cent had resided in Australia for less than five years. By 1971 the number (excluding visitors) had increased to 276 377, but the proportion of those who had lived in Australia for less than five years had fallen to 24.2 per cent.

For the first time, in 1971, overseas born persons were asked to specify whether they were a resident of Australia or a visitor to Australia. At the 1971 Census, of the 280 069 overseas born persons in South Australia, 3 692 (1.3 per cent) were visitors to Australia.

Nationality

The nationality (or country of allegiance) of the population of South Australia at June 1966 and 1971 is given in the following table. For purposes of this table, Irish nationality is included with British. Decreases in the number of persons of most nationalities in 1971 are partly because of British naturalisation of former aliens. Persons of British nationality represented 99.7 per cent of the State population in 1947, but this proportion had fallen to 94.9 per cent by 1971.

**Nationality (i.e. Allegiance) of Population, South Australia
Censuses 1966 and 1971**

| Nationality | 30 June 1966 | | 30 June 1971 | | Increase |
|---------------------------------|------------------|----------------|----------------|------------------|---------------|
| | Persons | Males | Females | Persons | Persons |
| British (a): | | | | | |
| Born in Australia | 849 036 | 439 365 | 454 273 | 893 638 | 44 602 |
| Born outside Australia | 193 955 | 114 961 | 104 670 | 219 631 | 25 676 |
| Total British | 1 042 991 | 554 326 | 558 943 | 1 113 269 | 70 278 |
| Foreign: | | | | | |
| Dutch | 6 677 | 2 391 | 2 226 | 4 617 | (-) 2 060 |
| German | 5 682 | 2 173 | 1 996 | 4 169 | (-) 1 513 |
| Greek | 9 863 | 4 400 | 4 403 | 8 803 | (-) 1 060 |
| Italian | 17 762 | 9 006 | 8 367 | 17 373 | (-) 389 |
| Polish | 1 611 | 572 | 497 | 1 069 | (-) 542 |
| US American | 816 | 1 022 | 731 | 1 753 | 937 |
| Yugoslav | 2 492 | 2 007 | 1 577 | 3 584 | 1 092 |
| Other | 5 932 | 5 095 | 3 964 | 9 059 | 3 127 |
| Stateless | 1 158 | 5 059 | 4 952 | 10 011 | 8 853 |
| Total foreign | 51 993 | 31 725 | 28 713 | 60 438 | 8 445 |
| Total | 1 094 984 | 586 051 | 587 656 | 1 173 707 | 78 723 |

(a) Includes Irish.

Educational Attainment

Level of Schooling

At the 1971 Census information was sought for the first time on the highest level of schooling attended. The following table summarises the details obtained for South Australia.

**Level of Schooling of Population, South Australia
Census 1971**

| Highest Level Attended | Currently Attending School | | | Not Currently Attending School | | |
|---|----------------------------|----------------|----------------|--------------------------------|----------------|----------------|
| | Males | Females | Persons | Males | Females | Persons |
| Child not yet attending school | .. | .. | .. | 56 767 | 53 990 | 110 757 |
| Primary: | | | | | | |
| Grades 1, 2, 3 | 40 144 | 37 010 | 77 154 | 4 674 | 5 079 | 9 753 |
| Grade 4 | 12 881 | 12 129 | 25 010 | 4 819 | 5 253 | 10 072 |
| Grade 5 | 12 989 | 12 300 | 25 289 | 12 054 | 12 236 | 24 290 |
| Grade 6 | 12 671 | 12 196 | 24 867 | 16 043 | 15 943 | 31 986 |
| Grade 7 | 12 384 | 12 052 | 24 436 | 82 239 | 93 903 | 176 142 |
| Secondary: | | | | | | |
| 1st Year | 12 460 | 11 636 | 24 096 | 28 317 | 31 023 | 59 340 |
| 2nd Year | 11 934 | 11 524 | 23 458 | 45 022 | 49 247 | 94 269 |
| 3rd Year | 10 147 | 9 849 | 19 996 | 73 308 | 83 512 | 156 880 |
| 4th Year | 7 849 | 6 515 | 14 364 | 51 029 | 49 130 | 100 159 |
| 5th Year | 3 598 | 2 523 | 6 121 | 60 070 | 44 690 | 104 760 |
| Total at school | 137 057 | 127 734 | 264 791 | .. | .. | .. |
| Other, never attended school | .. | .. | .. | 2 206 | 2 920 | 5 126 |
| Not stated | .. | .. | .. | 12 386 | 12 996 | 25 382 |
| Total population | 137 057 | 127 734 | 264 791 | 448 994 | 459 922 | 908 916 |

Educational Qualifications

At the 1971 Census information was sought on the type of educational qualification obtained. The following table shows that of the total population 15 years of age and over, only 19.5 per cent had obtained any educational qualification since leaving school.

**Educational Qualifications of Population, South Australia
Census 1971**

| Highest Level of Qualification Obtained | Males | Females | Persons |
|--|----------------|----------------|----------------|
| No qualification | 294 747 | 376 279 | 671 026 |
| Trade level | 76 688 | 7 595 | 84 283 |
| Technician level | 13 331 | 13 439 | 26 770 |
| Tertiary (excluding degrees) | 12 721 | 12 369 | 25 090 |
| Bachelor degree, post graduate-diploma or equivalent | 9 341 | 3 063 | 12 404 |
| Higher degree level or equivalent | 1 477 | 302 | 1 779 |
| Qualification not classified by level | 3 773 | 8 676 | 12 449 |
| Inadequately described | 33 | 23 | 56 |
| Total with qualifications | 117 364 | 45 467 | 162 831 |
| Total population 15 years of age and over | 412 111 | 421 746 | 833 857 |

Other Characteristics

Some census details of occupation, occupational status and industry are set out in Part 7.1.

SOCIAL ENVIRONMENT

6.1 LAW, ORDER AND PUBLIC SAFETY

LAW AND ADMINISTRATION

The law in force in South Australia consists of:

- (i) so much of the common law of England and such English statute law as came into force on the original settlement of the colony in 1836;
- (ii) Acts passed by the Parliament of the State of South Australia, together with regulations, rules, orders, etc. made thereunder;
- (iii) Acts passed by the Commonwealth Parliament within the scope of its allotted powers, together with regulations, rules, orders, etc. made thereunder;
- (iv) Imperial law binding South Australia as part of the British Commonwealth, as part of Australia or as a State—subject, since 1931, to the Statute of Westminster (this relates mainly to external affairs or matters of Imperial concern);
- (v) Case law (this consists of judicial decisions of the English, Commonwealth or State Courts, respectively, and represents an important part of the law in force in South Australia).

The scope of Commonwealth legislation is limited to the subjects specified in the Commonwealth Constitution. In some cases Commonwealth Government powers of legislation are exclusive of, in others concurrent with, those of the State. In all cases of conflict, valid Commonwealth laws override State laws.

LEGAL PROFESSION

Legal practitioners in South Australia are admitted to the Bar, after the prescribed academic training and service in articles, as barristers and solicitors. This means that the legal profession is not divided, as it is in New South Wales, Victoria and Queensland—a practitioner is entitled to act in either capacity.

The legal profession is controlled by the Legal Practitioners Act, 1936-1972. Rules of Court regulate articles of clerkship and prescribe the conditions of entry to the profession. Practitioners duly admitted to practice, and who are principals, have the right of audience in all courts of South Australia; those other than principals have this right in all courts except the Supreme Court. The Act provides for the hearing of charges of unprofessional conduct by the statutory committee of the Law Society and for its report to be referred to the Supreme Court which may make any order it thinks fit.

In 1976 there were 527 legal practitioners in private practice in South Australia.

LEGAL DEPARTMENT

In South Australia the Attorney-General is a Minister of State Parliament. There is a Solicitor-General who, under the Attorney-General, acts as principal legal adviser to the Government.

The Attorney-General is charged with the conduct of business relating to the Supreme Court and inferior Courts as well as statute law revision and consolidation. He also advises Ministers on questions on which his legal opinion is required, initiates and defends proceedings by and against the State and determines whether informations should be laid in cases of indictable offences.

The Attorney-General also administers Acts of Parliament relating to justices, coroners, lands titles, registration of companies and business names, liquor licensing, the Electoral Department and various vocational licences.

The Department of Legal Services administers the Local and District Criminal Courts and Courts of Summary Jurisdiction, the Crown Law Office, the Government Reporting Division and ancillary legal research services.

SUPREME COURT

The various jurisdictions of the Court are civil, criminal, land and valuation, matrimonial causes and testamentary causes.

Judges of the Supreme Court are appointed by commission of the Governor on the advice of the Executive Council. A person may not be appointed a judge of the Supreme Court unless he is a legal practitioner of ten years standing.

The Supreme Court Act, 1935-1975, provides *inter alia* for the constitution, jurisdiction, powers and duties of the Supreme Court and its judges. One of the powers of the judges of the Court of particular importance is that of making Rules of Court regulating the procedure of the Court. In particular the Rules, which are published in the *South Australian Government Gazette*, regulate the admission to practice of practitioners of the Supreme Court and control their conduct.

There are at present ten judges of the Supreme Court, comprising the Chief Justice, Dr J. J. Bray, QC, and nine puisne judges. A judge holds office until the

age of seventy years at a salary fixed by statute. The Court sits in Adelaide, but holds circuit sessions three times each year at Port Augusta and Mount Gambier.

Civil and Criminal Jurisdiction

Generally speaking, the Supreme Court has unlimited civil and criminal jurisdiction, except in respect of matters which are reserved for the original jurisdiction of Commonwealth Courts. The Court as a rule determines its own practice.

Following the establishment of District Criminal Courts, jurisdiction to hear many indictable offences was vested in these Courts late in 1970.

Crimes and misdemeanours prosecuted by indictment in the Supreme Court must be tried before a jury of twelve persons who find as to the facts of the case; the penalty being determined by the judge. The Court has original jurisdiction over all litigious matters arising in the State except where its jurisdiction is excluded by statute. Its original jurisdiction is usually exercised by one judge although it is possible in theory to try a civil issue with a jury.

The Court also has power to restrain inferior courts from acting in excess of their jurisdiction and may, by order, compel them to enforce a legal right. The Court also acts as a court of appeal from inferior courts. In proper cases, appeals may be carried from decisions of the Supreme Court to the High Court of Australia.

The following table gives details of persons tried and convicted for the years 1972 to 1976. In the post-war period to the end of 1976 a total of fifty-six persons were sentenced to death in South Australia; forty-one of these sentences were subsequently commuted. The last execution in South Australia occurred in 1964; no female has been executed in the State since 1873. The Statutes Amendment (Capital Punishment Abolition) Act, 1976 assented to on 23 December 1976 abolished capital punishment in South Australia.

Supreme and Circuit Courts: Trials and Convictions, South Australia

| Year | Tried | | Convicted | |
|------|-------|---------|-----------|---------|
| | Males | Females | Males | Females |
| 1972 | 114 | 12 | 95 | 10 |
| 1973 | 149 | 21 | 125 | 17 |
| 1974 | 153 | 10 | 132 | 10 |
| 1975 | 188 | 9 | 149 | 6 |
| 1976 | 188 | 17 | 143 | 15 |

Details of convictions classified by type of offence are set out in the following table.

Supreme and Circuit Courts: Persons Convicted, South Australia^(a)

| Type of Offence | 1972 | 1973 | 1974 | 1975 | 1976 |
|--|------------|------------|------------|------------|------------|
| Offences against the person: | | | | | |
| Murder and attempted murder | 4 | 5 | 8 | 6 | 9 |
| Other acts causing death, injury or endangering life | 14 | 17 | 24 | 30 | 21 |
| Robbery | 32 | 40 | 40 | 44 | 38 |
| Offences against females | 7 | 16 | 20 | 15 | 18 |
| Unnatural offences | 2 | 4 | — | — | 1 |
| Other offences against the person | 2 | 1 | 3 | 3 | — |
| Total | 61 | 83 | 95 | 98 | 87 |
| Offences against property: | | | | | |
| Breaking and entering and burglary | 5 | 16 | 12 | 5 | 12 |
| Embezzlement and stealing by servants | — | — | — | 1 | 1 |
| Fraud and false pretences | 2 | 2 | 1 | 2 | 1 |
| Other offences against property | 5 | 12 | 13 | 14 | 28 |
| Total | 12 | 30 | 26 | 22 | 42 |
| Other offences: | | | | | |
| Forgery and offences against the currency | 10 | 13 | 16 | 21 | 17 |
| Breach of recognisance | 6 | 5 | 2 | — | 7 |
| Other | 16 | 11 | 3 | 14 | 5 |
| Total | 32 | 29 | 21 | 35 | 29 |
| Total (all offences) | 105 | 142 | 142 | 155 | 158 |

(a) In the case of multiple charges, where more than one conviction is recorded, the most serious offence is counted.

Testamentary Causes Jurisdiction

The Supreme Court in its testamentary causes jurisdiction is the only authority competent to grant probate of the will, or administration of the estate, of any deceased person who leaves real or personal property in the State. With a few exceptions, the property of a deceased person cannot be dealt with in any way until a grant has been obtained. Pending a grant of probate or administration, all property of a deceased person, in respect of which he died intestate, is vested in the Public Trustee. The Court does not issue a grant until succession duty (if any) on the estate has been paid or security accepted for the due payment of duty.

The powers of the Court are exercised by a judge, the Master and the Registrar or Deputy Registrar of Probates. The latter deal with all applications for probate and administration where there is no contention and any matters prescribed by the rules. In cases of doubt or difficulty, the Registrar may obtain the direction of a Judge. The records of the Court are available for public inspection, and copies of wills and other documents may be obtained.

Some statistics of the estates of deceased persons appear in Part 12.3.

LOCAL AND DISTRICT CRIMINAL COURTS

Local and District Criminal Courts are now constituted under the Local and District Criminal Courts Act, 1926-1975. An amendment to the Act in 1969 increased the jurisdiction of Local Courts, established District Criminal Courts and provided for the appointment of a Senior Judge and other judges.

Local Courts

Local Courts were first established in South Australia by an ordinance of 1850 and originally had criminal as well as civil jurisdiction. The Local Courts Act, 1926 effected important alterations in the structure and jurisdiction of Local Courts by abolishing juries in Local Courts and also justices as constituent members of Courts of Full Jurisdiction (except on the application of a party), by conferring equitable jurisdiction on the Local Court of Adelaide of Full Jurisdiction, and by giving a full appeal to the Supreme Court on facts as well as on law from all judgments, determinations and orders of local courts in actions involving more than \$60.

Local Courts are divided into three groups—Full Jurisdiction, Limited Jurisdiction and Special Jurisdiction. The courts vested with all three jurisdictions are the Local Courts of Adelaide, Berri, Mount Gambier, Port Lincoln, Port Pirie and Whyalla. These courts may hear and determine actions for amounts up to \$20 000. The equitable jurisdiction provisions have also been extended to all Local Courts of Full Jurisdiction. Local Courts of Limited Jurisdiction may hear and determine claims of up to \$2 500, with special provisions for hearing 'small claims' as defined for a pecuniary sum not exceeding \$500. Courts of Special Jurisdiction may hear and determine any unsatisfied judgment summons whatever the amount of the judgment.

Local Courts: Summary of Transactions, South Australia

| Year | Total Claims | | Verdicts and Judgments | | | | Service and Execution of Process Act | |
|----------------|------------------------|-----------------|------------------------|--------|----------------------|--------|---|--------|
| | Sum-moneses Issued (a) | Amount Sued For | Verdicts by Trial | | Judgement by Default | | Sum-moneses for Service out of Jurisdiction | Amount |
| | | | Number | Amount | Number | Amount | | |
| | | \$'000 | | \$'000 | | \$'000 | | \$'000 |
| 1971 | 98 181 | 13 435 | 1 916 | 1 291 | 45 013 | 5 501 | 1 787 | 978 |
| 1972 | 101 780 | 19 128 | 1 595 | 1 346 | 45 082 | 4 911 | 1 755 | 973 |
| 1973 | 95 474 | 19 660 | 1 564 | 1 447 | 40 657 | 6 034 | 752 | 1 047 |
| 1974 | 93 375 | 24 615 | 1 678 | 1 951 | 36 853 | 6 264 | 1 815 | 1 117 |
| 1975 | 84 607 | 26 109 | 2 356 | 4 013 | 34 079 | 8 133 | 1 812 | 1 722 |

(a) Including those withdrawn or settled out of Court.

A Local Court of Full Jurisdiction may be constituted of a Judge of the Supreme Court or a Local Court judge, and exercise all jurisdictions under the Act. A special magistrate may exercise limited jurisdiction and special jurisdiction, while two justices of the peace sitting together or one special justice sitting alone may exercise special jurisdiction only.

Any Local Court may reserve any question of law arising in any action for the decision of the Supreme Court, and any party who is dissatisfied with any final judgment, determination or order of a Local Court, if the claim exceeds \$500, may appeal to the Supreme Court. Appeals involving claims under \$500 may be made if leave of the Supreme Court is obtained.

Pursuant to Section 28 of the Act the Governor may appoint the Senior Judge or any other judge to make rules of court for carrying into effect the Act or any other Act conferring jurisdiction upon Local Courts.

District Criminal Courts

These courts came into operation on 31 August 1970 and have jurisdiction to hear and determine many of the indictable offences that previously could only be tried by the Supreme Court. The State is divided into three proclaimed districts; Central Criminal Court District, Northern Criminal Court District, and the South Eastern Criminal Court District.

The jurisdiction of a District Criminal Court is exercisable by a District Criminal Court Judge sitting in open court, with or without a jury, or in chambers as the case may require. The Crown is represented in District Criminal Courts by the Attorney-General or by counsel appearing on his behalf. The other party may conduct his own case or may engage counsel on his behalf. A person who is not a practitioner of the Supreme Court entitled to practise cannot appear in a District Criminal Court on behalf of any party.

District Criminal Courts: Convictions, South Australia

| Type of Offence | Convicted | | | |
|--|------------|------------|------------|------------|
| | 1973 | 1974 | 1975 | 1976 |
| Offences against the person: | | | | |
| Acts (except murder) causing death, injury or endangering life | 67 | 63 | 78 | 83 |
| Offences against females | 101 | 84 | 44 | 28 |
| Unnatural offences | 11 | 5 | 11 | 19 |
| Other offences against the person | 3 | 13 | 16 | 22 |
| Total | 182 | 165 | 149 | 152 |
| Offences against property: | | | | |
| Breaking and entering and burglary | 445 | 358 | 397 | 460 |
| Embezzlement and stealing by servants | 6 | 18 | 11 | 11 |
| Fraud and false pretences | 36 | 30 | 30 | 29 |
| Other offences against property | 65 | 76 | 111 | 118 |
| Total | 552 | 482 | 549 | 618 |
| Offences against good order | 46 | 39 | 88 | 97 |
| Other offences | 60 | 78 | 48 | 82 |
| Total (all offences) | 840 | 764 | 834 | 949 |

Appeals against verdicts and sentences of District Criminal Courts are to the Full Court.

Pursuant to Section 321 of the Act the Senior Judge and two other judges may make rules of court for carrying into effect the district criminal court provisions of the Act.

COURTS OF SUMMARY JURISDICTION

Courts of Summary Jurisdiction are held in all major towns to hear criminal cases. In offences of dishonesty their jurisdiction is in most instances confined to cases where the property value is not more than \$400, and the limit of their jurisdiction as to penalty is imprisonment for two years. Their procedure is regulated by the Justices Act, 1921-1976. They are presided over, either by a special magistrate, a special justice or by two justices of the peace, with the more serious causes generally being heard by a special magistrate.

Special magistrates are appointed under the Justices Act and the Local Courts Act, and each appointment must be approved by the Chief Justice. Generally appointees are required to be practitioners of the Supreme Court who have been practising for some years.

Courts of Summary Jurisdiction (Magistrates Courts), Persons Convicted South Australia^(a)

| Offence | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|---|---------|---------|---------|---------|
| Against the person | 697 | 584 | 718 | 888 |
| Against property: | | | | |
| Burglary and housebreaking | 48 | 22 | 1 | — |
| Larceny (various) | 1 906 | 1 865 | 1 996 | 2 223 |
| Other | 1 546 | 1 381 | 1 254 | 1 430 |
| Against morality | 288 | 185 | 167 | 146 |
| Against good order: | | | | |
| Drug offences | 121 | 116 | 150 | 274 |
| Drunkenness | 9 975 | 8 314 | 7 973 | 6 736 |
| Unlawfully on premises | 348 | 307 | 258 | 307 |
| Vagrancy | 520 | 308 | 206 | 152 |
| Other | 2 930 | 2 092 | 2 200 | 2 731 |
| Other, relating to: | | | | |
| Road Traffic and Motor Vehicles Acts . . | 71 255 | 59 303 | 57 518 | 70 732 |
| Licensing Act | 661 | 495 | 250 | 299 |
| Community Welfare Act | 1 063 | 1 267 | 1 523 | 565 |
| Police Offences Act | 1 295 | 1 055 | 1 020 | 1 091 |
| Local Government Act | 5 679 | 5 293 | 5 620 | 6 836 |
| Broadcasting and Television Act | 2 883 | 2 250 | 2 919 | 608 |
| Income Tax Assessment Act | 2 637 | 1 452 | 1 591 | 1 702 |
| Other | 8 364 | 7 779 | 7 673 | 7 682 |
| Total persons convicted: | | | | |
| Males | 101 323 | 84 143 | 81 812 | 92 296 |
| Females | 10 893 | 9 925 | 11 225 | 12 106 |
| Total | 112 216 | 94 068 | 93 037 | 104 402 |

(a) Excludes juveniles. Where multiple charges have been laid against one individual at the same time each type of offence has been counted separately.

Offences under the Road Traffic and Motor Vehicles Acts accounted for 68 per cent of total convictions in 1974-75—this compares with 55 per cent in 1964-65 and 50 per cent in 1954-55.

JUVENILE COURTS

Proceedings in juvenile courts are regulated by the Juvenile Courts Act, 1971-1975 which came into force on 1 July 1972. The Senior Judge appointed under this Act exercises administrative control over juvenile courts throughout the State.

Juvenile courts may be presided over by a judge, a special magistrate or, in certain circumstances, either a special justice or two justices of the peace who have been approved as suitable to exercise this jurisdiction. The courts, if constituted of a judge or a special magistrate may try any offence (except homicide) committed by a juvenile. Limitations are placed on the jurisdiction of special justices or two justices of the peace.

Juvenile Offenders: Offences Proved in Juvenile Courts and Aid Panels South Australia^(a)

| Type of Offence | Juvenile Courts | | Juvenile Aid Panels | |
|---------------------------------------|-----------------|--------------|---------------------|--------------|
| | 1974-75 | 1975-76 | 1974-75 | 1975-76 |
| Homicide | 6 | 3 | — | — |
| Assault | 233 | 267 | 54 | 80 |
| Robbery | 39 | 47 | 1 | 4 |
| Rape | 7 | 14 | — | — |
| Other heterosexual offences | 68 | 75 | 8 | 27 |
| Breaking and entering | 1 327 | 1 220 | 612 | 461 |
| Vehicle theft | 1 015 | 1 130 | 168 | 201 |
| Other theft | 1 417 | 1 510 | 2 499 | 2 365 |
| Wilful damage | 302 | 323 | 271 | 282 |
| Receiving | 104 | 117 | 155 | 114 |
| Fraud | 214 | 206 | 81 | 69 |
| Drug offences | 82 | 131 | 4 | 8 |
| Driving and traffic (b) | 805 | 815 | 615 | 851 |
| Liquor | 466 | 561 | 69 | 46 |
| Unlawfully on premises | 137 | 156 | 119 | 132 |
| Indecent behaviour | 95 | 107 | 28 | 29 |
| Drunk, disorderly | 641 | 667 | 121 | 138 |
| Other | 709 | 745 | 311 | 288 |
| Total offences | 7 667 | 8 094 | 5 116 | 5 095 |
| Male | 6 875 | 7 224 | 3 642 | 3 743 |
| Female | 792 | 870 | 1 474 | 1 352 |
| Individual offenders: | | | | |
| Male | 2 898 | 3 040 | 2 300 | 2 360 |
| Female | 460 | 534 | 1 089 | 1 028 |

(a) Under 18 years. Excludes truants and children found to be neglected, destitute or uncontrolled.

(b) Excludes most minor traffic offences.

Juvenile offenders appearing before courts are classified into two basic groups according to the age of the child. Children under sixteen years are charged with being in need of care and control as a consequence of an alleged offence. When dealing with children in this group the court may discharge the child, release the child on a bond with or without supervision, or place the child under the care and control of the Minister of Community Welfare with or without an order committing the child to an institution. A child under sixteen cannot be convicted of an offence. Children over sixteen may be charged with an offence and dealt with as above with or without conviction; in addition the Act provides that a fine may be imposed and compensation or restitution may be ordered. Juvenile courts also exercise jurisdiction over truants, neglected children and uncontrolled children.

In most cases when a child under sixteen years is alleged to have committed an offence, the matter is referred to a non-judicial body called a juvenile aid panel for consideration. Difficult cases may be referred by the panels to the juvenile courts. For further details see Part 6.6, page 341.

THE LICENSING COURT

The licensing of hotels and the issue of liquor licences and permits is governed by the Licensing Act, 1967-1976 under which is constituted a Licensing Court consisting of a Licensing Court Judge, Special Magistrates designated by the Governor as members of the Licensing Court, and Licensing Court Magistrates. The classes of licences that may be granted are:

- | | |
|--|-----------------------------|
| (a) Full publican's licence. | (j) Packet licence. |
| (b) Limited publican's licence. | (k) Railway licence. |
| (c) Wholesale storekeeper's licence. | (l) Restaurant licence. |
| (d) Retail storekeeper's licence. | (m) Cabaret licence. |
| (e) Wine licence. | (n) Theatre licence. |
| (f) Brewer's Australian ale licence. | (o) Special licence. |
| (g) Distiller's storekeeper's licence. | (p) Twenty litre licence. |
| (h) Vigneron's licence. | (q) Hotel broker's licence. |
| (i) Club licence. | |

Fees for licences are paid in accordance with the amount of liquor purchased (or in some cases sold) during the preceding twelve months and at present, in the case of the retail licences, is calculated at 8 per cent of the amount of purchases.

In December 1976, legislation was enacted to authorise discretionary hotel bar trading hours from 5 a.m. to 12 midnight Monday to Saturday, and to fix obligatory trading hours, Monday to Saturday from 11 a.m. to 8 p.m.,

In the case of a full publican's, limited publican's and restaurant licence, liquor may be sold and disposed of in the dining area at any time on any day with or ancillary to *bona fide* meals.

The Court may upon the granting or renewal of a full publican's licence, having regard to the needs of the public, exempt the holder of the licence from the obligation to supply lodging.

The following table shows the number of licences and permits issued during the years ended 30 June 1972 to 1976.

Liquor Licences and Permits, South Australia

| Licence or Permit | Year ended 30 June | | | | |
|---------------------------------------|--------------------|--------|--------|--------|--------|
| | 1972 | 1973 | 1974 | 1975 | 1976 |
| Licence: | | | | | |
| Publican's: | | | | | |
| Full | 598 | 600 | 601 | 602 | 603 |
| Limited | 40 | 44 | 48 | 55 | 55 |
| Storekeeper's (a) | 171 | 174 | 180 | 183 | 189 |
| Vignerons | 47 | 55 | 61 | 67 | 75 |
| Club | 93 | 133 | 159 | 177 | 185 |
| Restaurant | 106 | 121 | 137 | 151 | 171 |
| Permits: | | | | | |
| Special licensed premises | 7 049 | 6 730 | 6 673 | 5 634 | 4 548 |
| Special unlicensed premises | 15 282 | 15 652 | 16 953 | 17 071 | 17 654 |
| Booth | 6 998 | 7 653 | 7 877 | 7 466 | 7 903 |
| Club | 1 737 | 1 888 | 2 097 | 2 036 | 2 041 |
| Other | 344 | 521 | 914 | 744 | 1 225 |

(a) Covers wholesale, retail and distillers.

Permits may be granted under certain circumstances to extend the trading hours of licensed premises and to allow the sale, supply or consumption of liquor in unlicensed premises. Permits may be granted to clubs, for periods of up to one year, for the sale and supply to members for consumption on club premises— at 30 June 1976, 773 of these permits were current. Clubs whose takings from the sale of liquor exceed \$25 000 in any one year are not eligible for a permit but are required to apply for a Club Licence.

BANKRUPTCY

Since 1928 bankruptcy has been under Commonwealth Government jurisdiction. Under the *Bankruptcy Act 1966* South Australia is a bankruptcy 'district' and jurisdiction is exercised through the Court of Insolvency of the State of South Australia exercising Commonwealth Government jurisdiction in bankruptcy.

A debt of at least \$500 is necessary before a creditor may commence bankruptcy proceedings. Preferential creditors include employees for amounts owing in respect of wages and salaries, worker's compensation, long service leave, annual leave, recreation leave or sick leave, and the Commissioner of Taxation for unpaid tax on one year's income.

A bankrupt who has not previously been discharged is automatically discharged after five years unless an objection is filed with the Registrar in Bankruptcy.

Bankruptcies: Number, Liabilities, Assets, South Australia

| Year | Bankruptcies and Orders for Administration of Deceased Debtors' Estates | | | Compositions, Deeds of Arrangement and Deeds of Assignment | | | Total Debtors Number |
|---------------|---|-----------|-------------|--|---------|-------------|----------------------------|
| | Number | Assets | Liabilities | Number | Assets | Liabilities | |
| | | \$ | \$ | | \$ | \$ | |
| 1971-72 | 622 | 1 884 312 | 3 695 896 | 21 | 728 755 | 938 616 | 643 |
| 1972-73 | 528 | 1 176 909 | 2 821 609 | 26 | 212 981 | 498 022 | 554 |
| 1973-74 | 358 | 1 049 624 | 2 036 653 | 15 | 375 849 | 433 540 | 373 |
| 1974-75 | 427 | 1 580 680 | 3 304 232 | 10 | 718 437 | 805 578 | 437 |
| 1975-76 | 341 | 2 894 881 | 3 646 832 | 10 | 394 858 | 528 012 | 351 |

JURY SYSTEM

The procedure in relation to juries is governed by the Juries Act, 1927-1976.

Indictable offences are tried before a Judge and twelve jurors sitting in the criminal jurisdiction of either the Supreme Court or District Court, depending on the gravity of the offence. In South Australia, for many years juries have not officiated when civil causes were being tried.

Jury districts for the metropolitan and certain country areas are fixed by proclamation pursuant to the Juries Act and consist of a number of subdivisions of the House of Assembly electoral districts. Legislation passed in 1965 provided for women to serve on juries as well as men, and, with certain exceptions, all persons over the age of twenty-five and under sixty-five who are enrolled as House of Assembly electors within the proclaimed jury districts are qualified and liable to serve as jurors.

Persons exempted from liability to serve are listed in the third schedule to the Act and include judges, Members of Parliament, certain public officers, members of the defence forces, clergymen, legal practitioners, magistrates, university professors, police officers, doctors, dentists, pharmacists, opticians, physiotherapists, veterinary surgeons, newspaper editors and school teachers. Women automatically exempted include nurses, and the wives of judges, magistrates and police officers.

A jury list is compiled annually for each jury district. The names of persons included in the list are selected by computer process from the appropriate electoral rolls at the direction of the Sheriff. The jurors summoned to hear and determine an issue are later selected by ballot. Accused persons and the Crown each have the right to challenge three jurors without assigning reasons. About 1 000 persons serve on juries each year in South Australia. A jury pool system was instituted in 1974 and juries now may be required to serve in both the Supreme and District Criminal Courts during their month of service.

STATE INDUSTRIAL TRIBUNALS

Industrial arbitration in South Australia was inaugurated in 1894 by the establishment of Boards of Conciliation. Since then the system has undergone fundamental changes from time to time and the present basis is the Industrial

Code, 1967-1972, under which the Industrial Court, Industrial Commission, Conciliation Committees and Commissioners have been established. For details on the composition of these bodies and their functions see Part 7.2.

LEGAL ASSISTANCE SCHEME

The Legal Assistance Scheme, administered by the Law Society of South Australia Incorporated, has been operating since 1933. This voluntary Scheme which has legislative recognition in the Legal Practitioners Act, 1936-1972, is supported by the legal profession and is designed to ensure that no person who is deserving of legal assistance shall be deprived of it by lack of finance.

The South Australian Government makes an annual grant to the Law Society to assist in the administration of the Scheme and, since 1960, the Government has made special annual grants to partially recompense legal practitioners acting in assigned cases. On 1 July 1970 the Legal Practitioners Trust Account was instituted and from that date further financial assistance to the Law Society and legal practitioners acting in assigned cases has been received from portion of the interest on this Trust Account.

In addition, the Law Society conducts an after hours advisory service for preliminary advice at no cost to pensioners and students, and to others at a nominal charge.

Practitioners also attend on a voluntary basis at Magistrates Courts at Adelaide, Glenelg, Darlington, Port Adelaide, Christies Beach, Berri, Whyalla, Mount Gambier, Naracoorte, Port Augusta, Ceduna, Port Pirie, Port Lincoln and Renmark to assist defendants appearing before the court to obtain adjournments, remands and legal assistance. General advice and guidance is given. No charge is made for this service.

CONSUMER PROTECTION

Consumer protection in South Australia, in common with the other States, is a responsibility divided between the Commonwealth and State Governments. The major arm of Commonwealth responsibility is the Trade Practices Commission; the relevant state instrumentality is the Department of Public and Consumer Affairs. In practice, the Trade Practices Commission intervenes only in multi-State matters or where exemplary legal action is called for. The State looks into matters involving consumer redress.

The South Australian Department of Public and Consumer Affairs formed in 1976 from units of several existing departments, comprises some ten branches: the four main branches are involved in consumer protection work. The Consumer Affairs Branch, headed by the Commissioner for Consumer Affairs (formerly known as the Prices Commissioner), deals with most general consumer complaints, and directly supervises fourteen Acts, including the Consumer Transactions, Manufacturers Warranties, Door to Door Sales, Unfair Advertising, Defective Houses, Second-hand Motor Vehicles, Consumer Credit, Fair Credit Reports and Prices Acts.

The following table gives details of complaints investigated by the Commissioner for Consumer Affairs and the Consumer Affairs Branch during 1976.

**South Australian Department of Public and Consumer Affairs, Consumer Affairs
Branch, Formal Complaints Investigated, 1976**

| Particulars | Number of Complaints | Percentage of Total |
|---|-------------------------|------------------------|
| | | Per cent |
| Faulty goods and services: | | |
| Building work and allied trades | 511 | 7.67 |
| Appliance sales | 336 | 5.04 |
| Vehicle sales and services | 269 | 4.04 |
| Appliance servicing | 247 | 3.71 |
| Floor coverings | 219 | 3.29 |
| Clothing | 131 | 1.97 |
| Furniture | 125 | 1.87 |
| Other | 683 | 10.25 |
| Total faulty goods and services | 2 521 | 37.84 |
| Unfair dealing: | | |
| Rental bond disputes | 299 | 4.49 |
| Insurance | 195 | 2.93 |
| Vehicle sales and service | 163 | 2.45 |
| Building work and allied trades | 129 | 1.93 |
| Appliance sales | 107 | 1.60 |
| Travel | 76 | 1.14 |
| Other | 567 | 8.51 |
| Total unfair dealing | 1 536 | 23.05 |
| Excessive charges: | | |
| Building work and allied trades | 373 | 5.60 |
| Food, drink, grocery lines | 130 | 1.95 |
| Vehicle servicing | 94 | 1.41 |
| Appliance servicing | 88 | 1.32 |
| Other | 339 | 5.09 |
| Total excessive charges | 1 024 | 15.37 |
| Second-hand Motor Vehicles Act: | | |
| Defective vehicles | 549 | 8.24 |
| Other | 45 | 0.67 |
| Total motor vehicles | 594 | 8.91 |
| Unfair Advertising Act: | | |
| Mail order | 227 | 3.40 |
| Other | 305 | 4.58 |
| Total unfair advertising | 532 | 7.98 |
| Consumer Credit Act | 200 | 3.00 |
| Door to Door Sales and Book Purchasers Protection Acts | 97 | 1.46 |
| Unordered Goods and Services Act | 36 | 0.54 |
| Prices Act (Practices) | 11 | 0.17 |
| Miscellaneous | 112 | 1.68 |
| Total complaints | 6 663 | 100.00 |

The Standards Branch, headed by the Commissioner for Standards, specialises in matters relating to weights and measures, packaging and labelling. Included in the Standards Branch's administration are seven Acts, including the Packages, Goods (Trade Descriptions), Flammable Clothing and Trade Measurements Acts.

The Builders' Licensing Board licences and supervises the conduct of builders offering their services for building work in excess of \$250 (\$100 if the work consists of painting only).

The Commercial Tribunals Branch comprises some seven licensing and disciplinary authorities supervising various industries, including auctioneers, credit providers, land agents and used car dealers.

Co-operation between the Commonwealth and South Australian authorities on a day-to-day basis ensures that overlapping and duplication of activities is kept to a minimum.

PUBLIC TRUSTEE

The office of Public Trustee was established in 1881 and is now regulated by the Administration and Probate Act, 1919-1975. It provides a service to the public in the administration of estates and the protection of infants and absentee beneficiaries in estates administered by private administrators. A person may appoint the Public Trustee to be the executor and trustee of a will or as trustee of any disposition of property creating a trust.

The Public Trustee, where directed by the Court, becomes administrator of certain deceased estates; acts as guardian of certain infants; controls a protected person's property under the Aged and Infirm Persons' Property Act, 1940-1975; and receives, invests and distributes for the benefit of widows and minor dependants, amounts awarded under the Workmen's Compensation Act, 1971-1974.

Under the Mental Health Act, 1935-1974 the Public Trustee has control of the estates of some of the patients who have been admitted to Government mental hospitals, and may be appointed to act for the estate of any person found to be of unsound mind.

THE SOUTH AUSTRALIAN POLICE FORCE

A police force was first established in South Australia in 1838 and has been administered by a Commissioner of Police since 1840. The number of police officers rose steadily from 127 in 1851 to a peak of 802 in 1929, fell to 674 in 1943 and has since risen steadily to 2 548 in 1976. The number of persons per police officer has fallen from 910 in 1943 to 488 in 1976.

The maintenance of law and order and the reduction of opportunities for criminal activity are the main functions of the Uniformed Branches. At 30 June 1976, there were thirty-seven metropolitan regional and 108 country police stations and offices. Women police officers have equal opportunities and carry out the same duties as male officers.

Police Personnel, South Australia^(a)

At 30 June

| Personnel | 1972 | 1973 | 1974 | 1975 | 1976 |
|-------------------------------------|-------|-------|-------|-------|-------|
| Commissioned officers | 61 | 69 | 81 | 89 | 94 |
| Non-commissioned officers | 501 | 522 | 566 | 640 | 675 |
| Constables | 1 501 | 1 576 | 1 617 | 1 732 | 1 779 |
| Total active police force | 2 063 | 2 167 | 2 264 | 2 461 | 2 548 |
| Persons per active member | 575 | 553 | 537 | 502 | 488 |

(a) Active police force strength. Excludes trainees and cadets, women police auxiliaries, civil staff, etc.

The Traffic Region, while policing the general regulations relating to road use and control of traffic, also aims at improving road safety by ensuring the safe and efficient flow of traffic, by testing vehicles for roadworthiness, lecturing on road courtesy and safety, visiting schools in conjunction with an educational program and conducting driving tests for licence applicants. A Traffic Intelligence Centre, using information gained from accident statistics, has been established to assist the correct placement of speed detection units in relation to accident action centres.

In Adelaide, the Criminal Investigation Branch has been reorganised. The Headquarters staff has been progressively reduced in line with the concept of a compact specialist unit responsible for the investigation of major crimes, or crimes requiring an unusual expertise. To ensure that the activities of enlarged suburban units are co-ordinated, a Crime Intelligence Unit has been established at Headquarters to study crime trends. The Crime Director is responsible for recommending the allocation of additional resources to any units requiring assistance. Country areas are served by detectives based at selected centres. Auxiliary services provided by the Modus Operandi, Records, Fingerprints, Photographic, Documents, Ballistics, Crime Scene and Laboratory sections are essential aids in criminal investigation.

In 1959, a Police Emergency Operations Group consisting of Cliff Rescue, Underwater Recovery, Sea Rescue and Emergency Squads, was constituted under the direction of a Superintendent who is now Director of the State Emergency Service.

The Commissioner of Police is responsible for the Emergency Fire Services, operations of which are outlined on page 214.

The changing police role in the community, together with continual changes in law and investigational techniques, has resulted in special emphasis being placed upon the training of all personnel within the Force. There are two levels of recruitment. Cadets are enrolled at seventeen years of age and are given a three-year course of academic and practical instruction before graduation to operational duties. Adults are enlisted between the ages of twenty and thirty years and are given twenty-two weeks instruction and then serve a probationary period on general duties before being permanently appointed. All personnel are required

to undergo refresher training at selected intervals of service. In addition, courses are regularly conducted for such specialist appointments as prosecutors, detectives, technicians, drivers and instructors. Commissioned officer and non-commissioned officer training, in addition to external tertiary studies, are provided. At 30 June 1976, there were 450 cadets in training, and during the year fifty adult recruits graduated. Formal instruction was given to 355 members in refresher or specialist courses.

The following table gives details of the revenue and expenditure of the South Australian Police Force in recent years.

South Australian Police Force, Revenue and Expenditure^(a)

| Year | Expenditure | | | Revenue | Net Cost | |
|---------------|--------------------|-----------|------------|---------------|------------|----------|
| | Wages and Salaries | Other | Total | | Total | Per Head |
| Dollars | | | | | | |
| 1971-72 | 11 947 148 | 2 354 245 | 14 301 393 | 1 339 915 | 12 961 478 | 10.85 |
| 1972-73 | 14 172 215 | 2 412 472 | 16 584 687 | 1 477 843 | 15 106 844 | 12.48 |
| 1973-74 | 18 131 664 | 2 840 914 | 20 972 578 | 1 638 929 | 19 333 649 | 15.76 |
| 1974-75 | 26 449 889 | 3 791 410 | 30 241 299 | 2 206 690 | 28 034 609 | 22.49 |
| 1975-76 | 34 076 299 | 5 776 230 | 39 852 529 | (b) 2 364 170 | 37 488 359 | 29.83 |

(a) As reflected in Consolidated Revenue Account only—capital expenditure is met from Loan Fund.

(b) Includes \$1 742 000 recouped from Highways Fund for traffic and road safety purposes which became payable under an amendment to the Highways Act from 1 July 1971.

In 1971 the use of light aircraft was instituted by the Department for the transport of personnel and prisoners throughout the State. Two twin-engined aircraft are used; one aircraft being based in Adelaide and the other at Woomera. The primary role of the Woomera based aircraft is to provide a more frequent police presence on the Aboriginal Reserves in the north-west of the State.

An extensive re-organisation of general police in the metropolitan area was begun early in 1973. This involved the division of metropolitan Adelaide into three territorial regions, each commanded by a Chief Superintendent, the implementation of a sector system in regions and the restructuring of patrol areas designed to give emphasis to personal contact between the patrol force and the public. Advanced VHF—UHF interface repeater radio equipment between car and constable has been introduced to make foot patrolling more effective. This equipment has been further developed to allow the patrolling officer in certain areas, to both make and receive telephone calls from the police vehicle.

Other innovations introduced are a crime prevention unit, a criminal intelligence centre and regional crime collators. A tactical reserve designated as a 'task force' has been formed under the command of the Metropolitan Senior Chief Superintendent to co-ordinate the activities of the metropolitan regions. Members of the task force receive special training to deal with extraordinary emergencies and provide supplementary assistance at special events.

The Police Community Affairs and Information Service was formed in 1973 to foster better relations between the police and the general public. In July 1976 a new branch known as the Inspectorate was set up primarily to co-ordinate planning, to inspect operational units and to investigate complaints.

Early in 1974, a Dog Squad, comprising six handlers and six dogs became operational. As well as carrying out foot and mobile patrol duties, the squad is used in tracking and drug searches.

Since the opening of the new Eyre Highway in September 1976, a fully equipped four-wheel drive vehicle is used to perform daily patrols between Ceduna and the Western Australian border.

CORRECTIONAL SERVICES

There were eight gaols and prisons and nine police prisons administered by the South Australian Department of Correctional Services during 1975-76. Adelaide Gaol is a holding centre for remand and short-term sentenced prisoners. Yatala Labour Prison, South Australia's largest prison, provides for long-term male prisoners under maximum, medium and minimum security ratings. Adjacent to Yatala is the Northfield Security Hospital which was officially opened in November 1973, to accommodate criminal mental defectives. This modern hospital is staffed by trained medical personnel and provides specialised treatment programs for both males and females. Port Augusta Gaol, Port Lincoln Prison and Mount Gambier Gaol are medium security prisons which accommodate male and female prisoners. Cadell Training Centre on the River Murray is a dual purpose institution which operates as a pre-release centre for long-term prisoners as well as accommodating medium security short-term prisoners. The Women's Rehabilitation Centre at Northfield is a multi-purpose prison for females from all parts of the State. The nine police prisons serve as short-term detention centres for both males and females, and are mainly situated in the more remote country areas.

In common with other States and countries the emphasis in South Australian prisons is on rehabilitation. Industrial and trade training in various fields is available throughout the institutions, enabling prisoners to be prepared for ultimate outside employment. A wide range of correspondence courses are available through the colleges of advanced education and the South Australian College of External Studies under the supervision of the prison education officers. Special migrant and remedial classes are also conducted by the Education Division of the Department. A classification committee ensures that prisoners serving long-term sentences are correctly assessed for education, employment, social and other training purposes. In a wide range of matters affecting the well-being and after-care of prisoners and their families, the prison administration is assisted by chaplains, the Prisoners Aid Association, the Salvation Army and other voluntary organisations. Community services rendered by prisoners include the provision of emergency fire service units and the production of soft toys for children's homes.

The Probation and Parole Branch continues to expand, both in staff numbers and in the decentralisation of services. District offices are located at Port Adelaide, Elizabeth, Gilles Plains, Christies Beach and Glenelg in the metropolitan area and at Cadell, Gladstone, Whyalla, Port Lincoln and Mount Gambier in the country. The Branch is responsible for providing supervision and social casework services to probationers and parolees. Social work graduates are

providing a more professional social work service, including a wider range of treatment and management alternatives for offenders. Provision of pre-sentence social reports to the courts remains one of the major functions of the Branch.

Gaols and Prisons, South Australia

| Year | Total Accommodation for Prisoners | Prisoners Received to Serve Sentence (a) | | Prisoners in Gaol under Sentence (b) | |
|------------------|-----------------------------------|--|---------|--------------------------------------|---------|
| | | Males | Females | Males | Females |
| 1970-71 | 1 414 | 6 871 | 694 | 818 | 38 |
| 1971-72 | 1 497 | 6 952 | 758 | 795 | 29 |
| 1972-73 | 1 493 | 7 323 | 560 | 654 | 25 |
| 1973-74 | 1 482 | 7 028 | 574 | 735 | 30 |
| 1974-75 | 1 417 | 6 899 | 637 | 705 | 13 |

(a) Counted once each time received.

(b) At 30 June.

PUBLIC SAFETY

FIRE SERVICES

The Fire Brigades Board

Provision for the establishment and maintenance of fire brigades in South Australia under the control and management of the Fire Brigades Board was first instituted in 1882.

In accordance with its general duty of extinguishing fires and protecting life and property in case of fire, the Board maintains suitably equipped fire brigades in proclaimed fire districts in the Adelaide Metropolitan Area and in country towns. At 30 June 1976 there were thirty-nine fire brigade stations of which seventeen were metropolitan and twenty-two were country. During the year 1975-76 these brigades received 6 108 calls of which 550 were false and malicious calls. Some of these brigades are manned by permanent personnel and others by auxiliary firemen, there being at 30 June 1976, 550 officers and firemen and 124 auxiliary firemen.

In addition to its main function, the Board provides a service section for the regular maintenance of private fire equipment installed in public and private premises, and makes its officers available for inspection of premises and for advice on fire protection generally, as well as to demonstrate the use and handling of various types of first-aid fire equipment.

The Fire Brigades Act, 1936-1976 provides that the expenses and maintenance of brigades be defrayed in the proportion of one-eighth by the State Treasury; three-quarters by insurance companies; and one-eighth by the municipalities and district councils concerned.

The total revenue for the year 1975-76 was \$8 030 500 made up as follows; insurance companies \$6 023 000; municipalities and district councils \$1 004 000; and Treasury \$1 004 000.

South Australian Emergency Fire Services

The South Australian Emergency Fire Services was formed as a branch of Civil Defence during the 1939-45 War. When Civil Defence was disbanded, redundant trailer pumps were issued to local governing bodies by the State Government and the Emergency Fire Service (EFS) was developed into a volunteer country fire service, to protect those areas outside the districts covered under the Fire Brigades Act, 1936-1976. The responsibility and authority for fire prevention and control in these outer areas are vested in local government by the Bush Fires Act, 1960-1972 and Local Government Act, 1934-1976.

South Australian Emergency Fire Services

| Particulars | 1973 | 1974 | 1975 | 1976 |
|--|---------|-----------|-----------|-----------|
| Strength of service at 30 June: | | | | |
| Affiliated organisations | 438 | 441 | 445 | 454 |
| Volunteer members | 9 000 | 9 000 | 9 500 | 10 000 |
| Fires attended in twelve months ended 30 June: | | | | |
| Number of fires: | | | | |
| Urban type | 256 | 280 | 282 | 327 |
| Bush | 755 | 657 | 1 317 | 1 333 |
| Hectares destroyed in bush fires | 15 040 | 53 081 | 3 053 443 | 285 190 |
| Financial losses; | | | | |
| | | Dollars | | |
| Urban type | 387 892 | 3 069 192 | 791 446 | 1 364 783 |
| Bush | 96 080 | 133 515 | 1 258 906 | 901 442 |

EFS Headquarters, a branch of the Police Department, functions as a co-ordinating centre. The Director of Emergency Fire Services, responsible to the Commissioner of Police, advises on fire protection problems, conducts competitions and training programs, and co-ordinates fire-fighters and auxiliaries in major fire control. Fire equipment purchased by EFS organisations and councils is subsidised by the Bush Fires Equipment Subsidies Fund (equal contributions by the State Government and by fire insurers), and government subsidies are provided for maintenance.

There was an unusual continuance of pastoral fires in South Australia's out-back during the 1975-76 season as a consequence of a carry-over of fuel from previous years and above average rains. The pastoral area burnt was 183 000 hectares resulting in \$32 000 damage.

LIFE SAVING**The Royal Life Saving Society—Australia**

The South Australian Branch of the Royal Life Saving Society—Australia was established in 1909 and the formation of clubs at various beaches followed. In 1952 an agreement was made with the Surf Life Saving Association whereby this body undertook responsibility for life saving on ocean beaches, the Royal Life Saving Society retaining responsibility in all other areas of activity.

In South Australia the Society has developed into a large teaching body administered by a Council, giving instruction at several public swimming pools, and to schools and other interested bodies in the various methods of life saving, including the current methods of artificial respiration. This is done by honorary instructors and examiners. It also conducts lifesaving patrols (water and beach) at the West Lakes waterway on weekends and public holidays during the warmer months. In the winter months the emphasis is on talks and demonstrations on resuscitation, but during the swimming season weekly life saving instruction and examination, and life saving demonstrations are conducted throughout the State. Awards totalling 24 183 were issued to candidates who passed the various examinations in the 1975-76 season.

The honorary work of the Society is financed mainly by grants made by the Commonwealth and State Governments, and by donations.

The Surf Life Saving Association

The South Australian State Centre of the Surf Life Saving Association of Australia was formed in 1952, with the co-operation of the South Australian Branch of the Royal Life Saving Society and the Surf Life Saving Association of Australia.

The Henley, Glenelg and Moana Life Saving Clubs formed the nucleus of this body, which has eighteen affiliated clubs situated at Semaphore, Grange, Henley, West Beach, Glenelg, Somerton, Brighton, Seacliff, Christies Beach, Port Noarlunga, Southport, Moana, Chiton Rocks, Port Elliot, Whyalla, Taperoo Beach, Hallett Cove and Port Lincoln.

Voluntary members give many hours to patrolling their respective beaches each weekend and public holiday from the beginning of November until the end of March. At 30 June 1976 there were 1 374 members in Association clubs. From 1952 to the end of the 1975-76 season 1 972 rescues were performed with no loss of life on patrolled South Australian beaches while patrols were maintained by club members. During this same period many hundreds of persons received first-aid treatment.

The South Australian State Centre receives an annual grant from the State Government and individual clubs have been assisted with subsidies when building their club houses.

'Learn to Swim' Campaign

Vacation swimming classes organised by the Education Department were first established on an extensive scale in January 1956. Thirty-six country and fourteen metropolitan swimming centres were set up and over 7 000 children enrolled for instruction. The January 'Learn to Swim' campaign has been continued in each subsequent year and has grown steadily; in the summer vacation of 1975-76, 128 country and eighty-six metropolitan swimming centres were used, and the total student enrolment was approximately 34 500. Instruction is provided over a period of ten days by qualified swimming instructors. Instruction in Surf Life Saving was offered for the first time in 1972 at eleven metropolitan and four country beaches.

Swimming classes have also been conducted in school time since October 1954; 55 000 and 65 000 children were enrolled in these classes in the first and third terms of 1976 respectively.

Although swimming is still a major part of the program, the Education Department has introduced a number of water safety skills into the 'Learn to Swim' campaign. All instructors are trained to teach water safety, life saving and swimming by the most up-to-date methods available.

Special Aquatic Centres commenced in 1975 with one centre based at Victor Harbor. In 1976, seven centres were established and offered to children such activities as surfing, canoeing, skiing, snorkelling and adventure boating.

INDUSTRIAL ACCIDENT PREVENTION

The post-war growth of industrial activity in this State was accompanied by an increasing toll of injuries and fatalities sustained during the course of employment. Legislation requires certain minimum standards of safety in working conditions to be provided in various industries, and inspections are made to ensure compliance with legislative requirements. However, legislation and inspection are not the only means of minimising industrial accidents and in the late 1950s the South Australian Government implemented a program of education for management, supervisors and employees in accident prevention measures, with the object of making all sections of industry more 'safety conscious'.

Safety officers employed in the Department of Labour and Industry conduct safety training courses, present lectures, screen films and distribute industrial safety pamphlets produced within the Department.

In addition the Safety Engineering Society of Australasia, the Australian Institute of Management (Adelaide Division), the South Australian Institute of Technology and the Department of Employment and Industrial Relations make valuable contributions within their particular spheres of activities to the promotion of industrial safety.

NATIONAL SAFETY COUNCIL OF AUSTRALIA SA DIVISION

The National Safety Council of Australia SA Division was formed in 1963 as the Industrial Accident Prevention Society of SA Inc., a voluntary non-profit educational body. It is an autonomous branch of the largest organisation in Australia devoting its entire resources to the reduction of accidents in most areas of the community. In South Australia the Council's efforts are devoted to occupational, child and home, and water safety problems; traffic safety being the function of the Road Safety Council of South Australia. The SA Division is also responsible for servicing the requirements of members in the Northern Territory and regular visits are made to that area for safety training and promotional purposes.

The aims of the Council are carried out by the provision of safety consultant services, lectures, training courses and the distribution of safety publications and materials. Finance is derived from membership fees, services, an annual grant from the State Government and assistance from the Commonwealth Government. The Council's activities are controlled by a body representative of all spheres of community interest.

ROAD SAFETY COUNCIL OF SOUTH AUSTRALIA

The Road Safety Council of South Australia was formed in December 1965. The Council appointed by State Cabinet consists of an independent chairman and ten members representing the National Council of Women, the Road Traffic

Board, the Police Department, the Royal Automobile Association of South Australia, the Local Government Association (two representatives), the Education Department, the Rail Division of the State Transport Authority, the Trades and Labor Council of South Australia and the Australian Medical Association.

The objectives of the Council are to prevent road accidents involving death, injury or property damage through united action by all sections of the community, and to advise and assist government, semi-government and local authorities as well as private organisations in the adoption of precautionary measures in an attempt to prevent such accidents. In its efforts to achieve its objectives the Council concentrates on the education of road users in correct practices.

The Council is a section of the Department of Transport. Its administrative headquarters are at the Road Safety Instruction Centre at Oaklands Park. The facilities of the Centre include lecture rooms and instructional areas for children and licensed drivers of all classifications and all age groups. Appropriate courses in road safety education and driver re-education are conducted.

The Council operations are financed from the \$1 derived from each driver's licence fee under the Motor Vehicles Act, 1959-1976.

6.2 EDUCATION

Educational services are available to all South Australians in a wide variety of forms, some being provided by Government and others by non-government agencies. Constitutionally education is a State responsibility, but the Commonwealth makes grants for specific purposes. Education in this State can be seen as comprising three levels, namely, pre-school, school and post-school.

Pre-school education is co-ordinated by the Childhood Services Council and consists of a range of services available to young children (under five years of age) and their parents.

In South Australia attendance at school is compulsory for children from six to fifteen years of age. Children who are five years of age by the last day of February may be admitted to government schools on the first school day in February; children who are five years of age on or before 2 July may be admitted on the first Monday after the last Saturday in June of that year. The two-intake system is being progressively replaced over a four-year period from 1 July 1974, by a system which allows continuous admission of five-year-olds as soon as they reach their fifth birthday. In 1976, eighty-six government metropolitan and 225 government country schools had implemented this policy. Most non-government schools have the two-intake system and those with kindergartens integrated with the school accept children under five years of age.

Education at the primary and secondary level is available at government schools controlled by the Education Department and at non-government schools, most of which are denominational. Some non-government schools provide boarding facilities. In both government and non-government schools there has been a trend towards co-education in recent years. The term 'year' is used to denote class level in both primary and secondary schools. Primary classes are designated Year 1 through to Year 7, and secondary classes Year 8 to Year 12.

South Australian schools celebrated the centenary of State education in October 1975. The present system of government schools and of compulsory education dates from the Education Act, 1875.

At the tertiary level the University of Adelaide, the Flinders University of South Australia and the colleges of advanced education are independently controlled but are financially dependent on government grants.

Facilities for adult education are provided by the Department of Further Education, the Workers Educational Association and the Adult Education Departments of the University of Adelaide and Flinders University.

A historical summary of education in South Australia was included on pages 153-4 of the *South Australian Year Book* 1969.

South Australian Council for Educational Planning and Research

The South Australian Council for Educational Planning and Research is an innovation in educational and administrative procedure in this State. The Council is a significant source of expertise and influence in education and educational administration. It is supported by a small research secretariat that conducts and commissions investigations into matters connected with long-term planning and research in education. The long-term nature of the Council's pre-occupation determines that it is confined to an advisory and modifying role in educational thinking and planning.

Research and Planning

The research and planning is disseminated in various ways depending on the purposes of the work: it may be issued in a report to Council or to the Minister; it may give rise to seminars and workshops for the informal dispersion of outcomes and suggested action; or it may be written into a report published for general use.

Recent studies undertaken include *Comparative Analysis of Expenditure on Education*; *Demographic Studies of Enrolments for Post-Secondary Education*; *An Investigation of Modern Language Teaching in South Australia*; and *Residential Accommodation for Secondary School Students*.

Educational Planning

Under the South Australian Council for Educational Planning and Research Act, 1974-1975, the Council is required to advise the Minister of Education regarding long-term educational planning. In the first year of operation this has involved work in two spheres: firstly, in working with those already engaged in forward planning, and assisting in the establishment of workable links with non-educational planning operations; secondly in producing the quantitative and qualitative data upon which decisions about the future may be based. This has involved also the exploration of techniques in investigation, feasibility study and impact analysis.

PRE-SCHOOL EDUCATION

The kindergarten movement in South Australia was founded in 1905 and up to the end of the 1939-45 War, kindergartens were primarily designed for the care and education of under-privileged children. Since 1946 they have become generally accepted as a phase of education, with a consequent rapid increase in

facilities. Although some independent kindergartens are conducted by private individuals, or by non-government schools, the majority of pre-school education is under the supervision of the Kindergarten Union of South Australia. This organisation supervises 283 subsidised kindergartens situated throughout the State together with three mobile units. In 1976 the subsidised kindergartens had an enrolment of 16 400 children and employed 802 persons, 542 of whom were teaching staff.

While the supervision covers various aspects of organisation it is largely concerned with the educational program. As well as encouraging the creative, physical and mental development of four to five-year-old children the kindergarten prepares them for the experiences of formal schooling. Sessions are generally of two and a half to three hours duration each day with enrolments limited to thirty children a session; two sessions are held daily at most kindergartens. The work of kindergartens is now being expanded to a wider pattern of child care to encompass extended hours care, playgroups and resource facilities for the community.

The Kindergarten Union is a statutory body and receives its revenue from the Commonwealth and South Australian Governments through the South Australian Childhood Services Council. This revenue covers teachers' salaries, capital building programs and most of the kindergartens' operating costs. Local committees are expected to raise a proportion of the day to day operating costs and, to a degree, provide some of the 'extras' needed. Such extra revenue generally comes from fund-raising activities.

The annual recurrent budget of the Kindergarten Union for the financial year to 30 June 1976 was \$6 000 000. Approximately \$300 000 was allocated for capital building work, providing for the construction of two new centres, one of which was a joint venture with the South Australian Department of Education. This capital amount also contributed to the completion of three other centres. During the financial year 1976-77 approximately \$2 000 000 was available for capital expansion.

In 1974 the Education Department opened its first pre-school centres, now known as child/parent centres. These centres are staffed by Education Department teachers and are established in the grounds of existing primary schools. A variety of pre-school arrangements is provided depending on local demand and the resources available.

By late 1976 there were forty-seven child/parent centres with eighty-seven full-time or part-time teachers and a total enrolment of 2 420 children. The child/parent centres at Whyalla, Alberton and Elizabeth West act as resource centres for early childhood services.

A combined project for Mansfield Park and Ferryden Park families is jointly supported by the Departments of Education, Community Welfare and Public Health. The Campbelltown, Nangwarry and Brompton centres are joint projects of the Education Department and the Department for Community Welfare. There are a further twelve child/parent centres serving Aboriginal children.

The Childhood Services Council co-ordinates the development of early childhood services in South Australia. These services include child-care; child health centres; the Child/Parent Resource Centre; family day care; kindergartens, pre-schools and child/parent centres; parent education; playgroups; and Toy Libraries.

In August 1975 the Australian Bureau of Statistics conducted a survey of all known kindergarten, pre-school and child-care establishments. This was done in consultation with the relevant Government departments and authorities to ensure appropriate coverage and completeness of the collection. A further survey was conducted in August 1976.

Children's Services Centres, South Australia, 1975 (a)

| Particulars | Type of Centre | | | | | Total |
|-----------------------------|--------------------|--|-------------|--------------------|------------------------|--------|
| | Kindergarten Union | Licensed by Department for Community Welfare | Independent | Government Schools | Non-government Schools | |
| Number of centres | 229 | 95 | 53 | 30 | 15 | 422 |
| Capacity (per session) | 6 738 | 3 472 | 1 561 | 925 | 363 | 13 059 |
| Attendance: | | | | | | |
| Boys | 6 788 | 2 351 | 994 | 700 | 197 | 11 030 |
| Girls | 6 337 | 2 250 | 906 | 739 | 168 | 10 400 |
| Total | 13 125 | 4 601 | 1 900 | 1 439 | 365 | 21 430 |
| Paid staff (b): | | | | | | |
| Qualified | 447 | 219 | 59 | 59 | 20 | 804 |
| Unqualified | 326 | 302 | 112 | 39 | 12 | 791 |
| Total | 773 | 521 | 171 | 98 | 32 | 1 595 |

(a) Week ended 1 August 1975.

(b) Includes part-time.

GENERAL SCHOOL EDUCATION

The State Government, through the Education Department, provides free facilities for primary and secondary education; however, parents may choose between government and non-government schools. The Education Department functions under the Minister of Education. The permanent head of the Department is the Director-General of Education, assisted by two Deputy Directors-General of Education and Directors of Schools, Educational Services, Facilities, Research and Planning, and Administration and Finance. A Director-General of Further Education heads the Department of Further Education which is concerned with technical colleges and adult education.

The work of the schools is materially assisted by the school councils, and also by the mothers clubs, parents and friends associations and welfare clubs. For many years these bodies have been instrumental in raising large sums for the purchase of additional amenities for the schools.

In country areas many children are conveyed to government schools by free bus services provided by the Education Department. At the end of 1976 there were 692 bus services carrying an average of 25 216 students daily to 309 schools.

Although non-government primary schools largely follow the government schools in their curricula, the Education Department exercises no formal authority over these schools beyond requiring them to submit certain statistical returns relating to compulsory attendance. The similarity between courses in the government and non-government secondary schools is attributable to the influence of the Public Examinations Board of South Australia syllabus and the close liaison of the administration and teachers of both types of school.

The Catholic school system is organised on a State-wide basis under the direction of the South Australian Commission for Catholic Schools. This Commission is comprised of the Catholic Archbishop of Adelaide, the Catholic Bishop of Port Pirie, priests, primary and secondary school principals, Superiors, parents, teachers (lay and religious), members of School Boards and regional members together with the Director of Catholic Education and the Co-ordinators of Primary and Secondary Education.

The State Government now pays a grant of \$10 a year for each primary and \$20 for each secondary student liable to pay fees at an approved non-government school. In 1976 additional payments on a needs basis varying from \$89 to \$226 a student were made to some schools.

Schools

Details of schools operating in South Australia in 1976 are given in the next table. The average size of government schools has increased rapidly since 1940 partly as a result of the consolidation of country schools. There were 625 government schools in 1976 compared with 1 043 in 1940 and 1 108 in the peak year of 1935. In 1940 there was an average of 73 students to each government school, with this figure increasing to 125 by 1950, 255 by 1960 and 351 by 1970. After peaking at about 379 between 1972 and 1975, the figure declined to 374 in 1976. There has been a similar movement in the average size of non-government schools.

**Schools by Size, South Australia
At 1 August 1976**

| Students on Roll | Government Schools | | | | Total | Non-government Schools |
|------------------|--------------------|-------------------|------------|-------------|------------|------------------------|
| | Primary | Primary-Secondary | Secondary | Special (a) | | |
| Under 21 | 23 | — | — | 1 | 24 | 1 |
| 21 to 35 | 40 | — | — | 9 | 49 | 8 |
| 36 to 100 | 101 | 5 | — | 20 | 126 | 24 |
| 101 to 200 | 43 | 9 | 7 | 3 | 62 | 43 |
| 201 to 300 | 31 | 13 | 8 | 1 | 53 | 22 |
| 301 to 400 | 35 | 13 | 7 | — | 55 | 14 |
| 401 to 600 | 80 | 7 | 21 | — | 108 | 22 |
| 601 to 800 | 49 | 4 | 18 | — | 71 | 6 |
| 801 to 1 000 | 25 | — | 12 | — | 37 | 6 |
| 1 001 to 1 200 | 8 | — | 18 | — | 26 | 1 |
| 1 201 to 2 000 | 1 | — | 13 | — | 14 | — |
| Total | 436 | 51 | 104 | 34 | 625 | 147 |

(a) Schools for physically and mentally handicapped children, schools at institutions and schools for Aborigines.

Students

Enrolments in recent years, classified by government and non-government schools and by age of the students are given in the following tables.

**Primary and Secondary Students, South Australia
At or about 1 August**

| Age | Government Schools | | | Non-government Schools | | |
|-------------------|--------------------|---------|---------|------------------------|--------|--------|
| | 1974 | 1975 | 1976 | 1974 | 1975 | 1976 |
| Under 6 | 18 020 | 19 185 | 19 975 | 2 990 | 2 973 | 3 182 |
| 6 | 19 884 | 20 134 | 20 373 | 2 614 | 2 709 | 2 647 |
| 7 | 19 027 | 19 578 | 20 005 | 2 601 | 2 652 | 2 829 |
| 8 | 19 666 | 18 875 | 19 743 | 2 718 | 2 636 | 2 747 |
| 9 | 19 918 | 19 696 | 18 945 | 2 894 | 2 833 | 2 657 |
| 10 | 20 536 | 19 940 | 19 432 | 3 022 | 3 006 | 2 988 |
| 11 | 20 905 | 20 359 | 19 735 | 3 242 | 3 243 | 3 185 |
| 12 | 20 558 | 20 669 | 20 114 | 3 495 | 3 550 | 3 517 |
| 13 | 20 842 | 20 662 | 20 389 | 3 709 | 3 575 | 3 660 |
| 14 | 20 649 | 20 846 | 20 257 | 3 503 | 3 623 | 3 545 |
| 15 | 16 594 | 17 223 | 17 616 | 3 308 | 3 426 | 3 615 |
| 16 | 10 451 | 11 449 | 11 326 | 2 685 | 2 916 | 2 964 |
| 17 | 4 176 | 4 676 | 4 516 | 1 469 | 1 411 | 1 463 |
| 18 | 949 | 1 086 | 944 | 325 | 278 | 257 |
| 19 | 204 | 226 | 173 | 34 | 44 | 33 |
| 20 and over . . . | 100 | 108 | 71 | 8 | 10 | 10 |
| Total | 232 479 | 234 712 | 233 614 | 38 617 | 38 885 | 39 299 |

**Primary and Secondary Students, South Australia
At 1 August 1976**

| Age | Government Schools | | | Non-government Schools | | | Total Students |
|-------------------|--------------------|-----------|---------|------------------------|-----------|--------|----------------|
| | Primary | Secondary | Total | Primary | Secondary | Total | |
| Under 6 | 19 975 | — | 19 975 | 3 182 | — | 3 182 | 23 157 |
| 6 | 20 373 | — | 20 373 | 2 647 | — | 2 647 | 23 020 |
| 7 | 20 005 | — | 20 005 | 2 829 | — | 2 829 | 22 834 |
| 8 | 19 743 | — | 19 743 | 2 747 | — | 2 747 | 22 490 |
| 9 | 18 945 | — | 18 945 | 2 657 | — | 2 657 | 21 602 |
| 10 | 19 432 | — | 19 432 | 2 988 | — | 2 988 | 22 420 |
| 11 | 19 687 | 48 | 19 735 | 3 175 | 10 | 3 185 | 22 920 |
| 12 | 11 537 | 8 577 | 20 114 | 1 762 | 1 755 | 3 517 | 23 631 |
| 13 | 1 142 | 19 247 | 20 389 | 169 | 3 491 | 3 660 | 24 049 |
| 14 | 198 | 20 059 | 20 257 | 16 | 3 529 | 3 545 | 23 802 |
| 15 | 143 | 17 473 | 17 616 | 3 | 3 612 | 3 615 | 21 231 |
| 16 | 102 | 11 224 | 11 326 | 1 | 2 963 | 2 964 | 14 290 |
| 17 | 93 | 4 423 | 4 516 | 1 | 1 462 | 1 463 | 5 979 |
| 18 | 68 | 876 | 944 | — | 257 | 257 | 1 201 |
| 19 | 47 | 126 | 173 | — | 33 | 33 | 206 |
| 20 and over . . . | 9 | 62 | 71 | — | 10 | 10 | 81 |
| Total | 151 499 | 82 115 | 233 614 | 22 177 | 17 122 | 39 299 | 272 913 |

Teachers

The numbers of teachers employed in primary and secondary schools in recent years are shown in the following table.

Teachers, South Australia

| At or about 1 August | Government Schools | | | | Non-government Schools | | | |
|--------------------------|--------------------|---------|---------------|---------|------------------------|---------|---------------|---------|
| | Full-time | | Part-time (a) | | Full-time | | Part-time (a) | |
| | Males | Females | Males | Females | Males | Females | Males | Females |
| 1974 | 5 148 | 6 764 | 67 | 510 | 589 | 962 | 51 | 217 |
| 1975 | 5 274 | 7 108 | 59 | 516 | 635 | 983 | 45 | 237 |
| 1976 | 5 541 | 7 380 | 39 | 466 | 678 | 1 043 | 50 | 218 |
| Type of School | | | | | | | | |
| 1976 | | | | | | | | |
| Primary | 1 663 | 4 392 | 3 | 139 | 89 | 518 | 6 | 44 |
| Prim-Secondary | 502 | 489 | 1 | 39 | 439 | 381 | 36 | 139 |
| Secondary | 3 291 | 2 340 | 34 | 280 | 150 | 120 | 8 | 32 |
| Special (b) | 85 | 159 | 1 | 8 | — | 24 | — | 3 |

(a) Equivalent full-time units of part-time teaching. Total part-time teachers at 1 August 1976, government schools, 58 males and 773 females; non-government schools, 111 males and 443 females.

(b) Includes schools for physically and mentally handicapped children, schools at institutions and schools for Aborigines.

PRIMARY EDUCATION

Children normally begin their schooling at the age of five years when they enrol for primary education at either a government or non-government school. Primary education involves a seven year course.

GOVERNMENT SCHOOLS

Metropolitan children attend primary schools while country children normally attend a primary, rural, area or special rural school, although those in remote areas may receive lessons by correspondence.

Primary

In the first two years of school the emphasis is on the child's active involvement in learning. The curriculum is designed to extend children's experience of their environment, through social studies, science and mathematics. It provides for the development of language skills, especially fluency in speech and reading, and creative activities in movement, music, art, drama and writing.

The primary school curricula provide a general framework for the study of English, mathematics, social studies, science, music, art and craft and physical education. An increasing provision is being made for the study of elective subjects, such as foreign languages, ballet and instrumental music.

Ancillary services and expert advice are provided for primary schools by the Supervisors of School Libraries, Physical Education, Music and Educational Technology and their staffs. There are also consultants in all the basic subjects who visit the schools and conduct in-service courses.

The table which follows shows the numbers of schools and students in the primary division in recent years.

Primary Education: Government Schools, South Australia

| At or about 1 August | Number of Schools | | Primary Students Enrolled | | | | Total |
|----------------------------|----------------------|----------|------------------------------|------------------------|-----------------------------------|--------------|---------|
| | Primary (a) | Area (b) | Primary Schools (a) | Area Schools (b) | Corres- pondence School (c) | Other (d) | |
| 1972 | 433 | 50 | 142 795 | 9 411 | 654 | 2 026 | 154 886 |
| 1973 | 429 | 50 | 140 567 | 9 108 | 675 | 2 348 | 152 698 |
| 1974 | 426 | 49 | 141 009 | 9 010 | 480 | 2 402 | 152 901 |
| 1975 | 430 | 49 | 139 912 | 9 131 | 493 | 2 439 | 151 975 |
| 1976 | 436 | 50 | 139 363 | 9 260 | 483 | 2 393 | 151 499 |

(a) Includes rural schools.

(b) Includes also special rural schools.

(c) From 1974 Northern Territory students are excluded.

(d) Includes schools for Aborigines, schools for handicapped children and schools at institutions.

Area and Special Rural

These schools, situated in country centres, cater for both primary and secondary students. The primary course is similar to that of the primary schools but the secondary courses offered are restricted by the availability of staff.

Correspondence

The Correspondence School was started in 1920 to cater for children unable to attend ordinary schools. Most of these children live in remote parts of South Australia although there are others who cannot attend school because of invalidity. Connected with the Correspondence School is the School of the Air at Port Augusta which provides two-way radio communication between teacher and student to supplement the correspondence lessons.

NON-GOVERNMENT SCHOOLS

At 1 August 1976, 22 177 children were receiving primary education at non-government schools. The majority of these children were attending Catholic schools (see table on page 229).

Catholic

Many children receiving primary education in the Catholic school system attend parish schools while the remainder attend colleges conducted by religious orders. Both types of school are supported by fees paid by parents and by State and

Commonwealth Government grants. Parish schools are the property of the parishes which are responsible for equipping and maintaining them. The educational program of the school is under the direction of the principal who may be either a lay person or a member of a religious order. Elected school boards assist in the financial administration of these schools and determine the fees that will be charged as well as concessions for parents in necessitous circumstances.

Other

The Church of England, the Lutheran Church and the Seventh Day Adventist Church conduct primary schools. Primary education is provided together with secondary education at primary/secondary schools conducted by the Church of England, the Methodist Church, and the Presbyterian Church, and at three non-denominational schools.

SCHOOLS FOR HANDICAPPED CHILDREN

The Education Department, through the Guidance and Special Education Branch, makes provision for children with intellectual and physical disabilities. The Guidance and Special Education Branch provides supporting services to schools and parents with slow-learning or problem children, many of whom are helped in special small or opportunity or remedial classes in primary or secondary schools. There are seventeen special schools in metropolitan and country areas which cater for mentally retarded children between the ages of five and twenty years. These schools include those conducted at Minda Home and the Strathmont Centre.

Other special schools cater for children with visual, hearing and physical handicaps (including cerebral palsy); there are special classes for children with speech and hearing defects, and there are schools within the institutions of the Department for Community Welfare. A number of private agencies also provide educational facilities for handicapped children.

SECONDARY EDUCATION

Children who have completed their primary schooling are required by law to attend a secondary school, either government or non-government, until their fifteenth birthday.

GOVERNMENT SCHOOLS

The South Australian Education Department's policy is to provide comprehensive co-educational high schools which, consistent with their size and enrolment, offer the widest range of courses possible in an endeavour to meet the interests of the students.

Metropolitan students are required to attend schools within the zone in which they reside. The few schools that are not co-educational as well as Urrbrae Agricultural High School are unzoned at present. In the country, secondary education is provided by high schools in the larger towns, and by either high, area or special rural schools in many of the smaller centres. Certain students may use the facilities of the Correspondence School.

All new schools built in recent years, and some existing schools, have been provided with gymnasiums and music and drama areas. The upgrading of schools and the provision of open-plan units in existing schools is continuing.

Secondary Education: Government Schools, South Australia

| At or about 1 August | Number of Schools | | Secondary Students Enrolled | | | | Total |
|-------------------------|-------------------|-------------|-----------------------------|------------------------|--------------------------------------|--------------|--------|
| | High | Area (a) | High Schools | Area Schools (a) | Corres- pondence School (b) | Other (c) | |
| 1972 | 98 | 50 | 72 519 | 5 139 | 168 | 100 | 77 926 |
| 1973 | 102 | 50 | 73 619 | 5 116 | 224 | 129 | 79 088 |
| 1974 | 103 | 49 | 74 291 | 5 013 | 157 | 117 | 79 578 |
| 1975 | 104 | 49 | 77 310 | 5 085 | 203 | 139 | 82 737 |
| 1976 | 104 | 50 | 76 436 | 5 308 | 204 | 167 | 82 115 |

(a) Includes also special rural schools.

(b) Full correspondence students only. Excludes Northern Territory students from 1974 (forty-six at 1 August 1976).

(c) Students receiving secondary education at primary schools, Aboriginal schools, institutions, senior special schools and speech and hearing centres.

Changes and Developments

Secondary schools have common aims and a large area of common studies. At the same time schools have become more flexible offering a variety of syllabuses that allow for differences in the aspirations and abilities of individual students.

A system of tracks from 0 to 4, employed previously by many schools to indicate the purpose of the various syllabuses, is gradually being displaced. In most subjects, attempts have been made to formulate courses of study which have a core for all students and various extension or enrichment courses to suit the students' varying needs and abilities. Integrated courses of studies are now being developed in some schools. In the humanities, for example, the branches of history, geography and social studies have been combined. These courses are integrated in a meaningful manner to cater for the needs of individual schools. Girls and boys have equal access to all courses of study offered in high schools. Health education and religious education courses have been devised and are being tested in a number of schools. In 1974 a co-ordinating curriculum committee was set up to co-ordinate the primary and secondary curriculum development.

Flexible and varying methods of teaching and learning are freely employed. Student representative councils are to be found in many schools and all have school councils which assist in their administration.

Secondary Schools

The breadth of courses sought during the first three years of secondary schooling (the Junior Secondary Curriculum) is believed to be best achieved by offering students as wide a selection of subjects as is compatible with their abilities and interests. For convenience and guidance the subjects are divided into two basic groups. The first, a core group of subjects, consists of English,

social studies, mathematics, science, art or craft, and physical education, to which is added a selection of two, three or four subjects from a second group called electives. Subjects in this group include such disciplines as foreign languages, further mathematics, science and craft, art, agriculture (in country area schools and high schools), history and/or geography, and music. The number of electives taken will depend upon the facilities available, the ability of the student and his vocational interests.

Opportunities are also given for general experience in some of the elective group of subjects. Instruction referred to as general experience is below the norm in time for that regarded as a full subject, but is sufficient to stimulate and awaken latent interest. General experience subjects may include foreign languages at a conversational level, art, further craft, physical education, music, agriculture, consumer education, shorthand, typewriting, road safety and drama.

The junior secondary levels are regarded as exploratory and aim to provide the student with as wide a range of interests and educational experience as possible before he commits himself to a particular course of study at the senior level.

Area Schools

Area schools are provided in certain country districts not served by high schools; they cater for both primary and secondary students and are co-educational. The range of subjects offered is more restricted than that available to larger secondary schools but all students have the opportunity to study core secondary syllabuses to Year 11 in their own district. Year 12 classes have been established in fifteen schools. English, social studies, mathematics, science, art or craft, and physical education, form a core to which may be added further mathematics, science or craft, history and/or geography. A foreign language is available in a few schools. The curriculum in many area schools is further broadened by general experience subjects.

Special Rural Schools

These schools were first established in remote country areas in 1966 with the intention of supplying a limited secondary education in areas where it had been shown that there was an obvious need for secondary education but where the establishment of an area school was not warranted. Courses in these schools are restricted to the core subjects, English, social studies, mathematics, science—sometimes craft where facilities are available, and geography and/or history. Instruction does not proceed beyond Year 10 level.

Correspondence School

Children who are unable to attend a secondary school may receive secondary education through the Correspondence School. Lessons are forwarded to cover eighteen academic subjects (all to Year 11 standard), and also certain drawing subjects. Assistance may take the form of full correspondence or supplementary courses. Supplementary courses are conducted through a primary school head teacher who may, in the case of remoteness from secondary school facilities, conduct grades beyond Year 7. Courses are also supplied to students in smaller secondary schools who wish to do a specific subject which is not available because of staffing problems.

At 1 August 1976, 366 students were receiving secondary education through full correspondence courses; of these, forty-six were living in the Northern Territory and two in New Guinea. Students who wish to do matriculation studies (Year 12) are enrolled through the South Australian College of External Studies.

The Curriculum

The aim of all secondary schools is to provide courses of study that best suit the needs of individual students. An extension of individualised learning has resulted in schools offering as wide a range of subjects and syllabuses as possible.

Secondary school subject curriculum committees, which are comprised of representatives of a wide spectrum of interests associated with education, meet regularly to discuss courses of study and to establish new syllabuses for secondary students. Although syllabuses are distributed to all teachers, they are in no way prescriptive. They are adapted to cater for the needs and abilities of students.

NON-GOVERNMENT SCHOOLS

Secondary education is also provided by non-government schools; these schools, for the most part, are identified with various religious denominations. Non-government secondary schools usually charge fees, however, a limited number of internal scholarships are available. In addition to normal day attendance many non-government schools offer boarding facilities for country students. Non-government schools provide academic courses preparing students for the Public Examinations Board examination at the Year 12 level. Church schools give religious as well as secular education.

Catholic

The Catholic school system provides secondary education at boarding and day colleges in metropolitan and country areas. The schools seek to serve the needs of students by providing (where appropriate) courses in technical education, business and commercial education and general education together with academic courses for those seeking admission to tertiary education after matriculation (Year 12). The majority of Catholic secondary schools are the property of the religious communities who conduct them and are supported by fees charged and government grants.

Other

The Lutheran Church and the Seventh Day Adventist Church conduct secondary schools. Secondary education is provided also at primary/secondary schools (see page 225).

Training in typing and shorthand is provided at privately owned business colleges which specialise in this field. A number of these colleges also prepare students in certain Public Examinations Board subjects.

Summary

The following tables give details of all non-government schools and cover both primary and secondary education. Additional information is shown in the tables on pages 222-3.

Non-government Schools, South Australia

| Year | Number of Schools | Number of Teachers (a) | Students on Roll at or about 1 August | | | | Total |
|----------------|-------------------|------------------------|---------------------------------------|---------|-----------|---------|--------|
| | | | Primary (b) | | Secondary | | |
| | | | Males | Females | Males | Females | |
| 1972 | 163 | 1 722 | 10 870 | 11 362 | 7 557 | 7 676 | 37 465 |
| 1973 | 163 | 1 777 | 10 736 | 11 193 | 7 846 | 7 960 | 37 735 |
| 1974 | 157 | 1 819 | 10 896 | 11 227 | 8 123 | 8 371 | 38 617 |
| 1975 | 151 | 1 900 | 10 996 | 11 071 | 8 118 | 8 700 | 38 885 |
| 1976 | 147 | 1 989 | 11 055 | 11 122 | 8 207 | 8 915 | 39 299 |

(a) Full-time teachers plus the full-time equivalent of part-time teachers.

(b) Includes students at special schools.

In the next table non-government school students are classified according to the denominational affiliation of the school they attended. The predominant contribution of Catholic schools is clearly evident from the table. In 1976 Catholic schools accounted for 80 per cent of primary students and 57 per cent of secondary students attending non-government schools.

Students at Non-government Schools, South Australia
At or about 1 August

| Denomination of School | 1972 | 1973 | 1974 | 1975 | 1976 |
|--|---------------|---------------|---------------|---------------|---------------|
| Primary: | | | | | |
| Catholic (a) | 17 815 | 17 571 | 17 686 | 17 662 | 17 666 |
| Church of England | 1 438 | 1 360 | 1 367 | 1 347 | 1 375 |
| Lutheran | 1 117 | 1 209 | 1 299 | 1 359 | 1 411 |
| Methodist and Presbyterian (b) | 1 133 | 1 134 | 1 027 | 987 | 965 |
| Seventh Day Adventist | 141 | 146 | 172 | 183 | 187 |
| Undenominational (a) | 588 | 509 | 572 | 529 | 573 |
| Total primary | 22 232 | 21 929 | 22 123 | 22 067 | 22 177 |
| Secondary: | | | | | |
| Catholic | 8 265 | 8 720 | 9 117 | 9 584 | 9 845 |
| Church of England | 2 306 | 2 281 | 2 271 | 2 216 | 2 193 |
| Lutheran | 808 | 880 | 971 | 980 | 994 |
| Methodist and Presbyterian (b) | 3 017 | 3 053 | 2 825 | 2 715 | 2 592 |
| Seventh Day Adventist | 51 | 79 | 116 | 138 | 140 |
| Undenominational | 786 | 793 | 1 194 | 1 185 | 1 358 |
| Total secondary | 15 233 | 15 806 | 16 494 | 16 818 | 17 122 |

(a) Includes students at special schools.

(b) Includes Baptist and Congregational to 1973.

EXAMINATIONS AND EDUCATION ASSISTANCE

Examinations

In addition to internal examinations conducted by the schools the Public Examinations Board (PEB) conducts a further examination at the completion of the fifth year of secondary education. Before 1966 this examination had been known as the Leaving Honours examination and while considered a desirable fore-runner to university study had not been compulsory for entrance to the University of Adelaide (matriculation being based on the Leaving examination). Commencing with 1966 this examination became the Matriculation examination.

Before 1966 the PEB had given a certificate for a pass in the required number of subjects at either the Intermediate or Leaving examinations and for a pass in one or more subjects in the Leaving Honours examination. From 1966 the Board has issued to each Intermediate, Leaving and Matriculation examinee a certificate showing the grade achieved in each of the subjects in which examined. The last PEB Intermediate examination was held in 1968 and the last Leaving examination in 1974. The total number of candidates for examination by the Board in one or more subjects at the 1976 Matriculation Examination was 10 554.

PRIMARY AND SECONDARY EDUCATION ASSISTANCE

The Commonwealth Government, the State Government and various private benefactors provide assistance to various categories of primary and secondary students.

South Australian Government

On the completion of primary schooling, secondary students, whether at government or non-government schools, are entitled to a book and materials allowance of \$38 a year. Students who have to travel considerable distances to the nearest school, or school bus, may also receive travelling expenses.

A Book Loan Scheme designed to reduce the financial burden on parents has now been established in all secondary schools. Under this scheme the Book and Material Allowance is retained by the school and in return students are supplied with textbooks and class sets on loan. The allowance also covers the cost of certain materials. Parents are still asked to pay something towards the cost of amenities and additional materials, and this is covered by a fee of not more than \$15.

If forced to live away from home, assistance under the Isolated Children's Scheme is provided by the Commonwealth Government. This scheme has replaced the South Australian Government boarding allowances and rural scholarships except in a few special cases not covered by the Isolated Children's Allowance.

Commonwealth Government

The Scheme of Assistance for Isolated Children assists the parents of students who do not have reasonable daily access to an appropriate government school. The main aim of this scheme is to assist student children whose homes are geographically isolated. However, assistance is also available in certain circum-

stances to handicapped children who must attend special schools or study by correspondence and to students undertaking a special type of course or specialised remedial teaching. Students who must live away from home to undergo diagnostic testing of an educational nature may also be assisted, as may students from itinerant families.

Assistance under this scheme comprises a basic boarding allowance of \$500 a year free of means test, an additional allowance of up to \$450 a year, which is subject to a means test and to boarding costs actually incurred, and a special supplementary allowance of up to \$550 a year payable where there is particular financial hardship. Eligible students studying by correspondence receive a basic allowance of \$200 and may receive an additional payment of up to \$300 a year in respect of approved expenditure incurred.

The Secondary Allowances Scheme aims to provide assistance to families with a limited income so that they may maintain their children at school for the final two years of secondary education. Under this scheme an allowance of up to \$550 a year may be paid subject to a means test.

The Commonwealth Government also provides financial assistance for the education of students of Aboriginal or Torres Straight Island descent who attend approved schools. This assistance is provided under the Aboriginal Secondary Grants Scheme. The grants are open to full-time students under the age of twenty-one who attend an approved secondary school. Grants also may be made available to full-time students who attend an approved primary school provided the student is fourteen years of age but under twenty-one years. Benefits under this scheme comprise textbook and uniform allowances, living allowance, personal allowance and fees. Students who must live away from their normal place of residence in order to attend school are eligible for a boarding allowance in lieu of living allowance, and for up to three return journeys to their home each year.

TERTIARY EDUCATION ASSISTANCE

In 1974 the Commonwealth Government abolished tuition fees at universities, colleges of advanced education, and technical colleges and introduced the Tertiary Education Assistance Scheme.

The Tertiary Education Assistance Scheme is intended to assist students in approved courses at universities, colleges of advanced education, technical colleges and certain other approved tertiary institutions in Australia. Assistance under the scheme may include payment of living allowance, incidentals allowance, allowance for a dependent spouse and/or child, and fares allowance. All benefits are subject to a means test and a student must be eligible for living allowance in order to receive any of the other benefits. The maximum amount of living allowance payable is \$2 236 a year for independent students. Students eligible to receive living allowance at the away from home rate may receive up to \$1 976 a year. Students living at home may receive up to \$1 250 a year.

Commonwealth Teaching Service Scholarships are available to students who are prepared to undertake full-time courses which provide professional teaching qualifications for pre-school, infant, primary, secondary school or college and specialised teaching. These scholarships are not covered by a bond but are intended for students who will, on completion of their training, become members

of the Commonwealth Teaching Service. Commonwealth Teaching Service Scholarships entitle the holder to a living allowance free of a means test, to a book and equipment allowance of \$80 a year and to the payment of compulsory fees which may be levied by the training institution. Students living away from home will receive assistance with travel costs between their home and place of study up to three times per year. The living allowance payable is \$1 250 a year in the case of a student living at home with his parents and \$1 976 a year in the case of a student who is eligible to receive the allowance at living away from home rates.

Aboriginal Study Grants are available for students of Aboriginal and Torres Strait Island descent who wish to study further after leaving school. Benefits include a living allowance and a textbook and equipment allowance.

Awards are also available for postgraduate study either in research or in course work. Assistance is by means of tax free allowances paid to award holders. The allowances payable consist of a living allowance, an incidentals allowance and under certain circumstances special allowances in respect of dependants, cost of travel, cost in setting up residence, and a contribution to costs associated with the production of a thesis. The living allowance payable to an award holder with no dependants is \$4 000 a year.

OTHER ASSISTANCE

Under the Adult Secondary Education Assistance Scheme the Commonwealth Government provides assistance to adult students undertaking one year full-time matriculation level courses at technical colleges, secondary schools and other approved institutions. This assistance is available subject to a means test and certain conditions of eligibility. Assistance under the scheme may include living allowance, incidentals allowance, allowance for a dependent spouse and/or child, and fares allowance. An applicant must be eligible for living allowance in order to receive any of the other benefits and the provision of living allowance is subject to a means test. The maximum rates of living allowance are the same as for the Tertiary Education Assistance Scheme.

Students Receiving Commonwealth Government Student Assistance South Australia, At 30 June 1976

| Scheme | 1975 | 1976 |
|---|-------|-------|
| Assistance for Isolated Children | 498 | 694 |
| Secondary Allowances | 704 | 1 440 |
| Aboriginal Secondary Grants. | 737 | 780 |
| Tertiary Education Assistance | 8 291 | 8 358 |
| Commonwealth Teaching Service Scholarships. | 91 | 85 |
| Pre-School Teacher Education | 344 | 457 |
| Postgraduate Awards. | 258 | 271 |
| Aboriginal Study Grants | 39 | 102 |
| Adult Secondary Education Assistance | 264 | 327 |

TERTIARY EDUCATION

THE UNIVERSITY OF ADELAIDE

The University of Adelaide was established in 1874 by Act of Parliament passed by the South Australian Parliament. The academic work of the University began in March 1876, with four professors, three part-time lecturers, a registrar-librarian, and eight matriculated and fifty-two non-graduating students attending classes in arts and science subjects. Within a decade, law, music and medicine were added; in 1888 studies in engineering were instituted in collaboration with the South Australian School of Mines and Industries; and at the turn of the century the University broke new ground for Australian universities by founding a conservatorium of music and by instituting studies in commercial subjects. Between the two wars the Waite Agricultural Research Institute and faculties of dentistry and economics were established, studies in agricultural science and engineering greatly developed, and diploma courses in pharmacy, public administration and physical education instituted.

The original full-time academic staff of four in 1876 had grown by May 1976 to 72 professors, 93 readers, 228 senior lecturers, 158 lecturers, and 135 tutors and demonstrators. Teaching by part-time staff amounted to 60 000 hours in 1976. Part-time staff were mainly engaged in large first-year science classes involving laboratory work and in the faculties of engineering, law, medicine and dentistry.

The governing body of the University of Adelaide is the Council, comprising the Chancellor and the Vice-Chancellor (*ex officio*), twenty-two members elected by a Convocation of Electors, four members elected by the undergraduates and five members appointed by Parliament. The principal advisory committees of the Council are the Education Committee and the Finance Committee each of which is appointed by the Council. There is also the usual university structure of faculties, boards of studies and special committees to advise on particular aspects of the University's work.

In 1977 the University had 12 faculties: arts (13 departments); economics (2); science (11); agricultural science (6); engineering (4); medicine (8); law; mathematical sciences (5); music; dentistry (4); architecture and town planning; and technology and applied science. Higher degrees are provided in all faculties except technology and post-graduate diploma courses are provided in applied psychology, business management, computing science, clinical science, education and library studies.

Intending students are normally required to have passed the Matriculation examination at a prescribed overall standard. Interstate and overseas students, however, may be accepted on alternative qualifications.

The period of study ranges from three years for certain degree and diploma courses to six years for medicine. As from 1974 all tuition fees and associated charges for degree and diploma courses were abolished. However, fees are still payable in respect of courses in the Adult Education Department and for studies in the Elder Conservatorium of Music which do not form part of a degree course. All students are still required to pay a Union Fee, *i.e.* an entrance fee of \$20 and an annual fee of \$102 for full-time students and \$51 for part-time

students undertaking more than twenty-five per cent of a full year's work and \$25.50 for part-time students undertaking up to and including twenty-five per cent of a full year's work.

During the last decade significant changes have occurred in the composition of the student body. The proportion of full-time students has steadily risen, and the proportion taking part-time studies has steadily declined. The most significant change, however, has been in the numbers of students proceeding to honours and higher degrees and post-graduate diplomas; here the rate of growth is considerably more than that of undergraduate enrolments.

From its inception until the end of 1976 the University had conferred 28 016 degrees and 8 333 diplomas by examination. The growth of the University in recent years is indicated by the number of degrees and diplomas awarded in 1976 which totalled 2 048, compared with 1 414 in 1966.

Details of student enrolments are given in the next two tables.

The University of Adelaide, Enrolments^(a)

| Course | 1972 | 1973 | 1974 | 1975 | 1976 |
|--|--------------|--------------|--------------|--------------|--------------|
| Higher degree candidates (b) | 996 | 997 | 1 101 | 1 170 | 1 243 |
| Undergraduate, diploma, certificate and miscellaneous students: | | | | | |
| Agricural science | 194 | 196 | 212 | 217 | 224 |
| Applied science | 47 | 23 | 10 | 3 | — |
| Architecture | 166 | 165 | 172 | 179 | 176 |
| Arts | 2 787 | 2 678 | 2 816 | 2 904 | 2 891 |
| Dentistry | 235 | 281 | 301 | 292 | 313 |
| Economics | 544 | 630 | 655 | 709 | 752 |
| Engineering | 625 | 623 | 605 | 620 | 617 |
| Law | 477 | 558 | 566 | 610 | 609 |
| Mathematical sciences | — | 234 | 262 | 326 | 414 |
| Medicine | 617 | 725 | 723 | 745 | 810 |
| Music | 125 | 134 | 159 | 170 | 162 |
| Pharmacy (degree) | 17 | 5 | 2 | — | — |
| Science | 1 500 | 1 296 | 1 331 | 1 255 | 1 109 |
| Technology | 111 | 55 | 29 | 14 | 2 |
| Physical education | 6 | — | — | — | — |
| Physiotherapy | 11 | — | — | — | — |
| Miscellaneous (SAIT) (c) | 103 | 100 | 96 | 115 | 123 |
| Elder Conservatorium (d) | 210 | 205 | 210 | 224 | 210 |
| Visiting students (e) | 18 | 31 | 51 | 73 | 150 |
| Total | 8 789 | 8 936 | 9 301 | 9 626 | 9 805 |

(a) Each student is counted once only; in the category appropriate to his principal course.

(b) Includes Master's qualifying candidates.

(c) Students enrolled in subjects as part of a diploma course at the South Australian Institute of Technology.

(d) Students not also enrolled for degree or diploma subjects.

(e) Students enrolled at another university, who may subsequently qualify for a degree of that other university, but who are undertaking part of their degree work at the University of Adelaide.

The University of Adelaide, Enrolments, 1976 (a)

| Course | New Students (b) | All Students | | | | Total |
|--|---------------------|--------------|-----------|----------|-------|-------|
| | | Full-time | Part-time | External | Staff | |
| Higher degree candidates | 332 | 628 | 347 | 132 | 115 | 1 222 |
| Master's qualifying candidates | 12 | — | 21 | — | — | 21 |
| Undergraduate, diploma and miscellaneous students: | | | | | | |
| Agricultural science | 88 | 188 | 36 | — | — | 224 |
| Applied science | — | — | — | — | — | — |
| Architecture | 47 | 167 | 9 | — | — | 176 |
| Arts | 1 004 | 1 666 | 1 183 | 42 | — | 2 891 |
| Dentistry | 69 | 287 | 26 | — | — | 313 |
| Economics | 217 | 448 | 302 | 2 | — | 752 |
| Engineering | 192 | 567 | 50 | — | — | 617 |
| Law | 162 | 529 | 80 | — | — | 609 |
| Mathematical sciences | 165 | 319 | 94 | 1 | — | 414 |
| Medicine | 192 | 737 | 73 | — | — | 810 |
| Music | 49 | 151 | 11 | — | — | 162 |
| Pharmacy | — | — | — | — | — | — |
| Science | 368 | 915 | 194 | — | — | 1 109 |
| Technology | — | — | 2 | — | — | 2 |
| Misc. (SAIT) (c) | 67 | — | 123 | — | — | 123 |
| Elder Conservatorium (d) | 70 | — | 210 | — | — | 210 |
| Visiting students (e) | 125 | 7 | 143 | — | — | 150 |
| Total | 3 159 | 6 609 | 2 904 | 177 | 115 | 9 805 |

(a) Each student is counted once only; in the category appropriate to his principal course.

(b) Figures for undergraduate courses include students who have transferred from another undergraduate course either in this or another university, or who are commencing a second course.

(c) Students enrolled in subjects as part of a diploma course at the South Australian Institute of Technology.

(d) Students not also enrolled for degree or diploma subjects.

(e) Students enrolled at another university, who may subsequently qualify for a degree of that other university, but who are undertaking part of their degree work at the University of Adelaide.

Waite Agricultural Research Institute

The Waite Institute was established at Urrbrae in 1924, through the generous benefaction of Mr Peter Waite, and this was largely responsible for the strong development of Agricultural Science in the University. Upon his death in 1922, Peter Waite endowed the University with the properties of Urrbrae, Claremont, and Netherby (approximately 120 hectares) together with Urrbrae House and ancillary buildings together with a Trust Fund of \$120 000, and by 1924 the Waite Agricultural Research Institute was established.

Since its establishment, the Waite Institute has conducted research into a wide range of agricultural problems. The research program is organised into six departments: agricultural biochemistry and soil science; agronomy;

animal physiology; entomology; plant pathology; and plant physiology and a Biometry section. Over the years, research projects have been carried out on the chemistry of soils, plant viruses, pasture management, ecological studies of insects, and numerous other subjects vital to the agricultural progress of the State and the nation.

The Mortlock Experimental Station of 275 hectares near Mintaro, north of Adelaide, was established in 1965 by the generosity of Mrs J. J. Mortlock. It provides more area for field experiments.

The Library

The central library of the University is named the Barr Smith Library in honour of its original benefactor, Robert Barr Smith, and his son, Tom Elder Barr Smith. During his life Robert Barr Smith provided funds for the purchase of books and members of his family gave the University a substantial donation in 1920 in his memory. Tom Elder Barr Smith provided the first part of the present building in 1930 at a cost of nearly \$70 000.

The central library includes the medical library. In addition there are branch libraries for law, music and the Waite Agricultural Research Institute. Borrowing facilities are available to staff, students and graduates.

Holdings at the end of 1976 were as follows: central library 730 000 volumes (including medical library 81 000); law library 52 000, music library 2 500 bound scores (and 13 500 pieces of music in sheets); and the Waite Agricultural Research Institute 32 500, making total holdings of 830 000 volumes. In addition, the Library held the equivalent of 65 500 volumes in microform.

During 1976 the Library made 255 000 loans to students, staff and graduates; 25 000 to other libraries in South Australia; and 6 700 to libraries in other States and countries. It received 3 100 loans from other libraries. Accessions totalled 51 000 volumes and the equivalent of 5 000 volumes in microform, while withdrawals numbered 1 800 volumes. Serials titles received exceeded 19 900. Expenditure on staff, books, serials and binding and for other library purposes amounted to \$2 200 000 or 6.5 per cent of total university revenue expenditure.

Elder Conservatorium of Music

Adelaide was the first University in Australia to establish a Chair of Music (1884) and a Conservatorium of Music (1897). In addition to full degree courses in practical studies, musicology and composition, the University School of Music provides instruction in the various branches of musical performance for part-time students.

Concert experience for students is provided through regular informal concerts internal to the Conservatorium and by occasional public concerts. The University Music Society, each year, arranges a series of night concerts by members of the staff, who also provide a series of Sunday afternoon public concerts and recitals during the winter months.

In 1976 there were 162 students proceeding to the degree of Bachelor of Music and 210 students taking single subject practical studies.

Finance

Details of income and expenditure for the period 1972 to 1975 are shown in the following table.

The University of Adelaide, Finance^(a)

| Particulars | 1972 | 1973 | 1974 | 1975 |
|--|---------------|---------------|---------------|---------------|
| | \$'000 | | | |
| Income for capital purposes: | | | | |
| Commonwealth Government | 481 | 898 | 4 726 | 2 447 |
| State Government | 481 | 898 | — | — |
| Income for other purposes: | | | | |
| Commonwealth Government | 6 208 | 6 842 | 23 783 | 30 286 |
| State Government | 7 020 | 9 661 | 88 | 111 |
| Student fees | 2 226 | 2 376 | 175 | 126 |
| Other | 1 138 | 1 138 | 1 356 | 2 153 |
| Total income | 17 554 | 21 813 | 30 128 | 35 123 |
| Expenditure: | | | | |
| Teaching and research | 12 673 | 12 315 | 20 506 | 25 617 |
| Administration | 1 636 | 2 164 | 1 604 | 2 168 |
| Libraries | 1 008 | 1 179 | 1 603 | 2 113 |
| Buildings, premises, grounds | 2 558 | 3 899 | 5 269 | 3 481 |
| Other | 981 | 864 | 1 231 | 1 768 |
| Total expenditure | 18 856 | 20 421 | 30 213 | 35 147 |

(a) Includes Waite Agricultural Research Institute.

Residential Colleges

The residential colleges are independent bodies affiliated with the University. Three of the four colleges for undergraduates were founded by churches, but impose no denominational restrictions on admission; the fourth undergraduate college and the college for postgraduate students have no denominational affiliation. All are situated in North Adelaide within easy walking distance of the University.

Their names, church affiliations, years of founding and residential capacities are:

| | | | |
|---------------------------|--|------|--------------------------|
| St Mark's | Church of England | 1925 | 130 students, 12 tutors; |
| St Ann's | Non-denominational | 1947 | 121 students, 8 tutors; |
| Aquinas | Catholic | 1948 | 102 students, 12 tutors; |
| Lincoln | Methodist | 1952 | 176 students, 15 tutors; |
| Kathleen Lumley | Non-denominational (postgraduate) | 1968 | 70 students. |

St Mark's confines its membership to men; in 1973 St Ann's and Lincoln and in 1974 Aquinas made their facilities available to both men and women. Kathleen Lumley has been co-residential since its foundation.

Department of Adult Education

This department offers a range of courses for members of the general public (see page 255).

Other Special Features

Unusual features of the University's work include its extensive research into the linguistics, myths, legends and musicology of the Aborigines; teaching and research in Computing Science ranging from first year undergraduate level to the Doctorate of Philosophy; the Mawson Institute for Antarctic Research (which also takes postgraduate students); upper atmosphere research by balloon and rocket; mineral exploration; and arid zone studies.

THE FLINDERS UNIVERSITY OF SOUTH AUSTRALIA

During 1958 when the University of Adelaide began to plan two major new buildings on its existing 13 hectare site it became apparent that further expansion would have to take place elsewhere.

Early in 1961 the South Australian Government indicated that it would make available to the University of Adelaide an area at Bedford Park, of some 150 hectares, situated about eleven kilometres from the centre of Adelaide in the foothills of the Mount Lofty Ranges. Consequently the University of Adelaide made a submission for financial support to the Australian Universities Commission in 1962, which gave approval for the planning of Bedford Park. The institution became known as 'The University of Adelaide at Bedford Park'. Towards the end of 1965 the South Australian Government decided to make the University of Adelaide at Bedford Park a fully autonomous university under the name 'The Flinders University of South Australia', after the great explorer and hydrographer, Matthew Flinders. A more detailed history of the Flinders University was included on pages 163-8 of the *South Australian Year Book* 1967.

The Flinders University of South Australia Act came into force on 1 July 1966. The Act places the whole management of the University in the hands of a council with powers to make statutes and regulations subject to the approval of Convocation which comprises the graduates of the University, graduates of other universities who have been awarded a diploma of the University and full-time members of the staff.

The Council comprises thirty-one members: the Chancellor; the Vice-Chancellor; the President of the Students Association; five members of the Parliament of South Australia; three members appointed by the Governor; eight members of the academic staff elected by the academic staff; one member of the ancillary staff elected by the ancillary staff; four persons elected by Convocation; one postgraduate student elected by the postgraduate students; three undergraduate students elected by the undergraduate students; and not more than three other members co-opted by the Council.

The first academic year of the University began in 1966, with enrolments of 382 first-year undergraduates and thirty-five graduate students.

Details of enrolments for the years 1973 to 1976 are shown in the following table.

The Flinders University of South Australia, Enrolments

| Course | 1973 | 1974 | 1975 | 1976 |
|--|--------------|--------------|--------------|--------------|
| Undergraduate bachelor degrees: | | | | |
| Arts | 1 251 | 1 447 | 1 586 | 1 848 |
| Science | 548 | 508 | 498 | 480 |
| Economics | 233 | 273 | 254 | 303 |
| Education | 240 | 265 | 249 | 199 |
| Medicine | — | 64 | 129 | 185 |
| Postgraduate bachelor and diploma: | | | | |
| Diploma Social Administration | 69 | 120 | — | — |
| Bachelor Social Administration (a) | — | — | 116 | 115 |
| Bachelor Special Education | — | — | 26 | 45 |
| Diploma Education | 120 | 141 | 216 | 189 |
| Diploma Education Administration (b) | — | — | — | 5 |
| Diploma Social Sciences (c) | — | — | 21 | 39 |
| Diploma Dietetics (b) | — | — | — | 10 |
| Higher degrees (including master qualifying) | 256 | 287 | 322 | 366 |
| Miscellaneous | 49 | 68 | 57 | 114 |
| Total | 2 766 | 3 173 | 3 474 | 3 898 |

(a) Replaces Diploma in Social Administration from 1975.

(b) Commenced in 1976.

(c) Commenced in 1975.

The Flinders University of South Australia: Enrolments, 1976

| Course | Commencing Students | All Students | | |
|---------------------------------|---------------------|--------------|--------------|--------------|
| | | Full-time | Part-time | Total |
| Arts | 820 | 1 309 | 539 | 1 848 |
| Science | 175 | 435 | 45 | 480 |
| Economics | 161 | 198 | 105 | 303 |
| Education | 68 | 127 | 72 | 199 |
| Medicine | 63 | 184 | 1 | 185 |
| Higher degrees | 127 | 154 | 197 | 351 |
| Master qualifying | 11 | 5 | 10 | 15 |
| Postgraduate diploma | 206 | 170 | 73 | 243 |
| Postgraduate bachelor | 93 | 130 | 30 | 160 |
| Miscellaneous | 162 | 8 | 106 | 114 |
| Total | 1 886 | 2 720 | 1 178 | 3 898 |

Academic Organisation

The academic organisation of the University is based on 'schools' instead of faculties or departments. The school is the basic academic and administrative unit and one of the professors of each school is appointed to act as the chairman of the school.

At present there are eight schools: the Schools of Humanities; Social Sciences; Mathematical Sciences; Physical Sciences; Biological Sciences; Medicine; Earth Sciences; and Education. The School of Biological Sciences is an integrated one; there are no divisions into the traditional disciplines of botany, zoology, microbiology, etc., the emphasis being on the manner in which the teaching and research are organised, e.g. cellular biology, molecular biology. The remaining schools have a total of twenty-six disciplines established within them.

The Flinders University of South Australia
Full-time Staff Establishment, 1 January 1977

| | |
|---|-----|
| Schools: | |
| Academic (teaching and research) | 324 |
| Technical | 155 |
| Clerical | 96 |
| Library: | |
| Professional | 23 |
| Other | 41 |
| Registry: | |
| Senior administrative | 39 |
| Clerical | 77 |
| Caretaking, grounds and maintenance | 55 |
| Student services: | |
| Professional | 6 |
| Other | 7 |
| Total | 823 |

The Library

The acquisition of books for the library commenced in 1963 when the first library staff were appointed. By the time teaching began in 1966 a collection of some 60 000 volumes had been assembled. At the end of 1976 the collection totalled 350 000 volumes and approximately 30 000 volumes are being added each year; 7 800 periodicals are currently received. Emphasis is placed on the acquisition of material to support the current teaching and research programs of the University. Loans to staff and students during 1976 totalled more than 120 000.

Admission to the University

Normally students must have qualified for matriculation by passing the Matriculation Examination of the Public Examinations Board in a prescribed manner, and must be selected by the University. Flinders University, the University of Adelaide and the South Australian Institute of Technology have established an Admissions Office for Higher Education to which all students wishing to enter any of these institutions must apply for admission. Selection for admission is based, as far as practicable, on academic merit.

Degrees Offered

The University offers the following degrees; Bachelor of Arts, Bachelor of Economics, Bachelor of Education, Bachelor of Medicine and Bachelor of Surgery, Bachelor of Science, Bachelor of Social Administration, Bachelor of

Special Education, Master of Arts, Master of Arts (Drama), Master of Economics, Master of Education, Master of Psychology, Master of Social Administration, Master of Science, Doctor of Philosophy, Doctor of Letters and Doctor of Science. In addition there are postgraduate diplomas in social sciences, education and dietetics. A postgraduate diploma in accountancy is expected to be offered in 1978.

The Flinders Institute of Atmospheric and Marine Sciences

The Flinders Institute for Atmospheric and Marine Sciences was established by the Council to further the University's interest in physical and environmental aspects of the air and the sea.

Academic staff and postgraduate students of the University who seek to conduct their research within the framework of the Institute's operations may be considered as members. As an association of scientists with related research interests, the Institute is able to undertake a relatively wide range of investigations including a significant contribution to an international research program on the Ross Ice Shelf, Antarctica, as well as expeditions to Lake Eyre and New Caledonia.

The Institute ensures that the University's academic and technological capabilities in atmospheric and marine sciences are made known to such government instrumentalities and private sectors of industry as may make use of them to the mutual benefit of both the outside group and the University. As such in many areas of the environmental and earth services the Institute is able to play an active role in introducing senior undergraduate students and postgraduate research scholars to some of the scientific needs of the community. Tidal and specialised meteorological data libraries, instrumental facilities and field stations on the Coorong and Cape du Couedic as well as a series of publications are maintained.

In recent years, the work of the Institute has been extensively supported by the Australian Research Grants Committee, the Commonwealth Department of Environment, Housing and Community Development, the Bureau of Meteorology, Department of Defence, the South Australian Housing Trust, the Engineering and Water Supply Department, the US National Centre for Atmospheric Research (a subsidiary of the National Science Foundation), Environmental Resources of Australia, the Horace Lamb Institute of Oceanography and the University's own research budget.

Flinders University Institute for Energy Studies

An Institute for Energy Studies has been formed at Flinders University with a membership extending through the disciplines of biology, chemistry, physics, geography and meteorology. The aim of the Institute is to explore alternative methods of energy production which are non-polluting. The projects under investigation are concerned with collection, storage and conversion of various forms of solar energy, and aspects of plasma physics. The Institute publishes reports on significant developments by its research associates and consultants.

Institute of Labour Studies

The Institute of Labour Studies in the School of Social Sciences encourages graduate study, research and publication in the areas of industrial relations, labour economics, industrial psychology and sociology, and labour history. It publishes a quarterly review of labour events, *The Australian Bulletin of Labour*, and a working paper series, current research projects include studies of worker participation in industry, interaction between work and social activity, unemployment and wage relativity problems.

The Institute is administered by a management committee comprising a director, research associates and persons outside the University. The research associates include members of staff of the School of Social Sciences who are active in labour studies and members of staff of some other tertiary institutions in Australia.

University Hall

University Hall, the University's first hall of residence was completed early in 1971. During the academic year it provides accommodation for nearly 200 students, mostly in single furnished study bedrooms. In addition some double study bedrooms are provided together with flat accommodation. During University vacations the Hall is also available for accommodation and conferences organised by outside bodies.

Finance

Details of income and expenditure for the period 1972 to 1975 are shown in the following table.

The Flinders University of South Australia, Finance

| Particulars | 1972 | 1973 | 1974 | 1975 |
|--|--------------|---------------|---------------|---------------|
| Income for capital purposes: | | | | |
| | | | \$'000 | |
| Commonwealth Government | 501 | 1 416 | 4 482 | 3 086 |
| State Government | 501 | 1 416 | — | — |
| Income for other purposes: | | | | |
| Commonwealth Government | 2 271 | 3 027 | 10 209 | 13 882 |
| State Government | 3 033 | 3 925 | 53 | 104 |
| Student fees | 508 | 548 | — | — |
| Other | 182 | 111 | 309 | 466 |
| Total income | 6 996 | 10 443 | 15 053 | 17 538 |
| Expenditure: | | | | |
| Teaching and research | 3 945 | 4 998 | 6 686 | 9 409 |
| Administration | 710 | 956 | 1 254 | 1 867 |
| Libraries | 644 | 740 | 875 | 1 213 |
| Buildings, premises, grounds | 1 485 | 3 495 | 5 386 | 4 496 |
| Other | 154 | 269 | 338 | 1 029 |
| Total expenditure | 6 938 | 10 458 | 14 539 | 18 014 |

ADVANCED EDUCATION

The South Australian Board of Advanced Education was established under the South Australian Board of Advanced Education Act, 1972 to function as a co-ordinating body for colleges of advanced education in South Australia.

The Board is responsible for the development of a balanced system of tertiary education (outside the universities) to meet the needs of South Australia for persons qualified in a wide range of vocations. The Board is the State accrediting authority for awards in advanced education; it exercises financial supervision over the capital and recurrent budgets of the colleges; and it is responsible for forward planning in advanced education in South Australia.

The Board is empowered to negotiate and co-operate with the Commission on Advanced Education, the Australian Council On Awards In Advanced Education and other national bodies concerned with tertiary education.

The colleges are the Adelaide College of Advanced Education, Kingston College of Advanced Education, Murray Park College of Advanced Education, Roseworthy Agricultural College, Salisbury College of Advanced Education, South Australian Institute of Technology, Sturt College of Advanced Education, and Torrens College of Advanced Education.

The former teachers colleges are to be developed as multipurpose institutions, wherever feasible; for example, journalism has been introduced at Murray Park College of Advanced Education; Torrens College of Advanced Education (incorporating the South Australian School of Art) provides courses in art and design, nursing and speech pathology courses are being conducted at Sturt College of Advanced Education and recreation can be studied at Salisbury College of Advanced Education.

Further details of college activities are listed below.

ADELAIDE COLLEGE OF ADVANCED EDUCATION

The Adelaide College of Advanced Education is the oldest institution in Australia with an unbroken history devoted to the training of teachers. The College opened its doors on 1 June 1876. The present site in Kintore Avenue, adjacent to the University of Adelaide, was occupied in 1927 and substantial development has taken place since, including construction of the multi-storey Schulz Building. Autonomy as a college of advanced education was granted on 1 January 1973.

The College's present activities are related principally to the training of secondary teachers. Undergraduate courses to fourth year degree level are offered in general secondary arts and science, also in specialist areas of drama, music, school librarianship, secretarial studies, commerce, physical education. Postgraduate courses are offered in the professional area of teaching for university graduates, in educational administration and in reading education. From 1977, the College offers courses in the language area, including interpreting/translating. Courses also will be developed to examine issues facing migrant groups in Australia.

Most programs are available to full-time, part-time and external students. The College is the centre in the State for external studies at the advanced education level.

KINGSTON COLLEGE OF ADVANCED EDUCATION

The Kindergarten Training College was established in 1907 under the auspices of the Kindergarten Union of South Australia. In 1967 the College changed its title to the Adelaide Kindergarten Teachers College. The reconstitution of the College as an autonomous college of advanced education was finalised when the Kingston College of Advanced Education Act was proclaimed on 6 June 1974.

The buildings on the present site in Childers Street, North Adelaide, were completed in 1972. Because of the demand for trained pre-school teachers, Kingston College of Advanced Education continues to specialise in courses for teachers in early childhood education. In addition to a three-year diploma course for the training of kindergarten and junior primary teachers and conversion courses for experienced primary teachers holding a two-year diploma, graduates of universities or other colleges of advanced education are able to undertake a one-year professional course to qualify them for kindergarten and junior primary teaching or a two-year part-time professional course to qualify them in child development and parent counselling.

MURRAY PARK COLLEGE OF ADVANCED EDUCATION

Murray Park College of Advanced Education was formerly the Wattle Park Teachers College, established in 1957 as the second Teachers College in South Australia. The College was granted autonomy and renamed on 1 January 1973.

In 1968 the 13 hectare Murray Park property in Magill, about 8 kilometres east of the city, was purchased as a new site for the College. When the College was granted autonomy it took its name from this historic property.

In the field of teacher education Murray Park College of Advanced Education provides undergraduate and postgraduate courses for primary and early childhood teachers. A postgraduate course is also available for candidates holding an approved tertiary award who wish to qualify for primary teaching. In developing as a multi-discipline College, an undergraduate journalism course and a postgraduate music course are being conducted. Commencing in 1977 the college will offer also an Associate Diploma in Liberal Studies.

ROSEWORTHY AGRICULTURAL COLLEGE

Roseworthy Agricultural College is a college of advanced education located 50 kilometres north of Adelaide. Established in 1883, it is the oldest of Australia's agricultural colleges.

The College provides advanced education and training and conducts research in the theory, management and practice of primary production, in methods of agricultural marketing and in the industrial processes involved in the agricultural processing industries. In addition to normal classroom facilities the 1 200 hectare campus includes a dairy, modern winery, vineyards and orchard. About 500 hectares are cropped annually as part of the educational program for students. Residential accommodation is provided for students. A wide range of sporting facilities is available.

Studs are conducted for cattle (Jersey and Poll Shorthorn), sheep (Merino and Poll Dorset), and pigs (Berkshire and Large White). The College is involved in research and experimental work applicable to the area and in the production of pure seed of wheat and oat varieties suitable for South Australia. A major wheat and oat breeding program is also conducted.

The College currently offers four undergraduate and four postgraduate courses: the Roseworthy Diploma in Agriculture (RDA), the Roseworthy Diploma in Oenology (RDO), the Roseworthy Associate Diploma in Wine Marketing and Production, the Roseworthy Associate Diploma in Farming (RADF), the Roseworthy Diploma of Agricultural Technology (RDAT) and graduate diplomas in agriculture, international agriculture and natural resources.

To be eligible for admission to the undergraduate courses, applicants normally must have completed full secondary schooling. Selection is based on performance in examinations at Year 12 level of secondary education in South Australia, or equivalent, and on the assessed capacity of the applicant to complete the course. Provision is made for the admission of mature age students. RDAT applicants must have qualified for the RDA at an acceptable level. Applicants for the graduate diploma courses must have completed an appropriate three-year tertiary course of study.

At 30 April 1976 there were 260 students enrolled at the College.

SALISBURY COLLEGE OF ADVANCED EDUCATION

The College, located on a 28 hectare site approximately 19 kilometres north of Adelaide, was established in 1968 as the Salisbury Teachers College. The College was granted autonomy and renamed Salisbury College of Advanced Education on 1 January 1973.

The College offers three-year teaching diplomas for junior primary, primary and secondary teachers, one-year Graduate Diplomas in Teaching and in Curriculum Design for holders of Diplomas of Teaching or equivalent education qualifications, and a one-year Graduate Diploma in Educational Technology for holders of three-year tertiary qualifications, such as degrees or diplomas. A Bachelor of Education degree course of four years duration is also offered. The first three years of the course is the same as the Diplomas of Teaching. The College also offers a one-year Graduate Diploma course in Recreation, and two-year Associate Diploma courses in Recreation and in Parks and Wildlife Management.

The College will introduce, in 1978, a Diploma of Arts in Recreation. This three-year course will have as the first two years, the two years of the Associate Diploma course in Recreation.

SOUTH AUSTRALIAN INSTITUTE OF TECHNOLOGY

The South Australian Institute of Technology, which adopted its present name in 1960, was established in 1889 as the South Australian School of Mines and Industries.

After its inception there was co-operation between the University of Adelaide and the School, and in 1903 joint engineering courses were established. An important development in the history of technical education came in 1957

with an agreement between these institutions whereby certain courses of study at the School would lead to the degree of Bachelor of Technology at the University. Other degree courses have subsequently been introduced.

Current government policy aims at the independent development of colleges of advanced education and the last degree students under the joint arrangement with the University of Adelaide were enrolled in 1969. The South Australian Institute of Technology Act was revised in 1972 and the Institute is now empowered to grant its own degrees. The first of these awards was made at the 1973 graduation ceremony.

The Institute maintains a close relationship with the Education Department and the Department of Further Education, and since 1959 there has been a progressive transfer of control of certain activities. Classes up to and including Matriculation level and all trade classes were transferred to the control of the Education Department, as was the Adelaide Technical High School in September 1963.

The Department of Further Education is progressively taking over technician courses from the Institute and this has enabled the Institute to expand its work in the professional and more advanced semi-professional fields. However, some courses, not approved for awards in advanced education by the Australian Commission on Advanced Education, will continue to be offered.

In addition to its campuses at North Terrace, City, and The Levels (approximately 13 kilometres north of the city), the Institute operates a campus at Whyalla teaching at both professional and semi-professional level.

The Institute is administered by a Council which has complete authority within the limits of the finance placed at its disposal and for which it is responsible annually to Parliament. The autonomy provided by this feature of control for many years made the Institute unique among Australian technical institutes, but in recent years, the interstate colleges have been granted autonomous government.

A wide range of courses and subjects to various levels is offered. Of the professional courses presented by the Institute, twenty-two have been accredited by the Australian Council On Awards In Advanced Education, for the award of Institute degrees and four further courses which at present lead to Diploma in Technology awards, will progressively be submitted through the national accrediting machinery for acceptance as degree courses. The Institute offers in addition to a Masters' degree in Applied Science (Pharmacy), a Masters' degree (Research) which is available in several areas. There are also fourteen graduate diploma courses, eight of which have already been accredited.

For a number of years the Institute has offered courses entered after the eleventh year of schooling which lead by various periods of part-time study to a level of qualification below that of the full professional. These courses provide for those employed in the broad area between the tradesman and the professional and lead to the award of a certificate and in many disciplines, after further study, to an advanced certificate. The range of courses presented is being widened by the introduction of new associate diploma courses which may be entered after completion of twelve years of schooling. Degree, diploma and certificate courses applicable to local needs are conducted at the Institute's Whyalla campus.

Details of income and expenditure for the period 1972 to 1975 are shown in the following table.

South Australian Institute of Technology, Revenue and Expenditure

| Particulars | 1972 | 1973 | 1974 | 1975 |
|--|--------------|--------------|---------------|---------------|
| | \$'000 | | | |
| Income for capital purposes: | | | | |
| Commonwealth Government | 865 | 1 469 | } 4 512 | 5 163 |
| State Government | 1 101 | 1 206 | | |
| Other | 64 | — | | |
| Income for other purposes: | | | | |
| Commonwealth Government (a) | 1 253 | 2 235 | } 8 094 | 11 477 |
| State Government (a) | 2 843 | 3 434 | | |
| Fees from students | 948 | 922 | | |
| Other | 54 | 65 | 126 | 206 |
| Total income | 7 128 | 9 331 | 12 732 | 16 846 |
| Expenditure: | | | | |
| Capital (land, buildings, plant, furniture and equipment) | 2 452 | 2 235 | 4 746 | 4 844 |
| Revenue | 5 315 | 6 509 | 8 225 | 11 327 |
| Total expenditure | 7 767 | 8 744 | 12 971 | 16 171 |

(a) Includes amounts transferred to Capital Account for equipment and furnishings purchased: 1972, \$42 000; 1973, \$38 000; 1974, \$34 000; 1975, \$57 000.

In 1976, the Institute taught over 800 subjects. Of the 5 682 individuals enrolled in 1976, 4 078 were taking professional courses, and 1 604 lower level courses. The majority of students attending the Institute do so on a part-time basis. There were 2 135 full-time students in 1976.

South Australian Institute of Technology, Students and Staff

| Particulars | 1972 | 1973 | 1974 | 1975 | 1976 |
|---------------------------------|--------|--------|--------|--------|--------|
| Students: | | | | | |
| Individual enrolments .. | 5 732 | 5 714 | 5 558 | 5 724 | 5 682 |
| Subject enrolments .. | 16 631 | 17 084 | 18 262 | 20 175 | 19 875 |
| Full-time teaching staff | 266 | 278 | 301 | 332 | 348 |
| Part-time teaching staff | 643 | 608 | 693 | 625 | 676 |

The Library is situated at each of the three campuses of the Institute. The total holding at the end of 1976 was 107 000 volumes with some 2 000 periodical titles being received during the year. Loans to staff and students exceeded 97 000 in 1976.

Emphasis is placed on the acquisition of material in the applied sciences, technology and social sciences to support the Institute's teaching program. Collections of audio-visual materials including films, microforms, maps, prints, records and slides are being developed.

STURT COLLEGE OF ADVANCED EDUCATION

Sturt College of Advanced Education was formerly Bedford Park Teachers College established in 1966 at the same time as The Flinders University of South Australia. The College was granted autonomy and renamed on 1 January 1973. The College occupied its present buildings in 1967. The site, of about 9 hectares, is located approximately 11 kilometres south of Adelaide and is adjacent to Flinders University.

At present the College offers programs within the School of Teacher Education and the School of Health Professions. Within the School of Teacher Education, the Diploma of Teaching is offered in the areas of junior primary, primary and secondary teaching. Students successfully completing the fourth year of study, usually all secondary and a selected number of primary student teachers, receive the award of Bachelor of Education. In 1977 a one-year full-time Diploma course in School Community Relations was being offered.

From 1975 the School of Health Professions has offered three-year full-time courses in nursing and communication disorders (the latter for speech therapists) and, in 1977, a one-year full-time diploma course in community health nursing and two-year diploma courses in radiography and nurse education are being offered. A bridging course is available for hospital-trained nurses who wish to study for the Diploma of Applied Science (Nursing) award. Most of the programs offered in the School of Health Professions utilise the facilities, and to a lesser extent, the staff of the Flinders Medical Centre which is situated a few hundred metres from the College.

TORRENS COLLEGE OF ADVANCED EDUCATION

Torrens College of Advanced Education, established as an autonomous college of advanced education on 1 January 1973, incorporates the former Western Teachers College and the South Australian School of Art, both of which were responsible to the Education Department. The Western Teachers College, established in 1962, had developed from two annexes begun in 1959 to relieve pressure on the Adelaide Teachers College. The South Australian School of Art was established in 1861 under the title of the School of Design and first received Commonwealth Government finance under the States Grants (Advanced Education) legislation in the 1967-69 triennium.

The Torrens College of Advanced Education Act, 1972 provided for the retention of the name of the SA School of Art. There are four other schools, the School of Teacher Education, the School of Applied Science, the School of Community Studies and the School of Performing and Expressive Arts.

The College at present occupies six sites scattered over the metropolitan area. New buildings on a 27 hectare site at Underdale, which will eventually contain all schools of the College, were opened on 19 March 1976. The School of Teacher Education, the School of Applied Science and the School of Community Studies are at present housed in the new buildings.

In the field of education, three-year courses are offered for primary teachers, for secondary teachers in the specialist areas of art, craft, home economics and environmental design, and for technical teachers in colleges of further education. A fourth year of study is also available to graduates wishing to improve their qualifications, particularly in areas of special education. From 1978 all students commencing courses for secondary teachers will undertake a full four-year course leading to a Bachelor of Education.

Outside the field of education the College, through the School of Art, provides tertiary level training for those wishing to become practising artists, designers and craftsmen. Diploma courses are for four years on a full-time basis while associate diplomas are designed for part-time study also over four years. A four-year degree course in Fine Arts was introduced in 1977. Through the School of Performing and Expressive Arts, the College offers a three-year course leading to the award of a Bachelor of Arts (Performing Arts—Music).

**Colleges of Advanced Education, Students by Course Level and Field of Study
South Australia**

| Course | 1974 | 1975 | 1976 |
|--|--------------|--------------|--------------|
| Master degree: | | | |
| Para-medical | 3 | 4 | 6 |
| Graduate diploma: | | | |
| Agriculture | — | 16 | 22 |
| Applied sciences | 36 | 41 | 39 |
| Building, surveying and architecture | 30 | 29 | 32 |
| Commercial and business studies | 53 | 202 | 226 |
| Engineering and technology | — | — | 3 |
| Liberal studies | 27 | 34 | 33 |
| Music | — | 1 | 8 |
| Para-medical | 12 | 7 | 8 |
| Teacher education | 764 | 740 | 999 |
| Total | 922 | 1 070 | 1 370 |
| Bachelor degree: | | | |
| Applied sciences | 197 | 304 | 321 |
| Building, surveying and architecture | 299 | 338 | 340 |
| Commercial and business studies | 1 092 | 1 091 | 1 080 |
| Engineering and technology | 634 | 662 | 663 |
| Liberal studies | 294 | 348 | 424 |
| Para-medical | 333 | 391 | 493 |
| Total | 2 849 | 3 134 | 3 321 |
| Diploma: | | | |
| Agriculture | 15 | 129 | 139 |
| Art and design | 277 | 284 | 300 |
| Liberal studies | 49 | 49 | 51 |
| Para-medical | 19 | 107 | 190 |
| Teacher education | 7 108 | 7 732 | 7 712 |
| Total | 7 468 | 8 301 | 8 392 |

**Colleges of Advanced Education, Students by Course Level and Field of Study
South Australia (continued)**

| Course | 1974 | 1975 | 1976 |
|--|---------------|---------------|---------------|
| Associate diploma: | | | |
| Agriculture | 88 | 20 | 33 |
| Applied sciences | 28 | 46 | 33 |
| Art and design | 51 | 106 | 135 |
| Building, surveying and architecture | 162 | 223 | 187 |
| Commercial and business studies | 201 | 239 | 319 |
| Engineering and technology | 274 | 283 | 209 |
| Liberal studies | — | 160 | 375 |
| Para-medical | 117 | 187 | 180 |
| Total | 921 | 1 264 | 1 471 |
| Total: | | | |
| Agriculture | 103 | 165 | 194 |
| Applied sciences | 261 | 391 | 393 |
| Art and design | 328 | 390 | 435 |
| Building, surveying and architecture | 491 | 590 | 559 |
| Commercial and business studies | 1 346 | 1 532 | 1 625 |
| Engineering and technology | 908 | 945 | 875 |
| Liberal studies | 370 | 591 | 883 |
| Music | — | 1 | 8 |
| Para-medical | 484 | 696 | 877 |
| Teacher education | 7 872 | 8 472 | 8 711 |
| Total | 12 163 | 13 773 | 14 560 |

FURTHER EDUCATION

The Department of Further Education, established in 1972, is responsible for a wide range of post-secondary educational activities conducted by community colleges and colleges of further education in all areas of the State. Adult education centres in the metropolitan area, which were administered from and located in secondary schools, are now administered from a community college or college of further education.

Much of the educational development is directed towards an improvement in vocational education. This includes the provision of courses for the employment sectors of industry, commerce and government. These courses are provided at many levels from basic trade (apprentice) to post-trade, certificate and diploma level (see pages 255-7). Also associated with this vocational orientation are preparatory or general education courses.

Further Education also caters for continuing education for people of all ages by providing a wide variety of general, academic, craft, art, cultural and general interest courses. During 1976 there were 170 000 subject enrolments in more than 1 300 courses.

The following table shows the range of educational activities conducted by the Department of Further Education during 1975 and 1976, and student hours involved.

Further Education: Distribution of Educational Activities, South Australia

| Courses | Student Hours | | | |
|--|-------------------|---------------------|-------------------|---------------------|
| | 1975 | | 1976 | |
| | No. | Percentage of Total | No. | Percentage of Total |
| Degree and diploma | 141 569 | 1.4 | 114 859 | 0.9 |
| Technician or certificate or post-trade | 2 727 268 | 25.8 | 3 260 106 | 26.6 |
| Basic trade or apprenticeship | 2 384 895 | 22.5 | 2 397 352 | 19.5 |
| Other skilled trade and vocational | 1 194 361 | 11.3 | 1 546 543 | 12.6 |
| Preparatory or general education | 1 748 448 | 16.5 | 2 208 636 | 18.0 |
| General interest, enrichment and improvement | 2 381 788 | 22.5 | 2 749 515 | 22.4 |
| Total | 10 578 329 | 100.0 | 12 277 011 | 100.0 |

A more precise distribution of the Department's activities in 1976, in terms of fields of study, is shown in the following table.

**Further Education: Student Hours by Courses and Fields of Study
South Australia, September 1976**

| Field of Study | No. of Courses | Student/Hour Involvement Per Cent |
|-----------------------------------|----------------|-----------------------------------|
| Applied science | 35 | 0.1 |
| Art and design | 185 | 11.1 |
| Building industry | 108 | 13.0 |
| Business studies | 142 | 14.6 |
| Engineering | 281 | 21.2 |
| Rural and horticultural | 74 | 3.9 |
| Music | 68 | 1.1 |
| Para-medical services | 16 | 0.5 |
| Service industries | 276 | 14.1 |
| General studies | 189 | 20.4 |
| Total | 1 374 | 100.0 |

There is a continuing trend towards greater diversification in courses undertaken and also towards an increase in the certificate level of study.

The following table shows the number of subject and individual student enrolments in the years 1974, 1975 and 1976.

Further Education: Enrolments, South Australia

| Course | 1974 | 1975 | 1976 |
|--|----------------|----------------|----------------|
| SUBJECT ENROLMENTS | | | |
| Degree and diploma | 428 | 585 | 3 766 |
| Technician, certificate and post-trade | 28 442 | 36 085 | 44 711 |
| Basic trade or apprenticeship | 26 337 | 24 372 | 24 487 |
| All other skilled trade and vocational | 14 928 | 17 408 | 27 634 |
| Preparatory and general education | 19 819 | 14 811 | 21 467 |
| General interest, enrichment and improvement | 34 734 | 36 728 | 47 529 |
| Total | 124 688 | 129 989 | 169 594 |
| INDIVIDUAL ENROLMENTS | | | |
| Degree and diploma | 381 | 557 | 2 374 |
| Technician, certificate and post-trade | 17 845 | 19 888 | 25 196 |
| Basic trade or apprenticeship | 8 578 | 9 317 | 9 651 |
| All other skilled trade and vocational | 13 816 | 15 994 | 25 302 |
| Preparatory and general education | 13 389 | 9 953 | 16 466 |
| General interest, enrichment and improvement | 34 145 | 35 712 | 45 316 |
| Total | 88 154 | 91 421 | 124 305 |

The following table shows the numbers of staff employed in community and further education colleges.

Further Education: Staffing, South Australia

| Staff | 1974 | 1975 | 1976 |
|------------------------------------|--------------|--------------|--------------|
| Full-time teaching | 860 | 987 | 1 115 |
| Part-time teaching (a) | 2 680 | 2 635 | 3 320 |
| Total | 3 540 | 3 622 | 4 435 |
| Non-teaching (ancillary) | 451 | 562 | 578 |
| Total | 3 991 | 4 184 | 5 013 |

(a) The large number of part-time teachers in each year reflects the Department's policy to have teaching staff who are currently involved in activities in commerce, industry and government, and to provide courses for groups, particularly in country centres, where full-time staff are not warranted.

Curriculum

The establishment in the Department of a Curriculum Development Branch closely associated with industry and commerce has stimulated the development of new courses. This development has gone beyond the apprentice level and over a wider range of disciplines.

The number of courses offered by the Department in 1976 increased in all fields of study. The continual upgrading of vocational courses to certificate level and the introduction of many new courses has led to a significant rise in the

number of certificate and vocational courses. The Department also expanded the range of studies offered in the degree and diploma areas. The large increase in the general interest and enrichment field occurred with the resumption of many of the courses which had been suspended in 1974 because of financial constraints and the introduction of a broad range of new courses.

Further Education: Courses, South Australia

| Course | Number of Courses | | | |
|--|-------------------|------------|--------------|--------------|
| | 1973 | 1974 | 1975 | 1976 |
| Degree and diploma | 3 | 3 | 10 | 62 |
| Technician, certificate and post-trade | 72 | 77 | 115 | 135 |
| Basic trade or apprenticeship | 45 | 44 | 52 | 56 |
| All other skilled trade and vocational | 152 | 161 | 332 | 471 |
| Preparatory and general education | 62 | 46 | 106 | 106 |
| General interest, enrichment and improvement | 217 | 153 | 403 | 544 |
| Total | 551 | 484 | 1 018 | 1 374 |

Teaching Methods

The Department has continued in its efforts to improve public accessibility to courses by providing for the option of full-time, part-time or correspondence studies in a large number of courses. Special arrangements for country apprentices have continued to operate with success. Correspondence students have also been able to attend community and further education colleges for supervised study.

The integrated training approach to vocational education continues to develop in many colleges. The more traditional divisions of technical courses into theory, drawing and practical plus on the job experience, have been broken down. Integration of course work on a project basis has resulted in a more meaningful learning experience for the students.

During 1976 there was a continuing involvement by teachers in the production and utilisation of different kinds of multi-media materials. Many colleges now produce and use a wide range of learning materials to meet this need. These materials which include slide and overhead transparencies, video tapes, and audio tapes as well as multi-media packages have become increasingly available for internal and external students.

The Multi-Media Centre, located as a school of Kilkenny College of Further Education, provides a State-wide service in the production of learning materials and their usage. Part of this service has been to produce a number of video programs for general distribution and educational television service for a number of teachers.

During 1976 there has been a continuing expansion in the facilities of the library/resource centre. Book stocks, sound and video tapes, slides and transparencies have all been increased. A number of meetings and visits have been held to initiate and develop the concept of the resource centre as a central factor in the learning process.

Administration

Community colleges, colleges of further education and schools of the Adelaide College of Further Education function along autonomous lines. This autonomy encompasses enrolments, staffing at the lecturer and teacher levels and budgeting within the State allocations.

The Operations Division is responsible for translating established policies into operational programs particularly in the areas of curriculum, staff training and development. The Resources Division services all areas of the Department with emphasis upon research, building, educational resources, administration, finance and clerical services.

Current and Future Developments

The major areas of change and emphasis include the following inter-related developments:

- the continuing development of the community college, both conceptually and physically;

- the further development of general studies in colleges which were predominantly technical by tradition;

- the adaptation of the 'open university' approach to education so as to reach a broader sample of the South Australian population at the post-secondary level;

- the multi-media emphasis in the teaching-learning situation partly through the planned development of library/resource centres;

- the further development of teaching staff with the appointment of staff-development officers;

- extended provision for student welfare by the development of College Counselling Services and associated staffing.

Block Release Training

A new form of technical education known as Block Release Training was introduced in 1973 for country apprentices in some trades in which apprentices previously were required to study by correspondence. It involves first and second year apprentices, who live outside a technical school district, attending a metropolitan college for a total period of eight weeks each year. In some cases it is four blocks of two weeks and in other cases two blocks of four weeks. These apprentices receive the same training as those employed in the metropolitan area and in country school districts and are not required to undertake any correspondence course training. The Apprenticeship Commission arranges accommodation in the government hostel at Pennington, or private accommodation may be arranged, with a subsidy being payable in both cases.

Workers Educational Association of South Australia

The Workers Educational Association of South Australia Incorporated (WEA) was established in 1914. Originally patterned on the English WEA, it is a voluntary adult education organisation which works in close co-operation with other adult education organisations, and the trade union movement.

Activities it organises include a comprehensive day and evening class program, postal courses for trade unionists, and support for an international adult and children's film festival. It possesses an adult education centre in the city. Courses are offered at the University of Adelaide, The Flinders University of South Australia, the Institute of Technology and the Murray Park and Salisbury Colleges of Advanced Education.

In 1975 there were 307 classes with a total enrolment of 10 150 students organised by the WEA, and a further twenty postal courses with an enrolment of 1 509. Since 1973 a program of trade union education has been developed with the aid of a State Government grant. More than 1 000 full-time and honorary officials, shop stewards and union members attended courses in 1975, studying industrial democracy, economics, workers compensation, communications, arbitration processes, grievance diagnosis, and other relevant subjects.

University of Adelaide: Department of Adult Education

The University initiated adult education classes in 1917 under a Department of Tutorial Classes. A Department of Adult Education was established in 1957.

The Department provides lectures and discussion courses, short schools and seminars in a range of subjects for members of the general public. It has a publications program which includes proceedings of schools and seminars it has held and two comprehensive natural history studies. It arranges courses also for the continuing education of professional people.

In June 1972 the University opened an educational radio station under the call sign of 5UV. Established by a private donation of \$100 000, the station is administered by the Department of Adult Education and costs are met by the University and listeners' subscriptions. Since its opening the station has provided structured courses for professional people and the general public as well as providing educational and cultural programs.

In 1975, 5UV began operating under the conditions of a new experimental broadcast licence which has enabled an expansion of its education work. In addition, it now offers music for serious listening and community access programs.

Total enrolments for all departmental activities during 1976 were about 5 000.

TRADE EDUCATION

Legislation governing apprenticeships in South Australia is contained in the Apprentices Act, 1950-1974 which is administered by an Apprenticeship Commission consisting of a full-time chairman and five part-time members representing employer organisations, trade unions and the Minister of Education.

An employer must receive the approval of the Commission before he can employ an apprentice. The Commission determines the term of indenture in any particular trade and no term can exceed four years. In the following table the number of new apprentices commenced for the period 1972 to 1976 are given for the major industry groups.

Number of New Apprenticeships Commenced: Trade Groups, South Australia

| Trade | 1972 | 1973 | 1974 | 1975 | 1976 |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Metal | 1 007 | 1 191 | 1 535 | 1 283 | 1 199 |
| Electrical | 351 | 403 | 421 | 402 | 373 |
| Building | 380 | 535 | 529 | 551 | 531 |
| Furniture | 142 | 221 | 234 | 211 | 167 |
| Printing | 62 | 92 | 115 | 59 | 59 |
| Vehicle industry | 123 | 142 | 180 | 167 | 157 |
| Ship and boat-building | 11 | 10 | 18 | 11 | 3 |
| Bootmaking | 19 | 18 | 7 | 17 | 10 |
| Clothing | 2 | 1 | — | 1 | 1 |
| Coopering | 1 | 2 | 6 | 2 | — |
| Food | 187 | 228 | 215 | 255 | 189 |
| Hairdressing | 306 | 402 | 348 | 288 | 302 |
| Leather and canvas goods | 1 | 4 | 3 | 1 | 5 |
| Miscellaneous | 15 | 20 | 20 | 14 | 29 |
| Total all trades | 2 607 | 3 269 | 3 631 | 3 262 | 3 025 |

The following table shows the number of new apprenticeships commenced, indentures completed, indentures cancelled, and apprentices employed at 31 December for the years 1972 to 1976.

Apprenticeships, South Australia

| Particulars | 1972 | 1973 | 1974 | 1975 | 1976 |
|--|--------|--------|--------|--------|--------|
| New apprenticeships commenced | 2 607 | 3 269 | 3 631 | 3 262 | 3 025 |
| Number of indentures completed | 2 089 | 2 229 | 2 477 | 3 463 | 2 318 |
| Number of indentures cancelled | 298 | 386 | 439 | 484 | 497 |
| Number of apprentices employed | 10 682 | 11 186 | 11 948 | 11 184 | 11 559 |

The technical education of apprentices is the responsibility of the Minister of Education but the Commission has authority to make recommendations to the Minister on matters affecting their technical education.

Apprentices are required to attend technical colleges during working hours for eight hours a week or an eight week course in the first and second year. Exceptions occur for certain trades where the apprentice must attend, during working hours, a technical college for twenty-four hours (three days) for every four weeks the college is open for instruction during the first, second and third years after commencement of his course.

Although apprentices are required to attend a technical college to complete basic training (normally three years), facilities are provided for those showing ability to attend voluntarily for a fourth year. During these years, apprentices normally commence studies of an advanced nature most of which are components

of various Post-Trade Certificate courses which the apprentices are encouraged to complete as adults. These advanced subjects, and others designed to meet special demands for training in new processes and techniques, are also available to adult tradesmen and others employed in industry.

Effective Apprentice Enrolment in Technical Colleges, South Australia

| Colleges | 1972 | 1973 | 1974 | 1975 | 1976 |
|--|-------|--------|-------|-------|-------|
| Metropolitan technical colleges | 6 250 | 7 903 | 7 385 | 7 594 | 7 737 |
| Country technical colleges | 992 | 1 280 | 1 156 | 1 102 | 1 247 |
| South Australian College of External Studies (a) | 865 | 837 | 516 | 202 | 177 |
| Total | 8 107 | 10 020 | 9 057 | 8 898 | 9 161 |

(a) Includes Northern Territory apprentices.

Since 1960 the Commonwealth Development Bank has awarded Post-Apprenticeship Scholarships annually to financially assist young tradesmen and outstanding apprentices to further their education and technical qualifications. The scholarship scheme is administered on behalf of the Bank by the Australian Apprenticeship Advisory Committee. Twelve scholarships were awarded to South Australians in 1976, compared with ten in 1975.

National Apprenticeship Assistance Scheme

The Department of Employment and Industrial Relations administers the National Apprenticeship Assistance Scheme, which is designed to encourage employers to engage apprentices and to provide improved training in basic practical skills during the first three years of apprenticeship.

A subsidy is payable to all employers who employ one or more apprentices for every four tradesmen employed or who increase the level of apprentice employment compared with that for the preceding year. The subsidy is related to the age of the apprentice and is payable for the first year of the apprenticeship only. For each qualifying first year apprentice under the age of eighteen years the employer's subsidy is \$1 248. Increased amounts are paid for apprentices aged eighteen years and over.

In addition to these basic payments, subsidies are payable to employers to encourage them to allow their apprentices to engage in full-time off-the-job training in basic practical skills. Where an employer provides full-time training to approved standards, or releases apprentices for full-time training in appropriate courses at technical education institutions or in other approved training centres, a subsidy of \$20 a week for each eligible apprentice is payable for the duration of the approved course. This subsidy is available for full-time off-the-job training during the first three years of the apprenticeship, subject to a maximum subsidised period of fifty-two weeks and provided that not more than twenty-six weeks are taken during the second and third years combined. Employers who make available their own training facilities for use by other employers are eligible for a further subsidy which is determined by the Department and related to the recurrent costs of training provided.

A group training scheme exists, whereby apprentices, sponsored by employers in the private sector and engaged as additional apprentices to the employers' normal annual requirements, receive full-time off-the-job training in a Commonwealth Government department training centre throughout the first year of their apprenticeship. Further, to assist small employers in providing approved additional skills training for their apprentices, the Department promotes and subsidises co-operative group training schemes under the provisions of the National Apprenticeship Assistance Scheme.

A living-away-from-home allowance is payable to both country and metropolitan apprentices required to live away from home to obtain or remain in an apprenticeship. This allowance, which offsets some of the additional costs associated with youths living away from home, is paid at the rate of \$12.60 a week to first year apprentices and \$5 a week to those in their second year. If the employer is paying the apprentice a lodging allowance the amounts paid by the Department are reduced by the amount paid by the employer.

OTHER TRAINING

Trainer Training

As part of its responsibility in implementing an effective national manpower policy, the Department of Employment and Industrial Relations has established a trainer training service to improve the extent and quality of training practices throughout industry and commerce. In addition, an advisory service is provided to assist companies to start or extend training in a systematic way.

The general aims of the service are to promote training as a concept in industry and commerce; to improve training and to assist individuals who need training to adjust to the labour market. The service is directed at those with responsibilities for training others, including manpower training—instructional specialists and line personnel with duties for administering or implementing training. The service is divided into several trainer training areas: Training Officer Service, Instructor Service and a Supervisor Trainer Service.

The Instructor Service aims to provide basic instructional techniques for those who instruct groups of employees and those who provide individual instruction on the job. During 1976 Group Instructor, Operator-Instructor and Clerk-Instructor courses were given.

The Supervisor Training Service aims to provide resources to trainers to meet some basic needs of supervisors. Trainers in this service may be engaged in full-time or part-time training duties. The courses covered include Instruction-Communication, Inter-personal Relations, Accident Prevention and Method Improvement. These courses were provided in 1976.

The Training Officer Service is, at the moment, operating only in Melbourne and Sydney.

National Employment and Training System

The National Employment and Training System (NEAT) provides a comprehensive system of labour training able to remedy labour imbalances in industrial sectors and geographical regions. NEAT forms a basis for the Commonwealth Government's manpower policy, and is designed for operation by the Commonwealth Employment Service with the following broad objectives:

to alleviate unemployment wherever it may occur and to overcome shortages of skilled labour;

to assist in the long-term restructuring of the workforce, promote regional development, and improve the general level of available skills;

to serve the social and economic needs of the community by means of special assistance, guidance, remedial training, and other measures designed to improve employment opportunities.

The NEAT System supersedes other employment training schemes such as those for women, widow pensioners, war widows, persons displaced by redundancy or technological change, Aborigines, general retraining for employment, rural reconstruction, permanent forces resettlement, disabled members of the forces, former regular servicemen, and national servicemen; these schemes were designed for specific categories of people. NEAT assistance is available to persons genuinely needing help to find suitable employment. Individuals assisted under NEAT must have specific employment objectives, which should be realistic for the individual and compatible with the requirements of the labour market.

Approved training can be undertaken full-time or part-time at training institutions, within industry or commerce, or by correspondence course. Persons undertaking full-time formal studies through NEAT are paid a weekly allowance. Companies providing on-the-job training for NEAT trainees receive a percentage of the average adult male award wage as a subsidy.

STATE EXPENDITURE ON EDUCATION

The following tables show details of outlay and receipts by the South Australian Government on education for the year 1975-76.

Consolidated Revenue Account: Receipts and Outlay on Education South Australia, 1975-76^(a)

| Particulars | Outlay | | | Total (Including Other) | Total Receipts (<i>b</i>) |
|---|--|---|---|-------------------------------|-----------------------------------|
| | Purchases of Goods and Services | Current Grants to Private Non-profit Organisa- tions | Less Charges for Goods and Services Supplied | | |
| | | | | | |
| | | | \$'000 | | |
| General administration, regulation and research | 7 265 | 23 | 700 | 7 179 | 99 |
| Transportation of students | 3 992 | — | 50 | 4 940 | 29 |
| Primary and secondary education | 207 882 | 5 661 | 1130 | 213 420 | 21 111 |
| Vocational training | 16 616 | 2 | 52 | 17 512 | 4 474 |
| University education (<i>c</i>) | 1 | — | 17 | — 16 | — |
| Other higher education | 6 004 | 1 | 404 | 11 408 | 1 170 |
| Other education programs: | | | | | |
| Handicapped children | 2 801 | 143 | — | 2 944 | — |
| Adult education | 4 932 | 45 | 664 | 4 313 | — |
| Pre-school and childcare | 1 069 | 362 | — | 10 234 | — |
| Other | 378 | 73 | — | 465 | 7 657 |
| Total | 250 940 | 6 310 | 3 017 | 272 399 | 34 540 |

(a) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay.

(b) Mainly grants from Commonwealth Government.

(c) Includes expenditure on general research.

Loan Fund: Receipts and Outlay on Education, South Australia, 1975-76

| Particulars | Outlay | | | Total Receipts (a) |
|---|------------------|-----------------|-------------------------|--------------------|
| | New Fixed Assets | Existing Assets | Total (Including Other) | |
| | | | \$'000 | |
| General administration, regulation and research | 7 | — | 7 | 513 |
| Transportation of students | 1 144 | — | 1 144 | — |
| Primary and secondary education | 35 634 | 3 216 | 38 850 | 9 932 |
| Vocational training | 8 383 | 817 | 9 200 | 1 617 |
| University education | — | — | — | 21 |
| Other higher education | 259 | — | 259 | 520 |
| Pre-school and childcare | — | — | — | 108 |
| Total | 45 427 | 4 033 | 49 460 | 12 711 |

(a) Mainly grants from Commonwealth Government.

TRAVEL TO SCHOOL

A sample survey was conducted in August 1974 to obtain information about the principal means of transport by which full-time students of all ages travelled to school, university or other educational institution, the time at which they usually left home and the time usually spent on the journey. Details of the survey are available in the bulletin, *Journey to Work and Journey to School*, August 1974 (Reference 17.4) published by the Australian Statistician.

6.3 SCIENTIFIC AND RESEARCH ORGANISATIONS**AUSTRALIAN MINERAL DEVELOPMENT LABORATORIES**

The Australian Mineral Development Laboratories (AMDEL) is a non-profit contract research and technical consulting organisation serving the mineral industry in Australia and overseas. AMDEL is controlled by a Council with representation from the State and Commonwealth Governments and the Australian Mineral Industries Research Association Ltd. Funds are provided for the continuance of the laboratories by annual guaranteed contributions. A wide range of services are offered including chemical analysis, mineralogy, petrology, computer techniques, ore reserves calculations, mine planning, mineral engineering, chemical metallurgy, process control, materials science, plant evaluation, process design and commissioning and environmental studies.

AMDEL employs approximately 160 people, including about seventy with professional degrees. It maintains extensive laboratories and pilot plant equipment in Adelaide, and has an office in Sydney, a small laboratory in Perth, and a resident representative in Indonesia.

Contract research earnings currently are approximately \$2 million annually.

AUSTRALIAN MINERAL FOUNDATION

The Australian Mineral Foundation has been established by the industries, institutions and departments concerned with minerals and petroleum. It is administered by a council representative of these groups.

The mining and petroleum industries are confronted with a rapid development in technology and a continual requirement for transmitting new information both to operating staff and to postgraduate students. The Foundation fills this communication need in several ways:

by providing short-term concentrated training courses for professional and other specialised staff;

through the medium of symposia, conferences and distinguished lecturers;

through a specialised resource centre including a geoscience library and information service;

by selective film showings.

In addition, it makes available an auditorium, seminar rooms and offices.

AUSTRALIAN WINE RESEARCH INSTITUTE

The Australian Wine Research Institute situated at Urrbrae promotes research and other scientific work for the Australian wine industry; it was established in 1955, having grown from a small research unit formed in 1934 within the University of Adelaide.

The Institute is administered by a nine-member council consisting of representatives from the Australian wine industry, the Commonwealth Government, the Commonwealth Scientific and Industrial Research Organization, the University of Adelaide, and scientific advisers.

Comprising laboratories and an experimental winery, the Institute conducts research into wines, brandies, and winemaking, and specialises in the microbiology and chemistry of wines and brandies. A technical advisory section assists commercial winemakers with technical problems. Tested yeast cultures for wine fermentation are made available to the wine industry.

The John Fornachon Memorial Library maintained by the Institute is a specialised library of technical literature on wine.

COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANIZATION

The Commonwealth Scientific and Industrial Research Organization (CSIRO) is Australia's largest research organisation. It is a statutory body created by the Commonwealth Government in 1949 to replace the former Council for Scientific and Industrial Research (CSIR), which had been established in 1926. The powers and functions of CSIRO include scientific research in connection with Australian primary and secondary industries or any other matter referred to it by the Minister for Science, the training of scientific research workers and the awarding of studentships, the making of grants in aid of scientific research, the recognition and support of research associations, the maintenance of the national standards of measurement, the dissemination of scientific and technical information and the publication of scientific and technical reports.

CSIRO is governed by an Executive comprising a full-time Chairman, four other full-time members, and four part-time members. The Organization has thirty-seven research Divisions, three of which have their headquarters in South Australia: these are the Divisions of Horticultural Research; Human Nutrition; and Soils.

Division of Horticultural Research

This Division is concerned with research on perennial horticultural plants. It has its headquarters and a laboratory in Adelaide, a laboratory and field plantings at Merbein, Victoria.

At the Adelaide laboratory, research in plant physiology and plant biochemistry provides information about the mechanisms which control growth, flowering and fruiting of horticultural crops. This includes studies on the effects of water stress, temperature and salinity on plant metabolism. Other work deals with research on plant parasitic nematodes and on the domestication of Australian native plants.

At Merbein, the Division is concerned with research on grape vines and a wide range of tree crops. For both drying and wine grapes it aims to provide better planting material through breeding new varieties, producing virus-free clones of established varieties, and through testing newly imported varieties and clones. Vine rootstock varieties are assessed for nematode resistance and salt tolerance. Research on spacing, trellising, pruning and mechanical harvesting of grapevines looks for better returns from vineyard operation, and the investigation of the processing of dried vine fruit is aimed at improving its market acceptability. The quality of wine grapes from the vine breeding program and viticultural experiments is assessed in a laboratory equipped for small-scale winemaking. A small-scale processing plant is used to examine problems of processing dried grapes.

Tree research involves the introduction and acclimatisation of new crops, the development of horticultural techniques for their production, the selection of scion varieties and the selection of salt tolerant and nematode resistant rootstocks for both new and existing crops. The Division is seeking varieties of subtropical fruits like avocados, guavas and macadamias suitable for diversifying fruit production along the Murray Valley and, together with tropical species, for growing in the tropical north of Australia. The suitability of pistachio, a valuable nut crop, for drier parts of Southern Australia is also under investigation. Trial plantings of these crops have been established at a number of representative localities as well as at Merbein, and the Division has recently appointed an officer to Darwin, Northern Territory, to supervise further field plantings. A small program studying nutritional problems of apples and related storage disorders is being continued by CSIRO at a laboratory in Hobart, Tasmania.

Division of Human Nutrition

The Division of Human Nutrition replaced the former Division of Nutritional Biochemistry on 1 January 1975. The staff are accommodated in laboratories in the grounds of the University of Adelaide and at the Glenthorne Field Station, O'Halloran Hill. The interests of the Division of Human Nutrition include: studies in epidemiology with reference to nutrition in adolescents and

young adults and in aboriginal infants; biochemical and physiological studies involving the functions of minerals and trace elements in human nutrition and aspects of human metabolism and digestion.

Division of Soils

The Division of Soils is one of three Divisions comprising the Land Resources Laboratories along with the Division of Land Use Research (centred in Canberra) and the Division of Land Resources Management (centred in Perth). The research program of this Division is concerned with the use of soils in agriculture and forestry, and the role of soils and soil materials in hydrology, plant growth and as habitats for flora and fauna. Increasing emphasis is placed on the importance of soil research in problems of the environment, although, from its inception the Division has necessarily been environmentally oriented. While early field programs in the Division involved survey and mapping, this aspect is now largely the responsibility of the various State Departments and pedologists are now engaged on more basic studies of the principles of soil occurrence, geomorphology, geochronology and sedimentology.

The work is organised into several programs, each of which comprises a number of projects. Because soil is a complex mixture of organic and inorganic materials, with a micro-flora and micro-fauna that vary with the material from which it was formed, the climate in which it occurs, and the plants and animals that occupy its surface, very few problems in soils are capable of a unidisciplinary solution. Consequently, although the Division operates through seven Sections, Chemistry, Microbiology, Micromorphology, Mineralogy, Pedology, Physics and Zoology, several of the programs involve work in more than one Section.

The headquarters laboratory is in Adelaide, with smaller groups in regional laboratories in Brisbane, Canberra, Hobart and Townsville. About half the staff are in the Adelaide laboratories, which hold the major groups for all sections except Micromorphology, which is at the Canberra laboratory. Not all the regional laboratories have each Section represented but scientists from Pedology and Chemistry Sections are located at all of them. Soil physicists and hydrologists are located at Brisbane and Canberra; the Mineralogy Section has a large group in Adelaide and a smaller unit in Brisbane.

MATERIALS RESEARCH LABORATORIES

A South Australian Branch of the Materials Research Laboratories (MRL) of the Department of Defence is located at Woodville North. The laboratory which was established in 1947 provides a scientific service to all branches of the Defence Services. After meeting defence requirements the facilities may also be made available on a commercial basis to non-defence government departments and to private industry provided such facilities are not available elsewhere in the State.

The laboratory works principally in the fields of chemistry, physics and metallurgy, and has a program of long-term research projects which are related to these disciplines. In addition it has excellent facilities for standards and calibration work and for providing a consulting and testing service in the disciplines mentioned.

The laboratory has been formally appointed a Verifying Authority under the *Weights and Measures (National Standards) Act 1960* in ten fields of precision measurement. In these particular fields, the laboratory can verify and re-verify subsidiary standards for use by other laboratories in the State in accordance with the requirements of the *Weights and Measures Act*.

The major research projects of the establishment are concerned with the development of defence and commercial applications for electrophotography and electroradiography and with fundamental aspects of photoconductivity in order to provide basic information for use in establishing and improving electrophotographic processes.

A new process for the liquid development of electrophotographic images was invented at the laboratory in 1953 and world-wide patents have been taken out to cover this and many other related processes which have been established since that time. These new processes have found numerous defence applications including medical and industrial radiography, cartography, the printing of aerial photographs, the high density recording of electrical signals and facsimile transmission. In addition the MRL liquid development process has had wide commercial application in office copying equipment and in colour printing and proofing. The royalties paid to the Commonwealth Government by overseas licensees of the electrophotography patents have amounted to approximately \$10 million.

At the end of 1976 the total staff of the laboratory was fifty-four including eighteen research scientists and experimental officers.

INSTITUTE OF MEDICAL AND VETERINARY SCIENCE

The Institute of Medical and Veterinary Science was established in 1937, under the *Institute of Medical and Veterinary Science Act, 1937*, to incorporate the functions of the former *Adelaide Hospital Laboratory*. The Director of the Institute is the chief executive officer of the council which is responsible to the Minister of Health.

The Institute provides diagnostic facilities in all branches of clinical pathology for the *Royal Adelaide Hospital* and other metropolitan and country hospitals, for public health authorities, for industry, and for private practitioners. It also undertakes work in all branches of veterinary pathology for the Department of Agriculture and Fisheries and for veterinary practitioners and stockowners. Research is conducted into selected problems connected with disease in man, and in animals of economic importance. The staff of the Institute takes part in the teaching of the medical sciences to graduates, students and technicians.

The Institute is financed by an annual grant from the State Government, and its research and development projects are assisted by the National Health and Medical Research Council of Australia, the Australian Wool Corporation, certain private firms and by private benefactors.

At the *Royal Adelaide Hospital* the Institute operates a Blood Transfusion laboratory, a Division of Nuclear Medicine and undertakes all required autopsies. To meet the growing need for blood transfusion and laboratory services in rural areas, regional laboratories, staffed and administered by the Institute, have been established in nine towns.

The increase in volume of work is reflected in the increased number of tests performed: 27 000 in 1938-39; 175 528 in 1952-53; and 3 499 097 in 1975-76. Sections of the Institute that have recently grown in size and importance are the Renal Pathology Unit, the Gastro-intestinal Pathology Unit and the computer section.

The Institute of Medical and Veterinary Science

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------|-----------|-----------|-----------|-----------|-----------|
| Staff at end of year: | | | | | |
| Graduate | 99 | 111 | 164 | 176 | 190 |
| Other | 399 | 448 | 481 | 510 | 559 |
| Tests performed | 1 752 943 | 2 036 425 | 2 470 909 | 2 878 886 | 3 499 097 |
| Revenue (a): | | | Dollars | | |
| State Government grant | 1 690 280 | 2 280 000 | 3 330 000 | 5 377 441 | 1 000 000 |
| Fees for laboratory tests | 1 207 494 | 1 145 815 | 1 292 342 | 1 508 577 | 7 569 329 |
| Other | 126 315 | 184 054 | 309 097 | 292 088 | 352 798 |
| Total | 3 024 089 | 3 609 869 | 4 931 439 | 7 178 106 | 8 922 127 |
| Expenditure: | | | | | |
| Salaries and wages | 2 201 285 | 2 691 840 | 3 725 993 | 5 474 257 | 6 916 506 |
| Other | 768 613 | 836 114 | 1 240 932 | 1 404 025 | 2 149 419 |
| Total | 2 969 898 | 3 527 954 | 4 966 925 | 6 878 282 | 9 065 925 |

(a) From 1 July 1975, costs incurred by the Institute for pathology services are recoverable from recognised hospitals and the Health Insurance Commission. As a result the State Government grant for 1975-76 was reduced to \$1 000 000.

A computerised system of laboratory reporting, accounting and data storage for rapid retrieval has been introduced and is progressively being developed. There are two remote terminals linked to the central computer, one at Modbury Hospital and one in the Casualty Section of the Royal Adelaide Hospital; further units will be provided in the intensive care wards. Telex links are operating to Port Lincoln, Port Augusta, Whyalla, Mount Gambier and Berri. Plans are developing for the Institute's computing service to be the base for an independent State laboratory computing organisation to cover the needs of several other large hospital laboratories in the metropolitan area.

WAITE AGRICULTURAL RESEARCH INSTITUTE

The Waite Agricultural Research Institute was established, within the University of Adelaide, in 1924. The research projects conducted at the Institute cover a wide range of topics, of which the following are a few examples: relationship of stocking rates to pasture composition and fertiliser practices; the protein chemistry of the wheat grain; the genetics and breeding of cereals and pasture plants; flower and fruit development in horticultural plants; studies on soil-borne and virus diseases of plants; nutrition of the honey bee; and the biochemistry of nitrogen fixation.

Further details relating to the Waite Institute may be found in Part 6.2 Education.

WEAPONS RESEARCH ESTABLISHMENT

The Weapons Research Establishment, situated at Salisbury, is one of a number of establishments within the Defence Science and Technology Organisation of the Commonwealth Department of Defence, and is responsible for research and scientific development in relation to defence, including the operation of the Joint United Kingdom-Australia Project for the conduct of trials.

The Weapons Research Establishment is concerned with research, development and testing of guided missiles, experimental research in the upper atmosphere, and research and development in other defence areas including aerodynamics, propulsion, electronics, computing, systems analysis and operational research.

The headquarters of the Weapons Research Establishment occupies an area of 1 170 hectares at Salisbury. The total strength of the Establishment, including staff at Salisbury and Woomera, was about 3 700 at November 1976. Facilities within the area have been provided for branches of firms which have contracts in the defence field.

The Establishment comprises four main sections or wings, namely, Trials Wing, Applied Physics Wing, Weapons Research and Development Wing, and Engineering Wing. Trials Wing is responsible for the operation and development of the Woomera Range, for the planning and conduct of range trials and associated activities relating to the use of the range, and for the processing and analysis of trials data. Applied Physics Wing is responsible for Australian defence research programs in the fields of electronics, optics, systems analysis, radio and optical propagation, radar, lasers, infra-red visual surveillance and electronic warfare. Weapons Research and Development Wing supports Australian defence and development programs in the fields of aero-ballistics, rocket propulsion, weapon systems and marine physics. Engineering Wing undertakes the design, development, prototype manufacture and testing of engineering equipment and systems to support the work of the Establishment. This Wing is also responsible for engineering services, maintenance, drafting, library services and documentation in the communications, electronics and mechanical engineering fields.

A testing range is situated at Woomera, approximately 500 kilometres north-west of Adelaide. Woomera township, with modern amenities including a hospital, school, kindergarten, community store, swimming pool and numerous sporting facilities, was built to accommodate the range staff and allied service personnel and their families. Woomera has a total population of about 3 000 which includes working staff, their dependants, and other supporting and business personnel.

Edinburgh Airfield which adjoins Weapons Research Establishment at Salisbury is the headquarters of the Royal Australian Air Force (RAAF) in South Australia and is a fully operational RAAF base. When necessary, aircraft associated with joint project or other trials are operated from this base.

A special article on the Weapons Research Establishment together with maps and diagrams was included on pages 184-92 of the *South Australian Year Book* 1969.

United States Space Projects

As a result of an agreement between the Australian and United States Governments a Defence Space Communication facility has been constructed near Woomera.

6.4 CULTURE AND RECREATION

LIBRARIES

The State Library

The State Library of South Australia has its origin in a collection of books assembled in London in 1834, two years before the province of South Australia was founded. The modern character of the Library was established in 1940 when, after the Price Report of 1937, the Library was separated from the Museum and Art Gallery and became a State Government department administered by the Libraries Board of South Australia.

The oldest section of the Library is the Reference Library, which is the central basic collection. Since 1946, except for rare irreplaceable volumes and reference works, most of the books have been available for loan. Over 4 200 periodicals are received annually, and the Newspaper Reading Room files 292 overseas and Australian newspapers; in 1975-76, 50 300 periodicals were lent. In the same year the Map Collection answered a record number of over 11 400 inquiries for its 56 750 maps. Legislation since 1878 provides for the deposit in the Library of copies of all items published in South Australia.

The Reference Library has a representative basic collection of nineteenth and twentieth century material in all subjects except medicine and law. It has considerable strength in a number of subjects including librarianship, wine, jazz, Australian Aborigines, River Murray shipping, sailing ships, and nineteenth century illustrated works on natural history. In addition there is a collection of tape recordings of Australian authors, folksongs and Aboriginal music. The Library is an official depository for the publications of the Australian, British and Californian Governments, and receives selected publications from the United States Government and the United Nations.

In 1975-76 the Reference Services Branch answered 172 000 inquiries. This Branch supplies lists of references and arranges for the borrowing of books, periodicals and photocopies from libraries in other States and overseas. *Pinpointer*, a bi-monthly index to popular periodicals and the quarterly *Index to Australian Book Reviews*, are published.

In 1919 the Archives Branch was established for the collection of original South Australian historical material. In 1925 legislation was passed requiring reference to the Libraries Board before destroying or disposing of public

documents. At the end of June 1976 there were 10 000 metres of occupied shelf space in the Archives. In 1975-76, 6 630 inquiries were dealt with involving 20 200 issues of documents, views, maps or printed sources. A journal, *South Australiana* is published twice a year.

The Young People's Services Branch includes the Children's Services and the Youth Lending Service. The Children's Services, formerly the Children's Library, was established in 1915 and is believed to be the oldest in Australia. The carefully selected stock includes some 14 640 books in the Children's Literature Research Collection, a special collection assembled to assist in the study of children's books. School classes visit the Library, and talks and stories are addressed to groups of children, both inside the Library and at outside venues, and to groups of parents and various societies. There are 23 700 registered borrowers in the metropolitan area and books are sent to 4 500 country children living in areas that do not have a public library.

To cater for the needs of young people between the ages of thirteen and eighteen the Youth Lending Service was established in 1957. Over 20 000 young people from the metropolitan area and country places are enrolled as members in the Service. The collection includes, besides general literature, publications of special interest to young people dealing with hobbies and careers. Cassettes, posters and paperbacks are also available for loan.

State Library of South Australia

| Year | Reference Library | Children's Services | Adult Lending Services | Central Pool for Local Public Libraries | Youth Lending Service | Total |
|-------------|-------------------|---------------------|------------------------|---|-----------------------|-----------|
| At 30 June: | | | VOLUMES HELD | | | |
| 1972 | 295 000 | 49 000 | (a) 264 000 | 18 000 | 626 000 | |
| 1973 | 308 000 | 51 000 | 69 000 | 232 000 | 682 000 | |
| 1974 | 320 000 | 63 000 | 93 000 | 175 000 | 675 000 | |
| 1975 | 339 000 | 65 000 | 85 000 | 155 000 | 666 000 | |
| 1976 | 355 000 | 64 000 | 67 000 | 180 000 | 691 000 | |
| To 30 June: | | | VOLUMES LENT | | | |
| 1972 | 105 000 | 194 000 | 533 000 | — | 98 000 | 930 000 |
| 1973 | 108 000 | 246 000 | 466 000 | — | 122 000 | 942 000 |
| 1974 | 109 000 | 247 000 | 521 000 | — | 111 000 | 988 000 |
| 1975 | 113 000 | 263 000 | 609 000 | — | 118 000 | 1 103 000 |
| 1976 | 94 000 | 244 000 | 656 000 | — | 126 000 | 1 120 000 |

(a) Separate details not available before 30 June 1973.

In 1938 a Country Lending Service was established to provide books for residents in the country districts of the State, none of which had a free local public library at the time. The service continues today, but is restricted to residents of local government districts which have not been provided with their own public library service, and to people in the unincorporated districts of the State. In 1946 the Adelaide Lending Service was founded so that residents of the metropolitan area might enjoy direct borrowing privileges. In 1972 these two services were amalgamated to form the Adult Lending Services Branch, and at the same time the children's and young people's collections previously functioning as part of the Country Lending Service were taken over by the Children's Services and Youth Lending Service respectively.

Since 1972, the Adult Lending Services Branch has enlarged its collection to include large print and foreign language books and periodicals, paperbacks, prints, posters, and cassettes, including music, spoken word and 'learn the language'. There are in excess of 6 000 cassettes in the collection and, despite a limit of two per borrower, loans exceeded 85 000 in 1975-76. Car manuals, musical scores and drama sets are also available. The Branch supplies bulk loans to several hospitals and institutions, and to a number of prisons in South Australia. Extension services also cater for housebound residents and invalids. Non-technical inquiries and requests for information are dealt with at the Readers Adviser Desk. The total number of adult borrowers in the metropolitan area is in excess of 68 600, and there are more than 5 500 adults in the country registered as borrowers from the Adult Lending Services.

Photographic and electrostatic copying facilities are available to the public. In 1962 the Libraries Board began an extensive program of publishing facsimile editions and other works of Australian interest. Over 170 works have now been published, including the first edition ever of *The Journal of Post Captain Nicolas Baudin*. Other publications include several series of *Occasional Papers* in various subject fields, and an annual *Miscellanea Musicologica*, published in association with the University of Adelaide.

Local Public Libraries

In June 1976, twenty-five local authorities, representing over half the State's population, were operating a total of thirty-seven public libraries, under the provisions of the Libraries (Subsidies) Act, 1955-1976. This Act, which gives the initiative for the establishment of free public libraries to local government, provides for the payment of subsidies (\$1 for \$1 based on all aspects of local government library expenditure except the cost of land) conditional upon a report on the matter by the Libraries Board to the State Treasurer. In 1975-76, subsidies amounted to \$972 450. The provision of bookstocks and other materials to public libraries operating under this Act is centred in the State Library, through its Public Libraries Branch, which also provides a Request and Reference Service to member libraries as a free service, as well as professional assistance to librarians and local authorities. This service includes advice on siting, and on internal planning of library buildings.

In the year ending 30 June 1976 the annual new book provision amounted to 127 800 volumes in addition to 30 000 paperbacks and 13 700 sound recordings. About 8 000 volumes were sent to libraries in answer to requests, from a central pool of 180 000 volumes maintained in the Public Libraries Branch.

Local Public Libraries, South Australia

| Year | Libraries at End of Year | Registered Readers | Books Lent | Stocks at End of Year |
|-------------------|--------------------------|--------------------|------------|-----------------------|
| 1971-72 | 31 | 127 000 | 2 366 000 | 303 000 |
| 1972-73 | 32 | 150 000 | 2 621 000 | 330 000 |
| 1973-74 | 32 | 157 000 | 2 867 000 | 389 000 |
| 1974-75 | 35 | 162 000 | 3 228 000 | 442 000 |
| 1975-76 | 37 | 137 000 | 3 882 000 | 564 000 |

Institute Libraries

Several country and suburban centres had formed institutes in the early 1850s. The first legislation on libraries was passed in the 1855-56 session of Parliament and resulted in the establishment of the South Australian Institute. In 1861, a new building was erected on the corner of North Terrace and Kintore Avenue for the Institute, which in 1884 was divided into two organisations, the Public Library and the Adelaide Circulating Library.

Institute libraries, which are situated in metropolitan and country areas throughout the State, are largely dependent on members subscriptions and in some cases on income from the Institute hall, but they also receive a government subsidy and about two-thirds of them receive support in varying degrees from local councils.

The Institutes Association of South Australia Inc. acts as a co-ordinating authority and as a purchasing agency for affiliated Institutes, these, however, retain complete autonomy, being governed by a committee elected by members. The conduct of Institutes is regulated by the Libraries and Institutes Act, 1939-1975.

The borrowing facilities of Institutes are available to subscribers and the general public has access to, and the use of, reading facilities in the library. Many Institute libraries allow children to borrow books from the library without charge.

Institute Libraries, South Australia

At 31 December

| Particulars | 1973 | 1974 | 1975 | 1976 |
|--|-----------|-----------|-----------|-----------|
| Number of institutes | 180 | 172 | 171 | 167 |
| Subscribers | 48 063 | 47 202 | 46 330 | 45 308 |
| Number of volumes | 763 997 | 738 024 | 737 054 | 731 354 |
| Volumes circulated during year | 1 773 869 | 1 654 259 | 1 654 818 | 1 384 509 |

Other Libraries

Particulars relating to the Barr Smith Library at the University of Adelaide (830 000 volumes, including 65 500 microformes, at the end of 1976), the Flinders University Library (350 000 volumes at the end of 1976) and the South

Australian Institute of Technology Library (107 000 volumes at the end of 1976) are given on pages 236, 240 and 247-8 respectively. Other libraries include those of the Royal Society of South Australia (approximately 29 000 volumes), the South Australian Branch of the Royal Geographical Society of Australasia (approximately 16 000 volumes) and the Parliamentary Library (about 60 000 volumes).

MUSEUMS

The South Australian Museum

Founded in 1856 as part of the South Australian Institute, the South Australian Museum became a separate institution with its own board in 1940 under the provisions of the Museum Act, 1939, until 1972 when it became a Division of the Department for the Environment. A new South Australian Museum Act was proclaimed on 11 March 1976, in which the present day functions of the Museum were defined. Similar to other major museums in Australia and overseas, it makes and preserves collections, carries out research and acts as an education and information centre for primary, secondary and tertiary students and for the public. Its main areas of interest are ethnology, natural history and geology.

The Museum's first permanent building, the West Wing, was opened in 1884, the North Wing was completed in 1895 and the East Wing was added in 1915. Since then the Museum has expanded to occupy the historically and architecturally significant buildings of the Old Police Barracks, three floors of Goldsborough House, an office/warehouse complex in Kent Town and a number of other annexes.

The South Australian Museum has a staff of ninety-one with twenty-seven professional research workers responsible for the care of the collections and for carrying out research. Several of the collections of specimens and data are outstanding. The collection of Australian ethnological material is of world renown while those of New Guinea ethnological objects, minerals, insects and southern Australian animals are excellent.

The research of the scientific staff is primarily taxonomic, involving the naming, identification and classification of animals, but considerable stress is laid also on their ecology, and inter-relationships with the environment. With the current interest in, and need for knowledge concerning conservation and environmental deterioration, this work is of increasing importance. Results of the research work of staff members are published in the *Records of the South Australian Museum* and in scientific journals throughout the world. The Museum's scientific Library houses more than 32 000 volumes.

Advice, based on their research results and on their specialised knowledge, is given by the scientific staff to many other research institutions and government departments. The anthropologists and archaeologists are, in addition to their research and other responsibilities, called upon to assist with the preservation of Aboriginal and historic relics (see page 273).

The Museum has a general Information Service dealing with about 10 000 inquiries annually and approximately 40 000 school children pass through the Education Centre each year. This service is now being extended to country areas with the appointment of more teachers and the development of a 'travelling museum'.

Public entertainment and education involves the presentation of displays in galleries covering nearly 4 000 square metres of which about 1 000 square metres are being currently redesigned. Education booklets on a variety of subjects, mostly written by Museum staff and published by the Museum, are on sale at a nominal price. Postcards and note paper are also published and are sold throughout Australia.

A Museums Extension Service began operation in 1976. The purpose of this is to provide professional museological advice to rural museums to improve their ability to preserve, document and display folk cultural material and thereby encourage greater community interest in local history and provide an additional resource for local educational needs.

The scientific work of the Museum is supported by a number of distinguished scientists who are appointed as honorary associates, by the Cave Exploration Group of South Australia and by the general public. In particular the Friends of the South Australian Museum have given considerable support since their foundation in 1964.

Plans are now being formulated for the construction of a new museum on the site presently occupied by the Bus and Tram Division of the State Transport Authority near Botanic Park at Hackney.

Other Museums

A number of historic residences serve as museums. In 1961 the 'Old Government House' at Belair was refurnished with relics of the colonial era and opened for public inspection. At 'Whalers Haven', Victor Harbor, a pioneer cottage has been restored and features many relics of early settlement with particular emphasis on the whaling industry. The home of the poet Adam Lindsay Gordon, 'Dingley Dell' at Port MacDonnell, is maintained as a historic house and Captain Charles Sturt's original home at Grange is open to the public. Items of historical interest are exhibited in old buildings in many of the early established country towns.

A railway museum has been established and maintained by a voluntary organisation, the Mile End Railway Museum. Locomotives and rollingstock are from the South Australian Railways, Australian National Railways, Silverton Tramway, BHP, BHAS and other private lines which have operated in South Australia. Included in the display are nineteen steam locomotives built between 1886 and 1954, two railcars, two diesels, one petrol locomotive and ten units of passenger and goods rollingstock dating from 1877, as well as a large selection of associated railway equipment. The Museum, at Railway Terrace, Mile End, is open to the public on the first and third Sundays of each month.

Various items of maritime association including pictures, models and fittings from early ships are displayed at the Nautical Museum at Port Adelaide.

A number of special museums are maintained at the University of Adelaide for the use of the staff and students and a Museum of Economic Botany is associated with the Botanic Garden.

The National Trust of South Australia

The National Trust of South Australia was established by Act of Parliament in 1955. It encourages the preservation and restoration of buildings of architectural, historic or scientific interest, the protection of scenic beauty and the conservation of land, flora and fauna.

The Trust, which is administered by a council, has forty-five branches spread throughout the State. Finance is provided by means of gifts, legacies, fund raising functions, subscriptions and a government grant.

Buildings of particular significance in South Australia are assessed on their architectural or historic merit and are categorised in accordance with the criterion adhered to by the Australian Council of National Trusts as either:

Classified, *i.e.* buildings having great historic significance or high architectural qualities, the preservation of which is essential to the heritage of the State; or

Recorded, *i.e.* buildings which contribute to the heritage of Australia and which should be recorded and their preservation encouraged.

Examples of the natural areas cared for are 'Willabalangaloo' at Berri, 'Waitiparinga' at Eden Hills, 'Roachdale' at Kersbrook and 'Engelbrook' at Bridgewater. The many beautiful or historic Trust properties include 'Collingrove' in the Barossa Valley, Beaumont House and the Marble Hill ruins and reserve. Marble Hill was officially opened on 15 February 1975 and magnificent views of the Adelaide Hills and Plains can be obtained from the many vantage points in the thirty-one hectares of park-like setting in which the building stands. Original plans of the building are on view, together with photographs of both the exterior and interior before the building was destroyed by fire on 2 January 1955. The original stables have been restored and converted for use as a cafe.

The Trust also owns the G. S. Sandison Reserve at Hallett Cove, an area of international scientific interest because of its glacial pavements.

In 1963 the paddle steamer *Marion* was purchased and refitted and now floats in the old gravings dock at Mannum; while the Willunga Court House and Police Station, both built in the mid-nineteenth century, were restored in 1969. In the following year the Trust fully restored the Customs House at Robe and in 1971 played a prominent part in persuading the State Government to save from demolition the architecturally classic and beautiful ANZ Bank Building in King William Street which had been classified by the Trust. This building has been renamed Edmund Wright House and is now occupied by the South Australian Registrar of Births, Deaths and Marriages, and many marriage ceremonies are held there.

At December 1976, the National Trust of South Australia controlled forty-nine reserves totalling 1 184 hectares and some forty-two restored buildings, many of which are used as folk museums in various country centres.

The headquarters of the National Trust in South Australia is in the historic and beautiful residence of Ayers House, once the home of the first and seven times Premier of South Australia, Sir Henry Ayers.

Aboriginal and Historic Relics

The protection of Aboriginal relics and of traces of the early settlement of the State is governed by the Aboriginal and Historic Relics Preservation Act, 1965. The administration of this Act is the responsibility of the Minister for the Environment.

Remnants of Aboriginal culture such as prehistoric camp-sites, ceremonial grounds, cave paintings, rock engravings and canoe trees are to be found in

various parts of the State. Although many such relics have been destroyed in the period of European settlement, several remain which are of great interest to scholars and tourists. In addition there are some areas of the State where such sites are of real significance to present day Aboriginal communities. These relics are protected under the provisions of the Act.

Similarly these are many relics and sites associated with early European settlement which are protected by the Act. These include settlement sites; industrial sites, particularly those associated with the pastoral and mining industries; overland telegraph stations; military installations, and a marine site at Holdfast Bay.

A particular relic or series of relics may be protected by the Governor declaring the area in which it is found either a Prohibited Area or an Historic Reserve. Inspectors and Wardens are appointed to safeguard such areas and the Protector of Relics maintains a complete register of all prohibited areas and reserves, and also of unproclaimed known occurrences of Aboriginal and Historic (including technological) relics.

A special article on Aboriginal relics together with a list of declared areas at 30 June 1969 was included on pages 201-8 of the *South Australian Year Book* 1969 and areas declared between 1 July 1969 and 31 October 1975 have been included in subsequent issues of the *South Australian Year Book*.

During the period 1 November 1975 to 31 October 1976, five Historic Reserves were declared, bringing the total of declared Historic Reserves to sixty-three while the number of Prohibited Areas remains at ten. In addition, boundaries of the previously declared Prohibited Area at Moolawatana Station were gazetted for redefinition. The five areas declared were:

| | |
|--|---|
| Kanyaka Historic Reserve <i>Historic Reserve</i> | A group of ruined buildings associated with the early pastoral development of northern South Australia. |
| Refuge Rockholes Historic Reserve <i>Historic Reserve</i> | Large granite dome associated with Aboriginal mythology and visited by Eyre in his overland exploration. |
| Holdfast Bay Historic Reserve <i>Historic Reserve</i> | First declared marine Historic Reserve. Area contains remains of first Glenelg jetty and associated jetsam. |
| Carrieton-Belton Road En-graving Site <i>Historic Reserve</i> | Aboriginal rock engravings threatened by nearby road improvement. |
| Nalara Rock Historic Reserve <i>Historic Reserve</i> | Aboriginal archaeological site. |

ART GALLERIES

The Art Gallery of South Australia

The National Gallery of South Australia was founded in 1881 as a part of the South Australian Institute which in 1884 became the Public Library, Museum and Art Gallery of South Australia. This institution was dissolved by

Act of Parliament in 1940, and the Gallery became a government department under the Art Gallery Board. The name was changed to the Art Gallery of South Australia in 1968. The first portion of the present building, the Elder Wing, was completed in 1900, the Melrose Wing on the western side and the facade were added in 1936, and in 1962 a three-storey air-conditioned wing was built at the northern end.

The collections are broad in scope and include a representative selection of Australian and European paintings and sculpture. There are large collections of prints, drawings, silver, glass and ceramics (including an important section devoted to South-East Asia), as well as furniture, arms and armour, and coins and medals. The South Australian historical collection includes relics and pictorial material of the discovery, exploration and settlement of the colony.

In addition to the permanent collections, the Gallery has a full program of visiting international and interstate exhibitions. With the establishment of the Adelaide Festival of Arts in 1960, the Gallery has participated as the organiser and venue of all the official art exhibitions presented during the biennial Festivals.

The Gallery has received many bequests, the Elder, Morgan Thomas, David Murray, Ragless, Boxall, Mortlock and Kolhagen bequests together totalling over \$252 000. In addition the State Government makes an annual grant for the purchase of works of art.

The staff of professional and technical officers undertake the research and development, care and conservation of the collections and the preparation of exhibits for public education and enjoyment. They also attend to public inquiries for authentication of works of art and guidance in conservation. Free guided tours of the collections are provided by education officers and volunteer gallery guides.

A regular program of film evenings, lectures and demonstrations is given and the Travelling Art Exhibition, a fully equipped van with illuminated portable screens, accompanied by a driver and a lecturer, tours country centres during school term. In 1976, seventy-nine centres were visited and the exhibition was viewed by 42 000 adults and children.

A society, The Friends of The Art Gallery of South Australia, was founded in 1969 for people interested in the fine arts and to create a body of people who would be informed about the activities of the Gallery. Membership stands at 1 700 and falls into five categories—Sustaining, Institutional, Family, Ordinary and Junior.

Other Galleries

South Australia's two leading art societies, the Royal SA Society of Arts (Australia's oldest art society which was founded in 1856) and the SA branch of the Contemporary Art Society of Australia Incorporated (founded in 1942) conduct exhibitions in their own galleries. An exhibition area, known as 'The Gallery', has been provided by the Adelaide Festival Centre Trust. Its inaugural exhibition was staged to coincide with the official opening of the Playhouse on

26 October 1974. A continuous, changing exhibition is mounted on its own premises by the Adelaide Potters' Club, South Australia's longest established craft society.

The SA Craft Authority was set up by the State Government in 1974 with administrative offices at St Peters in a large building known as the Jam Factory. Groups already operating there include the Crafts Association of SA and the Experimental Art Foundation Incorporated (SA).

The first permanent gallery to mount regular fortnightly shows opened at John Martin's Emporium in the mid-1940s under the directorship of Stefan Heysen. The Bonython Art Gallery, which opened at North Adelaide in 1961, was the first establishment in Adelaide to be devoted solely to the business of fine art dealing. The Llewellyn Galleries at Dulwich, which opened in 1967 but has now ceased operations was the first building in Adelaide to be architecturally designed and erected to function as a commercial exhibition gallery. Since then, many commercial galleries have been established throughout the State.

Outdoor exhibitions have been popular among amateur clubs, beginning with the Citizen's Art Group (now the Adelaide Art Society) in 1954. The Advertiser's annual open-air exhibition is supported by professionals and amateurs alike. The 1976 exhibition contained 1 189 exhibits selected from 1 729 entrants resulting in sales totalling \$33 661.

MUSIC AND DRAMA

MUSIC

Regular concerts are given by the Adelaide Symphony Orchestra, Adelaide String Quartet and University of Adelaide Wind Quintet, as well as by visiting artists and ensembles promoted by the Australian Broadcasting Commission and Musica Viva. Choral music is presented by three large choirs—Adelaide Choral Society, Adelaide Philharmonic and Harmony Choir, and by such chamber choruses as the Corinthian Singers. The State Government's subsidised regional opera company, The State Opera of SA, stages regular productions throughout the year in Adelaide and South Australian country centres. School performances aimed at promoting interest in opera are a regular feature of the Company's activities. Outside Adelaide, concerts are given in a number of country and outer-suburban areas, including an annual series of autumn concerts at Crafers in the Adelaide Hills.

The Festival Centre provides formal and informal venues for a wide variety of performances, from rock concerts to grand opera and the Rundle Mall is also being used for open-air community arts activities.

Australian Broadcasting Commission

In the metropolitan area the Adelaide Symphony Orchestra each year gives twenty orchestral subscription concerts and six youth orchestral subscription concerts, usually featuring overseas conductors and/or soloists. The Australian Broadcasting Commission (ABC) also presents a recital series of six performances by overseas artists. In addition there are at least six free orchestral concerts, a series of three Prom concerts, four family concerts and a number of non-subscription concerts each year.

During 1976 the Orchestra gave twenty-six free concerts for schoolchildren in the metropolitan area. Broken Hill had its own ABC subscription series of four concerts; one by the Adelaide Symphony Orchestra and three by international recital artists. In addition the Symphony Orchestra toured the country areas and during 1976 visited six other centres giving two free concerts for schoolchildren in each centre in addition to a public concert.

Elder Conservatorium of Music

The Elder Conservatorium of Music at the University of Adelaide provides a comprehensive course of training for students in courses leading to the degree of Bachelor of Music, and also caters for part-time students by providing instruction in the various branches of music as single studies.

Particulars relating to the Elder Conservatorium at the University of Adelaide are given on page 236.

DRAMA

The South Australian Theatre Company (SATC), a fully professional company, presents a repertory of both classics and significant modern plays. In October 1974 the company moved into its permanent quarters, the Playhouse in the Adelaide Festival Centre, with the premiere of a new Australian play. This theatre is the drama theatre of the Adelaide Festival Theatre complex which, together with its experimental theatre space and outdoor amphitheatre, provides excellent facilities for the presentation of drama, orchestral concerts, opera, ballet, recitals and films. The company includes a youth activities team working full-time in the area of drama in education.

Touring productions of plays, ballet and opera from overseas and interstate are presented by commercial managements and by the Elizabethan Theatre Trust.

The Royalty Theatre stages musical plays and light comedies, while the Q Theatre is mainly concerned with modern Australian plays.

There are over twenty amateur theatrical groups operating in South Australia, the oldest of which is the Adelaide Repertory Theatre Inc. which has its permanent home in the Arts Theatre. The Adelaide University Theatre Guild which plays in the Union Theatre of Adelaide University has premiered many Australian plays. The new Little Theatre in the University Union, opened in 1974, provides another venue for intimate theatre presentations. Many actors in the professional theatre have graduated from such groups as the Adelaide Theatre Group and the Therry Society.

Numerous country centres support amateur theatre groups. The Department of Further Education provides some tuition in country towns while the Arts Council of Australia (SA Division) arranges country tours by theatre groups.

The Adelaide Festival Centre

The Adelaide Festival Centre is a \$20 million performing arts complex on a 2.5 hectare site located on the banks of the River Torrens near the centre of the city of Adelaide. The Centre comprises a multi-purpose concert hall and lyric

theatre, two drama theatres and an open air amphitheatre. Stage three of the Centre's building project, completed in 1977, comprises a two-level underground car park and 0.75 hectares of open plaza, featuring an overall sculptural design.

The Festival Theatre

The \$7 million Adelaide Festival Theatre was the first completed auditorium of the Centre and was officially opened on 2 June 1973. Seating nearly 2 000 people on three levels and in a series of tiered boxes, the Theatre has been designed for a kaleidoscopic range of theatre activities, including orchestral concerts and recitals, large-scale opera, ballet and drama, films, musical comedy, variety and jazz concerts, conventions and conferences. The seats extend across the Theatre in continental style with access from large foyers along the sides of the auditorium.

Catering facilities in the Theatre include a restaurant seating 120 diners, a licensed bar-lounge and an outdoor cafe on the northern terrace overlooking Elder Park. During interval, patrons can also enjoy a drink at the foyer bars. Box office facilities in the Theatre are unrivalled in Adelaide and have been designed to serve the Adelaide Festival of Arts every two years when some sixty different attractions are being booked concurrently. A music and book shop in the box office lobby provides an additional service to theatre-goers and to the general public.

The Festival Centre Trustees have a policy of commissioning and purchasing works of art for the Centre which now has a collection valued at more than \$250 000.

The Drama Complex

In October 1974 work was completed on the \$6.5 million drama complex alongside the Festival Theatre. The largest auditorium in this complex is The Playhouse, a 600-seat, two-level theatre which is designed for both proscenium and thrust-stage productions.

The Playhouse is the home of the South Australian Theatre Company and is served by a production workshop consisting of design studio, carpentry and paint shops, assembly areas, wardrobe, millinery and wigmaking sections and a photographic dark room. The foyer areas of the Playhouse and the Bistro restaurant have panoramic views out over Elder Park and the River Torrens at the northern end of the Theatre.

Alongside the Playhouse and beneath plaza level is The Space, a 320 seat experimental theatre. A completely flexible auditorium, The Space can be arranged in almost any variation of seating and acting areas and incorporates electronic music facilities. It has been designed as an ideal venue for experimental performances and teaching workshops.

Where the Festival Theatre and Playhouse meet on the Elder Park side of the Festival Centre site, there is an open air Amphitheatre which is formed by the natural slope of the site where the plaza steps down to Elder Park.

The Centre's Activities

Australian national touring companies, The Australian Opera and The Australian Ballet, give annual seasons in the Festival Theatre and the resident Adelaide Symphony Orchestra uses the Theatre for its annual orchestral and

youth concert series as well as for special celebrity concerts by international artists and orchestras. The Adelaide Festival Centre Trust and principal Australian commercial entrepreneurs use the Theatre for a wide variety of other presentations. Since it opened, the Theatre has played host to many international groups including The Royal Shakespeare Company, The Leningrad Kirov Ballet, the Scottish Ballet (with Dame Margot Fonteyn), The Stuttgart Ballet, the Kwang Chow Acrobatic Troupe from the People's Republic of China, the Cleveland, Hungarian State Symphony, Shanghai and New York Philharmonic Orchestras, the Georgian State Dance Company and the Vienna Boys' Choir. Individual artists have included such diversely talented performers as Birgit Nilsson, Rod McKuen, Rudolf Nureyev, David Frost, Cleo Laine, Acker Bilk, The Supremes, Dave Brubeck, Ivan Rebroff and Yehudi Menuhin.

The Adelaide Festival of Arts

In 1958, a small group of Adelaide citizens developed plans for the first Adelaide Festival of Arts, which was held in 1960. Further festivals have been held in March in years of even number from 1962.

The Adelaide Festival has achieved many artistic triumphs in its sixteen year history and has been instrumental in bringing to Australia for the first time many notable overseas companies, performers and artists. It has seen the first performances of scores of major Australian productions and an increasing number of world premieres commissioned specially by or for the Festival. Notable world premieres have included Peter Maxwell Davies' music theatre piece for *The Fires of London*, *Miss Donnithorne's Maggot* (1974), South Australian composer Richard Meale's oboe concerto *Evocations* performed by Heinz Holliger and Collegium Musicum of Zurich (1974), Sir Robert Helpman's ballets, *The Display* (1964) and *Perisynthyon* (1974), Alex Buzo's *Coralie Landowne Says No* performed by Sydney's Nimrod Street Theatre (1974), and the Patrick White play *Night on Bald Mountain* (1966). First Australian performances have included the Janacek opera *The Excursions of Mr Broucek* (1974), Sir William Walton's *Troilus and Cressida* (1964), Benjamin Britten's *War Requiem* (1964) and his church parable *The Burning Fiery Furnace* (1970).

Notable overseas companies, orchestras and performers taking part in the Festival program over the years have included The London Philharmonic, London Symphony, Hungarian State Symphony and Warsaw Philharmonic Orchestras, Collegium Musicum of Zurich, The Swiss Kammermusiker, The Black Theatre of Prague, The Salzburg Marionette Theatre, The Jacques Loussier Trio, The Royal Shakespeare Company, The Bunraku National Puppet Theatre of Japan, The Academy of St Martin-in-the-Fields, The Prospect Theatre Company, The Stratford National Theatre of Canada, The National Theatre of the Deaf from New York, Tito Gobbi, Rudolf Nureyev, Marlene Dietrich, Rita Streich, Yehudi Menuhin, Sir Malcolm Sargent, Siobhan McKenna, Carlos Montoya, Hans Hotter and Arthur Fiedler.

World famous writers who have been guests at Festival Writers Week include Yevgeny Yevtushenko, Edna O'Brien, Anthony Burgess, Allen Ginsberg, John Updike, Alan Moorhead, Angus Wilson and Nadine Gordimer.

The completion of the \$20 million Adelaide Festival Centre has caused a shift in the emphasis of the Festival of Arts. The regular appearances of leading overseas performers and companies at the Centre throughout the year has enabled the Festival to engage in activities considered more appropriate to arts

festivals. These include the commissioning of new works, the encouragement of local companies and artists and the provision of a variety of programs to attract greater public interest and appreciation.

The 1976 Festival

The latest Festival program, the most innovative and wide-ranging to date, provided ten world premiere performances. These premieres included two one-act operas, *Fiery Tales* and *The Lamentable Reign of King Charles the Last*, commissioned by The State Opera Company of South Australia; a major piece of music commissioned from leading US composer, Charles Wuorinen; two smaller works for string quartet by Australia's Nigel Butterly and Colin Brumby; a ballet by American choreographer, Merce Cunningham; a new Australian play, *A Toast to Melba*; a one man show on the life of Lord Byron; and a youth participation play, *Carlotta and Maximilian* by Helmut Bakaitis.

Among the more important attractions at the Festival were the eighty-five members of the Siberian Cossacks from the USSR; the fifty members of the Radio Symphony Orchestra, Saarbrucken (West Germany); Lhamo, the National Folk Theatre of Tibet; and the Contemporary Chamber Ensemble and the Negro Ensemble Company from New York. Theatre offerings included Shakespeare's *Coriolanus* and Tennessee Williams' *Kingdom of Earth*; Miriam Karlin in her one woman look at the court of Louis XIV *Liselotte*, the black South African Plays, *Sizwe Bansi is Dead*, *The Island and Boesman and Lena*; and Australian puppeteer, Richard Bradshaw. The major operatic event was the Australian premiere of Allan Berg's *Wozzeck* performed by The Australian Opera with the Adelaide Symphony Orchestra. There was also a strong program of popular music which included six low-priced family concerts in Rymill Park featuring a wide range of jazz, pop, rock and big band music.

Other features of the Festival were Writers Week, burlesque stage shows, street theatre and an exhibition of decorative jewellery. The next Festival will be held from 25 February to 18 March 1978.

'Come Out'

In May 1975, the Festival administration, with \$30 000 in special grants from the State and Commonwealth Governments and a commercial sponsor (the Savings Bank of South Australia), staged 'Come Out', the first in a series of planned festivals of performing, creative and visual arts for young people. These will be staged in years of odd numbers, between the main Festivals of Arts.

The first 'Come Out' festival, was held in the final week of the first school term and the first week of the May holidays (2 to 17 May 1975) and offered a total of fifty-one different arts performances, workshops, exhibitions and allied activities which were attended by a total of 56 000 children and students and 16 000 adults.

The second 'Come Out' festival was staged on 8-22 May 1977.

BROADCASTING

The supervision of radio and television broadcasting is a Commonwealth Government responsibility. The structure of broadcasting in Australia was altered considerably in December 1976 when the *Broadcasting and Television*

Amendment Act (No. 2) 1976 was passed. This Act established the Australian Broadcasting Tribunal which has responsibility for the licensing of commercial and public broadcasting stations, and the holding of public inquiries into broadcasting matters. Previous licensing powers were vested with the Minister of Post and Telecommunications who acted upon the recommendations of the Australian Broadcasting Control Board.

The Act also established the Broadcasting Council which is comprised largely of members representing the national, commercial and public sectors of broadcasting. The Council has been established to consider and comment upon planning proposals for the development of the Australian broadcasting system.

Radio and television stations fall into three categories; national, commercial and public. National stations are operated by the Australian Broadcasting Commission. These stations do not broadcast advertising material, the Commission being supported by an annual grant from Commonwealth Government revenue. Commercial stations operated by companies licensed by the Minister for Post and Telecommunications, derive their revenue from advertising. Public broadcasting stations have recently been included under the jurisdiction of the *Broadcasting and Television Act 1942*.

Television

The following table shows the stations in service and the dates on which they commenced operations.

Television Stations At 31 December 1976
South Australia

| Call Sign and Channel | Location | Date Service Commenced |
|----------------------------|---------------|---------------------------|
| NATIONAL STATIONS | | |
| ABS—2 | Adelaide | March 1960 |
| ABNS—1 | Port Pirie | April 1965 |
| ABGS—1 | Mount Gambier | December 1965 |
| ABRS—3 | Loxton | January 1971 |
| ABCS—7 | Ceduna | July 1973 |
| ABWS—7 | Woomera | November 1973 |
| COMMERCIAL STATIONS | | |
| NWS—9 | Adelaide | September 1959 |
| ADS—7 | Adelaide | October 1959 |
| SAS—10 | Adelaide | July 1965 |
| SES—8 | Mount Gambier | March 1966 |
| GTS—4 | Port Pirie | March 1968 |

As the early stations became established their transmitting time was increased until in December 1963 the two commercial stations were transmitting in excess of seventy-seven hours a week and the national station sixty-seven hours. At 30 June 1976, the hours of service for the four Adelaide stations varied between ninety-one and 101 hours each week.

From 19 October 1974 to 28 February 1975 a restricted number of hours per week of colour television were transmitted for test purposes and on 1 March 1975 colour television was introduced in South Australia and is now used for most programs.

On commercial channels there is a considerable emphasis on drama and light entertainment, whereas the Australian Broadcasting Commission devotes more time to programs of an informative and educational nature. The Australian Broadcasting Control Board's analysis of television programs is derived from data obtained directly from commercial and national stations and is calculated on the actual duration of the programs and not, as formerly, on the scheduled duration as shown in program journals. The time occupied by advertising is not dissected in the analysis but a separate study of advertising time based on data supplied in audience measurement survey reports carried out in Melbourne provides some indication of the proportion of time occupied by advertisements; in 1975 this was estimated at 19.1 per cent of the total televising time of commercial stations.

Results of surveys conducted by the Australian Broadcasting Control Board in 1975 indicating the proportions of total broadcasting time (other than advertising) for various types of programs are given in the following table.

Television Programs: Categories, Australia, 1975

| Category | Metropolitan Stations | | Country Stations | |
|----------------------------|-----------------------|----------|------------------|----------|
| | Commercial | National | Commercial | National |
| | Per cent | | | |
| Drama: | | | | |
| Adventure | 12.1 | 4.2 | 10.7 | 4.2 |
| Domestic and comedy | 24.5 | 9.5 | 20.2 | 9.5 |
| Other | 24.3 | 5.6 | 22.8 | 5.6 |
| Light Entertainment: | | | | |
| Cartoons | 6.7 | 1.5 | 3.8 | 1.5 |
| Personality programs | 1.3 | 0.5 | 2.1 | 0.5 |
| Variety | 4.2 | 2.4 | 9.4 | 2.4 |
| Other | 2.7 | 4.3 | 2.2 | 4.3 |
| Sport | 6.3 | 15.3 | 7.6 | 15.3 |
| News | 3.6 | 6.6 | 7.3 | 6.6 |
| Children | 6.7 | 21.4 | 2.9 | 21.4 |
| Family | 2.8 | 1.0 | 4.3 | 1.0 |
| Information | 1.8 | 4.1 | 2.5 | 4.1 |
| Current affairs | 1.7 | 6.7 | 1.0 | 6.7 |
| Political matter | 0.1 | 0.2 | 0.2 | 0.2 |
| Religious | 0.4 | 1.7 | 1.6 | 1.7 |
| The arts | — | 11.3 | — | 1.3 |
| Education | 0.8 | 3.7 | 1.4 | 13.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

Radio

There are at present twenty medium frequency radio stations operating in South Australia. In the metropolitan area there are two national, four commercial and one public station, while there are eight national and five commercial stations in country areas. The country or regional stations relay programs from their respective parent metropolitan stations in addition to providing programs to cater for local interests. Adelaide's four commercial stations

broadcast continuously, while all other stations operated between 121 and 130 hours a week at 30 June 1976. On the same date all the national stations in South Australia transmitted programs for 133 hours a week. The call signs and location of stations are given in the following table: all call signs in South Australia are prefixed by the number '5'.

Radio Stations: Medium Frequency, 31 December 1976
South Australia

| National Stations | | Commercial Stations | | Public Stations | |
|-------------------|---------------|---------------------|---------------|-----------------|----------|
| Call Sign | Location | Call Sign | Location | Call Sign | Location |
| 5AN | Adelaide | 5AA | Adelaide | 5UV | Adelaide |
| 5CL | Adelaide | 5AD | Adelaide | | |
| 5CK | Port Pirie | 5DN | Adelaide | | |
| 5LC | Leigh Creek | 5KA | Adelaide | | |
| 5LN | Port Lincoln | 5AU | Port Augusta | | |
| 5MG | Mount Gambier | 5MU | Murray Bridge | | |
| 5MV | Renmark | 5PI | Crystal Brook | | |
| 5PA | Naracoorte | 5RM | Renmark | | |
| 5SY | Streaky Bay | 5SE | Mount Gambier | | |
| 5WM | Woomera | | | | |

At 31 December 1976 the national frequency modulation station, 5ABC-FM was operating for a total of 166 hours a week.

Broadcasting Programs by Categories, Australia, 1975
All Metropolitan Stations

| Category | Commercial | National | Public |
|----------------------------------|--------------|--------------|--------------|
| | Per cent | | |
| Entertainment: | | | |
| Light and popular music | 56.7 | 20.6 | 29.4 |
| Incidental matter | 5.2 | 3.7 | 6.3 |
| Variety | 1.5 | 1.2 | 1.1 |
| Drama | 0.1 | 2.4 | 1.9 |
| The arts | 0.1 | 43.5 | 24.6 |
| Information and services: | | | |
| News | 8.0 | 9.0 | 0.4 |
| Sport | 4.5 | 2.9 | 0.2 |
| Information | 1.9 | 7.2 | 18.2 |
| Religious | 0.5 | 1.0 | — |
| Social and political | 2.9 | 6.1 | 10.2 |
| Family | 1.6 | 0.3 | — |
| Children | 0.1 | 0.9 | — |
| Educational | 0.2 | 1.2 | 7.7 |
| Advertisements | 16.7 | — | — |
| Total | 100.0 | 100.0 | 100.0 |

Since 1963, the Australian Broadcasting Control Board has made surveys of all metropolitan programs twice yearly to obtain information as to the general availability of programs in each city. The program analysis covers the period of transmission between 6.00 a.m. and 10.30 p.m. Results of the surveys indicate that commercial stations broadcast mainly light entertainment in contrast to the national stations which, being independent of advertising revenue, provide a much wider variety of programs.

FILMS

South Australian Film Corporation

The South Australian Film Corporation is constituted under the South Australian Film Corporation Act, 1972-1975. The Corporation has the sole right to produce, or arrange for the production of, films for or on behalf of the State Government.

The Corporation also may undertake film productions on its own behalf, or for other organisations, and has enjoyed considerable success in several commercial ventures which include *Sunday Too Far Away*, *Picnic at Hanging Rock* and *Storm Boy*.

Other functions of the Corporation include the distribution and exhibition of films, the provision of library and other services relating to films, the arranging of courses of instruction for persons interested in film projection and research into the effectiveness of films generally.

The Corporation encourages feature film and television production by providing studio and sound mixing facilities for rental. Liaison services for producers based outside South Australia are also available.

THE PRESS

The State's first newspaper, *The South Australian Gazette & Colonial Register*, was first printed in London in 1836, six months before colonisation. The second issue of this paper, which served both as the official government publication and as an unofficial reporter of the news, was produced in Adelaide twelve months later. *The South Australian Gazette* (renamed *The South Australian Government Gazette* in 1840) emerged as a separate organ in 1839 and the newspaper continued as *The Register*. In 1850 *The Register* became the first continuous daily paper.

In the next twenty years several more daily newspapers were introduced, and for many years there were two morning and two evening papers daily. However, since the mid-1920s the present system of three major newspapers—one morning daily, one evening daily and one weekend publication—has emerged.

The Advertiser, published each morning except Sunday, was first issued in 1858 as *The South Australian Advertiser* and absorbed *The Register* in 1931. It is distributed throughout the State, with about 30 per cent of its circulation in country districts.

The News, published each evening from Monday to Friday, was introduced in 1923 replacing two evening newspapers, *The Express & Telegraph* and *The Journal*, which traced back their origins to the 1860s. Almost 80 per cent of sales of *The News* are in Adelaide and suburbs.

The *Sunday Mail*, printed on Saturday evenings and distributed mainly on Sunday mornings, first appeared under this name in 1955 following a merger between *The Mail*, first printed in 1912 and the *Sunday Advertiser*, which was introduced in 1953. About 25 per cent of sales of the *Sunday Mail* are in country districts.

The *Stock Journal*, previously the *Adelaide Stock and Station Journal*, was established in 1904. It is published weekly and provides up-to-date information on stock and wool markets and the technical aspects of farming and property management.

To support these major State-wide newspapers, a strong provincial press has been built up. There are at present thirty country newspapers operating in the State with a combined circulation of over 106 000. Most of these are published weekly, although two appear bi-weekly and three tri-weekly. Of those still existing, *The Border Watch* (Mount Gambier) in 1861 and *The Bunyip* (Gawler) in 1863 were first to appear. Earlier publications are, however, recorded; *The Port Lincoln Herald*, for example, was printed in the early 1840s. There are also district papers containing items of local interest circulated in a number of suburbs of Adelaide.

PARKS AND GARDENS

Adelaide Botanic Garden

The Adelaide Botanic Garden, occupying about 20 hectares east of the Royal Adelaide Hospital, was established in 1855 and was opened to the public in 1857. Botanic Park, an area of about 30 hectares north of the Garden was acquired in 1874 and has now been developed as an arboretum.

Since 1860 powers of management have been vested in a Board of Governors of eight members who serve for a period of four years but who may be re-elected for further terms.

The Garden contains an extensive collection of about 6 000 species of plants. Important features are the collections of native plants from dryland regions, cacti and succulents, the class ground, glass house displays and the Wisteria arbor. The Museum of Economic Botany, opened in 1879, houses a comprehensive carpological collection, displays of plant products and educational displays.

In 1954 the State Herbarium was re-established within the Botanic Garden and a new herbarium building was completed and occupied in 1965. At present it contains about 250 000 specimens.

State-wide advisory services are available on all matters relating to ornamental horticulture.

Experimental tree plantations have been established at Giles Corner, Kulpara, Lameroo, Stansbury and Meningie. Mount Lofty Botanic Garden of approximately 80 hectares was established in 1960 and is expected to be opened to the public in 1977.

In the mid-1960s the Wittunga garden at Blackwood was donated by the Ashby Family to the Botanic Garden. This comprises approximately 15 hectares and has

Australian and South African plants. This garden was opened to the public in mid-September 1975. Visiting days are Saturdays, Sundays, Public Holidays and Wednesdays from 10 a.m. to 4 p.m.

Zoological Gardens

The Royal Zoological Society of South Australia was founded in 1878, and in 1883 approximately 8 hectares of Botanic Park were granted to the Society for the establishment of the Zoological Gardens. At the same time arrangements were made for the various exotic and Australian animals and birds previously housed in the Botanic Garden to be transferred to the Zoological Gardens.

The Zoological Gardens contains an excellent collection of mammals, birds and reptiles. Particular emphasis is given to Australian fauna and especially to native Australian birds. During 1975-76, 128 species and varieties of mammals, including a large collection of marsupials, and more than 250 different species of Australian and foreign birds were exhibited.

The many mammals, reptiles and birds are attractively displayed in cages and enclosures; the enclosures for some animals are moated yards freely open to public view. Two walk-through aviaries, a Children's Zoo, where the animals can be handled and fed, and a nocturnal house for the display of animals which are more active during the night than the day, are features of the Gardens.

The revenue necessary for maintaining and developing the Gardens is obtained through an annual State Government grant, from gate receipts and sundry sources.

During 1975-76 about 380 500 persons visited the Zoological Gardens.

National Parks and Wildlife Service

The National Parks and Wildlife Act, 1972-1974 repealed several Acts and amalgamated the previous functions of, and areas controlled by, the National Parks Commission, National Pleasure Resorts, the Fauna and Flora Board and the fauna section of the Fisheries and Fauna Conservation Department to form the National Parks and Wildlife Service. The Service is a division of the Department for the Environment and its purpose is to establish and manage reserves for public benefit and enjoyment, and to conserve wildlife.

The Act provides for the protection of all fauna, flora and natural features within reserves and all protected and rare species of fauna and flora outside reserves. The areas are classified into the following types of reserves:

1. National Parks (parks of national significance);
2. Conservation Parks (primarily for conservation);
3. Recreation Parks (to allow for recreation without undue danger to natural areas);
4. Game Reserves (to enable management of wildlife).

At 31 December 1976 the reserves comprised 190 areas throughout the State and consisted of eight National Parks, 157 Conservation Parks, seventeen Recreation Parks and eight Game Reserves. The total area was almost 3.9 million hectares, or 3.9 per cent of the State. Areas under Service control ranged from 0.4 hectares (Lipson Island Conservation Park) to 2 132 600 hectares (an unnamed conservation park in the north-west of the State).

The National Parks and Wildlife Service issues permits to keep and sell protected animals and is responsible for the issue of hunting permits in South Australia.

A description of some of the parks, recreation reserves and places of historical or scenic interest was included on page 217 of the *South Australian Year Book* 1972. Flora and fauna are discussed in Part 1.4 Natural Environment.

Municipal Parks and Gardens

The City of Adelaide is surrounded by 688 hectares of parklands, considerable areas of which are devoted to gardens (136 hectares), golf courses (100 hectares) and other recreational areas. The form of development and flexibility of areas permits varied usage by the public including equestrian activities, swimming, boating, ball games, picnicking, fetes, Christmas parties, art displays and pop concerts. Planting during the year 1975-76 included 1 751 trees and 1 331 shrubs.

Most suburban and country local government authorities maintain parks and gardens within their areas.

RECREATION AND SPORT

Division of Recreation and Sport

The Department of Tourism, Recreation and Sport was established by the South Australian Government in October 1973, and comprised the new Division of Recreation and Sport and the Division of Tourism (incorporating the South Australian Government Tourist Bureau).

On 28 June 1976 the functions of the National Fitness Council of SA were amalgamated with those of the Division of Recreation and Sport. The staff and property of the Council were transferred to the Department.

In the area of recreation and sport the Department is involved in:

- capital assistance program for community recreation facilities,
- equipment grants for recreational and sporting equipment,
- advisory services for planning of recreation facilities,
- sports coaching scheme, providing grants for coaching and training,
- financial assistance towards travel to National sporting events,
- grants for the conduct of major sporting events in South Australia,
- vacation recreation programs,
- administration of recreation camps at Mylor and Parnanga and a Conference Centre at 'Graham's Castle', Goolwa,
- club administration courses,
- recreation for special needs groups including the handicapped and the elderly,
- maintenance and administration of walking tracks,

administering the Regulations under the Lottery and Gaming Act, 1936-1976, pertaining to the licensing of small lotteries in the State, administering the provisions of the Racing Act, 1976, and Regulations thereto.

The Division of Tourism is involved in:

- the promotion and marketing in South Australia and interstate, which includes media advertising; brochure production and distribution; displays, promotions and public relations; operation of public information facilities and booking offices, and regional promotion,
- development of tourist attractions, facilities and services, which includes assistance to the private sector; tourist facility projects; advisory service to Government, and contribution to government resource management policies,
- research and planning which includes collection, analyses and interpretation of data; local, regional and State research service and specific research reports.

SPORTING FACILITIES

In terms of attendance the most popular spectator sport is Australian Rules football; during the 1976 season the average attendance at the 110 minor round matches was 7 535 while the average at the six final matches was 34 305.

In addition, there were fifteen matches in the National Football League 'Wills' Cup Series; thirteen of the matches were held in South Australia. Total attendance was 198 651, an average of 7 243 a match.

From 1974 the South Australian National Football League Inc. has used its headquarters ground, Football Park at West Lakes, for major games with the Adelaide Oval as a support oval for matches when Football Park is unavailable or when other matches have been programmed there. There was a record attendance of 66 897 at the Grand Final on 25 September 1976.

Adelaide Oval, occupying approximately 6 hectares of the north parklands, has been used for major cricket and Australian Rules football matches. The record attendances have been 62 543 on 2 October 1965 for Australian Rules football and 50 962 for Test cricket on 14 January 1933. In addition there are first class suburban ovals at which major sports are played.

The Olympic Sports Field which features a new synthetic 'tartan' track is the headquarters of the South Australian Amateur Athletic Association which is affiliated with the Amateur Athletic Union of Australia. Each Saturday from October to March inter-club contests are held at this arena with an approximate annual attendance of 100 000 competitors and spectators. The Olympic Sports Field is also used by the South Australian Women's Amateur Athletic Association which conducts competitions on Saturday afternoons.

The Apollo Stadium at Richmond is a multi-purpose air-conditioned building with seating for 4 390 spectators at which a weekly basketball competition is conducted. It is situated on a 2-hectare site and is the headquarters of the South Australian Amateur Basketball Association Inc. The stadium is also used by visiting entertainers. Other basketball stadiums are at Forestville, Bowden,

Marion, Hillcrest, Colonel Light Gardens and Morphett Vale. Many school gymnasiums have basketball facilities and this sport is played in the open at various centres.

A number of indoor multi-purpose centres exist at Campbelltown, Woodville and Salisbury and in country areas such as Whyalla, Loxton, Kadina, Naracoorte and Tanunda. Others are currently under development at Elizabeth, Blackwood, Marion and Noarlunga.

The parklands of the City of Adelaide are used extensively for sporting purposes and during 1975-76, 404 sports permits were issued catering for eighteen different sports.

Sports grounds are distributed throughout suburban Adelaide, at approximately two to three kilometre intervals, and throughout country areas. In addition sports areas are available at most government and non-government schools.

Race Courses

There are four registered metropolitan courses; Morphettville, Cheltenham, Victoria Park (occupying approximately 23 hectares of the east parklands) and Oakbank. In addition there were, at 30 June 1976, thirty-four registered racing clubs and twenty-eight registered country courses. Picnic race meetings are held at a number of outlying centres.

Trotting Tracks

Metropolitan trotting in South Australia is conducted at Globe Derby Park, Bolivar, a modern and well-appointed track. There are twelve other courses in use in the State and six of these (Gawler, Kadina, Kapunda, Mount Gambier, Port Augusta and Port Pirie) have facilities for the conduct of night trotting. A new track at Murray Bridge was opened in March 1976.

Dog Racing

Greyhound racing (with betting) was introduced into South Australia in May 1971 with meetings at Whyalla and Strathalbyn. Other tracks have been established at Angle Park, Gawler and Port Pirie since that date. Meetings are held three times a week. Average attendance at Angle Park, the city track, is approximately 3 000. At present about 5 000 people own or train greyhounds in South Australia. The estimated greyhound population is 10 000 dogs.

Golf Courses

At 30 June 1976 there were eight suburban public courses, four 18-hole courses including one at National Park, Belair, and four par-3 links. There were also fourteen private courses operating within suburban Adelaide. The last course completed was an 18-hole par-3 course at Valley View in 1974. In addition there are courses at many country centres.

Motor Racing

Adelaide International Raceway at Virginia was opened on 2 January 1972. It occupies an area of 65 hectares and contains two racing circuits of 2 and 3 kilometres respectively, and a drag racing strip. There is provision for 20 000 spectators and approximately fifty meetings are held each year.

A rallycross track was commissioned at Tailem Bend Raceway on 17 April 1977. The track has been leased by the Tailem Bend Racing Club to the South Australian Motor Racing Club which conducts rallycross meetings on an average of once every six weeks. The 1.2 kilometre track, which is a combination of bitumen and loose dirt, was laid in 1976 by the District Council of Meningie.

Tennis Courts

The South Australian Lawn Tennis Club's courts (thirty-three grass and eight hard) at Memorial Drive, North Adelaide occupy approximately 4 hectares of the north parklands. The centre court was the venue for Davis Cup matches in 1952, 1956, 1963, 1968 and 1975. At 31 December 1976 the parklands also contained approximately 220 other tennis courts. Courts associated with schools, churches and private clubs exist throughout the State.

Lawn Bowling Clubs

At 30 June 1976 there were 240 bowling clubs registered with the Royal South Australian Bowling Association—sixty-seven in and near Adelaide and 173 in country areas, including four at Broken Hill, New South Wales. The size of clubs varied from thirty-five rinks at Bordertown to as few as three rinks, with the two largest suburban clubs being Holdfast Bay and Lockleys, each with thirty-two rinks. There are also 234 bowling clubs registered with the South Australian Women's Bowling Association, sixty-three in the metropolitan area (including seven clubs exclusively for women) and 171 in the country.

Swimming Facilities

At 31 December 1976 there were eighty-one public swimming pools in South Australia, of which fifty-seven were in country centres. Of these only eight country and two metropolitan pools had been in use before 1950, recent activity having been stimulated by a State Government subsidy on pool construction. Of the eighty-one pools, seventy-four had treated water, the remainder were in lakes, dams, rivers or the sea, or utilised sea water. While mainly used for recreational and instructional purposes, the facilities provide a base for fifty-four swimming clubs providing instruction and competition in swimming, diving and water polo. These clubs have a total membership of 6 500.

Swimming pools are provided at sixty-eight government schools, twenty-eight of these being in country areas. Swimming facilities are also available at a number of non-government schools. The Education Department encourages school committees to build swimming pools by granting subsidies for their construction.

The Adelaide Swimming Centre in the north parklands, opened on 20 December 1969, is a complex of four pools, including a 50-metre eight lane pool, a diving/water polo pool, both of which comply fully with international competition requirements, a 20 metre by 20 metre learner's pool and a toddler's pool. The whole is contained in a 2-hectare grassed area with spectator accommodation for 2 000 people forming an amphitheatre arrangement surrounding the competitive pools.

A new swimming complex was opened at Marion on 24 January 1976. The complex comprises 50 metre, learner's and wader's pools with associated facilities and was constructed at a cost of approximately \$900 000 by the Marion City Council, with financial assistance from the Commonwealth and State Governments, through the Department of Tourism, Recreation and Sport.

On 2 May 1976, a 25 metre indoor heated pool was opened at Whyalla, as part of the \$1.3 million Whyalla Recreation and Leisure Centre. This pool is the second public 25 metre indoor heated pool to be built in South Australia; the first being at Mount Gambier.

The nature of Adelaide's foreshore and that of many country beaches, combined with the prevailing climate, provides ideal conditions for open sea summer bathing.

PHYSICAL FITNESS

The National Fitness Movement began in Australia in 1939 when the Commonwealth Government made funds available to each State for the purpose of setting up National Fitness Councils. A National Fitness Act was passed in 1941.

The National Fitness Council of South Australia, which was appointed by the Government of South Australia, spent what funds it received from the Commonwealth and South Australian Governments and other sources on the appointment of staff, securing of property and the promotion of recreation and physical fitness within the State. It conducted training courses for community organisations and coaching courses in many games and outdoor activities as well as giving active support to groups concerned with recreation.

The Council established and/or supported youth hostelling, the Women's Memorial Playing Fields, Outward Bound SA, the Duke of Edinburgh's Award and other youth schemes together with activities like softball, orienteering, playgrounds, scuba diving, swimming and camping. It conducted surveys on recreation areas, sports participation, government contributions to recreation, camps and camp use and youth activities. Its publications included books and pamphlets on adventure training, physical conditioning, fitness programs, sports coaching and walking tracks.

The Council maintained a library that contained books, pamphlets, journals, maps, plans and films on physical education, sports, recreation and health education.

On 28 June 1976 the functions of the National Fitness Council of South Australia were amalgamated with those of the Division of Recreation and Sport. The staff and property of the Council were transferred to the Department of Tourism, Recreation and Sport.

LOTTERIES AND BETTING

LOTTERIES

The State Lotteries Act, 1966-1974 provides for the promotion and control of lotteries by the Government of the State. In November 1966 a Lotteries Commission, consisting of a chairman and two other members, was appointed to administer the Act which came into operation on 8 December 1966 and the first draw was made in May 1967.

In accordance with Section 16 of the Act all moneys received by the Commission are paid into a Lotteries Fund from which moneys are made available to meet the expenses of the Commission and to pay prizes. The balance of the Lotteries Fund, which represents the surplus of income over expenditure and prize money not claimed for over six months, is transferred to a Hospitals Fund.

Up to 31 December 1976, \$79 656 054 was received from the sale of tickets including X Lotto, of which \$48 441 341 was distributed in prize money, and approximately \$24.5 million had been transferred to the Hospitals Fund.

Originally only one lottery, a 50 cent series, was conducted but in July 1967 a Jackpot series was introduced. In addition a few special lotteries have been conducted with tickets sold at \$2, \$3, \$4, \$5 or \$10 each. The last of the 50 cent lotteries was drawn on 2 July 1974 and on 3 July 1974 a 60 cent lottery was introduced. However its popularity gradually declined and the 60 cent lottery was discontinued on 6 August 1976.

In April 1973, a new type of lottery called 'X Lotto' (Cross Lotto) was introduced. This scheme originated in Germany after the 1939-45 War, and is very similar to Football Pools except the subscriber selects numbers instead of teams.

Initially the popularity of X Lotto was not great but it grew towards the end of 1974. For the year ending 31 December 1976, \$7 615 049 was invested, of which 60 per cent was allocated as prize money. In October 1975 the percentage of prize money was increased to 61 per cent.

The Commission operates an account service by accepting deposits from persons wishing to invest in each lottery without the need to purchase tickets themselves. At 31 December 1976, 2 451 subscribers availed themselves of this service.

At 31 December 1976 there were 203 Lotteries Commission Agents appointed in South Australia. Of these 139 were in the Adelaide and suburban areas; fifty-three in country areas and eleven were subscriber (non-ticket selling) agents.

The following table shows for the past five financial years lotteries, each of 100 000 tickets, that have been fully subscribed and drawn.

Lotteries Drawn, South Australia

| Type of Lottery | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-----------------|---------|---------|---------|---------|---------|
| 50 cent | 58 | 54 | 47 | 1 | — |
| 60 cent | — | — | — | 46 | 31 |
| \$1 Jackpot | 19 | 21 | 19 | 20 | 16 |
| \$1 | — | — | — | — | 2 |
| \$2 | 3 | 5 | 6 | 7 | 5 |
| \$3 | 1 | 1 | 2 | 1 | 2 |
| \$4 | — | — | — | 1 | 1 |
| \$5 | 1 | 1 | — | 1 | 2 |
| \$10 | — | — | 1 | 1 | 1 |
| Total | 82 | 82 | 75 | 78 | 60 |

BETTING

Legalised betting in South Australia is restricted to horse racing, trotting, dog racing and coursing. It is governed by the provisions of the Racing Act, 1976 which came into operation on 1 January 1977. Before 1 January 1977 legalised betting was governed by the provisions of the Lottery and Gaming Act, 1936-1975.

The Act makes provision for betting with the totalisator and with bookmakers at horse race, trotting and dog race meetings. The totalisator cannot be used at coursing meetings but bookmakers may operate at these meetings. Details of on-course betting and betting in registered premises are given in the table below for the years 1973-74 to 1975-76.

Betting: Amounts Invested with Bookmakers and On-Course Totalisators and Distribution of Commissions, Taxes and Fractions, South Australia

| Particulars | 1973-74 | 1974-75 | 1975-76 |
|---|----------------|----------------|----------------|
| Amount invested: | | | \$'000 |
| Totalisator; | | | |
| Horse racing | 7 151 | 9 156 | 11 105 |
| Trotting | 1 837 | 2 387 | 3 354 |
| Dogs | 1 744 | 2 186 | 2 570 |
| Total. | 10 732 | 13 729 | 17 029 |
| Bookmakers; | | | |
| On-course | 96 017 | 120 771 | 149 140 |
| Registered premises | 2 388 | 3 613 | 3 566 |
| Total. | 98 405 | 124 384 | 152 706 |
| Total amount invested | 109 137 | 138 113 | 169 735 |
| Distribution of commissions, taxes and fractions derived from betting transactions: | | | \$'000 |
| State Government; | | | |
| Totalisator tax and licences | 513 | 695 | 875 |
| Commission on bets | 1 000 | 1 297 | 1 708 |
| Stamp duty on betting tickets | 130 | 138 | 152 |
| Dividends and winning bets unclaimed | 132 | 172 | 204 |
| Total paid to Consolidated Revenue. | 1 775 | 2 302 | 2 939 |
| Clubs; | | | |
| Commission on bets | 904 | 1 260 | 1 641 |
| Commission on totalisator takings | 977 | 1 250 | 1 570 |
| Totalisator fractions | — | (a) 75 | 166 |
| Total payable to clubs | 1 880 | 2 585 | 3 377 |
| Charitable institutions; | | | |
| Totalisator fractions payable | 113 | (a) 57 | — |
| Racecourses Development Board; | | | |
| Commission on totalisator takings | 11 | 20 | 28 |
| Total distribution | 3 779 | 4 964 | 6 344 |

(a) From 23 December 1974 totalisator fractions became payable to clubs instead of charitable institutions.

Before December 1933 legalised betting was restricted to totalisator betting at registered race meetings. From 1933 to 1967 it was limited to 'on-course' totalisators and to betting with bookmakers who were licensed to bet on courses where meetings were held, and also (from January 1934 to February 1942) with bookmakers who were licensed to bet 'off-course' in specially registered premises.

As a war-time measure racing and betting in South Australia were banned from March 1942 until October 1943. Off-course betting facilities were not re-established until 1946, when they were restricted to country areas. Port Pirie is the only town where bookmakers now operate in registered premises.

In October 1966 provision was made for the setting up of the Totalizator Agency system of 'off-course' betting, and agencies have since been established in the metropolitan area and at numerous country towns. A Board consisting of a Chairman and seven other members representative of racing and trotting interests was appointed to administer the new system and the Totalizator Agency Board (TAB) Headquarters was established in Adelaide during December 1966. The Board was enlarged during 1970-71 to include a representative of the greyhound racing interests. The Board was changed in 1976 to comprise an independent Government appointed Chairman and Deputy Chairman plus a representative from the controlling body of each of the three codes of galloping, trotting and greyhounds. The TAB first operated on 29 March 1967 on a country race meeting while it operated for the first time on a metropolitan meeting on 1 April 1967.

Thirteen agencies were open on the first day of TAB operations. At 30 June 1976, 168 agencies were operating of which fifty-eight were sub-agencies operated in conjunction with other businesses. Further premises in the city, suburbs and country towns are being established progressively to provide a complete coverage of the whole State. In addition, a system of telephone betting is available to persons who have established accounts with the TAB. At 30 June 1976 the Board employed seventy-four permanent officers and 1 169 part-time staff.

For the year ended 30 June 1976 off-course investments totalled \$87 658 156 of which approximately 82 per cent was payable as dividends. The following amounts became payable to the South Australian Government (to be paid into the Hospitals Fund at the State Treasury) from the operations of the Board during that year:

| | \$ |
|---|-----------|
| Stamp duty | 4 382 909 |
| Fractions | 732 927 |
| Unclaimed dividends | 334 120 |
| Commission on NSW (Broken Hill) investments | 3 894 |
| | 5 453 850 |

In addition, for the year ended 30 June 1976, an amount of \$2 377 942 became available for distribution to racing, trotting and greyhound clubs under a scheme

of distribution prepared by the Board and approved by the Chief Secretary. Since commencing operations in 1967 the Board has distributed a total of \$12 062 846 to participating clubs while in the same period, the South Australian Government has received \$24 894 778.

Racecourses Development Board

The Racecourses Development Board, established under the Lottery and Gaming Act, 1936-1975, administers the Horse Racing Grounds Development Fund, the Trotting Grounds Development Fund and the Dog Racing Grounds Development Fund. These funds are financed by a proportion of investments on totalisators conducted by racing clubs or the Totalizator Agency Board and are to be applied by way of grants or loans to racing clubs for providing, erecting, improving or repairing public facilities. The Board is empowered also to borrow funds for these purposes.

6.5 HEALTH

HISTORICAL

The first Health Act in South Australia was passed in 1873. This Act, which was modelled on earlier English legislation, established a Central Board of Health, and a number of town councils were constituted as local boards. The present Health Act dates from 1935. Administration continued under the authority of the Central Board of Health until 1949 when the Department of Public Health was formed to co-ordinate the work of the board and other health activities. The first hospital in South Australia was built in 1837. It was a small thatched hut situated on North Terrace and measured 6 metres by 4 metres. The foundation stone of the first Adelaide Hospital was laid in 1840. This building, which was demolished in 1938, contained two 12-bed wards and four smaller rooms. The first buildings of the present Royal Adelaide Hospital were erected in 1856-57. Hospitals in the country were established at Mount Gambier in 1869, Wallaroo and Port Lincoln in 1870, Port Augusta in 1875, and Port Pirie in 1890. The Port Adelaide Casualty Hospital was erected in 1882.

The State's first mental hospital, now demolished, was situated in Botanic Park. The Parkside Psychiatric Hospital (now Glenside Hospital) commenced operation in 1870 under the control of the Colonial Surgeon. The Enfield Receiving House and the Northfield Mental Hospital (now Hillcrest Hospital) were established in 1922 and 1929 respectively.

ADMINISTRATION

The administration of health in South Australia is principally under the control of three main authorities: the South Australian Department of Public Health and Hospitals Department, and the Commonwealth Department of Health. Broadly the Department of Public Health concentrates on general health matters including the prevention of disease, the Hospitals Department on hospitalisation, and the Department of Health on health on a national basis including quarantine.

The Department of Public Health embraces the activities of the Central Board of Health, the Occupational Health Branch, the School Health Branch (including

the Deafness Guidance Clinic), the Dental Health Branch, the Epidemiology Branch, the Food and Drugs Advisory Committee, the Radiological Advisory Committee, the Geriatrician, the Clean Air Committee, and also the public health aspects of the control of tuberculosis, including the Chest Clinic and the State X-ray health surveys. The Department is responsible also for health education, including the drug education program sponsored by the Commonwealth Government, and for Aboriginal health in South Australia.

The Central Board of Health administers the Health, Food and Drugs, Narcotic and Psychotropic, Noxious Trades and Bakehouses Registration Acts. The Board also has responsibilities under the Local Government Act and the Cremation Act.

The Health Act and the Food and Drugs Act constitute every municipal or district council a local board of health or local authority for its area, except that in the metropolitan area, the Metropolitan County Board (representing twenty metropolitan corporations) is the local authority under the Food and Drugs Act. The Central Board of Health acts as a supervisory body over all the 131 local boards under the Health Act, the Food and Drugs Act and the Bakehouses Registration Act. It has concurrent jurisdiction with local boards. Outside the boundaries of local boards the Central Board is the administering authority.

The Hospitals Department administers government hospitals and supervises the work of government subsidised hospitals in South Australia.

Other State authorities concerned with aspects of public health include the Engineering and Water Supply Department which is responsible for water supply and sewerage services, and the South Australian Meat Corporation which is responsible for the functioning of the metropolitan abattoirs and for the inspection of premises used for merchandising, storing or processing of meat.

The Commonwealth Government through the Departments of Health and Social Security is responsible for the administration of national health services in co-operation with State Health authorities and voluntary organisations. Under the *Quarantine Act* 1908 the Department of Health is responsible for the various aspects of human, animal and plant quarantine. Persons ordered into quarantine are accommodated at Torrens Island Quarantine Station.

The South Australian Branch of the Department of Veterans' Affairs administers the medical services provided for ex-service personnel whose disabilities are accepted as being attributable to war service.

GENERAL HOSPITAL SERVICES

The control of hospitals in South Australia is vested in several authorities including the Hospitals Department, the Department of Veterans' Affairs, religious and charitable organisations, local community committees and private owners.

RECOGNISED HOSPITALS

Recognised hospitals (formerly public hospitals) are those which have been approved under the Hospital Agreement between the State Government and the Commonwealth from 1 July 1975. They are deficit financed by the State Government; the Commonwealth has agreed to meet up to 50 per cent of net operating costs.

The Hospitals Department administers four recognised teaching hospitals in the metropolitan area, Royal Adelaide Hospital, The Queen Elizabeth Hospital, Modbury Hospital and Flinders Medical Centre which opened early in 1976. The Department fully administers also the recognised hospitals at Port Pirie, Mount Gambier, Port Lincoln, Port Augusta, Wallaroo and Whyalla.

In addition there are fifty-seven recognised hospitals in country areas and six (including Adelaide Children's Hospital and Queen Victoria Hospital) in the metropolitan area, conducted by local boards of management, which are deficit financed by the State Government and come under the general supervision of the Hospitals Department.

Recognised Hospitals, South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-------------------------------|---------------|---------------|---------------|----------------|----------------|
| Hospitals | 68 | 69 | 70 | 71 | 73 |
| Staff (at end of year): | | | | | |
| Medical; | | | | | |
| Salaried | 446 | 479 | 516 | 568 | 664 |
| Sessional (a) | 527 | 597 | 639 | 607 | 415 |
| Nursing | 6 351 | 6 733 | 7 041 | 7 600 | 7 780 |
| Other | 5 139 | 5 704 | 6 315 | 6 505 | 7 298 |
| Total | 12 463 | 13 513 | 14 511 | 15 280 | 16 157 |
| Patients: | | | | | |
| Admitted and re-admitted | 147 058 | 158 261 | 164 797 | 168 832 | 179 733 |
| Average daily number resident | 3 899 | 4 081 | 4 106 | 4 221 | 4 207 |
| | | | \$'000 | | |
| Operating receipts: | | | | | |
| State Government aid | 29 671 | 37 951 | 53 893 | 82 194 | 70 730 |
| Commonwealth Government (b) | 4 030 | 4 629 | 5 330 | 6 208 | 70 730 |
| Fees | 19 597 | 21 593 | 25 357 | 35 724 | 15 588 |
| Other | 452 | 460 | 675 | 804 | 1 230 |
| Total | 53 750 | 64 633 | 85 255 | 124 930 | 158 278 |
| Operating payments: | | | | | |
| Salaries and wages | 35 784 | 43 352 | 58 701 | 90 263 | 112 039 |
| Other | 16 272 | 19 899 | 24 825 | 33 467 | 46 239 |
| Total | 52 056 | 63 251 | 83 526 | 123 730 | 158 278 |
| Capital payments: | | | | | |
| Buildings, equipment etc.; | | | | | |
| Government | 12 482 | 9 570 | 13 864 | 19 741 | 25 696 |
| Other | 4 936 | 3 491 | 3 940 | 5 439 | 5 433 |
| Total | 17 418 | 13 061 | 17 804 | 25 180 | 31 129 |

(a) Includes visiting specialists paid on a sessional basis and honorary consultants, but not those paid on a modified fee for service basis.

(b) Before 1 July 1975, mainly hospital, pharmaceutical and tuberculosis benefits. After that date, 50 per cent of net operating costs.

Recognised Hospitals: South Australia, 1975-76

| Particulars | Royal Adelaide Hospital | Queen Elizabeth Hospital | Adelaide Children's Hospital | Other Recognised Hospitals | Total |
|-----------------------------------|-------------------------------|--------------------------------|------------------------------------|----------------------------------|---------|
| Staff (at end of year): | | | | | |
| Medical: | | | | | |
| Salaried | 258 | 171 | 95 | 140 | 664 |
| Sessional (a) | 173 | 79 | 100 | 63 | 415 |
| Nursing | 2 180 | 1 041 | 688 | 3 871 | 7 780 |
| Others | 2 224 | 1 242 | 767 | 3 065 | 7 298 |
| In-patients: | | | | | |
| Admitted and re-admitted | 33 566 | 26 258 | 17 459 | 102 450 | 179 733 |
| Average daily number resident . . | 907 | 515 | 253 | 2 532 | 4 207 |

(a) Includes visiting specialists paid on a sessional basis and honorary consultants, but not those paid on a modified fee for service basis.

Royal Adelaide Hospital

The Royal Adelaide Hospital is a general teaching hospital controlled by a board of three members, with the Director-General of Medical Services as Chairman. The hospital, which incorporates a department of dentistry, is a school of medical and dental clinical teaching, in conjunction with the University of Adelaide.

In addition to the main hospital there are wards at Northfield, a section of which is used to accommodate patients with infectious conditions, and a section of the Morris Hospital, Northfield is occupied by the Spinal Injuries Unit.

At 30 June 1976 there were 1 133 beds at the hospital, excluding 132 at Northfield classified as nursing home beds. Construction of two new ward blocks at Northfield commenced during 1976.

Queen Elizabeth Hospital

The Queen Elizabeth Hospital at Woodville is a general, casualty and maternity hospital controlled by a board of management of three members. It is a teaching hospital affiliated with the University of Adelaide for the clinical teaching of undergraduate medical students. Opened in 1954 as a temporary 55-bed maternity hospital, it has been developed progressively to a major teaching hospital which, at 30 June 1976, had 699 beds available, including ten rehabilitation beds at the Mareeba Rehabilitation Centre, Woodville, which also incorporates a day treatment centre and an extensive domiciliary care service.

Modbury Hospital

The Modbury Hospital is a general teaching hospital comprising medical, surgical, maternity and children's wards, and casualty and out-patient services. It is controlled by a board of management of seven members.

The hospital complex was designed to provide facilities for 224 beds initially but is planned to extend to 450 beds by 1981. The hospital was officially opened on 16 February 1973, with 134 staffed beds. Since that time additional beds have become available progressively and at 30 June 1976, 214 beds were in use.

Queen Victoria Hospital

The Queen Victoria Hospital, founded by public subscription, was opened in 1902. It primarily provides facilities for midwifery, neo-natal paediatrics and gynaecology. It is a university teaching hospital and is controlled by a board of management. Accommodation at 30 June 1976 was 176 beds.

Adelaide Children's Hospital

The Adelaide Children's Hospital was founded by public subscription in 1876 and the first buildings were completed in 1879. In 1955, Estcourt House at Grange was added and is an integral part of the hospital although located some thirteen kilometres from the main hospital site. A continuing development program was commenced during 1975 to provide additional facilities and modern wards.

The hospital is a general paediatric teaching hospital for children fourteen years and under and is a training school for nurses, while the Department of Paediatrics of the University of Adelaide is situated at the hospital. It is controlled by a board of management and is a recognised hospital. Accommodation at 30 June 1976 was 385 beds.

Flinders Medical Centre

Opened in 1976, the Flinders Medical Centre represents a new concept of a general teaching hospital integrated with a university (Flinders University) for the clinical teaching of undergraduate medical students and for research.

Of an initial 320 beds, 200 were in use at 30 June 1976; the continuing commissioning of new facilities will increase the total available beds to 550. The Centre is controlled by a board of management of nine members.

COMMUNITY HEALTH AND DOMICILIARY CARE

Commencing in late 1971, the Domiciliary Care Program, which is funded jointly by the State and Commonwealth Governments, provides health orientated support services at home, so that the recipient is able to continue to live in a domiciliary situation, where frequently, the only previous alternative was institutional care. This concept was greatly expanded in 1973-74 by the addition of the Community Health Program, which provided for a wider range of complimentary community health services, not necessarily of a domiciliary nature.

With the introduction of the Hospital Program from 1 July 1975, there has been a rationalisation of community health services, so that existing hospital facilities may be used, where appropriate, in lieu of the provision of separate facilities or projects.

The whole concept of community health care is one of continuing development as a viable alternative, in appropriate circumstances, to institutional health care.

REPATRIATION HOSPITALS

The Department of Veterans' Affairs maintains the Repatriation General Hospital at Daw Park. Originally known as Daw Park Hospital, it was built as a military hospital during the 1939-45 War, and came under the

control of the Department in 1947. Medical, surgical and psychiatric in-patient and out-patient treatment is provided for eligible ex-service personnel, eligible dependants, serving members of the forces, and, under certain conditions, for non-eligible ex-service personnel and civilians.

In 1974 the Daw Park Private Hospital adjacent to the Repatriation General Hospital, Daw Park was acquired and developed as a Rehabilitation Centre and Day Hospital. Within the hospital's grounds is the Repatriation Artificial Limb and Appliance Centre which manufactures and supplies artificial limbs and other aids free of charge to all citizens who require them, regardless of whether they have a Repatriation entitlement or not. The average daily number of patients in the Repatriation General Hospital, Daw Park during 1975-76 was 236. At June 1976 there were 767 staff and 388 beds.

PRIVATE HOSPITALS AND NURSING HOMES

Details of all private institutions approved for payment of Commonwealth Government hospital or nursing home benefits are given in the following table.

Private Hospitals and Nursing Homes, South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-----------------------------------|---------|---------|---------|---------|---------|
| Number of hospitals | 53 | 50 | 51 | 48 | 47 |
| Number of nursing homes | 127 | 129 | 127 | 124 | 124 |
| Number of beds at end of year: | | | | | |
| Hospitals | 2 137 | 1 929 | 2 026 | 2 068 | 2 041 |
| Nursing homes | 3 382 | 4 027 | 3 809 | 3 915 | 4 117 |

There are several large private hospitals in the metropolitan area including Calvary Hospital, the Memorial Hospital and St Andrew's Presbyterian Hospital, all of which are run by denominational bodies. Another large institution is the Home for Incurables at Fullarton which provides accommodation and nursing attention for persons suffering from chronic disease.

MENTAL HEALTH SERVICES

The Director of Mental Health Services is responsible for the management of public psychiatric services operating under the Mental Health Act, 1935-1974. A division of the Hospitals Department, this Service controls four major institutions—Glenside Hospital, Enfield Hospital, Hillcrest Hospital and the Strathmont Centre—and in addition three hostels for accommodating discharged patients, two child guidance clinics, two community mental health centres and the St Corantyn Psychiatric Day Hospital.

In addition to the Enfield Hospital, there are separate 'short-term' receiving units at Glenside and Hillcrest Hospitals where treatment is directed towards early discharge. In general the duration of stay in these units is a few months terminating in either transfer as a 'long-term' patient or in discharge. A summary of the number of persons following Mental Health Services treatment in the years 1970-71 to 1974-75 follows.

Government Psychiatric Institutions, South Australia

| Particulars | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| In-patients: | | | | | |
| Admitted and re-admitted | 3 527 | 3 602 | 3 225 | 3 309 | 3 410 |
| Discharged | 3 433 | 3 486 | 3 023 | 3 230 | 3 204 |
| Deaths during year | 170 | 150 | 153 | 159 | 158 |
| Remaining at end of year; | | | | | |
| Certified, males | 471 | 403 | 383 | 308 | 252 |
| females | 396 | 336 | 346 | 327 | 201 |
| Voluntary, males | 726 | 739 | 765 | 801 | 847 |
| females | 600 | 681 | 714 | 687 | 774 |
| Total | 2 193 | 2 159 | 2 208 | 2 123 | 2 074 |
| Out and day-patients: | | | | | |
| Treated during year; | | | | | |
| Males | 2 149 | 2 109 | 2 245 | 2 534 | 2 590 |
| Females | 2 356 | 2 281 | 2 174 | 2 697 | 2 623 |
| Persons | 4 505 | 4 390 | 4 419 | 5 231 | 5 213 |

The number of in-patients remaining at the end of the year indicates a shift in emphasis from 'certified' to 'voluntary' over the period; certified patients comprised nearly 44 per cent in June 1970 compared with only 22 per cent in June 1975.

Details of diagnosis and of the number of attendances by out-patients and day-patients during 1974-75 are shown in the next table.

Out-patients and Day-patients Treated in Government Psychiatric Institutions
Diagnosis and Number of Attendances, South Australia, 1974-75

| Diagnosis | Number of Patients who Attended | | | | | Total Patients Treated |
|---|---------------------------------|------------|-------------|-------------|------------------|------------------------|
| | 1-4 Times | 5-9 Times | 10-15 Times | 16-22 Times | 23 or more Times | |
| | MALES | | | | | |
| Senile and pre-senile dementia | 15 | 4 | — | 1 | 2 | 22 |
| Alcoholic psychosis | 3 | 1 | 1 | — | 4 | 9 |
| Other organic psychoses | 9 | 2 | 3 | 1 | 3 | 18 |
| Schizophrenia and paranoid states | 197 | 104 | 48 | 21 | 40 | 410 |
| Depressive psychosis | 56 | 21 | 6 | 5 | 14 | 102 |
| Other functional psychoses | 46 | 20 | 5 | 4 | 5 | 80 |
| Depressive neurosis | 153 | 56 | 16 | 5 | 18 | 248 |
| Other neuroses and psychosomatic disorders | 194 | 79 | 20 | 17 | 19 | 329 |
| Alcoholism | 70 | 6 | 3 | 2 | 10 | 91 |
| Drug addiction | 16 | 3 | 1 | 1 | 6 | 27 |
| Other personality disorders | 250 | 55 | 22 | 19 | 29 | 375 |
| Transient situational disturbances and behaviour disorders of childhood | 255 | 121 | 61 | 15 | 12 | 464 |
| Non-psychotic mental disorders associated with physical condition | 37 | 14 | 1 | 1 | 6 | 59 |
| Mental retardation | 229 | 6 | 3 | 1 | 3 | 242 |
| Non-psychiatric diagnosis | 95 | 14 | — | 3 | 2 | 114 |
| Total | 1 625 | 506 | 190 | 96 | 173 | 2 590 |

**Out-patients and Day-patients Treated in Government Psychiatric Institutions
Diagnosis and Number of Attendances, South Australia, 1974-75 (continued)**

| Diagnosis | Number of Patients who Attended | | | | | Total Patients Treated |
|---|---------------------------------|------------|-------------|-------------|------------------|------------------------|
| | 1-4 Times | 5-9 Times | 10-15 Times | 16-22 Times | 23 or more Times | |
| FEMALES | | | | | | |
| Senile and pre-senile dementia | 27 | 3 | 1 | 1 | 13 | 45 |
| Alcoholic psychosis | 4 | 1 | 2 | — | — | 7 |
| Other organic psychoses | 18 | 8 | 1 | — | 3 | 30 |
| Schizophrenia and paranoid states | 189 | 104 | 41 | 18 | 40 | 392 |
| Depressive psychoses | 84 | 54 | 15 | 8 | 22 | 183 |
| Other functional psychoses | 69 | 34 | 17 | 4 | 12 | 136 |
| Depressive neurosis | 328 | 92 | 44 | 18 | 70 | 552 |
| Other neuroses and psychosomatic disorders | 221 | 88 | 29 | 16 | 31 | 385 |
| Alcoholism | 19 | 1 | 2 | 2 | 3 | 27 |
| Drug addiction | 16 | 2 | — | — | 3 | 21 |
| Other personality disorders | 157 | 57 | 22 | 13 | 24 | 273 |
| Transient situational disturbances and behaviour disorders of childhood | 130 | 54 | 33 | 10 | 14 | 241 |
| Non-psychotic mental disorders associated with physical condition | 13 | 2 | — | 2 | 5 | 22 |
| Mental retardation | 190 | 5 | 1 | 1 | 1 | 198 |
| Non-psychiatric diagnosis | 90 | 16 | 1 | 2 | 2 | 111 |
| Total | 1 555 | 521 | 209 | 95 | 243 | 2 623 |

The next table shows that for both males and females admitted or re-admitted as in-patients during 1974-75 the most common diagnosis was 'schizophrenia and paranoid states'. Females out-numbered males by more than two to one in the diagnosis categories 'depressive psychosis' and 'depressive neurosis'.

**In-patients Admitted and Re-admitted to Government Psychiatric Institutions
South Australia**

| Diagnosis | 1972-73 | | 1973-74 | | 1974-75 | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| | Males | Females | Males | Females | Males | Females |
| Senile and pre-senile dementia | 46 | 80 | 56 | 96 | 60 | 96 |
| Alcoholic psychosis | 48 | 15 | 63 | 9 | 55 | 10 |
| Other organic psychoses | 45 | 48 | 32 | 34 | 23 | 22 |
| Schizophrenia and paranoid states | 410 | 380 | 479 | 345 | 455 | 389 |
| Depressive psychosis | 83 | 168 | 72 | 190 | 54 | 118 |
| Other functional psychoses | 80 | 108 | 92 | 144 | 139 | 210 |
| Depressive neurosis | 123 | 253 | 124 | 262 | 100 | 182 |
| Other neuroses and psychosomatic disorders | 37 | 54 | 50 | 50 | 58 | 111 |
| Alcoholism | 396 | 59 | 335 | 62 | 371 | 90 |
| Drug addiction | 16 | 21 | 31 | 27 | 43 | 32 |
| Other personality disorders | 199 | 185 | 178 | 183 | 185 | 142 |
| Transient situational disturbances and behaviour disorders of childhood | 25 | 33 | 27 | 20 | 33 | 34 |
| Non-psychotic mental disorders associated with physical condition | 24 | 13 | 29 | 16 | 28 | 8 |
| Mental retardation | 129 | 121 | 175 | 101 | 184 | 146 |
| Non-psychiatric diagnosis | 18 | 8 | 15 | 12 | 18 | 14 |
| Total | 1 679 | 1 546 | 1 758 | 1 551 | 1 806 | 1 604 |

In-patients discharged during 1974-75 are shown in the following table in relation to the period hospitalised and the condition treated.

**In-patients Discharged from Government Psychiatric Institutions
Diagnosis and Period Resident, South Australia, 1974-75**

| Diagnosis | Period Resident | | | | | Total Discharges |
|---|-----------------|---------------------------|----------------------------|-----------------------------|-------------------|------------------|
| | Under 2 weeks | 2 weeks and under 1 month | 1 month and under 2 months | 2 months and under 6 months | 6 months and over | |
| MALES | | | | | | |
| Senile and pre-senile dementia | 5 | 4 | 5 | 2 | 11 | 27 |
| Alcoholic psychosis | 13 | 8 | 12 | 9 | 12 | 54 |
| Other organic psychoses | 3 | 4 | 3 | 3 | 12 | 25 |
| Schizophrenia and paranoid states . . | 71 | 71 | 87 | 123 | 87 | 439 |
| Depressive psychosis | 13 | 10 | 9 | 12 | 15 | 59 |
| Other functional psychoses | 19 | 17 | 24 | 43 | 13 | 116 |
| Depressive neurosis | 36 | 23 | 22 | 18 | 10 | 109 |
| Other neurosis and psychosomatic disorders | 22 | 14 | 3 | 6 | 4 | 49 |
| Alcoholism | 99 | 86 | 60 | 100 | 13 | 358 |
| Drug addiction | 14 | 13 | 5 | 14 | — | 46 |
| Other personality disorders | 58 | 48 | 26 | 29 | 15 | 176 |
| Transient situational disturbances and behaviour disorders of childhood | 8 | 3 | 5 | 9 | 2 | 27 |
| Non-psychotic mental disorders associated with physical condition | 3 | 7 | 6 | 7 | 6 | 29 |
| Mental retardation | 61 | 61 | 15 | 7 | 42 | 186 |
| Non-psychiatric diagnosis | 10 | 3 | 1 | 3 | — | 17 |
| Total | 435 | 372 | 283 | 385 | 242 | 1 717 |
| FEMALES | | | | | | |
| Senile and pre-senile dementia | 6 | 3 | 12 | 17 | 30 | 68 |
| Alcoholic psychosis | 3 | 1 | 1 | 3 | 5 | 13 |
| Other organic psychoses | 4 | 3 | 5 | 6 | 8 | 26 |
| Schizophrenia and paranoid states . . | 49 | 55 | 67 | 109 | 125 | 405 |
| Depressive psychosis | 17 | 15 | 25 | 44 | 25 | 126 |
| Other functional psychoses | 39 | 42 | 40 | 52 | 16 | 189 |
| Depressive neurosis | 46 | 27 | 36 | 47 | 25 | 181 |
| Other neuroses and psychosomatic disorders | 26 | 30 | 12 | 27 | 5 | 100 |
| Alcoholism | 23 | 22 | 11 | 33 | 4 | 93 |
| Drug addiction | 15 | 4 | 2 | 8 | 1 | 30 |
| Other personality disorders | 44 | 27 | 26 | 34 | 14 | 145 |
| Transient situational disturbances and behaviour disorders of childhood | 8 | 5 | 4 | 9 | 2 | 28 |
| Non-psychotic mental disorders associated with physical condition | 1 | — | 3 | 3 | 2 | 9 |
| Mental retardation | 25 | 61 | 14 | 7 | 49 | 156 |
| Non-psychiatric diagnosis | 3 | 3 | 3 | 3 | — | 12 |
| Total | 309 | 298 | 261 | 402 | 311 | 1 581 |

MATERNAL AND CHILD WELFARE

MOTHERS AND BABIES HEALTH ASSOCIATION

The Mothers and Babies Health Association, a voluntary body supported by government subsidy and public subscriptions, was established in 1909 and conducts maternal and infant welfare work throughout the State. At 320 centres, triple certificated sisters teach management skills to parents of babies and young

children, and centres conduct group or individual sessions by appointment for the management of problems in the older child up to the age of five years. The Association also conducts a twenty-four hour telephone advisory service and a correspondence service for remote and isolated families. Physiotherapeutic and family management ante-natal classes are conducted, and many eight-session parentcraft courses are conducted centrally and regionally throughout each year. There is an extensive school-lecturing service on parentcraft, and advice on playgroups is provided by staff playgroup advisers.

The Association, through its Torrens House mothercraft hospital, provides the only training for mothercraft nurses and infant welfare sisters in South Australia. Torrens House has forty-two beds and admits mothers with newborn babies for assistance in management and also treats babies and children up to the age of five years for various behavioural disorders. A day hospital and a model child-care centre are further facilities for placement and training.

Babies awaiting adoption and a social work service for single mothers, multi-problem families, and families-at-risk for child maltreatment, are further services provided.

Pamphlets and books on a wide range of topics of interest to parents are provided through the Association.

SCHOOL HEALTH SERVICES

The medical inspection of school children was first introduced into schools in 1913 and since 1951 these inspections have been the responsibility of a branch of the Department of Public Health. The dental health of school children has been the responsibility of a separate branch since 1974. The medical assessment program aims to detect health impediments which are likely to affect the progress of children at school and to provide advice on appropriate management. No treatment is carried out by the Branch. All government and non-government schools are visited, usually annually. Students in Year 1 in primary schools are medically assessed by a doctor and a sister. In addition vision and hearing are tested by a school nurse in Years 4, 6 and 8.

In 1976 school nursing positions were established in ten high schools classified by the Education Department as 'disadvantaged'. These nurses are responsible to the School Health Branch but are seconded to the schools as staff members.

With the establishment of a pre-school system by the Education Department, the School Health Branch has established a service to pre-schools, under the direction of a medical officer experienced in developmental paediatrics.

During 1976, 64 152 children were examined by medical officers or screened by nurses in 393 metropolitan and 188 country schools. Those requiring referral for treatment included 3 024 for defective vision, 2 563 for defective hearing and 2 906 for dental disorders.

Dentists using ten mobile vans and dentists and therapists working in fifty-four static clinics examined 59 631 children in 1976. During 1976, the School of Dental Therapy provided dental care to 5 356 children.

There were 3 760 children examined at the Deafness Guidance Clinic including 1 906 examined for the first time in 1976; 896 of those first examined in 1976 were referred to doctors or hospitals for treatment.

An assessment clinic, under the direction of a paediatrician, began in 1971 for children with learning and behavioural problems; seventy-four children attended with their parents in that year. In 1976, 601 children were examined.

The staff of the School Health Branch at the beginning of 1976 included fifteen medical officers (four part-time), thirty-seven school nurses (one part-time), one full-time and three sessional otologists, three audio-metrists and one social worker. The staff of the Dental Health Branch at the end of 1976 included fifty dental officers and 113 dental therapists.

COMMUNICABLE DISEASES

Under the Health Act, 1935-1976, certain diseases have been designated as 'infectious' and others as 'notifiable'. It is required that cases of infectious and notifiable diseases be reported to the local board of health, which in turn advises the Central Board of Health, and that cases of tuberculosis, gonorrhoea and syphilis be notified directly to the Central Board. It should be noted that the figures in the following table refer to cases notified and this may not reflect the actual number of occurrences of the disease in the population.

Communicable Disease: Cases Notified, South Australia

| Disease | 1972 | 1973 | 1974 | 1975 | 1976 |
|-----------------------------------|------|-------|-------|-------|-------|
| Diarrhoea, infantile | 22 | 13 | 9 | 28 | 16 |
| Dysentery, bacillary | 277 | 126 | 31 | 37 | 85 |
| Encephalitis | 1 | 1 | 8 | 1 | — |
| Gonorrhoea | 989 | 1 492 | 2 091 | 2 114 | 1 855 |
| Infectious hepatitis | 630 | 319 | 193 | 203 | 235 |
| Malaria | 25 | 15 | 17 | 24 | 22 |
| Meningococcal infection | 10 | 10 | 5 | 4 | 10 |
| Paratyphoid | 5 | 2 | 3 | 1 | — |
| Rubella | 168 | 311 | 40 | 73 | 23 |
| Salmonella infection | 150 | 239 | 159 | 243 | 234 |
| Scarlet fever | 28 | 20 | 15 | 16 | 24 |
| Syphilis | 205 | 178 | 257 | 305 | 484 |
| Trachoma | 1 | 1 | — | — | — |
| Tuberculosis | 132 | 124 | 113 | 101 | 96 |
| Typhoid fever | — | 2 | 1 | 2 | 2 |
| Other diseases | 117 | 19 | 30 | 69 | 122 |

The Department of Public Health maintains a venereal diseases investigation clinic at 275 North Terrace, Adelaide.

Anti-tuberculosis Campaign

The Department of Public Health chest clinic has complete facilities for investigation, diagnosis and treatment of individuals with tuberculosis. In addition suspected cases are investigated and contacts are advised of precautionary

measures and are periodically re-examined. The chest clinic has a static X-ray unit available to individuals and to which any doctor can refer patients for routine chest X-rays. In addition there are mobile units which are used for chest X-ray surveys in metropolitan and country areas.

The tuberculosis campaign in South Australia has been successful in lowering the incidence of the disease to a level of 8.49 per 100 000 of mean population. Compulsory surveys were introduced in March 1952 and have been a valuable means of detecting active cases of tuberculosis. However, with the low incidence of the disease the yield from these surveys has been progressively reduced and accordingly the frequency of the surveys has altered and become more selective.

The very low incidence of tuberculosis in the younger age groups means that it is no longer necessary to examine this group and accordingly the lower age limit for attendance at compulsory mass surveys has been raised to thirty years.

Children in Year 9 at most government and non-government schools throughout South Australia are given a tuberculin test, and where appropriate the children are given BCG vaccination.

Prevention of Poliomyelitis

In the 1950s South Australia was affected by an intense poliomyelitis epidemic which began in 1949 and continued for several years, reaching a peak in 1951 when 1 491 cases with 62 deaths were registered. From 1956, when mass immunisation against poliomyelitis with Salk vaccine was begun, the incidence of the disease declined. The last indigenous case of poliomyelitis in South Australia was recorded in 1963. Since then, one case, originating in the Northern Territory and treated in Adelaide was reported in 1970 and towards the end of 1974 a child with suspected poliomyelitis was investigated at the Adelaide Children's Hospital.

The oral (Sabin) poliomyelitis vaccine was first introduced in July 1967, and is now the only vaccine used against poliomyelitis in this State. It is distributed by the Department of Public Health, to Local Boards of Health and private medical practitioners. The Department also organises poliomyelitis immunisation in areas without local government and conducts a clinic at the State Immunization Centre, Norwood.

Poliomyelitis, South Australia

| Period | Cases Notified | Deaths |
|---------|----------------|--------|
| 1950-54 | 3 747 | 117 |
| 1955-59 | 331 | 11 |
| 1960-64 | 82 | 5 |
| 1965-69 | — | — |
| 1970-74 | 2 | — |
| 1975-76 | — | — |

ABORTION

Until December 1969 the law relating to abortions was included in Sections 81 and 82 of the Criminal Law Consolidation Act, 1935-1966. These Sections prohibited abortions under any circumstances. However, it was possible for legally qualified medical practitioners to perform abortions in a limited number of cases, at their discretion, under Common Law provisions. No separate statistics of such operations were recorded.

In December 1969 this Act was amended by the Criminal Law Consolidation Act Amendment Act, 1969 which was assented to on 8 January 1970. The amendment inserted a new section (Section 82a) which provided for certain exceptions to the prohibitions in Sections 81 and 82. These exceptions allow for termination of the pregnancy where:

- (1) it is necessary to save life, or prevent grave injury to the woman's physical or mental health; or
- (2) the continued pregnancy would involve greater risk to the mental or physical health of the woman, or there was a substantial risk that the child would suffer from such physical or mental abnormalities as to be seriously handicapped.

To qualify under these grounds, a woman must have resided in South Australia for a period of at least two months before the termination of her pregnancy.

Under the amended Act (the Criminal Law Consolidation Act, 1935-1976), a legally qualified medical practitioner may perform an operation to terminate a pregnancy, provided that he and another legally qualified medical practitioner are both of the opinion that one of the above grounds is met. There is provision for one legally qualified medical practitioner to terminate the pregnancy without recourse to a second opinion where it is immediately necessary to save the life, or to prevent grave injury to the physical or mental health of the pregnant woman. All operations must be performed in hospitals prescribed under regulations to the Act.

The following tables give details of abortions notified in recent years. The incidence of abortions notified per 1 000 live births registered was 138.8 in 1973 (compared with 157.3 in the United Kingdom and 237.3 in the United States of America) 141.3 in 1974, and 145.9 in 1975.

Abortions Notified: Grounds on Which Granted, South Australia

| Grounds | 1974 | | 1975 | |
|---|--------------|--------------|--------------|--------------|
| | Number | Per Cent | Number | Per Cent |
| Assault | 5 | 0.2 | 6 | 0.2 |
| Potential damage to foetus | 101 | 3.5 | 51 | 1.8 |
| Specified medical disorders | 141 | 4.9 | 96 | 3.3 |
| Specified psychiatric disorders | 2 605 | 91.4 | 2 763 | 94.7 |
| Total.. . . . | 2 852 | 100.0 | 2 916 | 100.0 |

Abortions Notified: Age Distribution, South Australia

| Age Group | 1971 | 1972 | 1973 | 1974 | 1975 |
|-------------|--------|-------|-------|-------|-------|
| | NUMBER | | | | |
| Under 16 | 70 | 76 | 125 | 89 | 91 |
| 16-19 | 593 | 670 | 743 | 717 | 709 |
| 20-24 | 704 | 665 | 686 | 744 | 768 |
| 25-29 | 356 | 459 | 483 | 490 | 526 |
| 30-34 | 305 | 329 | 348 | 353 | 334 |
| 35-39 | 280 | 269 | 255 | 260 | 291 |
| 40-44 | 147 | 160 | 145 | 151 | 136 |
| 45 and over | 12 | 24 | 17 | 18 | 23 |
| Not stated | 52 | 20 | 31 | 30 | 38 |
| Total | 2 519 | 2 672 | 2 833 | 2 852 | 2 916 |

Abortions Notified: Marital Status, South Australia

| Marital Status | 1974 | | 1975 | |
|--------------------|--------|----------|--------|----------|
| | Number | Per Cent | Number | Per Cent |
| Single | 1 408 | 49.4 | 1 455 | 49.9 |
| Married | 1 149 | 40.3 | 1 106 | 37.9 |
| Widowed | 25 | 0.9 | 27 | 0.9 |
| Divorced/separated | 270 | 9.4 | 308 | 10.6 |
| Not stated | — | — | 20 | 0.7 |
| Total | 2 852 | 100.0 | 2 916 | 100.0 |

Age-specific Abortion Rates, South Australia^(a)

| Age Group | 1971 | 1972 | 1973 | 1974 | 1975 _p |
|------------|--------|--------|--------|--------|-------------------|
| 15-19 (b) | 12.72 | 13.91 | 16.08 | 14.49 | 14.05 |
| 20-24 | 14.52 | 13.66 | 13.82 | 14.74 | 14.92 |
| 25-29 | 9.24 | 10.81 | 10.70 | 10.31 | 10.79 |
| 30-34 | 9.05 | 9.50 | 9.71 | 9.53 | 8.59 |
| 35-39 | 8.92 | 8.34 | 7.78 | 7.75 | 8.52 |
| 40-44 | 4.24 | 4.68 | 4.36 | 4.58 | 4.13 |
| 45-49 (c) | 0.33 | 0.66 | 0.47 | 0.50 | 0.65 |
| Total rate | 8.99 | 9.41 | 9.78 | 9.63 | 9.66 |
| Ratio (d) | 109.54 | 122.32 | 138.82 | 141.32 | 145.90 |

(a) Abortions notified per 1 000 of female population in each age group.

(b) Includes abortions to females less than 15 years of age.

(c) Includes abortions to females greater than 49 years of age.

(d) Abortions per 1 000 live births.

OTHER HEALTH SERVICES

Blood Transfusion Service

The Red Cross Blood Transfusion Service collects and processes blood for the routine and emergency needs of all hospitals in South Australia. Blood donations are given at the Service's centre in Adelaide, at a mobile unit visiting metropolitan and country centres, and at regional centres. In 1976 over 90 000 individual donations were received.

The Service maintains a blood bank at the Royal Adelaide Hospital, and a reference laboratory which, in addition to performing the necessary tests on donor blood, carries out investigations for hospitals and medical practitioners. There are subsidiary blood banks at the Queen Elizabeth Hospital, the Repatriation General Hospital, Modbury Hospital and the Lyell McEwin Hospital, Elizabeth, and regional blood transfusion centres have been established at Mount Gambier, Whyalla, Berri, Port Lincoln and Wallaroo.

The cost of maintaining the Blood Transfusion Service is met by the State Government (60 per cent), the Commonwealth Government (35 per cent) and the Red Cross Society (5 per cent).

Home Nursing

The Royal District Nursing Society of South Australia Incorporated, through its forty-six branches in metropolitan and country districts, provides nursing facilities to those in need of home nursing. The services of the fully trained nursing staff are provided free of charge to those unable to afford a fee, and to others according to their means. During 1975-76 a total of 386 655 visits were made by 169 full-time nurses. The Society also maintains a hospital at Marree and a medical centre at Iron Knob.

The Society obtains its revenue from State and Commonwealth Government aid (86 per cent of total revenue in 1975-76), branch contributions, including payments from patients, local government and other sources (13 per cent), and legacies and donations (1 per cent).

Aerial Medical Services

The Royal Flying Doctor Service (RFDS) of Australia is a non-profit organisation and provides medical, dental, ophthalmic, School of the Air and telegram services in remote areas of Australia. The Royal Flying Doctor Service of Australia (SA and NT Section) Inc. of the RFDS operates over an area of approximately 2 124 000 square kilometres in South Australia and the Northern Territory; it administers control stations at Port Augusta, and Alice Springs in the Northern Territory, two aircraft being based at Port Augusta and one at Alice Springs. For the year ended 30 June 1976 these aircraft flew a total of 476 658 kilometres in transporting 640 patients to hospital and treating 3 831 patients at outback clinics. A further 541 patients received dental treatment from Adelaide dentists on regular monthly visits. Doctors gave 5 822 radio consultations to outback residents and 54 535 telegrams were transmitted from 436 licensed fixed and portable outstations.

No flying charges are made to patients and the Service relies on donations, bequests and similar sources for approximately 50 per cent of the finance required and 50 per cent from State and Commonwealth Government grants.

Ambulance Services

The St John Council for South Australia Inc. provides a full-time ambulance service in the metropolitan area manned by the St John Ambulance Brigade. The Council also has administrative oversight over ambulance operations in country areas and in most cases the vehicles are manned by the Brigade. In the metropolitan area during 1976 St John ambulances travelled 2 434 917 kilometres and carried 192 810 patients. Country ambulances travelled 1 891 712 kilometres and transported 37 187 patients. Three aerial ambulances, based at Whyalla and at Adelaide, flew 2 378 hours in 1976. These aircraft are fitted out on the same basis as road ambulances and all the equipment throughout the State is interchangeable. A mobile radio communication system operates throughout the State on standard frequencies.

Common training programs are based on a Manual of Casualty Care and Transport published by the St John organisation in Adelaide. The establishment of a branch of Medic Alert International, a United States organisation, has facilitated the identification of people suffering from diseases and allergies which are not readily apparent. This knowledge is of assistance to both ambulance and hospital staffs in handling and treating patients.

Voluntary Agencies

There are many other voluntary bodies operating in South Australia and doing health work of a special nature. Their activities cover such fields as care of the handicapped, hospital services, care of mother and baby, care of the aged and the provision of convalescent facilities.

CREMATORIUMS AND CEMETERIES

The first crematorium in South Australia, the Adelaide Crematorium, was erected by the Cremation Society of South Australia, presented to the State Government in 1903 and subsequently was closed in November 1959. Cremations are currently conducted at two cemeteries in the State. The Centennial Park Crematorium was erected in 1956 and is operated by the Centennial Park Cemetery Trust. A second crematorium, constructed by the Enfield General Cemetery Trust, commenced operations in December 1969. There were 3 994 cremations in South Australia during 1976.

Cemeteries in South Australia are divided into three main groups: those under the control of the State Government or local government authorities, those under church control and those under the control of trusts. In each of the above groups the cemeteries are financed by the usual charges for burials and by the leasing of land for burial purposes. With church and trust cemeteries, the cost of maintenance is often derived from interest accruing from invested capital funds.

MEDICAL PERSONNEL

The following table lists registrations with the Medical, Dental, Pharmaceutical, Physiotherapy, Chiropodists, and Nurses Boards of South Australia, and with the Board of Optical Registration.

**Professional Medical Personnel, South Australia
Number Registered at 31 December**

| Profession | 1971 | 1972 | 1973 | 1974 | 1975 |
|--------------------------------------|--------|--------|--------|--------|--------|
| Medical practitioners (a) | 2 707 | 3 054 | 3 154 | 3 348 | 3 767 |
| Dentists | 414 | 442 | 477 | 521 | 564 |
| Pharmaceutical chemists | 891 | 903 | 1 017 | 969 | 904 |
| Opticians | 90 | 94 | 96 | 95 | 95 |
| General nurses (b) | 10 506 | 11 201 | 11 923 | 12 717 | 13 863 |
| Enrolled nurses | 2 255 | 2 740 | 3 406 | 3 641 | 4 419 |
| Midwives | 4 040 | 4 265 | 4 470 | 4 787 | 5 196 |
| Psychiatric nurses | 771 | 830 | 865 | 955 | 1 067 |
| Mental deficiency nurses | 444 | 464 | 483 | 519 | 578 |
| Infant welfare nurses | 603 | 629 | 657 | 690 | 699 |
| Mothercraft nurses | 145 | 175 | 198 | 220 | 257 |
| Infectious diseases nurses | 34 | 34 | 33 | 34 | 36 |
| Dental nurses | 122 | 142 | 156 | 169 | 200 |
| Physiotherapists | 475 | 498 | 524 | 565 | 601 |
| Chiropodists (c) | 158 | 152 | 150 | 144 | 149 |

(a) Includes personnel not practising in South Australia. Date of registration is 31 January in following year.

(b) General nurses may also be registered and included as midwives, psychiatric nurses, mental deficiency nurses, etc.

(c) Date of registration is 1 July.

The figures for registered medical practitioners show the number of persons registered to practise medicine in South Australia and not the number actually practising, which is estimated at approximately two-thirds of those registered. Since the 1939-45 War there has been a considerable re-organisation of general practice in medicine with a movement away from single practices to partnership and group practice arrangements.

MEDICAL RESEARCH

The Institute of Medical and Veterinary Science

Details of this organisation are given under the heading of Scientific Organisations on pages 264-5.

The Anti-Cancer Foundation

The forerunner of the Foundation, the Anti-Cancer Campaign Committee, was formed within the University of Adelaide in 1928. The Committee's early activities were largely devoted to establishing and developing the Radiotherapy Department of the Royal Adelaide Hospital. As demand for these facilities grew the hospital assumed responsibility for routine treatment, and the Committee concentrated its activities on cancer research. In 1962 the Committee was re-organised and became the Anti-Cancer Foundation of the University of Adelaide.

Early research was of a clinical nature, but more recently the Foundation has subsidised cancer research projects within the Institute of Medical and Veterinary Science, the Flinders University of South Australia, the University of Adelaide, the Queen Elizabeth Hospital and the Royal Adelaide Hospital.

An education program is being conducted to encourage the public to seek early medical advice and prompt treatment. Social workers assist with problems associated with cancer patients being cared for at home by relatives who, in necessitous circumstances, receive financial help. The Foundation has established 'Martin House' a well-equipped hostel to accommodate country patients receiving treatment at the Royal Adelaide Hospital.

The income of the Foundation is derived from gifts and bequests, government grants and subsidies, and from direct public appeals. The Foundation has formed standing committees in the country districts of South Australia and the Northern Territory to assist in the expansion of its anti-cancer activities.

The National Heart Foundation

The National Heart Foundation of Australia and its South Australian Division was established in 1959. Its aims are research into the causes of heart and arterial diseases, the rehabilitation of patients suffering from heart and arterial diseases, and the education of doctors and the general public in all aspects of cardio-vascular problems with particular emphasis on prevention and risk factors. The National Heart campaign of 1961 raised \$5 124 000 for the work of the Foundation, of which \$662 000 was contributed in South Australia. An appeal for further funds which was made during 1969 raised \$268 000 in South Australia. Since then, the Heart Fund Continuing Support Program has been established with the aim of providing regular annual donations to support the three-part program. In 1975, the total amount raised by the Heart Fund Program was \$156 921.

The campaign funds are being spent on research (66 per cent), education (18 per cent) and rehabilitation (16 per cent). Research funds, distributed at the national level, support projects in various departments at the University of Adelaide, at Flinders University, and at the Institute of Medical and Veterinary Science, the Royal Adelaide Hospital and the Adelaide Children's Hospital. Research funds are also used in providing local and overseas fellowships and travel grants.

The National Heart Foundation Centre, Adelaide was established by the South Australian Division in 1963 for the rehabilitation of patients suffering from the effects of heart disease. The South Australian Division is also involved in professional education of medical practitioners and paramedical staff. An increasing emphasis is placed on community education in order to make the public aware of the symptoms of heart attack and what to do if one occurs, and to stress the risk factors which increase the chances of having a heart attack.

HEALTH SERVICES USAGE IN SOUTH AUSTRALIA

As part of the February 1972 population survey conducted by the Australian Bureau of Statistics, data was obtained and used to derive measures of some characteristics of the incidence and distribution of health services used or required by one per cent of the population of South Australia during 1971. Details of

this survey can be found in the *Survey of the Use of Health Services* bulletin published by the Deputy Commonwealth Statistician, Adelaide. Some findings of this survey, expanded in accordance with accepted statistical principles to represent the population of the State as a whole, were included on pages 279-81 of the *South Australian Year Book 1974*.

STATE GOVERNMENT EXPENDITURE ON PUBLIC HEALTH

The following table shows the net expenditure by the State Government from Consolidated Revenue Account on various aspects of health which is defined as excluding sewerage, drainage and water supply. The figures include both the cost of maintaining State Government activities and subsidies paid to other organisations active in this field. For further details see Part 11.3 State Government Finance.

Receipts and Outlay on Health, South Australia^(a) 1975-76

| Purpose | Outlay (b) | | | Receipts (b) | |
|---|---------------------------------|--|--|-------------------------|---------------|
| | Purchases of Goods and Services | Current Grants to Private Non-Profit Organisations | Less Charges for Goods and Services Supplied | Total (Including Other) | Total (c) |
| | | | | | |
| | | | \$'000 | | |
| General administration, regulation and research | 9 431 | 30 | 152 | 9 457 | 102 |
| Hospital and clinical services: | | | | | |
| Mental health | 25 454 | 961 | 3 182 | 23 488 | 279 |
| Other hospital and clinical services | 136 261 | 2 511 | 21 506 | 127 244 | 74 836 |
| Other health services: | | | | | |
| Preventive services | 1 091 | 92 | — | 1 189 | 102 |
| Maternal and infant health | — | 1 767 | — | 1 951 | — |
| Domiciliary care | 585 | — | 68 | 562 | 850 |
| Health of school children | 2 393 | — | — | 2 437 | 1 506 |
| Community health facilities | 2 499 | — | 80 | 2 419 | 2 339 |
| Ambulance services | — | 779 | — | 779 | — |
| Other | 1 603 | 2 038 | — | (d)4 973 | 661 |
| Total | 179 317 | 8 178 | 24 988 | 174 499 | 80 675 |

(a) Consolidated Revenue Account only: excludes operations of subsidised hospitals.

(b) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay.

(c) Mainly grants from Commonwealth Government.

(d) Includes \$1 010 000 transferred to Institute of Medical and Veterinary Science.

6.6 SOCIAL WELFARE

The Commonwealth and State Governments and a large number of voluntary agencies provide social welfare services for the population. The Commonwealth Government is concerned largely with providing fixed monetary pensions and benefits and repatriation services. It also provides, either directly or through State and local government authorities and voluntary agencies, for a wide range of

welfare services for people with special needs. State agencies operate in the field of child welfare and distribute emergency relief in circumstances where Commonwealth Government assistance is not available. The voluntary agencies, many of which receive government aid, provide a wide range of services in various fields of social welfare.

COMMONWEALTH GOVERNMENT PENSIONS AND BENEFITS

EXPENDITURE

The following table sets out Commonwealth Government expenditure in South Australia on social welfare, which includes expenditure under the Social Services Act, other Acts, National Health Service and disability and service pensions, but the figures do not include administration costs.

Commonwealth Government Expenditure on Social Welfare, South Australia (a)

| Type of Benefit | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|----------------|----------------|----------------|----------------|-----------------|
| | \$'000 | | | | |
| Social Services Act: | | | | | |
| Age and invalid pensions | 76 545 | 101 625 | 131 771 | 184 218 | 234 266 |
| Widows pensions | 10 458 | 14 364 | 18 403 | 23 873 | 30 143 |
| Family allowance (b) | 19 766 | 22 780 | 20 098 | 20 237 | 22 896 |
| Maternity allowance | 707 | 661 | 618 | 627 | 597 |
| Unemployment benefits | 2 930 | 5 107 | 6 143 | 20 475 | 36 002 |
| Sickness benefits | 1 243 | 2 226 | 3 633 | 4 855 | 6 971 |
| Supporting mother's benefit | — | — | 4 838 | 9 293 | 15 210 |
| Other | 1 237 | 1 467 | 1 952 | 3 196 | 5 270 |
| Total | 112 886 | 148 230 | 187 456 | 266 772 | 351 355 |
| Delivered Meals Subsidy Act | 48 | 78 | 166 | 172 | 203 |
| Aged or Disabled Persons Homes Act (c) | 2 671 | 3 608 | 4 221 | 6 733 | 4 838 |
| Aged Persons Hostels Act (d) | — | 106 | 865 | 753 | 591 |
| States Grants (Home Care) Act | 106 | 181 | 226 | 942 | 1 388 |
| States Grants (Deserted Wives) Act | 464 | 776 | 1 534 | 1 045 | 1 509 |
| National Health Service (e) | 50 587 | 57 851 | 66 005 | 82 399 | p222 397 |
| Disability Pensions (f) | 17 307 | 18 450 | 21 010 | 26 641 | 27 971 |
| Service Pensions (f) | 5 186 | 7 467 | 10 340 | 15 133 | 21 406 |
| Total payments | 189 255 | 236 747 | 291 823 | 400 590 | 631 658 |

(a) Where applicable the amounts shown include payments for supplementary assistance, allowances and additional pensions for children.

(b) From 15 June 1976 child endowment superseded by family allowance. Payments are made to claimant's bank accounts every twelve weeks. Five payments were included in 1972-73 and 1975-76, other years include four payments.

(c) Includes Personal Care Subsidy (\$1 380 000 in 1975-76).

(d) Commenced September 1972.

(e) Includes Northern Territory for some items (see page 325).

(f) Includes Northern Territory.

COMMONWEALTH SOCIAL SECURITY

Brief details of Commonwealth Government pensions and benefits are given in this section; however, in discussing the eligibility of persons for the various payments, all the necessary qualifications and exceptions to the general rule have not been delineated.

Age and Invalid Pensions

Age pensions are payable to men aged sixty-five and over and women aged sixty and over, who have lived in Australia continuously for a period of ten years.

Invalid pensions are payable to persons aged sixteen years and over who are permanently incapacitated to an extent of at least 85 per cent, or are permanently blind. Where the incapacity or blindness occurred outside of Australia, other than during a temporary absence, ten years continuous residence is necessary.

Age, Invalid and Wife Pensions, South Australia
Number of Pensioners

| At 30 June | Age Pensioners | | | Invalid Pensioners | | | Wife Pensioners |
|------------|----------------|---------|---------|--------------------|---------|--------|-----------------|
| | Males | Females | Total | Males | Females | Total | Total (a) |
| 1972 | 24 429 | 56 210 | 80 639 | 6 643 | 5 489 | 12 132 | 1 957 |
| 1973 | 27 745 | 63 250 | 90 995 | 7 441 | 5 914 | 13 355 | 3 740 |
| 1974 | 31 510 | 69 792 | 101 302 | 8 425 | 6 390 | 14 815 | 4 529 |
| 1975 | 33 875 | 73 404 | 107 279 | 9 703 | 6 645 | 16 348 | 4 972 |
| 1976 | 36 027 | 76 890 | 112 917 | 10 667 | 6 645 | 17 312 | 5 646 |

(a) Wife's pension became payable from 5 October 1972. Wife's allowance was payable before that date.

If a person subject to the ten year qualification for either pension has completed five years but not ten years continuous residence, but has lived in Australia for periods which, in total exceed ten years, he may be eligible. Residence in New Zealand, the United Kingdom or an Australian external Territory (except Norfolk Island) may be treated as residence in Australia. Absences from Australia may, in certain circumstances, be treated as residence.

From November 1976, for both age and invalid pensions, the maximum rate for an unmarried pensioner, or for a married pensioner whose husband or wife was not receiving an age or invalid pension, a tuberculosis allowance or a service pension, was \$43.50 a week. Where married pensioner couples are living apart for an indefinite period because of the illness or infirmity of either or both, each receives a pension at the single rate. The maximum married rate for a couple both being pensioners was \$36.25 a week each. A wife's pension is payable, subject to an income test, at the married rate to an age or invalid pensioner's wife who does not qualify for an age, invalid or repatriation service pension in her own right.

An additional pension up to \$7.50 a week is payable for all children under sixteen years or who are full-time students. An unmarried age or invalid pensioner having the custody, care and control of a child under sixteen years or who is a

full-time student is paid a guardian's allowance of \$4 a week in addition to the pension. The guardian's allowance is increased to \$6 a week if there is a child under six years, or if there is an invalid child under sixteen years requiring full-time care and attention.

Up to \$5 a week extra may be paid to a single pensioner or to a married couple (\$2.50 each) who pay rent or lodging. For single and married persons the maximum rate of supplementary assistance is reduced by the amount by which the pensioners' income exceeds \$1 a week.

Age, invalid and wife's pensions, unless the pensioner is seventy years of age or over, or permanently blind, are subject to an income test. Additional allowances are generally subject to an income test regardless of age. Under the income test, a full pension is paid if the annual income does not exceed \$1 040 (for a single pensioner) or \$1 794 (for a pensioner couple). If the income exceeds \$1 040 (or \$1 794), the annual rate of pension is reduced by half the excess.

Certain types of income are exempted. The main exemptions are: gifts or allowances from children, parents, brothers or sisters; benefits from friendly societies; family allowances or other payments for children; Commonwealth Government health benefits and amounts received from registered benefit organisations.

Widows Pensions

Widows pensions are paid to widows and other women who satisfy certain conditions; there is a test on income.

There are three classes of pensions:

Class A, a widow with at least one dependent child who is a child of the widow or a child who entered her care before she became a widow;

Class B, a widow of at least fifty years of age who has no child or, if she has a child, the child does not qualify her for a Class A pension and a widow of at least forty-five years of age whose Class A pension ceases because she no longer has a qualifying child;

Class C, a widow under fifty years of age who has no child and is in necessitous circumstances within twenty-six weeks of her husband's death.

For Classes A and B the term 'widow' includes a deserted wife who has been deserted at least six months, a divorcee, a woman whose husband has been in prison at least six months and a woman whose husband is in a mental hospital.

For all classes the term 'widow' may also include a woman who was the common law wife of a man for at least three years immediately before his death. 'Child' includes a full-time student over the age of sixteen.

A residential qualification is not required if a couple were permanent residents when the husband died or if an event occurs—such as divorce—which qualifies a woman as a 'widow'. In other circumstances five years continuous residence immediately preceding a lodgement of claim or ten years residence at anytime is required. Certain absences are not considered as breaking continuity of

residence, and residence in New Zealand, the United Kingdom or an Australian external Territory (except Norfolk Island) counts as residence in Australia. The income test operates similarly to that for age pensions.

Widows Pensions, South Australia
Number of Pensioners At 30 June

| Class | 1972 | 1973 | 1974 | 1975 | 1976 |
|----------------------|--------------|---------------|---------------|---------------|---------------|
| A | 4 898 | 5 910 | 6 297 | 6 154 | 5 956 |
| B | 4 459 | 5 111 | 5 448 | 5 662 | 5 978 |
| C | 6 | 2 | 8 | 6 | 10 |
| Total | 9 363 | 11 023 | 11 753 | 11 822 | 11 944 |

From November 1976, the maximum rates of pension were: Class A widows, \$43·50 a week, plus a mother's allowance of \$4 a week (\$6 if there is an invalid child or a child under six years), plus \$7·50 a week for each child under sixteen years or a full-time dependent student; for Class B widows, \$43·50 a week; for Class C widows, \$43·50 a week.

An additional payment of up to \$5 a week may be paid to widow pensioners who pay for rent or lodging, whose income is under \$6 a week. In the case of a Class A widow the income limit may be increased by up to \$6 a week for each child.

Supporting Mother's Benefit

A supporting mother's benefit is payable to an unmarried mother, a mother who is a deserted *de facto* wife, a *de facto* wife of a prisoner or a separated wife, from a date six months after the event which gives rise to eligibility (e.g. the birth of a child or separation). The rates, income test and other conditions are the same as for a Class A widows pension.

Portability

Pensions may be received in any country, subject to the following conditions:

- (1) the pension must be granted before departure from Australia;
- (2) normal residential requirements must be satisfied;
- (3) payment can only be made if the pensioner has left Australia on or after 8 May 1973.

Persons Living Overseas

Pensions may be granted to persons living outside Australia subject to the following conditions:

- (1) the claimant had lived thirty years in Australia and was of age-pension age or within five years of that age at the time of departure from Australia. This residential qualification does not apply to a claimant who became permanently incapacitated for work (or permanently blind) or widowed, in Australia;

(2) the claimant left Australia before 8 May 1973;

(3) the claimant is in special need of financial assistance.

In addition, the claimant is required to satisfy the ordinary conditions for grant of pension in Australia, except that of living in Australia.

Family Allowances

Persons resident in Australia who have the custody, care and control of one or more children under the age of sixteen are eligible for family allowance (formerly known as child endowment); approved institutions of which children are inmates are similarly eligible. Family allowance is also paid for full-time students between the ages of sixteen and twenty-five years. There is no income test on family allowances, but one year's residence in Australia is required if the mother and child were not born in Australia; this requirement is waived if the Department of Social Security is satisfied that they are likely to remain in Australia permanently.

At 31 December 1976 family allowance was paid at the rate of \$3.50 a week for the first eligible child; \$5 for the second; \$6 for the third; \$6 for the fourth; \$7 for the fifth and each subsequent child. Family allowance of \$5 a week is paid for each child in an institution.

Family Allowances, South Australia

| At 30 June | Families | | | Institutions | | Total Endowed Children | |
|---------------|----------------------------|------------------|-------------------|-------------------------------|------------------|------------------------------|-------------------|
| | Endowed Families (a) | Endowed Children | | Approved Institu- tions | Endowed Children | | |
| | | Under 16 | Students 16-21 | | Under 16 | | Students 16-21 |
| 1972 . . . | 170 599 | 362 830 | 23 306 | 64 | 1 545 | 145 | 387 826 |
| 1973 . . . | 172 453 | 361 539 | 24 068 | 67 | 1 203 | 120 | 386 930 |
| 1974 . . . | 174 976 | 361 853 | 23 361 | 67 | 1 745 | 116 | 387 075 |
| 1975 . . . | 178 978 | 364 047 | 25 625 | 68 | 1 045 | 150 | 390 867 |
| 1976 . . . | 179 187 | 358 746 | 28 100 | 70 | 1 072 | 102 | 388 020 |

(a) Excludes those with only endowed student children.

Maternity Allowances

Any woman, permanently resident in Australia, who gives birth to a child in Australia, is entitled to a maternity allowance. The amount payable depends on the number of existing children under sixteen years of age, and special allowance is made for multiple births. Maternity allowances are not subject to an income test.

At 31 December 1976 a mother with no other children under sixteen years of age was entitled to an allowance of \$30; where there were one or two such children the rate was \$32, and where there were three or more such children \$35. An extra amount of \$10 is paid for each additional child in multiple births.

Maternity Allowances, South Australia
(Claims granted during year)

| Category | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------------|---------------|---------------|---------------|---------------|
| Single births: | | | | | |
| No other children under 16 | 8 975 | 8 576 | 8 105 | 8 433 | 7 909 |
| One or two children under 16 | 10 693 | 10 266 | 9 678 | 10 012 | 9 686 |
| Three or more children under 16 | 2 467 | 1 984 | 1 604 | 1 414 | 1 259 |
| Multiple births: | | | | | |
| Twins | 251 | 175 | 204 | 180 | 197 |
| Triplets | 4 | 1 | 4 | 2 | 2 |
| Quadruplets | — | — | 1 | — | — |
| Total | 22 390 | 21 002 | 19 596 | 20 041 | 19 053 |

Handicapped Child's Allowance

A handicapped child's allowance was introduced in December 1974. The allowance is payable at the rate of \$15 a week to the parent or guardian of a child under sixteen years of age who is severely handicapped physically or mentally and requires constant care and attention in the family home.

Double Orphans Pension

A pension of \$11 a week is payable to the guardian of a child under sixteen years or a full-time student between the ages of sixteen and twenty-five years who has both parents dead or one dead and the other missing. The benefit is also payable in respect of either an adopted child or a child whose sole surviving parent is a long-term inmate of a prison or mental hospital.

If an orphan child is being cared for by an approved charitable or religious institution the pension may be paid to the institution.

Unemployment and Sickness Benefits

Unemployment and sickness benefits are paid to persons who suffer temporary loss of regular earnings because of unemployment, sickness or accident. There is a means test on income but not on property. Persons eligible must be between sixteen and sixty-four years of age (fifty-nine for women) with either twelve months residence or the intention to reside permanently in Australia. A person receiving an alternative social security pension is ineligible for unemployment and sickness benefits. A married woman is not usually qualified to receive sickness benefit if her husband can support her.

To qualify for unemployment benefit a person must (a) be unemployed and be able to show that unemployment was not because of his being a direct participant in a strike, (b) be able and willing to undertake suitable work, and (c) have taken reasonable steps to secure work, including registration with the Commonwealth Employment Service.

The amount of income which a person may receive and still qualify for the maximum rate of benefit is \$6 a week for an adult or married person under twenty-one, and \$3 a week for a single person under twenty-one with at least

one parent residing in Australia. The benefit is reduced by any amount in excess of these figures. For unemployment benefit, the income of the claimant's husband or wife is taken into account. In the case of sickness benefit, income received by a claimant's wife is not included for income test purposes but may determine whether additional benefit is payable for her, and if so, the amount. Special conditions apply where the wife receives an age, invalid or service pension.

From November 1976 the maximum weekly amounts for sickness and unemployment benefits were \$43.50 for a single person aged eighteen and over and \$72.50 for a married couple plus \$7.50 for each child. The rate for single persons aged over sixteen years but under eighteen years is \$36 a week.

There is a waiting period of seven days during which unemployment or sickness benefit is not payable, but this waiting period is not required more than once in any period of thirteen weeks.

Unemployment and Sickness Benefits, South Australia

| Year | Unemployment | | Sickness | | Special (a) | |
|------------|----------------------------|-------------------------------|----------------------------|-------------------------------|----------------------------|-------------------------------|
| | Number of Benefits Granted | Average Number on Benefit (b) | Number of Benefits Granted | Average Number on Benefit (b) | Number of Benefits Granted | Average Number on Benefit (b) |
| 1971-72 .. | 30 308 | 3 515 | 7 325 | 1 059 | 1 021 | 265 |
| 1972-73 .. | 31 111 | 4 423 | 7 585 | 1 388 | 1 042 | 283 |
| 1973-74 .. | 19 926 | 3 244 | 8 639 | 1 571 | 988 | 313 |
| 1974-75 .. | 61 944 | 10 557 | 9 311 | 1 978 | 1 125 | 373 |
| 1975-76 .. | 80 535 | 15 010 | 13 273 | 2 224 | 2 458 | 469 |

(a) Excludes special benefits to migrants in accommodation centres.

(b) Average number at the end of each week.

Supplementary Assistance Allowance

Supplementary assistance is payable, subject to an income test, to an age, invalid, wife or widow pensioner, or a woman receiving a supporting mother's benefit if he or she pays rent or lodging and has little or no income apart from the pension or benefit. A similar payment, known as supplementary allowance, of up to \$5 a week may be made to a sickness beneficiary who has received benefit for a continuous period of six weeks.

Special Benefits

A special benefit may be granted to a person not normally qualified for unemployment or sickness benefit and who is not in receipt of some other social service pension or allowance, or a service pension, if he is unable to earn a sufficient livelihood for himself and his dependants. The maximum rate of payment is the same as for unemployment or sickness benefit, whichever is appropriate.

Rehabilitation

The Commonwealth Rehabilitation Service assists people who are unable to work because of long-term disability or who have had to give up their employment because of sickness or injury. It aims at helping disabled people to reach their maximum physical, mental and social usefulness and to prepare them for suitable employment. The service provides a co-ordinated program of treatment and training to meet the special needs of each disabled person.

Rehabilitation is provided free to persons receiving, or eligible to receive, an invalid or widows pension, unemployment, sickness or special benefit. Also eligible are: recipients of a tuberculosis allowance; persons aged fourteen or fifteen who, without treatment or training, would be likely to qualify for an invalid pension at age sixteen; national servicemen and members of the permanent forces who are disabled at time of discharge but are ineligible for rehabilitation assistance from the Department of Veterans' Affairs and persons who become disabled while working for the Commonwealth Government and are covered by the *Compensation (Australian Government Employees) Act 1971*.

Persons from these groups are selected for rehabilitation if their disability is a substantial handicap for employment but can be overcome by treatment or training, and if there is a reasonable prospect that they will be able to start work following rehabilitation. Disabled persons who do not qualify for the free service may pay for rehabilitation themselves, and provision is made for charges to be reduced in accordance with a person's ability to pay. Private or government organisations may also sponsor rehabilitees.

Rehabilitation, South Australia

| Year | Number Accepted for Rehabilitation | Number Placed in Employment | Expenditure (a) |
|----------------------|------------------------------------|-----------------------------|-----------------|
| | | | \$ |
| 1971-72 | 208 | 188 | 470 521 |
| 1972-73 | 301 | 201 | 542 492 |
| 1973-74 | 258 | 203 | 709 355 |
| 1974-75 | 319 | 171 | 982 168 |
| 1975-76 | 323 | 133 | 1 296 422 |

(a) Excludes capital expenditure on sites and buildings, and administrative cost of the Rehabilitation Service.

Funeral Benefits

A funeral benefit of up to \$20 is payable to any person liable for the funeral costs of a deceased age or invalid pensioner. A higher benefit of up to \$40 is payable to an age, invalid, wife or widow pensioner, or a woman in receipt of supporting mother's benefit, liable for the funeral cost of a deceased spouse, child or another such pensioner or beneficiary. For these benefits 'pensioner' means a person who satisfies the Commonwealth Government pensioner 'fringe' benefits income test. 'Deceased pensioner' also refers to a person who satisfied those conditions before his death.

During 1975-76, 4 924 claims for funeral benefits were granted in South Australia.

Homes for the Aged

The *Aged or Disabled Persons Homes Act 1954* provides that grants may be made to certain organisations towards the capital cost of erecting or purchasing approved homes for aged or disabled people. Religious, charitable, ex-servicemen's organisations and local government bodies as well as any other approved organisation are eligible. Grants are made on the basis of \$2 for each \$1 (excluding government assistance and borrowed money, except that borrowed by local government bodies) raised by an organisation.

At 30 June 1976, 645 grants had been approved in South Australia since the inception of the scheme in 1954. The amount granted, \$43 364 809, was associated with the accommodation of 10 610 persons.

Since October 1969, a personal care subsidy has been provided in terms of this Act, to eligible organisations providing personal care services in hostel-type accommodation for persons of eighty years of age and over. In 1974, the subsidy was increased to \$15 per week, and the cover extended to persons who, though not yet eighty years of age, required personal care services.

Under the *Aged Persons Hostels Act 1972*, the Commonwealth Government introduced a three-year program for the purpose of providing additional hostel accommodation. The legislation provides for the Commonwealth Government to meet building costs up to a maximum limit of \$15 700 at 1 October 1976 (this amount is reviewed quarterly) and supply \$250 per person for furnishings and a further \$2 400 per person for land purchased since September 1972. The extent of an organisation's projected use of this entitlement is related to whether its existing facilities are subsidised or not. Applications for assistance closed in September 1975 and all projects were due to start by September 1976. However in 1976 the *Aged Persons Hostels Act* was amended to extend the twelve-month deadline for commencement, and this has enabled deferred projects to be funded over a period of three to four years.

The *States Grants (Home Care) Act 1969*, which is administered by the Department of Social Security, provides for financial assistance to the States to assist them in developing senior citizens' centres and a range of home care services providing housekeeping or other domestic assistance for aged persons in their homes. Payments to South Australia up to 30 June 1976 amounted to \$1 251 071 for senior citizens' centres, \$73 748 towards the salaries of welfare officers employed in connection with senior citizens' centres and \$1 569 294 for home care services.

Delivered Meals Service

Under the *Delivered Meals Subsidy Act 1970*, financial assistance is provided to organisations to establish, maintain, expand and improve 'meals on wheels' services. These organisations must be non-profit charitable, benevolent or welfare bodies not controlled by the Commonwealth or State Governments. The basic rate of subsidy is 30 cents for each meal with which an approved vitamin C supplement is provided, and 25 cents for all other eligible meals.

At 30 June 1976, approvals had been given to twenty metropolitan and fifty-one country meals services in South Australia which had served a total of 3 984 638 meals since the scheme's inception. The total amount of subsidy paid was \$748 076.

Homeless Persons' Assistance

The *Homeless Persons' Assistance Act 1974* provides for assistance to non-profit organisations and local government bodies which provide accommodation, food and social welfare services for homeless men and women.

The Act enables grants to be made to eligible organisations to meet the cost of purchasing, constructing, altering or renting buildings to be used as homeless persons assistance centres, as well as to meet the cost of purchasing and installing furniture and equipment for such centres. Grants also meet half the salary of a social welfare worker employed at a centre, and help to meet the cost of providing food and accommodation for homeless persons at an approved centre, or of meals provided at such centres for non-residents. The rate of the food and accommodation subsidy has been prescribed at 75 cents per day and the rate of meals subsidy at 25 cents per meal.

Up to 30 June 1976 grants totalling \$64 572 had been made to eligible organisations in South Australia.

Handicapped Persons Assistance

Under the *Handicapped Persons Assistance Act 1974*, financial assistance provided by the Commonwealth Government to eligible organisations conducting sheltered workshops and handicapped children's training centres has been extended. Grants may now be made available for activity therapy centres for handicapped persons. Subsidy is also available towards the cost of rehabilitation facilities (including holiday homes) which are ancillary to or provided together with an approved program of training, activity therapy, sheltered employment or residential accommodation. All capital and equipment subsidies are paid at a rate of \$4 for every \$1 raised from non-government sources. A subsidy covering 50 per cent of actual salaries may be paid toward the cost of salaries of most staff. A higher rate of 100 per cent may be paid during an initial period in the case of some new enterprises. Since October 1970, a training fee of \$500 has been paid to sheltered workshop organisations for each handicapped person who remains in normal employment for twelve months following at least six months training by the organisation.

During the year ended 30 June 1976, grants totalling \$5 448 786 were approved under the Act.

Handicapped Children's Benefit

A benefit is payable by the Commonwealth Government for each physically or mentally handicapped child who is under sixteen years of age and resides in an approved home conducted by a charitable organisation. From November 1976, the rate of benefit has been \$5 per day. In 1975-76, expenditure by the Commonwealth Government on handicapped children's benefits in South Australia was \$204 176. At 30 June 1976, 214 eligible handicapped children were accommodated in eight approved homes in South Australia.

Reciprocal Agreements

New Zealand. An agreement exists between the Governments of Australia and New Zealand for reciprocity in social services. The arrangements cover age and invalid pensions, widows pensions, family allowances, and unemployment and

sickness benefits, and apply to both permanent and temporary changes of residence. Residence in one country may be treated as residence in the other country in relation to entitlement to benefits in which a residential qualification applies. Persons from one country taking up permanent residence in the other country become eligible for any of the specified benefits of the new country under the same conditions (with one or two exceptions) as apply to citizens of that country. Persons in receipt of any of the specified benefits in one country may continue to receive those benefits while temporarily absent in the other country.

Britain. A reciprocal agreement on social services exists between Britain and Australia. Under the current agreement residence in one country may be treated as residence in the other country as the basis for entitlement to benefits in which a residential qualification applies. Australians going to Britain for permanent residence are treated in Britain as if they had been insured under the National Insurance Scheme while in Australia, so that they can qualify for various National Insurance benefits. There is also provision for the safeguard of social service rights for persons going from one country to the other for temporary residence.

Deserted Wives Assistance

The *State Grants (Deserted Wives) Act* 1968 provides for assistance to be given by the Commonwealth Government to the States in respect of aid for needy mothers with children, where there is no breadwinner and the mothers are not eligible for benefits under the Social Services Act. Broadly these include deserted wives and deserted *de facto* wives during the first six months of desertion; wives and *de facto* wives of prisoners during the first six months of the husband's imprisonment; and other separated wives and unmarried mothers during the first six months after the birth of a child or separation.

Telephone Rental Concessions

The Department of Social Security with the Australian Telecommunications Commission provides telephone rental concessions to qualified pensioners in the form of a one-third reduction in annual rental charges.

Telephone Interpreter Service

A Telephone Interpreter Service is operating through the Department of Social Security as an adjunct to migrant welfare services. It acts as a multi-lingual information service both to migrants, especially those with queries regarding government services, and to professional people experiencing language problems with a patient or client.

NATIONAL HEALTH SERVICES

Expenditure

The following table shows Commonwealth Government expenditure in South Australia from the National Welfare Fund, the Health Insurance Fund and under the *States Grants (Hospital Operating Costs) Act* 1976, on the various aspects of the national health services. The amounts shown are the direct costs of these benefits and services and do not include the administrative costs.

National Health Services Expenditure, South Australia

| Type of Benefit | Year First Paid | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|-----------------------|---------------|---------------|---------------|-----------------|
| \$'000 | | | | | |
| National Welfare Fund: | | | | | |
| Hospital and nursing home benefits (a) | 1946 | 18 498 | 21 994 | 31 126 | 21 344 |
| Medical benefits (b) | 1953 | 17 833 | 17 969 | 20 370 | 6 942 |
| Pensioner medical service (c) | 1951 | 3 257 | 3 845 | 5 109 | 539 |
| Deficit financing of nursing homes (d) | 1975 | — | — | — | 9 513 |
| Domiciliary nursing care (e)(f) | 1973 | 101 | 632 | 770 | 852 |
| Pharmaceutical benefits (f) | 1948 | 10 668 | 13 118 | 16 082 | 13 106 |
| Pensioner pharmaceutical benefits (f) | 1951 | 5 377 | 6 294 | 7 400 | 9 884 |
| Anti-tuberculosis campaign | 1947 | 876 | 1 041 | 1 106 | 655 |
| Milk for school children | 1951 | 990 | 699 | — | — |
| Other | — | 251 | 413 | 436 | 769 |
| Health Insurance Fund: | | | | | |
| Medical benefits (f) (g) | 1975 | — | — | — | 56 918 |
| Hospital benefits (h) | 1975 | — | — | — | p74 308 |
| Health program grants | 1975 | — | — | — | 1 998 |
| States Grants (Hospital Operating Costs) Act (i) | 1976 | — | — | — | 25 569 |
| Total | | 57 851 | 66 005 | 82 399 | p222 397 |

(a) Includes Northern Territory for nursing home benefits and payments.

(b) Includes benefits and payments for Northern Territory residents insured with South Australian hospital and medical organisations. There are no organisations registered in the Northern Territory.

(c) Payments for medical services rendered before 1 July 1975.

(d) Commenced 1 January 1975.

(e) Commenced March 1973.

(f) Includes Northern Territory.

(g) Includes advances to cash payment centres.

(h) Excludes payments in respect of public hospitals made after 26 May 1976.

(i) Includes payments made to recognised hospitals after 26 May 1976.

Medibank

On 1 July 1975 the Australian health insurance program, Medibank, came into operation replacing the previous voluntary health insurance arrangements, the Subsidised Health Benefits Plan and the Pensioner Medical Service.

Following a comprehensive review of Medibank, the Commonwealth Government decided to modify the operations of the health insurance program with effect from 1 October 1976. Amendments to the *Health Insurance Act 1973* to modify Medibank were introduced in May 1976. As a result of the modifications, Medibank no longer automatically covers all residents of Australia. All residents may elect to have Medibank coverage, but must insure privately if they elect otherwise.

There are now three main choices of health insurance available.

- (1) Standard Medibank. The benefits are basically 85 per cent of scheduled fees charged by doctors or the schedule fee less \$5 whichever is the greater, and free shared-ward accommodation in recognised (*i.e.* public) hospitals with free medical care provided by doctors engaged by the hospitals. The 85 per cent coverage also applies to consultations by participating optometrists and certain services by approved dentists in the operating theatres of approved hospitals.

The Australian Health Insurance Commission (a statutory authority constituted by an Act of Parliament) administers standard Medibank.

- (2) Standard Medibank plus basic 'hospital-only' insurance. This provides all the benefits of standard Medibank plus choice of doctor in hospital. The 'hospital-only' insurance coverage is available from private hospital benefits organisations including Medibank (Private) (administered by the Health Insurance Commission).

Contribution rates payable for basic 'hospital-only' insurance are subsidised by the Commonwealth Government and are generally lower than the rates payable by privately insured persons. The subsidy is designed to assist lower income earners.

- (3) Basic private health insurance. This provides basic hospital and medical benefits, and is available from private health benefits organisations including Medibank (Private).

In addition to basic private health insurance and basic 'hospital-only' insurance, private health benefits organisations offer coverage against the gap between medical benefits and schedule fees, fees charged for single room accommodation in recognised hospitals, costs for private hospital accommodation and various ancillary services.

Levy on Income

The program now provides for a health insurance levy equivalent to 2.5 per cent of personal taxable income, with maximum levy payment of \$300 per annum (family) and \$150 per annum for a person without dependants. Those on the lowest incomes, most pensioners, certain Defence personnel and Repatriation beneficiaries, and those who take private insurance for both the basic medical and basic hospital benefits are exempt from the levy. Privately insured persons are required to make a declaration for taxation purposes in order to gain exemption from the levy. The responsibility for the administration of the levy rests with the Commissioner of Taxation.

Hospital Benefits

Before the Medibank Hospitals Agreement between the Commonwealth and South Australian Governments came into operation on 1 July 1975, the Commonwealth Government paid hospital benefits to patients in approved hospitals under the following arrangements:

- (a) patients insured with registered benefit organisations and hospitalised in an approved hospital received a benefit (\$2 a day) paid through the organisation. Details of registered organisations are given on pages 347-8.

- (b) uninsured patients were entitled to a benefit (80c a day) which was deducted from the patient's account and paid by the Commonwealth Government to the hospital;
- (c) pensioners enrolled with the Pensioner Medical Service and their dependants in standard wards of public hospitals were entitled to a benefit of \$5 a day which was paid to the hospital;
- (d) a benefit of \$2 a day was payable direct to approved hospitals for patients treated without charge;
- (e) special financial assistance for hospital benefits insurance was provided through the Subsidised Health Benefits Plan to low income families, to people receiving unemployment, sickness or special benefits and to migrant settlers for hospital expenses incurred during the first two months in Australia.

Under the Medibank Hospitals Agreement which came into effect on 1 July 1975 the Commonwealth Government agreed to meet 50 per cent of the net operating costs of the State's public hospitals. The Commonwealth's 50 per cent share of the net operating costs was made up of:

- (a) a payment of \$16 a patient day paid to the hospital;
- (b) a benefit of \$2 an insured patient day (this benefit was withdrawn on 1 April 1976); and
- (c) the balance to 50 per cent paid to the respective State hospital authority.

Towards the end of May 1976, the Commonwealth Government announced that the hospital agreements with each of the States were not in accordance with the provisions of the Health Insurance Act and payments under the agreements were discontinued. In order that the State Governments could continue to receive, on an interim basis, the amounts to 30 September 1976 that they would otherwise have received under the agreements, the *States Grants (Hospital Operating Costs) Act 1976* was introduced which authorised the Treasurer to make payments to the States. South Australia received \$25 569 000 under this Act in 1975-76.

A new Agreement was negotiated between the Commonwealth and South Australian Governments for the provision of hospital services with effect from 1 October 1976. Under the Agreement the Commonwealth Government agrees to meet 50 per cent of the net operating costs of recognised hospitals within the terms of an annual budget formulated by a State Standing Committee, comprising representatives of the Commonwealth and South Australia, and approved by the respective Commonwealth and State Health Ministers. There is also provision for adjusting the budget as necessary throughout the year by the same procedures.

From 1 July 1975 the Commonwealth Government payments to private hospitals of \$16 a day for each occupied bed were made directly to the hospitals and additional benefits of \$2 a day through a hospital benefit organisation for insured patients, \$0.80 a day for uninsured patients and \$2 a day for patients treated without charge were paid. These latter three benefits were withdrawn from 1 April 1976.

Section 34 of the *Health Insurance Act 1973* allows the Minister to grant approval to non-profit private hospitals to provide care and treatment without charge to patients in free standard ward accommodation. A supplementary Commonwealth benefit is payable on an occupied-bed-day basis in respect of such hospital patients. This benefit is additional to the \$16 daily bed payments. The rate of supplementary Commonwealth benefit is determined on the basis of information on actual operating costs as advised by the hospital. The hospital then claims payment directly from the Health Insurance Commission. Payments of \$115 000 were made to South Australian hospitals in 1975-76 under this Section.

The following table gives details of Commonwealth Government hospital benefit payments from 1972-73 to 1975-76.

Hospital Benefits, South Australia

| Type of Benefit | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|----------------------|---------------|---------------|-----------------|
| | Amount paid (\$'000) | | | |
| National Welfare Fund: | | | | |
| Hospitals; | | | | |
| Insured patients (a) | 2 747 | 2 683 | 2 800 | 2 018 |
| Uninsured patients | 40 | 43 | 39 | (b)3 |
| Special Account Advance and Deficit payments (a) (c) | 4 038 | 5 949 | 9 248 | 6 453 |
| Subsidised Health Benefits Plan payments (a) | 1 321 | 1 550 | 2 222 | 711 |
| Patients treated without charge (b) | 19 | 12 | 15 | 2 |
| Pensioner patients | 1 896 | 1 912 | 1 879 | (b)194 |
| Nursing home patients (d) | 8 027 | 9 778 | 14 699 | 11 769 |
| Other nursing home payments (e) | 14 | 68 | 224 | 193 |
| Total National Welfare Fund | 18 103 | 21 994 | 31 126 | 21 344 |
| Health Insurance Fund: | | | | |
| Hospitals; | | | | |
| \$16 per day payments to public and private hospitals | — | — | — | p 27 168 |
| Balance payments to public hospitals | — | — | — | 47 025 |
| Section 34 payments to private hospitals | — | — | — | 115 |
| Total Health Insurance Fund | — | — | — | p 74 308 |

(a) Includes benefits and payments for Northern Territory residents insured with South Australian organisations.

(b) Hospitalisation in all hospitals before 1 July 1975 and in private hospitals for uninsured patients and patients treated without charge between 1 July 1975 and 1 April 1976.

(c) Reimbursements to registered hospital benefits organisations for losses incurred on chronic or pre-existing ailments and long-term illness.

(d) Includes Northern Territory.

(e) Includes payments for Northern Territory residents insured with South Australian organisations and covers Subsidised Health Benefits Plan fund benefit reimbursements and Special Account Advance and Deficit payments payable from 1 January 1973.

Nursing Home Benefits

Commonwealth Government nursing home benefits are paid direct to nursing homes on behalf of nursing home patients, the amount of benefit paid in respect of individual patients being deducted from the nursing home account payable by the patient.

There are three forms of nursing home benefit payable by the Commonwealth Government, as follows:

- (a) Ordinary Care Nursing Home Benefit is payable at the rate of \$3.50 a day in respect of all patients accommodated in approved nursing homes.
- (b) A Supplementary Benefit of \$3 a day, in addition to the basic benefit, is payable in respect of patients who need and receive intensive nursing home care.
- (c) An additional benefit of \$11.15 per day is payable by either the Commonwealth Government, in respect of patients who are not insured for both private medical and hospital insurance or by hospital benefits organisations, in respect of patients who are insured for both private medical and hospital insurance.

Under the authority of the *Nursing Homes Assistance Act 1974* the Commonwealth Government meets the operating deficits of certain religious and charitable nursing homes which enter into an agreement with the Government for this purpose. Nursing home benefits are not payable in respect of patients accommodated in such homes.

Domiciliary Nursing Care

Domiciliary Nursing Care benefit of \$2 a day was introduced in March 1973. The benefit was designed to help meet the cost of home nursing and other professional care for aged people who are chronically ill but being cared for in the home environment. The benefit can be paid to any person who provides continuous care for a patient in a private home which is the residence of the person and the patient.

Patients must be sixty-five years of age or more, have a certificate from their doctor stating that they have a continuing need for nursing care by a registered nurse and they must be receiving this care by a registered nurse on a regular basis involving at least two visits each week. In remote localities, where nursing services are not readily available, a lesser amount of professional nursing care may be acceptable. The scope of the benefit was extended during 1976 to include patients and beneficiaries living in certain aged persons complexes.

Medical Benefits

Following the introduction of Medibank under the *Health Insurance Act 1973*, from 1 July 1975 all persons in Australia became eligible for medical benefits amounting to eighty-five per cent of the schedule fee with the patient paying a maximum of \$5 for any medical service where the schedule fee was charged for medical treatment provided by medical practitioners in private practice, optometrical consultations given by participating optometrists and some medical services carried out by approved dentists in the operating theatres of approved hospitals.

Schedule fees are determined periodically by independent medical fees inquiries. These fees, however, are not binding on doctors. In the event of a doctor charging in excess of the schedule fee, the patient has to bear the difference and this amount is not recoverable by health insurance. Private benefit organisations offered insurance to cover only the 'gap' between the benefit paid and the schedule fee.

Before 1 October 1976, doctors who chose to 'bulk-bill' Medibank were required to accept benefits payable for services as payment in full for those services. However, from 1 October 1976, doctors may, in addition to 'bulk-billing', charge patients an amount not exceeding the 'gap' between a schedule fee and benefits payable.

Before 1 July 1975, the Commonwealth Government paid medical benefits in respect of medical expenses incurred by persons who were members of registered medical benefit organisations or by the dependants of such members. The benefits were normally paid through the organisations to the member upon receipt of a medical practitioner's account. The fund benefit and the Commonwealth Government benefit were paid in accordance with the rates prescribed under the *National Health Act* 1953. Benefits were not payable where a patient received a payment by way of compensation or damages.

The special financial assistance for medical benefits insurance provided through the Subsidised Health Benefits Plan to low income families, to people receiving unemployment, sickness or special benefits, and to migrant settlers during their first two months in Australia no longer applied with the introduction of Medibank. The provisions of the *National Health Act* which related to the Subsidised Health Benefits Plan were repealed with effect from 1 March 1976. Commonwealth Government expenditure on medical benefits in South Australia in 1975-76 was \$6 942 000. Further details of medical benefits organisations are given on pages 347-9.

Medical Benefit Exclusions

Medical benefit is not payable in respect of a professional service that is a medical examination for the purposes of life insurance, superannuation or provident account schemes, or admission to membership of a friendly society.

Unless the Minister for Health otherwise directs, medical benefit is not payable in respect of a professional service where:

- (1) the service has been rendered by or on behalf of or under an arrangement with the Commonwealth, a State or a local governing body, or an authority established by a law of either a State or an internal Territory;
- (2) the medical expenses were incurred by the employer of the person to whom the service was rendered; or
- (3) the person to whom that service was rendered was employed in an industrial undertaking and that service was rendered to him for purposes connected with the operation of that undertaking.

Medical benefit is not payable where the service was rendered in the course of carrying out a mass immunisation.

A direction has, however, been issued under Section 19 (2) of the *Health Insurance Act 1973* providing for payment of medical benefits for professional services rendered to all wards of States and internal Territories.

New Arrivals to Australia (after 1 October 1976)

Immigrants who intended to live permanently in Australia are covered by the Health Insurance system just as other residents are. However, on arrival, they need to decide on the type of cover they want and they are required to pay the levy unless they choose to insure privately.

Visitors to Australia are not eligible for standard Medibank benefits and, while in Australia, are responsible for their own health care costs.

Provision exists, however, under Section 6 of the Health Insurance Act, for visitors to be regarded as residents of Australia for the period of their stay. Only genuine hardship cases will be considered and, generally, individual applications must be made to the Health Insurance Commission.

Special arrangements will apply for foreign students to be regarded as eligible for Standard Medibank benefits while in Australia.

Special Account

Contributors who would otherwise have been ineligible for medical and hospital fund benefits because of limitations imposed by registered private health insurance organisations' rules relating to pre-existing ailments and maximum benefits in the case of medical benefits, and pre-existing ailments, chronic illnesses and hospitalisation in excess of the maximum periods for which benefits were payable in the case of hospital benefits, could, under the Special Account arrangements continue to receive the same benefits as other contributors up to private ward charges in public hospitals. Benefits so paid, plus management expenses, were charged to the Account and contributions credited to it. The Commonwealth Government reimbursed the deficit balances of the Special Accounts.

Contributors who had been transferred to a registered hospital insurance organisation Special Account for one of the above reasons could receive nursing home fund benefits under the Special Account arrangements. However, a claim for nursing home fund benefits would not entitle a registered hospital benefits organisation to transfer a contributor to the Special Account.

All medical benefits organisations in South Australia ceased operating Special Accounts when Medibank took over as the principal payer of medical benefits from 1 July 1975. Hospital benefits organisations continued to operate Special Accounts after the introduction of Medibank but the maximum benefits payable were restricted to the single room/recognised hospital fee of \$30 a day. The Special Account arrangements ceased to operate on 30 September 1976 in respect of claims for hospital benefits for treatment rendered after that date.

The deficit balances reimbursed in 1975-76 were \$6 453 000 in the case of hospital payments, \$192 000 in the case of nursing home payments and \$233 000 in the case of medical payments.

Hospital Benefits Reinsurance Arrangements

To replace the Special Account the Commonwealth Government established, on and from 1 October 1976, a Hospital Benefits Reinsurance Trust Fund in respect of the standard (basic) hospital benefits tables. Both the Government and all registered hospital benefits organisations contribute to the Fund under a pooling arrangement. Under the reinsurance arrangements, organisations are able to transfer the benefits liability for contributors whose period of hospitalisation in a contributor year exceeds thirty-five days.

Health Program Grants

Health program grants were introduced on 1 July 1975 as part of the Medibank program, and were primarily intended as a means of financing medical services provided in Australia by doctors employed on a salaried or sessional basis.

With the introduction of the new Medibank arrangements effective from 1 October 1976, the health program grant arrangements were reviewed within the context of the overall review of Medibank. The basic principle underlying the new Medibank arrangements is that the cost of medical services to privately insured persons should be met by the private medical benefits funds. This resulted in health program grant policy being changed to conform with this principle. Payments to organisations in receipt of a health program grant are generally now only given in respect of patients who are covered by Standard Medibank. Consequently the number of organisations approved under the health program grants arrangements has been substantially reduced. The grants no longer apply to those industrial organisations which provide personal health services for their employees.

The amount paid to approved organisations in South Australia during the 1975-76 financial year was \$1 998 000.

Pensioner Medical Service

The Pensioner Medical Service was designed to provide a general practitioner service free of charge to eligible pensioners and their dependants. Persons receiving an age, invalid, widows or service pension, or a sheltered employment allowance, who met the requirements of a means test, and persons receiving a tuberculosis allowance were eligible pensioners. The service did not extend to specialist treatment, general anaesthetics, pathology services, X-rays, operations or the treatment of fractures, which were generally available to eligible pensioners through the public hospital system. Doctors participating in the service were remunerated by the Commonwealth Government on a fee-for-service basis.

Medical Services to Eligible Pensioners

With the termination of the Pensioner Medical Service on Medibank's introduction on 1 July 1975, 'eligible pensioners' *i.e.* pensioners issued with Pensioner Health Benefits (formerly PMS) cards, and their dependants became entitled to the full range of medical services, including those of private specialists and consultant physicians.

The Health Insurance Act reflects Government policy that pensioners receive these services without direct charge. Under Section 23 of the Act, the Minister for Health requests all medical practitioners in Australia to give an undertaking to 'direct-bill' Medibank for eligible pensioners who are not privately insured for basic medical and hospital benefits, thereby enabling them and their dependants to receive these services at no direct cost.

With the implementation of modifications to Medibank from 1 October 1976, the Government decided that all pensioners entitled to Pensioner Health Benefits would receive relief from the Medibank levy. Further, the Government, from 25 November 1976, amended the eligibility test for Pensioner Health Benefits to bring it into line with the new pension income test, effectively increasing the number of pensioners eligible for these benefits. This latter group of persons also receive relief from the levy. As well as seeking undertakings from doctors, the Government expects that doctors will accept benefits in full payment for services provided to eligible pensioners with Pensioner Health Benefits Cards, even where they have private insurance, and that generally doctors will not seek any 'gap' payment from a pensioner.

Eligible pensioners are still entitled, under the Pharmaceutical Benefits Scheme, to receive a wide range of medicines free of cost.

Pensioner Pharmaceutical and Medical Benefits, South Australia^(a)

| Year | Number of Pensioners and Dependants | Number of Pharmaceutical Prescriptions | Commonwealth Government Payments for Services | | |
|---------|-------------------------------------|--|---|-------------|--------|
| | | | Pharmaceutical | Medical (c) | Total |
| | | '000 | \$'000 | | |
| 1971-72 | 124 | 2 188 | 4 749 | 2 979 | 7 728 |
| 1972-73 | 135 | 2 384 | 5 377 | 3 257 | 8 634 |
| 1973-74 | 143 | 2 629 | 6 294 | 3 845 | 10 139 |
| 1974-75 | 146 | 2 868 | 7 400 | 5 109 | 12 509 |
| 1975-76 | n.a. | 3 000 | 9 884 | 539 | 10 423 |

(a) Includes Northern Territory.

(b) Enrolled at end of year.

(c) Includes payments for mileage vouchers. Expenditure during 1975-76 relates to medical services rendered before the introduction of Medibank on 1 July 1975.

Pharmaceutical Benefits

Under the Pharmaceutical Benefits Scheme certain medicines, when prescribed by a doctor, are made available to the general public upon the payment of \$2. Eligible pensioners are supplied free of cost. The drugs and medicinal preparations available as pharmaceutical benefits are determined on the advice of the Pharmaceutical Benefits Advisory Committee which also recommends the maximum quantities that can be prescribed. Pharmaceutical benefits are normally obtained through registered pharmacists.

Pharmaceutical Benefits, South Australia^(a)

| Year | Number of Benefit Prescriptions | Cost of Benefit Prescriptions | | | Additional Costs to Commonwealth Government ^(b) |
|---------------|---------------------------------|-------------------------------|------------------------|----------------------------------|--|
| | | Total Cost | Patients Contributions | Net Cost Commonwealth Government | |
| | '000 | | | '000 | |
| 1971-72.. . . | 4 345 | 11 080 | 3 164 | 7 916 | 2 183 |
| 1972-73.. . . | 4 378 | 11 977 | 4 328 | 7 649 | 3 018 |
| 1973-74.. . . | 5 254 | 14 572 | 5 207 | 9 365 | 3 684 |
| 1974-75.. . . | 5 992 | 17 302 | 5 941 | 11 361 | 4 630 |
| 1975-76.. . . | 5 854 | 21 286 | 8 297 | 12 988 | 1 709 |

(a) Excludes pensioner benefits. Includes Northern Territory. (b) Payments to hospitals and miscellaneous services.

Anti-tuberculosis Campaign

From 1948 until 1976, the Commonwealth Government paid for all capital expenditure on tuberculosis clinics and hospitals and for any increase in the cost of diagnosis, treatment, and control of tuberculosis. These payments ceased on 31 December 1976.

The Commonwealth Government pays allowances to people suffering from tuberculosis to encourage them to give up work and undergo treatment. The allowances paid to persons suffering from tuberculosis are subject to an income test.

At 31 December 1976 the maximum income permitted before allowances were affected was \$20 per week for a single person and \$17.25 for each married person.

Anti-tuberculosis Campaign, South Australia

| Commonwealth Government Expenditure | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Allowances paid to sufferers | 33 | 67 | 48 | 38 | 54 |
| Maintenance expenditure (a) | 757 | 811 | 988 | 1 114 | 685 |
| Capital expenditure | 155 | 243 | 395 | 31 | 30 |
| Total | 945 | 1 121 | 1 430 | 1 183 | 769 |

(a) Includes administrative expenses not paid from National Welfare Fund.

At 31 December 1976, the allowance payable to a married person and his or her spouse was \$38 a week each. In addition, an amount of \$7.50 a week was paid for each dependent child who was under sixteen years of age or undergoing full-time education. This amount was apportioned evenly between the sufferer and the spouse. A single person without dependants, if not

hospitalised, received \$46.75 a week or, if receiving hospital treatment free of charge, \$43.50 a week. Widows or widowers with dependent children either under sixteen years of age or undergoing full-time education received \$47.50 a week, plus \$7.50 a week for each dependent child plus a mothers or guardians allowance of \$4 a week. An additional mothers or guardians allowance of \$2 a week was also paid where there was a dependent child under six years of age or a dependent invalid child requiring full-time care.

REPATRIATION BENEFITS

Disability Pensions

Disability pensions are paid by way of compensation to ex-servicemen and women who suffer incapacity because of war service, to their eligible dependants, and to the dependants of those whose death is attributable to war service. There are four main classes of disability pensions.

The special (TPI) rate (\$83.25 a week from 4 November 1976) is payable to those who are deemed totally and permanently incapacitated.

The intermediate rate (\$57.35 a week from 4 November 1976) is payable to an ex-serviceman who, because of the severity of his war-caused incapacity, can work only part-time or intermittently and in consequence is unable to earn a living wage.

The general rate is payable to those who suffered war-caused disabilities but still retained some earning capacity. The pension payable depends on the degree of incapacity, the maximum from 4 November 1976 being \$31.45 a week. Pensions are also payable for a wife and each child under sixteen years of age under both special and general pensions.

The widows rate is payable to widows of ex-servicemen who died as a result of war service, and to any children under sixteen years of age. An additional domestic allowance is payable to certain classes of widows. From 4 November 1976 the widows rate was \$43.50 a week and the domestic allowance \$12.

Disability Pensions, South Australia^(a)

| Year | Pensions in Force at End of Year | | | Total | Expenditure |
|---------------|----------------------------------|---|--------------------------------------|--------|-------------|
| | Incapacitated Ex-Servicemen | Dependants of Incapacitated Ex-Servicemen | Dependants of Deceased Ex-Servicemen | | |
| | Number | | | | \$'000 |
| 1971-72 . . . | 19 844 | 25 612 | 5 126 | 50 582 | 17 270 |
| 1972-73 . . . | 19 423 | 25 345 | 5 048 | 49 816 | 18 405 |
| 1973-74 . . . | 19 138 | 24 413 | 4 986 | 48 537 | 21 010 |
| 1974-75 . . . | 18 726 | 23 545 | 4 866 | 47 137 | 26 583 |
| 1975-76 . . . | 18 246 | 22 406 | 4 762 | 45 414 | 27 971 |

(a) Includes Northern Territory.

Service Pensions

Service pensions are payable to ex-servicemen who served in a theatre of war and have reached the age of sixty years (fifty-five for women) or who are permanently unemployable or suffering from pulmonary tuberculosis. The service pension is equivalent in amount to the social services age and invalid pensions and is subject to the same income test. It also confers eligibility for a full range of medical and dental treatment. The dependants of service pensioners may continue to receive their appropriate allowance upon the death of the pensioner. All service pensioners aged seventy years and over have received the pension free of the income test from 8 May 1975.

Service Pensions, South Australia^(a)

| Year | Pensions in Force at End of Year | | | | Expenditure |
|---------------|----------------------------------|---------------------------------------|-----------------------------------|--------|-------------|
| | Ex-Servicemen | Dependants of Pensioner Ex-Servicemen | Dependants of Deceased Pensioners | Total | |
| | Number | | | | \$'000 |
| 1971-72 . . . | 6 025 | 1 556 | 458 | 8 039 | 5 186 |
| 1972-73 . . . | 6 929 | 2 444 | 456 | 9 829 | 7 467 |
| 1973-74 . . . | 7 753 | 2 849 | 383 | 10 985 | 10 340 |
| 1974-75 . . . | 8 241 | 3 384 | 368 | 11 993 | 15 133 |
| 1975-76 . . . | 9 373 | 4 404 | 345 | 14 122 | 21 406 |

(a) Includes Northern Territory.

Medical Services

The Department of Veterans' Affairs provides hospital treatment, general practitioner services, specialist facilities, pharmaceutical benefits, dental treatment, and nursing home benefits for eligible persons. A comprehensive rehabilitation and social worker service is also available. Medical treatment is provided for all service-related disabilities, pulmonary tuberculosis, and all forms of malignant cancers. Treatment for all non-service-related disabilities is made available to veterans receiving a disability pension at or above the 100 per cent general rate, veterans of the Boer and 1914-18 Wars; veterans who are ex-prisoners of war, veterans in receipt of service pensions (subject to income being within the limits governing the provision of free medical treatment and other fringe benefits), widows, and certain dependants of deceased male veterans whose deaths have been accepted as related to service.

In-patient and out-patient treatment is provided at the Repatriation General Hospital, Daw Park. Facilities at the Out-patient Department include radiological, pathological, physiotherapy, and chiropody services in addition to medical specialist examinations.

The Repatriation Artificial Limb and Appliance Centre, as well as attending to repatriation needs, provides appliances and services for other government departments and provides artificial limbs free of charge to all disabled members of the community.

Department of Veterans' Affairs: Medical Services, South Australia (a)

| Year | In-patients: Total Treated | | Out-patients: Number of Visits | | Pharmaceutical Benefits |
|---------|----------------------------|-----------------|--------------------------------|---------------------------------|-------------------------|
| | Daw Park | Other Hospitals | Daw Park | Visits to or by Medical Officer | |
| Number | | | | | \$ |
| 1971-72 | 5 269 | 847 | 69 541 | 198 007 | 1 422 955 |
| 1972-73 | 5 251 | 840 | 73 650 | 209 872 | 1 514 849 |
| 1973-74 | 5 839 | 882 | 74 999 | 180 257 | 1 571 946 |
| 1974-75 | 6 107 | 935 | 76 849 | 189 087 | 1 699 990 |
| 1975-76 | 5 794 | 897 | 76 197 | 187 901 | 2 300 005 |

(a) Includes Northern Territory.

Education and Training

Assistance in education and training is provided, through the Department of Veterans' Affairs for children of ex-servicemen whose death, blindness or total and permanent incapacity is accepted as service-related. The Soldiers' Children Education Board guides and supervises the progress of children receiving such assistance. In certain circumstances vocational training is also provided for disabled ex-servicemen and widows of ex-servicemen.

Other Services

Other assistance, through the Department of Veterans' Affairs, includes gift cars for certain disabled ex-servicemen, aids for blinded ex-servicemen and business re-establishment loans. Funeral grants of up to \$100 are paid on the death of certain ex-servicemen and dependants.

ABORIGINAL ADVANCEMENT

By agreement with the South Australian Government on 1 December 1973 the Commonwealth Government assumed responsibility in relation to Aboriginal affairs policy, planning, financial administration, information and co-ordination. These functions are administered in South Australia by officers of the Department of Aboriginal Affairs in Adelaide and Port Augusta. The transfer of responsibilities, however, did not include the Aboriginal Reserves in South Australia which were to be managed and controlled by the Minister of Community Welfare until such time as these communities elected to take over responsibility for running their own affairs. Most Reserves have now assumed such control.

The policy of the Commonwealth Government is that, wherever possible, Aboriginal people should avail themselves of the normal facilities provided for the total community, for example, welfare, health and education, and the State or Commonwealth Government departments responsible for these functions will continue to provide such services. Where special additional programs are needed for Aboriginal people the Commonwealth Government will provide the finance to enable these to be carried out through the appropriate Government or voluntary agency, with the co-ordination of arrangements being handled by the Regional Director of the Department of Aboriginal Affairs. Funds are also made available direct to Aboriginal organisations and communities within the State for programs designed to develop Aboriginal self-sufficiency and achievement.

The following table shows funding by the Department of Aboriginal Affairs on various aspects of Aboriginal advancement.

Department of Aboriginal Affairs: Funding, South Australia, 1975-76

| Particulars | Amount |
|--|-----------|
| Direct Funds: | \$ |
| Housing | 2 413 705 |
| Health | 85 000 |
| Education | 590 877 |
| Welfare | 247 130 |
| Community councils | 1 771 653 |
| Recreation | 91 000 |
| Legal Aid | 358 600 |
| Special works projects | 270 093 |
| Enterprises | 1 444 746 |
| Total | 7 272 804 |
| State Grants: | |
| Department for Community Welfare | 265 000 |
| Education Department | 1 009 000 |
| South Australian Housing Trust | 2 968 000 |
| Department of Further Education | 140 000 |
| Department of Public Health | 1 097 000 |
| Total | 5 479 000 |

Specific needs in education were met with the establishment in 1973, of both the Aboriginal Community College, as part of Torrens College of Advanced Education, and the Aboriginal Task Force at the South Australian Institute of Technology. The College provides remedial work-orientated training and self-development courses for Aborigines who have had difficulty in maintaining work continuity. The Task Force is a community development training program which provides trained staff for Government departments handling aspects of Aboriginal Affairs and for Aboriginal communities themselves.

The Aboriginal Housing Board is a predominantly Aboriginal body which makes policy and gives direction to the South Australian Housing Trust in relation to houses for Aboriginal tenants. The Trust acts as agent for the Board in purchasing, maintenance and rent collection.

STATE WELFARE SERVICES

EXPENDITURE

The following table shows receipts and outlay by the State Government from Consolidated Revenue Account on various aspects of social security and welfare. For further details of the classifications in the table see Part 11.3 State Government Finance.

Receipts and Outlay on Social Security and Welfare, South Australia, 1975-76^(a)

| Purpose | Outlay (b) | | | | | Receipts (b) |
|--|--|---|---|-----------------------------------|---------------------------|-----------------|
| | Purchases of Goods and Services | Current Grants to Private Non-profit Organisa- tions | Less Charges for Goods and Services Supplied | Cash Benefits to Persons | Total (Incl. Other) | Total (c) |
| | \$'000 | | | | | |
| General administration, regulation and research | 7 170 | 22 | 71 | 720 | 8 080 | 59 |
| Care of and assistance to: | | | | | | |
| Aged persons | 1 428 | 40 | 758 | 4 247 | (d) 8 336 | 739 |
| Incapacitated and handicapped persons | — | 657 | — | 22 | 686 | — |
| Unemployed and sick persons | 39 | — | — | 147 | 15 458 | 16 |
| Ex-servicemen | — | 2 | — | 154 | 156 | — |
| Widowed and deserted spouses | — | — | — | 3 377 | 3 377 | 1 527 |
| Families and children (e) | 2 351 | 180 | 36 | 735 | 3 338 | 2 |
| Other social security and welfare services: | | | | | | |
| Services to Aborigines n.e.c. (f) | 886 | — | 111 | — | 825 | 21 |
| Other | 5 | 517 | 19 | 9 | 537 | 603 |
| Total | 11 879 | 1 418 | 995 | 9 411 | 40 793 | 2 967 |

(a) Consolidated Revenue Account only.

(b) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay.

(c) Mainly grants from Commonwealth Government.

(d) Includes \$2 464 000 transferred to local government authorities in respect of pensioner rate remissions.

(e) Excludes reformatory institutions.

(f) Includes only programs designed to meet specific needs of persons of Aboriginal descent.

COMMUNITY WELFARE

The first official activity for the social welfare of children and adults was taken soon after colonisation. The early State immigration authorities cared for new arrivals, and sometimes immigrants were accommodated temporarily in tents on the parklands. A more permanent solution of the problems of the destitute came with the first Destitute Persons Relief Act in 1842. In 1849 a Destitute Board was formally appointed and assumed responsibility for the welfare of both children and adults. In 1886 a State Children's Council was formed to deal with children, while the Destitute Board continued with its other work. The Children's Welfare and Public Relief Board was created by the Maintenance Act, 1926 to do the work of both these earlier authorities. The Chairman of the Board was the permanent head of the Children's Welfare and Public Relief Department.

In 1965 a new portfolio of Minister of Social Welfare was created. Subsequently the Children's Welfare and Public Relief Board was abolished under the Social Welfare Act, 1926-1965, and its powers and functions vested in the Minister of Social Welfare, a body corporate under the Act. The Department then became the Department of Social Welfare and the Social Welfare Advisory Council was set up to advise the Minister on any question regarding social welfare. On 1 July 1970 this Department was amalgamated with the Department of Aboriginal Affairs to form the Department of Social Welfare and Aboriginal Affairs.

The Social Welfare Act, 1926-1971, the Aboriginal Affairs Act, 1962-1968 and the Children's Protection Act, 1936-1969 were replaced by the Community Welfare Act, 1972 which became operative on 1 July 1972. Under this Act the Department became the Department for Community Welfare with the objectives of promoting the general well-being of the community, encouraging the welfare of the family as the basis of community welfare, promoting co-ordination of services and collaboration amongst various agencies and promoting research, education and training in community welfare.

This Act provides for the establishment of community welfare centres at selected locations throughout the State and the full range of the Department's services is available from these centres. District offices have been established at Adelaide, Amata, Berri, Brighton, Campbelltown, Ceduna, Christies Beach, Coober Pedy, Elizabeth, Enfield, Glenelg, Indulkana, Leigh Creek, Maitland, Mansfield Park, Mitcham, Modbury, Mount Gambier, Murray Bridge, Norwood, Nuriootpa, Port Adelaide, Port Augusta, Port Lincoln, Port Pirie, Salisbury, Woodville and Whyalla, and branch offices at Clare, Hindmarsh, Marion, Millicent, Naracoorte, Oodnadatta, Peterborough, Stirling and Thebarton.

The decentralisation program has led to a new sense of involvement in the community and its many welfare needs. There is greater flexibility and opportunity to support local efforts to provide new services for youth, the aged, single parents and others in need.

Community Councils for Social Development involve local people in providing better welfare services for their own communities. Departmental support is given to the Councils through the Community Development Branch.

The Department has developed and extended its ties with the Commonwealth Government and other State Government departments and with local government and voluntary bodies. A Community Welfare Grants Advisory Committee, established in 1972, recommends grants to assist voluntary community welfare organisations with both capital and operating costs.

A special Youth Services Unit gives advice and guidance to organisations seeking to develop youth programs and facilities and administers the Duke of Edinburgh's Award Scheme in South Australia.

A special 24-hour emergency service in the Adelaide metropolitan area helps in personal and family crises. This service works in close co-operation with the Police Department. Crisis Care workers especially trained to help people under stress, provide on-the-spot assistance to individuals and families, and cars fitted with two-way radios and radio telephones ensure prompt attention, where necessary. In its first four months of operation, the service attended an average of thirty cases a week.

A budget advice service operates from fourteen district offices to help people manage their budgets, re-arrange debts and plan their spending.

Job hunters clubs provide a focal point for unemployed young people to meet others who are employed, to share mutual problems, to make contact with people who can give guidance and support and have the opportunity to become involved in personal development and self-help activities. The clubs operate at fourteen locations throughout the State where there are large concentrations of unemployed young people.

Care and Supervision of Children

Under the Juvenile Courts Act, 1971-1975 the emphasis is on the welfare and rehabilitation of young offenders, together with the adequate protection of the community.

Any child up to the age of eighteen may be dealt with as neglected or uncontrolled and those up to the school leaving age may be charged with truancy. Offenders dealt with are between the ages of ten and eighteen years. The Juvenile Court may place the child under the care and control of the Minister of Community Welfare or on a bond. He may be placed under the supervision of a Departmental officer or may be obliged to attend at a youth project centre as a condition of the bond. Either of these court orders results in Departmental help for the child for the period set by the Court.

Some children under the care and control of the Minister are placed in Departmental homes or centres for care, treatment and training. Many are placed with their parents or with foster parents, or in other substitute care under the supervision of a community welfare worker.

The Department for Community Welfare has established a special treatment services branch with the following functions:

- (1) the development of community based treatment projects including the Youth Project Centre at Magill and the Norwood Project Centre;
- (2) the oversight and development of Juvenile Aid Panels;
- (3) assistance for juveniles appearing before the Courts;
- (4) special residential care for;
 - (a) offenders who cannot be satisfactorily maintained by the community,
 - (b) offenders on remand from Court and sometimes needing assessment,
 - (c) children who have been neglected or whose foster placement has broken down.

The Youth Project Centre, Magill, provides intensive non-residential treatment facilities for young offenders. The Norwood Project Centre helps children who are referred with learning and behavioural difficulties. The Northern Suburbs Project Team will operate 'The Parks' area, including Angle Park, Mansfield Park, Ferryden Park, Thebarton and Croydon.

Juvenile Aid Panels provide a non-judicial setting to deal with certain children under sixteen years, alleged to have committed an offence, or be uncontrolled or habitual truants. A community welfare worker from the Department for Community Welfare and either a senior police officer (in most cases) or a justice of the peace constitute a panel. Panels may warn or counsel children or parents. They may request the child or his parents to co-operate in a rehabilitative program for the child. Panels have power to refer a child to a Juvenile Court and the child or his parents may ask for such a referral.

Juvenile Court Services

Officers from the Department for Community Welfare appear in all major Juvenile Courts to present reports and help Courts to reach a decision in the best interests of the child.

Juvenile Courts officers also represent the Department in the prosecution of neglect and uncontrolled charges when necessary. They protect the interests of children under the guardianship of the Minister when these children appear in court.

Residential Care

At 30 June 1976 the Department was operating thirty-seven residential care homes and centres. The large number of family homes, cottage homes, hostels and training centres allows a wide range of choice in selecting the environment most appropriate to the needs of each individual.

Details of the number of children committed to the care and control of the Minister of Community Welfare are given in the following table. Of the 454 children committed during 1975-76, 173 were girls, of whom 26 were neglected or uncontrolled. Of 2 013 children under care and control at 30 June 1976, there were 1 284 boys and 729 girls.

Children under Care and Control, South Australia^(a)

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|--------------|--------------|--------------|--------------|--------------|
| Number of children newly committed during the year: | | | | | |
| Offenders | 484 | 235 | 181 | 125 | 134 |
| Neglected | 144 | 153 | 146 | 75 | 41 |
| Uncontrolled | 32 | 24 | 26 | 15 | 9 |
| Truancy | 12 | 7 | 16 | 19 | 13 |
| Temporary care and control.. | — | 221 | 220 | 176 | 209 |
| In Default of Fine | — | 17 | 10 | 32 | 28 |
| Transfer of control | — | 7 | 8 | 21 | 20 |
| Total | 672 | 664 | 607 | 463 | 454 |
| Number of State children at 30 June: | | | | | |
| Children in departmental institutions | 455 | 443 | 377 | 320 | 247 |
| Children not in institutions .. | 2 656 | 2 425 | 2 168 | 1 914 | 1 766 |
| Total | 3 111 | 2 868 | 2 545 | 2 234 | 2 013 |

(a) Excludes children on remand, not committed.

The homes and centres under the control of the Department include McNally Training Centre for older youths, who have been committed for residential training or assessment by a Juvenile Court following an offence, and Brookway Park, which provides residential training or assessment for boys between ten and fifteen years, most of whom have been committed by a Juvenile Court following an offence. Vaughan House provides remand and assessment facilities for girls, generally from twelve to eighteen years.

Lochiel Park is a training centre for boys, generally between the ages of fourteen and eighteen years, who are mentally retarded and under care and control of the Minister. In addition, cottage and family homes provide a family-like atmosphere for small groups of boys and girls.

In addition, there were 761 children placed on bonds requiring supervision by Departmental officers during 1975-76 and the total number of such children at 30 June 1976 was 916 (779 boys and 137 girls).

The importance of keeping a child in his own home whenever possible cannot be over-emphasised and children are placed out of Departmental homes and centres as soon as possible. Review boards consider the social background of each child under care and control and make recommendations regarding action to be taken for the child's benefit and welfare.

When a child is returned to his own home from an alternative placement, support is continued to the whole family through counselling, motivation of self-help programs, and through the full utilisation of appropriate resources throughout the Department and the community. The same services of a community welfare worker are available to all children under care and control or on bonds with supervision as well as to other families in the community seeking help.

Other responsibilities of the Department's welfare workers include the investigation of allegations that children are neglected, ill-treated or uncontrolled, and the counselling of youths and children voluntarily referred to Departmental officers. Departmental welfare workers are also appointed as attendance officers under the Education Act to assist in the prevention of school truancy. Medical and other specialists including psychologists are employed within the Department.

Licensing of Foster Parents and Children's Homes

Under the Community Welfare Act, 1972-1976 every foster parent caring for a child under the age of fifteen years must be approved by the Director-General of Community Welfare, who is responsible for each child's welfare. Departmental officers visit such homes regularly.

Consultant and licensing services are provided in the areas of Child Care, Family Day Care and Non-Statutory Children's Homes. Family Day Care Co-ordinators are working in seven districts. At Mansfield Park and Ferryden Park there are joint Department for Community Welfare/Education Department projects combining Family Day Care with pre-school and child-parent programs, while at Campbelltown, Brompton, Nangwarry and Thebarton both Departments in co-operation with local groups, operate Child Care, Resource Centre and Pre-school facilities.

Adoptions

South Australia has had an Adoption of Children Act since 1925, the current legislation being the Adoption of Children Act, 1966-1976. Under this Act the interests of the children are considered paramount. The right to place children for adoption is restricted to the Director-General of Community Welfare or to private adoption agencies which the Director-General has approved. The adoptive parents, who must be approved by the Director-General, become the legal parents after the adoption order is made by an Adoption Court, (usually about six months after placement).

Adoptions made in other Australian States are recognised in South Australia; similarly South Australian adoptions are recognised in the other States. A more detailed account of the South Australian legislation was included on pages 221-4 of the *South Australian Year Book* 1968.

There are two types of adoptions, namely, adoptions by placement and other adoptions. Adoptions by placement include those adoptions where the child is normally placed with the adoptive parents either at, or within twelve months of birth. Other adoptions mainly comprise those cases where children of a former marriage are adopted into the present marriage. The following statistics relate to those adoptions for which an order was made in the stated period, and not to the number of placements or other adoptions occurring in that period.

Of the total of 549 adoptions (267 males and 282 females) in 1975-76, 307 were placed and 242 were other adoptions. The average waiting time for a child to be placed varies from year to year, depending on the number of applicants and the number of children surrendered.

Number of Adoptions, South Australia

| Age of Child (a) | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|------------|------------|------------|------------|------------|
| Under one year | 510 | 426 | 352 | 271 | 227 |
| One year and under two | 44 | 46 | 37 | 47 | 73 |
| Two years and under six | 89 | 75 | 68 | 112 | 96 |
| Six years and under thirteen | 88 | 71 | 59 | 92 | 100 |
| Thirteen years and under sixteen | 19 | 17 | 10 | 11 | 15 |
| Sixteen years and over | 26 | 14 | 32 | 18 | 38 |
| Total | 776 | 649 | 558 | 551 | 549 |

(a) At date of adoption order.

For adoption orders relating to children placed in 1975-76, the average age of the natural mother at the date of birth of the child was 19.5 years, while for the adoptive parents the respective average ages at the date of adoption order were, mothers 31.9 and fathers 34.4.

Age of Adoptive Parents at Date of Adoption Order, Children Placed South Australia, 1975-76

| Age of Mother (Children Placed) | Age of Father | | | | | | | Total |
|---------------------------------|---------------|----------|-----------|------------|-----------|-----------|-----------|----------------|
| | Under 21 | 21-24 | 25-28 | 29-32 | 33-36 | 37-40 | Over 40 | |
| Under 21 | — | — | — | — | — | — | — | — |
| 21-24 | — | 2 | 8 | 2 | 3 | — | — | 15 |
| 25-28 | — | 1 | 38 | 45 | 8 | 2 | 1 | 95 |
| 29-32 | — | — | 10 | 53 | 38 | 11 | 5 | 117 |
| 33-36 | — | — | — | 4 | 20 | 16 | 6 | 46 |
| 37-40 | — | — | — | 1 | 2 | 7 | 8 | 18 |
| Over 40 | — | — | — | — | 3 | 3 | 5 | 11 |
| Total | — | 3 | 56 | 105 | 74 | 39 | 25 | (a) 305 |

(a) Includes three orders on which ages of parents were not stated.

Legal Services

Prosecutions for neglected, ill-treated and uncontrolled children are carried out by officers of the Department for Community Welfare who may also appear in Court where State children are involved. The Department assists by providing reports on the social background of children whose cases are considered by the Courts.

The Department provides a free legal service to deserted wives and other persons with maintenance, matrimonial and domestic problems. Officers interview and advise wives and husbands and negotiate with other parties and solicitors for settlements.

When necessary the officers institute legal proceedings and appear in Court on behalf of those seeking assistance to obtain Orders for separation, custody of children, access and maintenance. The Department does not take action for divorce. Some 2 300 maintenance payments are collected and paid weekly to deserted wives by the Department. Assistance is given to unmarried mothers in affiliation cases.

Financial Assistance

The Director-General for Community Welfare may, subject to any directions of the Minister, provide assistance to families or individuals in need. The assistance may be provided in the form of money or commodities or the provision of other services which will promote the welfare of the family or individual.

During 1975-76 financial assistance was issued to 12 278 applicants, representing 30 658 persons. The gross cost of assistance issued was \$5 424 012.

The Department provides residential care in a home at Magill for aged people in special need, most of whom are pensioners. The daily average occupancy of the Magill home was 145 during 1975-76.

Rates Remission Scheme

A remission of rates and taxes scheme for pensioners and others able to demonstrate exceptional circumstances of hardship is operated by the State Government. The scheme provides for a remission of up to 60 per cent of the cost of water and sewerage rates, land tax and council rates charged on dwellings, including flats and units owned and occupied by eligible applicants. Pensioners receive a direct remission from the rating authority on application. Applications from non-pensioners are processed by the Department and in 1975-76, 1 010 claims totalling \$26 955 were approved. The total cost of remissions by all authorities was met by the Department and totalled \$5 071 769 for 1975-76 in the following categories:

| | \$ |
|----------------------------|-----------|
| Land tax | 292 438 |
| Water, sewerage | 2 315 795 |
| Local government | 2 463 536 |

Aboriginal Reserves

When a definable Aboriginal community with a sound administrative structure wants to become responsible for the control and management of its community affairs, a request is made to the South Australian Aboriginal Lands Trust.

The Trust accepts Fee Simple title of the Aboriginal Reserve and leases the land back to the community for a period of ninety-nine years with right of renewal.

In 1975-76 title to the Koonibba and Indulkana reserves was granted to the Trust and the lands leased back to those communities. A request by the Davenport Aboriginal Council Inc. was being processed by the Department of Lands.

The Aboriginal Community Councils in the North West Aboriginal Reserve have not yet requested transfer because of difficulty in defining the complicated land ownership structure of such a large area. At present there are three functional communities on the North West Aboriginal Reserve—Amata, Pipaljatjara and Fregon. There are also four non-functional communities—Walinynja, Aparajora, Napari and Indornya.

Each functional community is incorporated under the Incorporation of Associations Act and has an elected Council. Advisory and/or managerial staff are appointed according to the degree of control and management responsibility accepted by the community from the Minister of Community Welfare.

Complete community responsibility was transferred to Koonibba Aboriginal Community Council Inc. in January 1976 and to Davenport Community Council Inc. in May 1976.

Indulkana Community Council Inc. accepted responsibility for village services in December 1974 and Family Centre complex in November 1975, and the community store in May 1976. However, the Department still supplies electrical and water supply services at Indulkana.

The unmanned Aboriginal Reserve at Marree has two permanent residents. Other houses are used only occasionally for itinerant people.

PRIVATE WELFARE SERVICES

There are numerous charitable and benevolent organisations working within South Australia. A large proportion of these derive revenue from regular donations, subscriptions and income from bequests; nearly all derive revenue from special functions. A number also receive Commonwealth, State or local government grants. The Collections for Charitable Purposes Act, 1939-1947, requires the registration of charitable organisations before they may actively solicit funds.

Organisations which have a wide range of activities include the Australian Red Cross Society, Marriage Guidance Council, Service to Youth Council, the welfare bureaux and missions of the various churches, and organisations catering for ex-servicemen and their dependants. Most of these agencies maintain full-time staff and generally employ professional social workers. Other organisations cater for more specific needs, covering a wide range of physical and sociological disabilities. This includes the care of physically and mentally handicapped persons such as crippled children, the blind, deaf-mutes and alcoholics; also of specific groups such as aged persons, Aborigines and migrants. Many of these organisations depend largely or entirely on voluntary aid.

For details of the numerous bodies concerned with social welfare, reference should be made to the *Directory of Social Resources* published jointly by the South Australian Council of Social Services and the Department of Public Health. For those in need, the Citizens Advice Bureau advises on how to benefit from and how to use wisely the many services provided by the Commonwealth and State Governments and the various voluntary organisations.

REGISTERED MEDICAL AND HOSPITAL ORGANISATIONS

Since 1953 Australia has had a system of voluntary health insurance supervised and financially supported by the Commonwealth Government through the payment of Commonwealth benefits. Before the introduction of Medibank under the *Health Insurance Act 1973* medical benefits and full hospital benefits were payable to members of a registered benefits organisation. In most cases both medical and hospital benefits were provided by the one organisation. By paying regular contributions members became entitled to refunds covering the major part of medical and hospital expenses. The benefit was combined with the fund benefit in a single payment made by the registered organisation.

From 1 July 1975 all persons in South Australia became entitled to medical benefits at the same level as that previously paid by private benefit organisations and to free accommodation and treatment at recognised hospitals. Private benefit organisations, however, offer insurance to cover the 'gap' between the medical benefit paid by Standard Medibank and the schedule fee for medical treatment. 'Gap' insurance was not available under the previous insurance system. This insurance is usually offered as a package comprising also benefits cover for a range of ancillary health services. Hospital benefits organisations continue to offer insurance to those persons who wish to be treated in a private hospital or as private in-patients in a recognised hospital.

These organisations are operated on a non-profit basis and include a number of Friendly Societies.

Registered Hospital Organisations, South Australia^(a)

| Particulars | Unit | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|--------|---------|------------|---------|---------|---------|
| Registered organisations (b) | No. | 9 | 9 | 9 | 9 | 8 |
| Membership (b) (c) | '000 | 433 | 444 | 453 | 448 | n.a. |
| Estimated persons covered (b) (c) | '000 | 1 076 | 1 112 | 1 135 | 1 126 | n.a. |
| Fund benefits paid (d) | \$'000 | 21 284 | (e) 25 027 | 29 192 | 44 080 | n.a. |

(a) State of registration of organisations. No organisations are registered in the Northern Territory and insured persons in the Northern Territory are covered by organisations registered in the States. (b) At end of period. (c) As advised by the organisations. (d) Includes Subsidised Health Benefits Plan fund benefit reimbursements. Also includes Ancillary fund benefit. (e) Includes nursing home fund benefit from 1 January 1973.

The contributions (premiums) payable to hospital benefits organisations depend on the scale of fund benefits required. Contribution rates to medical and hospital organisations may vary slightly between funds, and single and family rates are available.

Details of registered medical organisations are given in the following table.

Registered Medical Organisations, South Australia (a)

| Particulars | Unit | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------------|---------------|---------------|---------------|---------------|
| Registered organisations (b) | No. | 7 | 7 | 7 | 4 |
| Membership (b) (c) | '000 | 432 | 443 | 442 | n.a. |
| Estimated persons covered (b) (c) | '000 | 1 091 | 1 118 | 1 091 | n.a. |
| Cost of medical services (d) : | | | | | |
| Met by fund benefit (e) | \$'000 | 10 294 | 11 628 | 17 889 | 5 602 |
| Met by Commonwealth Government benefit (f) | \$'000 | 15 607 | 15 845 | 17 652 | 5 797 |
| Met by insured member | \$'000 | 5 141 | 5 709 | 6 435 | 1 664 |
| Total | \$'000 | 31 042 | 33 182 | 41 976 | 13 063 |
| Proportion paid by (g): | | | | | |
| Fund benefit | Per cent | 33.2 | 35.0 | 42.6 | 42.9 |
| Commonwealth Government benefit | Per cent | 50.3 | 47.8 | 42.1 | 44.4 |
| Insured member | Per cent | 16.6 | 17.2 | 15.3 | 12.7 |
| Fund benefits for ancillary services (h) | \$'000 | 327 | 349 | 633 | 333 |
| Professional services per member: | | | | | |
| General practitioner | No. | 6.97 | 6.74 | 7.05 | n.a. |
| Other | No. | 4.61 | 4.54 | 5.28 | n.a. |
| Total | No. | 11.59 | 11.28 | 12.32 | n.a. |

(a) State of registration of organisations. No organisations are registered in the Northern Territory and insured persons in the Northern Territory are covered by organisations registered in the States. (b) At end of period. (c) As advised by the organisations. (d) Relates to services rendered before introduction of Medibank on 1 July 1975. (e) Excludes ancillary fund benefit but includes Subsidised Health Benefits Plan fund benefit reimbursements (\$202 000 in 1975-76). (f) Excludes Special Account Advance and Deficit payments. (g) Based on proportions paid in relation to matched services, i.e. those which attract both Commonwealth and Fund benefits. (h) Services for which Commonwealth benefits are not provided.

From 1 October 1976 all persons who did not elect private medical and hospital insurance from a registered health benefits organisation, including Medibank (Private), will automatically be covered under Standard Medibank. Registered organisations are required to provide *inter alia* insurance for the standard (basic) benefit tables. Commonwealth Government control over the affairs of registered organisations was increased with legislation that came into effect from 1 October 1976.

FRIENDLY SOCIETIES

Friendly Societies are mutual organisations paying medical, hospital and other benefits to members and dependants in time of need. These societies are required to register under the Friendly Societies Act, 1919-1975. The Act is administered by the Chief Secretary through the Public Actuary who approves the table of contributions, the level of benefits and generally sees that the societies' rules and practices are in accordance with the law. A number of Friendly Societies are registered to pay Commonwealth Government medical and hospital benefits (see previous section), while others re-insure such benefits through a society created for this purpose.

Other benefits offered by some of the societies include sickness, funeral, dental, optical, pharmaceutical and physiotherapy benefits. Small loans and endowment assurance is also available. The Friendly Societies Act requires that separate funds be maintained for each of these benefits and members may contribute for all or for only a selection of benefits. However, a person is considered to be a full benefit member only if he contributes for sick pay and funeral benefits regardless of contributions for other benefits.

Friendly Societies, South Australia

| Particulars | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|--|---------|---------|---------|---------|---------|
| Number of registered societies | | | | | |
| (a) | 14 | 13 | 13 | 12 | 12 |
| Number of members (a) (b) .. | 50 488 | 50 077 | 50 664 | 50 779 | 49 888 |
| Revenue (c): | | | \$'000 | | |
| Contributions and levies .. | 9 993 | 11 744 | 12 198 | 15 023 | 21 626 |
| Interests, dividends and rent | 1 110 | 1 243 | 1 311 | 1 496 | 2 000 |
| Other | 1 237 | 1 961 | 2 726 | 3 120 | 5 179 |
| Total revenue | 12 341 | 14 947 | 16 235 | 19 638 | 28 805 |
| Expenditure (c): | | | | | |
| Sick pay | 181 | 173 | 173 | 158 | 156 |
| Medical attendance and medicine | 3 386 | 3 878 | 4 401 | 4 981 | 7 435 |
| Sums payable at death .. | 151 | 145 | 142 | 143 | 150 |
| Hospital benefits | 4 982 | 7 198 | 8 432 | 10 045 | 14 567 |
| Administration | 1 483 | 1 641 | 1 793 | 2 149 | 2 883 |
| Other | 550 | 690 | 613 | 571 | 644 |
| Total expenditure | 10 733 | 13 726 | 15 554 | 18 047 | 25 835 |
| Total funds | 20 962 | 22 184 | 22 865 | 24 456 | 27 426 |

(a) At 30 June. (b) Full benefit members; does not include those who contribute for medical and hospital benefits only. (c) Receipts and payments of Commonwealth Government medical and hospital benefit subsidies excluded.

The level of benefits paid varies between societies, with sickness benefits generally on a declining scale as the period of illness lengthens. The Friendly Societies Act limits to \$4 000 any payment for endowment or funeral benefits and to \$21 any weekly payment to members for sickness or superannuation.

The Friendly Society Medical Association operates thirty-one pharmacies in the metropolitan area and one at Port Pirie where medicines are dispensed for Friendly Society members at concession prices. The Mount Gambier United Friendly Societies' Dispensary Incorporated also operates a shop at Mount Gambier.

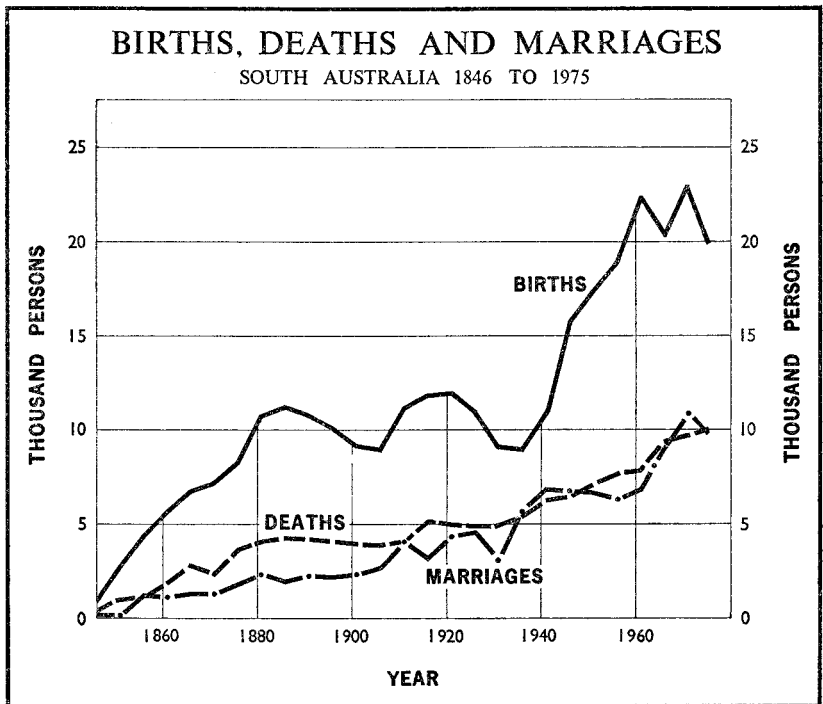
The Friendly Societies Act also prescribes the nature of assets which societies may hold. Their most important investment is in property mortgages and in particular in housing loans to members. They may also invest in government securities.

6.7 MARRIAGE

Registration of marriage has been compulsory in South Australia since 1842 when Acts 'for regulating Marriages in the Province of South Australia' and 'for registering Births, Deaths and Marriages in the Province of South Australia' were passed. The present legislation relating to marriages is the Commonwealth *Marriage Act* 1961 which came into full operation on 1 September 1963 superseding, in South Australia, the *Marriage Act, 1936-1957*.

The Principal Registrar of Births, Deaths and Marriages in South Australia carries out the statutory duties under the Act and has supervision over ministers of religion (as regards their duties under the Marriage Act), the District Registrars appointed to the twenty-two registration districts, and other persons authorised to perform marriages.

After a marriage the celebrant is required to forward the official certificate of marriage to the Principal Registrar who maintains at his office a register of all marriages celebrated in South Australia. In addition, a copy of the marriage certificate is forwarded by the office of the Principal Registrar to the District Registrar who maintains a register of the marriages celebrated in his district.



The total marriages and marriage rates for selected years from 1846 are shown in the Statistical Summary, Appendix A. Particulars relating to first marriages, remarriages and crude marriage rates for the last five years are shown in the following table. The crude marriage rate rose throughout the sixties from 6.99 in 1960 to 9.38 in 1970, gradually declined to a level of 8.84 in 1974 and fell substantially to 7.95 in 1975. The crude marriage rate does not take into account changes over time in the age distribution of the population. Influences underlying the increase during the sixties include the upsurge of births immediately following the 1939-45 War, together with the effects of post-war immigration.

Previous Marital Status of Persons Marrying, South Australia

| Year | Bridegrooms | | | Brides | | | Total Marriages | Rate (a) |
|------|-------------|---------|----------|----------|-------|----------|-----------------|----------|
| | Bachelor | Widower | Divorced | Spinster | Widow | Divorced | | |
| 1971 | 9 865 | 310 | 658 | 9 822 | 365 | 646 | 10 833 | 9.21 |
| 1972 | 9 779 | 323 | 727 | 9 798 | 359 | 672 | 10 829 | 9.10 |
| 1973 | 9 649 | 309 | 848 | 9 716 | 349 | 741 | 10 806 | 8.99 |
| 1974 | 9 538 | 353 | 878 | 9 560 | 388 | 821 | 10 769 | 8.84 |
| 1975 | 8 504 | 297 | 1 042 | 8 571 | 336 | 936 | 9 843 | 7.95 |

(a) Per 1 000 of mean population.

Since 1970 the absolute number of both brides and bridegrooms marrying for the first time has declined, the total for 1975 representing a marked decrease. However, over the period 1970 to 1975 the number of divorced persons remarrying has risen substantially, bridegrooms by 65 per cent and brides by 66 per cent.

Age at Marriage and Previous Marital Status, South Australia, 1975

| Age | Previous Marital Status | | | | | | | |
|-------------------|-------------------------|---------|----------|-------|----------|-------|----------|-------|
| | Bridegrooms | | | | Brides | | | |
| | Bachelor | Widower | Divorced | Total | Spinster | Widow | Divorced | Total |
| Under 21 years | 1 768 | — | — | 1 768 | 4 709 | 2 | 2 | 4 713 |
| 21 - 24 years | 4 308 | — | 29 | 4 337 | 2 823 | 9 | 107 | 2 939 |
| 25 - 29 years | 1 754 | 4 | 249 | 2 007 | 757 | 17 | 251 | 1 025 |
| 30 - 34 years | 370 | 13 | 233 | 616 | 169 | 20 | 207 | 396 |
| 35 - 39 years | 146 | 18 | 161 | 325 | 47 | 24 | 142 | 213 |
| 40 - 44 years | 73 | 16 | 112 | 201 | 30 | 30 | 69 | 129 |
| 45 years and over | 85 | 246 | 258 | 589 | 36 | 234 | 158 | 428 |
| All ages | 8 504 | 297 | 1 042 | 9 843 | 8 571 | 336 | 936 | 9 843 |

During 1975 the median age (that age at which one half of the total number of persons are below the age and the other half exceed it) of persons marrying for the first time was 22.9 years for bachelors and 20.7 years for spinsters, a difference of 2.2 years. The following table shows median ages for the last five years of all persons marrying, classified by marital status at the time of marriage.

Median Age at Marriage and Previous Marital Status, South Australia

| Year | Median Age of Bridegrooms (Years) | | | | Median Age of Brides (Years) | | | |
|------|-----------------------------------|---------|----------|-------|------------------------------|-------|----------|-------|
| | Bachelor | Widower | Divorced | Total | Spinster | Widow | Divorced | Total |
| 1971 | 23·0 | 58·8 | 38·0 | 23·3 | 20·8 | 51·2 | 34·3 | 21·1 |
| 1972 | 23·0 | 58·5 | 38·0 | 23·4 | 20·8 | 52·4 | 33·3 | 21·1 |
| 1973 | 22·9 | 58·3 | 36·4 | 23·4 | 20·7 | 51·6 | 33·4 | 21·1 |
| 1974 | 22·9 | 59·4 | 35·4 | 23·4 | 20·7 | 53·1 | 33·6 | 21·1 |
| 1975 | 22·9 | 59·3 | 35·2 | 23·6 | 20·7 | 52·8 | 32·0 | 21·2 |

The following table highlights the tendency for brides to marry bridegrooms older than themselves. Although the age difference has narrowed over the past decade, this phenomenon, together with the greater life expectancy of females compared to males as shown in the table on page 183, tends to perpetuate the predominance of aged widows over widowers within community and welfare institutions.

Relative Age Differences of Parties to Marriage, South Australia

| Elder Partner of Marriage | Number of Marriages | | | Proportion of Total Marriages | | |
|---------------------------|---------------------|---------------|--------------|-------------------------------|--------------|--------------|
| | 1973 | 1974 | 1975 | 1973 | 1974 | 1975 |
| | | | | Per cent | | |
| Bridegroom: | | | | | | |
| 8 years or more | 945 | 946 | 952 | 8·7 | 8·8 | 9·7 |
| 7 years | 348 | 348 | 337 | 3·2 | 3·2 | 3·4 |
| 6 years | 496 | 489 | 489 | 4·6 | 4·5 | 5·0 |
| 5 years | 678 | 667 | 615 | 6·3 | 6·2 | 6·3 |
| 4 years | 1 005 | 968 | 889 | 9·3 | 9·0 | 9·0 |
| 3 years | 1 403 | 1 356 | 1 233 | 13·0 | 12·6 | 12·5 |
| 2 years | 1 702 | 1 661 | 1 508 | 15·8 | 15·4 | 15·3 |
| 1 year | 1 593 | 1 606 | 1 467 | 14·7 | 14·9 | 14·9 |
| Bride: | | | | | | |
| 1 year | 600 | 624 | 524 | 5·6 | 5·8 | 5·3 |
| 2 years | 329 | 329 | 279 | 3·0 | 3·1 | 2·8 |
| 3 years | 179 | 202 | 173 | 1·7 | 1·9 | 1·8 |
| 4 years | 118 | 104 | 120 | 1·1 | 1·0 | 1·2 |
| 5 years or more | 216 | 259 | 236 | 2·0 | 2·4 | 2·4 |
| No age difference | 1 194 | 1 210 | 1 021 | 11·0 | 11·2 | 10·4 |
| Total | 10 806 | 10 769 | 9 843 | 100·0 | 100·0 | 100·0 |

MARRIAGE RITES

The number of marriages performed by civil officers in South Australia during the decade from 1960 to 1969 accounted for 10·9 per cent of all marriages but reached a record level of 24·2 per cent in 1975. The increase in civil ceremonies

during the 1970s is evident from the following table, and can partly be accounted for by the improved facilities now provided at the office of the Principal Registrar of Births, Deaths and Marriages.

Marriages: Marriage Rites, South Australia

| Rites | Number of Authorised Celebrants January 1975 | Number of Marriages | | | Proportion of Total Marriages | | |
|-----------------------------------|---|---------------------|---------------|--------------|-------------------------------|--------------|--------------|
| | | 1973 | 1974 | 1975 | 1973 | 1974 | 1975 |
| | | | | | | | Per cent |
| Denomination: | | | | | | | |
| Baptist | 74 | 236 | 260 | 234 | 2.2 | 2.4 | 2.4 |
| Catholic | 269 | 2 089 | 2 138 | 1 833 | 19.3 | 19.9 | 18.6 |
| Church of England | 205 | 1 867 | 1 796 | 1 587 | 17.3 | 16.7 | 16.1 |
| Churches of Christ | 71 | 316 | 289 | 263 | 2.9 | 2.7 | 2.7 |
| Congregational | 49 | 290 | 262 | 238 | 2.7 | 2.4 | 2.4 |
| Lutheran | 141 | 596 | 607 | 570 | 5.5 | 5.6 | 5.8 |
| Methodist | 213 | 2 347 | 2 240 | 1 934 | 21.7 | 20.8 | 19.6 |
| Orthodox | 20 | 169 | 164 | 148 | 1.6 | 1.5 | 1.5 |
| Presbyterian | 32 | 309 | 295 | 283 | 2.8 | 2.7 | 2.9 |
| Salvation Army | 38 | 73 | 68 | 55 | 0.7 | 0.6 | 0.6 |
| Seventh Day Adventist | 22 | 20 | 30 | 19 | 0.2 | 0.3 | 0.2 |
| Other denominations | 171 | 227 | 255 | 295 | 2.1 | 2.4 | 3.0 |
| Total | 1 305 | 8 539 | 8 404 | 7 459 | 79.0 | 78.0 | 75.8 |
| Civil Ceremonies | 37 | 2 267 | 2 365 | 2 384 | 21.0 | 22.0 | 24.2 |
| Grand Total | 1 342 | 10 806 | 10 769 | 9 843 | 100.0 | 100.0 | 100.0 |

MARRIAGE OF MINORS

The *Marriage Act* 1961 stipulates the marriageable age to be eighteen years or over for a male and sixteen years or over for a female. Under exceptional circumstances a judge or magistrate can, upon application by a party who has not attained marriageable age but who is at least sixteen in the case of a male or fourteen in the case of a female, authorise him or her to marry a particular person who is of marriageable age.

Before 1 July 1973 prior consent had to be obtained from either both parents, one parent, a guardian or guardians, or other prescribed authority, according to the circumstances, where a party to a marriage was under twenty-one years. From 1 July 1973 the age of majority for purposes of the *Marriage Act* was reduced to eighteen years.

The proportion of persons marrying under 21 years of age has changed significantly since details were first recorded in 1903. In that year 2.7 per cent of males and 19.2 per cent of females marrying were under twenty-one years of age. Over the years the proportion of males has ranged from a low of 2.6 per cent in 1916 to a high of 18.3 per cent in 1974. The corresponding proportions for females were 14.7 and 49.3 per cent recorded in 1919 and 1974 respectively. These proportions fell in 1975 to 18.0 per cent for males and 47.9 per cent for females.

Figures relating to the marriages of persons under twenty-one years of age for the five years to 1975 are shown in the following table.

Marriages of Persons Under 21 Years of Age, South Australia

| Year | Age in Years | | | | | | | Total Under 21 | Percentage of Total Marriages |
|----------------|--------------|----|-----|-----|-------|-------|-------|----------------|-------------------------------|
| | Under 15 | 15 | 16 | 17 | 18 | 19 | 20 | | |
| BRIDEGROOMS | | | | | | | | | |
| 1971 | — | — | 1 | 25 | 247 | 576 | 938 | 1 787 | 16.5 |
| 1972 | — | — | 8 | 26 | 241 | 524 | 1 002 | 1 801 | 16.6 |
| 1973 | — | — | 4 | 24 | 257 | 554 | 1 091 | 1 930 | 17.9 |
| 1974 | — | — | 7 | 27 | 282 | 567 | 1 085 | 1 968 | 18.3 |
| 1975 | — | — | 2 | 23 | 217 | 553 | 973 | 1 768 | 18.0 |
| BRIDES | | | | | | | | | |
| 1971 | 3 | 20 | 212 | 491 | 1 133 | 1 601 | 1 745 | 5 205 | 48.0 |
| 1972 | 1 | 15 | 221 | 514 | 1 077 | 1 578 | 1 780 | 5 186 | 47.9 |
| 1973 | 3 | 8 | 215 | 487 | 1 220 | 1 682 | 1 690 | 5 305 | 49.1 |
| 1974 | 1 | 12 | 195 | 463 | 1 249 | 1 635 | 1 757 | 5 312 | 49.3 |
| 1975 | 1 | 8 | 154 | 448 | 1 113 | 1 530 | 1 459 | 4 713 | 47.9 |

6.8 DIVORCE

The Supreme Court of South Australia had exclusive jurisdiction in divorce under the Matrimonial Causes Act, 1858 from 1 January 1859. Uniform legislation throughout Australia on dissolution of marriage and other matrimonial causes was provided for under the *Matrimonial Causes Act 1959* from 1 February 1961. Jurisdiction to hear and determine causes under the Act was vested in the Supreme Courts of the States and Territories. The South Australian Registry of the Family Court of Australia commenced operations under the *Family Law Act 1975* on 5 January 1976. The Supreme Court had concurrent jurisdiction to deal with outstanding applications presented before that date, until 31 May 1976.

The jurisdiction of the Supreme Court provided for petitions for nullity of marriage, judicial separation, restitution of conjugal rights and jactitation of marriage in addition to the most common petition for dissolution of marriage (commonly known as divorce).

Fluctuations from year to year in the number of decrees granted and petitions filed may be independent of each other because of variations in the number of actions outstanding at the end of each year.

Family Court (SA Registry)

Matrimonial causes within the jurisdiction of the Court include dissolution of marriage, maintenance, custody, property settlement, enforcement and injunction proceedings. The hearing of applications for dissolution commenced on 1 March 1976. The hearing of other matrimonial causes commenced earlier.

Under the provisions of the *Family Law Act* the sole ground for dissolution of marriage is irretrievable breakdown, established by twelve months separation. Prospective applicants are encouraged to seek help from marriage counsellors attached to the Family Court or from voluntary marriage guidance organisations.

Maintenance entitlement is determined largely by the needs of the applicant and the capacity of the respondent to pay. Any transfer or settlement of property is also taken into consideration.

In custody proceedings the welfare of the child is regarded as paramount. The Court can order that a child be separately represented in matters affecting his custody or maintenance. Both parties are considered liable for his maintenance, according to their respective financial resources. If the proceedings are contested, both parties may be referred to a welfare officer, and the Court may then require a report on the child's circumstances.

In settling disputes over matrimonial property the Court takes into account any maintenance order and the effective contribution of each party to that property.

Petitions Filed

Particulars of petitions filed during the five years to 1975 are shown in the following table. In each of these years petitions for dissolution lodged by wives outnumbered those lodged by husbands, a pattern which has prevailed for over fifty years.

**Dissolution of Marriage and other Matrimonial Causes
Petitions Filed, South Australia**

| Year | Dissolution of Marriage | | | Nullity of Marriage | Judicial Separation | Total Petitions (a) |
|------------|-------------------------|----------|-------|---------------------|---------------------|---------------------|
| | By Husbands | By Wives | Total | | | |
| 1971 . . . | 622 | 1 026 | 1 648 | 5 | 9 | 1 668 |
| 1972 . . . | 727 | 1 250 | 1 977 | 6 | 6 | 1 997 |
| 1973 . . . | 809 | 1 326 | 2 135 | 7 | 12 | 2 159 |
| 1974 . . . | 855 | 1 405 | 2 260 | 3 | 6 | 2 272 |
| 1975 . . . | 697 | 1 226 | 1 923 | 5 | 2 | 1 930 |

(a) Includes petitions filed for dissolution or nullity; 1971, 2; 1972, 4; 1973, 5; 1974, 2 and petitions lodged for dissolution or judicial separation: 1971, 4; 1972, 4; 1974, 1.

In 1975 there were 1 923 petitions filed for dissolution of marriage compared with 2 260 in 1974 and 2 135 in 1973. This decrease possibly was attributable to the pending introduction (on 5 January 1976) of the *Family Law Act 1975* which now provides a sole ground for dissolution of marriage—irretrievable breakdown, established by twelve months separation.

In 1976, 6 567 applications for divorce were received by the Family Court and 4 446 decrees absolute were made: under the new provisions the period before a decree *nisi* can become absolute has been reduced to one month.

Decrees Granted

The following table shows the number of decrees absolute granted for dissolution and nullity of marriage and decrees granted for judicial separation. A further table shows details of the grounds on which final decrees have been granted for the years 1971 to 1975.

**Dissolution of Marriage and other Matrimonial Causes
Decreases Absolute Granted, South Australia**

| Period | Dissolution of Marriage | | | Nullity of Marriage | Judicial Separation |
|------------------------|-------------------------|----------|---------|---------------------|---------------------|
| | To Husbands | To Wives | Total | | |
| Annual Average: | | | | | |
| 1951-55 | 262.8 | 350.0 | 612.8 | 4.6 | 1.2 |
| 1956-60 | 244.2 | 294.2 | 538.4 | 7.6 | 1.6 |
| 1961-65 | 334.6 | 446.8 | 781.4 | 4.6 | 0.6 |
| 1966-70 | 363.8 | 599.2 | 963.0 | 5.8 | 1.8 |
| 1971-75 | 568.0 | 922.8 | 1 490.8 | 5.2 | 1.8 |
| Year: | | | | | |
| 1971 | 473 | 791 | 1 264 | 8 | 3 |
| 1972 | 479 | 756 | 1 235 | 4 | 2 |
| 1973 | 585 | 997 | 1 582 | 6 | — |
| 1974 | 605 | 956 | 1 561 | 4 | 1 |
| 1975 | 698 | 1 114 | 1 812 | 4 | 3 |

**Dissolution of Marriage: Grounds on which Final Decrees were Granted
South Australia**

| Ground | 1971 | 1972 | 1973 | 1974 | 1975 | | |
|---------------------------------------|--------------|--------------|--------------|--------------|------------|--------------|--------------|
| | | | | | To Husband | To Wife | Total |
| DISSOLUTION OF MARRIAGE | | | | | | | |
| Single grounds: | | | | | | | |
| Desertion | 437 | 430 | 489 | 515 | 216 | 381 | 597 |
| Adultery | 446 | 459 | 634 | 641 | 392 | 408 | 800 |
| Separation | 160 | 149 | 182 | 171 | 79 | 103 | 182 |
| Cruelty | 174 | 161 | 237 | 196 | 5 | 184 | 189 |
| Drunkenness | 27 | 18 | 22 | 26 | 2 | 16 | 18 |
| Other single grounds | 4 | 2 | 5 | 3 | 2 | 6 | 8 |
| Dual grounds: | | | | | | | |
| Desertion and; | | | | | | | |
| Adultery | 2 | 2 | 4 | — | 1 | 2 | 3 |
| Separation | 3 | 2 | 1 | 2 | 1 | 3 | 4 |
| Cruelty | 1 | — | 1 | 2 | — | 1 | 1 |
| Drunkenness | — | 1 | 1 | — | — | — | — |
| Cruelty and; | | | | | | | |
| Drunkenness | 9 | 11 | 5 | 5 | — | 10 | 10 |
| Drug intoxication | 1 | — | — | — | — | — | — |
| Other dual grounds | — | — | 1 | — | — | — | — |
| Total | 1 264 | 1 235 | 1 582 | 1 561 | 698 | 1 114 | 1 812 |
| NULLITY OF MARRIAGE | | | | | | | |
| Bigamy | 3 | 1 | 1 | — | — | — | — |
| Invalid marriage | 1 | 1 | — | 1 | — | — | — |
| Incapacity to consummate | 3 | 1 | 5 | 3 | 1 | 2 | 3 |
| Pregnancy | 1 | — | — | — | 1 | — | 1 |
| Total | 8 | 3 | 6 | 4 | 2 | 2 | 4 |
| JUDICIAL SEPARATION | | | | | | | |
| Adultery | 1 | 1 | — | — | — | 1 | 1 |
| Cruelty | 2 | 1 | — | 1 | — | 1 | 1 |
| Other grounds | — | — | — | — | — | 1 | 1 |
| Total | 3 | 2 | — | 1 | — | 3 | 3 |
| ALL DECREES | | | | | | | |
| Total | 1 275 | 1 240 | 1 588 | 1 566 | 700 | 1 119 | 1 819 |

Detail of the relative ages at marriage of husbands and wives for marriages dissolved in 1975 is contained in the following table.

Dissolution of Marriage: Decrees Absolute, Ages of Parties at Time of Marriage, South Australia, 1975

| Age of Husband at Marriage | Age of Wife at Marriage | | | | | | | Not Stated | Total Husbands |
|----------------------------|-------------------------|-------|-------|-------|-------|-------|-------------|------------|----------------|
| | Under 20 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45 and Over | | |
| Under 20 | 197 | 40 | 1 | 1 | — | — | — | — | 239 |
| 20-24 | 460 | 513 | 40 | 7 | 2 | — | — | 1 | 1 023 |
| 25-29 | 73 | 188 | 46 | 11 | 6 | 1 | — | — | 325 |
| 30-34 | 10 | 42 | 27 | 13 | 3 | 1 | — | 1 | 97 |
| 35-39 | 6 | 11 | 15 | 10 | 11 | 6 | 4 | — | 63 |
| 40-44 | 1 | 2 | 4 | 8 | 5 | 3 | 1 | — | 24 |
| 45 and over | 1 | 1 | 5 | 2 | 4 | 7 | 18 | — | 38 |
| Not stated | — | — | — | — | — | — | — | 3 | 3 |
| Total wives | 748 | 797 | 138 | 52 | 31 | 18 | 23 | 5 | 1 812 |

The following table shows the duration of marriage, i.e. the interval between marriage and the date the decree was made absolute, for marriages dissolved during the five years to 1975.

Dissolution of Marriage: Decrees Absolute, Duration of Marriage South Australia

| Year | Duration of Marriage (Years) | | | | | | | | Total | |
|------|------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------------|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | | 40 and Over |
| 1971 | 108 | 380 | 247 | 185 | 169 | 100 | 54 | 11 | 10 | 1 264 |
| 1972 | 137 | 380 | 228 | 158 | 159 | 100 | 53 | 13 | 7 | 1 235 |
| 1973 | 175 | 507 | 313 | 217 | 176 | 114 | 50 | 23 | 7 | 1 582 |
| 1974 | 150 | 523 | 325 | 213 | 149 | 118 | 51 | 20 | 12 | 1 561 |
| 1975 | 162 | 602 | 384 | 263 | 179 | 123 | 63 | 26 | 10 | 1 812 |

For marriages dissolved in 1975 the following table shows the relative ages of husbands and wives at the time of dissolution.

Dissolution of Marriage: Decrees Absolute, Ages of Parties at Time of Dissolution, South Australia, 1975

| Age of Husband at Dissolution | Age of Wife at Dissolution | | | | | | | Not Stated | Total Husbands |
|-------------------------------|----------------------------|-------|-------|-------|-------|-------|-------------|------------|----------------|
| | Under 25 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50 and Over | | |
| Under 25 | 85 | 12 | — | — | — | — | — | — | 97 |
| 25-29 | 132 | 265 | 25 | 2 | — | — | — | — | 424 |
| 30-34 | 10 | 158 | 163 | 9 | 3 | 1 | — | 1 | 345 |
| 35-39 | — | 33 | 118 | 112 | 13 | 5 | — | — | 281 |
| 40-44 | 1 | 4 | 19 | 98 | 62 | 14 | 7 | — | 205 |
| 45-49 | — | 3 | 14 | 32 | 58 | 64 | 18 | — | 189 |
| 50 and over | — | — | 2 | 14 | 17 | 62 | 172 | 1 | 268 |
| Not stated | — | — | — | — | — | — | — | 3 | 3 |
| Total wives | 228 | 475 | 341 | 267 | 153 | 146 | 197 | 5 | 1 812 |

Information collected for petitions filed covers living 'children of the marriage' under twenty-one years of age, which, as defined in the Matrimonial Causes Act, includes also adopted children, children of the husband and wife born before marriage and children of either the husband or the wife if members of the household.

The following table shows the number of children of marriages related to duration of marriage for decrees absolute for dissolution granted in 1975.

**Dissolution of Marriage: Decrees Absolute
Duration of Marriage and Number of Children of the Marriage
South Australia, 1975^(a)**

| Duration of Marriage (Years) | Marriages Dissolved With | | | | | | | Total Dissolutions | Total Children |
|------------------------------|--------------------------|---------|------------|------------|------------|------------|--------------------|--------------------|----------------|
| | No Children | 1 Child | 2 Children | 3 Children | 4 Children | 5 Children | 6 or more Children | | |
| Under 5 | 108 | 44 | 8 | 2 | — | — | — | 162 | 66 |
| 5-9 | 217 | 201 | 139 | 30 | 12 | 2 | 1 | 602 | 633 |
| 10-14 | 38 | 69 | 168 | 84 | 19 | 5 | 1 | 384 | 767 |
| 15-19 | 24 | 25 | 85 | 68 | 43 | 12 | 6 | 263 | 671 |
| 20-24 | 13 | 23 | 45 | 43 | 30 | 19 | 6 | 179 | 497 |
| 25-29 | 43 | 39 | 23 | 10 | 4 | 4 | — | 123 | 151 |
| 30-34 | 36 | 18 | 7 | 1 | 1 | — | — | 63 | 39 |
| 35 and over | 26 | 3 | 6 | 1 | — | — | — | 36 | 18 |
| Total dissolutions | 505 | 422 | 481 | 239 | 109 | 42 | 14 | 1 812 | .. |
| Total children | .. | 422 | 962 | 717 | 436 | 210 | 95 | .. | 2 842 |

(a) Number of children living and under 21 years at time of petition.

The following table shows particulars of the number of children of marriages dissolved in the five years to 1975.

**Dissolution of Marriage: Decrees Absolute, Children of the Marriage
South Australia^(a)**

| Year | Number of Marriages Dissolved With | | | | | | | Total Dissolutions | Total Children |
|------|------------------------------------|---------|------------|------------|------------|------------|--------------------|--------------------|----------------|
| | No Children | 1 Child | 2 Children | 3 Children | 4 Children | 5 Children | 6 or more Children | | |
| 1971 | 329 | 305 | 314 | 171 | 86 | 42 | 17 | 1 264 | 2 116 |
| 1972 | 349 | 301 | 293 | 172 | 78 | 26 | 16 | 1 235 | 1 949 |
| 1973 | 464 | 366 | 416 | 212 | 78 | 27 | 19 | 1 582 | 2 408 |
| 1974 | 449 | 383 | 418 | 198 | 73 | 27 | 13 | 1 561 | 2 324 |
| 1975 | 505 | 422 | 481 | 239 | 109 | 42 | 14 | 1 812 | 2 842 |

(a) Number of children living and under 21 years at time of petition.

LABOUR

7.1 EMPLOYMENT

THE LABOUR FORCE

Particulars of the number of persons who constitute the labour force in South Australia are available from periodic population censuses. For the 1966 Census the definition of the labour force was revised to accord with the recommendations of the Eighth International Conference of Labour Statisticians, and the revised approach has been retained for subsequent Censuses. The major factor in this change was the inclusion of a number of females working part-time who did not previously consider themselves as 'engaged in an industry, business, profession, trade or service'.

In the first table on page 360 population at the 1966 and 1971 Censuses is classified by occupational status, which refers to the status of each person in his or her occupation e.g. employer, worker on own account, working for wages, etc. Those persons reporting themselves as not engaged in an industry, business, profession, trade or service take as their occupational status 'not in the labour force'.

The growth in the female proportion of the labour force, evident between the 1954 and 1966 Censuses, somewhat levelled off with females constituting 30.0 per cent of the labour force in 1971 compared with 29.0 per cent in 1966. However, the proportion of married females in the labour force has continued to increase (from 13.8 per cent in 1966 to 18.9 per cent in 1971).

**Occupational Status of the Population, South Australia
Censuses 1966 and 1971**

| Occupational Status | 30 June 1966 (a) | | | 30 June 1971 | | |
|--------------------------------|------------------|----------------|------------------|----------------|----------------|------------------|
| | Males | Females | Persons | Males | Females | Persons |
| In labour force: | | | | | | |
| Employer .. | 23 747 | 6 228 | 29 975 | 19 468 | 5 832 | 25 300 |
| Self-employed | 31 135 | 7 205 | 38 340 | 29 713 | 8 302 | 38 015 |
| Employee .. | 259 105 | 111 197 | 370 302 | 275 292 | 135 712 | 411 004 |
| Helper .. . | 1 167 | 2 613 | 3 780 | 1 009 | 2 240 | 3 249 |
| Unemployed | 4 464 | 3 563 | 8 027 | 4 682 | 3 673 | 8 355 |
| Total labour force .. . | 319 618 | 130 806 | 450 424 | 330 164 | 155 759 | 485 923 |
| Not in labour force | 228 912 | 412 539 | 641 451 | 255 887 | 431 897 | 687 784 |
| Total population .. | 548 530 | 543 345 | 1 091 875 | 586 051 | 587 656 | 1 173 707 |

(a) Excludes full-blood Aborigines.

The following table shows the employed population at the 1971 Census classified by occupation. Occupation refers to the kind of work a person normally performs e.g. carpenter, clerk, and is classified according to the Australian Classification of Occupations which has been adapted from and closely adheres to the principles embodied in the International Standard Classification of Occupations issued by the International Labour Office, Geneva 1958. It contains 11 major groupings subdivided into 72 minor groups further subdivided into 367 individual categories.

Employed Population: Occupation, South Australia, 30 June 1971

| Occupation Group | Males | | Females | | Persons | |
|---|----------------|---------------------------------|----------------|---------------------------------|----------------|---------------------------------|
| | Number | Proportion of Total Per cent | Number | Proportion of Total Per cent | Number | Proportion of Total Per cent |
| Professional, technical and related workers | 27 418 | 8.42 | 22 538 | 14.82 | 49 956 | 10.46 |
| Administrative, executive and managerial workers | 27 261 | 8.38 | 4 080 | 2.68 | 31 341 | 6.56 |
| Clerical workers | 25 980 | 7.98 | 43 061 | 28.31 | 69 041 | 14.46 |
| Sales workers | 19 211 | 5.90 | 20 911 | 13.75 | 40 122 | 8.40 |
| Farmers, fishermen, hunters, timbergetters and related workers | 35 069 | 10.78 | 7 922 | 5.21 | 42 991 | 9.00 |
| Miners, quarrymen and related workers | 1 823 | 0.56 | 32 | 0.02 | 1 855 | 0.39 |
| Workers in transport and communication occupations | 21 921 | 6.74 | 3 422 | 2.25 | 25 343 | 5.31 |
| Craftsmen, production-process workers and labourers (n.e.i.) | 140 981 | 43.31 | 18 161 | 11.94 | 159 142 | 33.32 |
| Service, sport and recreation workers | 11 686 | 3.59 | 25 758 | 16.94 | 37 444 | 7.84 |
| Members of armed services, enlisted personnel | 3 000 | 0.92 | 144 | 0.10 | 3 144 | 0.66 |
| Occupation inadequately described or not stated | 11 132 | 3.42 | 6 057 | 3.98 | 17 189 | 3.60 |
| Total employed population | 325 482 | 100.00 | 152 086 | 100.00 | 477 568 | 100.00 |

Industry refers to the branch of productive activity, trade or service in which the individual works or carries out his occupation. The Australian Standard Industrial Classification (ASIC), designed primarily as a system for classifying establishments (e.g. individual mines, factories, shops etc.) by industry, was used for the 1971 Census and divides the whole field of industry into twelve major industry groups, which in turn are divided into sixty subdivisions, 157 groups and 519 classes.

In the next table the number of employed males and females aged fifteen years and over at the 1971 Census are classified according to industry in conjunction with occupational status. The proportion of the employed population engaged in agriculture, forestry, fishing, etc. declined from 10.7 per cent in 1966 to 8.6 per cent in 1971. The percentage recorded as employed in manufacturing industries fell from 28.0 in 1966 to 24.4 in 1971 reversing the trend which was evident between 1933 and 1966.

**Employed Population 15 Years and Over: Industry and Occupational Status
South Australia
Census 30 June 1971**

| Industry Group | Employed | | | | Total |
|--|---------------|---------------|----------------|--------------|----------------|
| | Employer | Self-employed | Employee | Helper | |
| MALES | | | | | |
| Agriculture, forestry, fishing, etc. | 5 474 | 15 709 | 10 830 | 619 | 32 632 |
| Mining | 48 | 503 | 2 816 | 61 | 3 428 |
| Manufacturing | 1 217 | 1 030 | 90 798 | 17 | 93 062 |
| Electricity, gas and water | 3 | 2 | 8 242 | — | 8 247 |
| Construction | 2 644 | 3 592 | 27 209 | 13 | 33 458 |
| Wholesale and retail trade | 5 715 | 4 396 | 45 421 | 59 | 55 591 |
| Transport and storage | 714 | 1 755 | 17 732 | 8 | 20 209 |
| Communication | 4 | 12 | 6 826 | — | 6 842 |
| Finance, business services, etc. | 1 208 | 854 | 13 854 | 23 | 15 939 |
| Public administration, defence | — | — | 13 479 | — | 13 479 |
| Community services | 1 100 | 253 | 22 683 | 54 | 24 090 |
| Entertainment, recreation, etc. | 1 105 | 872 | 6 459 | 32 | 8 468 |
| Other and not stated | 236 | 735 | 8 943 | 123 | 10 037 |
| Total males employed | 19 468 | 29 713 | 275 292 | 1 009 | 325 482 |
| FEMALES | | | | | |
| Agriculture, forestry, fishing, etc. | 1 386 | 3 747 | 2 057 | 1 083 | 8 273 |
| Mining | 7 | 33 | 295 | 5 | 340 |
| Manufacturing | 289 | 316 | 22 892 | 54 | 23 551 |
| Electricity, gas and water | 1 | 1 | 508 | — | 510 |
| Construction | 292 | 188 | 1 244 | 67 | 1 791 |
| Wholesale and retail trade | 2 412 | 2 432 | 33 447 | 364 | 38 655 |
| Transport and storage | 115 | 171 | 2 521 | 24 | 2 831 |
| Communication | 1 | 11 | 2 182 | 1 | 2 195 |
| Finance, business services, etc. | 161 | 226 | 11 789 | 22 | 12 198 |
| Public administration, defence | — | — | 5 714 | — | 5 714 |
| Community services | 205 | 365 | 35 346 | 166 | 36 082 |
| Entertainment, recreation, etc. | 907 | 630 | 13 125 | 99 | 14 761 |
| Other and not stated | 56 | 182 | 4 592 | 355 | 5 185 |
| Total females employed | 5 832 | 8 302 | 135 712 | 2 240 | 152 086 |

Labour Force Survey

In addition to complete census counts, estimates of the civilian labour force are prepared each quarter from the results of surveys conducted at a sample of dwellings throughout Australia. These surveys began in 1960 and were initially

confined to the six State capital cities, but in 1964 were extended to include non-metropolitan urban and rural areas, thereby enabling derivation of estimates of the total civilian labour force in Australia. The proportion of the population included in the surveys varies from State to State (1 per cent in South Australia) but in aggregate about 0.67 per cent of the Australian population is included.

Statistics obtained from the surveys include numbers employed and unemployed; labour force participation and unemployment rates; duration of unemployment; analyses of reasons for working less than 35 hours per week; as well as age, sex, occupation and industry characteristics.

The following table shows, for South Australia, quarterly estimates of the employment status of the civilian population fifteen years of age and over from February 1975 to November 1976, based on the 1971 Census.

**Civilian Population 15 Years of Age and Over: Employment Status
South Australia**

| Month | In Labour Force | | | | Not in Labour Force | Civilian Popu- lation Aged 15 years and Over | |
|-----------------------|------------------|---------------------|-----------------|-------|---------------------------|---|-------|
| | Employed | | Un- employed | Total | | | |
| | Agri- culture | Other Industries | | | | | |
| MALES ('000) | | | | | | | |
| 1975 Feb. .. | 32.1 | 319.4 | 351.5 | 10.5 | 362.0 | 79.5 | 441.5 |
| May .. | 31.9 | 318.4 | 350.3 | 9.0 | 359.3 | 82.1 | 441.4 |
| Aug. .. | 31.0 | 317.5 | 348.5 | 9.9 | 358.4 | 85.8 | 444.2 |
| Nov. .. | 31.5 | 316.4 | 347.9 | 12.5 | 360.4 | 85.9 | 446.3 |
| 1976 Feb. .. | 33.5 | 322.4 | 355.9 | 11.3 | 367.2 | 81.6 | 448.8 |
| May .. | 32.2 | 320.7 | 352.9 | 10.5 | 363.4 | 86.6 | 450.0 |
| Aug. .. | 32.1 | 320.8 | 352.9 | 9.9 | 362.7 | 88.5 | 451.2 |
| Nov. .. | 32.1 | 323.1 | 355.2 | 10.5 | 365.7 | 87.6 | 453.3 |
| FEMALES ('000) | | | | | | | |
| 1975 Feb. .. | 8.3 | 178.8 | 187.1 | 12.7 | 199.8 | 257.8 | 457.6 |
| May .. | 7.3 | 178.3 | 185.6 | 9.4 | 195.0 | 261.6 | 456.6 |
| Aug. .. | 7.1 | 177.7 | 184.8 | 10.8 | 195.6 | 260.4 | 456.0 |
| Nov. .. | 7.9 | 187.9 | 195.8 | 10.5 | 206.4 | 251.4 | 457.8 |
| 1976 Feb. .. | 8.2 | 187.3 | 195.5 | 11.7 | 207.1 | 254.1 | 461.2 |
| May .. | 6.7 | 187.8 | 194.5 | 8.2 | 202.6 | 259.8 | 462.4 |
| Aug. .. | 8.7 | 184.5 | 193.2 | 9.3 | 202.5 | 261.5 | 464.0 |
| Nov. .. | 8.0 | 187.6 | 195.6 | 10.8 | 206.4 | 260.7 | 467.1 |
| PERSONS ('000) | | | | | | | |
| 1975 Feb. .. | 40.4 | 498.2 | 538.6 | 23.2 | 561.9 | 337.3 | 899.1 |
| May .. | 39.3 | 496.6 | 535.9 | 18.4 | 554.4 | 343.6 | 898.0 |
| Aug. .. | 38.0 | 495.3 | 533.3 | 20.7 | 554.0 | 346.2 | 900.2 |
| Nov. .. | 39.4 | 504.4 | 543.8 | 23.0 | 566.7 | 337.3 | 904.1 |
| 1976 Feb. .. | 41.6 | 509.7 | 551.4 | 23.0 | 574.4 | 335.6 | 910.0 |
| May .. | 38.9 | 508.5 | 547.5 | 18.7 | 566.1 | 346.4 | 912.4 |
| Aug. .. | 40.8 | 505.3 | 546.0 | 19.2 | 565.2 | 350.0 | 915.2 |
| Nov. .. | 40.1 | 510.7 | 550.8 | 21.2 | 572.1 | 348.3 | 920.4 |

Since the estimates are based on a sample, they may differ from the figures that would have been obtained from a complete census using the same questionnaire and procedures. One measure of the likely difference is given by the standard error, which indicates the extent to which an estimate might have varied by chance because only a sample and not the whole population was enumerated. The smaller the estimate the higher is the relative standard error. For example, the relative standard error of an estimate for South Australia of 500 000 persons is approximately 0.6 per cent (3 200), while that of an estimate of 3 000 is approximately 16 per cent (500). There are about two chances in three that a sample estimate will differ by less than one standard error from the figures that would have been obtained from a comparable complete enumeration, and about nineteen chances in twenty that the difference will be less than two standard errors. Further details may be obtained from bulletins relating to the surveys which are discussed in the following pages.

Estimates for the period from August 1966 have been revised recently using the results of the 1971 Census rather than those of the 1966 Census used in earlier estimates. This has resulted in a small reduction in the size of estimates of the labour force.

The definition of the labour force used in the Population Census is similar to that used in the survey. However, evidence from census post-enumeration surveys indicates that the personal interview approach as used in the quarterly survey, tends to identify a larger number of persons as being in the labour force than does the filling in of the questions on the census schedule by the householder, and that this tendency increased between the 1966 and 1971 Censuses. These considerations should be borne in mind when comparisons of the total labour force or labour force participation rates are made between the 1966 and 1971 Censuses, or between the 1971 Census and the 1971 labour force quarterly estimates.

Further details may be obtained from the following bulletins issued quarterly by the Australian Statistician: *Unemployment, Preliminary Estimates* (reference 6.35); *The Labour Force (Preliminary)* (reference 6.32); *The Labour Force* (reference 6.20).

Special Studies

The sample of dwellings referred to in respect of the Labour Force Survey has provided the framework for a number of special studies. These have recently included: information on post-school study and adult education; school leavers; the nature and extent of multiple jobholding; the distribution of weekly earnings of wage and salary earners; information on persons not in the labour force; information about persons who had recently been looking for work; the frequency of pay of wage and salary earners; information about changes of employment or job location and other aspects of the mobility of the labour force. Brief summaries of some of these studies are given in the following pages.

Since the estimates provided in these studies are based on sample surveys they are subject to sampling error, the magnitude of which is described in some detail in the bulletins for each topic published by the Australian Statistician.

School Leavers

In May 1975, a survey was conducted in conjunction with the quarterly Labour Force Survey in order to obtain, among other things, information about persons aged 15 to 24 years, who, at the time of the survey, were not attending an educational institution full-time in a course normally lasting at least one academic year, and who had completed or withdrawn from such a course at an Australian educational institution in 1974 or 1975 (these persons were defined as being school leavers).

The number of school leavers who entered the labour force expressed as a percentage of total leavers describes their labour force participation rates. This rate for South Australian males in May 1975 was 97.0 compared with the national rate of 95.2 while the equivalent rate for females was 91.8 in this State and 93.0 for Australia.

Detailed results of this survey and other similar surveys carried out in February of each year from 1964 to 1974 may be obtained from bulletins entitled *Leavers from Schools, Universities or other Educational Institutions* (reference 6.9) published by the Australian Statistician.

Multiple Jobholding

In August 1975 the quarterly Labour Force Survey was extended to obtain information about the nature and extent of multiple jobholding. Results show that an estimated 197 100 persons, or 3.3 per cent of the total Australian labour force stated that they held more than one job in August 1975. In August 1973 when a similar survey was held, the corresponding figure was 190 600 or 3.3 per cent of the total labour force.

The following table shows by State and for Australia the proportion of persons in the labour force who held a second job.

Multiple Jobholders: Proportion of Persons in the Labour Force who Held a Second Job, by Marital Status, August 1975^(a)

| Multiple Jobholders | NSW | Vic. | Qld | SA | WA | Tas. | ACT | Australia (b) |
|-----------------------|----------|------|-----|-----|-----|------|-----|------------------|
| | Per cent | | | | | | | |
| Males: | | | | | | | | |
| Married | 3.7 | 4.6 | 3.4 | 5.7 | 5.7 | 5.2 | 5.6 | 4.3 |
| Not married (c) | 2.3 | 3.6 | 2.3 | (d) | 4.7 | (d) | (d) | 2.9 |
| Total | 3.3 | 4.3 | 3.1 | 4.8 | 5.4 | 4.5 | 5.1 | 3.9 |
| Females: | | | | | | | | |
| Married | 1.8 | 1.8 | 2.5 | 3.2 | 3.2 | (d) | (d) | 2.2 |
| Not married (c) | 1.7 | 2.4 | (d) | 4.0 | (d) | (d) | (d) | 2.3 |
| Total | 1.8 | 2.0 | 2.5 | 3.5 | 2.9 | 2.7 | (d) | 2.2 |
| Persons: | | | | | | | | |
| Married | 3.1 | 3.7 | 3.2 | 4.9 | 4.9 | 4.6 | 3.7 | 3.6 |
| Not married (c) | 2.1 | 3.1 | 2.4 | 3.1 | 3.8 | (d) | (d) | 2.6 |
| Total | 2.8 | 3.5 | 2.9 | 4.4 | 4.5 | 3.9 | 3.5 | 3.3 |

(a) Multiple jobholders in each group as a percentage of the civilian labour force in the same group.

(b) Includes the Northern Territory.

(c) Never married, widowed and divorced.

(d) Subject to sampling variability too high for most practical purposes.

Further details may be obtained from the bulletin *Multiple Jobholding*, August 1975 (reference 6.10), published by the Australian Statistician.

Persons Not in the Labour Force

In November 1975, the quarterly Labour Force Survey included questions to obtain information about persons aged 15 to 64 years who were not in the labour force: in particular, their intentions regarding entering or re-entering the labour force, whether they had ever held a regular job and, if so, how long ago and for what reason they had left it, and their educational qualifications.

The following table shows for persons not in the labour force, who were keeping house or retired or voluntarily idle, the reason for not looking for work. It excludes 38 600 persons who were looking for work in the survey week but had not taken active steps to find a job and others who had been looking for work in the three weeks before the survey week.

Persons Aged 15 to 64 Years Not in the Labour Force who were Keeping House Retired or Voluntarily Idle: Reason for Not Looking for Work, November 1975^(a)

| Reason for Not Looking for Work | NSW | Vic. | Qld | SA | WA | Tas. | Australia (b) |
|---|-------|-------|-------|-------|-------|------|------------------|
| MALES ('000) | | | | | | | |
| Own ill health or physical disability | 34.6 | 17.0 | 20.9 | 6.6 | 8.2 | 2.2 | 90.0 |
| Did not want to or need to work | 16.7 | 12.9 | 8.1 | 4.9 | 4.6 | (e) | 50.5 |
| Total males (c) | 52.3 | 32.3 | 29.9 | 11.8 | 13.5 | 3.8 | 146.2 |
| FEMALES ('000) | | | | | | | |
| Own ill health, physical disability or pregnancy | 139.8 | 96.6 | 55.4 | 29.7 | 25.7 | 9.7 | 363.6 |
| Did not want to or need to work, believed should stay at home | 422.6 | 309.4 | 205.2 | 118.2 | 99.2 | 40.3 | 1 217.3 |
| Family considerations | 78.1 | 52.4 | 26.4 | 12.5 | 13.4 | 5.2 | 189.9 |
| Ill health other than own | 4.9 | 4.2 | (e) | (e) | (e) | (e) | 13.1 |
| Child care arrangements/children too young | 70.9 | 46.1 | 23.0 | 11.2 | 12.2 | 4.8 | 169.7 |
| Discouraged (d) | 13.7 | 10.5 | 3.2 | (e) | (e) | (e) | 31.8 |
| Other reasons | (e) | 5.5 | 4.4 | (e) | (e) | (e) | 15.8 |
| Total females | 656.9 | 474.4 | 294.7 | 162.6 | 141.4 | 56.1 | 1 818.3 |

(a) Highest-ranked reason only.

(b) Includes NT and ACT.

(c) Includes other reasons such as 'family considerations', 'discouraged' and 'other'.

(d) Defined as persons who wanted a job but were not looking for work because of any of the following reasons: considered too young or too old by employers; language or racial difficulties; lacked necessary training, skills or experience; or no jobs in locality or line of work.

(e) Subject to sampling variability too high for most practical purposes.

Of the 146 200 males not looking for work 16.3 per cent stated they intended to look for work in the next twelve months, 4.6 per cent stated they might look for work, 74.4 per cent stated they would not look for work and 4.2 per cent stated they did not know whether they would look for work. Of the 1 818 300 females not looking for work the corresponding figures were 9.6 per cent, 6.3 per cent, 80.6 per cent and 3.5 per cent.

More details from the November 1975 Survey have been published in the bulletin *Persons not in the Labour Force*, (reference 6.59) released by the Australian Statistician.

Persons Looking for Work

In November 1976 a survey, based on the quarterly Labour Force Survey, was conducted throughout Australia in order to obtain information about persons who had recently been looking for work, including particulars of their last job, difficulties experienced in finding a job, family status, and duration of last job. The following table shows for various age groups the main difficulty in finding work. (A similar survey was conducted in May 1976.) In November 1976, 17.8 per cent reported that their main difficulty in finding a job was that there were no vacancies in their line of work (16.5 per cent in May 1976); a further 30.9 per cent reported that there were no vacancies at all (27.5 per cent in May) while 9.5 per cent were considered by employers to be too young or too old (12.5 per cent in May).

**Persons Looking for Work: Main Difficulty in Finding Work by Age
November 1976, Australia (a)**

| Main Difficulty in Finding Work | Age Group (Years) | | | | Total |
|--|-------------------|-------------|-------------|-------------|--------------|
| | 15-19 | 20-24 | 25-34 | 35 and Over | |
| | | | | | '000 |
| Own ill health or handicap | (c) | (c) | (c) | 6.8 | 12.2 |
| Considered by employers to be too young or too old | 6.1 | 3.7 | (c) | 12.5 | 24.0 |
| Unsuitable hours | (c) | (c) | (c) | (c) | 6.4 |
| Too far to travel/transport problems ... | 5.9 | 3.8 | 3.8 | 3.7 | 17.3 |
| Lacked necessary education, training or skills | 10.0 | 5.2 | (c) | (c) | 19.2 |
| Insufficient work experience | 12.1 | 5.8 | 3.3 | (c) | 22.8 |
| No vacancies in line of work | 11.2 | 10.0 | 11.5 | 12.4 | 45.1 |
| No vacancies at all | 31.3 | 20.6 | 12.3 | 13.9 | 78.1 |
| Other difficulties (b) | (c) | 3.3 | 3.5 | (c) | 11.1 |
| No difficulties reported | 6.4 | 3.7 | 3.3 | 3.4 | 16.8 |
| Total..... | 87.6 | 58.4 | 46.3 | 60.7 | 253.0 |

(a) For this survey persons looking for work were defined as all civilians aged 15 years and over who during survey week did not work and did not have a job, but could have taken one had it been available, and had been actively looking for full-time or part-time work in the four weeks up to and including the survey week.

(b) Includes about 3 400 persons in November (3 700 persons in May) whose main difficulty was language problems or discrimination against migrant or racial groups.

(c) Subject to sampling variability too high for most practical purposes.

More details from the May 1976 and November 1976 surveys have been published in bulletins *Persons Looking for Work* (reference 6.60), released by the Australian Statistician.

Labour Mobility

A sample survey was conducted in February 1976 to obtain information about some aspects of the mobility of the labour force, e.g. the number of different employers for whom employees had worked during 1975 or the number of different businesses in which employers and self-employed persons had been engaged.

A summary of results for Australia indicates that:

- (1) 86.1 per cent of males and 87.3 per cent of females employed at the end of 1975 had not changed their employer or business during the year;
- (2) 10.6 per cent of males and 10.5 per cent of females had made one change;
- (3) 3.3 per cent of males and 2.2 per cent of females had changed at least twice;
- (4) For males the highest proportion with more than one employer or business occurred among sales workers (19.0 per cent). For females the highest proportion (13.9 per cent) was recorded for clerical workers and service, sport and recreation workers.

Further information is available in the bulletin *Labour Mobility*, February 1976 (reference 6.43) published by the Australian Statistician.

Job Tenure

In August 1976 a survey based on the quarterly Labour Force Survey was conducted throughout Australia to classify estimates of employed persons according to the length of time they had been in the job held in August 1976.

Employed Wage and Salary Earners: Duration of Current Job South Australia, August 1976

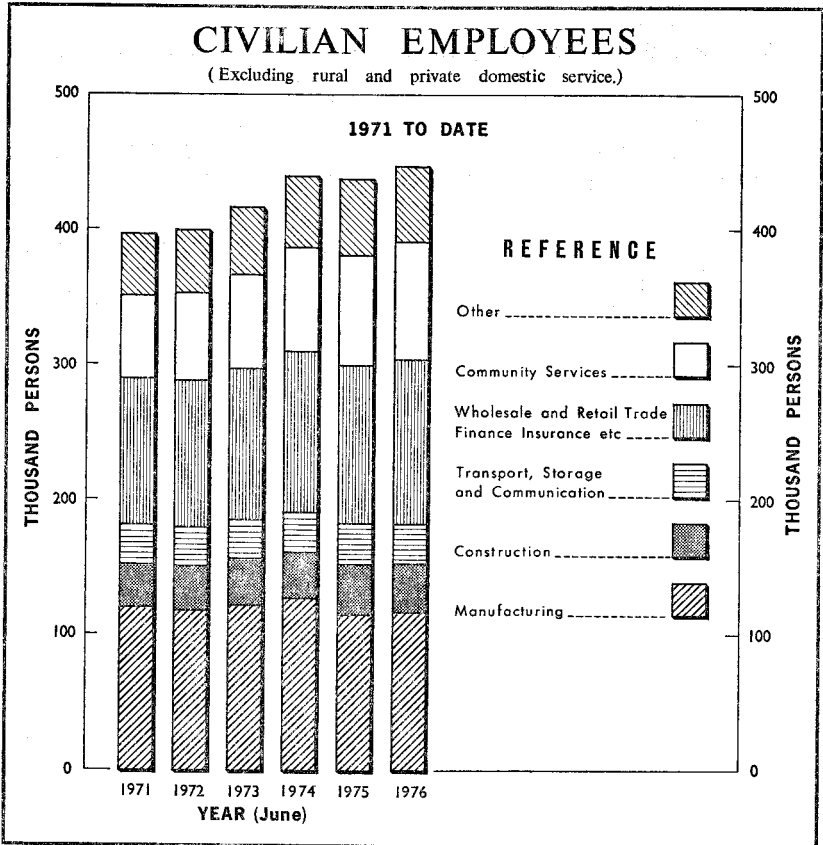
| Duration of Current Job | Males | Females | | All Persons |
|-----------------------------------|--------------|---------------|-------------------------|--------------|
| | | Married Women | Total (Including Other) | |
| | | Per cent | | |
| Under 3 months | 8.9 | 11.6 | 12.4 | 10.1 |
| 3 months and under 6 months | 4.6 | 6.6 | 7.9 | 5.9 |
| 6 months and under 1 year | 8.8 | 9.9 | 12.2 | 10.1 |
| Total under 1 year | 22.3 | 28.2 | 32.5 | 26.1 |
| 1 year and under 2 years | 9.9 | 14.2 | 14.4 | 11.6 |
| 2 years and under 3 years | 9.3 | 14.1 | 13.6 | 10.9 |
| 3 years and under 4 years | 7.2 | 8.5 | 9.2 | 8.0 |
| 4 years and under 5 years | 5.2 | 8.2 | 6.4 | 5.6 |
| 5 years and under 10 years | 18.0 | 18.8 | 16.0 | 17.2 |
| 10 years and under 15 years | 10.5 | 4.5 | 3.9 | 8.0 |
| 15 years and over | 17.6 | 3.4 | 4.1 | 12.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

The above table shows that in August 1976 approximately 22 per cent of males and 33 per cent of females had been in their current jobs for less than a year, while half of the males and one quarter of the females had been in their current jobs for five years or more.

Further information may be obtained in the bulletin, *Job Tenure*, February 1976 (reference 6.44), published by the Australian Statistician.

WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT

Details of the number of wage and salary earners in civilian employment other than at census dates are available from periodic estimates. These estimates, which exclude employees in agriculture and private domestic service, are based on information obtained at population censuses, known as bench-marks, and adjustments to these bench-marks are made from certain current information.



An industry distribution of wage and salary earners derived from these estimates, and beginning with the Census year 1971, is presented in the bar chart above. The industry classification used in this chart, and in the following table is the Australian Standard Industrial Classification (ASIC). This industrial classification is not directly comparable with those adopted for population censuses before 1971. 'Manufacturing' includes employees of manufacturing enterprises who are not directly associated with the productive process, such as sales and distribution personnel. The category

'community services' covers employees in education, health, welfare and other community services while the category 'other' includes employees in mining, electricity, gas and water, public administration and entertainment, restaurants, hotels and personal services.

Wage and Salary Earners in Civilian Employment, South Australia^(a)

| June | Manufacturing | Construction | Transport, Storage and Communication | Wholesale and Retail Trade | Finance, Insurance, Real Estate and Business Services | Community Services | Total Employment (Incl. Other) |
|----------------|---------------|--------------|--------------------------------------|----------------------------|---|--------------------|--------------------------------|
| MALES ('000) | | | | | | | |
| 1972 | 93.3 | 31.8 | 23.6 | 46.6 | 14.6 | 24.9 | 263.4 |
| 1973 | 94.4 | 33.5 | 23.4 | 48.2 | 14.6 | 26.4 | 270.5 |
| 1974 | 96.6 | 32.6 | 24.1 | 50.6 | 15.8 | 28.1 | 278.4 |
| 1975 | 89.4 | 36.2 | 24.5 | 50.6 | 15.7 | 29.8 | 278.3 |
| 1976 | 89.0 | 33.5 | 24.2 | 52.5 | 15.6 | 31.7 | 278.5 |
| FEMALES ('000) | | | | | | | |
| 1972 | 24.9 | 1.3 | 4.9 | 35.6 | 12.1 | 39.7 | 136.8 |
| 1973 | 27.4 | 1.4 | 4.9 | 36.5 | 12.8 | 42.9 | 145.9 |
| 1974 | 30.5 | 1.4 | 5.2 | 39.5 | 13.8 | 48.2 | 161.0 |
| 1975 | 25.7 | 1.5 | 5.4 | 38.0 | 13.4 | 51.3 | 159.5 |
| 1976 | 26.2 | 1.6 | 5.2 | 40.1 | 13.7 | 55.6 | 166.5 |
| PERSONS ('000) | | | | | | | |
| 1972 | 118.2 | 33.1 | 28.5 | 82.2 | 26.7 | 64.6 | 400.2 |
| 1973 | 121.8 | 34.9 | 28.3 | 84.7 | 27.4 | 69.3 | 416.4 |
| 1974 | 127.1 | 34.0 | 29.3 | 90.1 | 29.6 | 76.3 | 439.4 |
| 1975 | 115.1 | 37.7 | 29.9 | 88.6 | 29.1 | 81.1 | 437.8 |
| 1976 | 115.2 | 35.1 | 29.4 | 92.6 | 29.3 | 87.2 | 445.0 |

(a) Excludes employees in agriculture, private domestic service and defence forces.

The following table shows the distribution of wage and salary earners at June 1975 and June 1976 by class of employer.

Wage and Salary Earners in Civilian Employment: Class of Employer South Australia^(a)

| Class of Employer | June 1975 | | | June 1976 ^(b) | | |
|--------------------|-----------|---------|---------|--------------------------|---------|---------|
| | Males | Females | Persons | Males | Females | Persons |
| Private | 188.2 | 116.3 | 304.5 | 187.0 | 112.9 | 299.8 |
| Government: | | | | | | |
| Commonwealth | 24.9 | 7.5 | 32.4 | 24.5 | 7.5 | 32.0 |
| State | 58.4 | 34.5 | 92.9 | 61.2 | 45.1 | 106.3 |
| Local | 6.8 | 1.1 | 7.9 | 5.8 | 1.0 | 6.8 |
| Total government.. | 90.1 | 43.2 | 133.3 | 91.5 | 53.6 | 145.2 |
| Total employment . | 278.3 | 159.5 | 437.8 | 278.5 | 166.5 | 445.0 |

(a) Excludes employees in agriculture, private domestic service and defence forces.

(b) Details of private and government employment for June 1976 are on a revised basis.

The government sector (government departments, local government authorities, public corporations and public trading and financial enterprises) employs 30 per cent of total civilian wage and salary earners.

Further information on employment in specific sectors such as factories, agriculture, the building industry etc. is found in the relevant sections of this Year Book.

UNEMPLOYMENT

Labour Force Surveys

For the 1971 Census of Population and Housing and for quarterly Labour Force Surveys until May 1976, unemployed persons were defined as those civilians aged 15 years and over who, in the week before the Census (or in the survey week, *i.e.* the week immediately preceding that in which the interview takes place) did no work at all and either:

- (a) did not have a job and were actively looking for work (including those who stated that they would have looked for work had they not been temporarily ill, believed no work was available or had already made arrangements to start in a new job in which they would have preferred to start during survey week), or
- (b) had a job from which they were temporarily laid off without pay for the whole week.

This approach conformed closely to the recommendations of the Eighth International Conference of Labour Statisticians held in Geneva in 1954 and to the approach used at the 1966 Census. The number unemployed in South Australia as recorded at the 1971 Census was 4 682 males and 3 673 females.

However, it became apparent that the questions asked in the surveys lacked some comprehensiveness and precision. For example, they allowed persons who had been actively looking for work in the survey week to be classified as unemployed, even though they may not have been able to start work in that week had a job been available. On the other hand, persons who had been looking for work in the recent past but had for some reason not done so in the survey week were not counted as unemployed.

Thus, further questions were designed to ascertain whether there were any persons who had taken active steps to find work in the three weeks before the survey week and whether those persons who were (in the past) classified as actively looking for work would have been able to take a job in the survey week had one become available.

Therefore, from February 1975 to February 1976 inclusive, unemployment estimates derived from the Labour Force Survey were based on a revised definition as well as the old definition and from May 1976 are based on the revised definition only.

Unemployed persons are now defined as those civilians aged 15 years and over who during the survey week either:

- (a) did not work and did not have a job, but could have taken one had it been available, and had been looking for full-time or part-time work anytime during the four weeks up to and including

survey week (including those who would have been prevented from taking a job in the survey week due to their own temporary illness, or by their having already made arrangements to start in a new job in which they would have preferred to start during survey week), or

- (b) were waiting to be called back to a job from which they had been temporarily stood down without pay for four weeks or less (including the whole of survey week).

One of the primary functions of the Labour Force Survey (see pages 361-3) is to provide regular and detailed information on unemployment in Australia. The following table shows the number of unemployed persons in South Australia and the corresponding unemployment rates for each category at the time of surveys conducted in August of each year from 1974 to 1976.

Unemployed Persons, South Australia (a)
August

| Particulars | 1974 | | | 1975 (b) | | | 1976 (b) | | |
|-------------------|---------|-------|-------|----------|-------|-------|----------|-------|-------|
| | Married | Other | Total | Married | Other | Total | Married | Other | Total |
| NUMBER ('000) | | | | | | | | | |
| Males | (c) | 2.8 | 4.9 | 3.8 | 6.3 | 10.2 | 2.7 | 7.2 | 9.9 |
| Females | 2.9 | 3.4 | 6.4 | 5.5 | 6.3 | 11.9 | 4.6 | 4.8 | 9.3 |
| Persons | 5.0 | 6.2 | 11.3 | 9.4 | 12.7 | 22.0 | 7.3 | 12.0 | 19.2 |
| UNEMPLOYMENT RATE | | | | | | | | | |
| Males | (c) | 3.0 | 1.4 | 1.4 | 6.7 | 2.8 | 1.0 | 7.1 | 2.7 |
| Females | 2.4 | 5.3 | 3.4 | 4.2 | 9.4 | 6.0 | 3.4 | 6.8 | 4.6 |
| Persons | 1.3 | 4.0 | 2.1 | 2.4 | 7.9 | 4.0 | 1.8 | 7.0 | 3.4 |

(a) Civilians 15 years of age and over.

(b) Estimates based on revised definitions of the labour force unemployed persons.

(c) Estimate of 'number' is less than 2 500 and although derivable by subtraction, the estimate (and corresponding rate) should not be regarded as reliable.

More detailed estimates of unemployment statistics are available for Australia but cannot be made available for South Australia because of the relatively high standard of errors involved. (For an explanation of the level of accuracy of Labour Force Surveys estimates see page 363). The standard errors of the estimates in the above table range from approximately 20 per cent for an estimate of 2 500 to approximately 5.5 per cent for an estimate of 20 000.

Commonwealth Employment Service

Monthly figures compiled by the Commonwealth Employment Service of the Department of Employment and Industrial Relations provide indicators of movement in the level of unemployment. These figures are a count of the number of persons, registered with the Employment Service for employment on the Friday nearest the end of the month, who claimed at the time of registering that they were not employed, and who were still recorded as unplaced. Included are persons who have been referred to employers and those who may have obtained employment without notifying the Department. Also available is the number of vacancies, registered by employers, which were recorded as unfilled at the end of the month.

The next table gives the seasonally adjusted number of persons and vacancies registered at the end of each month for the years 1972 to 1976 *i.e.* it does not show the actual numbers unemployed, but a series from which seasonal variations have been removed so that long-term trends can be seen. However, from August 1976 it was decided to discontinue publishing seasonally adjusted data for 'persons registered for employment' because the seasonal pattern of the figures have changed markedly in recent years.

**Registration with Commonwealth Employment Service, South Australia
(Seasonally Adjusted Series)^{(a)(b)}**

| Month | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|-------------------|---|------|------|------|------|------|------|-------------|-------------|-------------|-------------|-------------|
| Year: | PERSONS REGISTERED FOR EMPLOYMENT ('000) (c) | | | | | | | | | | | |
| 1972 | 9.6 | 10.9 | 11.3 | 11.5 | 11.3 | 12.9 | 13.2 | 14.3 | 13.9 | 12.9 | 11.9 | 12.3 |
| 1973 (d) | 11.5 | 10.1 | 9.9 | 10.1 | 10.1 | 9.9 | 10.1 | 9.4 | 9.1 | 9.2 | 9.1 | 9.2 |
| 1974 | 9.1 | 9.0 | 8.4 | 8.1 | 9.2 | 8.7 | 10.2 | 11.4 | 12.9 | 15.9 | 18.5 | 18.7 |
| 1975 | 20.6 | 22.5 | 22.3 | 24.2 | 22.6 | 22.8 | 22.1 | 24.2 | 26.1 | 26.3 | 26.3 | 24.6 |
| 1976 | 22.9 | 22.3 | 23.2 | 22.2 | 20.5 | 21.9 | 22.6 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| | VACANCIES REGISTERED ('000) | | | | | | | | | | | |
| 1972 | 3.0 | 2.7 | 2.7 | 2.7 | 2.6 | 2.4 | 2.6 | 2.3 | 2.6 | 2.8 | 3.0 | 3.3 |
| 1973 | 3.8 | 4.4 | 4.7 | 4.8 | 5.4 | 5.8 | 6.1 | 6.4 | 6.8 | 7.3 | 6.8 | 5.6 |
| 1974 | 6.5 | 7.3 | 7.3 | 6.8 | 5.9 | 5.4 | 4.5 | 4.4 | 4.1 | 3.6 | 3.3 | 2.4 |
| 1975 | 2.8 | 2.7 | 2.8 | 3.1 | 3.0 | 3.3 | 3.2 | 3.2 | 2.8 | 2.5 | 3.0 | 2.2 |
| 1976 | 2.6 | 2.6 | 2.2 | 2.3 | 2.5 | 2.3 | 2.4 | 2.7 | 2.4 | 2.4 | 2.7 | 1.8 |
| | EXCESS OF PERSONS REGISTERED OVER VACANCIES ('000) | | | | | | | | | | | |
| 1972 | 6.6 | 8.2 | 8.7 | 8.8 | 8.7 | 10.4 | 10.7 | 12.1 | 11.3 | 10.2 | 8.9 | 9.0 |
| 1973 (d) | 7.7 | 5.7 | 5.2 | 5.2 | 4.6 | 4.1 | 4.0 | 3.0 | 2.3 | 1.8 | 2.3 | 3.7 |
| 1974 | 2.6 | 1.7 | 1.2 | 1.3 | 3.3 | 3.3 | 5.6 | 7.0 | 8.8 | 12.3 | 15.2 | 16.3 |
| 1975 | 17.8 | 19.8 | 19.5 | 21.2 | 19.6 | 19.6 | 18.9 | 21.0 | 23.3 | 23.8 | 23.4 | 22.3 |
| 1976 | 20.3 | 19.7 | 21.0 | 19.9 | 18.0 | 19.6 | 20.2 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Includes Northern Territory.

(b) Figures are subject to revision.

(c) Persons who claimed they were unemployed.

(d) Break in continuity of series from July 1973 because of revised definition of school leavers.

EMPLOYMENT SERVICES

The Commonwealth Employment Service, administered by the Department of Employment and Industrial Relations, commenced operations in South Australia in May 1946. The main functions of the Employment Service are to assist people seeking employment to obtain positions best suited to their training, experience, abilities and qualifications; and to assist employers seeking labour to obtain employees best suited to the demands of the employers' particular class of work.

Before unemployment benefit can be paid, persons seeking such benefit must be registered with the Employment Service which is responsible for certifying that suitable employment is not available.

Specialised facilities are provided for young people, persons with physical and mental handicaps, ex-members of the defence forces, Aborigines, migrants, rural workers, and persons with professional and technical qualifications. Vocational counselling by psychologists is provided without charge. The Department of Employment and Industrial Relations is also responsible for the administration of the National Employment and Training System (NEAT), a vocational

training scheme designed to assist persons whose employment prospects would be enhanced by training. Further information on the NEAT scheme is contained in Part 6.2 Education.

The Commonwealth Employment Service is responsible for placing in employment migrant workers sponsored by the Commonwealth Government under the Commonwealth Nomination and similar schemes. This includes arranging for them to move to their initial employment. Experts required for overseas service under technical aid programs are recruited by the Employment Service.

In association with placement activities, regular surveys of the labour market are carried out. These include a monthly survey of employment in larger private factories covering a number of factories with 50 or more employees. A survey of the level of overtime and/or short-time being worked is conducted concurrently with this survey.

The Department of Employment and Industrial Relations operates twelve Commonwealth Employment Service offices, including a Professional Employment Office, in the metropolitan area and has offices in eight country areas backed up by agents in smaller centres. The Professional Employment Office in Adelaide specialises in the placement of more highly qualified and professional applicants.

There are also a number of private employment agencies, all of which are required to register with the Department of Labour and Industry. At 31 December 1976 there were thirty-seven such agencies registered.

7.2 ARBITRATION AND INDUSTRIAL ORGANISATIONS

INDUSTRIAL ARBITRATION

In Australia a unique system of conciliation and arbitration by Government-established tribunals has been developed, with the Commonwealth and the State Parliaments each passing their own industrial legislation.

Under Section 51 of the Constitution, the Commonwealth Parliament may make laws in relation to 'conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State'. In addition the Parliament may legislate under certain industrial powers for the stevedoring industry, the maritime industry, the Commonwealth Public Service, certain national projects, the Snowy Mountains Area and flight crew officers. Federal arbitration is binding only on the parties to a dispute and decisions need not be of general application to an industry.

Employees not specifically covered by Federal awards are subject to State industrial jurisdiction, but where an award or determination of a State industrial tribunal is in conflict with an award of a Federal tribunal, the latter prevails.

Federal Industrial Tribunals

Before 1956 a Court of Conciliation and Arbitration was responsible for the prevention and settlement of industrial disputes extending beyond the limits of any one State. In that year substantial amendments were made to the Conciliation and Arbitration Act separating the judicial and arbitral functions of the Court by the establishment of the Australian Industrial Court and the Australian Conciliation and Arbitration Commission.

The Industrial Court, which is comprised of a Chief Judge and up to eleven other Judges, interprets and enforces awards, passes judgment on questions of law and determines questions arising in relation to organisations registered under the Act. Decisions of the Industrial Court are final, although in certain matters an appeal lies to the High Court, but only by leave of the High Court.

The Conciliation and Arbitration Commission comprises a President and as many Deputy Presidents and Commissioners as are necessary.

State Industrial Tribunals

The South Australian legislation governing State intervention in industrial relations is the Industrial Conciliation and Arbitration Act, 1972-1975, the principal Act having come into operation on 1 January 1973. This Act, which made various changes in the existing industrial law provides for:

- (1) An Industrial Court which deals with matters of law and hears claims for recovery of money payable under awards or agreements;
- (2) An Industrial Commission which makes awards covering workers not under the jurisdiction of Conciliation Committees; and
- (3) Conciliation Committees which make or vary awards for an industry or area of the State in relation to which each Committee is appointed.

The President and any Deputy President of the Industrial Court are Judges of that Court. The Court itself consists of one or more Judges or the Industrial Magistrate as the President directs. The President and each Deputy President of the Industrial Court are also President and Deputy Presidents respectively of the Industrial Commission. Arbitral functions of the Commission may be exercised by a presidential member or a Commissioner as directed by the President. When required a Full Commission is constituted by either two presidential members and a Commissioner or a presidential member and two Commissioners as directed by the President.

Although the President and Deputy President must be persons eligible for appointment as Judges of the Supreme Court, the four Commissioners appointed by the Governor do not require law qualifications. The Act provides that one-half of the number of Commissioners must be experienced in industrial affairs through association with employers' interests, and the other half must have similar experience by having been associated with trade union affairs.

Conciliation Committees with a Commissioner as chairman are appointed for a three year term by the Minister of Labour and Industry on the recommendation of the President and have the same jurisdiction in industrial matters as the Commission. If the process of conciliation before a Committee fails, then the Chairman sits as a Commissioner to determine the unresolved matters. All awards, both those made by the Commission and those made by Committees, operate as common rules in the industries concerned, unless the Commission determines otherwise.

Provision is made for the Commission, when constituted by a single member, or for the Chairman of a Conciliation Committee, to consult with the President as to whether a matter should be dealt with by the Full Commission and he is required to consult with the President on the application of any party to an industrial matter before him.

There is a right of appeal against awards and decisions of the Commission, when constituted by a single member, or of a Conciliation Committee. The appeal is heard by the Full Commission.

The Industrial Court may hear claims for the recovery of sums due under contracts of service, awards or registered agreements both Federal and State, and claims for long service leave, but it does not have power to award costs against either party. Where the claim has been heard by the Industrial Magistrate an appeal may be heard by a Judge of the Industrial Court.

Proceedings against persons or organisations breaching an award are heard in a Court of Summary Jurisdiction, which is normally constituted by the Industrial Magistrate, although where a question of law is involved the matter may be referred to the Industrial Court.

Proceedings before the Industrial Commission may be commenced by an application submitted by:

- (i) the Minister of Labour and Industry;
- (ii) an employer, or group or registered association of employers in an industry employing in the aggregate not less than twenty employees or 75 per cent of the employees in the industry, whichever is the lesser; or
- (iii) a group or registered association consisting of not less than twenty employees or 75 per cent of the employees within an industry, whichever is the lesser.

At 31 December 1976 there were seven associations of employers and seventy-two associations of employees registered with the Industrial Registrar. Membership of these employee associations totalled approximately 212 000 at 31 December 1976.

The Industrial Conciliation and Arbitration Act, 1972-1975 also provides that every full-time employee shall be entitled to the general standard of annual leave as determined by the Full Commission. It also enables the Industrial Commission to prescribe in awards preference for employment to members of registered associations where all factors relevant to the employment of such members and all other persons affected are otherwise equal. The Act also gives the Court jurisdiction to hear any question as to whether the dismissal of an employee is harsh, unjust or unreasonable, and has power to direct the employer to reinstate the dismissed employee to his former position on terms not less favourable than those held previously.

EMPLOYEE ORGANISATIONS

At 31 December 1975 there were 135 separate unions operating in South Australia; although a number of unions exist only in this State, branches of interstate or federated unions account for the majority of total membership. Some of these are bound under a system of unification with centralised control while others are practically independent and self-governing, the federal bond existing only for limited specified purposes.

The following table gives particulars of the number of separate unions and union membership for the years 1971 to 1975. The table includes estimated percentages of trade union members to total wage and salary earners in

employment. The estimates of total wage and salary earners have been derived by adding figures for employees in agriculture and private households employing staff to the estimates of employees in all other industries at the end of each year. The percentages shown should be regarded as giving only a broad indication of the extent of union membership among wage and salary earners because they are based on estimates of *employed* wage and salary earners that are subject to revision. The degree of unemployment of reported union members would affect the percentages for a particular year and comparisons over time. The employment estimates have recently been revised to incorporate new benchmarks derived from the 1971 Population Census and other sources and are now classified according to the Australian Standard Industrial Classification.

**Trade Unions, South Australia
At 31 December**

| Year | Separate Unions | Members | | | Proportion of Members to Total Wage and Salary Earners | | |
|----------------|-----------------|---------|---------|---------|--|---------|---------|
| | | Males | Females | Persons | Males | Females | Persons |
| | No. | | '000 | | Per cent | | |
| 1971 | 139 | 172.1 | 43.8 | 215.9 | 63 | 32 | 52 |
| 1972 | 132 | 171.6 | 52.1 | 223.7 | 62 | 36 | 53 |
| 1973 | 135 | 181.6 | 60.2 | 241.8 | 64 | 39 | 55 |
| 1974 | 135 | 189.4 | 63.4 | 252.8 | 66 | 39 | 56 |
| 1975 | 135 | 187.3 | 68.2 | 255.6 | 66 | 41 | 57 |

The central labour organisation for the State is the United Trades and Labor Council of South Australia, and combined union councils exist for Mount Gambier, Port Augusta, Port Lincoln, Port Pirie, the Upper Murray, Leigh Creek and Whyalla. These central organisations, together with individual unions are affiliated with the Australian Council of Trade Unions (ACTU). All major unions are affiliated with the ACTU, which was founded at an All-Australian Trade Union Congress in 1927. The Trades and Labor Council is the State branch of the ACTU and has the right to appoint one representative to act on the executive of the ACTU.

A historical summary of the growth of the trade union movement in South Australia was included on pages 280-1 of the *South Australian Year Book* 1969.

EMPLOYER ORGANISATIONS

In industrial matters there are three dominant employer organisations in the State. These are the South Australian Employers' Federation Inc., which was founded in 1889, the Chamber of Commerce and Industry (SA) Inc., which resulted from the amalgamation in 1973 of the South Australian Chamber of Manufactures Inc. (established in 1869) and the Adelaide Chamber of Commerce Inc. (established in 1839) and the Metal Industries Association, South Australia (MIASA), which was established in its current form in 1940, but whose origins date back to 1869. The Federation, the Chamber and MIASA provide industrial services for the majority of South Australian employers and employer groups.

The South Australian Employers' Federation is an incorporated body being largely a federation of employer associations, although provision is made for individual membership. In 1976 there were thirty-two affiliated associations encompassing some 10 500 employers, and approximately 1 000 individual members. The Federation is maintained by fees paid by members, together with charges made for industrial actions, and from secretarial charges from member associations for which the Federation acts as secretariat. A council, which contains a representative from each of the member associations and a number of personal representatives from member companies, is elected annually. The executive of the Federation is elected from the council by members at the annual general meeting.

Services provided by the Federation include the negotiating and drafting of industrial agreements, and the preparation and presentation of cases before Federal and State industrial tribunals. Advice is provided on existing awards and determinations, and on various aspects of industrial legislation. A comprehensive industrial service letter is forwarded to all members and affiliated associations monthly.

The Chamber of Commerce and Industry has 4 000 members who subscribe directly to the Chamber for the industrial and other services provided. Where appropriate, Chamber members are grouped into trade associations, of which eighty are currently active. The Chamber's industrial advocates represent employers before both Federal and State Industrial Commissions in the making and variation of awards, and assist members in the settlement of disputes. The Chamber monitors Bills presented to the Commonwealth and State Parliaments and, where appropriate, makes representations on behalf of its members seeking amendments to the legislation. Research and investigation is continually being made into the areas where industrial action is likely to occur within the next five to ten years and in other areas where innovation, on the part of employers, can be expected to improve labour relations within their operations.

The principal employers' organisation registered under the provisions of the Commonwealth Conciliation and Arbitration Act is the Metal Industries Association, South Australia (MIASA). The Association represents the varied interests of South Australia's large metal and engineering manufacturing sector by monitoring developments in industrial relations, education and training, trade, economic and legislative matters. MIASA has established sections at Whyalla and the Elizabeth/Salisbury areas, and is affiliated with the Chamber of Commerce and Industry (SA) Inc. at the State level and the Metal Trades Industry Association at the national level.

WORKER PARTICIPATION

In February 1972 two committees were appointed by the South Australian Cabinet to inquire into worker participation in management. One committee was to examine and report on the feasibility of introducing worker participation into industry and commerce in South Australia, the other to examine and report on worker participation in the public sector.

In April 1973 both committees recommended that the Government encourage the introduction of worker participation in management in the form of job

enrichment schemes and joint consultative councils, and that a unit should be established in an appropriate Government department to advise and assist management and trade unions on all aspects of worker participation.

Consequently, a Worker Participation Branch was set up in the Department of Labour and Industry and became fully operational in February 1974. Its main role was encouraging the redesign and humanising of jobs, and the development of joint consultation to allow people to become more involved in decisions that affected their working lives. Some developments have occurred in these areas but more especially considerable interest has arisen from all sections of the industrial community and a much higher level of understanding now exists and is continuing to grow among workers, trade unionists and managers.

The experience gained by the middle of 1975 led the Government to reconsider the effectiveness of the arrangements it had initially made in 1974 and it sought advice from various quarters. As a result, a new policy was evolved which was more specific in its provisions and indicated clear guidelines for future developments without being unduly rigid in its approach or imposing any fixed time scale for developments. The modification of the original ideas reflected in the new policy is exemplified by the change of title to Industrial Democracy Unit by which name the Worker Participation Branch is now known. Simultaneously with the adoption of the policy and the change of name, the Unit was transferred from the Department of Labour and Industry to the Premier's Department to reinforce its policy implementation role.

The policy guidelines established in 1975 provided the general framework within which particular statements for the private sector, public sector, methods of implementation and similar aspects could be developed. One aspect of the policy was the adoption of the term 'industrial democracy' rather than other terms, as more accurately reflecting the sense of the State Government's intentions.

To enhance the chances of success in any individual industrial democracy project it is important that the many points of view which might be present are taken into account. To help the State Government in this area, two specialist committees have been established. The first of these is the Tripartite Advisory Committee on Industrial Democracy. Its function is to inform both the private and public sectors of industry and their trade unions and representative organisations, of the State Government's initiatives, and in turn keep the State Government informed of reactions to those initiatives. It also gives advice on sponsoring projects and overviews progress. Its membership comprises representatives from senior managers of Adelaide private companies and public sector organisations, leading blue and white collar trade unionists from both public and private sectors, and representatives of key Government departments with responsibility for significant policy aspects. The second committee, the Public Service Advisory Committee, is concerned with the special circumstances which arise in implementing an industrial democracy program in public service departments. It is concerned with co-ordinating separate activities, assessing priorities, providing resources within budgetary limitations, and with resolving issues which arise from interpretation of government policy in Public Service departments.

Emphasis is continuing to be directed towards public sector organisations and a number of Public Service departments have industrial democracy schemes operating. Some of them are still only in a preliminary stage of development

while some others have reached more complex stages and have begun to share decision-making functions between employees and management on specific issues. A number of the more significant statutory authorities have also begun development of systems appropriate to their own structure.

In the private sector some companies have taken initiatives, in some instances with the help of State Government resources and in some others independently. The nature of these projects range from development of new work organisations for individual small scale work areas, to consideration of company-wide profit and ownership sharing schemes.

In all these developments, a significant factor in their success or otherwise is a requirement for education in concepts of industrial democracy and the implications for organisations, trade unions, and employees. A distinctive feature of 1976 is the number of seminars, conferences, workshops and individual enterprise educational programs which have taken place directed to such ideas. This process of education is supplemented by an Industrial Democracy Newsletter.

INDUSTRIAL DISPUTES

Details of the number and extent of industrial disputes occurring in South Australia are shown in the next table. Effects on other establishments because of lack of materials, disruption of transport services, power cuts, etc. are not included in these statistics.

Industrial Disputes, South Australia^(a)

| Period | Disputes | Workers Involved (b) | Working Days Lost | Estimated Loss in Wages |
|-------------------------|----------|----------------------|-------------------|-------------------------|
| | | | | \$'000 |
| Annual Averages: | | | | |
| 1951-55 | 30 | 17 800 | 50 500 | 310.0 |
| 1956-60 | 24 | 12 800 | 22 400 | 157.4 |
| 1961-65 | 39 | 18 500 | 26 000 | 234.6 |
| 1966-70 | 82 | 45 100 | 62 600 | 717.6 |
| 1971-75 | 156 | 71 300 | 149 600 | 2 752.0 |
| Year: | | | | |
| 1971 | 135 | 64 100 | 111 200 | 1 484.9 |
| 1972 | 111 | 49 800 | 60 900 | 858.0 |
| 1973 | 159 | 56 900 | 130 600 | 2 144.0 |
| 1974 | 180 | 116 300 | 316 500 | 6 105.1 |
| 1975 | 194 | 69 600 | 127 600 | 3 168.2 |
| 1976 | 118 | 130 400 | 151 800 | 4 285.2 |

(a) Disputes involving a stoppage of work of ten man-days or more.

(b) Includes workers indirectly involved at the establishments where the stoppages occurred.

Particulars of all disputes in progress during the year are included in the annual figures. Consequently, details of the number of disputes and of workers involved in the disputes which commenced in any year, and were still in progress during the following year, are included in the figures for both years. Working days and wages lost are included in the appropriate year. Workers involved in more than one dispute during the year are counted once for each dispute. Because of difficulties in identifying all participants in every dispute the statistics should be regarded as giving only a broad measure of the extent of work stoppages.

In the following table industrial disputes occurring during 1976 are compiled according to the Australian Standard Industrial Classification (ASIC). A dispute involving workers in more than one industry group is counted once only and is included in the industry group which has the largest number of workers involved. Other details are allocated to their respective industry groups.

Industrial Disputes: Industries, South Australia, 1976 (a)

| Industry | Disputes | Workers Involved (b) | Working Days Lost | Estimated Loss in Wages |
|--|------------|----------------------|-------------------|-------------------------|
| | | '000 | '000 | \$'000 |
| Agriculture, forestry, fishing and hunting | — | 0.2 | 0.2 | 7.2 |
| Mining | — | 1.1 | 1.1 | 29.5 |
| Manufacturing: | | | | |
| Food, beverages and tobacco | 6 | 10.2 | 10.2 | 296.7 |
| Textiles; clothing and footwear | — | 2.6 | 2.6 | 62.1 |
| Wood, wood products and furniture | — | 4.6 | 4.6 | 119.5 |
| Paper and paper products, printing and publishing | 2 | 2.9 | 3.0 | 89.5 |
| Chemical, petroleum and coal products | 2 | 1.0 | 0.9 | 27.0 |
| Metal products, machinery and equipment (c) | 36 | 48.7 | 51.7 | 1 488.5 |
| Other manufacturing (d) | 7 | 4.9 | 7.0 | 188.0 |
| Electricity, gas and water | 4 | 2.7 | 2.8 | 83.6 |
| Construction | 21 | 19.0 | 27.5 | 809.8 |
| Wholesale and retail trade | 7 | 5.4 | 15.4 | 388.2 |
| Transport and storage, communication: | | | | |
| Water transport | 4 | 0.9 | 0.9 | 25.2 |
| Railway transport, air transport | 7 | 8.7 | 8.6 | 242.1 |
| Road transport, other transport and storage, communication | 13 | 8.7 | 10.2 | 292.9 |
| Entertainment, recreation, restaurants, hotels and personal services | 1 | 4.2 | 3.7 | 91.8 |
| Other industries | 14 | 4.6 | 1.5 | 43.5 |
| Total | 118 | 130.4 | 151.8 | 4 285.2 |

(a) Disputes involving a stoppage of work of ten man-days or more.

(b) Includes workers indirectly involved at the establishments where the stoppages occurred.

(c) Includes basic metal products, fabricated metal products, transport equipment and other industrial machinery and equipment and household appliances.

(d) Includes non-metallic mineral products and leather, rubber and plastic products.

7.3 WAGES AND HOURS

WAGES

Before the National Wage Cases of 1967, wages consisted of two distinct elements, a basic or living wage and a margin or loading which was appropriate to the employee's occupation. A more detailed description of these elements was included on pages 253 and 257-8 of the *South Australian Year Book 1967*.

The total wage concept was accepted by the decision of the Conciliation and Arbitration Commission in June 1967. The application of this concept (until the introduction of wage indexation guidelines in 1975) limited the number of national wage cases in any year to one and provided the Commission with a flexible basis for decisions.

National Wage Fixation

The *Conciliation and Arbitration Act* 1904 gives the Australian Conciliation and Arbitration Commission power to make an award or to certify an agreement 'making provision for, or altering, rates of wages, or the manner in which rates of wages are to be ascertained, on grounds predominantly related to the national economy and without examination of any circumstance pertaining to the work upon which, or the industry in which, persons are employed'. The Commission holds wage inquiries from time to time with its findings applicable to industrial awards within its jurisdiction. A detailed account of the history of national wage fixation before the introduction of the total wage concept appears in the Arbitration Reports and a summary was included on pages 257-60 of the *South Australian Year Book* 1968.

The National Wage decision handed down by the Commission in May 1974 increased the total wage rates prescribed for adult males and adult females by 2 per cent of current award rates plus a flat amount of \$2.50 per week, with male and female juniors and apprentices receiving proportionate increases. The minimum wage for adult males was increased by \$8 bringing it to \$67.60 per week.

It was also decided to extend the adult male minimum wage to adult females in three stages, commencing at 85 per cent of the male rate, increasing to 90 per cent by the beginning of the pay-period in which 30 September 1974 occurred and to 100 per cent from the beginning of the pay-period in which 30 June 1975 occurred. Thus the minimum wage for adult females was initially \$57.50 per week. On subsequently becoming 90 per cent of the adult male rate, the adult female minimum wage became \$60.80 per week and in December 1974 when the Commission increased the male rate a further \$8 to \$75.60 per week operative from the beginning of the first pay-period commencing on or after 1 January 1975, the female rate rose by \$7.20 to \$68 per week.

In the 1975 National Wage decision, wage indexation was the major issue. The Commission indicated that the critical aspects were the magnitude of pay increases outside indexation and national productivity increases, which in turn depended on what wage fixing principles were selected to operate in conjunction with indexation.

On 30 April 1975 the Commission decided on a 3.6 per cent increase in all award rates, based on the increase in the Consumer Price Index for the March 1975 quarter, to operate from the beginning of the first pay-period commencing on or after 15 May 1975.

The adult male minimum wage was increased by \$4 (inclusive of the 3.6 per cent increase on account of the March 1975 quarter Consumer Price Index) to \$79.60 per week and the female rate increased by \$3.60 to \$71.60 per week.

From the beginning of the pay-period in which 30 June 1975 occurred, the female rate increased to \$79.60 per week, completing the final stage of extending the adult male minimum wage to adult females.

On 18 September 1975, the Commission varied all awards and determinations in accordance with the June quarter 1975 increase in the Consumer Price Index of 3.5 per cent, the increase being operative from the beginning of the first pay-period commencing on or after 18 September 1975. The minimum wage was increased by \$2.80 to \$82.40 per week.

The 0.8 per cent increase in the Consumer Price Index for the September 1975 quarter was carried forward and considered in conjunction with the 5.6 per cent increase in the December 1975 quarter. Thus on 13 February 1976 the Commission increased wages and salaries prescribed in all Federal awards and determinations by 6.4 per cent as from the beginning of the first pay-period commencing on or after 15 February 1976. This decision increased the minimum wage by \$5.30 to \$87.70 per week and a further decision in March 1976 increased it another \$5 to \$92.70 per week from the first pay-period commencing on or after 1 April 1976.

In its decision on 28 May 1976, the Commission decided to award a 'plateau indexation' increase. This meant that the Federal minimum wage for South Australia and all Federal award wage and salary rates up to \$125 per week (the approximate average male award rate) were increased by the full 3.0 per cent increase in the Consumer Price Index while the increase above that level was a flat \$3.80 per week. Thus the Federal minimum wage for South Australia rose by \$2.80 to \$95.50 per week. The increases were backdated to the beginning of the first pay-period commencing on or after 15 May 1976.

On 12 August 1976, the decision was to apply the full 2.5 per cent increase in the June 1976 quarter Consumer Price Index to the lowest wage in the Metal Industry Award for Melbourne, *i.e.* \$98 per week. The resulting \$2.50 per week was granted to those on award rates up to and including \$166 per week (the average weekly earnings per employed male unit for the March 1976 quarter). For those above that amount the increase was 1.5 per cent. The Federal minimum wage for South Australia was raised by \$2.50 to \$98 per week and all increases operated from the beginning of the first pay-period beginning on or after 15 August 1976.

The full increase of 2.2 per cent in the Consumer Price Index for the September 1976 quarter was applied to all award rates and operated from the beginning of the first pay-period commencing on or after 22 November 1976. Hence the Federal minimum wage for South Australia was increased by \$2.20 to \$100.20 per week.

State Wage Fixation

For many years, all awards of both the State Industrial Commission and Conciliation Committees created under the Industrial Conciliation and Arbitration Act, 1972-1975 had included a 'living wage' for both adult male and adult female employees. In determining such living wages, the Full Commission could, as deemed fit, take into consideration any decision of the Australian Conciliation and Arbitration Commission which related to awards of that tribunal and was likely to affect employees subject to awards in South Australia. As such, in May 1975 the Full Commission granted a 3.6 per cent increase in all ordinary award rates to employees under State awards and agreements, being

a flow-on of the National Wage decision of 30 April 1975. The living wage for adult males was increased to \$48·20 per week and to \$38·60 for adult females.

However, the Industrial Conciliation and Arbitration Act provided that no new determination of a South Australian living wage could be made until at least 6 months from the date of the previous determination. Thus in September 1975 the Act was amended to facilitate flows-on from quarterly National Wage decisions by deleting reference to the living wage, award rates thereafter being specified as total wages.

Following a recommendation by the Australian Conciliation and Arbitration Commission concerning indexation of over-award payments, the State Government agreed in late September 1975 to make wage rises due to indexation apply to over-award and service payments for weekly paid Government employees and to back date the decision to 15 May 1975, the beginning of indexation.

In a judgment by the Full Commission in October 1975 it was ruled that the Commission had the power to make 'paid rates' awards as well as 'minimum rates' awards. This judgment means that it is now possible for over-award payments to be built into awards, leading to greater uniformity in wage rates for employees under State awards.

In December 1975, the Full Commission finally adopted the Federal wage indexation guidelines but reserved the right to deal with anomalous situations outside the scope of wage indexation.

The Full Commission went a step further than the Australian Conciliation and Arbitration Commission in June 1976, when it ruled that, under State awards service payments, leading hand rates and other special allowances should be included in the ordinary rates to which indexation rises apply.

Equal Pay

In recent years there have been significant developments in the attitude of government and arbitration authorities towards the awarding of equal pay for male and female employees.

In 1965 the South Australian Government decided to introduce progressively, over five years from July 1966, equal pay for women teachers employed by the Education Department. In 1966 this principle was extended to the State Public Service.

In June 1969 the Australian Conciliation and Arbitration Commission, in what was accepted as a test case, granted equal pay to some women in the meat processing industry, set a timetable for implementation of equality of remuneration by 1 January 1972, and set out principles to be followed by individual commissioners or the Public Service Arbitrator in deciding future applications for the extension of equal pay provisions to other awards. In February 1970, Commissioner Winter of the Australian Conciliation and Arbitration Commission granted progressive increases in the pay rates of adult female process workers employed under the Australian Metal Trades Award, so that from 1 January 1972 their rates would be equal to adult male rates.

In a decision handed down on 15 December 1972, the Full Bench of the Commission decided to enlarge the concept of 'equal pay for equal work' to that of 'equal pay for work of equal value,' i.e. award rates for all work should be con-

sidered without regard to the sex of the employee. The new principle is applied to all awards of the Commission. However, it was considered that the social and economic consequences of the decision would be wide-ranging and so under normal circumstances implementation would take place by three equal instalments so that one-third of any increase was payable no later than 31 December 1973, half of the remainder by 30 September 1974 and the balance by 30 June 1975. Under principles established in 1969, equal pay was to be given for equal work and the decision was not intended to rescind those principles under which females could become entitled to equal pay earlier than they would under the December 1972 decision.

Subsequent to the decision there were instances of agreements guaranteeing full equal pay earlier than required by the decision. The most notable was the granting of equal pay to women in the Commonwealth Public Service during 1973.

In the 1972 decision, the Commission rejected the claim that adult females be paid the same minimum wage as adult males because of the family considerations involved in male minimum wages. However, in the 1974 National Wage Case the Commission discarded the family component concept and decided to extend the male minimum wage to females in three stages, the rates for both males and females becoming equal from the beginning of the pay-period in which 30 June 1975 occurred.

Following an amendment to the Industrial Conciliation and Arbitration Act in September 1975, the concept of a separate State living wage for both males and females was abolished by a decision of the Full Bench of the South Australian Industrial Commission handed down on 15 December 1975. This, together with the repeal of Section 78 of the Act relating to equal pay, eliminated discrimination between the sexes and removed an inhibiting factor on the State Industrial Commission making equal pay decisions. Applications to the Commission to introduce equal pay provisions must be made in respect of individual awards.

A historical discussion on the relativities of male and female wage rates was included on pages 290-2 of the *South Australian Year Book* 1970.

Award Wages

The minimum weekly amounts provided in awards, determinations, and registered agreements under Federal and State jurisdiction are known as award rates. The amounts shown in the following tables are a weighted average of minimum weekly wage rates payable to adult males and females in South Australia. Generally these are award rates; however, in a few cases where unregistered agreements are dominant in a particular industry, rates prescribed therein are used. The amounts shown should not be regarded as actual current averages, but rather as indexes expressed in money terms. The minimum rates used are for representative occupations within each industry, the weights for each occupation and industry being based on sample surveys conducted in 1954, with allowance made where necessary for subsequent changes in the industrial structure. Because of coverage difficulties rural industries are excluded. The statistics are designed to show movements in minimum wages as distinct from salaries, with the result that those awards, etc. which relate solely or mainly to salary earners have been excluded.

Classified as Federal are awards of, or agreements registered with, the Australian Conciliation and Arbitration Commission and the Coal Industry Tribunal, and determinations of the Commonwealth Public Service Arbitrator. Incorporated under the State heading are awards or determinations of, or agreements registered with, State industrial tribunals, together with any unregistered agreements used in the computations.

In the next table weighted average minimum weekly wage rates for males and females are shown for individual industrial groups.

Weekly Wage Rates: Industrial Groups, South Australia^(a)
At 31 December

| Industrial Group | 1972 | 1973 | 1974 | 1975 | 1976 |
|--|-------|--------|--------|--------|--------|
| Dollars | | | | | |
| ADULT MALES | | | | | |
| Mining and quarrying | 62.46 | 71.36 | 103.49 | 112.03 | 127.11 |
| Manufacturing: | | | | | |
| Engineering, metal works, etc. . . | 63.57 | 71.28 | 101.55 | 110.71 | 126.85 |
| Textiles, clothing and footwear . . | 61.66 | 71.17 | 91.49 | 107.35 | 123.37 |
| Food, drink and tobacco | 61.85 | 72.27 | 98.34 | 110.46 | 126.79 |
| Sawmilling, furniture, etc. | 61.39 | 75.06 | 99.88 | 107.12 | 122.87 |
| Paper, printing, etc. | 72.49 | 81.11 | 108.84 | 118.95 | 137.40 |
| All manufacturing groups | 63.87 | 72.67 | 100.89 | 110.91 | 127.36 |
| Building and construction | 68.92 | 77.59 | 106.60 | 127.65 | 144.48 |
| Railway services | 62.91 | 71.38 | 100.27 | 107.38 | 122.80 |
| Road and air transport | 62.16 | 73.23 | 104.63 | 112.52 | 129.18 |
| Shipping and stevedoring | 78.94 | 87.96 | 112.56 | 138.80 | 157.57 |
| Communication | 86.18 | 101.96 | 129.73 | 140.52 | 159.70 |
| Wholesale and retail trade | 66.05 | 75.90 | 104.19 | 112.35 | 132.19 |
| Public authority (n.e.i.) and com- munity and business services . . | 62.03 | 74.16 | 97.23 | 111.46 | 129.16 |
| Amusement, hotels, personal ser- vices, etc. | 57.93 | 70.30 | 92.44 | 105.47 | 120.22 |
| All industrial groups | 65.82 | 75.20 | 103.32 | 115.13 | 132.19 |
| ADULT FEMALES | | | | | |
| Manufacturing: | | | | | |
| Engineering, metal works, etc. . . | 53.30 | 61.80 | 92.19 | 99.00 | 121.89 |
| Textiles, clothing and footwear . . | 47.97 | 60.32 | 81.88 | 101.43 | 118.67 |
| Food, drink and tobacco | 45.98 | 57.56 | 89.51 | 99.07 | 121.31 |
| Other manufacturing | 49.10 | 60.67 | 87.21 | 100.56 | 121.45 |
| All manufacturing groups | 49.60 | 60.39 | 87.76 | 100.03 | 120.98 |
| Transport and communication . . | 59.38 | 74.98 | 101.81 | 113.16 | 132.10 |
| Wholesale and retail trade | 51.68 | 62.56 | 96.24 | 106.22 | 131.97 |
| Public authority (n.e.i.) and com- munity and business services . . | 50.15 | 61.64 | 90.85 | 104.85 | 122.81 |
| Amusement, hotels, personal ser- vices, etc. | 45.26 | 59.90 | 84.94 | 99.98 | 116.90 |
| All industrial groups | 50.50 | 62.11 | 91.47 | 103.34 | 125.11 |

(a) Weighted average minimum weekly rates payable for a full week's work (excluding overtime) as prescribed in awards, determinations and agreements. Excludes rural industries.

The following table shows weighted average minimum weekly wage rates for adult males and adult females with separate details shown for award rates within Federal and State jurisdictions. The index numbers refer to the weighted average minimum weekly wage rates of all awards.

Weekly Wage Rates, South Australia^(a)

| 31 December | Rates of Wage | | | | Index Numbers All Groups (Base: Australia 1954 = 100) | |
|---------------|----------------|---------------|--------------|---------------|--|---------------|
| | Federal Awards | | State Awards | | Adult Males | Adult Females |
| | Adult Males | Adult Females | Adult Males | Adult Females | | |
| | \$ | \$ | \$ | \$ | | |
| 1972 | 67.13 | 51.33 | 62.88 | 49.94 | 233.1 | 253.7 |
| 1973 | 76.21 | 63.67 | 73.00 | 61.03 | 266.3 | 312.0 |
| 1974 | 104.75 | 89.50 | 100.21 | 92.81 | 365.8 | 459.5 |
| 1975 | 117.57 | 103.82 | 109.07 | 103.02 | 407.6 | 519.1 |
| 1976 | 134.04 | 119.28 | 127.58 | 129.10 | 468.0 | 628.4 |

(a) Weighted average of minimum weekly rates payable for a full week's work (excluding overtime) as prescribed in awards, determinations and agreements. Excludes rural industries.

Holiday Pay

On 7 June 1972 a Full Bench of the Arbitration Commission handed down a decision which resulted in increases in annual recreation leave pay to a large number of Australian workers. The Bench ruled that over-award payments, shift work premiums, industry allowances and some other allowances should be included in holiday pay. General provisions only were introduced as each award was to be considered separately. Since September 1972, various awards have been altered to provide (in most cases) for a 17.5 per cent loading to be added to the payment which the employee would have received in respect of the ordinary time he would have worked had he not been on leave during the relevant period. Commonwealth public servants receive a 17.5 per cent leave loading up to a maximum of average weekly earnings for the September quarter of the year in which the leave accrued. Permanent and temporary officers of the South Australian Public Service (employed other than as seven day week workers) receive a 17.5 per cent leave loading subject to a maximum of \$150: seven-day week workers receive a 20 per cent loading (subject to the \$150 limit) or the allowances and penalties payable had the worker not been on leave during the relevant period, whichever is the greater.

EARNINGS

Figures given in this section relate to actual average weekly earnings (including award wages, salaries, overtime earnings, over-award and bonus payments and

prepayments) of all wage earners and salaried employees, whether adult or junior, full-time, part-time, or casual. Payments to members of the defence forces are excluded.

Particulars of wages and salaries are not available for males and females separately and average earnings have therefore been calculated by using total civilian employment expressed in terms of 'male units'. Male units represent total male employment plus a proportion of female employment based on the approximate ratio of female to male earnings.

Average Weekly Earnings per Employed Male Unit, South Australia

| Year | September Quarter | December Quarter | March Quarter | June Quarter | Year |
|---------|----------------------|---------------------|------------------|-----------------|--------|
| Dollars | | | | | |
| 1971-72 | 84.50 | 88.00 | 82.50 | 88.00 | 86.00 |
| 1972-73 | 88.70 | 95.00 | 90.30 | 99.50 | 93.40 |
| 1973-74 | 104.20 | 110.40 | 106.10 | 120.80 | 110.40 |
| 1974-75 | 129.80 | 141.80 | 137.40 | 145.30 | 138.60 |
| 1975-76 | 148.10 | 163.70 | 154.40 | 167.60 | 158.50 |
| 1976-77 | 175.00 | 182.80 | | | |

As quarterly figures are affected by seasonal influences, comparisons for trends should be made by relating complete years or corresponding quarters. Because of variation in coverage, etc. these figures cannot be related to the minimum weekly wage rates shown in the preceding section.

Separate estimates of the average weekly earnings of males and females, and of adults and juniors, shown in the next table, have been obtained from sample surveys conducted in the last pay-period of October for each year since 1972.

Average Weekly Earnings: Private and Government Employment South Australia^(a)

| October | Adult Males | | | Junior Males | Adult Females | Junior Females |
|---------|-------------|------------------|--------|-----------------|------------------|-------------------|
| | Overtime | Ordinary Time | Total | | | |
| Dollars | | | | | | |
| 1972 | 9.50 | 82.10 | 91.60 | 47.30 | 64.30 | 39.90 |
| 1973 | 12.40 | 96.70 | 109.10 | 56.00 | 77.40 | 47.20 |
| 1974 | 11.90 | 126.90 | 138.80 | 74.50 | 107.60 | 68.40 |
| 1975 | 9.80 | 144.60 | 154.40 | 85.00 | 125.20 | 79.00 |

(a) Full-time employees other than managerial, executive, professional and higher supervisory staff.

The surveys were based on a sample selection of private employers subject to payroll tax and details of employees in non-government hospitals not subject to payroll tax, employees of Commonwealth and State Government departments, authorities and semi-government bodies and local government authorities. Employees in agriculture and domestic service were excluded as were those of religious, benevolent and similar organisations exempt from payroll tax.

Similar surveys were also conducted in the last pay-periods of October for the years 1968 to 1971 but coverage in these years was restricted to private employers subject to payroll tax. Details of these earlier surveys were included on pages 344-5 of the *South Australian Year Book 1974*.

HOURS OF WORK

The 40-hour week is the standard working week for employees under Federal and State awards; however, the number of hours constituting a full week's work varies between occupations. Significant variations to this standard working week were achieved in the stevedoring industry during 1972 where a 70-hour fortnight has operated from June 1975. Certain Federal awards covering rural industries prescribe hours in excess of forty, while other occupations by tradition work less than forty hours, although forty hours is generally retained in their awards.

The weighted average standard hours (excluding overtime) prescribed in awards, determinations, and agreements for a full working week for adult male employees in all industries in South Australia, except rural, shipping, and stevedoring, was 39.95 hours at 31 December 1976. This compared with 43.83 hours at 30 September 1947 immediately before the introduction of the 40-hour week. The weighted average for female employees at 31 December 1976 was 39.77 hours. The weighted average figure for South Australian male employees has not changed significantly since 1953, nor for females since 1951. The normal working day in manual trades is of eight hours duration, and employees working beyond these hours are paid penalty rates.

The following table shows the relative distribution of employed civilian wage and salary earners in South Australia according to the number of hours worked in a specified week, as recorded in the August Labour Force Surveys. The distribution is based on actual hours worked, including overtime, rather than hours paid for, and is therefore affected by public holidays, leave, absenteeism, temporary absence from work because of sickness, accident and industrial disputes, and work stoppages caused by plant breakdowns and weather.

Employed Persons: Hours Worked, South Australia (a)

| August | Proportion who Worked the Following Hours in the Specified Week | | | | | | | Total |
|--------------|--|------|-------|-------|------|-------|---------|-------|
| | 0 | 1-29 | 30-34 | 35-39 | 40 | 41-48 | Over 49 | |
| | Per cent | | | | | | | |
| 1974 | 6.0 | 13.0 | 3.2 | 14.1 | 42.4 | 11.9 | 9.4 | 100.0 |
| 1975 | 7.0 | 13.6 | 4.2 | 14.5 | 40.6 | 12.1 | 8.0 | 100.0 |
| 1976 | 6.1 | 13.2 | 4.8 | 14.3 | 43.3 | 11.0 | 7.3 | 100.0 |

(a) Employed civilian population, fifteen years of age and over.

HOLIDAYS AND LEAVE

Public Holidays

A number of days are observed each year throughout the State as public holidays and additional days may be proclaimed either on a State-wide basis or applicable to particular localities. Employees required to work on public holidays normally receive an extra day's pay and are paid at penalty rates. From 1971 authorised public holidays are:

New Year's Day (1 January or the following Monday if that day falls on a Saturday or Sunday),

Australia Day (first Monday after 25 January),

Good Friday,

Easter Saturday,

Easter Monday,

Anzac Day (25 April or the following Monday if 25 falls on a Sunday),

Adelaide Cup Day (third Monday in May),

Queen's Birthday (usually observed on a Monday early in June),

Labour Day (second Monday in October),

Christmas Day (25 December or the following Monday if 25 falls on a Saturday or Sunday), and

Proclamation Day (28 December or the following Monday if 28 falls on a Saturday or Sunday).

The Holidays Act makes provision for other days to be proclaimed in lieu of the authorised holidays. Additional holidays may also be proclaimed.

Annual Leave

Under Federal awards generally, four weeks annual recreation leave is granted to employees who have completed twelve months continuous service and there are provisions for a proportionate payment where employment is terminated before the completion of twelve months. Under State awards the Federal standard has generally been adopted.

Employees of the South Australian Public Service are entitled to four weeks annual recreation leave. However, with the exception of some employees engaged in essential services *e.g.*, hospitals, motor vehicle registrations etc., State public servants are required to take three days of their recreation leave between the Christmas and New Year holidays. Commonwealth public servants were granted four weeks annual recreation leave from 1 January 1973.

Certain employees in special occupations or where regular shift work is involved *e.g.* police officers, nurses, etc., are entitled to annual recreation leave in excess of four weeks.

In 1973 the South Australian Industrial Commission handed down a decision which enabled part-time workers, when taking annual leave, to be paid the normal weekly wage they would have received had they been at work.

Sick Leave

The Industrial Conciliation and Arbitration Act, 1972-1975 for South Australia provides that all full-time employees shall be eligible to receive annually not less

than ten days cumulative sick leave on full pay. There is also provision for insertion in awards allowance for unlimited accumulation of such leave. Most Federal and State awards provide for two weeks sick leave a year.

Long Service Leave

In 1964 the Australian Conciliation and Arbitration Commission included, for the first time in a Federal award, long service leave, granting employees in the graphic arts and metal trades industries leave on the basis of thirteen weeks for twenty years service in respect of employment before the date of the decision, and eight and two-thirds weeks in respect of each ten years of subsequent service; these provisions have been extended to many other Federal awards. In a number of other cases, registered agreements provide for thirteen weeks leave after fifteen years service.

The South Australian Long Service Leave Act, 1967-1972 entitles employees, in respect of continuous service after 1 January 1972, to thirteen weeks leave for each ten years service. In respect of service before 1 January 1972 the entitlement is calculated at the rate of thirteen weeks for fifteen years service for the period 1 January 1966 to 31 December 1971 and at the rate of thirteen weeks for twenty years service for the employment period up to 31 December 1965. The obligation to grant leave is imposed on all employers in South Australia except in regard to employees entitled to long service leave pursuant to an award of the Australian Conciliation and Arbitration Commission. The Industrial Commission has the power to exempt an employer from the provisions of the Act where the employees involved have access to benefits not less favourable than those prescribed by the Act. Other provisions of the Act relate to payment for leave, deferment of leave, claim for leave on termination of employment, and notice of granting of leave.

State and local government employees are in general entitled to ninety calendar days leave after ten years service, and Commonwealth Government employees to three months after ten years service. The long service leave provisions which apply to State public servants are also extended to teachers employed under the Education Act.

The various long service leave arrangements provide for additional *pro rata* periods of leave for service in excess of the minimum, and for *pro rata* payments for employees who have completed a specified term of service but who, through the termination of their services or through death, do not complete the full entitlement period.

Maternity and Paternity Leave

In 1966 the Public Service Act was amended to enable a permanent female employee of the Commonwealth Public Service to absent herself from duty because of pregnancy for a period of twenty-six weeks at the time of confinement. The leave could be taken from sick leave, recreation leave or long service leave credits or as leave without pay. In 1973, new provisions were introduced which entitle female employees, whether permanent or temporary, to at least twelve weeks maternity leave on full pay and to a total period of absence of up to fifty-two weeks in respect of each confinement. Provisions for paternity leave were also introduced at this time. A male employee, permanent or temporary,

can apply for paternity leave provided he is the father, or a person accepting responsibility for the care and maintenance of an expected or newly-born child. Leave not exceeding one week, may be granted in the period one week before the expected date of birth of the child to five weeks after the actual date of birth.

Maternity leave provisions also exist for female employees of the South Australian Public Service. The maximum special leave without pay is twenty-six weeks but leave on full pay to which the officer has an entitlement may be used in addition to, or in substitution for the special leave. No paternity leave is available to male employees.

There are provisions in the Education Act for maternity leave for teachers in the South Australian Education Department with the maximum leave being fifty-eight weeks and the minimum fourteen weeks. Leave is taken without pay except when long service credits are used.

Maternity leave provisions have been introduced into some awards applicable to private industry in South Australia but the proportion of the workforce so covered is relatively small. Several Industrial Agreements filed with the South Australian Industrial Commission contain maternity and paternity leave provisions.

7.4 INDUSTRIAL SAFETY

SAFETY REGULATIONS AND INSPECTION

On the recommendation of the Parliamentary Select Committee on Occupational Safety, Health and Welfare in Industry and Commerce, a new Act, the Industrial Safety, Health and Welfare Act, was passed in 1972. This Act replaced those sections of the Industrial Code, 1967-1972 that dealt with the safety, health and welfare of persons employed in factories, shops, offices and warehouses and the Construction Safety Act, 1967 with respect to persons employed on building and construction sites.

Only general principles applicable to all employed persons in industry (primary as well as secondary), commerce and in State Government are contained in the Industrial Safety, Health and Welfare Act. It authorises the making of detailed provisions by regulations for different industries and different processes. The Act is progressively coming into operation for different industries as regulations are prepared. The Construction Safety Regulations, 1974 were the first to be prepared and apply to persons employed on building and construction sites. They came into force on 1 April 1974 and revoked all regulations made under the Construction Safety Act, 1967. The Rural Industries (Machine Safety) Regulations, 1975 and the Power Driven Machinery (Safety) Regulations, 1975 came into effect on 1 January 1975. The Industrial Safety Code Regulations came into effect on 1 September 1975.

At present most of the legislation directed at industrial safety is administered by the Department of Labour and Industry, although other authorities hold responsibilities in certain fields.

Department of Labour and Industry

The general working conditions in industrial premises (factories, shops, offices and warehouses) are regulated by the Industrial Safety Code Regulations, 1975, and the Shops and Offices Regulations, 1975. Inspections are made by Departmental officers to ensure that the requirements of the Safety Regulations with respect to safeguarding of machinery, safety of processes, cleanliness and general working conditions on industrial premises are being observed.

The registration and inspection of steam boilers and other pressure vessels is provided for under the Boilers and Pressure Vessels Act, 1968-1971. The Lifts and Cranes Act, 1960-1972 regulates the use of lifts, escalators, cranes and hoists, and requires the Department to approve new installations and to inspect regularly existing lift equipment. The Inflammable Liquids Act, 1961-1976, and the Liquefied Petroleum Gas Act, 1960-1973, regulate the storage and carriage of these products.

Department of Mines

Regulations under the Mines and Works Inspection Act, 1920-1970 provide for the health and safety of persons engaged in mining, quarrying or associated treatment plants and for the protection of the general public. Mining sites and camps must be maintained in safe condition with specific attention given to ventilation, sanitation, the use of explosives and the protection of the area amenity and environment. All mining operators are required to achieve some form of rehabilitation of areas disturbed by mining. The legislation includes operations conducted by local government authorities and road and rail construction authorities.

Officers of the Department inspect mines and quarries; ensure there is no undue impairment of the environment; check old workings; investigate mining accidents and complaints associated with mining activities; and give advice to industry on matters pertaining to mining and explosives.

Department of Public Health

Health aspects of industrial safety are the responsibility of the Occupational Health Branch of the Department of Public Health. The Department investigates health hazards resulting from the presence of toxic and noxious substances in industry, both on its own initiative and on reference from employers, unions, other authorities, and individuals. Hazards investigated include both chemicals and such physical agents as noise, heat and radiation, including the use of radio-active substances and irradiating apparatus for industrial, scientific, or medical purposes.

Department of Services and Supply (Chemistry Division)

The Explosives Act, 1936-1974 regulates the importation, manufacture, carriage, storage, and sale of explosives. The Chemistry Division is responsible for the maintenance of government magazines and the licensing and inspection of magazines. Vehicles used in the carriage of explosives are also licensed. Commercial explosives entering the State are inspected by the Division.

Electricity Trust of South Australia

Consumers' electrical installations are required to conform to the service rules of the Electricity Trust and the wiring rules of the Standards Association of Australia, and are subject to inspection by Trust officers. Persons engaged in

the installation, maintenance or repair of electrical installations and permanently connected equipment must be licensed to do this work in accordance with the provisions of the Electrical Workers and Contractors Licensing Act, 1965-1966. Under the Electrical Articles and Materials Act, 1940-1967 certain classes of electrical articles and materials may only be sold or hired or offered for sale or hire if they are of a type approved by the Trust or a recognised interstate authority.

WORKMEN'S COMPENSATION

Legislation

Provisions describing assistance for workmen sustaining personal injury out of or in the course of their employment are included in the Workmen's Compensation Act, 1971-1974. The provisions of the Act extend to injuries arising out of or in the course of employment and cover accidents during recess periods, travelling to or from work, travelling to or from or while in attendance at a place of pick up, travelling to or from or attending a trade or technical school, and travelling for medical treatment while on compensation.

An injury may be physical or mental. It includes diseases contracted and the aggravation or recurrence of an injury or disease including any pre-existing coronary heart disease.

Compensation is payable when the injury results in death, or in total or partial, permanent or temporary incapacity. Where death results from the injury, the Act provides for payment to members of the family wholly or partly dependent on the earnings of the deceased. In such a case, compensation will be an amount equal to the sum of the workman's earnings in the six years before the accident plus \$500 for each dependent child, with a maximum of \$25 000. If the workman has not been in the same employment for six years the amount will be his average weekly earnings in the job at which he was working at the time of the accident multiplied by 312, with a maximum of \$25 000. Where a workman dies leaving no dependants, compensation will be paid into the estate covering medical, funeral and other expenses with a maximum of \$500.

Where the injury does not result in death, the most common form of compensation is weekly payment. If incapacity is for one week or more compensation is an amount equal to average weekly earnings during the twelve months preceding the incapacity. The maximum liability of an employer is \$18 000, unless the workman is totally and permanently incapacitated, when it is \$25 000 or such greater amount as may be fixed by the Court having regard to the special circumstances of the case. Weekly payments must begin within two weeks of the workman providing the employer with a medical certificate and his declaration in the correct form stating that he believes himself entitled to compensation. The payment must be made to the workman on his usual pay day.

Provision is made for lump sum payments in lieu of weekly payments. Such payments are arranged by agreement; or after six months, by proceedings in the Industrial Court of South Australia on application of either employer or employee.

Lump sum payments are payable for certain specified injuries *e.g.* loss of limbs, for permanent injuries which may involve total or partial incapacity for work whether actual or potential *e.g.* speech loss, or no incapacity for work *e.g.* severe facial scarring.

In addition to other compensation reasonable medical, hospital, nursing, constant attendance, rehabilitation and ambulance expenses are paid and compensation is provided to \$150 for loss or damage to clothing and personal effects and \$300 for loss or damage to tools of trade.

Excluded from the scope of the Act are members of the crews of fishing vessels remunerated by a share in the profits or the gross earnings of the working of such vessels, service personnel and Commonwealth Government employees. Compensation for employees of the Commonwealth Government is provided by the *Compensation (Commonwealth Government Employees) Act 1971*.

Workmen's Compensation Insurance

The Workmen's Compensation Act requires every employer, unless specifically exempted, to obtain from a licensed insurance company a policy which fully covers his liability under the Act. The exemptions are the State Government which provides its own cover through the State Government Insurance Fund, the South Australian Railways Commissioner, and any employer who can satisfy the Minister of Labour and Industry of his ability to meet all probable claims and who is accordingly issued with a certificate of exemption.

PART 8

PHYSICAL DEVELOPMENT

8.1 WATER SUPPLY AND SEWERAGE

WATER SUPPLY

With 96 per cent of the State receiving less than 500 millimetres of rain a year, and high evaporation increasing the demand for water and causing heavy losses from reservoirs, water conservation is of vital importance to South Australia.

The Waterworks Act, 1932-1975 gives the Minister of Works power to divert and impound the water from any streams or springs and take the water found in or under any lands for the purpose of constructing, completing, extending or maintaining any waterworks or for supplying water to or in any water district. The Act also gives the Minister power to declare any district, place or town a water district. The function of exploiting water resources is performed through the Engineering and Water Supply Department.

In 1973, the State Government announced its new water resources management policy. This statement embraced the same important principles contained in a document *Proposed National Approach to Water Resources Management*, being developed under the auspices of the Australian Water Resources Council and adopted by the Commonwealth and State Governments in 1976.

With the Water Resources Act, 1976 coming into effect from 1 July 1976, the Control of Waters and Underground Preservation Acts were repealed.

South Australian Gulf Drainage Division

The eastern boundary of this Division is formed partly by the Mount Lofty Ranges which rise to a maximum of 727 metres east of Adelaide and to over 1 000 metres north of Burra and further north it follows the Flinders Ranges which reach a height of 1 166 metres at St Mary Peak. The boundary then rounds Lake Torrens and, further south, the western boundary is formed by a discontinuous line of hills on Eyre Peninsula. Kangaroo Island is also included, so that, in all, the Division covers the whole perimeter of the South Australian gulfs. The individual river basins in this Division are all very small.

Most of the South Australian reservoirs are situated in this Division as can be seen from the map on page 400. The following table shows the capacity, area at full supply level and the catchment area of the ten largest reservoirs at 30 June 1976.

Major Reservoirs, South Australia^(a)
At 30 June 1975

| Reservoir | Capacity | Area at Full Supply Level | Catchment Area |
|--------------------------|------------|---------------------------|-----------------|
| | Megalitres | Hectares | km ² |
| South Para | 51 300 | 444 | 228 |
| Mount Bold | 47 300 | 308 | 388 |
| Myponga | 26 800 | 280 | 124 |
| Kangaroo Creek | 24 400 | 121 | 289 |
| Millbrook | 16 500 | 178 | 233 |
| Happy Valley | 12 700 | 188 | 451 |
| Tod River | 11 300 | 134 | 196 |
| Bundaleer | 6 370 | 85 | 1 671 |
| Baroota | 6 140 | 63 | 136 |
| Warren | 5 080 | 105 | 119 |

(a) All reservoirs with a capacity in excess of 5 000 megalitres.

Rainfall in excess of 750 millimetres a year occurs only on a very small area in the Mount Lofty Ranges, while in the north-west of the Division the annual average is less than 150 millimetres. In the southern parts of the Division, average precipitation generally exceeds potential evaporation only from May to August, and over most of the Division monthly evaporation rates exceed rainfall throughout the year.

The average annual run-off in this Division at the lowest practical dam sites is estimated at 430 000 megalitres but is subject to considerable variation. The two best streams, the Onkaparinga and the Torrens, account for 135 000 megalitres of the average flow and the combined annual flow of these two has varied between 467 000 megalitres down to 8 600 megalitres in the last eighty years.

After the major dam sites in the Mount Lofty Ranges had been developed because of the small size of the individual catchments in the Division, and the relatively low run-off and its high variability, it was found more economical

to provide additional water to Adelaide and other high demand centres *via* pipelines from the River Murray. However, as demand continues to rise and problems with the quality of the River Murray water increase, attention is being re-directed to further development of streams within the Division.

The present average annual extraction of water by the Engineering and Water Supply Department from the Gulf Drainage Division is about 120 000 megalitres; private diversion may take a further 13 000 megalitres.

River Murray

The River Murray is the most important source of water supply for South Australia. Under the terms of the River Murray Waters Agreement (see page 407), South Australia is entitled to 1 546 810 megalitres of water annually and, after Dartmouth Reservoir has been completed and declared to be effective, this entitlement will be increased to 1 850 250 megalitres, subject to the declaration of restriction by the River Murray Commission. Most of this water is used for irrigation purposes but more than 120 000 megalitres is used for water supply. The completion of present works will provide pipelines with a capacity capable of meeting a demand of 400 000 megalitres annually.

Adelaide metropolitan water supplies are supplemented by River Murray water through the Mannum-Adelaide and Murray Bridge-Onkaparinga pipelines. The Morgan-Whyalla, Swan Reach-Stockwell and Tailem Bend-Keith pipelines provide the water supply for extensive country areas or augment local resources in these areas. The first water pumped through the Mannum-Adelaide pipeline reached the metropolitan system in 1954. The water is drawn from the River at Mannum nearly 67 kilometres in a direct line from Adelaide, and is raised by three pumping stations a total of 457 metres to a 137 megalitre summit storage near Tungkillo. At first the water flowed into the Torrens and Onkaparinga Rivers and hence into the metropolitan system; later the pipeline was extended to a terminal storage near Modbury. The Mannum-Adelaide pipeline is also connected to the Warren Reservoir on the South Para River and branches serve many country areas *en route*.

A second large pipeline to augment the metropolitan supply was completed in 1973. The pipeline extends for 48 kilometres from the River Murray near Murray Bridge to the River Onkaparinga near Hahndorf, and the water is distributed through the reservoirs on the latter stream. Three pumping stations lift the water 418 metres over the first 40 kilometres of the pipeline to a summit storage from which an 8-kilometre gravity section of the line discharges into the Onkaparinga. A branch main supplies the town of Murray Bridge and other branch mains supply areas in the Mount Lofty Ranges. This pipeline will be the source of supply for the new town of Monarto.

The Morgan-Whyalla pipeline, completed in 1944, includes four pumping stations which lift the water 478 metres over a distance of 92 kilometres from Morgan to a summit storage at Hanson. From here the water gravitates 267 kilometres *via* Port Augusta to Whyalla. Branch lines have been laid to Woomera (177 kilometres) and other country centres. The Morgan-Whyalla pipeline, being an additional source of supply for the Bundaleer system, has

permitted reticulation over most of Yorke Peninsula. A second main was completed in 1966 and appurtenant works comprising additional storages and four new pumping stations were commissioned early in 1970. The second main which more than doubles the capacity of the scheme, parallels the original main to Baroota Reservoir, then extends westerly to Whyalla *via* a 12-kilometre undersea crossing of Spencer Gulf.

A 53-kilometre pipeline between Swan Reach and Stockwell which connects to the distribution section served by Warren Reservoir commenced operating in 1969 to supplement the supplies for lower northern areas from the Murray. A 143-kilometre pipeline between Tailem Bend and Keith completed in 1969 forms the backbone of a scheme involving 800 kilometres of branch mains subsequently laid to supply River Murray water to towns and farmlands in the Upper South East. The River Murray also supplies towns along its banks by means of direct pumping.

Other Water Resources

Eyre Peninsula

Eyre Peninsula has no perennially flowing streams with the Tod River the only stream that can be relied upon in normal years to provide some flow of water. Underground basins, mainly in the southern portion of Eyre Peninsula provide most of the water supplies. Port Lincoln is supplied entirely with underground water available at shallow depth in the Lincoln Basin and Uley South Basin. The Uley-Wanilla Basin supplies Cleve and Cowell *via* the East Coast Main and also supplements the natural intake of the Tod Reservoir which was built in 1922 on a tributary of the Tod River.

A trunk main, 384 kilometres in length, from the Tod Reservoir to Ceduna and Thevenard was laid between 1923 and 1926 and a program of replacement and enlargement was completed in 1974. A 106-kilometre trunk main from Lock on the Tod Trunk Main supplies water to Kimba and intervening farmlands. This supply is augmented with water from the Polda underground basin. All above-ground sources of water on Eyre Peninsula are being fully utilised and any further supplies will have to come from underground sources.

South East

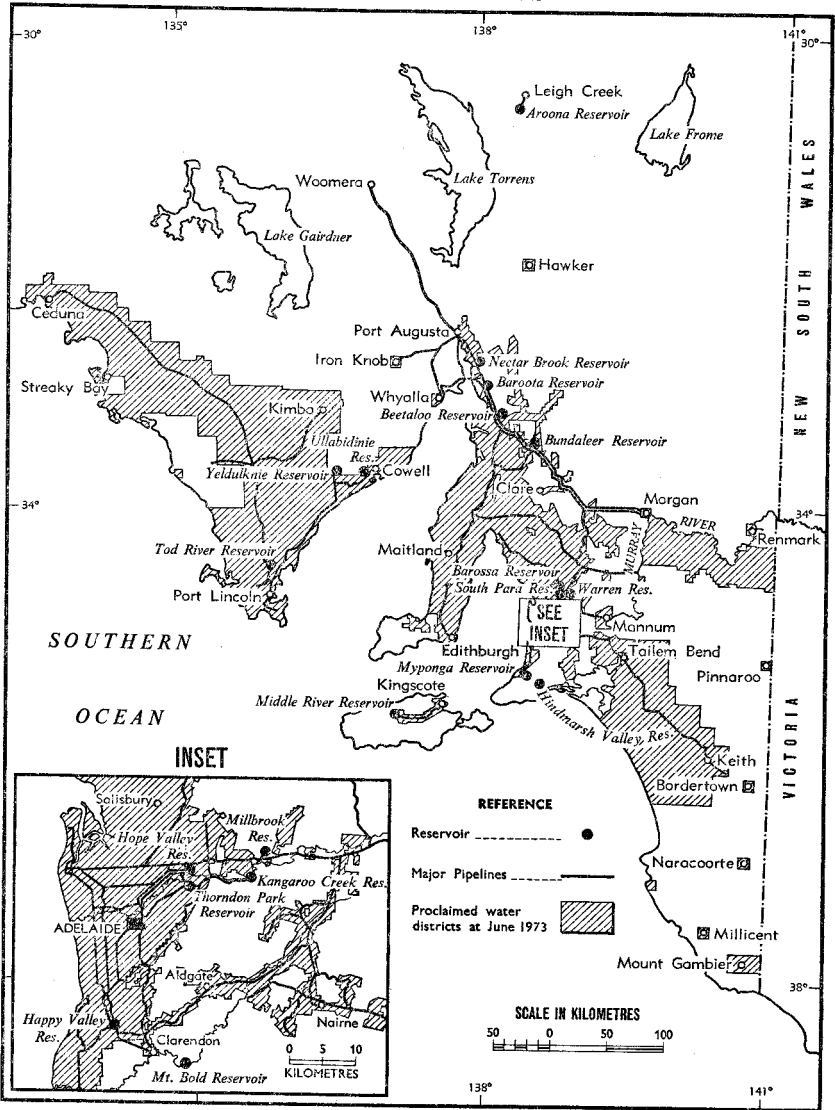
The hydrology of the South East covers a complex of surface and underground waters with substantial water resources but to date most work has been concentrated on the removal of water by drainage and this is discussed on pages 408-9.

Eight Mile Creek to the east of Port MacDonnell carries a permanent natural overflow from the springs of the Ewen Ponds area and discharges 60 000 megalitres a year into the Southern Ocean and there are other visible outlets. The Blue Lake now provides 4 000 megalitres annually to Mount Gambier. There is scope for considerable development in the South East and it is likely that 120 000 megalitres could be used annually from the underground water resources of the Region.

Other Underground Supplies

Many other areas of the State are dependent on underground supplies, particularly for stock drinking water. The aquifers of the North Adelaide Plains provide the major source of water for market gardens and related irrigation, but the demand level of 21 000 megalitres has been found to be beyond

PORTION OF SOUTH AUSTRALIA
WATER SUPPLIES



the permanent capability of the area. Usage is subject to Government control, and investigations on means of prolonging the life of the aquifers are in progress. A more complete discussion on underground water appears on pages 33-5.

Water Consumption

The following table gives details of water used during the year and storage capacity of major reservoirs at the end of the year for metropolitan and country districts for the years 1972-73 to 1975-76. The quantity of water pumped from the River Murray through the major pipelines is also shown.

Water Storage and Consumption, South Australia

| Particulars | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------|---------|---------|---------|
| Capacity of major storages (at end of year): | | | | |
| Adelaide metropolitan water supply (a) | 188 380 | 188 680 | 188 680 | 188 680 |
| Country water supply | 36 150 | 36 150 | 34 860 | 34 860 |
| Water consumption: | | | | |
| Adelaide metropolitan water supply (b) | 155 300 | 144 700 | 156 900 | 172 300 |
| Country water supply (c) | 74 100 | 67 700 | 76 400 | 82 800 |
| Pumped from River Murray: | | | | |
| Mannum-Adelaide pipeline | 51 600 | 22 200 | 19 300 | 39 000 |
| Murray Bridge-Onkaparinga pipeline | — | 7 500 | 3 700 | 5 800 |
| Morgan-Whyalla pipeline | 29 000 | 21 400 | 21 500 | 27 600 |
| Other supply systems | 15 500 | 10 700 | 10 900 | 13 800 |

(a) Includes storages on the Mannum-Adelaide and Murray Bridge-Onkaparinga pipelines.

(b) Consumption within the Adelaide Statistical Division.

(c) Includes consumption in various areas outside of the Adelaide Statistical Division supplied from the Metropolitan distribution system.

Metropolitan Water Supply

In the following table, details of metropolitan services as well as revenue and expenditure are given for the metropolitan water supply district for the years 1972-73 to 1975-76.

Adelaide Metropolitan Waterworks, South Australia

| Particulars (a) | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------|---------|---------|---------|
| Length of mains (kilometres) | 6 646 | 6 867 | 6 874 | 7 049 |
| Number of services | 272 001 | 278 624 | 285 125 | 293 644 |
| | | | \$'000 | |
| Revenue: | | | | |
| Rates and excess water | 18 761 | 20 486 | 22 072 | 28 771 |
| Other | 154 | 213 | 260 | 187 |
| Total | 18 915 | 20 699 | 22 332 | 28 957 |

Adelaide Metropolitan Waterworks, South Australia (continued)

| Particulars (a) | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|----------------------------|---------|---------|---------|---------|
| Expenditure: | | | | |
| | | | \$'000 | |
| Working expenses | 8 516 | 10 121 | 13 118 | 15 295 |
| Interest | 6 738 | 7 543 | 8 996 | 10 279 |
| Total | 15 254 | 17 664 | 22 114 | 25 575 |
| Surplus | 3 661 | 3 035 | 218 | 3 383 |

(a) Includes particulars relating to near country areas supplied by extensions of the Metropolitan distributions system.

WATER RATES AND CHARGES

Water rates are levied on all properties served from or abutting a water main except where specific exemption from rating applies or the property is in an area not subject to rating.

Amounts payable by individual ratepayers are determined by a base water rate on the annual value of a property and a water rate per kilolitre. Payment of the base rate on property permits use of a water allowance which is determined by dividing the sum involved by the water rate per kilolitre. Water used in excess of the allowance is charged at the rate per kilolitre.

Valuation equalisation was introduced in Metropolitan and Country Water Districts from 1 July 1975. This system provides for a more even distribution of rates and properties of equal market value pay approximately the same base water rates irrespective of location or year of valuation. The approximate base water rate on a home with a market value of \$30 000 is \$76.50. A minimum charge of \$24 is applicable.

In Country Lands Water District (farm lands) the current base water rate is 29 cents for each hectare located within 1.6 kilometres of a main. A minimum charge of \$24 is applicable.

The current water rate per kilolitre applicable in City, Township and Country Lands Water Districts is 16 cents per kilolitre. Where water is supplied to properties outside of proclaimed water districts or otherwise beyond ratable limits it is supplied by measure at the ruling rate per kilolitre.

Approved churches, charitable institutions and schools are exempted from payment of water rates on annual values and water is supplied to them by measure at concessional prices. A remission of up to 60 per cent of water rates, with a maximum of \$50 a year, is provided to eligible pensioners.

Services from mains to property boundaries are installed and maintained by the Engineering and Water Supply Department. Connection fees are uniform throughout the State and are currently \$90 for a 20 millimetre service and \$120 for a 25 millimetre service with commensurately higher fees for larger services.

SEWERAGE ADMINISTRATION

Sewerage of cities and towns in South Australia is undertaken by the State Government under the authority of the Sewerage Act, 1929-1975. The Act is administered by the Engineering and Water Supply Department for the Minister of Works and provides for waterborne sanitary sewerage schemes within proclaimed drainage areas. As a general rule the Government sewerage schemes are provided only in densely populated cities and towns where they are essential for public health or in areas where it is necessary to protect surface or underground water resources from pollution by domestic or industrial wastes.

Local Government authorities are empowered under the Local Government Act, 1934-1976 to provide sanitary drainage schemes and in recent years a number of these authorities have installed common septic tank effluent drainage schemes discharging to biological filters or oxidation ponds.

METROPOLITAN SEWERAGE

Sewerage for Adelaide was first authorised by an Act of Parliament in 1878. Construction began in 1879 and by 1881 sewage from the city and inner suburbs was admitted to a sewage farm at Islington. Since then continual expansion of sewerage systems has kept pace with development of the metropolitan area as far as physical and financial factors permit and Adelaide is now the most completely sewered of the Australian capital cities.

The next table shows details of metropolitan sewers for the last four years.

Metropolitan Sewers, South Australia

| Particulars | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------|---------|---------|---------|
| Adelaide Drainage Area (km ²) | 550 | 642 | 652 | 662 |
| Length of sewers (km) | 4 063 | 4 196 | 4 368 | 4 538 |
| Number of connections | 276 652 | 288 166 | 298 472 | 309 781 |
| | \$'000 | | | |
| Revenue: | | | | |
| Rates | 12 798 | 14 159 | 15 914 | 20 503 |
| Other | 161 | 166 | 223 | 81 |
| Total | 12 959 | 14 325 | 16 137 | 20 584 |
| Expenditure: | | | | |
| Working expenses | 5 463 | 6 950 | 9 751 | 11 008 |
| Interest | 4 900 | 5 328 | 5 963 | 7 298 |
| Total | 10 363 | 12 278 | 15 714 | 18 306 |
| Surplus | 2 596 | 2 047 | 423 | 2 278 |

The proclaimed Adelaide Drainage Area at 30 June 1976 served an estimated population of 880 000 persons and covered 662 square kilometres of the Adelaide Plains between Darlington and Smithfield, the area between Port Noarlunga and Aberfoyle Park and portion of the Blackwood and Belair area. Subdivision developers are required to make capital contributions towards the cost of sewer and water extensions for all new allotments in areas capable of being served within the Drainage Area.

Four major sewerage systems are employed, each draining to separate sewage treatment works at Bolivar, Glenelg, Port Adelaide and Christies Beach. Islington Sewage Farm was abandoned in 1966 when the Bolivar Treatment Works was put into service. The Christies Beach Treatment Works began operating in August 1971, and will eventually serve the whole of the area between Coromandel Valley and Moana Beach. At present there are a number of small temporary treatment works installed in the Reynella-Morphett Vale area which will be phased out following connection of the developed areas to the Christies Beach Works.

A large number of common effluent drainage systems have been installed in fringe areas by local government authorities and most of these have been, or are planned to be, connected to the sewerage systems. A charge for each house connected is levied against local government authorities whose common effluent drainage systems discharge to sewer mains. Property owners pay an annual rate for the service to the local government authority concerned.

COUNTRY SEWERAGE

At 30 June 1976 the drainage areas of country sewerage schemes constructed and operated by the Engineering and Water Supply Department totalled 113 square kilometres; the length of sewers laid was 694 kilometres and the number of connections totalled 29 255.

Sewerage schemes are located at Angaston, Balhannah, Gawler, Gumeracha, Hahndorf, Lobethal, Mannum, Millicent, Mount Gambier, Murray Bridge, Plymponga, Naracoorte, Port Augusta, Port Lincoln, Port Pirie, Stirling, Victor Harbor, and Whyalla.

Construction of the Port Pirie, Gawler and Victor Harbor sewerage systems is still in progress. In 1975-76, 54 kilometres of sewers and 2 753 new connections were laid in country drainage areas. In addition, the Engineering and Water Supply Department has constructed schemes at Mount Burr and Nangwarry townships for the Woods and Forests Department and numerous schemes to serve country hospitals, institutions etc. operated by other authorities.

Common effluent drainage schemes have been installed by local government authorities at Barmera, Pinnaroo, Maitland, Berri, Waikerie, Renmark, Streaky Bay, Nuriootpa, Kapunda, Eudunda, Cleve, Bordertown, Port Elliot, Lock, Mount Pleasant, Clare, Woodside, Saddleworth, Mount Barker, Riverton, Cummins, Parn-dana, Port Augusta, McLaren Vale, Meningie, Tanunda, Willunga, Paringa, Birdwood, Lameroo, Loxton, Penola and portion of Port Wakefield. In addition to local authorities installing township schemes, the South Australian Housing Trust have provided Housing Trust home areas with small schemes. These have been installed at Wallaroo, Loxton, Quorn, Echunga and Kingscote. The Australian National Railways have provided schemes for settlements in the areas of Stirling North, Hesso and Pimba.

Construction of systems is currently being carried out at Crystal Brook, Ardrossan (part only), Kadina, Williamstown along with extensions at Nuriootpa, Mount Barker, Tea Tree Gully and McLaren Vale. Surveys and designs are in progress for Littlehampton, Kingscote, Burra, Lyndoch and Peterborough and tenders have been let for schemes to be installed at Cobdogla, Mount Torrens, Goolwa and Barmera extensions.

Various other small schemes have been installed and include the Wilpena Pound chalet and camping area and Aboriginal reserves at Ernabella, Point Pearce, Davenport, Nepabunna, Amata and Point McLeay.

SEWER RATES AND CHARGES

The Engineering and Water Supply Department provides sewer connections to property boundaries but internal drainage systems which are the responsibility of landholders must conform to regulations under the Sewerage Act and must be installed by authorised plumbers. Standard fees for sewer connections are \$50 and \$75 for 100-millimetre and 150-millimetre sizes respectively.

Sewer rates are levied on properties connected to or abutting a sewer, with a minimum annual charge of \$24. Valuation equalisation, as applicable to water rating, applies also to sewer rating. A marginally higher rate is charged in country areas. The approximate rate payable on a property with a market value of \$30 000 would be \$78 in the metropolitan area and \$96 in the country. A remission of up to 60 per cent of sewer rates to a maximum of \$50 is provided to eligible pensioners.

Rates levied by local government authorities on properties connected to common effluent schemes are usually proportionate to the costs and interest charges involved in the schemes.

WATER AND WATER POLLUTION CONTROL LABORATORIES

The Engineering and Water Supply Department has the responsibility to control pollution of the State's water resources, to maintain public water supplies at an acceptable quality and to operate sewerage systems. For this purpose, the Department maintains Water and Water Pollution Control Laboratories at Bolivar, where a staff of chemists, biologists and other scientists and technical personnel examine over 85 000 samples of water, effluent and industrial wastes each year. A more detailed discussion on these laboratories was included on pages 369-71 of the *South Australian Year Book 1975*.

8.2 IRRIGATION AND DRAINAGE

IRRIGATION

The development of irrigation areas in South Australia has been carried out by both Government authorities and private interests. Since 1930 the administrative authority for Government irrigation areas has been the Department of Lands with the Engineering and Water Supply Department the constructing authority for the Minister of Irrigation. A more detailed historical discussion of irrigation in South Australia was included on pages 314-6 of the *South Australian Year Book 1970*.

Irrigation areas are confined almost exclusively to the Murray Valley and can be classified into two groups; highland areas requiring the pumping of water, and reclaimed lands watered by gravitation. During 1975-76, 375 601 megalitres of water were diverted from the River Murray in South Australia for irrigation purposes. Details of the production of these areas are given in Part 9.1.

Highland Areas

With the major exception of the Mypolonga Irrigation Area, highland irrigation is located in the hot and dry zone along the River Murray between Morgan and the Victorian border.

These areas are largely devoted to vineyards and citrus and stone fruit orchards which are irrigated by water pumped from the river in open concrete-lined channels or pipes. Many of the recently developed areas use a system of overhead or under-tree sprays for watering the blocks in preference to the traditional surface reticulation. Sprays are also being used to develop land too high for reticulated watering. Landholders on Government controlled areas and on private lands constituted under special Parliamentary Acts pay an annual rate for routine irrigation and a charge is made for additional water, except at Loxton and Cooltong where water is supplied on a measurement basis. The Renmark Irrigation Trust also supplies water on a volume basis to landholders in its district.

Irrigation systems must also provide for the removal of surplus water which accumulates beneath the surface of the land. Blocks have internal drainage systems either leading to shafts and bores or to comprehensive drainage systems which convey the water to evaporation basins.

Reclaimed Areas

On the lower Murray between Mannum and Wellington, a series of swamp and overflow areas have been reclaimed by Government and private agencies.

Although these reclaimed areas contain some market gardens they are devoted principally to the growing of green fodder for dairy herds and sheep flocks. These lands are watered by gravitation and surplus water is run into main drains from which it is pumped back into the river. Approximately 600 hectares of highlands adjacent to reclaimed areas have also been developed for the production of fodder crops through the use of spray irrigation and there are 260 hectares at Mypolonga used for horticultural crops.

Irrigation Areas, South Australia

| Area Irrigated | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|-----------------|---------|---------|---------|
| Government controlled: | Hectares | | | |
| War Service schemes (1939-45 War) | 3 178 | 3 253 | 3 236 | 3 281 |
| Other | 12 712 | 12 850 | 12 722 | 12 600 |
| Non-government: | | | | |
| Trusts, boards and association areas . . | 7 875 | 7 875 | 7 875 | 7 875 |
| Private schemes | 18 875 | 18 875 | 18 875 | 18 875 |

Further details of the 15 881 hectares irrigated in Government-controlled schemes in the year 1975-76 are shown in the following table.

DRAINAGE

With the exception of the reclaimed areas along the lower Murray, already discussed in the previous section, and certain works associated with metropolitan development, drainage schemes in South Australia are confined to the south-east corner of the State. The topography of this area reveals a series of fertile valleys or flats interspersed by low infertile ranges running parallel to the sea and thus preventing the natural drainage of the land. In consequence, drainage schemes have been constructed to reclaim these areas.

The first major drainage scheme was commenced in 1863 and completed in 1885. This scheme, the Millicent Drainage System, reclaimed 40 000 hectares of land at a cost of \$300 000, this cost subsequently being included in the land allotment price. The system is maintained by the Millicent District Council from rates levied on landholders.

Following this early success the Government undertook the construction of further drains during the next sixty years. These drains were constructed under three sets of conditions: *National Drains* were constructed at Government expense, the cost being absorbed in the price of the land when sold; *Petition Drains* were constructed on requests from landholders who agreed to repay the full cost to the Government over a period of forty-two years; *Scheme Act Drains*, commenced in 1908, provided for the Government and the landholders to share the cost, the landholders share being repayable over forty-two years. After the Scheme Act Drains had been completed it was found that the cost exceeded the benefit derived, and subsequently, following a royal commission, the landholders' liability was reduced.

The passing of the South-Eastern Drainage Act Amendment Act, 1948 marked a new stage in the development of south-eastern drainage. Previously attention had been devoted to the construction of a system of drains removing large quantities of water from general areas and providing above all for the rapid removal of floodwaters. By 1948, 700 kilometres of drains had been constructed at a capital cost of \$1 441 752. However, in 1948, with the establishment of the Western Division Drainage Scheme, emphasis was placed on a complete drainage program as achieved by the earlier Millicent scheme. The Western Division Drainage Scheme, which aimed at the comprehensive drainage of 160 000 hectares of land between the Millicent and Kingston districts, has now been completed. In 1960 the Eastern Division Drainage Scheme, for the drainage of 300 000 hectares of flats lying between Kalangadoo and 65 kilometres north of Lucindale, was commenced and construction on this scheme was completed in November 1969.

Under the schemes introduced since 1948 landholders were required to repay an amount based on a 'betterment assessment' of their property. As in the other schemes this amount was repayable over forty-two years. The 1971 amendment to the South-Eastern Drainage Act extinguished the liability of landholders to make a capital contribution in respect to existing drainage construction.

At 30 June 1976 approximately 1 450 kilometres of drains (excluding the Millicent scheme) had been constructed at a capital cost of \$18 756 000. These drains vary considerably in size from only a few metres to over 60 metres bottom width.

In addition to new construction, continual attention must be paid to the prevention of silting and of weed growth and to the upkeep of over 500 bridges. Rates are levied on landholders to meet the costs of such maintenance. The closer settlement resulting from the drainage schemes has, in many areas, necessitated the construction of new bridges.

The system is administered by the South-Eastern Drainage Board under the South-Eastern Drainage Act, 1931-1974.

8.3 ROADS

Roads in South Australia are officially classified either as main roads, being those proclaimed as such under the provisions of the Highways Act, or district roads. Main and district roads within local government areas are vested in the various local governing authorities who primarily are responsible for construction and maintenance works within their respective areas. However, there is provision in the Highways Act for the Commissioner of Highways to construct, reconstruct, and maintain important roads after due notice has been given, and in practice most of the roads carrying heavy traffic are constructed and maintained by the Highways Department. In areas outside the control of local government authorities roads are vested in the Minister of Local Government under the control and management of the Commissioner of Highways.

The following table shows the length, as advised by the Highways Department, of roads customarily used by the public according to type of surface at 30 June 1976. The classification used is that adopted by the Commonwealth Department of Transport.

**Length of Roads: Type of Surface, South Australia
At 30 June 1976**

| Class of Road | Type of Surface | | | | Total |
|--------------------------------------|-----------------|---------------|---------------|---------------|----------------|
| | Natural Surface | Formed Only | Paved | | |
| | | | Unsealed | Sealed | |
| Kilometres | | | | | |
| National roads (a): | | | | | |
| National highways (b) | 573 | 539 | 11 | 1 487 | 2 610 |
| Export roads (c) | — | — | — | 9 | 9 |
| Major commercial roads (d) | — | — | — | 47 | 47 |
| Arterial roads (e): | | | | | |
| Rural | — | 516 | 1 707 | 7 554 | 9 777 |
| Urban | — | 10 | 44 | 1 067 | 1 121 |
| Local roads (f): | | | | | |
| Rural | 35 988 | 22 743 | 19 046 | 3 246 | 81 023 |
| Urban | 465 | 584 | 372 | 4 433 | 5 854 |
| Total | 37 026 | 24 392 | 21 180 | 17 843 | 100 441 |

(a) Roads declared by the Commonwealth Minister for Transport to be national highways, export roads and major commercial roads under the provisions of the *National Roads Act 1974*.

(b) Roads linking State capital cities with other State capital cities, Canberra, Darwin, other specified cities and other roads considered to be of national importance.

(c) Roads which facilitate trade and commerce with other countries.

(d) Roads which facilitate trade and commerce with other States.

(e) Roads declared by the Commonwealth Minister for Transport to be arterial roads under the provisions of the *Road Grants Act 1974*.

(f) Roads not included in above categories.

The natural surface roads shown in the table include tracks in localities outside of local government areas.

In closely settled areas, particularly in the metropolitan area and country towns, most roads are surfaced with bituminous concrete or by bituminous penetration of a macadam base. In rural districts where traffic is light, roads may be formed of natural materials or be only lightly gravelled but the more important country roads are constructed of gravel or crushed rock and are improved, as traffic warrants, by the addition of a bituminous seal.

A continuous program of road improvement is carried out by reconstructing and widening arterial roads in the metropolitan area and the construction and sealing of important rural roads. Extensive road construction is carried out also in new housing development areas.

Ferry services across the River Murray are provided on a free and continuous basis and are under the control and management of the Commissioner of Highways. The Commissioner also operates a free ferry across Cooper Creek, on the Birdsville Track in the Far North of the State, when the Creek is in flood.

ROAD FINANCE

Funds used for roadworks in South Australia are derived from four main sources, namely:

- (1) the net proceeds of fees imposed by the State Government for the registration of motor vehicles and the licensing of drivers;
- (2) grants from the Commonwealth Government;
- (3) charges imposed by the State Government under the Road Maintenance (Contribution) Act;
- (4) property rates and other levies imposed by municipal and district councils.

Funds received from the first three sources are expended by the Commissioner of Highways on works authorised by the Minister of Transport. The Highways Act provides for fees received for vehicle registrations and drivers licences, less cost of collection, to be credited to the Highways Fund. The Fund is credited also with interest on and repayments of advances made to local government authorities for roadworks and for the purchase of machinery; special contributions from the Bus and Tram Division of the State Transport Authority under the Highways Act; contributions from local government authorities towards the cost of lighting roads; licence fees collected under the Hawkers Act, 1934-1960; and other minor sundry receipts. Receipts under the Road Maintenance (Contribution) Act are paid into a special account at the State Treasury and applied only to the maintenance of public roads.

Exact figures are not available for total expenditure in South Australia on the construction, reconstruction, and maintenance of roads, streets, bridges, ferries, and associated works. Approximate expenditure by State and local government authorities during each of the past five years was 1971-72, \$66 million; 1972-73, \$68 million; 1973-74, \$69 million; 1974-75, \$77 million and 1975-76, \$90 million. These figures include the cost of land purchased for new roads, for road widening, and charges for depreciation of plant and

machinery. Local government figures used to derive the totals include expenditure which is subsequently recouped from the public and expenditure on footpath maintenance and stormwater drainage.

Highways Department, South Australia
Receipts and Payments

| Particulars | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------------|---------------|---------------|---------------|
| RECEIPTS (\$'000) | | | | |
| Motor vehicle registrations, licences, fees, fines, etc. | 18 828 | 19 872 | 25 840 | 27 574 |
| Road Maintenance Charges | 3 401 | 3 859 | 4 050 | 4 243 |
| Commonwealth Government grants | 28 000 | 31 000 | 31 770 | 41 100 |
| Loans from State Government | 800 | — | — | — |
| Repayments of, and interest on, advances to local authorities | 762 | 386 | 474 | 326 |
| Other | 1 168 | 2 028 | 570 | 2 901 |
| Total | 52 959 | 57 145 | 62 704 | 76 144 |
| PAYMENTS (\$'000) | | | | |
| Construction and reconstruction of roads, bridges, etc. | 33 604 | 35 210 | 39 180 | 44 095 |
| Maintenance of roads, bridges, etc. | 11 197 | 11 483 | 14 964 | 18 479 |
| Interest, debt redemption, etc. | 619 | 653 | 675 | 707 |
| Advances to local authorities | 262 | 4 | 42 | 31 |
| Net purchases of land, buildings, plant, equipment, materials, etc. | 2 032 | 339 | 888 | 1 446 |
| Other (a) | 4 572 | 7 659 | 7 671 | 9 243 |
| Total | 52 286 | 55 348 | 63 420 | 74 001 |

(a) This includes provision for leave and plant overhauls which may be a negative figure in some years.

The Local Government Act provides for grants-in-aid to be paid from the Highways Fund to local government authorities for expenditure on roads, other than main roads, and related works: in 1975-76 the total of these grants paid was \$407 058.

The biggest single element of roads expenditure omitted from the above table is the cost of work carried out under the provisions of the Planning and Development Act, 1966-1975 which requires persons and authorities (including the South Australian Housing Trust) who subdivide land for housing to provide roads to certain specifications. The actual work is sometimes performed by local government authorities at the expense of the subdividers: in such cases the costs of construction are included in the figures above but in most cases these roads are constructed by subdividers and few details are available.

Commonwealth Government Road Grants

Road grants by the Commonwealth Government have been made to the States since 1923-24. The current road grant arrangements are contained in the *National Roads Act 1974*, the *Roads Grants Act 1974* and the *Transport (Planning and Research) Act 1974*.

In arriving at the current road grant arrangements, the Commonwealth Government took into account the Commonwealth Bureau of Roads *Report on Roads in Australia* 1973. In this report, the Bureau set out its assessment of the most appropriate road expenditure programs in each State for the years 1974-75 to 1978-79, and it made recommendations regarding the Commonwealth Government road grants and arrangements considered necessary to achieve these expenditure programs.

Although the Commonwealth Government was guided to a considerable extent by the Bureau report, the road grant program it adopted differed significantly from that recommended by the Bureau.

Under the *National Roads Act* 1974, a total of \$400 million in grants was allocated to States. Of this South Australia will receive \$53.9 million or 13.5 per cent. These grants are provided to meet the approved construction and maintenance costs of declared national highways, including, in South Australia, the principal road links connecting Adelaide to Melbourne, Adelaide to Perth and Adelaide to Darwin. Under the *National Roads Act*, provision is also made for construction and maintenance grants for expenditure on declared roads which facilitate trade and commerce with other countries and between States. These roads are referred to in the legislation as export roads and major commercial roads.

The *Roads Grants Act* 1974, provided a total of \$700 million in grants to States, of which South Australia will receive \$45 million or 6.4 per cent. These grants are provided for approved expenditures on urban arterial roads, rural arterial and developmental roads, urban local roads, rural local roads and minor traffic engineering and road safety improvements.

Under the *Transport (Planning and Research) Act* 1974, a total of \$15 million in grants was allocated to States; this includes an amount of \$1.1 million, or 7.3 per cent for South Australia. In the Act a further amount of \$11 million is provided for allocation among the States during the currency of the legislation. This action was aimed at imparting some flexibility to the arrangements, and to allow projects competing for these funds to be judged on their own merits. Grants under this Act are provided to meet two-thirds of the approved cost of all approved planning and research projects undertaken by the States in relation to roads, road transport and urban public transport.

Actual advances made under all three Acts have now been varied from the amounts originally incorporated in schedules to the Acts. The Commonwealth Government road grants to South Australia under each of these three Acts, including supplementary grants provided for in amendments to the main Acts, are shown in the table on page 413. In addition to the grants shown in the table, the Commonwealth Government allocated, in 1974-75, a road grant of \$2.71 million to South Australia to assist employment in the road sector.

As a condition to the receipt of road grants the Commonwealth Government has stipulated that each State should meet, from its own resources, minimum annual road expenditure quotas. These quotas are set out in the *Road Grants Act* 1974 as amended. The quotas for South Australia under this Act are \$25.4 million in 1974-75, \$33.5 million in 1975-76 and \$34.2 million in 1976-77.

Commonwealth Government Road Grants, South Australia

| Type of Grant | 1974-75 | 1975-76 | 1976-77 | Total |
|---|---------------|---------------|---------------|----------------|
| | \$'000 | | | |
| National Roads Act 1974: | | | | |
| National highways construction | 16 210 | 17 490 | 17 300 | 51 000 |
| National highways maintenance | 1 310 | 2 110 | 1 400 | 4 820 |
| Export; major commercial construction and maintenance | 330 | 1 000 | 1 300 | 2 630 |
| Total National Roads Act | 17 850 | 20 600 | 20 000 | 58 450 |
| Roads Grants Act 1974: | | | | |
| Rural arterial construction | 1 200 | 1 770 | 3 300 | 6 270 |
| Rural local construction and maintenance | 4 790 | 5 300 | 5 300 | 15 390 |
| Miters (a) | 1 520 | 1 500 | 1 500 | 4 520 |
| Urban arterial construction | 7 510 | 8 290 | 7 600 | 23 400 |
| Urban local construction | 540 | 940 | 1 100 | 2 580 |
| Total Roads Grants Act | 15 560 | 17 800 | 18 800 | 52 160 |
| Transport (Planning and Research) Act 1974 | 300 | 400 | 400 | 1 100 |
| Total | 33 710 | 38 800 | 39 200 | 111 710 |

(a) Minor traffic engineering and road safety improvements.

ROADS SURVEY

A survey designated as the Australian Road Survey Update 1974 has been completed as a joint undertaking by the National Association of Australian State Road Authorities and the Commonwealth Bureau of Roads. A report of the results of this survey has been prepared for the Commonwealth Government to use as a basis of road finance legislation for the three years 1977-78 to 1979-80.

FUTURE DEVELOPMENT

The *South Australian Year Book* 1970, on pages 319-25, contained some details of the reports of two major studies: these were the reports of the Town Planning Committee of South Australia (Metropolitan Development Plan), submitted in 1962, and the Metropolitan Adelaide Transportation Study (MATS) report, released in 1968. In June 1970 the Government undertook to review the MATS proposals with particular reference to public transport. The resultant Adelaide Transportation Report 1970 or 'Breuning Report', was discussed in the *South Australian Year Book* 1971, on pages 317-8.

One outcome of the Breuning Report was the appointment of a Director-General of Transport to advise the Minister on transport policy. In 1973 the Director-General submitted a report to the Minister, entitled *Public Transport in Metropolitan Adelaide*. The report contains a program of improvements to urban public transport ranging from specific projects to be executed in the near future to a broad program for up to thirty years in the future. This report has become the basis for current Government policy. A revised document to update this report was commenced in 1975.

Some extensive and important roadworks have proceeded, and will continue, along lines recommended in the earlier reports. These include major arterial road and street improvements and the progressive improvement of interstate road links. Major improvements to the main Adelaide to Melbourne route have been

under way for some years and will continue. The sealing of the Eyre Highway linking Adelaide to Perth was completed and the road opened to traffic in October 1976. The highway has been re-routed further south between Yalata and the border to achieve a shorter route and also to enable tourists to enjoy the spectacular coastal scenery at the head of the Great Australian Bight.

Construction of the South Eastern Freeway has been completed to Littlehampton and it is expected that the remaining section to the outskirts of Murray Bridge will be completed by 1979. The Swanport Deviation will provide a by-pass of Murray Bridge and includes a new bridge over the River Murray. Construction of this deviation is expected to be completed in 1979.

RESEARCH

Because of the great area of South Australia and the wide variety of climatic and soil conditions, special sections of the Highways Department are engaged in constant investigation and testing of soils, materials, and construction methods to ensure that a high standard of road construction is maintained and that methods are adapted to the needs of particular areas.

South Australia contributes to Australian road development through its active participation in the National Association of Australian State Road Authorities. Specialist committees deal with bridge design, materials research, traffic engineering, bituminous pavements, plant and equipment, and long-term planning. The Association in 1960 established the Australian Road Research Board as a national centre for road research information and for the correlation and co-ordination of road research activities.

8.4 RAILWAYS

Railway systems in South Australia are operated by both the Commonwealth and South Australian Governments. Management of the Australian National Railways is vested in an Australian National Railways Commissioner.

In 1851 a 'Board of Undertakers' was appointed in connection with the construction of the Adelaide to Port Adelaide railway and in 1856 a Board of Railways Commissioners was appointed to control South Australian railway operations. This Board was abolished in 1859 and from then until 1887 control was vested in the Commissioner of Public Works. The South Australian Railways Commissioners Act of 1887 gave almost complete authority for management and administration to three Railways Commissioners, reserving (as in the past) financial control to Parliament. The powers of the three Commissioners passed to one Commissioner in 1892. The South Australian Railways Commissioners Act, 1936-1975, under which the Commissioner was appointed for a period of seven years, incorporated many of the provisions of the 1887 Act, including those for financial control.

In August 1975 the State Government approved the transfer of non-urban railways to the Australian National Railways Commission, such transfer to be operative from a date to be declared. In December 1975, under the provisions of the South Australian Railways Commissioners Act Amend-

ment Act, 1975 the State Transport Authority took over control of the South Australian Railways, including non-urban lines pending their full amalgamation with the Australian National Railways. For further details see page 584.

In South Australia the only private railways open to general traffic are the lines owned by the Broken Hill Proprietary Co. Ltd: from Iron Knob and Iron Baron to Whyalla (82 kilometres) used for the carriage of iron ore; and from Coffin Bay to Port Lincoln (40 kilometres) used for the carriage of limesand.

At 30 June 1976 the route length of railways operated by the State and Commonwealth Governments open for traffic in South Australia totalled 5 961 kilometres. This consisted of 2 533 kilometres of broad gauge, 1 874 kilometres of standard gauge and 1 554 kilometres of narrow gauge.

Only a small portion of the Adelaide metropolitan area is served by railways, the main trunk routes passing through northern and southern suburbs. The line to Port Stanvac serves south-western suburbs and carries passenger traffic as far as Hallett Cove and goods traffic to Port Stanvac; the extension of this line to Christie Downs was opened for traffic on 25 January 1976. This line serves the rapidly expanding industrial and housing development along the coast south of Adelaide. The Port Adelaide line, its extensions to Semaphore and Outer Harbor, the branch line to Grange, and spur lines to industrial establishments provide better coverage in north-western suburbs than is achieved elsewhere in Adelaide.

Lines operated by the Commonwealth Government in South Australia at 30 June 1976 were: narrow gauge from Marree to the Northern Territory border, 591 kilometres; and standard gauge from Port Pirie Junction to the Western Australian border, 1 051 kilometres, Stirling North to Marree, 349 kilometres, and Port Augusta to Whyalla, 76 kilometres.

An agreement has been reached between the South Australian and Commonwealth Governments for the construction of a standard gauge line between Tarcoola in South Australia and Alice Springs in the Northern Territory to replace the existing narrow gauge line from Marree to Alice Springs; the enabling legislation was passed by the Commonwealth and South Australian Parliaments in 1974. The contract for the initial construction was let in March 1975 and it is anticipated that the whole project will be completed in the early 1980s. The route for the 830 kilometre line, estimated to cost \$145 million, has been carefully chosen to avoid areas subject to the flooding which renders the existing line inoperative for prolonged periods.

A more detailed historical survey on railways in South Australia was included on pages 263-6 of the *South Australian Year Book* 1966.

Standardisation of Rail Gauges

The existence in South Australia of narrow, standard, and broad gauge systems has already been noted. For many years railway administrators have been greatly concerned about the increased costs and decreased efficiency associated with the transshipment of goods and passengers and with the provision, maintenance and operation of different sets of rollingstock. During recent years with the rapid development of road and air transport facilities there has been increasing pressure for standardisation of rail gauges in the interests of efficiency and economy of operation of transport services as a whole.

As part of an agreement enacted in 1949 to convert much of the South Australian rail system to standard gauge in 1963 the Commonwealth Government decided to proceed with standardisation of the Port Pirie-Broken Hill Railway. During 1967 agreement was reached between the Commonwealth, New South Wales and South Australian Governments to link Cockburn and Broken Hill along a new line of 47 kilometres instead of converting the 56 kilometres previously owned and operated by the Silverton Tramway Company. Conversion of the Port Pirie-Cockburn section was completed during 1969, and the new Cockburn-Broken Hill line, owned and operated by the State Transport Authority—Rail Division, was completed in January 1970. The first revenue-earning passenger train to use the coast-to-coast standard gauge line left Sydney on 2 March 1970 for the 3 961 kilometre run to Perth.

With the opening of the Port Pirie-Broken Hill standard gauge railway and the extension of the broad gauge from Terowie to Peterborough, the State Transport Authority-Rail Division now operates two bogie exchange depots, one at Port Pirie and the other at Peterborough.

Before the financial provisions of the railways standardisation agreement can become effective in relation to any specific project Commonwealth Government acceptance of that project is necessary. Early in August 1969 it was announced that the Commonwealth and South Australian Governments had agreed on the terms of reference for a feasibility study on standardisation of the Adelaide-Port Pirie line and the carrying of traffic on existing narrow gauge lines affected by standardisation. Consultants were engaged to carry out the study and in March 1970 they submitted a report to the Commonwealth Government. The State Government submitted alternative proposals expected to provide a more comprehensive scheme of standardisation and offering greater operational savings at a cost no greater than that estimated by the consultants.

Following consideration of the two proposals, consultants were commissioned to prepare a master plan which was duly presented to the respective Governments in January 1974. Enabling legislation was passed by both Parliaments late in 1974.

The scheme provides for a new standard gauge track to be built from Adelaide to Crystal Brook and the standard gauge line from Crystal Brook to Port Pirie to be duplicated. Standard gauge will be provided also as a third rail addition to the existing broad gauge track between Snowtown and Wallaroo.

In the Adelaide Metropolitan Area a standard gauge freight connection will be provided to Mile End, Islington, Pooraka and Port Adelaide while the passenger facilities at Adelaide Railway Station will be extended to handle standard gauge passenger trains. Standard gauge marshalling yards will be constructed at Dry Creek and will include bogie exchange facilities which will replace the present bogie exchange depot at Port Pirie. The broad gauge lines from Virginia to Port Pirie and Bumbunga to Lochiel will be closed.

The project is estimated to cost \$145.6 million and will be financed by the Commonwealth Government on a 70 per cent grant and 30 per cent loan basis. The first major field study for the project commenced in January 1975 and detailed work is now proceeding. It is expected that the project will be completed in the early 1980s.

8.5 HARBOURS AND AERODROMES

HARBOURS

The State of South Australia, including Kangaroo Island, has a coastline of more than 3 850 kilometres. There are two large indentations, Gulf St Vincent and Spencer Gulf, which have many harbours for shipping.

Of many seaports in South Australia, at present only sixteen are used by commercial shipping: nine of these have State-owned wharves or jetties and seven have privately-owned wharves or jetties. In addition the State maintains jetties or wharves for promenade and fishing purposes at fifty ports that are no longer used by commercial shipping and eighteen jetties are leased to district councils.

The Broken Hill Proprietary Co. Ltd owns and operates bulk handling facilities at Ardrossan, Rapid Bay, Whyalla and Proper Bay, while the Colonial Sugar Refining Co. Ltd owns and operates a bulk loading installation at Ballast Head, Kangaroo Island. The Australian National Railways operates the wharf at Port Augusta on behalf of the Commonwealth and the Port Stanvac oil terminal is owned by Petroleum Refineries (Aust.) Pty Ltd.

There are six deep-sea ports operated by the State, namely Port Adelaide, Port Pirie, Port Lincoln, Thevenard, Wallaroo and Port Giles while overseas vessels are also accommodated at Port Stanvac, Port Augusta, Whyalla and Ardrossan.

CONTROL OF HARBOURS

The control of State-owned harbours (including the River Murray) is vested in the Minister of Marine; he is responsible for the control of navigation within harbours and for all harbour facilities including lights, buoys, beacons, bulk loading plants and fishing boat accommodation. In addition he is responsible for the control of the competency of masters and others in charge of intrastate vessels and fishing vessels, and the seaworthiness and safety of such vessels. Relevant legislation includes the Harbours Act, 1936-1974, the Marine Act, 1936-1976 and the Fisheries Act, 1971-1975.

Department of Marine and Harbours
Indebtedness, Revenue and Expenditure

| Year | Loan Fund Indebted- ness | Revenue | Expenditure from Revenue | | | Surplus (+) or Deficit (-) |
|-------------------|-----------------------------------|---------|--------------------------|----------|--------|--|
| | | | Working Expenses | Interest | Total | |
| | | | \$'000 | | | |
| 1971-72.. | 57 824 | 7 813 | 5 393 | 2 796 | 8 189 | -376 |
| 1972-73.. | 62 655 | 7 324 | 5 453 | 3 028 | 8 481 | -1 157 |
| 1973-74.. | 67 082 | 10 037 | 6 537 | 3 359 | 9 896 | +141 |
| 1974-75.. | 73 013 | 10 889 | 8 425 | 3 828 | 12 253 | -1 365 |
| 1975-76.. | 80 388 | 10 705 | 9 065 | 4 661 | 13 726 | -3 021 |

In 1975-76 the Department of Marine and Harbours handled 7 734 386 tonnes of cargo (including general cargo at private ports) or approximately 43 per cent of the total tonnage of 18 190 359 tonnes passing through all the ports in South Australia, the balance being handled independently at the privately owned wharves.

HISTORICAL

For a detailed description of development in the nineteenth century see pages 270-1 of the *South Australian Year Book* 1966.

Trend of Development

As shipping has increased through growth in trade many wharves and jetties have been strengthened or replaced by better structures. To keep most harbours open for larger vessels it has been necessary to deepen and widen navigation channels, deepen existing berths and extend jetties into deeper water. An example of this type of project was the redevelopment of Thevenard harbour, completed in 1972, which entailed the dredging of a deeper channel and the reconstruction of the jetty so that bulk carriers twice the size of those previously accommodated could be fully loaded.

Since the establishment of new soldier settlements in the 1950s, shipping to and from Kangaroo Island has increased. Additional harbour facilities were made available with the provision of a trailership berth at Kingscote for the roll-on roll-off vessel *M. V. Troubridge* which went into service in November 1961. Trailership berths were also built at Port Adelaide and Port Lincoln.

A change in the pattern of intrastate shipping has occurred with the provision of bulk handling facilities for grain at major ports progressively since 1952. These facilities are now available at Port Adelaide, Port Pirie, Wallaroo, Port Lincoln, Thevenard and Port Giles, and also at Ardrossan under agreement with the owner of the private wharf. Grain is railed or trucked overland to terminal silos and loaded aboard ocean-going vessels by means of conveyors, so eliminating ketch trade from the smaller ports. Competition from intrastate road and rail transport has affected the larger ports as well, so that very little general cargo is carried between ports in this State.

Future developments at ports other than Adelaide are likely to be concerned primarily with bulk trades and the increasing size of bulk carriers. For example, bulk handling facilities, expected to cost \$10.8 million and to be completed in 1977, are being installed at Port Lincoln. The project involves extension of an existing jetty to provide two outer berths for loading grain ships and an inner berth for unloading phosphate-rock carriers: the grain berths will cater at first for ships up to 60 000 tonnes but could be modified for ships of 100 000 tonnes, while the phosphate-rock berth will cater for ships up to 35 000 tonnes.

Development of Port Adelaide

The Greater Port Adelaide Plan, details of which were released in 1949, included proposals for twenty projects for port development over the ensuing fifty years. Among those projects were:

- (1) the improvement and extension of wharves and allied cargo facilities;
- (2) the deepening, and widening of the shipping channels and provision of larger swinging basins;

- (3) the reclamation and development of low-lying land adjacent to the port for the creation of industrial, commercial and dock estates.

Some of these projects have been completed while others are still in progress, e.g. the Port River has been deepened to 9 metres at Low Water and a swinging basin of 305 metres diameter has been provided in the inner harbour. Currently the river channel is being widened to a minimum width of 150 metres. The material dredged in this operation is being used to reclaim part of the 800 hectares of low-lying land intended to be used for industrial and commercial sites and for port extensions.

At present, container ships do not call regularly at ports in South Australia; containers are usually transported to Melbourne and shipped from there. However, planning is proceeding on the assumption that Port Adelaide will become a regular port of call for container ships in the future. As a result 160 hectares of land are being reclaimed at Pelican Point near the outer harbour where it will be possible to provide up to 2 000 metres of berth length with a depth of 14 metres Low Water if necessary. One berth on this waterfront for use by large container ships and roll-on roll-off vessels has been completed at a cost of \$8.5 million. The approach channel and swinging basin are being deepened to 12 metres at Low Water to enable the largest container ships to berth at any state of the tide.

Two container depots have been built by private enterprise in the dock industrial estate 800 metres from the inner harbour waterfront and offer acceptance, forwarding, packing and unpacking facilities for international and interstate containers and other unit loads: to facilitate shipment of wool in containers a large wool store and a high density wool dumping centre have been established adjacent to these depots.

An interstate roll-on roll-off terminal in No. 3 Dock was opened early in 1971 and later in the year the facilities were extended to serve larger roll-on roll-off vessels engaged in overseas trade. A berth in No. 1 Dock has been modified to provide a reinforced concrete pad for the stern-loading type of vessel operating between Port Adelaide and ports in Tasmania. Recent developments include the provision of a steel handling berth to accommodate roll-on roll-off vessels and modifications to an outer harbour berth to serve larger overseas roll-on roll-off vessels.

A two-storey building, containing a passenger terminal and cargo shed for overseas vessels at one of the outer harbour berths, was opened in October 1973. A new signal tower at the outer harbour was opened in February 1974.

TIDES AND WATER DEPTH

Tides—the daily ebb and flow of the waters of the ocean—are brought about by the gravitational effect of the sun and moon. Spring and neap tides are associated with phases of the moon, *i.e.* spring tides with the new moon and full moon, and neap tides with the first quarter and last quarter of the moon.

All around the Australian coast there is a well-marked 'diurnal inequality'; that is, the forenoon and afternoon tides may differ considerably in height. The mean tide rises in the following table are shown as higher high water and lower high water, rather than high water springs and neaps. This method of measuring tides is used for the majority of Australian ports.

Tides and Water Depths: South Australian Ports, 1 January 1977 (continued)

| Port | Maximum Depth below Low Water Datum (a) | Tides | | |
|--|--|--------------------|-------------------------|------------------------|
| | | At | Mean Rise | |
| | | | Higher High Water | Lower High Water |
| | Metres | | Metres | Metres |
| Whyalla (BHP): | | | | |
| Inner harbour; | | | | |
| Channel | 7.3 | Jetty and Wharf | 2.5 | 1.8 |
| Wharf | 8.5 | | | |
| Outer harbour; | | | | |
| Channel—ore jetty (No. 2) approach | 10.7 | Jetty and Wharf | 2.5 | 1.8 |
| Ore jetty (No. 2) | 11.0 | | | |

(a) The depth shown against wharves is the greatest at present available and may be found at one berth only at the wharf or jetty concerned.

(b) No approach channel. (c) Deep water gradually shoaling to depth at wharf.

AERODROMES

There were twenty-nine civil aerodromes in South Australia at 30 June 1976 including nine owned and operated by the Commonwealth Government and twenty licensed aerodromes owned and operated by local authorities or private interests. In addition there are numerous authorised landing grounds which are fields prepared for the operation of aircraft but not open to public use. These fields meet Commonwealth Government specifications less exacting than those used in the development of government owned or licensed aerodromes.

Government and licensed aerodromes in South Australia are set out below.

Government Owned

| | | |
|-----------|---------------|--------------|
| Adelaide | Leigh Creek | Parafield |
| Ceduna | Mount Gambier | Port Lincoln |
| Kingscote | Oodnadatta | Whyalla |

Licensed

| | | |
|----------------|---------------|------------|
| Amata | Granite Downs | Mount Dare |
| Cleve | Indulkana | Naracoorte |
| Cordillo Downs | Innamincka | Port Pirie |
| Cowell | Kimba | Renmark |
| De Rose Hill | Loxton | Tieyon |
| Ernabella | Millicent | Waikerie |
| Fregon | Minnipa | |

The main terminal in South Australia is the Adelaide Airport at West Beach, and although not an international airport it can be used by international aircraft when required. It is on the scheduled flights of interstate services from Sydney, Melbourne, Perth, Canberra and Darwin and is the terminus of intrastate services. Since this airport was opened to commercial aircraft in February 1955, modern navigational aid systems and equipment (e.g. Australian designed visual approach slope guidance systems and long range radar) have been installed and various improvements to general airport facilities have been carried out.

Since the opening of the Adelaide Airport the aerodrome at Parafield, about 18 kilometres north of Adelaide, has been restricted principally to use by light aircraft.

Other aerodromes are situated near the larger towns e.g. Mount Gambier, Whyalla, Port Lincoln and Port Pirie. About half of the licensed aerodromes are on stations, missions, etc. in the northern part of the State.

In addition to the civil aerodromes there are two major aerodromes, one at Woomera controlled by the Department of Defence, through the Weapons Research Establishment, and the other at Salisbury (Edinburgh Airfield) which are used by aircraft associated with trials operations and by civil charter aircraft carrying passengers and freight. Edinburgh Airfield is also the base for a Royal Australian Air Force maritime squadron.

A joint Government Advisory Committee consisting of representatives from Commonwealth Government departments, South Australian Government departments and local government authorities has been established to consider airport requirements for the Adelaide region.

Control of Aerodromes

At a conference of Commonwealth Ministers and State Premiers in May 1920, it was agreed that the Commonwealth should introduce a Bill to give effect to the Convention for the Regulation of Air Navigation signed in Paris on 13 October 1919. The *Air Navigation Act* 1920, under which a Controller of Civil Aviation was appointed as head of the Civil Aviation Branch which came under the jurisdiction of the Department of Defence, had three main objectives:

- (1) generally to regulate civil aviation activities in Australia;
- (2) to carry out the provisions of the Convention on Air Navigation signed in Paris;
- (3) to apply the principles of the Convention to domestic as well as international flying operations.

Regulations were drawn up under this Act to provide, *inter alia*, for the registration and periodic inspection of aircraft, licensing of aerodromes, examination and licensing of personnel engaged in flying and in upkeep of machines, control of aircraft movements, rules of the air, etc.

The South Australian Parliament passed the Commonwealth Powers (Air Navigation) Act, 1921 in which it referred to the Commonwealth powers to make regulations in connection with international and interstate air navigation. The Air Navigation Act, 1937 provided for the application of the Commonwealth Air Navigation Regulations to and in relation to air navigation within the State of South Australia and repealed the earlier Act.

The Commonwealth civil aviation legislation at present includes the *Air Navigation Act 1920*, the *Australian National Airlines Act 1945* and several other Acts, while the State legislation in South Australia includes the 1937 Act and the Civil Aviation (Carriers' Liability) Act, 1962-1971.

Civil aviation administration was a separate department under the Minister for Civil Aviation from 1939 until 1 December 1973 when it was incorporated in the Department of Transport.

Historical

A description of early aerodromes in South Australia and development was included on pages 277-8 of the *South Australian Year Book 1966*: an article describing the first flight from England to Australia, in 1919, appeared on pages 334-5 of the *South Australian Year Book 1969*.

8.6 ELECTRICITY AND GAS

ELECTRICITY

In 1946 the Electricity Trust of South Australia (ETSA), a public corporation, acquired the assets of the Adelaide Electric Supply Company and since then the Trust has been responsible for electricity supply throughout most of the State. Over the years indigenous fuels—coal from Leigh Creek and natural gas from the north-east of the State—have largely supplanted imported fuels. A detailed description of the development of electricity supply was included on pages 278-81 of the *South Australian Year Book 1966*.

Power Generation

The Osborne 'A' station produced all of the requirements of the South Australian electricity net-work from 1923 until 1947 when the 'B' station commenced operations and the 'A' station was subsequently closed in 1968. At 30 June 1976 the remaining generating capacity at Osborne (excluding emergency generating plants) was 240 000 kilowatts.

A major decision by the Trust was the construction of the Thomas Playford Power Station at Port Augusta, designed to burn Leigh Creek coal exclusively. The 'A' section was completed in 1954 while the 'B' section was completed in 1964 to give a combined total generating capacity of 330 000 kilowatts.

Following the passing of the Electricity Trust of South Australia (Torrens Island Power Station) Act in 1962 work commenced on the construction of section 'A' of the Torrens Island Power Station. Section 'A' was completed in the first half of 1971 and comprises four 120 000 kilowatt turbo-generators with associated boiler equipment. The first 200 000 kilowatt turbo-generator in 'B' section is being commissioned and the second unit is expected to be commissioned during 1976-77. Civil construction work for the third and fourth 200 000 kilowatt units is in progress. When completed Section 'B' will have four 200 000 kilowatt units and this will make the combined capacity of 'A' and 'B' sections of Torrens Island Power Station 1 280 000 kilowatts.

Electricity Generation, South Australia
Installed Capacity of Generating Plant in Power Stations at 30 June

| Power Stations | 1967 | 1970 | 1973 | 1975 | 1976 |
|-----------------------------|----------------|----------------|------------------|------------------|------------------|
| Electricity Trust: | | | kilowatts | | |
| Osborne | 311 525 | 240 000 | 240 000 | 240 000 | 240 000 |
| Port Augusta | 330 000 | 330 000 | 330 000 | 330 000 | 330 000 |
| Torrens Island | 120 000 | 360 000 | 480 000 | 480 000 | 480 000 |
| Dry Creek | — | — | — | 104 000 | 156 000 |
| Mount Gambier | 22 000 | 22 000 | 22 000 | 22 000 | 22 000 |
| Port Lincoln | 9 000 | 9 000 | 9 000 | 9 000 | 9 000 |
| Total ETSA | 792 525 | 961 000 | 1 081 000 | 1 185 000 | 1 237 000 |

At the Dry Creek Power Station, three gas turbo-generators each with a capacity of 52 000 kilowatts have been installed to meet high load demands of short duration. The first machine was commissioned in November 1973, the second in May 1974, and the third in September 1975.

In order to meet future electricity demands, the Electricity Trust proposes to build a new power station in the north of the State to burn Leigh Creek coal. The Electricity Trust has appointed a Northern Power Station Environment Committee, comprising four members representing conservationists, and general community interests and two officers from the Trust, to advise on the most suitable site for the power station and to prepare an environmental impact statement.

Fuels

The development of the Leigh Creek coal field and the use of this coal as a source of power freed the Trust from its relative dependence upon New South Wales coal as a fuel source. Since commissioning, the Thomas Playford Power Station at Port Augusta has used this type of fuel exclusively.

The construction of oil refineries in Australia resulted in residual oil being supplied at a price competitive with coal and, over the years, the Osborne Power Station and, more recently, the Torrens Island Power Station, have used this type of fuel.

Natural gas discoveries in the north-eastern areas of South Australia and the construction of a natural gas pipeline to Adelaide has given the Trust a further source of indigenous fuel. The four 120 000 kilowatt boilers at Torrens Island have been equipped to use natural gas or oil, or both fuels simultaneously. The Trust commenced using natural gas in 1969 and it uses more of this type of fuel for generation than any other electricity authority in Australia.

Because of the continuing reduction in wood waste supplies, the Trust ceased operating the Mount Gambier Power Station in October 1976 and arrangements were made for some of the plant to be taken over by the Woods and Forests Department to generate electricity for internal use.

Electricity Trust of South Australia, Fuels Consumed in Steam Power Stations

| Year | NSW Coal | Leigh Creek Coal | Oil | Wood (a) | Coke | Natural Gas |
|------------------|-------------|------------------------|---------|-------------|------|-------------------|
| | | | Tonnes | | | Millions of MJ |
| 1966-67 | 51 045 | 2 123 459 | 232 674 | 187 687 | — | — |
| 1969-70 | 3 430 | 2 155 239 | 299 180 | 185 629 | — | 5 673 |
| 1972-73 | — | 1 588 735 | 37 893 | 198 496 | — | 29 040 |
| 1973-74 | — | 1 504 839 | 47 691 | 147 210 | — | 33 048 |
| 1974-75 | — | 1 792 144 | 91 758 | 139 071 | — | 31 256 |
| 1975-76 | — | 1 869 073 | 84 183 | 125 375 | — | 36 663 |

(a) Mill waste.

Transmission and Distribution

The Electricity Trust was specifically charged with the responsibility of expanding its services into country areas. In the immediate post-war years shortages of materials somewhat handicapped the rate of extension; however, a vigorous expansion of services in general has taken place as illustrated in the following table.

Electricity Trust of South Australia, Transmission Lines
At 30 June

| Rated Voltage | 1967 | 1970 | 1973 | 1975 | 1976 |
|---------------------------------|------------------|--------|--------|--------|--------|
| | Route Kilometres | | | | |
| 275 000 volt | 595 | 716 | 745 | 745 | 846 |
| 132 000 volt | 2 010 | 2 232 | 2 581 | 2 581 | 2 581 |
| 66 000 volt | 750 | 832 | 1 246 | 1 326 | 1 328 |
| 33 000 volt | 3 410 | 3 499 | 3 487 | 3 578 | 3 602 |
| 19 000 volt (SWER) (a) | 13 591 | 17 083 | 18 694 | 19 437 | 19 734 |
| 11 000 and 7 600 volt | 9 024 | 10 731 | 12 076 | 13 252 | 13 701 |
| Total | 29 380 | 35 093 | 38 830 | 40 919 | 41 792 |

(a) Single wire earth return system.

Electric power is transmitted over considerable distances at very high voltages and is stepped down at substations and distribution centres.

Transmission lines of 275 000 volts link power stations at Port Augusta and Torrens Island to a major substation at Para from which 275 000 volt connections radiate to Magill, Cherry Gardens and Happy Valley substations serving the Adelaide metropolitan area. One line from Port Augusta is tapped into a

substation at Brinkworth to reinforce distribution to the mid-north area of the State. Construction of the 275 000 volt transmission line from Para (east of Elizabeth) to Tailem Bend was completed during the year. This line will improve reliability and provide increased capacity at Tailem Bend substation which is a major supply point for the Lower Mallee and the South East.

Two 132 000 volt lines also link Port Augusta and Adelaide. These lines follow similar routes from Port Augusta to Bungama, near Port Pirie, where a substation serves the mid-north area. From Bungama the lines diverge, one passing through South Hummocks where a substation serves Yorke Peninsula and surrounding areas, and the other running *via* Brinkworth to Waterloo where a substation serves the Upper Murray.

Transmission lines of 132 000 volts extend as far as Woomera, Leigh Creek, Berri, Whyalla, Port Lincoln, Ardrossan South, Mobilong and Mount Gambier.

Extensive use of the single wire earth return system (see table on page 425) has resulted in the supplying of electricity to country areas where consumers are so scattered that supply by conventional methods would have been impracticable.

The following table shows electricity sold by the Electricity Trust for the last five years.

**Electricity Trust of South Australia, Sales of Electricity
Year Ended 30 June**

| Particulars | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|-----------|-----------|-----------|-----------|-----------|
| | '000 kWh | | | | |
| Residential | 1 570 389 | 1 645 603 | 1 737 877 | 1 905 615 | 2 025 616 |
| Industrial | 1 418 195 | 1 547 896 | 1 609 443 | 1 554 772 | 1 602 333 |
| Commercial | 600 749 | 661 036 | 762 019 | 825 685 | 894 795 |
| Bulk supply | 94 634 | 95 636 | 88 839 | 77 626 | 80 124 |
| Street lighting | 24 019 | 27 610 | 31 338 | 33 137 | 34 837 |
| Mannum and Murray Bridge pipelines | 15 781 | 93 230 | 48 219 | 38 218 | 72 985 |
| Total | 3 723 767 | 4 071 012 | 4 277 735 | 4 435 052 | 4 710 690 |

In recent years there has been a progressive change from conventional overhead street mains to underground street mains and most new subdivisions are now being supplied with 11 000 volt and low voltage underground systems. The Electricity Trust and local government authorities share the costs of conversion from overhead to underground reticulation in areas such as parks and foreshores where aesthetic benefit to the general public would be gained. During 1975-76 the Electricity Trust approved seven new schemes recommended by the Electricity Reticulation Advisory Committee.

In the following table the numbers of Electricity Trust consumers in the various categories are given at selected dates.

Electricity Trust of South Australia, Number of Consumers

At 30 June

| Consumers | 1967 | 1970 | 1973 | 1975 | 1976 |
|-----------------------------|---------|---------|---------|---------|---------|
| Residential | 321 731 | 353 289 | 392 314 | 417 996 | 431 859 |
| Commercial | 38 950 | 41 773 | 43 739 | 44 947 | 45 828 |
| Industrial | 19 956 | 22 776 | 25 615 | 27 487 | 28 221 |
| Bulk and traction | 7 | 7 | 11 | 11 | 11 |
| Total | 380 644 | 417 845 | 461 679 | 490 441 | 505 919 |

GAS

The South Australian Gas Company, a privately owned company regulated by State legislation, was incorporated by Act of Parliament in 1861 to supply gas to Adelaide and surrounding villages. The first gas was produced at Brompton in 1863 and subsequent plants were opened at Port Adelaide in 1866 and Glenelg in 1875.

An Act authorising a second company, the Provincial Gas Company, was assented to in 1869. This company established a metropolitan works at Thebarton in 1871 and country works were opened at Gawler, Kapunda and Strathalbyn. In 1878 this undertaking was absorbed by the South Australian Gas Company and manufacturing at the Thebarton plant ceased. The country works were kept in operation until 1917. Gas was first produced at Port Pirie in 1892.

Following the development of higher pressure distribution facilities the South Australian Gas Company was able to centralise its metropolitan production at Brompton with the Port Adelaide and Glenelg plants ceasing production in 1922 and 1923 respectively. These plants together with the earlier Thebarton works were retained as holder stations. In 1928 a new gas works was opened adjacent to the Port River at Osborne. The Osborne works were closed for several years during the 1930s depression.

Since the 1939-45 War a considerable expansion of manufacturing capacity and distribution facilities has taken place. This is evident from the following table which gives details of capital employed, number of consumers and length of mains at 30 June in selected years.

South Australian Gas Company: Capital, Consumers and Mains

At 30 June

| Particulars | 1940 | 1950 | 1960 | 1970 | 1976 |
|-----------------------------------|--------|--------|---------|---------|---------|
| Capital employed (\$m) | 5.4 | 6.0 | 19.4 | 40.0 | 50.7 |
| Number of consumers (a) | 61 207 | 84 629 | 121 720 | 186 670 | 222 440 |
| Length of mains (km) | 1 455 | 1 677 | 2 525 | 3 603 | 4 382 |

(a) Includes consumers of bottled gas.

The manufacture of gas by the carbonisation of black coal imported from New South Wales was the conventional method of production until the end of the 1939-45 War. Under this process large quantities of coke and tar are produced as by-products but a declining market for these residuals together with the development of alternative production methods has resulted in less emphasis in recent years on this method of production.

In 1948 and 1950 the company installed plant at Osborne and Brompton for the manufacture of carburetted water gas from oil distillate and coke. This plant was introduced to help meet peak winter loads and could be brought into production much more rapidly than carbonising retorts.

In 1964 the first of four reforming plants was installed at Brompton. These plants operated initially on refinery tail gases and modifications were subsequently made to enable all four plants to reform a wider range of feedstocks, including light virgin naphtha and natural gas. A similar plant was in operation at Port Pirie for reforming light virgin naphtha.

When natural gas became available, the South Australian Gas Company contracted with the producers for a supply of this indigenous fuel. All coal carbonising and carburetted water gas plants making gas for distribution in the metropolitan area were shut down and the reforming plants ceased to operate in 1971 when the conversion of all appliances to use natural gas was completed. One section of the coal carbonising plant has been retained at the Osborne Works for the manufacture of metallurgical grade coke. Gas resulting from carbonisation is used partly for heating the coal chambers, the remainder being sold.

Port Pirie is now being supplied with natural gas following the completion of a \$2.5 million pipeline in June 1976. Natural gas from the line is supplied direct to industry, including Broken Hill Associated Smelters, and is used as a feedstock in the reforming plant to provide a supply of manufactured gas to domestic consumers in the city.

Gas is reticulated through most of the Adelaide metropolitan area and Port Pirie. In addition liquefied petroleum gas is distributed by reticulation at Mount Gambier by the Mount Gambier Gas Company Ltd, at Whyalla by the South Australian Gas Company, and is available elsewhere as bottled gas.

An inter-connected system of high and intermediate pressure mains traverses the metropolitan area, extending south to Hackham, north-east to Tea Tree Gully and north to Elizabeth. The pressure in these mains is reduced by means of governors for distribution to consumers.

The conversion of the metropolitan distribution system to use straight natural gas brought a marked change in the Company's operations. The Company is now concerned largely with the distribution and marketing of gas, rather than manufacturing. Great emphasis is placed on marketing gas to industry, where as a cheap, non-polluting fuel it is able to compete successfully with other fuels. This has produced the situation where industrial gas sales made up 58 per cent of all gas sold in 1976 compared with 14 per cent in 1969.

At 30 June 1976 the Company was maintaining 4 244 kilometres of mains in the metropolitan area serving 185 951 consumers with natural gas. The Port Pirie

system involves 90 kilometres of mains serving 4 249 consumers. A distribution system has also been developed in Whyalla over the past six years, and at 30 June 1976 involved 51 kilometres of mains serving 1 975 consumers. An additional 30 265 customers are supplied with liquefied petroleum gas in bottles.

8.7 HOUSING AND BUILDING

HOUSING

A feature of housing development in South Australia has been the change from the use of stone to brick as the major building material. The familiar old-style stone houses are still to be seen in most settled parts of the State, especially in rural areas. The 1947 Census was the first at which houses with outer walls of brick outnumbered those with walls of stone.

The building materials used have been determined largely by the availability of building stone and deposits of clay suitable for brickmaking, and by the relative lack of natural timbers suitable for houses. In recent years brick veneer homes have become more popular, particularly in Urban Adelaide, but this is partly because of the poor building soil in some of these areas.

DWELLINGS: CENSUS DATA

Information on housing is obtained mainly from particulars of dwellings collected at each census. For the purpose of the census a 'dwelling' is any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term 'dwelling' includes houses, home units and flats, and in addition habitations ranging from a single-roomed shack to a multi-roomed hotel or institution. Dwellings have been classified as 'private' or 'non-private'. Private dwellings include private houses, home units, shares of private houses, self-contained flats, shares of self-contained flats, rooms, apartments, sheds and huts; non-private dwellings include hotels, motels, boarding houses, lodging houses and hostels, educational, religious, and charitable institutions, hospitals, and defence and penal establishments.

Dwelling counts from the eight censuses to 1976 are shown in the next table: figures for censuses before 1966 exclude dwellings occupied solely by full-blood Aborigines.

Dwellings in South Australia, Censuses 1921 to 1976

| Census | Occupied | | | Unoccupied (a) | Total Dwellings |
|----------------|----------|-------------|---------|-------------------|--------------------|
| | Private | Non-private | Total | | |
| 1921 | 104 295 | 3 619 | 107 914 | 4 431 | 112 345 |
| 1933 | 136 611 | 2 663 | 139 274 | 5 353 | 144 627 |
| 1947 | 166 118 | 2 420 | 168 538 | 3 547 | 172 085 |
| 1954 | 212 095 | 3 206 | 215 301 | 8 524 | 223 825 |
| 1961 | 259 344 | 2 564 | 261 908 | 17 061 | 278 969 |
| 1966 | 299 933 | 2 693 | 302 626 | 25 110 | 327 736 |
| 1971 | 342 064 | 2 048 | 344 112 | 30 553 | 374 665 |
| 1976 | 390 976 | 1 785 | 392 761 | 39 539 | 432 300 |

(a) See page 435 'Unoccupied Dwellings'.

In some of the tables which follow, details of dwellings at the 1971 Census are given by geographical distribution. New criteria were adopted at the 1966 Census for the delimitation of urban centres, a full description of which is contained in Part 5.2 pages 150-1. The relevant tables show totals for each section of the State only, namely:

- (a) Urban Adelaide; this area is the 'urban centre' of Adelaide.
- (b) Other Urban; includes all urban centres other than Urban Adelaide.
- (c) Rural; includes all areas not included in (a) or (b) above.

Occupied Dwellings

The next table gives details of occupied dwellings only, according to the class of dwelling. Private dwellings were classified into the following four categories at the 1971 Census:

Private House; houses (including semi-detached and terrace houses) used for dwelling purposes by a household group;

Home Unit; one of a group of three or more single or double storey homes, separate or joined together in sets of two or more, all occupying a common block of land;

Other Self-contained Flat; a part of a house or other building which can be completely closed off and which has its own cooking and bathing facilities;

Other Private Dwelling; includes non-self-contained flats and such sheds, huts, caravans, etc. which are occupied on a permanent or semi-permanent basis.

Occupied Dwellings by Class, South Australia Censuses 1966 and 1971

| Class of Dwelling | 30 June | 30 June 1971 | | | Total |
|---|----------------|----------------|---------------|---------------|----------------|
| | 1966 | Urban | | Rural | |
| | Total | Adelaide | Other | Total | |
| Private dwellings: | | | | | |
| Private house (a) | 271 171 | 210 921 | 48 420 | 47 287 | 306 628 |
| Home unit (a) | <i>n.a.</i> | 12 604 | 699 | 127 | 13 430 |
| Other self-contained flat (a) | 20 802 | 14 834 | 1 377 | 358 | 16 569 |
| Other private dwelling | 7 960 | 2 836 | 1 095 | 1 506 | 5 437 |
| Total private dwellings | 299 933 | 241 195 | 51 591 | 49 278 | 342 064 |
| Non-private dwellings | 2 693 | 988 | 542 | 518 | 2 048 |
| Total occupied dwellings | 302 626 | 242 183 | 52 133 | 49 796 | 344 112 |

(a) At the 1966 Census, home units were included in the 'Private house' or 'Other self-contained flat' categories.

Although tables showing characteristics of dwellings by their class at both the 1966 and 1971 Censuses have been included, intercensal comparisons of these characteristics should be made for total dwellings only.

The 1971 Census classification of private dwellings was changed from that used at the 1966 Census to distinguish those dwellings classed as home units which were shown as houses or self-contained flats in the 1966 and previous censuses. Because of this change in the classification and because there are no standard definitions of home units and flats in common usage, it is not possible to draw comparisons between statistics at the 1971 Census and earlier censuses of houses, home units and self-contained flats.

The following table shows the number of persons enumerated in each class of dwelling at the last two censuses.

**Number of Inmates by Class of Dwelling, South Australia
Censuses 1966 and 1971**

| Particulars | 30 June 1966 | 30 June 1971 | | | |
|---|-----------------|--------------|---------|---------|-----------|
| | Total | Urban | | Rural | Total |
| | | Adelaide | Other | | |
| Persons enumerated: | | | | | |
| In private dwellings: | | | | | |
| Private house (a) | 981 870 | 723 702 | 166 919 | 168 190 | 1 058 811 |
| Home unit (a) | <i>n.a.</i> | 22 029 | 1 434 | 298 | 23 761 |
| Other self-contained flat (a) .. | 45 268 | 30 313 | 3 098 | 851 | 34 262 |
| Other private dwellings | 17 746 | 4 794 | 2 510 | 4 111 | 11 415 |
| Total private dwellings | 1 044 884 | 780 838 | 173 961 | 173 450 | 1 128 249 |
| In non-private dwellings | 47 217 | 28 592 | 9 147 | 5 540 | 43 279 |
| Total occupied dwellings .. | 1 092 101 | 809 430 | 183 108 | 178 990 | 1 171 528 |
| Persons not enumerated in dwellings: | | | | | |
| Campers-out | 1 310 | 52 | 79 | 158 | 289 |
| Migratory | 1 573 | .. | .. | .. | 1 890 |
| Total population | 1 094 984 | 809 482 | 183 187 | 179 148 | 1 173 707 |

(a) At the 1966 Census, home units were included in the 'Private house' or 'Other self-contained flat' categories.

The percentage of persons enumerated in private dwellings was 95.4 at the 1966 Census, and by 1971 this percentage had increased slightly to 96.1. The percentage of persons enumerated in non-private dwellings decreased from 4.3 to 3.7. Preliminary details from the 1976 Census indicate that the percentage of persons enumerated in non-private dwellings decreased further to 3.5 while private dwellings increased to 96.4.

Occupied Private Dwellings

There were 299 933 occupied private dwellings at 30 June 1966, and by 30 June 1971 this number had increased to 342 064 (390 976 at 30 June 1976). Characteristics of these dwellings are shown in the tables which follow.

**Occupied Private Dwellings by Number of Rooms, South Australia
Censuses 1966 and 1971**

| Number of Rooms Per Dwelling | 30 June 1966 | 30 June 1971 | | | |
|---|-----------------|------------------|---------------|----------------------------------|--|
| | Total | Private House | Home Unit | Other Self- contained Flat | Total (Including Other Private) |
| 1. | 2 672 | 305 | 273 | 651 | 3 636 |
| 2. | 6 151 | 1 416 | 1 940 | 2 792 | 7 496 |
| 3. | 13 701 | 6 512 | 5 747 | 6 510 | 19 637 |
| 4. | 38 259 | 36 721 | 4 816 | 4 866 | 46 756 |
| 5. | 133 746 | 158 321 | 512 | 1 085 | 160 110 |
| 6. | 66 310 | 68 741 | 88 | 345 | 69 289 |
| 7. | 25 209 | 22 544 | 27 | 132 | 22 786 |
| 8 and over | 13 885 | 12 068 | 27 | 188 | 12 354 |
| Total | 299 933 | 306 628 | 13 430 | 16 569 | 342 064 |
| Average number of rooms per dwelling | 5.3 | 5.3 | 3.3 | 3.3 | 5.1 |

**Occupied Private Dwellings by Number of Inmates, South Australia
Censuses 1966 and 1971**

| Number of Inmates Per Dwelling | 30 June 1966 | 30 June 1971 | | | |
|---|------------------|------------------|---------------|----------------------------------|--|
| | Total | Private House | Home Unit | Other Self- contained Flat | Total (Including Other Private) |
| 1. | 32 843 | 30 047 | 6 169 | 5 454 | 44 287 |
| 2. | 73 259 | 77 482 | 5 252 | 7 082 | 91 147 |
| 3. | 55 754 | 58 236 | 1 292 | 2 400 | 62 570 |
| 4. | 59 539 | 64 046 | 486 | 1 041 | 66 002 |
| 5. | 40 460 | 41 951 | 159 | 376 | 42 694 |
| 6. | 21 585 | 20 751 | 50 | 147 | 21 063 |
| 7. | 9 294 | 8 275 | 14 | 46 | 8 382 |
| 8 and over | 7 199 | 5 840 | 8 | 23 | 5 919 |
| Total | 299 933 | 306 628 | 13 430 | 16 569 | 342 064 |
| Total inmates | 1 044 395 | 1 058 811 | 23 761 | 34 262 | 1 128 249 |
| Average number of inmates per dwelling | 3.48 | 3.45 | 1.77 | 2.07 | 3.30 |

The number of rooms includes kitchen and enclosed sleep-out, but does not include bathroom, toilet, pantry, laundry or storerooms, halls or rooms used only for business purposes. A combined living-dining room or combined kitchen-living or kitchen-dining room was counted as one room.

The largest increase in the five-year period was in five-roomed dwellings. In 1966 five-roomed dwellings were 44.6 per cent of all occupied dwellings; by 1971 this percentage had increased to 46.8. The total increase in private dwellings was approximately 42 100 and 26 400 of these were five-roomed dwellings.

The average number of occupants per occupied private dwelling had fallen progressively from 4.03 in 1933 to 3.65 in 1947 and to 3.49 in 1954. The figures then rose slightly to 3.54 in 1961, fell to 3.48 in 1966, and continued to fall in 1971 and 1976 when the occupancy rates were 3.30 and 3.07 respectively.

The following two tables give details of occupied private dwellings by the type of occupancy and material of outer walls respectively.

The number of dwellings owned, or being purchased by instalments, rose by 8.4 per cent between the 1966 and 1971 Censuses. This can be compared with an increase of 19.7 per cent over the same period in the number of dwellings being rented.

**Occupied Private Dwellings by Nature of Occupancy, South Australia
Censuses 1966 and 1971**

| Nature of Occupancy | 30 June 1966 | 30 June 1971 | | | |
|--|-----------------|------------------|---------------|----------------------------------|--|
| | Total | Private House | Home Unit | Other Self- contained Flat | Total (Including Other Private) |
| Owner, purchaser by instalments | 215 602 | 226 432 | 3 418 | 2 076 | 233 715 |
| Tenant of Housing Trust | 27 636 | 31 477 | 1 516 | 1 137 | 34 174 |
| Tenant of employer .. | <i>n.a.</i> | 9 973 | 106 | 323 | 10 502 |
| Tenant, other | 50 719 | 26 820 | 7 891 | 12 128 | 49 138 |
| Other | 4 154 | 7 856 | 212 | 490 | 9 131 |
| Not stated | 1 822 | 4 070 | 287 | 415 | 5 404 |
| Total | 299 933 | 306 628 | 13 430 | 16 569 | 342 064 |

At the 1971 Census 61 per cent of all occupied private dwellings had outer walls of brick, as compared with 54 per cent at the 1966 Census. Dwellings of stone walls decreased from 20 per cent of all occupied private dwellings in 1966 to 17 per cent in 1971.

**Occupied Private Dwellings by Material of Outer Walls, South Australia
Censuses 1966 and 1971**

| Material of Outer Walls | 30 June 1966 | 30 June 1971 | | | |
|-------------------------|----------------|----------------|---------------|---------------------------|---------------------------------|
| | Total | Private House | Home Unit | Other Self-contained Flat | Total (Including Other Private) |
| Brick | 161 919 | 183 784 | 11 398 | 12 452 | 209 231 |
| Brick veneer | 14 414 | 18 613 | 554 | 330 | 19 558 |
| Stone | 59 849 | 52 927 | 634 | 2 227 | 56 679 |
| Concrete | 18 540 | 8 742 | 473 | 805 | 10 154 |
| Timber | 13 789 | 13 160 | 76 | 173 | 13 833 |
| Metal | 6 692 | 6 244 | 42 | 141 | 7 785 |
| Fibro-cement | 23 542 | 22 253 | 228 | 412 | 23 128 |
| Other | 1 188 | 905 | 25 | 29 | 1 696 |
| Total | 299 933 | 306 628 | 13 430 | 16 569 | 342 064 |

The proportions of occupied private dwellings that were stated to have gas and/or electricity remained approximately the same (99 per cent) at both censuses. However, the proportion of occupied private dwellings having electricity only increased by 14 per cent from 1966 to 1971.

**Occupied Private Dwellings by Facilities, South Australia
Censuses 1966 and 1971**

| Facilities | 30 June 1966 | 30 June 1971 | | | |
|-------------------------------------|----------------|----------------|---------------|---------------------------|---------------------------------|
| | Total | Private House | Home Unit | Other Self-contained Flat | Total (Including Other Private) |
| Gas only | 771 | 281 | 6 | 11 | 570 |
| Electricity | 146 943 | 154 237 | 4 666 | 7 652 | 168 070 |
| Gas and electricity .. | 149 349 | 150 674 | 8 679 | 8 718 | 170 854 |
| Neither gas nor electricity | 1 827 | 493 | 5 | 3 | 913 |
| Not stated | 1 043 | 943 | 74 | 185 | 1 657 |
| Total | 299 933 | 306 628 | 13 430 | 16 569 | 342 064 |

At the 1966 and 1971 Censuses each householder was asked to state the number of motor vehicles (excluding motor cycles, scooters and tractors) used by members of that household that were garaged or parked at or near that dwelling on Census night. Data were obtained only for private dwellings.

**Occupied Private Dwellings by Number of Motor Vehicles, South Australia
Censuses 1966 and 1971**

| Number of Vehicles | 30 June 1966 | 30 June 1971 | | | |
|--------------------------|-----------------|------------------|---------------|----------------------------------|--|
| | Total | Private House | Home Unit | Other Self- contained Flat | Total (Including Other Private) |
| No vehicles | 58 264 | 44 264 | 5 786 | 4 994 | 56 964 |
| One vehicle | 155 999 | 156 360 | 6 210 | 9 029 | 173 834 |
| Two vehicles | 58 880 | 75 710 | 976 | 1 718 | 78 907 |
| Three vehicles | 15 197 | 19 038 | 69 | 246 | 19 477 |
| Four or more vehicles | 5 770 | 7 625 | 36 | 126 | 7 861 |
| Not stated | 5 823 | 3 631 | 353 | 456 | 5 021 |
| Total | 299 933 | 306 628 | 13 430 | 16 569 | 342 064 |

Unoccupied Dwellings

Unoccupied dwellings include vacant dwellings available for sale or renting, dwellings such as weekenders or holiday homes and seasonal workers quarters which were not occupied on Census night; dwellings normally occupied but whose occupants were temporarily absent on the night of the Census; newly completed dwellings where owners or tenants had not entered into occupation on Census night; dwellings described as 'to be demolished', 'condemned', 'exhibition home', etc.; and buildings constructed as dwellings but used for non-dwelling purposes on the night of the Census.

**Reason for being Unoccupied by Class of Unoccupied Private Dwellings
South Australia, Census 1971**

| Reason Unoccupied | Class of Dwelling | | | | Total |
|------------------------------|-------------------|------------|----------------------------------|------------------|---------------|
| | Private House | Home Unit | Other Self- contained Flat | Other Private | |
| For sale | 1 900 | 120 | 95 | 3 | 2 118 |
| To let | 1 625 | 75 | 767 | 101 | 2 568 |
| Newly built | 1 335 | 147 | 312 | 2 | 1 796 |
| Vacant for repair | 1 296 | 10 | 77 | 12 | 1 395 |
| Holiday house | 9 056 | 147 | 319 | 162 | 9 684 |
| Condemned | 1 313 | 5 | 36 | 17 | 1 371 |
| Temporarily vacant | 6 686 | 420 | 757 | 156 | 8 019 |
| Other reasons | 2 770 | 37 | 85 | 35 | 2 927 |
| Not stated | 572 | 21 | 56 | 26 | 675 |
| Total | 26 553 | 982 | 2 504 | 514 | 30 553 |

BUILDING

BUILDING CONTROL

The Building Act, 1923-1965 gave local government authorities power to control building operations within their municipality or district. This power was not automatic but followed a request from a local government authority for all, or a specified portion, of its area to be brought under the Act. The Building Act, 1970-1976 has brought each area of a local government municipality or district within the State under the provisions of the Act. However, a council may petition to the Governor for a proclamation that the Act (or any specified portion of the Act) shall not apply within an area or portion of an area. In areas outside the jurisdiction of the Building Act certain building provisions under the Local Government Act, 1934-1976 apply.

Persons erecting or altering buildings on land coming under the Building Act are required to submit to a building surveyor appointed by the local government authority details and plans of the work envisaged and to receive written approval before commencing operations. Authorities concern themselves with such things as the size and location of buildings, the materials used, the height of ceilings and the provision of ventilation and drainage. They have the power to disapprove building work, subject to a right of appeal. Following the approval of building work, local government inspectors visit the construction site to inspect foundations and may visit the site at other times to check that council requirements are being met.

In addition to administering the general site and structural requirements of the Act, authorities may effect their own by-laws under the Local Government Act, 1934-1976. A by-law may prescribe a higher minimum size for dwelling sites than that provided under the Act or may regulate the positioning of a dwelling on a site. One of the most important by-laws is that of defining particular areas or zones within which the nature of buildings and their use may be restricted. Thus certain areas may be proclaimed residential areas with industrial and commercial premises, beyond those already in existence, prohibited; other areas are designated as industrial zones.

In some local government areas such by-laws have been replaced by regulations under the Planning and Development Act, 1966-1975. During 1971 the Builders Licensing Act, 1967-1976 came into force with provisions for the licensing of builders.

BUILDING OPERATIONS

Details of building operations in South Australia are compiled from returns collected from all builders of new dwellings, and new other building valued at \$10 000 and over. The statistics relate only to buildings as distinct from other construction activity such as roads, bridges, earthworks and water storage. Alterations and additions of \$10 000 and over to existing buildings other than dwellings are included with new buildings but those to dwellings from 1973-74 are shown as a separate item.

All values shown exclude the value of land and unless otherwise stated represent the anticipated or actual value of buildings upon completion.

Building Approvals

The following table shows the value of new buildings, and alterations and additions valued at \$10 000 and over on completion for which approval was given during 1974-75 and 1975-76. In addition to information on permits issued to private persons and organisations for building in areas subject to building control, particulars have been included of buildings known to be projected or to have started in areas outside building control and details of contracts let or expenditure authorised by government and semi-government authorities.

Building Approvals, South Australia

| Type of Building | 1974-75 | | | 1975-76 | | |
|---|---------|---------|---------|---------|--------|---------|
| | Private | Govt | Total | Private | Govt | Total |
| | \$'000 | | | | | |
| New houses | 146 915 | 20 678 | 167 593 | 274 162 | 19 507 | 293 669 |
| New other dwellings | 36 438 | 10 602 | 47 040 | 59 607 | 6 969 | 66 575 |
| Alterations and additions to dwellings (a) | 5 070 | 29 | 5 100 | 12 139 | 21 | 12 160 |
| Hotels, etc. | 10 696 | 33 | 10 728 | 6 117 | 131 | 6 247 |
| Shops | 10 411 | 145 | 10 557 | 8 886 | 69 | 8 955 |
| Factories | 12 411 | 12 381 | 24 792 | 12 741 | 2 641 | 15 381 |
| Offices | 11 739 | 5 758 | 17 498 | 11 239 | 5 350 | 16 589 |
| Other business premises | 12 206 | 3 503 | 15 708 | 10 994 | 8 167 | 19 161 |
| Education | 3 714 | 29 519 | 33 232 | 2 917 | 2 958 | 5 876 |
| Religion | 802 | — | 802 | 2 913 | — | 2 913 |
| Health | 5 758 | 16 728 | 22 485 | 8 905 | 1 570 | 10 475 |
| Entertainment, recreation | 5 700 | 1 853 | 7 553 | 6 218 | 938 | 7 156 |
| Miscellaneous | 4 392 | 2 414 | 6 806 | 3 477 | 3 142 | 6 620 |
| Total value of all buildings .. | 266 252 | 103 643 | 369 895 | 420 314 | 51 463 | 471 777 |

(a) Valued at \$10 000 and over.

In using approvals as an indicator of building activity it should be noted that certain projects may be cancelled, delayed or altered and resubmitted for approval, that large projects may be spread over a number of years, and that building costs may vary over the period of construction.

Buildings Under Construction

At the end of 1975-76 new buildings with an anticipated value when completed of \$383 851 000 were in the process of construction, with work done on these buildings valued at \$190 000 000. There were 5 869 houses and 2 605 other dwellings in the course of construction, having an anticipated value when completed of \$188 869 000.

Value of Work Done

Possibly the best measure of building activity is that of value of work done, i.e. of work actually carried out on buildings during the period. Information on the value of work done on owner-built houses is not collected; however, an

estimate based on the value of houses commenced, completed and under construction is calculated and this amounted to \$10.6 million, \$14.7 million and \$28.4 million in the years 1973-74, 1974-75 and 1975-76 respectively. The estimated values of work done on owner built houses are included in the following table.

Buildings: Value of Work Done, South Australia

| Type of Building | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|----------------|----------------|----------------|----------------|----------------|
| | | | \$'000 | | |
| Houses (a) | 97 603 | 120 351 | 146 352 | 165 261 | 240 808 |
| Other dwellings (a) | 29 813 | 30 834 | 38 092 | 49 981 | 58 954 |
| Total dwellings | 127 414 | 151 184 | 184 444 | 215 241 | 299 764 |
| Alterations and additions to dwellings | (a) | (a) | 2 215 | 4 004 | 7 170 |
| Hotels, etc. | 3 577 | 4 689 | 4 602 | 3 853 | 5 613 |
| Shops | 2 772 | 6 409 | 15 269 | 12 105 | 12 820 |
| Factories | 15 365 | 17 981 | 18 621 | 28 780 | 21 795 |
| Offices | 19 735 | 17 630 | 19 472 | 31 369 | 39 890 |
| Other business premises | 17 827 | 12 742 | 12 110 | 11 137 | 15 694 |
| Education | 20 447 | 23 968 | 25 395 | 56 281 | 48 176 |
| Religion | 1 078 | 1 008 | 646 | 1 064 | 1 658 |
| Health | 12 719 | 12 637 | 12 490 | 19 803 | 24 055 |
| Entertainment, recreation | 4 247 | 8 469 | 6 434 | 6 214 | 11 053 |
| Miscellaneous | 3 870 | 5 561 | 11 447 | 8 676 | 5 560 |
| Total buildings | 229 050 | 262 277 | 313 146 | 398 525 | 493 247 |

(a) New dwellings and alterations and additions valued at \$10 000 and over to dwellings are tabulated separately from 1973-74. Semi-detached houses and cottage flats are included with 'houses' prior to July 1973 and 'other dwellings' from 1973-74.

New Buildings Commenced

A building is recorded as commenced when work on the foundation has begun. In the table below commencements during 1974-75 and 1975-76 have been classified according to ownership at the date of commencement. Almost all houses recorded under the 'government' heading were being built for the South Australian Housing Trust, many of them being intended for sale on completion.

New Buildings Commenced, South Australia

| Type of Building | 1974-75 | | | 1975-76 | | |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| | Private | Govt. | Total | Private | Govt. | Total |
| | \$'000 (a) | | | | | |
| New houses | 140 774 | 20 362 | 161 136 | 242 911 | 26 291 | 269 201 |
| New other dwellings | 36 772 | 11 309 | 48 081 | 48 982 | 7 579 | 56 561 |
| Alterations and additions to dwellings (b) | 4 117 | 117 | 4 236 | 7 345 | 27 | 7 372 |
| Hotels, etc. | 2 608 | 718 | 3 325 | 5 037 | 81 | 5 117 |
| Shops | 6 089 | 448 | 6 538 | 11 200 | 1 477 | 12 677 |
| Factories | 18 240 | 5 346 | 23 586 | 13 281 | 6 716 | 19 996 |
| Offices | 17 861 | 14 836 | 32 697 | 8 730 | 5 982 | 14 712 |
| Other business premises | 6 877 | 3 680 | 10 557 | 8 694 | 12 124 | 20 819 |
| Education | 4 326 | 29 015 | 33 341 | 3 806 | 35 125 | 38 932 |
| Religion | 1 070 | — | 1 070 | 2 705 | — | 2 705 |
| Health | 13 591 | 11 874 | 25 466 | 4 426 | 15 828 | 20 253 |
| Entertainment, recreation | 7 472 | 2 637 | 10 110 | 5 377 | 2 767 | 8 144 |
| Miscellaneous | 2 403 | 2 046 | 4 448 | 3 200 | 2 751 | 5 951 |
| Total value of new buildings | 262 198 | 102 388 | 364 586 | 365 693 | 116 746 | 482 438 |

(a) Anticipated completion value.

(b) Valued at \$10 000 and over.

New Buildings Completed

Details of new buildings completed for the years 1971-72 to 1975-76 are given in the next table. A building is regarded as having been completed when the contractor has fulfilled the terms of the contract or in the case of an owner-built house when the dwelling is either completed or occupied, whichever occurs first. However, the value in all cases is that of the building as a finished product.

New Buildings Completed, South Australia

| Year | Number of Dwellings | | Value of New Buildings | | | | Total |
|-----------|---------------------|-----------------|------------------------|-----------------|--|---------|---------|
| | Houses (a) | Other Dwellings | Houses (a) | Other Dwellings | Alterations and Additions to Dwellings | Other | |
| | | | | | \$'000 | | |
| 1971-72.. | 9 061 | 4 184 | 97 834 | 27 411 | (b) | 89 792 | 215 036 |
| 1972-73.. | 8 977 | 4 217 | 110 357 | 30 333 | (b) | 114 702 | 255 394 |
| 1973-74.. | 8 952 | 3 955 | 131 839 | 35 644 | 1 748 | 103 067 | 272 296 |
| 1974-75.. | 9 071 | 3 802 | 166 744 | 44 916 | 3 618 | 152 123 | 367 403 |
| 1975-76.. | 9 921 | 4 032 | 219 521 | 60 856 | 6 788 | 189 216 | 476 380 |

(a) Before 1973-74 included semi-detached houses and cottage flats; these are now included with 'other dwellings'.

(b) Before 1973-74 alterations and additions to dwellings valued at \$10 000 and over were included with new dwellings.

The following table gives further details of dwellings completed over the five years to 1975-76.

Number of New Dwellings Completed, South Australia^(a)

| Type of Dwelling | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--------------------------------------|---------|---------|---------|---------|---------|
| Private: | | | | | |
| Contract-built houses (b) | 6 635 | 7 117 | 7 540 | 7 245 | 7 520 |
| Owner-built houses (c) | 321 | 413 | 587 | 638 | 922 |
| Total houses (b) | 6 956 | 7 530 | 8 127 | 7 883 | 8 442 |
| Other dwellings | 4 114 | 4 039 | 3 460 | 3 303 | 3 254 |
| Total private dwellings | 11 070 | 11 569 | 11 587 | 11 186 | 11 696 |
| Government: | | | | | |
| Houses (b) | 2 105 | 1 447 | 825 | 1 188 | 1 479 |
| Other dwellings | 70 | 178 | 495 | 499 | 778 |
| Total government dwellings | 2 175 | 1 625 | 1 320 | 1 687 | 2 257 |
| Total all dwellings | 13 245 | 13 194 | 12 907 | 12 873 | 13 953 |

(a) Before 1973-74 alterations and additions to dwellings valued at \$10 000 or over were included with new dwellings.

(b) Before 1973-74 included semi-detached houses and cottage flats; these are now included with 'other dwellings'.

(c) Owner-built houses are houses erected without services of contractor for whole job.

The value of buildings, other than dwellings, completed over the same period is shown below. Included under 'other business premises' are service stations, warehouses and communication buildings and under 'miscellaneous' are defence establishments, buildings for law and order and certain institutional premises.

Value of New Buildings Other Than Dwellings Completed, South Australia

| Type of Building | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-------------------------------------|---------------|----------------|----------------|----------------|----------------|
| | | | \$'000 | | |
| Hotels, etc. | 3 246 | 3 779 | 4 682 | 5 085 | 5 118 |
| Shops | 2 334 | 4 633 | 13 930 | 10 967 | 14 468 |
| Factories | 17 889 | 12 529 | 20 603 | 21 684 | 19 619 |
| Offices | 16 800 | 14 118 | 12 484 | 25 824 | 34 471 |
| Other business premises | 8 772 | 25 996 | 11 497 | 9 323 | 15 829 |
| Education | 22 144 | 23 570 | 17 810 | 33 514 | 67 628 |
| Religion | 1 153 | 897 | 752 | 758 | 1 639 |
| Health | 11 663 | 16 808 | 10 191 | 22 442 | 16 234 |
| Entertainment, recreation | 2 178 | 8 767 | 3 114 | 9 889 | 8 256 |
| Miscellaneous | 3 618 | 3 605 | 8 004 | 12 639 | 5 951 |
| Total | 89 792 | 114 702 | 103 067 | 152 123 | 189 216 |

New Houses—Material of Outer Walls

A plentiful supply of clay and building stone together with a paucity of suitable timbers in South Australia resulted in more houses being built of solid construction than brick veneer or other construction until 1974-75. In the table below new houses are classified according to the materials used in the outer walls.

New Houses: Material of Outer Walls, South Australia^(a)

| Year | Brick, Concrete, Stone | | Brick Veneer and Stone Veneer | | Asbestos-Cement | | Other | |
|-------------------|------------------------|---------|-------------------------------|---------|-----------------|--------|--------|--------|
| | Number | Value | Number | Value | Number | Value | Number | Value |
| | | \$'000 | | \$'000 | | \$'000 | | \$'000 |
| | COMMENCED | | | | | | | |
| 1971-72 | 4 930 | 63 300 | 3 090 | 30 268 | 805 | 6 021 | 59 | 558 |
| 1972-73 | 5 796 | 83 412 | 3 610 | 42 101 | 812 | 6 706 | 101 | 928 |
| 1973-74 | 4 905 | 89 396 | 3 723 | 55 737 | 936 | 9 307 | 159 | 1 805 |
| 1974-75 | 3 273 | 78 696 | 3 479 | 61 651 | 1 467 | 19 210 | 101 | 1 579 |
| 1975-76 | 4 072 | 116 172 | 5 522 | 120 698 | 1 654 | 27 675 | 239 | 4 656 |
| | COMPLETED | | | | | | | |
| 1971-72 | 4 927 | 60 659 | 3 272 | 30 619 | 806 | 6 004 | 56 | 554 |
| 1972-73 | 5 064 | 68 956 | 3 060 | 34 345 | 756 | 6 180 | 97 | 876 |
| 1973-74 | 4 747 | 77 858 | 3 145 | 43 542 | 915 | 8 859 | 145 | 1 578 |
| 1974-75 | 4 116 | 87 994 | 3 633 | 61 377 | 1 224 | 15 844 | 98 | 1 531 |
| 1975-76 | 3 690 | 98 232 | 4 452 | 91 783 | 1 549 | 25 277 | 230 | 4 229 |

(a) Before 1973-74 included semi-detached houses and cottage flats, and alterations and additions valued at \$10 000 and over.

In 1975-76 brick veneer houses constituted 48 per cent of commencements. Although a large proportion of brick veneer houses are built by the South Australian Housing Trust a wider acceptance of this type of construction is indicated by the increasing number being erected by private contractors.

Location of New Dwellings

In recent years the greatest development has occurred in the local government areas of Noarlunga, Salisbury and Tea Tree Gully; during the five years 1971-72 to 1975-76, new dwellings in these areas accounted for 30 per cent of the total State completions. Of the country local government areas, Whyalla has recorded the greatest number of completions each year from 1959.

Location of New Dwellings Completed, South Australia^(a)

| Local Government Area | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-----------------------|---------------|---------------|---------------|---------------|---------------|
| Brighton (C) | 185 | 204 | 159 | 78 | 28 |
| Burnside (C) | 302 | 365 | 393 | 363 | 263 |
| Campbelltown (C) | 452 | 546 | 365 | 386 | 486 |
| Elizabeth (C) | 276 | 181 | 256 | 175 | 171 |
| Enfield (C) | 615 | 614 | 559 | 397 | 158 |
| Glenside (C) | 312 | 284 | 130 | 63 | 32 |
| Henley and Grange (C) | 253 | 279 | 139 | 146 | 84 |
| Marion (C) | 488 | 552 | 487 | 520 | 457 |
| Meadows (DC) | 356 | 391 | 534 | 575 | 495 |
| Millicent (DC) | 63 | 47 | 48 | 59 | 73 |
| Mitcham (C) | 732 | 650 | 592 | 427 | 347 |
| Mount Gambier (C) | 120 | 186 | 223 | 186 | 195 |
| Munno Para (DC) | 98 | 103 | 129 | 336 | 271 |
| Murray Bridge (M) | 92 | 93 | 70 | 115 | 185 |
| Noarlunga (C) | 1 142 | 1 103 | 1 201 | 1 271 | 1 640 |
| Payneham (C) | 214 | 170 | 263 | 150 | 180 |
| Port Adelaide (C) | 191 | 243 | 217 | 157 | 263 |
| Port Augusta (C) | 186 | 121 | 108 | 113 | 116 |
| Port Lincoln (C) | 91 | 63 | 94 | 79 | 117 |
| Salisbury (C) | 1 478 | 1 597 | 1 373 | 1 288 | 1 567 |
| Stirling (DC) | 140 | 156 | 162 | 215 | 212 |
| Tea Tree Gully (C) | 1 305 | 1 354 | 1 367 | 1 083 | 1 254 |
| Unley (C) | 251 | 207 | 174 | 313 | 266 |
| West Torrens (C) | 505 | 515 | 234 | 259 | 292 |
| Whyalla (C) | 391 | 363 | 236 | 278 | 267 |
| Woodville (C) | 763 | 661 | 652 | 835 | 1 154 |
| Other (b) | 2 260 | 2 162 | 2 763 | 3 021 | 3 390 |
| Total State | 13 261 | 13 210 | 12 928 | 12 888 | 13 963 |

(a) Dwelling units comprise houses and other dwellings plus dwellings attached to other new buildings. Before 1973-74 alterations and additions to dwellings valued at \$10 000 and over were included with new dwellings.

(b) Includes unincorporated areas.

(C) Municipality with city status (M) Municipality (DC) District Council

Building Employment

Details of building employment in South Australia are given in the next table. The figures are an average of the number of persons employed on four days in the year, namely at the end of March, June and September and in mid-December. They include all contractors and sub-contractors, and employees of contractors, sub-contractors and government instrumentalities, who on these four days were engaged on the construction, alteration, repair and maintenance of buildings, but exclude persons working on owner-built houses or for contractors or sub-contractors who undertake only alterations, additions, repairs and maintenance. Persons 'actually engaged' include those temporarily laid off because of weather. Some duplications may occur as a result of frequent movement between jobs or because some persons (such as electricians) may work on several buildings which are under construction simultaneously.

The average employment figure of 14 007 for 1975-76 was made up of 7 404 persons working on new dwellings, 4 243 working on other new buildings and 2 360 employed on additions, alterations, repairs and maintenance.

Building Employment, South Australia

| Classification | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------|---------------|---------------|---------------|---------------|---------------|
| PERSONS ENGAGED | | | | | |
| Occupational status: | | | | | |
| Contractors | 575 | 664 | 767 | 963 | 938 |
| Sub-contractors | 3 823 | 4 226 | 4 447 | 3 806 | 4 127 |
| Wage-earners | 9 996 | 10 411 | 11 026 | 9 557 | 8 942 |
| Trade: | | | | | |
| Carpenters | 3 364 | 3 592 | 3 843 | 3 660 | 3 588 |
| Bricklayers | 2 249 | 2 449 | 2 620 | 2 176 | 2 106 |
| Painters | 1 258 | 1 322 | 1 365 | 1 219 | 1 166 |
| Electricians | 942 | 1 003 | 1 106 | 994 | 921 |
| Plumbers | 1 261 | 1 382 | 1 523 | 1 306 | 1 265 |
| Builders labourers | 1 856 | 2 096 | 2 202 | 1 935 | 1 955 |
| Other | 3 464 | 3 458 | 3 581 | 3 037 | 3 007 |
| Total | 14 394 | 15 302 | 16 239 | 14 325 | 14 007 |

THE SOUTH AUSTRALIAN HOUSING TRUST

The South Australian Housing Trust which was constituted by Act of Parliament in 1936 provides houses and flats for rental and houses for sale.

Rental Dwellings

When the South Australian Housing Trust commenced operations in 1937 it undertook, in the words of its first Annual Report, 'the provision of accommodation necessary for decent living at low rentals for persons coming within the lower income group.' The enabling legislation confined the Trust's activities for many years to the building and letting of double-unit attached houses. Subsequent legislation provided for the construction of single unit houses for

rental and an eventual removal of statutory limitations on the capital cost of houses permitted the construction of larger single-unit houses. At 30 June 1976 the Trust had completed 37 087 dwellings for rental.

In 1952 Trust rental accommodation was expanded with the construction of the first flats for single persons and for married couples without young children. Originally only two-storey flat developments were built; since 1953, however, three-storey flats and single-storey villa flats have also been constructed. At 30 June 1976 the Trust had built 2 315 flat units, of which 2 251 were for rental. In 1954 construction of small groups of cottage flats for elderly persons began on five sites in the metropolitan area. At 30 June 1976, 2 580 of these units had been built; 867 for charitable organisations and 1 713 for rental by the Trust.

Dwellings for Sale

Since the inception of its program of building houses for sale in 1946, the Trust has greatly expanded its operations in this area. Under the original scheme, purchasers were required to provide their own finance, either from a lending institution or from their own resources. Since 1952, however, the Trust has been able to advance money on second mortgage. During the year ended 30 June 1976, 872 houses were completed and sold throughout the State under the bank finance sales scheme.

In addition, under the rental-purchase scheme established in 1962, houses are made available for a minimum deposit of \$100 under an agreement to purchase. At the end of June 1976, 7 335 houses had been sold under these agreements.

The Trust provides a variety of sizes and designs for sale houses, depending on cost, location, and availability of building materials. Houses are provided for primary producers on their own land and for employees of State Government departments at the request of the departments concerned.

Details of dwellings completed by the Trust since its inception, both for rent and for sale, are given in the following table.

South Australian Housing Trust, Number of Dwellings Completed^(a)

| Period | Dwellings | | | | Rural Dwellings including Soldier Settlers | Total |
|------------------------|---------------|------------------|---------------|--------------|--|---------------|
| | Single Units | Double Units (b) | Cottage Flats | Other | | |
| 1937-1970 | 36 699 | (c)24 365 | 1 725 | 1 521 | 1 234 | 65 544 |
| 1970-71 | 1 371 | 420 | 177 | 245 | — | 2 213 |
| 1971-72 | 1 396 | 498 | 239 | 68 | — | 2 201 |
| 1972-73 | 869 | 417 | 158 | 174 | — | 1 618 |
| 1973-74 | 812 | 281 | 104 | 142 | — | 1 339 |
| 1974-75 | 1 118 | 269 | 121 | 81 | — | 1 589 |
| 1975-76 | 1 506 | 630 | 56 | 84 | — | 2 276 |
| Total | 43 771 | 26 880 | 2 580 | 2 315 | 1 234 | 76 780 |

(a) Excludes emergency and temporary dwellings.

(b) Number of individual dwelling units.

(c) Includes a small number of triple-units.

The Trust's early activities concentrated on the provision of rental and sales dwellings in small groups. The expansion of its activities has led the Trust into the more complex areas of town planning and urban development. At Elizabeth, 27 kilometres north of Adelaide, a comprehensive development including a wide range of houses for sale and houses and flats for rent has grown into a city, complete with commercial and industrial areas. There are also several other areas throughout the State where the Trust is helping to provide housing in close proximity to employment.

Most of the funds used to finance the building operations of the Trust are borrowed either from the State Government under the Housing Agreement or from semi-government borrowings arranged in conjunction with the State Treasury. Details of funds employed, and of the revenue and expenditure of the Trust in recent years are given in Part 11.4 Public Corporation Finance.

Special Rental Houses

Under the terms of the *Housing Agreement Act 1973*, advances may be used to purchase and renovate older houses in order that they can be let to needy families. This scheme has enabled the Trust to increase its stock of rental houses especially in the City of Adelaide, and inner urban and industrialised areas where it cannot build new houses because of the lack of vacant land. To 30 June 1976 the Trust had purchased a total of 765 of these dwellings.

Housing for Aborigines

In March 1973, the Trust took over responsibility for the Aboriginal Funded Program in South Australia and the 196 houses maintained under the scheme.

Encouraged by the Department of Aboriginal Affairs and the local Aboriginal Committee, the Trust in April 1974 took the step of reforming the then Aboriginal Housing Policy Committee. The new structure allowed five Aboriginal people elected by the Adelaide community to join the three Departmental representatives namely, Department for Community Welfare, Department of Aboriginal Affairs, and the Trust.

In July 1975, a further restructuring took place, principally to give greater representation to country areas. As a result, the Aboriginal Housing Board of South Australia was formed, followed soon after by the first five Housing Management Committees in regional areas of the State.

There are presently eight Housing Management Committees in South Australia and these are elected only by the local Aboriginal community. Each Committee is represented on the Aboriginal Housing Board which also has representation from the Trust, Department for Community Welfare, Department of Aboriginal Affairs, and Aboriginal Hostels Limited. These Committees make policy and administrative decisions. The administration and performance is carried out within the Trust.

The Trust's main roles comprise the supplying of houses either by way of purchase and the upgrading of existing houses, the erection of new houses, sometimes in remote areas by supplying transportable pre-made houses, maintenance, rent collection, the processing of applications and the like. A special Trust section has been established to handle these operations and its staff includes Aboriginal people.

The Aboriginal Housing Board is responsible for overall policy, the allocation of capital funds, over-seeing the operations of Management Committees, specifying numbers of houses to be purchased in each region, setting rent levels, policies on rent arrears, maximum purchase price, conditions of tenancy and conditions of eligibility.

From the outset of the scheme, the decision was made to purchase existing houses rather than erect new dwellings. It is considered that buying in preference to building has many social advantages. For instance, it allows people to choose the area in which they wish to live. This naturally gives wide choice and if the program was dependent on new buildings this choice would be very limited. It also avoids the concentration of welfare tenants in particular areas.

There are now 603 houses administered under the Funded Scheme. In the last twelve months, eighty-nine houses were purchased. A further ninety-five families have been housed through the medium of vacancies thus bringing the total number of Aboriginal families housed for the first time in Funded houses to 137 during the year.

Industrial and Commercial Properties

The Trust is involved in the construction of industrial and commercial properties to assist in the State's industrial development. The construction or purchase of factories by the Trust requires the recommendation of the Industries Development Committee and the consent of the Governor. The factories are usually leased with a right of purchase.

During 1975-76, the Trust completed four new factories and extensions to five existing industrial premises. Building work also commenced on extensions to two other factories.

In the commercial field two major projects were begun during 1975-76; these projects are both located in the Elizabeth Town Centre and comprise a large discount department store and a twin cinema complex. The Trust also continued its program of updating and expanding many of its shops and offices.

At 30 June 1976, the number of shops let by the Trust was 410 and the total number of factories occupied was forty-nine.

HOUSING AGREEMENTS

In July 1953 the South Australian Government became party to an agreement already existing between the Commonwealth and certain other State Governments under which the Commonwealth Government made substantial loans to the States for the provision of housing. The initial agreement was renewed in 1956, 1961 and again in 1966 for a further five years.

Under the Housing Agreement the Commonwealth Government made advances to the State for the erection of dwellings by the South Australian Housing Trust and for the provision of finance for home builders by means of loans, through

the Home Builders Fund, to the State Bank and certain building societies. At least 30 per cent of the funds provided had to be channelled through the Home Builders Fund.

The Housing Agreement was terminated on 30 June 1971 and new legislation, the *States Grants (Housing) Act 1971*, operated from 1 July 1971. Advances made pursuant to the terminated Agreements are repayable with interest by the States over fifty-three years.

From 1 July 1971, the States were responsible for financing their housing programs from Loan allocations but, under the new legislation, received Commonwealth Government assistance by way of grants towards the debt charges involved. In terms of the *States Grants (Housing) Act 1971* which prescribed the arrangements and conditions, South Australia was to receive grants of \$14 107 500 in respect of each of the five years from 1971-72 to 1975-76, payable over a period of thirty years. However, because of new arrangements (*Housing Agreements Act 1973*) effective from 1 July 1973, this State only received the grants of \$14 107 500 in respect of each of the years 1971-72 and 1972-73.

Under arrangements discussed and agreed to at the June 1973 Premiers' Conference, the Commonwealth Government entered into an agreement with each State, under which the States will receive advances for welfare housing purposes during the five years 1973-74 to 1977-78; these advances are to be outside, and in addition to, the State Loan Council programs. The *Housing Agreements Act 1973* was passed by Parliament in the autumn session of 1973. Advances made under the Agreement will be repaid, with interest, over fifty-three years. During 1975-76 the Commonwealth Government advanced to the State \$56 360 000 in accordance with the Agreement. Advances totalling \$56 360 000 will be made available in 1976-77. Because of the re-introduction of a direct interest concession, the *States Grants (Housing) Act 1971* was amended by the *States Grants (Housing) Act 1973*.

Advances for Housing, South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-------------------------------|---------|---------|---------|---------|---------|
| | \$'000 | | | | |
| Advances for year (a): | | | | | |
| Housing Trust | 13 100 | 14 500 | 15 500 | 33 560 | 33 560 |
| Home builders accounts | 14 600 | 15 500 | 17 250 | 22 800 | 22 800 |
| Total | 27 700 | 30 000 | 32 750 | 56 360 | 56 360 |
| Liability at end of year (b): | | | | | |
| Housing Trust | 146 282 | 145 555 | 159 732 | 191 959 | 225 531 |
| Home builders accounts | 114 170 | 113 375 | 129 796 | 151 648 | 173 351 |
| Total | 260 451 | 258 929 | 289 528 | 343 607 | 398 882 |

(a) Advances in 1971-72 and 1972-73 are allocations included under the States' Loan Council borrowing program; advances for other years are made under Housing Agreements.

(b) Under Housing Agreements only.

DEPARTMENT OF ENVIRONMENT, HOUSING AND COMMUNITY
DEVELOPMENT**Home Savings Grant Scheme**

Under the Commonwealth Government's Home Savings Grant Scheme introduced in 1964, married, widowed and divorced persons under 36 years of age, who have lived and saved in Australia for at least three years, may become eligible for a grant of \$750 to assist them in obtaining their first home. To be eligible for the maximum grant, applicants must have saved \$2 250 or more in an acceptable form before entering into a contract for the purchase or construction of a dwelling or, if an owner/builder, before commencing construction. Persons who have saved less than \$2 250 may qualify for a reduced grant. Homes which exceeded a value of \$22 500 were not eligible for a grant.

From January 1977, a new scheme has been introduced in which grants are made on the basis of \$1 for each \$3 saved in an acceptable form. Under the scheme persons, including single persons, who contract to buy or build their first home in Australia can apply for a grant of up to \$667 in 1977 on the basis of savings held for the previous 12 months, up to \$1 333 in 1978 with two years savings and from 1979 up to \$2 000 taking into account savings held for the previous three or more years. Acceptable forms of savings include savings bank deposits, fixed deposits with trading banks, savings with registered building societies and credit unions, and payments made before entering into the contract to buy or build the home, for the land on which the home is to be built or any other payments made in connection with the acquisition of the home.

A total of 38 749 Home Savings Grants had been approved in South Australia at 30 June 1976 representing a total payment of \$18 478 846.

Migrant Flats Scheme

The Commonwealth Hostels Ltd. maintains fifty fully furnished self-contained flats in the southern suburbs of Adelaide to provide transitory accommodation of up to six months for selected newly arrived migrant families who have been sponsored under the Commonwealth Government Immigration Scheme.

Defence Service Homes Scheme

The Defence Service Homes Scheme is being administered by the Defence Service Homes Corporation.

The scheme originated in the War Service Homes Commission which was set up in 1919 to help provide homes for ex-servicemen and their dependants. Persons currently eligible for assistance include ex-servicemen and women of the Australian Forces and Nursing Services who were enlisted or appointed for or employed on active service outside Australia in the 1914-18 War, the 1939-45 War, in Korea, Malaya or Vietnam, or in any other areas as specified from time to time by the Commonwealth Government. In addition, National Servicemen and Permanent Members of the Force may be eligible if their period of service did not cease before 7 December 1972.

Also eligible are certain other ex-service personnel who served in British Forces and who were resident in Australia before enlistment, and certain members of the Mercantile Marine Services. Assistance may also be granted to the widow or in some cases to the widowed mother of an eligible person,

and to a representative of an approved welfare organisation who, subject to certain conditions, served outside Australia on or after 3 September 1939 with a body, contingent or detachment of the Australian Forces.

Assistance is given for building a home, in purchasing a new or existing home, or in discharging a mortgage which has been arranged with the prior approval of the Corporation. In certain circumstances a person who has not received the maximum loan may receive a further loan to undertake certain additions. The maximum loan available is \$15 000 and the interest rate is 3½ per cent for the first \$12 000 lent and 7¼ per cent on the balance of loan above \$12 000.

Defence Service Homes Scheme, South Australia

| Year | Activities During Year | | Advances Outstanding at End of Year | |
|------------------|------------------------|------------------|-------------------------------------|--------|
| | Homes Provided | Capital Advanced | Number | Amount |
| | | \$'000 | | \$'000 |
| 1969-70 | 509 | 4 100 | 16 693 | 76 405 |
| 1970-71 | 537 | 4 380 | 16 719 | 77 248 |
| 1971-72 | 669 | 6 060 | 16 801 | 79 389 |
| 1972-73 | 685 | 6 208 | 16 618 | 80 504 |
| 1973-74 | 804 | 10 580 | 16 747 | 84 354 |
| 1974-75 | 853 | 12 000 | 16 909 | 91 042 |
| 1975-76 | 745 | 10 490 | 16 778 | 95 398 |

OTHER HOME FINANCE SOURCES

The State Bank of South Australia advances funds provided by the State Government under the Advances for Homes Act, 1928-1972, funds provided from the Home Builders Fund, and its own funds. The Savings Bank of South Australia advances its own funds either as Homes Act loans guaranteed by the State Treasurer or on its own terms. Homes Act loans are also arranged by the South Australian Superannuation Department, in addition to loans on its own terms. The Commonwealth Savings Bank and the private savings banks make long-term housing advances.

Maximum loans available from the above institutions vary with differing rates for new and existing houses and for solid and timber frame construction.

Life assurance companies make housing loans which are normally collaterally secured by a life assurance policy. Maximum loan limits vary considerably between companies but in general are higher than those offered by the banks. Another source of housing finance is the building societies, details of which are given in Part 12.3 Other Private Finance.

Housing Loans Insurance Corporation

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act 1965* to administer the Commonwealth Government's Housing Loans Insurance Scheme under which approved lenders may be insured against

losses arising from the making of housing loans. The Corporation consists of a Chairman (who is also Managing Director) and a Deputy Chairman, who are full-time members, and three part-time members, all of whom are appointed by the Governor-General.

The main purpose of the Housing Loans Insurance Scheme is to assist people to borrow as a single loan, at a reasonable rate of interest, the money they need and can afford to re-pay to obtain a home suited to their requirements.

To encourage lenders to make high ratio loans, the Corporation may insure a loan of up to \$75 000. The maximum loan to valuation ratio is 95 per cent where the security is a house or a unit. For loans in respect to two units of accommodation, the maximum is 90 per cent.

A once and for all premium is charged by the Corporation at the time the loan is made. The premium is payable by the borrower but lenders may agree to add it to the amount of the loan for repayment by the borrower over the period of the loan. On loans comprising 94 per cent and 95 per cent of the valuation of a home the premium is 1.4 per cent of the amount of the loan. On loans less than 94 per cent of valuation, the premium falls progressively down to 0.25 per cent on loans of less than 76 per cent of valuation.

The Corporation will insure a loan made to enable a borrower who is to occupy the dwelling to buy or build a house, to buy a home unit, or to discharge an existing mortgage. A loan for a dwelling consisting of two units of accommodation is insurable if one of the units is to be occupied by the borrower. Loans for alterations and extensions and loans to meet expenses of providing or improving lighting, sewerage, drainage, fences, roads, etc. are also insurable. In addition to loans secured by a registered first mortgage, there is provision for the insurance of second mortgage loans and cover is available for either full term, fixed term or five year loans.

An insured loan may be made only by an approved lender. Approved lenders are appointed by the Corporation from within approved classes of lenders specified by the Commonwealth Minister for Housing. Approved classes include banks, building societies, friendly societies, mortgage management companies, solicitors, credit unions and trustees of superannuation funds.

During 1975-76, 1 635 loans for \$31 665 000 were insured in South Australia. Comparable figures for 1974-75 were 1 590 loans for \$26 185 000.

PART 9

PRODUCTION

9.1 RURAL INDUSTRIES

Two-thirds of the area of the State, from the northern boundary down to latitude 32°S, is mainly desert and unsuitable for agriculture. The rainfall is low and erratic, coming mainly from thunderstorms, and averages less than 200 millimetres a year. High day temperatures during a large part of the year cause a very high rate of evaporation.

South of latitude 32°S is an area where the rainfall is more regular and higher; this land, mostly semi-arid, is transitional between the desert and the agricultural regions. Small areas are planted to cereals and extensive areas, adjacent to the River Murray and irrigated from the waters of the river, are devoted to horticulture and viticulture.

A third region, further south, extending as far as latitude 36°S enjoys an average annual rainfall varying according to locality between 250 and 1 250 millimetres a year and has a reliable growing season of five months or more. This is the main agricultural region of the State and is devoted to ley farming, producing wheat, barley, oats, fruit and vegetables and carrying sheep and cattle.

The south-eastern part of the State has a rainfall in excess of 500 millimetres a year but the physiography is not congenial to agriculture, most of the usable area being devoted to grazing and afforestation.

Cereal crops (of which wheat is the most important) are sown following opening rains, which are normally expected in April or May. The growing

season varies between districts, but generally can be considered as the eight months April to November, and good rains during this period are vital to the success of the season's harvest.

Rural Statistics

Most rural statistics are prepared from the annual Agricultural Census in which returns are collected from rural holdings. Particulars relate to rural operations for one complete year ended 31 March, but where harvesting of some crops (mainly fruit) has not been completed by that date, growers are asked to estimate production. An owner or occupier who works more than one holding is normally required to report details for each holding. However, where the holdings are near to one another and are in effect worked as one farm, a composite return is obtained, and is treated as covering a single holding in the district in which the main farm is situated.

The number and area of holdings in each statistical division for the past two years are shown in the following table.

Rural Holdings, Statistical Divisions, South Australia

| Statistical Division | Holdings | | Area of Holdings | |
|------------------------------|---------------|---------------|------------------|---------------|
| | 1974-75 | 1975-76 | 1974-75 | 1975-76 |
| | Number | | '000 hectares | |
| Adelaide.. | 3 972 | 2 627 | 91 | 83 |
| Central | 3 096 | 2 915 | 1 272 | 1 268 |
| Kangaroo Island | 450 | 441 | 309 | 309 |
| Mount Lofty Ranges | 5 772 | 5 091 | 756 | 748 |
| Murray | 5 786 | 5 475 | 2 953 | 2 950 |
| South East | 4 336 | 4 029 | 2 194 | 2 183 |
| Eyre | 2 265 | 2 236 | 3 910 | 3 884 |
| Northern | 2 206 | 2 031 | 2 953 | 2 959 |
| Far North | 302 | 298 | 49 388 | 49 193 |
| Total | 28 185 | 25 143 | 63 825 | 63 577 |

For 1975-76 the statistics are derived from the Agricultural Census returns, relating to approximately 25 000 holdings which utilised an area of land of ten hectares or more, for the production of agricultural products (including fruit and vegetables) or for the raising of livestock (including poultry) and the production of livestock products. Holdings of less than ten hectares are included where the legal entities operating those holdings have estimated values of operations from agricultural activity, of \$1 500 or more. Details of the method used in the calculation of estimated values of operations are contained in the publication, *Agricultural Sector: Part 1, Structure of Operating Units, 1974-75* (Reference No. 10-82), published by the Australian Statistician.

The scope of the statistics for 1975-76 differs from 1974-75 and earlier years, which included holdings of one hectare or more. Holdings of less than one hectare tended to be included where there existed intensive agricultural operations such as commercial market gardens, nurseries and poultry farms. The effect of raising the area criteria for 1975-76 statistics from one to ten hectares and the introduction of a minimum economic criterion for holdings less than ten hectares has resulted in the exclusion of a significant number of small holdings. For this reason it is not strictly valid to compare 1976 data with previous years. However, the exclusion of small holdings does not have a great effect on statistics of total agricultural production.

A classification of holdings by type of main activity was undertaken for the year ended 31 March 1974 based on estimates of gross receipts of each activity. Values were allocated to areas of crops and livestock numbers reported on the returns submitted for the year.

The following table gives a summary of the type of activity carried out on rural holdings in each statistical division.

Rural Holdings: Classified by Type of Activity, South Australia, 1973-74

| Type of Activity (a) | Statistical Division | | | | | | Total (b) |
|------------------------------------|----------------------|--------------|--------------------|--------------|--------------|--------------|---------------|
| | Adelaide | Central | Mount Lofty Ranges | Murray | South East | Eyre | |
| | Number of Holdings | | | | | | |
| Commercial holdings: | | | | | | | |
| Sheep—cereal grain | 37 | 1 221 | 472 | 1 337 | 259 | 1 291 | 5 612 |
| Sheep | 49 | 22 | 438 | 146 | 1 249 | 84 | 2 761 |
| Cereal grain | 18 | 950 | 89 | 378 | 26 | 586 | 2 382 |
| Cattle (meat production) | 57 | 12 | 307 | 75 | 945 | 24 | 1 533 |
| Cattle (milk production) | 132 | 49 | 1 027 | 327 | 457 | 6 | 2 024 |
| Vineyards | 183 | 7 | 477 | 967 | 23 | — | 1 657 |
| Fruit (other than vine) | 326 | 8 | 245 | 1 083 | 5 | — | 1 677 |
| Vegetables: | | | | | | | |
| Potatoes | 27 | 10 | 79 | 5 | 31 | — | 153 |
| Other and mixed | 750 | 74 | 35 | 233 | 52 | — | 1 187 |
| Poultry | 73 | 35 | 60 | 79 | 11 | 3 | 271 |
| Pigs | 31 | 44 | 56 | 56 | 52 | 25 | 289 |
| Other | 73 | 4 | 18 | 8 | 22 | — | 129 |
| Multi-purpose | 34 | 135 | 333 | 288 | 319 | 57 | 1 305 |
| Total classified | 1 790 | 2 571 | 3 636 | 4 982 | 3 451 | 2 076 | 20 980 |
| Unclassified: | | | | | | | |
| Sub-commercial | 928 | 250 | 1 211 | 414 | 539 | 85 | 3 672 |
| Unused, special, etc. | 1 532 | 277 | 813 | 518 | 455 | 151 | 4 086 |
| Total holdings | 4 250 | 3 098 | 5 660 | 5 914 | 4 445 | 2 312 | 28 738 |

(a) Estimated gross receipts of specified activity greater than 50 per cent of total estimated gross receipts.

(b) Includes Kangaroo Island, Northern and Far North Divisions.

New Statistical Divisions

From 1 July 1976 new statistical divisions and subdivisions have been adopted for the publication of official statistics. Maps showing the new statistical divisions and subdivisions are included on pages 133-4. However, for some of the tables that follow details have been provided on the basis of the previous statistical divisions as details relate to the year ended 31 March 1976. To facilitate comparison the following table provides a few selected items for 1975-76 tabulated on the basis of the new statistical divisions.

**Selected Rural Activity: Statistical Divisions, South Australia
At 31 March 1976**

| Statistical Division | Rural Holdings | | Production for Grain | | Livestock | | |
|---------------------------------|----------------|---------------|----------------------|--------------|-----------------------|------------|--------------|
| | Number | Area | Wheat | Barley | Sheep and Lambs | Cattle | |
| | | | | | | Milk | Meat |
| | | '000 hectares | '000 tonnes | | | '000 | |
| Adelaide | 2 627 | 83 | 2 | 6 | 108 | 9 | 20 |
| Outer Adelaide | 5 555 | 996 | 50 | 73 | 1 956 | 92 | 203 |
| Yorke and Lower North | 3 525 | 1 926 | 359 | 472 | 2 580 | 12 | 108 |
| Murray Lands | 5 397 | 3 986 | 116 | 152 | 2 363 | 38 | 181 |
| South East | 3 762 | 1 851 | 27 | 24 | 4 281 | 50 | 747 |
| Eyre | 2 302 | 5 616 | 430 | 281 | 2 606 | 3 | 116 |
| Northern | 1 975 | 49 119 | 156 | 86 | 3 384 | 4 | 308 |
| Total | 25 143 | 63 577 | 1 139 | 1 094 | 17 279 | 209 | 1 683 |

Farm Machinery

Particulars of farm machinery on rural holdings in South Australia for the five years ending March 1975, and in each statistical division at 31 March 1975 are given in the next two tables. Details of farm machinery were not collected at 31 March 1976.

**Farm Machinery on Rural Holdings, South Australia
At 31 March**

| Type of Machine | 1971 | 1972 | 1973 | 1974 | 1975 |
|---|--------|-------------|-------------|-------------|-------------|
| Shearing machines: | | | | | |
| Machines | 15 852 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Stands | 30 205 | 29 586 | <i>n.a.</i> | <i>n.a.</i> | 24 580 |
| Milking machines: | | | | | |
| Machines | 5 571 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| Units | 17 082 | 16 261 | 15 834 | <i>n.a.</i> | <i>n.a.</i> |
| Rotary hoes and rotary tillers | 5 442 | 6 005 | 6 239 | 6 484 | 6 446 |
| Tractors: | | | | | |
| Wheeled | 33 971 | 34 223 | 34 370 | 34 749 | 35 524 |
| Crawler | 3 052 | 2 974 | 2 888 | 2 839 | 2 831 |
| Grain drills: | | | | | |
| Combine | 15 100 | 15 355 | 15 408 | 15 232 | 15 218 |
| Other | 4 804 | 4 485 | 4 148 | 4 084 | 4 010 |
| Fertiliser distributors | 9 667 | 9 816 | 9 863 | 10 007 | 10 021 |
| Harvesters, headers and strippers | 11 208 | 11 385 | 11 090 | 11 013 | 10 999 |
| Forage harvesters | 814 | 856 | 877 | 892 | 872 |
| Pick-up balers | 5 404 | 5 582 | 5 624 | 5 829 | 5 878 |

**Farm Machinery on Rural Holdings: Statistical Divisions, South Australia
At 31 March 1975**

| Type of Machine | Statistical Division | | | | | | | Total (a) |
|--|----------------------|---------|--------------------------|--------|---------------|-------|----------|--------------|
| | Adelaide | Central | Mount Lofty Ranges | Murray | South East | Eyre | Northern | |
| Rotary hoes and rotary tillers | 1 454 | 480 | 1 381 | 1 747 | 590 | 388 | 326 | 6 446 |
| Tractors: | | | | | | | | |
| Wheeled | 2 457 | 4 697 | 5 991 | 8 136 | 5 222 | 5 123 | 2 869 | 35 524 |
| Crawler | 307 | 189 | 422 | 379 | 504 | 581 | 209 | 2 831 |
| Grain drills. | | | | | | | | |
| Combine | 287 | 2 966 | 1 882 | 3 072 | 1 681 | 3 205 | 1 839 | 15 218 |
| Other | 92 | 411 | 656 | 821 | 844 | 889 | 148 | 4 010 |
| Fertiliser distributors.. | 835 | 850 | 2 544 | 1 853 | 1 973 | 1 178 | 409 | 10 021 |
| Harvesters, headers and strippers. | 150 | 2 358 | 1 131 | 2 277 | 1 052 | 2 399 | 1 361 | 10 999 |
| Forage harvesters. . . . | 55 | 80 | 248 | 181 | 207 | 62 | 26 | 872 |
| Pick-up balers. | 141 | 975 | 1 158 | 971 | 1 333 | 595 | 550 | 5 878 |

(a) Includes Kangaroo Island and Far North Divisions.

Rural Employment

In the following table particulars are given of permanent and temporary rural employment during the five years ending March 1975. The figures include male and female workers. Females engaged mainly in domestic duties are excluded from the table. Statistics of rural employment collected at 31 March 1976 are not comparable with earlier years.

**Rural Employment, South Australia
At 31 March**

| Particulars | 1971 | 1972 | 1973 | 1974 | 1975 |
|------------------------------------|--------|--------|--------|--------|--------|
| Permanent workers: | | | | | |
| Owners, lessees, etc. | 21 436 | 21 405 | 21 454 | 21 124 | 21 208 |
| Relatives (not paid wages) | 316 | 141 | 103 | 109 | 90 |
| Employees | 6 992 | 6 161 | 5 983 | 5 772 | 5 660 |
| Total | 28 744 | 27 707 | 27 540 | 27 005 | 26 958 |
| Temporary workers | 13 926 | 12 637 | 13 271 | 12 260 | 12 018 |
| Total workers | 42 670 | 40 344 | 40 811 | 39 265 | 38 976 |

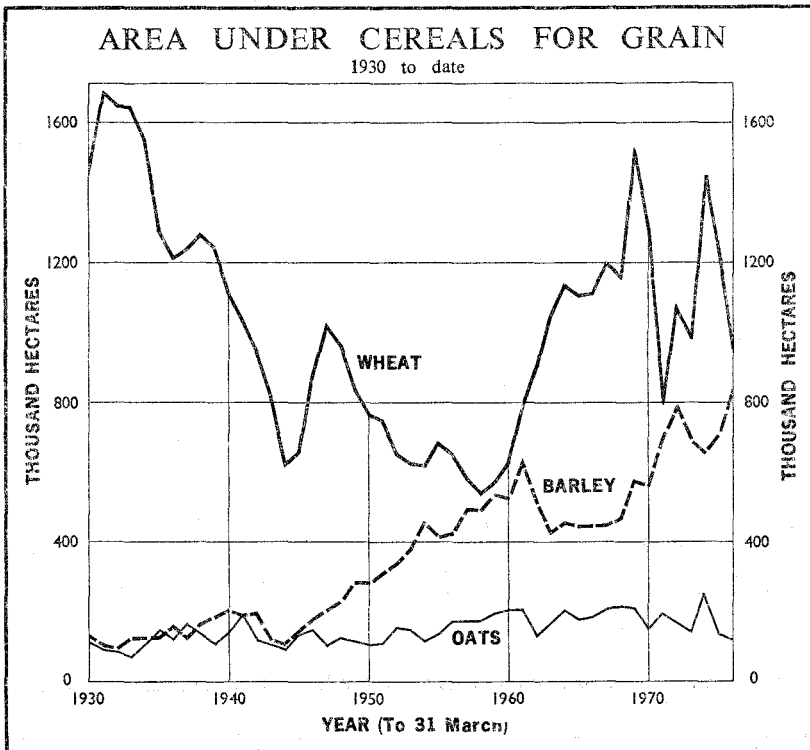
AGRICULTURE

Most of the land area of South Australia is arid or semi-arid and cannot be used for agricultural production. This severe natural limitation means that even with modern farming methods only 6 million of 64 million hectares in rural holdings are devoted to cropping or permanent improved pasture.

The area under crop in recent years has varied between 2.0 and 2.5 million hectares most of which is planted to cereals for the production of grain, hay and forage. About 57 000 hectares are used for the production of fruit and vegetables.

The cereals—wheat, barley and oats—sown for grain account for about 90 per cent of the total area cropped in South Australia. In addition to hay and green forage the remainder of the area is devoted mainly to orchards, vineyards and vegetable production. Climatic conditions, particularly the relatively low winter rainfall and the dry hot summer, favour cereal growing; one advantage being the low incidence of stem rust, a serious disease in the moister areas of the Australian wheat belt.

The extent of fluctuations since 1930 in the area under the three main cereal crops is illustrated in the following graph.



The area sown to the more important crops during the last five seasons is given in the following table.

Area Sown to Principal Crops, South Australia

| Crop | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------|----------------|----------------|----------------|----------------|----------------|
| '000 hectares | | | | | |
| Cereals for grain: | | | | | |
| Wheat. | 1 068·6 | 986·1 | 1 431·9 | 1 220·4 | 958·5 |
| Barley | 783·7 | 692·1 | 627·3 | 700·7 | 832·0 |
| Oats | 168·9 | 141·5 | 152·2 | 134·9 | 119·0 |
| Rye | 19·6 | 15·2 | 17·2 | 10·2 | 7·8 |
| Crops for hay: | | | | | |
| Oaten | 52·7 | 52·6 | 56·4 | 35·0 | 34·4 |
| Other | 25·0 | 36·5 | 23·9 | 15·9 | 16·7 |
| Crops for green forage | | | | | |
| | 84·8 | 88·2 | 71·1 | 59·4 | 54·8 |
| Vegetables: | | | | | |
| Potatoes | 2·8 | 2·7 | 2·5 | 2·7 | 2·8 |
| Tomatoes | 0·5 | 0·5 | 0·5 | 0·6 | 0·4 |
| Other | 7·1 | 7·9 | 6·4 | 6·9 | 6·2 |
| Fruit: | | | | | |
| Orchards | 17·2 | 16·7 | 16·9 | 16·6 | 16·5 |
| Vineyards | 28·8 | 29·5 | 29·6 | 30·4 | 31·2 |
| Other crops | | | | | |
| | 18·3 | 14·9 | 15·3 | 23·6 | 35·3 |
| Total area of crops.. | | | | | |
| | 2 278·0 | 2 084·4 | 2 451·2 | 2 257·2 | 2 115·7 |

IRRIGATED CULTURE

The following table shows the approximate area of all irrigated culture in South Australia for the seasons 1971-72 to 1975-76. Of the areas shown below, about 60 per cent of both orchards and vineyards and about 15 per cent of pastures are in the River Murray irrigation areas listed in the table on page 457.

Area Under Irrigated Culture, South Australia^(a)

| Season | Orchards | Vineyards | Vegetables | Other Crops | Pasture | Total |
|-------------------|----------|-----------|------------|----------------|---------|--------|
| Hectares | | | | | | |
| 1971-72 | 12 969 | 15 843 | 6 375 | 977 | 39 914 | 76 078 |
| 1972-73 | 13 126 | 17 160 | 6 248 | 2 028 | 44 586 | 83 148 |
| 1973-74 | 13 211 | 16 973 | 5 599 | 1 434 | 42 960 | 80 177 |
| 1974-75 | 13 263 | 17 987 | 5 888 | 2 396 | 39 414 | 78 948 |
| 1975-76 | 13 132 | 18 387 | 5 601 | 2 205 | 38 369 | 77 894 |

(a) Approximations only.

The most important irrigation areas are those located in the Murray Valley. A description of the development and types of irrigation schemes along the River Murray is given in Part 8.2. The remainder of the areas under irrigation are located mainly in the Mount Lofty Ranges and South East Divisions.

The main crops in the Upper Murray irrigation areas are grapes, citrus fruit and stone fruit while the reclaimed swamp areas of the Lower Murray irrigation areas are used mainly for pastures.

River Murray Irrigation Areas: Area of Pasture and Area and Production of Vineyards and Orchards, 1975-76 (a)

| Irrigation Area | Area | | | | Production | | | |
|------------------------|----------------|--------------|-------------|--------------|-----------------------|----------------------|----------------|---------------|
| | Pasture (b) | Vineyards | | Orchards | Vineyards | | Orchards | |
| | | Bearing | Not Bearing | | Total Grapes Produced | Grapes Used for Wine | Oranges | Peaches |
| Hectares | | | | Tonnes | | | | |
| Upper Murray: | | | | | | | | |
| Berri | 89 | 1 939 | 158 | 1 121 | 28 069 | 25 707 | 10 085 | 2 372 |
| Cadell | — | 156 | 9 | 164 | 1 361 | 1 192 | 1 332 | 70 |
| Cobdogla | 47 | 493 | 30 | 14 | 8 211 | 7 853 | 105 | 3 |
| Cooltong | 61 | 205 | 9 | 304 | 3 721 | 3 564 | 5 706 | 122 |
| Holder | 14 | 106 | 21 | 115 | 1 909 | 1 896 | 1 753 | 44 |
| Loveday | 87 | 898 | 49 | 146 | 16 073 | 15 100 | 1 706 | 25 |
| Loxton | — | 1 578 | 65 | 1 155 | 26 592 | 24 933 | 26 731 | 973 |
| Moorook | — | 169 | 12 | 194 | 2 392 | 2 188 | 3 054 | 115 |
| Nookamka | 4 | 657 | 45 | 56 | 11 684 | 11 110 | 627 | 12 |
| Ral Ral | 123 | 266 | 36 | 115 | 3 053 | 2 323 | 141 | 535 |
| Renmark | 294 | 2 002 | 202 | 1 330 | 25 535 | 21 657 | 9 109 | 5 463 |
| Sunlands | — | 51 | 4 | 583 | 798 | 798 | 21 807 | 50 |
| Walkerie | 24 | 651 | 53 | 882 | 9 869 | 9 490 | 14 236 | 2 112 |
| Other | 49 | 383 | 44 | 895 | 5 719 | 5 044 | 14 566 | 2 830 |
| Total | 796 | 9 554 | 737 | 7 074 | 144 986 | 132 855 | 110 958 | 14 726 |
| Lower Murray: | | | | | | | | |
| Cowirra | 409 | — | — | — | — | — | — | — |
| Jervois | 1 905 | — | — | 3 | — | — | — | — |
| Monteith | 522 | — | — | — | — | — | — | — |
| Mypolonga | 662 | — | — | 346 | — | — | 5 671 | 506 |
| Neeta | 353 | — | — | — | — | — | — | — |
| Pompoota | 571 | — | — | — | — | — | — | — |
| Other | 754 | — | — | — | — | — | — | — |
| Total | 5 176 | — | — | 349 | — | — | 5 671 | 506 |

(a) Excludes areas and yields of crops grown by irrigation on the River Murray and elsewhere not in the above irrigation areas.

(b) Includes non-irrigated pastures.

FERTILISERS

Nearly all soils in the agricultural areas of South Australia are deficient in phosphoric acid, and superphosphate is used on both crops and pastures in large quantities to overcome this deficiency. In some areas trace elements (manganese, copper, zinc and molybdenum) are added to the superphosphate to rectify the chronic shortage of these elements.

A summary of the area of crops and pastures treated and the quantities of fertiliser used in 1975 is shown in the following table. A further table shows area treated and quantity of fertiliser used in each statistical division.

Principal Crops and Pasture Fertilised, South Australia, 1975

| Type of Crop | Area Fertilised | Super-phosphate | Other | Total | Per Hectare |
|---------------------------------------|-----------------|-----------------|---------------|----------------|---------------|
| | '000 hectares | Tonnes | Tonnes | | kg |
| Wheat | 864 | 110 444 | 3 901 | 114 345 | 132.42 |
| Barley, oats and rye | 901 | 114 533 | 5 822 | 120 355 | 133.65 |
| Vegetables | 7 | 4 176 | 6 373 | 10 549 | 1 479.70 |
| Fruit trees and vines | 28 | 8 698 | 9 729 | 18 427 | 662.87 |
| Other and unspecified crops | 22 | 3 872 | 246 | 4 118 | 187.72 |
| Total crops | 1 821 | 241 723 | 26 071 | 267 794 | 147.36 |
| Pasture | 1 133 | 141 669 | 5 326 | 146 995 | 129.09 |
| Total | 2 954 | 383 392 | 31 397 | 414 789 | 140.40 |

Use of Artificial Fertilisers: Statistical Divisions, South Australia, 1975

| Statistical Division | Crops | | | | Pastures | | |
|------------------------------|-----------------|----------------------------------|-----------------|-----------------------------|-----------------|-----------------|-----------------------------|
| | Area Fertilised | Proportion of Total Area Cropped | Fertiliser Used | Fertiliser Used per Hectare | Area Fertilised | Fertiliser Used | Fertiliser Used per Hectare |
| | '000 ha | Per cent | Tonnes | kg | '000 ha | Tonnes | kg |
| Adelaide | 11 | 60.53 | 7 788 | 719.91 | 9 | 1 658 | 182.56 |
| Central | 445 | 90.01 | 63 377 | 142.34 | 83 | 9 733 | 117.70 |
| Kangaroo Island | 8 | 71.18 | 1 486 | 177.41 | 100 | 11 985 | 120.42 |
| Mount Lofty Ranges | 91 | 80.98 | 16 417 | 179.99 | 130 | 21 064 | 162.33 |
| Murray | 321 | 86.28 | 50 260 | 156.60 | 80 | 11 027 | 138.20 |
| South East | 74 | 73.36 | 12 503 | 168.77 | 523 | 67 584 | 129.15 |
| Eyre | 661 | 86.95 | 91 819 | 138.99 | 164 | 18 723 | 114.22 |
| Northern | 190 | 86.95 | 21 634 | 113.65 | 45 | 5 189 | 115.00 |
| Far North | 19 | 71.08 | 2 510 | 130.29 | — | 32 | 138.53 |
| Total | 1 821 | 86.07 | 267 794 | 147.07 | 1 133 | 146 995 | 129.69 |

The next table gives the area of crops and pastures treated in the State for the years 1971 to 1975.

Use of Artificial Fertilisers, South Australia

| Year | Crops | | | | Pastures | | |
|----------------|-----------------|----------------------------------|-----------------|-----------------------------|-----------------|-----------------|-----------------------------|
| | Area Fertilised | Proportion of Total Area Cropped | Fertiliser Used | Fertiliser Used per Hectare | Area Fertilised | Fertiliser Used | Fertiliser Used per Hectare |
| | '000 ha | Per cent | Tonnes | kg | '000 ha | Tonnes | kg |
| 1971 | 2 113 | 85.30 | 284 448 | 135 | 1 822 | 254 403 | 140 |
| 1972 | 1 864 | 89.44 | 258 209 | 139 | 2 033 | 296 192 | 146 |
| 1973 | 2 146 | 87.53 | 310 010 | 144 | 2 425 | 382 845 | 158 |
| 1974 | 1 986 | 87.99 | 299 438 | 151 | 2 138 | 322 754 | 151 |
| 1975 | 1 821 | 86.07 | 267 794 | 147 | 1 133 | 146 995 | 130 |

WHEAT

Wheat has always been a crop of major importance to the economy of this State. South Australia as a wheat producing State ranks fourth in order of importance, and for the ten harvests ending 1975-76 averaged 13 per cent of Australian wheat production.

In the past twenty years a feature of the industry has been that average yields have fluctuated about a higher level of average yield mainly because of improved farming practices, including the adoption of nitrogen-building legumes in the rotation. The average yield per hectare for the ten seasons ended 1975-76 was 1.16 tonnes, a record of 1.58 tonnes being attained in 1960-61. The record wheat crop was 2 263 000 tonnes in 1968-69. Production in 1975-76 was 1 139 000 tonnes.

Varieties of Wheat

In each of the Australian States a committee has been set up to examine and recommend the wheat varieties which should be grown by farmers for marketing through the Australian Wheat Board. The South Australian Advisory Committee on Wheat Quality was established in 1962. Recommendation or approval of wheat varieties is decided each year by the Committee which brings together relevant available information on breeding, testing, commercial production, handling and end usage of wheat and more particularly of specific varieties. The Department of Agriculture and Fisheries and the Australian Wheat Board encourage growers to produce wheat with uniform characteristics in both the Hard class and Australian Standard White (ASW) class and this can be done more successfully if only a few of the best varieties are grown by the farmers.

The leading varieties of wheat sown for all purposes for the last three years are shown in the following table.

Principal Varieties of Wheat Sown, South Australia

| Variety | Area | | | Proportion of Total Area | | |
|----------------------|---------------|---------|---------|--------------------------|---------|---------|
| | 1973-74 | 1974-75 | 1975-76 | 1973-74 | 1974-75 | 1975-76 |
| | '000 hectares | | | Per cent | | |
| Dirk | 42 | 36 | 25 | 2.9 | 2.9 | 2.6 |
| Eagle | 9 | 53 | 164 | 0.6 | 4.3 | 16.9 |
| Festiguay | 4 | 11 | 42 | 0.3 | 0.9 | 4.3 |
| Gabo | 125 | 67 | 31 | 8.6 | 5.4 | 3.2 |
| Gamenya | 29 | 29 | 26 | 2.0 | 2.4 | 2.6 |
| Halberd | 821 | 763 | 446 | 56.7 | 62.0 | 46.0 |
| Heron | 119 | 59 | 34 | 8.2 | 4.8 | 3.6 |
| Kite | (a) | 1 | 22 | (a) | 0.1 | 2.3 |
| Raven | 47 | 46 | 33 | 3.2 | 3.7 | 3.4 |
| Other | 254 | 167 | 146 | 17.5 | 13.5 | 15.1 |
| Total area | 1 449 | 1 231 | 970 | 100.0 | 100.0 | 100.0 |

(a) Not collected separately.

The Advisory Committee has divided the State into seven wheat growing zones and each year recommends to farmers only those wheat varieties which are likely to give the best results as far as the protein content of the wheat is concerned, while maintaining a high rate of yield. For 1975-76 Halberd was the main variety recommended for ASW wheat and of the hard wheats Raven was the most widely grown of the recommended varieties although a greater area was sown to the approved variety Eagle.

Wheatgrowing Districts

Wheatgrowing in South Australia is virtually restricted to the belt between the 200 millimetre and 450 millimetre rainfall isohyets for the period April-November inclusive. The principal wheat producing districts are in the Eyre, Central, Murray and Northern Divisions. These districts accounted for over 90 per cent of the area sown in 1975-76.

Wheat Sown for Grain: Area and Production, Statistical Divisions South Australia

| Statistical Division | Area | | Production | |
|-----------------------------|---------------|------------|------------------|------------------|
| | 1974-75 | 1975-76 | 1974-75 | 1975-76 |
| | '000 hectares | | Tonnes | |
| Adelaide | 1 | 1 | 1 405 | 1 699 |
| Central | 213 | 186 | 318 360 | 315 788 |
| Kangaroo Island | (a) | (a) | 305 | 188 |
| Mount Lofty Ranges | 38 | 35 | 46 150 | 53 412 |
| Murray | 254 | 130 | 309 332 | 125 001 |
| South East | 21 | 22 | 21 160 | 32 654 |
| Eyre | 526 | 439 | 580 167 | 421 497 |
| Northern | 147 | 130 | 193 294 | 179 699 |
| Far North | 20 | 16 | 15 454 | 9 021 |
| Total | 1 220 | 958 | 1 485 627 | 1 138 959 |

(a) Less than 500 hectares.

Research

Under the *Wheat Tax Act 1957* a tax, not exceeding fifteen cents a tonne, may be levied on all wheat delivered to the Australian Wheat Board and credited to the Wheat Research Trust Account for use by the respective State Wheat Industry Research Committees. Each committee allocates the amounts available for research and reports the expenditure approved to the Wheat Industry Research Council. The Commonwealth Government also makes contributions for wheat research, the amount being equal to the wheat tax levied from the growers. The Wheat Industry Research Council recommends the avenues of research on which this Government grant should be spent.

The wheat research funds are made available to organisations, such as the Commonwealth Scientific and Industrial Research Organization and the Department of Agriculture and Fisheries, which conduct research on wheat diseases and varieties, and on soil structure.

Marketing*Australian Wheat Board*

The Board consists of fourteen members; four appointed by the Commonwealth Minister for Primary Industry and ten representing wheatgrowers (two from each mainland State). The Board has legislative powers over the receipt and disposal of all wheat and wheat products and issues licences to bulk handling authorities in each State to act as receivers, which gives them the responsibility for the storage, care and protection of the Board's wheat and its movement from country silos to buyers in Australia and to terminal silos for export. Under the stabilisation plan the Board is the sole authority for marketing wheat in Australia and for marketing wheat and flour for export.

In its first full season, 1939-40, the Wheat Board received 5.3 million tonnes. A record delivery of 14 million tonnes of wheat was made during 1968-69. Deliveries to the Board in 1975-76 totalled 11.2 million tonnes.

Deliveries to the Australian Wheat Board^(a)

| Season | South Australia | Australia | Season | South Australia | Australia |
|-------------------|--------------------|-----------|-------------------|--------------------|-----------|
| | '000 tonnes | | | '000 tonnes | |
| 1966-67 | 1 361 | 11 954 | 1971-72 | 1 306 | 7 665 |
| 1967-68 | 601 | 6 732 | 1972-73 | 711 | 5 438 |
| 1968-69 | 2 162 | 14 033 | 1973-74 | 1 672 | 11 199 |
| 1969-70 | 1 517 | 9 755 | 1974-75 | 1 377 | 10 704 |
| 1970-71 | 681 | 6 936 | 1975-76 | 1 042 | 11 247 |

(a) Mostly in bulk, but includes weight of bags where used.

During the year ended 30 November 1976 total exports of wheat (including wheat equivalent of flour and wheat products) were 8.2 million tonnes. The value of the Wheat Board's sales on both the local and export market is shown in the following table.

Australian Wheat Board Sales of Wheat and Wheat Flour

| Crop Year | Sales | | Value | |
|-------------------|-------------|--------|---------|-----------|
| | Local | Export | Local | Export |
| | '000 tonnes | | \$'000 | |
| 1969-70 | 1 602 | 8 185 | 91 624 | 371 720 |
| 1970-71 | 1 703 | 9 050 | 97 138 | 444 674 |
| 1971-72 | 1 857 | 7 760 | 108 255 | 366 273 |
| 1972-73 | 2 242 | 4 137 | 134 369 | 214 961 |
| 1973-74 | 2 319 | 7 418 | 163 499 | 881 427 |
| 1974-75 | 2 394 | 8 560 | 198 002 | 1 078 889 |
| 1975-76 | 1 992 | 8 236 | 194 756 | 946 290 |

Wheat Delivery Quotas Plan

In March 1969 the Australian Wheatgrowers Federation put forward proposals to the Australian Agricultural Council for the allotment of quotas on deliveries of wheat to the Australian Wheat Board. The Federation's proposals were mainly designed to bring marketable supplies of wheat more into line with available outlets, following the record 1968-69 harvest. The proposals were approved by the Council and later by the Commonwealth Government and became effective for the 1969-70 harvest with total Australian quotas of 9.7 million tonnes and the retention of \$40.42 as the rate per tonne for first payment. State Governments, in 1969 (except Queensland where the legislation was introduced in 1970), enacted the necessary legislation to implement the system of wheat delivery quotas within the States. The quota plan operated for each season from 1969-70 to 1974-75.

The Australian Wheatgrowers Federation successfully recommended in February 1971 that the total wheat quotas for Australia in the 1971-72 season should be 9.2 million tonnes. The 1972-73 quotas were approved at 11.1 million tonnes and the 1973-74 quotas 14 million tonnes. The 1973-74 quotas included allowances for short-falls in production in 1972-73 attributable to poor seasonal conditions. The quotas for South Australia were 2 million tonnes in both the 1973-74 and 1974-75 seasons.

The States were responsible for determining the method of allocation of individual quotas within their respective boundaries. In South Australia the Wheat Delivery Quotas Act, 1969 instituted a Wheat Delivery Quota Advisory Committee consisting of eight members representing wheatgrowers, and one representative each from the Wheat Board, the South Australian Co-operative Bulk Handling Limited and the South Australian Department of Agriculture and Fisheries. A Review Committee of three members was also provided to deal with the appeals by growers against the quota quantities allotted to them.

The basis on which quotas were allocated in South Australia for the 1969-70 season was the average quantity of wheat obtained after listing deliveries from the various farm properties to the Australian Wheat Board during the five-year period from 1964-65 season to 1968-69 season, less 10 per cent.

The Act permitted the Quota Advisory Committee, in certain cases, to make special allowances when determining nominal quotas and provides for quotas to be allotted only to growers who are owners of the wheat-farming properties and to lessees, but not to people who are simply share-farmers.

At the instigation of the Australian Wheatgrowers Federation, the Commonwealth and State Governments agreed to the suspension of wheat delivery quotas for an indefinite period from the 1975-76 season. The action of the Federation was motivated by a barely adequate world supply and a serious depletion of carry-over stocks of wheat in recent years, the need to establish carry-over stock reserves within Australia, and because the establishment of the Wool Reserve Price Scheme has made it unlikely that woolgrowers will have to change over to wheat as a major alternative source of income.

Bulk Handling

The South Australian Co-operative Bulk Handling Ltd, which was incorporated on 7 December 1954, is the sole bulk grain handling authority in this State, and is owned, financed and controlled by the growers. At 31 December 1976

the Co-operative had a total storage capacity, including current contracts let, of 3.5 million tonnes (3.1 million tonnes permanent storage and 0.3 million tonnes temporary storage).

The bulk handling operations of the State have been divided into seven divisions—Arrossan, Port Giles, Wallaroo, Thevenard, Port Lincoln, Port Pirie and Port Adelaide—each of which provides a terminal port as a shipping outlet for the country silos within the division. The bulk capacity of the respective divisions for each of the three major cereals is shown in the following table.

Bulk Handling Capacity, South Australia
31 December 1976^(a)

| Division | Wheat | | Barley | | Oats | |
|--------------------|----------------|--------------|--------------|------------|-------------|------------|
| | Permanent | Temporary | Permanent | Temporary | Permanent | Temporary |
| '000 tonnes | | | | | | |
| Arrossan | 148.3 | — | 102.1 | — | — | — |
| Port Adelaide .. | 633.9 | 56.5 | 223.6 | 1.0 | 9.0 | 2.1 |
| Port Giles | 24.5 | — | 111.8 | — | — | — |
| Port Lincoln .. | 610.3 | 95.4 | 155.2 | — | 1.8 | — |
| Port Pirie | 316.1 | 75.9 | 67.4 | — | — | — |
| Thevenard | 255.3 | 64.1 | 60.0 | — | 1.8 | 7.4 |
| Wallaroo | 345.4 | — | 81.9 | — | — | — |
| Total | 2 333.8 | 291.9 | 802.0 | 1.0 | 12.6 | 9.5 |

(a) Includes current contracts let.

The system by which payments are made to growers changed for the 1975-76 and future seasons. In the past growers forwarded claim forms through the bulk handling authority, after the delivery of wheat. Now a claim form containing the pre-harvest information required by the Board is forwarded by each grower. The form enables the prompt payment of the first advance, on a fortnightly basis after 1 December throughout the harvest period, by directly crediting the net payments to growers' individual bank accounts.

Under the system of pooling wheat, the cost of handling wheat by the Co-operative is reimbursed by the Wheat Board.

Grading of Wheat and Determination of Standards

To aid the Wheat Board in the marketing of wheat each season, a separate standard sample is determined for the various classes of exportable wheat produced in each State. Samples of the various classes of wheat are then packed in sealed bags and forwarded by the Wheat Board to the potential purchasers of Australian wheat.

In each of the five mainland States, the function of establishing wheat standards each season is performed by the respective Wheat Standards Committees, which have been appointed for this purpose. The Committees comprise representatives of the Wheat Board, the bulk handling authorities, State Departments of Agriculture, the wheatgrowers and the flour millers.

Each standard is determined by collecting a proportionate amount of wheat, for the class concerned, from every delivery point in the State from which the wheat is to be exported. These wheat quantities are then blended to form a State composite sample for that class. After the various bulk wheat samples have been thoroughly mixed, the test weight of each is ascertained in kilograms per hectolitre. The relevant particulars of season, test weight, class of wheat and State concerned are designated on the bags into which the official sample wheat is packed. The bags are then sealed for dispatch to buyers.

In South Australia, the classes of wheat for which official standards are declared each season are South Australian Hard and Australian Standard White (SA). An official standard sample will also be determined for the class known as General Purpose in seasons when sufficient is available for export.

The segregation of South Australian wheat into classes was first introduced in the 1957-58 season when wheat was separated into a Semi-hard wheat class (after 1966 called Hard wheat) and into what, up to that time, was the long established FAQ (Fair Average Quality) class. This has been done in each season since 1957-58.

Test weights of the standard samples for the three classes of wheat segregated in season 1975-76 were declared a follows:

| Class of Wheat | Kilograms per Hectolitre |
|---------------------------|-----------------------------|
| ASW | 76.5 |
| Hard | 78.0 |
| General Purpose | 72.0 |

Wheat Stabilisation Plan

Wheat grown in Australia is marketed under a stabilisation scheme approved by the Commonwealth and State Governments which provides for:

- (i) the fixing of a home consumption price for each season which may be varied annually by changes in the cost of production;
- (ii) the pooling of the proceeds from local (Australian) and overseas sales of wheat;
- (iii) the operation of a stabilisation fund into which is paid the proceeds of a tax, which is imposed on wheat exported when the average of the export prices exceeds certain specified amounts;
- (iv) the establishing of a stabilisation price each season which may involve Commonwealth Government financial contributions to the stabilisation fund, when the average export price falls below specific levels.

The first post-war Wheat Stabilisation Plan operated between 1948 and 1953. Subsequent stabilisation plans were introduced in 1954 (for seasons 1953-54 to 1957-58), 1958 (for seasons 1958-59 to 1962-63), 1963 (for seasons 1963-64 to 1967-68) and 1968 (for seasons 1968-69 to 1972-73). The 1968 plan was extended to cover 1973-74. The current stabilisation plan will operate for five years from 1974-75 to the 1978-79 season, and contains provisions in relation to the stabilisation price which are based on different principles to those applying to the guaranteed price in previous stabilisation plans.

Under the *Wheat Export Charge Act 1974*, wheat exported is subject to a tax which is paid into the Wheat Prices Stabilisation Fund. The balance in the Stabilisation Fund may not exceed \$80 million and any surplus must be returned to the growers.

The Stabilisation Fund is used to make up deficiencies in respect of all wheat exported from each crop where the average export realisation falls below the stabilisation price. In the event of the Fund being unable to meet any deficiency the Commonwealth Government is required to meet its obligations under its guarantee, as provided in the stabilisation legislation.

International Grains Agreements

The history of these agreements goes back to 1947 when negotiations commenced, between the principal exporters and importers of wheat throughout the world, for an agreement which would stabilise international trading in wheat and influence equitable and stable prices. Eventually, after hard bargaining, the first agreement, which was of four years duration, came into force on 1 August 1949 and brought to fruition earlier efforts extending back over the previous twenty years to stabilise world wheat marketing through international co-operation. Along with thirty-seven importing nations and five exporting nations, Australia, as an exporter, participated in that agreement because it assured the nation's wheatgrowers of overseas markets at payable prices.

The initial International Wheat Agreement of 1949 has been reviewed and extended by subsequent agreements through to 30 June 1975. The last agreement which contained pricing provisions was the International Grains Arrangement 1967 described on page 383 of the *South Australian Year Book 1970*. The current agreement is the International Wheat Agreement 1971 which was due to expire on 30 June 1974 but has been extended by member nations by Protocol (a form of diplomatic document) until 30 June 1978. The current 1971 Agreement comprises two separate legal instruments known as the Wheat Trade Convention and the Food Aid Convention which are linked by a common preamble. An explanation of the terms of the current 1971 Agreement was included on page 421 of the *South Australian Year Book 1974*.

The Protocol for the extension of the Food Aid Convention to 30 June 1978 provides for a Food Aid Committee to administer contributions of international food aid of grains, grain products and cash by certain nations who are parties to that Protocol.

Prices

The following table shows the trend in export and domestic prices of Australian wheat for the years 1966-67 to 1975-76. The export prices shown in the table are the basic selling prices for FAQ (now known as ASW) bulk wheat f.o.b., terminal ports. The home prices shown for the seasons 1966-67 to 1968-69 inclusive, are those set by the Wheat Board for bulk wheat (free-on-rail, terminal port basis) sold to millers for grinding into flour for consumption in Australia. In those seasons the prices charged by the Board for wheat for stock feed in Australia were the same as those charged for wheat for human consumption. However,

Area and Production of Barley for Grain: Statistical Divisions, South Australia

| Statistical Division | Area | | Production | |
|-----------------------------|---------------|---------|-------------|---------|
| | 1974-75 | 1975-76 | 1974-75 | 1975-76 |
| | '000 hectares | | '000 tonnes | |
| Adelaide | 4 | 4 | 8 | 7 |
| Central. | 242 | 277 | 508 | 465 |
| Kangaroo Island | 2 | 2 | 1 | 2 |
| Mount Lofty Ranges. | 32 | 37 | 53 | 59 |
| Murray | 168 | 174 | 203 | 145 |
| South East | 25 | 30 | 30 | 38 |
| Eyre | 171 | 233 | 249 | 275 |
| Northern | 50 | 67 | 77 | 98 |
| Far North | 7 | 8 | 5 | 6 |
| Total | 701 | 832 | 1 134 | 1 094 |

Varieties

The most widely grown barley variety before 1970-71 was Prior, which for the three seasons ended 1969-70 averaged about 60 per cent of the total area sown. Another variety, known as Noyep, is similar to Prior but is earlier maturing and is suitable to areas where a sudden cut-off in spring rainfall is experienced.

The malting variety, Clipper, was released in South Australia to replace Prior in 1968. Reported area sown to Clipper in the 1970-71 season was 330 000 hectares, in the 1971-72 season 512 000 hectares and in the 1975-76 season 602 000 hectares. The variety has greater straw strength, much less subject to wind damage, is adapted to conditions of high soil fertility and in tests produced substantially higher yields than Prior. These features together with improved malting quality represent considerable advantages for the grower and the industry as a whole. In 1975-76 Clipper was the most widely grown variety, accounting for 71 per cent of total area sown to barley. The percentage sown to Prior and Noyep was 7 and 1 per cent respectively. Another variety, Ketch, was released in 1970. The proportion sown to Ketch in 1975-76 was approximately 8 per cent.

Research

Because of the inherent similarities, the barley industry has in many instances benefited from the technological advances achieved by the wheat industry, namely the use of superphosphate and the inclusion of pastures in rotation, but certain problems peculiar to barley have necessitated the undertaking of extensive research. The barley research program is conducted by the Department of Agriculture and Fisheries and the Waite Agricultural Research Institute for which the Australian Barley Board provides financial support.

Marketing

The marketing of barley is under the control of the Australian Barley Board which operates in South Australia and Victoria and provides an orderly marketing system for barley grown in these States. In the 1975-76 season the Board

received a record total of 1 420 000 tonnes. Since 1966-67 receipts of bulk barley have been greater than receipts of bagged barley.

For marketing purposes all barley is classified on sample before delivery. Classification is firstly by row variety and secondly by quality. With the wide acceptance of Clipper barley as the prime malting variety, the Board has renumbered its barley standards for South Australia for season 1975-76 and subsequent seasons to South Australian Clipper Barley No. 1 and No. 2 Grade, South Australian Two Row Barley No. 3 and 4 Grade, and South Australian Six Row Barley Feed Grade.

Australian Barley Board Receipts, South Australia

| Season | 2-Row | | | 6-Row | | Total |
|-------------------|-------------|---------|------|---------|------|-------|
| | Malting | Milling | Feed | Malting | Feed | |
| | '000 tonnes | | | | | |
| 1968-69 | 126 | 182 | 167 | 1 | 9 | 485 |
| 1969-70 | 80 | 147 | 312 | — | 5 | 544 |
| 1970-71 | 109 | 150 | 343 | — | 3 | 605 |
| 1971-72 | 98 | 287 | 475 | — | 2 | 862 |
| 1972-73 | 5 | 29 | 315 | — | 1 | 350 |
| 1973-74 | 117 | 209 | 346 | — | 3 | 676 |
| 1974-75 | 139 | 435 | 485 | — | 13 | 1 072 |
| 1975-76 | 116 | 270 | 609 | — | 10 | 1 006 |

The price of malting barley is determined on the basis of an agreed formula and subsequently the prices of barley for distilling and pearling are calculated—the prices for feed purposes are determined monthly. The home consumption prices determined by the Board for barley for the season 1975-76 are shown below.

Price per Tonne of Barley for Home Consumption

| Season | No. 1 Grade | No. 2 Grade | No. 3 Grade | No. 4 Grade |
|---------------------------|----------------|----------------|----------------|----------------|
| Bagged Barley | | | | |
| Dollars | | | | |
| 1975-76: | | | | |
| 3 year Contract | — | — | 95·95 | 94·05 |
| Other | 106·70 | 103·70 | 101·00 | 99·00 |
| Bulk Barley | | | | |
| 1975-76: | | | | |
| 3 year Contract | — | — | 91·20 | 89·30 |
| Other | 101·70 | 98·70 | 96·00 | 94·00 |

OATS

The following table shows the area of oats sown for grain, for hay and for forage and the production of grain and hay in recent years.

Oats, South Australia

| Season | Area Sown for | | | Total Area | Production | |
|-----------------|---------------|-----|--------|---------------|---------------|-----|
| | Grain | Hay | Forage | | Grain | Hay |
| | | | | | '000 tonnes | |
| | | | | | '000 hectares | |
| 1971-72 | 169 | 53 | 56 | 278 | 166 | 204 |
| 1972-73 | 142 | 53 | 60 | 254 | 74 | 120 |
| 1973-74 | 152 | 56 | 44 | 252 | 142 | 192 |
| 1974-75 | 135 | 35 | 45 | 215 | 112 | 117 |
| 1975-76 | 119 | 34 | 41 | 195 | 107 | 99 |

The milling qualities of most oats grown in South Australia do not meet the requirements of overseas markets and only a small proportion of the harvest is exported; most of the crop is used as animal fodder. As is the case with barley, some of the area sown for grain and hay is grazed until June or July then closed to sheep to allow re-growth to a crop. Part of the area sown for forage is left to stand until it is used as dry grazing in autumn, when other fodder is not plentiful.

In 1975-76, 82 per cent of the total area of oats was sown in four varieties—Swan, 99 000 hectares; Avon, 31 000 hectares; Irwin, 16 000 hectares; and Kherson, 13 000 hectares.

RYE

Rye is a minor crop, but it has been used to control sand drift and particularly to stabilise the light soils of the Murray Mallee. Because the sands are deficient in two main nutrients (nitrogen and phosphorus), a mixed superphosphate-ammonia fertiliser is sown with the rye seed early in the season. The rapid early growth of the rye while the ground is still warm and before the strong winds of winter cause sandblast is at present the most effective form of controlling drifting sand. Rye provides early greenfeed while some grain is produced on a number of farms. Although most grain is used for stock feed, varying quantities are exported in different years for milling. Rye hay is of poor nutritional quality and only a few hundred tonnes are produced each year.

In 1975-76, 7 800 hectares of rye for grain yielded 2 803 tonnes. Record production was 12 000 tonnes from 23 000 hectares in 1958-59.

HAY

The quantity of hay produced varies considerably from year to year according to seasonal conditions and the need to replace stocks used during the previous

season. The main crops cut for hay in recent years have been oats, lucerne, and clover and grass hay which together account for more than half of all hay produced.

Hay: Area and Production, South Australia

| Season | Oaten | Wheaten | Lucerne | Barley and Rye | Clover and Grass | Total |
|---------------------------------|-------|---------|---------|----------------|------------------|-------|
| AREA ('000 hectares) | | | | | | |
| 1968-69 | 61 | 21 | 32 | 15 | 120 | 249 |
| 1969-70 | 41 | 22 | 27 | 10 | 55 | 155 |
| 1970-71 | 52 | 19 | 33 | 14 | 79 | 196 |
| 1971-72 | 53 | 15 | 37 | 10 | 131 | 245 |
| 1972-73 | 53 | 20 | 37 | 16 | 84 | 210 |
| 1973-74 | 56 | 14 | 45 | 10 | 143 | 268 |
| 1974-75 | 35 | 10 | 28 | 6 | 111 | 190 |
| 1975-76 | 34 | 10 | 25 | 7 | 83 | 159 |
| PRODUCTION ('000 tonnes) | | | | | | |
| 1968-69 | 242 | 87 | 155 | 48 | 468 | 1 001 |
| 1969-70 | 156 | 87 | 136 | 31 | 207 | 618 |
| 1970-71 | 180 | 66 | 163 | 39 | 308 | 755 |
| 1971-72 | 204 | 61 | 176 | 31 | 509 | 982 |
| 1972-73 | 120 | 53 | 154 | 30 | 265 | 623 |
| 1973-74 | 192 | 46 | 167 | 25 | 449 | 879 |
| 1974-75 | 117 | 34 | 119 | 17 | 375 | 662 |
| 1975-76 | 99 | 30 | 101 | 16 | 260 | 506 |

Between 20 000 and 50 000 tonnes of silage are produced in most years and in certain areas this is an important supplementary stock food; in 1975-76 production was 20 000 tonnes.

VEGETABLES

The market garden industry in South Australia is characterised by a large number of growers, most of whom cultivate only a few hectares. Many of the gardens form part of a larger holding. Much of the production of the industry comes from properties with easy access to the Adelaide market.

Of the total area of approximately 10 000 hectares devoted to market gardens, districts adjacent to Adelaide account for 4 000 hectares producing all types of vegetables, including large quantities of celery and early tomatoes for export. Over 4 000 hectares are cultivated in the South East Division, mainly peas sweet corn and potatoes. An area of some 200 hectares in Northern Division (mainly on the coastal plains near Port Pirie) is used for the production of peas and early tomatoes for Adelaide and for export to the Melbourne market. Nearly 1 500 hectares along the River Murray are devoted to production of peas,

pumpkins and melons for the Adelaide market, tomatoes for local markets and small areas of most other vegetables.

The bulk of the potato production comes from the central and southern Adelaide hills and from the Mount Gambier area. The average yield has risen progressively to a record of 26 tonnes per hectare in 1972-73 and again approached this level in 1975-76. This improvement is largely because of better quality seed, improved fertilisers and advances in pest and disease control.

The South Australia Potato Board is constituted under authority of the Potato Marketing Act, 1948-1974 to control the sale and delivery of potatoes by growers. It fixes the maximum and minimum prices and the conditions under which potatoes may be sold. Members of the Board are representatives of retail sellers, merchants and growers of potatoes.

In 1975-76, 2 875 hectares were sown to green peas in the South East Division for factory processing. Production of green peas from this area accounted for about 98 per cent of the total crop. The Port Pirie-Mambray Creek area, the hills to the south of Adelaide and Upper Murray irrigation areas are other important areas for pea production.

The Adelaide plains produce most of the South Australian tomatoes which are grown in glass houses. Significant quantities, mostly for canning and juice production in local factories, are now grown in the Upper Murray irrigation areas. In recent years high yields have resulted from the introduction of new varieties.

The following table shows the area and production of the principal vegetables for human consumption in South Australia in 1974-75 and 1975-76.

Vegetables for Human Consumption, South Australia

| Vegetable | Area | | Production | |
|------------------------|---------------|--------------|------------|-----------|
| | 1974-75 | 1975-76 | 1974-75 | 1975-76 |
| | Hectares | | Tonnes | |
| Beans | 50 | 47 | 304 | 259 |
| Cabbages | 225 | 201 | 9 460 | 8 837 |
| Carrots | 274 | 292 | 5 840 | 6 756 |
| Cauliflowers | 208 | 218 | 10 540 | 11 539 |
| Celery | 95 | 77 | 5 427 | 4 533 |
| Lettuce | 194 | 201 | 3 409 | 4 258 |
| Melons | 93 | 111 | 1 256 | 1 402 |
| Onions | 778 | 791 | 19 240 | 21 399 |
| Peas | 3 492 | 3 192 | 24 606 | 14 088 |
| Potatoes | 2 747 | 2 842 | 70 849 | 70 727 |
| Pumpkins | 538 | 392 | 6 621 | 5 797 |
| Tomatoes | 551 | 426 | 19 537 | 17 069 |
| Turnips | 106 | 99 | 1 145 | 874 |
| Other | 826 | 608 | .. | .. |
| Total. | 10 177 | 9 497 | .. | .. |

GRAPES

Approximately 43 per cent of Australia's vineyard area is located in South Australia where the bulk of the grapes grown are used for winemaking. In 1974-75 South Australia produced 222 million litres of wine and 4 784 tonnes of dried vine fruit representing 63 per cent and 7 per cent respectively of total Australian production. The following table shows the area of vineyards in South Australia for the seasons 1971-72 to 1975-76.

Area of Vineyards, South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---------------------------|----------|---------|---------|---------|---------|
| | Hectares | | | | |
| Vines: | | | | | |
| Bearing age | 23 924 | 25 200 | 26 178 | 26 833 | 27 278 |
| Not yet bearing | 4 845 | 4 328 | 3 424 | 3 533 | 3 883 |

The area planted to vines at 31 March 1976 was a record 31 161 hectares exceeding the previous record at March 1975 by 795 hectares. Total production in 1975-76 was 269 728 tonnes. The record harvest of 290 561 tonnes was achieved in 1974-75.

Production of Grapes, South Australia^(a)

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|----------------------|---------|---------|---------|---------|---------|
| | Tonnes | | | | |
| Grapes: | | | | | |
| For wine | 224 718 | 220 576 | 206 022 | 272 007 | 256 583 |
| For table | 1 849 | 1 213 | 900 | 1 388 | 962 |
| For drying | 44 517 | 22 106 | 12 230 | 17 166 | 12 183 |

(a) Classified according to purpose for which grapes are used.

About one-third of the State's wine-grape crop is received by the co-operative wineries. Nearly all of this is grown by members who receive a down payment on each tonne, followed by further payments over a period of up to five years according to realisation made on the product. The balance of the crop is processed by proprietary wineries which purchase grapes from the growers. Minimum prices, according to variety, are determined by the South Australian Commissioner for Prices and Consumer Affairs. The proprietary wineries also purchase a large proportion of the wine, brandy and spirits made by co-operatives.

The following table shows the area, production and utilisation of grapes for the seasons 1966-67 to 1975-76.

Area, Production and Utilisation of Grapes, South Australia

| Season | Area of Vines | Total Grape Production (Fresh) | Wine Production (a) | Dried Fruit Production | | |
|------------|---------------|--------------------------------|---------------------|------------------------|----------|---------|
| | | | | Currants | Sultanas | Raisins |
| | Hectares | Tonnes | '000 litres | | Tonnes | |
| 1966-67 .. | 23 099 | 229 034 | 133 310 | 3 833 | 12 614 | 1 148 |
| 1967-68 .. | 23 524 | 204 458 | 136 633 | 3 162 | 4 671 | 612 |
| 1968-69 .. | 24 513 | 221 027 | 164 505 | 2 298 | 1 603 | 167 |
| 1969-70 .. | 26 239 | 272 321 | 196 850 | 3 378 | 2 981 | 239 |
| 1970-71 .. | 27 659 | 224 618 | 169 265 | 3 201 | 1 132 | 202 |
| 1971-72 .. | 28 769 | 271 084 | 185 999 | 3 098 | 7 979 | 633 |
| 1972-73 .. | 29 528 | 243 895 | 183 502 | 2 026 | 3 244 | 468 |
| 1973-74 .. | 29 602 | 219 152 | 169 991 | 1 053 | 1 819 | 324 |
| 1974-75 .. | 30 366 | 290 561 | 221 977 | 2 333 | 2 034 | 322 |
| 1975-76 .. | 31 161 | 269 728 | 213 863 | 1 357 | 1 639 | 280 |

(a) Excludes grape spirit added.

Grapes are grown commercially in South Australia in non-irrigated areas of 480 to 660 millimetres rainfall, and in much drier areas (frequently with less than a 250 millimetre rainfall) where irrigation is available (e.g. Upper Murray irrigation areas). The following table gives particulars of area of vines and production of grapes in the main statistical divisions in 1975-76.

Area and Production of Vines: Statistical Divisions, South Australia 1975-76

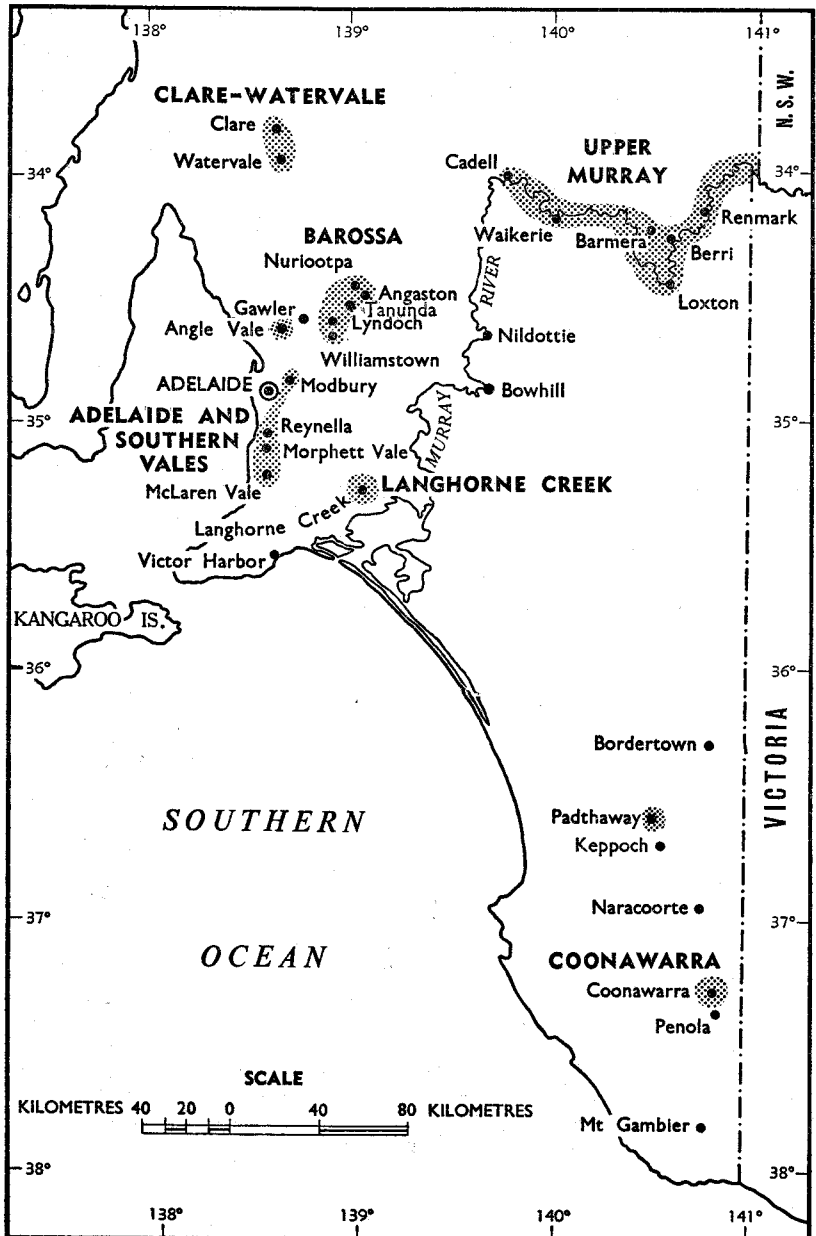
| Statistical Division | Area | | Production of Fresh Grapes | | | |
|-----------------------|----------|-------------|----------------------------|-------|--------|---------|
| | Bearing | Not Bearing | Wine | Table | Drying | Total |
| | Hectares | | Tonnes | | | |
| Adelaide .. | 3 981 | 684 | 18 884 | 27 | 179 | 19 090 |
| Mount Lofty Ranges .. | 9 651 | 1 396 | 53 967 | 10 | 195 | 54 172 |
| Murray .. | 11 918 | 1 342 | 167 719 | 924 | 11 793 | 180 436 |
| South East .. | 1 604 | 440 | 15 328 | — | — | 15 328 |
| Total (a) .. | 27 278 | 3 883 | 256 583 | 962 | 12 183 | 269 728 |

(a) Includes remainder of divisions.

Grape Growing Districts

The grape growing districts of South Australia are subject to substantial variety in geographical location, climatic variations and soil conditions and can be divided into six easily recognisable regions (see map on page 474) ranging from the Clare-Watervale district in the north to the southern limit of the grape growing area at Coonawarra in the south-east of the State and bounded by the warm irrigated areas of the River Murray to the east.

PORTION OF SOUTH AUSTRALIA GRAPE GROWING DISTRICTS



Supplementary irrigation is carried out in some grape growing districts which have not been officially designated as irrigation areas, especially Langhorne Creek and Coonawarra where approximately 50 to 60 per cent of all grapes are under irrigation. The other areas are mainly dependent on winter rainfall stored in the sub-soil by careful dry-farming methods to be used during the summer growing season of the vine—the yields in the non-irrigated districts are more variable than the Upper Murray irrigation areas.

District average yields in the irrigated areas are 18 to 20 tonnes per hectare although individual vineyard yields of 40 and 50 tonnes per hectare are not uncommon. In the non-irrigated districts the average is 4 to 8 tonnes per hectare with individual vineyards producing 20 to 25 tonnes per hectare in favourable years.

Grape Varieties

The following table shows the area planted to the principal grape varieties in South Australia. The most common varieties include sultana and currant which can be used for dried fruit as well as wine or spirit production. The grape variety names used are those recommended for publication throughout Australia by the Grape Industry Advisory Committee.

Principal Varieties of Vines, South Australia

| Variety | March 1973 | March 1974 | March 1975 | March 1976 |
|-------------------------------------|---------------|---------------|---------------|---------------|
| | Hectares | | | |
| Sultana | 3 084 | 2 871 | 2 815 | 2 747 |
| Muscat Gordo Blanco | 2 036 | 1 903 | 1 900 | 1 897 |
| Currants | 1 157 | 1 028 | 943 | 864 |
| Grenache (a) | 5 366 | 5 321 | 5 364 | 5 308 |
| Shiraz | 4 772 | 4 937 | 5 297 | 5 576 |
| Doradillo | 1 882 | 1 822 | 1 787 | 1 750 |
| Palomino (Paulo, Listan) | 2 646 | 2 525 | 2 514 | 2 486 |
| Common Palomino (b) | | | | |
| Pedro Ximinez | | | | |
| Semillon (c) | 3 101 | 3 298 | 3 511 | 3 877 |
| Rhine Riesling | | | | |
| Clare Riesling | | | | |
| Mataro | 1 575 | 1 571 | 1 628 | 1 635 |
| Cabernet Sauvignon | 1 684 | 1 908 | 2 153 | 2 413 |
| Other | 2 225 | 2 418 | 2 454 | 2 608 |
| Total | 29 528 | 29 602 | 30 366 | 31 161 |

(a) Includes White Grenache. (b) Includes False Pedro. (c) Includes Madeira.

A special article on the wine industry in South Australia was included on pages 376-95 of the *South Australian Year Book* 1968.

ORCHARD FRUIT

A large variety of fruit crops is grown in South Australia. The main types are oranges, peaches and apricots (predominantly grown in the irrigation

settlements of the Upper Murray) and apples (nearly all grown in the Adelaide Hills). The following table relating to 1975-76 production shows the concentration of fruitgrowing in the Adelaide, Mount Lofty Ranges and Murray Divisions.

Production of Principal Fruit Crops: Statistical Divisions, South Australia 1975-76

| Fruit | Statistical Division | | | | Total |
|-----------------------|----------------------|--------------------|--------|-------|--------|
| | Adelaide | Mount Lofty Ranges | Murray | Other | |
| Tonnes | | | | | |
| Citrus fruit: | | | | | |
| Oranges; | | | | | |
| Navel | 31 | 9 | 54 443 | 329 | 54 812 |
| Other | 18 | 43 | 88 192 | 542 | 88 796 |
| Other citrus fruit .. | 228 | 8 | 17 417 | 182 | 17 836 |
| Non-citrus fruit: | | | | | |
| Apples | 5 956 | 12 598 | 719 | 29 | 19 302 |
| Apricots | 86 | 827 | 11 208 | 63 | 12 184 |
| Peaches | 157 | 230 | 19 579 | 142 | 20 108 |
| Pears.. . . . | 1 855 | 2 351 | 5 006 | 24 | 9 235 |
| Plums and prunes .. | 470 | 514 | 869 | 26 | 1 879 |

The following table of citrus trees of bearing age and production during the past five seasons shows the predominance of navel and valencia oranges. Other types of oranges, lemons and limes, mandarins, grapefruit, etc., together represent only 12 per cent of total citrus production.

Citrus Fruit: Trees and Production, South Australia

| Season | Oranges | | Lemons and | | Grapefruit | Total Citrus |
|-----------------------------|---------|----------|------------|-------|------------|---------------|
| | Navel | Valencia | Other | Limes | | |
| TREES OF BEARING AGE ('000) | | | | | | |
| 1971-72 .. | 546 | 783 | 9 | 59 | 67 | 1 507 |
| 1972-73 .. | 544 | 797 | 7 | 70 | 67 | 1 528 |
| 1973-74 .. | 540 | 802 | 8 | 72 | 66 | 1 533 |
| 1974-75 .. | 530 | 795 | 11 | 78 | 67 | 1 527 |
| 1975-76 .. | 520 | 797 | 10 | 87 | 68 | 1 534 |
| PRODUCTION (Tonnes) | | | | | | |
| 1971-72 .. | 44 784 | 56 281 | 856 | 3 570 | 3 055 | 5 699 114 245 |
| 1972-73 .. | 47 396 | 77 717 | 591 | 4 603 | 2 755 | 5 657 138 719 |
| 1973-74 .. | 45 750 | 66 985 | 631 | 6 108 | 3 847 | 6 017 129 338 |
| 1974-75 .. | 50 307 | 75 325 | 821 | 7 360 | 3 371 | 5 692 142 876 |
| 1975-76 .. | 54 812 | 87 778 | 1 019 | 7 151 | 3 619 | 7 066 161 445 |

Citrus growing is concentrated in the irrigation settlements of the Upper Murray where approximately 80 per cent of the total crop is produced. The industry has shown great expansion in the last decade; in 1975-76 a record production of 161 445 tonnes was achieved.

The Citrus Industry Organization Committee of South Australia, constituted under the Citrus Industry Organization Act, 1965-1972, regulates and controls the marketing of citrus fruit in South Australia and undertakes or arranges for research into the citrus industry.

Apple growing is the principal non-citrus fruit industry and is concentrated in the Adelaide Hills. The yield per bearing hectare which averaged 9 tonnes for the ten seasons ended 1961-62, rose to a record 16 tonnes per bearing hectare in 1968-69. A record production of 33 000 tonnes was achieved in 1940-41, while production in 1975-76 was 19 302 tonnes.

Pears are grown in the Adelaide Hills, in the Barossa Valley and on the Murray irrigation settlements. The yield from the 1970-71 harvest was a record 13 000 tonnes from 636 hectares. Production in 1975-76 was 9 235 tonnes.

The stone fruits industry became important following development of the irrigation schemes. Production of peaches has shown the greatest increase: the 1951-52 yield of 3 000 tonnes from 835 hectares was typical for the crop until that time, but by 1966-67 the yield was a record 29 000 tonnes from 1 924 hectares. In the same period production of apricots rose from 11 000 to 28 000 tonnes. South Australia is the major apricot-producing State, with the greater part of the crop being dried and much of the remainder being canned.

Cherries, plums and prunes, and almonds are the most important of the remaining crops.

Non-citrus Orchard Fruit: Trees and Production, South Australia

| Season | Apples | Apricots | Cherries | Peaches | Pears | Plums and Prunes |
|------------------------------------|--------|----------|----------|---------|--------|------------------|
| TREES OF BEARING AGE ('000) | | | | | | |
| 1971-72 | 538 | 371 | 49 | 379 | 170 | 65 |
| 1972-73 | 523 | 376 | 45 | 359 | 163 | 62 |
| 1973-74 | 509 | 369 | 45 | 334 | 157 | 57 |
| 1974-75 | 485 | 346 | 45 | 317 | 150 | 60 |
| 1975-76 | 473 | 332 | 42 | 300 | 145 | 58 |
| PRODUCTION (Tonnes) | | | | | | |
| 1971-72 | 22 423 | 23 805 | 881 | 26 075 | 11 790 | 1 950 |
| 1972-73 | 27 940 | 22 928 | 1 059 | 25 457 | 13 076 | 2 057 |
| 1973-74 | 18 551 | 21 046 | 814 | 19 442 | 10 091 | 1 678 |
| 1974-75 | 23 181 | 12 535 | 779 | 22 671 | 11 380 | 1 392 |
| 1975-76 | 19 302 | 12 184 | 741 | 20 108 | 9 235 | 1 879 |

The Upper Murray irrigation areas and the Barossa Valley of South Australia account for almost the entire Australian production of dried apricots, peaches, pears and nectarines. A small proportion of the Australian production of dried prunes is produced in the Barossa Valley and in the Noarlunga district.

The Dried Fruits Board, constituted under the Dried Fruits Act, 1934-1972, regulates marketing in South Australia by determining a quota for home sale of dried fruits in each year and encourages the consumption of dried fruits by advertising.

OTHER CROPS

Other crops cultivated in South Australia include field peas, nursery products, cut flowers, pasture seeds, vegetable seeds, chicory and linseed.

In 1975-76, 10 769 hectares of field peas were grown for grain yielding 12 698 tonnes; virtually all of this area is located in the cereal growing districts north of Adelaide. Field peas are grown mainly as a livestock fodder or for processing into split peas.

Most of the lucerne and other pasture seeds are grown in the cooler, moist regions, particularly in the south-east of the State. During the 1975-76 season approximately 50 per cent of the 1 564 000 kg of lucerne seed produced in the State was grown in the South East Division.

A considerable portion of the area devoted to nurseries is found in the vicinity of Adelaide. In addition there are several fruit tree nurseries in the horticultural districts of the River Murray.

PLANTING AND HARVESTING OF CROPS

The main crops of South Australia are normally planted and harvested during the periods listed below.

Usual Months of Planting and Harvesting, South Australia

| Crop | Planting | Harvesting |
|----------------------|--------------------|------------------|
| Cereals: | | |
| Wheat | April-June | November-January |
| Barley | May-July | November-January |
| Oats | April-June | November-January |
| Fruit: | | |
| Grapes | .. | February-May |
| Citrus | .. | May-February |
| Apples | .. | January-April |
| Apricots | .. | December-January |
| Peaches | .. | December-March |
| Pears | .. | January-April |
| Vegetables: | | |
| Potatoes | July-January | November-June |
| Tomatoes: | | |
| Field | September-February | January-June |
| Glasshouse | March-June | July-January |

VALUE AND PRICES OF CROPS

The gross value of crops (including pastures) for South Australia in the 1975-76 season was \$368 386 000. Gross value is defined as the value placed on recorded production at wholesale prices realised in principal markets. Where products are absorbed at a local point or become raw material for a secondary industry the value in each case is presumed to be the value at the principal market.

In the following table gross values of principal crops for the seasons 1971-72 to 1975-76 are shown.

Gross Value of Principal Crops, South Australia

| Commodity | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 ^p |
|--|-------------|-------------|---------|-------------|----------------------|
| | \$'000 | | | | |
| Cereals: | | | | | |
| Wheat | 76 381 | 44 588 | 196 444 | 163 922 | 118 337 |
| Barley | 40 295 | 27 506 | 68 276 | 119 305 | 105 709 |
| Oats | 5 496 | 3 974 | 8 184 | 7 832 | 6 485 |
| Rye | 306 | 240 | 131 | 116 | 203 |
| Canary seed | 20 | 13 | 11 | 39 | 45 |
| Crops for hay | 4 752 | 6 709 | 9 276 | 5 944 | 5 115 |
| Crops for greenfeed or silage | 907 | 1 221 | 1 351 | <i>n.a.</i> | <i>n.a.</i> |
| Field peas | 1 159 | 705 | 1 602 | 1 873 | 1 306 |
| Orchard and berry fruit: | | | | | |
| Citrus | 12 885 | 12 995 | 12 400 | 14 865 | 16 806 |
| Apples | 4 007 | 5 003 | 4 434 | 7 975 | 5 196 |
| Apricots | 4 300 | 5 263 | 5 226 | 4 016 | 4 291 |
| Peaches | 2 999 | 4 385 | 3 312 | 6 635 | 4 917 |
| Other | 4 571 | 5 720 | 5 419 | 6 727 | 6 555 |
| Vine fruit: | | | | | |
| Wine grapes | 15 988 | 18 167 | 19 119 | 33 802 | 31 886 |
| Table grapes | 506 | 384 | 340 | 654 | 417 |
| Dried currants, raisins, etc. | 4 496 | 2 498 | 2 097 | 3 046 | 1 731 |
| Vegetables: | | | | | |
| Potatoes | 4 393 | 5 796 | 11 172 | 9 285 | 10 259 |
| Green peas | 1 658 | 1 643 | 1 698 | 2 513 | 1 417 |
| Other | 16 963 | 17 903 | 23 479 | 24 779 | 29 505 |
| Other crops | 2 994 | 2 911 | 3 414 | 7 274 | 7 971 |
| Total crops (excluding pastures) | 205 077 | 167 623 | 377 384 | 420 601 | 358 148 |
| Pastures: | | | | | |
| Pasture seed | 2 232 | 3 023 | 4 929 | 5 092 | 3 648 |
| Pastures cut for hay | 5 897 | 7 122 | 11 242 | 9 014 | 6 590 |
| Pastures cut for green feed or silage | <i>n.a.</i> | <i>n.a.</i> | 63 | <i>n.a.</i> | <i>n.a.</i> |
| Total pastures | 8 129 | 10 145 | 16 234 | 14 106 | 10 238 |
| Gross value of crops | 213 206 | 177 768 | 393 618 | 434 707 | 368 386 |

Market prices of principal crops grown in South Australia for the years 1971-72 to 1975-76 are set out in the following table. The average price of wheat in the 1975-76 season was \$104.92 per tonne, compared with the record \$111.21 per tonne in 1974-75. The price of wheat rose from \$56.09 per tonne in 1972-73 to \$110.33 per tonne in 1973-74. The highest price previously recorded was \$61.77 per tonne in 1952-53. The lowest average price recorded in the past 25 years was \$49.05 per tonne in 1954-55.

The average price of barley in the 1975-76 season was \$98.05 per tonne following a record high price of \$106.11 per tonne in the 1974-75 season. The lowest average price recorded in the past 25 years was \$36.82 per tonne in 1969-70.

The average price of oats in the 1975-76 season was \$65.20 per tonne. In the previous 25 years oats prices have been as low as \$29.10 per tonne and as high as \$74.10 per tonne.

Prices of Principal Crops, South Australia

| Commodity | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 ^p |
|------------------------|-------------------|---------|---------|---------|----------------------|
| Cereals: | | | | | |
| | Dollars per tonne | | | | |
| Wheat (a) | 55.26 | 56.09 | 110.33 | 111.21 | 104.92 |
| Barley (a) | 40.96 | 59.30 | 88.29 | 106.11 | 98.05 |
| Oats | 37.20 | 62.70 | 63.49 | 74.10 | 65.20 |
| Rye | 41.98 | 94.35 | 61.92 | 75.41 | 75.00 |
| Fruit: | | | | | |
| Apples | 205.76 | 246.18 | 256.29 | 386.00 | 290.00 |
| Apricots | 316.92 | 331.71 | 271.45 | 541.00 | 411.00 |
| Peaches | 385.56 | 393.10 | 438.00 | 672.00 | 637.00 |
| Pears | 209.68 | 232.31 | 243.11 | 320.00 | 420.00 |
| Oranges; | | | | | |
| Navel (a) | 101.05 | 78.08 | 78.08 | 96.91 | 97.00 |
| Other (a) | 116.66 | 92.32 | 92.31 | 105.14 | 105.00 |
| Grapes; | | | | | |
| Table | 273.53 | 311.89 | 377.88 | 471.00 | 433.00 |
| Wine (b) | 71.15 | 82.36 | 92.80 | 124.27 | n.a. |
| Vegetables: | | | | | |
| Potatoes (a) | 60.55 | 85.05 | 185.10 | 131.40 | 145.18 |
| Onions | 122.99 | 105.21 | 265.00 | 201.00 | 253.00 |
| Tomatoes; | | | | | |
| Glasshouse | 346.32 | 296.66 | 435.00 | 563.00 | 709.00 |
| Other | 227.82 | 335.57 | 352.00 | 289.00 | 569.00 |

(a) Average price realised.

(b) Weighted average price at winery.

PASTORAL AND DAIRYING

Pastoral activities, with sheep grazing predominant, are widespread in South Australia under widely varying climatic conditions from the arid saltbush plains in the Far North through to the lush, well-watered pastures of the South East.

Livestock numbers have increased markedly since 1960 (although sheep numbers have stabilised since 1966-67, except for 1972-73 when numbers fell noticeably). The bulk of the expansion of the industry has been confined to the heavier rainfall districts.

The Dog Fence

This fence is an unbroken barrier of wire netting about 2 metres high extending for more than 8 000 kilometres through South Australia, along the South Australia-New South Wales and the New South Wales-Queensland borders and through part of Queensland. It has been erected to protect the sheep lands of these States from the ravages of dingoes (native dogs). The part of the fence within South Australia extends in a tortuous line from the head of the Great Australian Bight to the New South Wales border for a distance of nearly 2 400 kilometres. The whole of the sheep population of South Australia is now confined within the area enclosed by the dog fence which effectively excludes the dingoes.

PASTURES

There has been a significant increase in the area of sown pastures over the past twenty years. Area under pasture for the years 1971-72 to 1975-76 is shown for statistical divisions in the following table.

Area Under Pasture: Statistical Divisions, South Australia^(a)

| Statistical Division | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-------------------------------|---------------|--------------|--------------|--------------|--------------|
| | '000 hectares | | | | |
| Adelaide.. | 23 | 26 | 26 | 24 | 22 |
| Central | 168 | 165 | 196 | 191 | 173 |
| Kangaroo Island | 149 | 155 | 166 | 162 | 167 |
| Mount Lofty Ranges | 244 | 285 | 302 | 293 | 281 |
| Murray | 470 | 500 | 544 | 617 | 618 |
| South East | 1 342 | 1 461 | 1 502 | 1 526 | 1 513 |
| Eyre | 482 | 506 | 616 | 657 | 649 |
| Northern | 106 | 119 | 131 | 152 | 142 |
| Far North | 10 | 12 | 17 | 19 | 23 |
| Total | 2 994 | 3 230 | 3 500 | 3 641 | 3 589 |

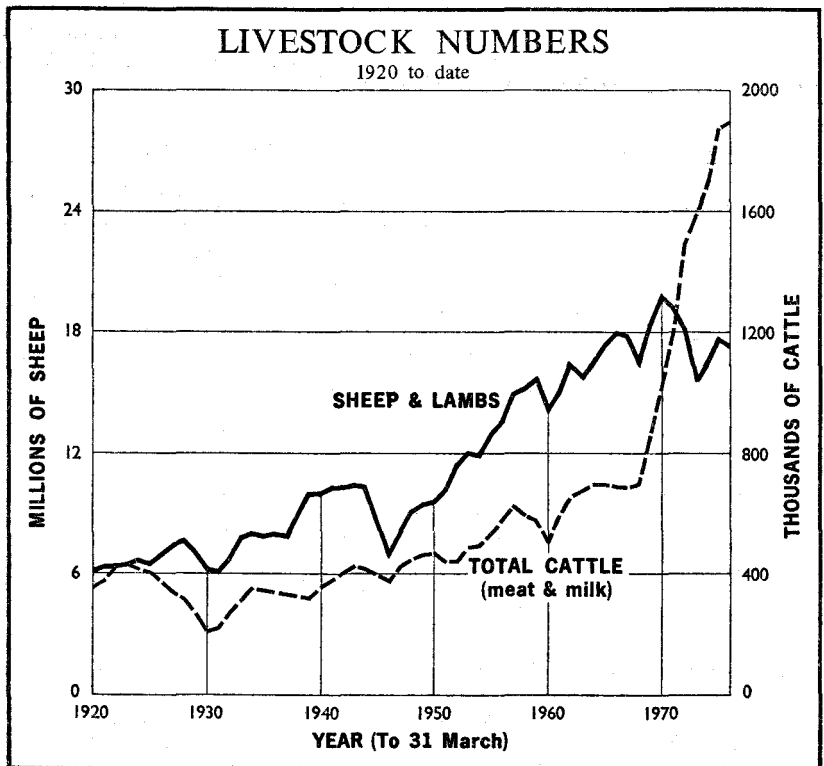
(a) Lucerne, clovers (all kinds), rye grasses (all kinds), cocksfoot, paspalum, phalaris, primrose, sudan and veldt.

The Murray Mallee and Eyre Peninsula have been transformed from unstable farming districts to highly productive areas through the sowing of more and improved pastures. In earlier years most pasture plants available flourished only in the higher rainfall zones of the State. At that time Mount Barker subterranean clover was the predominant pasture. New varieties have been

introduced, including Clare, Geraldton, Dwalganup and Yarloop subterranean clovers. These are suited to the hard setting soils of the important wheatgrowing area extending northward from Adelaide to Jamestown.

Another type of legume, known as medics, has been found to be suitable for the drier cereal country, especially the mallee soils. Five medics are grown: Hannaford, Jemalong Barrel, Harbinger Strand, Gama Paragosa and Snail. Lucerne is also extensively grown; it thrives under irrigation yet still grows in areas with as little as 250 millimetres of rainfall a year—it is both salt-resistant and drought-resistant. Strawberry clover is the important legume on the black soils of the South East.

The most important perennial grasses in the better rainfall areas are phalaris tuberosa, perennial rye grass and cocksfoot while the annual, wimmera rye grass is most widely used in the medium to low rainfall areas. The naturalised annual grasses which occur over the whole of the State contribute substantially to total pasture production.

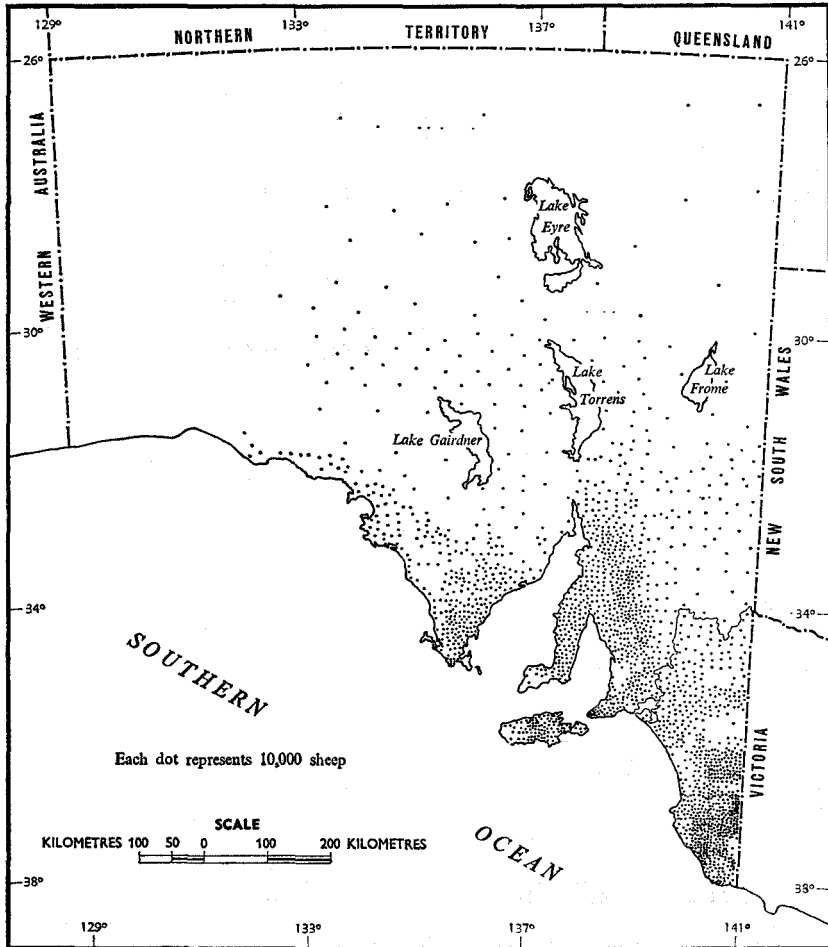


SHEEP

Numbers and Distribution

At 31 March 1970 a record number of 19 747 000 sheep were being maintained in South Australia but drought conditions had reduced the number to 15 651 000 at 31 March 1973. The number of sheep at 31 March 1976 was 17 279 000.

SOUTH AUSTRALIA
SHEEP DISTRIBUTION
At 31 March 1970.



By far the greatest concentration of sheep is in the South East Division which carried 4.8 million sheep at 31 March 1976. The next largest concentration of sheep at 31 March 1976 was in the Eyre Division, 2.4 million, and sheep numbers of over 2.0 million were reported both in Murray and Northern Divisions.

**Sheep Numbers: Statistical Divisions, South Australia
At 31 March 1976**

| Statistical Division | 1972 | 1973 | 1974 | 1975 | 1976 |
|------------------------------|---------------|---------------|---------------|---------------|---------------|
| | | | '000 | | |
| Adelaide | 133 | 103 | 112 | 96 | 108 |
| Central | 1 816 | 1 503 | 1 654 | 1 768 | 1 637 |
| Kangaroo Island | 814 | 700 | 705 | 768 | 793 |
| Mount Lofty Ranges | 1 583 | 1 387 | 1 424 | 1 538 | 1 494 |
| Murray | 2 178 | 1 705 | 1 952 | 2 151 | 2 012 |
| South East | 4 986 | 4 376 | 4 409 | 4 685 | 4 771 |
| Eyre | 2 625 | 2 227 | 2 363 | 2 549 | 2 447 |
| Northern | 2 007 | 1 816 | 1 977 | 2 169 | 2 084 |
| Far North | 1 827 | 1 834 | 1 836 | 1 895 | 1 934 |
| Total | 17 970 | 15 651 | 16 431 | 17 621 | 17 279 |

**Number of Rural Holdings Classified by Size of Sheep Flock
Statistical Divisions, South Australia
At 31 March 1976**

| Number of Sheep in Flock | Statistical Division | | | | | | | Total (a) |
|-------------------------------|----------------------|--------------|--------------------------|--------------|---------------|--------------|--------------|---------------|
| | Adelaide | Central | Mount Lofty Ranges | Murray | South East | Eyre | Northern | |
| | Number of Holdings | | | | | | | |
| 1- 99 | 175 | 148 | 591 | 177 | 321 | 60 | 93 | 1 577 |
| 100- 499 | 115 | 742 | 723 | 573 | 413 | 209 | 344 | 3 157 |
| 500- 999 | 33 | 773 | 452 | 743 | 485 | 659 | 503 | 3 717 |
| 1 000- 1 499 | 10 | 323 | 226 | 354 | 428 | 513 | 274 | 2 201 |
| 1 500- 1 999 | 4 | 121 | 104 | 174 | 330 | 251 | 154 | 1 212 |
| 2 000- 2 999 | 2 | 59 | 91 | 110 | 371 | 184 | 149 | 1 076 |
| 3 000- 4 999 | — | 26 | 47 | 51 | 258 | 76 | 85 | 627 |
| 5 000- 9 999 | 2 | 2 | 16 | 11 | 137 | 17 | 34 | 302 |
| 10 000-19 999 | 1 | — | — | 3 | 24 | — | 9 | 82 |
| 20 000 and over | — | — | — | — | 5 | — | — | 24 |
| Total flocks | 342 | 2 194 | 2 250 | 2 196 | 2 772 | 1 969 | 1 645 | 13 975 |

(a) Includes Kangaroo Island and Far North Divisions.

At 31 March 1976, 23 per cent of the total sheep population consisted of lambs and hoggets under one year. The proportion of lambs to sheep has remained fairly constant for a number of years although it is subject to some fluctuations.

Age and Sex of Sheep, South Australia
At 31 March

| Year | Rams | Breeding Ewes | Other Ewes | Wethers | Lambs and Hoggets (under one year) | Total Sheep |
|--------------|------|---------------|------------|---------|------------------------------------|-------------|
| | | | | '000 | | |
| 1970 | 234 | 9 183 | 857 | 4 789 | 4 684 | 19 747 |
| 1971 | 240 | 9 223 | 1 021 | 4 657 | 4 025 | 19 166 |
| 1972 | 230 | 8 944 | 786 | 3 989 | 4 021 | 17 970 |
| 1973 | 212 | 8 004 | 641 | 3 187 | 3 607 | 15 651 |
| 1974 | 215 | 8 417 | 536 | 3 430 | 3 832 | 16 431 |
| 1975 | 227 | 8 648 | 707 | 3 820 | 4 217 | 17 621 |
| 1976 | 227 | 8 338 | 824 | 3 899 | 3 991 | 17 279 |

Breeds of Sheep

The predominant breed in South Australia is the Merino which accounts for more than 86 per cent of the total sheep numbers. The South Australian Merino, having a robust constitution and a capacity to travel long distances to water, has adapted well to the hot, dry conditions of the interior.

Breeds of Sheep, South Australia
At 31 March

| Breed | 1968 | 1969 | 1970 | 1971 | 1974 |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | '000 | | |
| Merino | 13 418.1 | 15 275.1 | 16 749.3 | 16 304.1 | 14 212.0 |
| Corriedale | 1 113.0 | 1 085.3 | 973.1 | 940.6 | 646.2 |
| Dorset Horn | } 58.9 | } 62.0 | } 67.4 | } 77.9 | } 46.5 |
| Poll Dorset | | | | | |
| Border Leicester | 37.5 | 32.3 | 29.6 | 27.7 | 25.8 |
| Polwarth | 113.9 | 114.1 | 139.6 | 147.6 | 137.3 |
| Romney Marsh | 25.7 | 26.6 | 21.1 | 17.6 | 11.4 |
| Ryeland | 5.7 | 7.1 | 6.7 | 5.7 | 4.0 |
| Southdown | 7.8 | 5.3 | 4.9 | 4.7 | 3.1 |
| Suffolk | 17.0 | 16.9 | 14.9 | 18.4 | 19.0 |
| Other | 3.1 | 4.3 | 3.8 | 4.3 | 7.7 |
| Merino-Comeback | 213.6 | 198.8 | 168.4 | 214.7 | 133.6 |
| Crossbred | 1 391.0 | 1 564.3 | 1 568.3 | 1 402.6 | 1 149.3 |
| Total | 16 405.3 | 18 392.1 | 19 747.1 | 19 165.8 | 16 430.9 |

Of the remaining recognised breeds, the Australasian breeds, Corriedale and Polwarth, are most important. These are dual purpose sheep, used for mutton and at the same time producing wool of good quality. The Corriedale is a fixed cross between Lincoln rams and Merino ewes while the Polwarth is a fixed comeback bred from the mating of Merino rams with Lincoln-Merino ewes.

British longwools (Border Leicester, Cheviot and Romney Marsh) are used for mating with the Merino or crossbred ewes mainly to produce fat lambs but useful types of comeback and crossbred wools, are also yielded. British shortwools (Dorset Horn, Ryeland, Suffolk, Southdown and Shropshire) are used principally for production of export lambs.

Lambing

In 1969 a record 8 598 000 ewes were mated and the number of lambs marked totalled 7 193 000. In 1975, 7 882 000 ewes were mated and the number of lambs marked was 6 164 000. Early reports from farmers indicated that they intended to mate 7.9 million ewes in 1976—approximately 5.2 million to Merino rams, 0.8 million to other longwool rams and 1.9 million to shortwool rams.

Details of lambs marked and the lambing percentage in each statistical division in 1974 and 1975 are given in the next table.

Lambing: Statistical Divisions, South Australia

| Statistical Division | Lambs Marked | | Lambing Percentage (a) | |
|-----------------------------|--------------|-------|------------------------|-------|
| | 1974 | 1975 | 1974 | 1975 |
| | '000 | | Per cent | |
| Adelaide | 42 | 39 | 88.04 | 86.95 |
| Central | 736 | 706 | 81.00 | 78.84 |
| Kangaroo Island | 230 | 231 | 72.40 | 71.38 |
| Mount Lofty Ranges | 604 | 590 | 85.60 | 83.61 |
| Murray | 849 | 791 | 81.11 | 76.54 |
| South East | 1 815 | 1 871 | 87.05 | 86.49 |
| Eyre | 779 | 723 | 74.32 | 72.06 |
| Northern | 766 | 691 | 79.14 | 73.47 |
| Far North | 605 | 522 | 78.63 | 67.63 |
| Total | 6 427 | 6 164 | 81.37 | 78.20 |

(a) Percentage of lambs marked to ewes mated.

Sheep Shearing and Wool-clip

In the agricultural areas of the State there is a predominance of shearing during the late winter and spring months, August to November. Shearing in the South East Division occurs somewhat later, with 50 per cent of the wool-clip being obtained in the period October to November. In the northern pastoral

areas (Far North Division) there are two main seasons, March-April and July-August. The next table gives details of sheep and lambs shorn, wool-clip and average fleeceweight in South Australia for the years 1971-72 to 1975-76.

Sheep and Lambs Shorn: Wool-clip and Average Fleeceweight, South Australia

| Classification | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-------------------------------|---------|---------|---------|---------|---------|
| NUMBER SHORN ('000) | | | | | |
| Sheep | 16 613 | 15 009 | 13 965 | 14 651 | 15 355 |
| Lambs | 4 210 | 3 973 | 3 919 | 4 416 | 4 394 |
| Total | 20 823 | 18 982 | 17 885 | 19 067 | 19 748 |
| WOOL-CLIP ('000 kg) (a) | | | | | |
| Sheep | 94 792 | 85 353 | 82 314 | 88 965 | 84 148 |
| Lambs | 7 792 | 6 844 | 7 320 | 8 703 | 7 663 |
| Crutchings | 4 904 | 4 419 | 4 249 | 4 594 | 4 413 |
| Total | 107 487 | 96 616 | 93 883 | 102 261 | 96 224 |
| AVERAGE FLEECEWEIGHT (kg) (a) | | | | | |
| Sheep | 6.00 | 5.98 | 6.20 | 6.39 | 5.77 |
| Sheep and lambs | 5.16 | 5.09 | 5.25 | 5.36 | 4.87 |

(a) Includes crutchings.

The total wool-clip, including crutchings, exceeded 100 million kg for the first time in 1966-67. More than 90 per cent of the total wool is obtained from adult sheep.

The average fleeceweight in South Australia is well over 5 kg a head for adult sheep, with a record 6.39 kg a head being achieved in 1974-75. This is significantly higher than the yield obtained in other States, and is primarily because of the larger size of the South Australian Merino, its broader wool quality and longer thicker-stapled fleece.

A breakdown of the State figures for 1975-76 by statistical divisions is given in the next table. This shows the high average fleeceweight obtained in the northern pastoral areas. The relatively light average fleece obtained in the South East Division is explained partly by the lower proportion of Merino sheep in the area (at 31 March 1974 only 73 per cent of total sheep in the South East Division were Merinos, compared with a total State figure of over 86 per cent), but more importantly by the lighter wool quality of the smaller framed sheep in this area.

Sheep and Lambs Shorn, Wool-clip and Average Fleeceweight
Statistical Divisions, South Australia
1975-76

| Statistical Division | Number Shorn | | | Wool-clip | | | Average Fleeceweight (a) | |
|------------------------------|---------------|--------------|---------------|---------------|--------------|---------------|--------------------------|-----------------|
| | Sheep | Lambs | Total | Sheep | Lambs | Total (a) | Sheep | Sheep and Lambs |
| | | | '000 | | | '000 kg | | kg |
| Adelaide | 146 | 15 | 160 | 579 | 26 | 624 | 4.11 | 3.89 |
| Central | 1 485 | 347 | 1 832 | 8 340 | 587 | 9 383 | 5.92 | 5.12 |
| Kangaroo Island | 697 | 202 | 899 | 3 503 | 328 | 4 009 | 5.28 | 4.46 |
| Mount Lofty Ranges | 1 365 | 361 | 1 726 | 7 437 | 591 | 8 417 | 5.73 | 4.88 |
| Murray | 1 830 | 523 | 2 354 | 10 414 | 909 | 11 910 | 6.01 | 5.06 |
| South East | 4 141 | 1 420 | 5 561 | 22 222 | 2 479 | 25 804 | 5.63 | 4.64 |
| Eyre | 2 270 | 545 | 2 815 | 12 269 | 806 | 13 719 | 5.69 | 4.87 |
| Northern | 1 862 | 559 | 2 421 | 10 328 | 961 | 11 827 | 5.84 | 4.88 |
| Far North | 1 558 | 422 | 1 980 | 9 057 | 977 | 10 531 | 6.13 | 5.32 |
| Total | 15 355 | 4 394 | 19 748 | 84 148 | 7 663 | 96 224 | 5.77 | 4.87 |

(a) Includes crutchings.

WOOL INDUSTRY

Organisation of the Australian Wool Industry

The *Wool Industry Act 1962* made provision for the replacement of three separate instrumentalities (the Australian Wool Bureau, the Wool Research Committee and the Australian Wool Testing Authority) by a single body, the Australian Wool Board. The Board comprised a chairman, six woolgrower representatives, three members with special qualifications and a representative of the Commonwealth Government.

The Australian Woolgrowers and Graziers Council and the Australian Wool and Meat Producers Federation formed the Australian Wool Industry Conference in October 1962. Principal functions of the Conference are to nominate woolgrower representatives for appointment to the Australian Wool Board; to recommend what rates of levy should be paid by woolgrowers for promotion and research, and to review the activities of the Board at least once a year. Levies had been imposed on shorn wool produced in Australia since 1936 for research and promotion purposes.

The Australian Wool Commission, a statutory authority set up by the Commonwealth Government following proposals from the Australia Wool Industry Conference and the subsequent report of a special Advisory Committee of the Australian Wool Board, commenced operations in November 1970 and in that month began bidding and operating its flexible reserve price at wool auctions.

The *Wool Industry Act 1972* repealed the *Wool Industry Act 1962* and the *Australian Wool Commission Act 1970* and under this Act the Australian Wool Corporation commenced operations on 1 January 1973 with the combined functions of the Australian Wool Commission and the Australian Wool Board. The Wool Corporation has continued to operate the Flexible Reserve Price Scheme at auctions and to implement the policies established by the Australian Wool Commission.

Production of Wool

Total wool production consists of shorn wool (including crutchings) plus fellmongered wool, dead wool and wool exported on skins. Fellmongering is the process of removing wool from the pelt by bacterial action (sweating) or by treatment with chemicals. Dead wool is picked from the carcasses of dead sheep.

In 1944 the weight of wool produced exceeded 50 million kg for the first time. Production dropped significantly in 1945-46 following the reduction in flocks caused by the 1944 drought. The industry recovered quickly and in 1947-48 a record 53 million kg of wool was produced, achieved by an increase in the numbers shorn and an exceptionally high average fleece of 4.93 kg. The rising trend has since continued with current production over 100 million kg.

Before 1946-47 the annual wool value had not exceeded \$14 million and was relatively stable. The marked changes in the value of wool produced since then have been mostly because of frequent and substantial price fluctuations rather than variations in the quantity produced. On the resumption of the auction system in 1946-47 wool prices increased sharply, reaching a peak in the record 1950-51 season. Gross value of production in that year exceeded \$132 million.

Demand eased in the following years causing values to fall, although a recovery in prices combined with a significant increase in production in 1956-57 raised gross value of production to \$114 million. In 1963-64 increased wool production and somewhat higher prices than in the previous few years resulted in gross value of production of \$113 million. Since 1965-66 wool production has exceeded 100 million kg each year, however wool prices have varied markedly resulting in the gross value of production being as low as \$65 million in 1970-71 and as high as \$183 million in 1973-74. Since 1973-74 the gross value of wool has fallen due mainly to lower prices.

Wool Production and Value, South Australia

| Season | Production | | | Value of Wool Production |
|------------------|------------|-----------|---------|--------------------------|
| | Shorn Wool | Other (a) | Total | |
| | '000 kg | '000 kg | '000 kg | \$'000 |
| 1966-67 | 99 961 | 7 766 | 107 727 | 104 588 |
| 1967-68 | 93 252 | 7 749 | 101 002 | 79 925 |
| 1968-69 | 98 661 | 7 055 | 105 716 | 95 054 |
| 1969-70 | 115 455 | 9 076 | 124 531 | 91 224 |
| 1970-71 | 107 641 | 9 618 | 117 260 | 65 086 |
| 1971-72 | 107 487 | 10 435 | 117 922 | 70 093 |
| 1972-73 | 96 616 | 9 391 | 106 006 | 141 713 |
| 1973-74 | 93 883 | 6 272 | 100 155 | 183 227 |
| 1974-75 | 102 261 | 5 191 | 107 452 | 125 044 |
| 1975-76 | 96 224 | 5 193 | 101 418 | 118 884 |

(a) Includes fellmongered wool, dead wool and wool exported on skins.

Wool Quality and Marketing

For many years approximately 9 per cent of the wool grown in South Australia was sold outside the auction system. This percentage has increased since the 1970-71 season reaching 19 per cent in 1972-73, falling to 14 per cent in

1973-74 and again rising to 21 per cent in 1975-76. Of the South Australian wool passing through the auction system approximately 85 per cent is received by the Adelaide selling centre with the remainder, predominantly of South Eastern origin, going to Victorian selling centres. A similar inflow of wool occurs from western New South Wales, and to a lesser extent from western Victoria.

Because of the development of a system of Objective Measurement for wool the traditional method of displaying wool for sale, whereby sample bales are opened for inspection by buyers, is declining in importance and much wool is now sold by sample. A high standard of clip preparation is required for sale by sample as there must be very little variation between the bales of wool of each grade.

When a suitable lot is received into store a core sample is taken and this is then tested to give measures of average fibre diameter (mean micron), degree of vegetable fault, and yield of wool (by three methods) and this information is entered on a certificate. As various other factors (*e.g.* length of wool, type of vegetable fault) must be assessed a grab sample of 8 kg is taken from each lot and this is displayed on a show floor, together with the Objective Measurement certificate, for examination by buyers.

An advantage of the Objective Measurement system of clip preparation is that the sample may be inspected at a site remote from the location of the bulk of the clip. This has enabled wool held in Adelaide stores to be inspected, and sold, in Melbourne sales, which is of particular value to growers who deliver wool in late autumn and winter when there may be six to eight weeks between sales in Adelaide.

The incidence of vegetable matter reduces the yield of all wool types. If the extent of vegetable fault is greater than 14 per cent of the wool's greasy weight the wool has to be treated by the carbonising process. In most seasons approximately 70 per cent of South Australian wool is free of, or contains only light burr and seed; almost 15 per cent contains medium or heavy burr and seed and some 10 per cent is carbonising wool.

The following tables show the quality analysis of and the incidence of vegetable fault in wool sold at auction in South Australia in recent years.

Quality Analysis of Greasy Wool Sold at Auction in South Australia

| Mean Micron Classification | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|----------------------------|---------|---------|----------|---------|
| | | | Per cent | |
| 20 and finer | 1.4 | 0.7 | 0.8 | 3.7 |
| 21 | 5.2 | 5.8 | 6.7 | 11.7 |
| 22 | 17.0 | 10.2 | 9.2 | 19.3 |
| 23 | 29.9 | 23.5 | 21.9 | 26.5 |
| 24 | 18.7 | 20.8 | 20.8 | 16.4 |
| 25 | 11.8 | 15.0 | 14.7 | 8.5 |
| 26 | 6.3 | 9.7 | 11.4 | 5.4 |
| 27 to 38 | 8.4 | 12.0 | 12.8 | } 6.7 |
| Coarser | — | — | — | |
| Oddments | 1.3 | 2.3 | 1.7 | 1.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |

Incidence of Vegetable Fault in Wool Sold at Auction in South Australia

| Season | Free or Near Free | Light Burr and/or Seed | Medium Burr and/or Seed | Heavy Burr and/or Seed | Carbonising Wool | Combing Oddments | Total |
|-------------------------------------|-------------------|------------------------|-------------------------|------------------------|------------------|------------------|-------|
| Percentage of Total Number of Bales | | | | | | | |
| 1968-69 | 35.8 | 46.2 | 8.3 | 1.3 | 6.8 | 1.6 | 100.0 |
| 1969-70 | 28.6 | 45.3 | 11.8 | 2.6 | 10.3 | 1.4 | 100.0 |
| 1970-71 | 24.5 | 44.3 | 12.6 | 3.9 | 13.5 | 1.2 | 100.0 |
| 1971-72 | 37.6 | 36.2 | 9.6 | 3.3 | 12.0 | 1.3 | 100.0 |
| 1972-73 | 36.2 | 33.9 | 10.9 | 4.6 | 13.1 | 1.3 | 100.0 |
| 1973-74 | 50.2 | 26.4 | 7.4 | 2.2 | 12.2 | 1.6 | 100.0 |
| 1974-75 | 49.7 | 24.6 | 8.6 | 2.7 | 12.7 | 1.7 | 100.0 |

During the main spring shearing season sales are held every two or three weeks, lengthening to monthly or longer intervals over the remainder of the year. Pastoral wools provide the bulk of the offerings in the early spring months with agricultural wools becoming more prominent as the season progresses. Wools from the South East and other high rainfall areas make up a considerable proportion of the offerings in the summer months. Towards the end of the season wools are drawn from various parts of the State.

At the Wool Exchange, the sales are conducted with great rapidity taking on average for a normal market only eight seconds to dispose of an individual lot or line of wool. On completion of the sale the bales are returned to the stacks to await instructions from the buyers. When required for shipment the bales are usually dumped, *i.e.* pressed to less than half their original size and banded, to economise on shipping space.

Details relating to Adelaide wool sales during the past eight seasons compared with 1950-51, the year of boom prices, are shown in the following table.

Adelaide Wool Sales

| Season | Wool Sold (Scoured and Greasy) | | Amount Realised | Average Price | In Store at End of Season |
|---------|-----------------------------------|---------|--------------------|--------------------|------------------------------|
| | Bales | Weight | | Per Kg (Greasy) | |
| | Number | '000 kg | | Cents | |
| 1950-51 | 383 630 | 53 086 | 125 956 | 237.28 | 6 304 |
| 1968-69 | 575 532 | 84 432 | 77 478 | 91.76 | 73 998 |
| 1969-70 | 742 575 | 107 731 | 80 823 | 75.02 | 27 042 |
| 1970-71 | 613 305 | 88 882 | 53 106 | 59.74 | 24 670 |
| 1971-72 | 672 056 | 99 133 | 71 585 | 72.21 | 24 675 |
| 1972-73 | 521 187 | 75 862 | 135 087 | 178.07 | 12 693 |
| 1973-74 | 487 336 | 74 249 | 131 078 | 176.54 | 30 582 |
| 1974-75 | 563 483 | 84 962 | 102 054 | 120.12 | 22 762 |
| 1975-76 | 517 176 | 77 810 | 104 626 | 134.46 | 17 079 |

Wool Prices

Prices paid for wool sold in South Australia tend to be on average less than prices realised in other States, this being partly attributable to the large proportion of medium to broad quality wools grown in South Australia and in western New South Wales. In 1975-76 the average price for wool sold at auctions in Australia was 143.25 cents per kg greasy, compared with 134.46 cents per kg in South Australia.

Average prices realised for greasy wool at Adelaide sales between 1945-46 and 1949-50 rose to 106 cents and more than doubled to nearly 239 cents in 1950-51. There was an immediate drop to half this level in the following year and then prices remained more stable until 1967-68. In 1970-71 the average price fell to 60 cents per kg, but in 1971-72 prices began to rise, reaching a monthly average of 253 cents per kg in July 1973. The price of wool has declined somewhat since then.

CATTLE

In comparison with other States, cattle grazing is not a major industry in South Australia. Of the cattle in Australia at 31 March 1976 just over 5 per cent of those used mainly for meat production and about the same percentage of those for milk production were in South Australia. At 31 March 1976 the total number of cattle in South Australia was 1 891 000.

**Cattle Numbers: Statistical Divisions, South Australia
31 March 1976**

| Classification | Statistical Division | | | | | | Total (a) | |
|-------------------------------------|----------------------|--------------------------|--------------|---------------|--------------|-------------------|--------------|----------------|
| | Central | Mount Lofty Ranges | Murray | South East | Eyre | Northern North | | Far North |
| Associated with milk production: | '000 | | | | | | | |
| Bulls (b) | 0.3 | 1.4 | 0.6 | 1.1 | 0.1 | 0.2 | — | 3.7 |
| Cows | 4.8 | 61.4 | 26.1 | 32.7 | 0.9 | 2.8 | 0.1 | 135.0 |
| Heifers | 1.2 | 15.5 | 6.3 | 8.3 | 0.3 | 0.7 | — | 34.0 |
| Calves under one year | 1.3 | 12.8 | 5.6 | 7.4 | 0.3 | 0.9 | — | 29.4 |
| House cows | 0.7 | 0.9 | 1.0 | 1.4 | 1.2 | 0.7 | 0.1 | 6.6 |
| Total | 8.3 | 92.0 | 39.5 | 50.9 | 2.8 | 5.3 | 0.2 | 208.7 |
| Associated with meat production: | | | | | | | | |
| Bulls (b) | 1.9 | 3.9 | 2.3 | 18.0 | 2.1 | 1.6 | 4.2 | 35.3 |
| Cows and heifers | 46.2 | 83.8 | 59.6 | 432.3 | 62.6 | 40.3 | 128.1 | 896.1 |
| Calves under one year | 27.9 | 48.7 | 40.0 | 259.5 | 40.3 | 25.5 | 74.9 | 540.9 |
| Other cattle | 7.9 | 17.3 | 8.3 | 111.0 | 9.1 | 7.4 | 41.1 | 210.2 |
| Total | 83.9 | 153.8 | 110.2 | 820.7 | 114.1 | 74.8 | 248.2 | 1 682.6 |
| Total cattle | 92.1 | 245.7 | 149.7 | 871.7 | 116.9 | 80.2 | 248.4 | 1 891.2 |

(a) Includes Adelaide and Kangaroo Island Divisions.

(b) Used or intended for service.

Cattle for Meat Production

Numbers of cattle associated with meat production have increased in the last thirteen years in South Australia. At 31 March 1964, 424 000 cattle associated with meat production were recorded (this figure is not strictly comparable with earlier figures because of a change of classification adopted in 1964); by 31 March 1969, 631 000 cattle were reported for meat production on 8 706 holdings. The number at 31 March 1976 had risen to 1 683 000 cattle on 11 900 holdings indicating an overall increase in the heard size of meat cattle.

**Number of Rural Holdings Classified by Size of Meat Cattle Herd
Statistical Divisions, South Australia
At 31 March 1976**

| Number of Cattle in Herd | Statistical Division | | | | | | | Total (a) |
|-----------------------------|----------------------|---------|--------------------------|--------|---------------|-------|----------|--------------|
| | Adelaide | Central | Mount Lofty Ranges | Murray | South East | Eyre | Northern | |
| | Number of Holdings | | | | | | | |
| 1-29 | 351 | 597 | 1 267 | 692 | 516 | 385 | 440 | 4 311 |
| 30-49 | 71 | 207 | 397 | 181 | 260 | 187 | 151 | 1 495 |
| 50-69 | 38 | 161 | 233 | 107 | 269 | 150 | 106 | 1 102 |
| 70-99 | 22 | 154 | 198 | 119 | 341 | 199 | 96 | 1 181 |
| 100-149 | 19 | 110 | 198 | 93 | 417 | 183 | 85 | 1 174 |
| 150-199 | 10 | 44 | 85 | 50 | 293 | 103 | 38 | 696 |
| 200-299 | 8 | 54 | 74 | 45 | 403 | 69 | 48 | 769 |
| 300-499 | 2 | 26 | 51 | 35 | 346 | 42 | 27 | 578 |
| 500-999 | 4 | 4 | 23 | 27 | 278 | 7 | 9 | 388 |
| 1 000 and over | — | — | 4 | 12 | 134 | — | 4 | 206 |
| Total herds | 525 | 1 357 | 2 530 | 1 361 | 3 257 | 1 325 | 1 004 | 11 900 |

(a) Includes Kangaroo Island and Far North Divisions.

In 1976 about 49 per cent of these cattle were in South East Division, 15 per cent in Far North Division, 9 per cent in Mount Lofty Ranges Division, and smaller numbers in other parts of the State. In the northern pastoral areas, Shorthorns are the predominant breed and there are lesser numbers of Herefords; in the South East, Herefords and Shorthorns are the main breeds and there are substantial numbers of Aberdeen Angus while near Adelaide, where a number of studs are located, several breeds are well represented. In recent years several European breeds have been introduced, most notably the Charolais.

The northern pastoral region is traditionally the breeding area for cattle for meat production (carrying 50 per cent or more of these cattle before 1957) but there has been a trend towards moving cattle which were bred in this drier country to the better rainfall areas for fattening. The continued increase in the area of sown pastures has contributed to the increase of cattle in southern parts of the State.

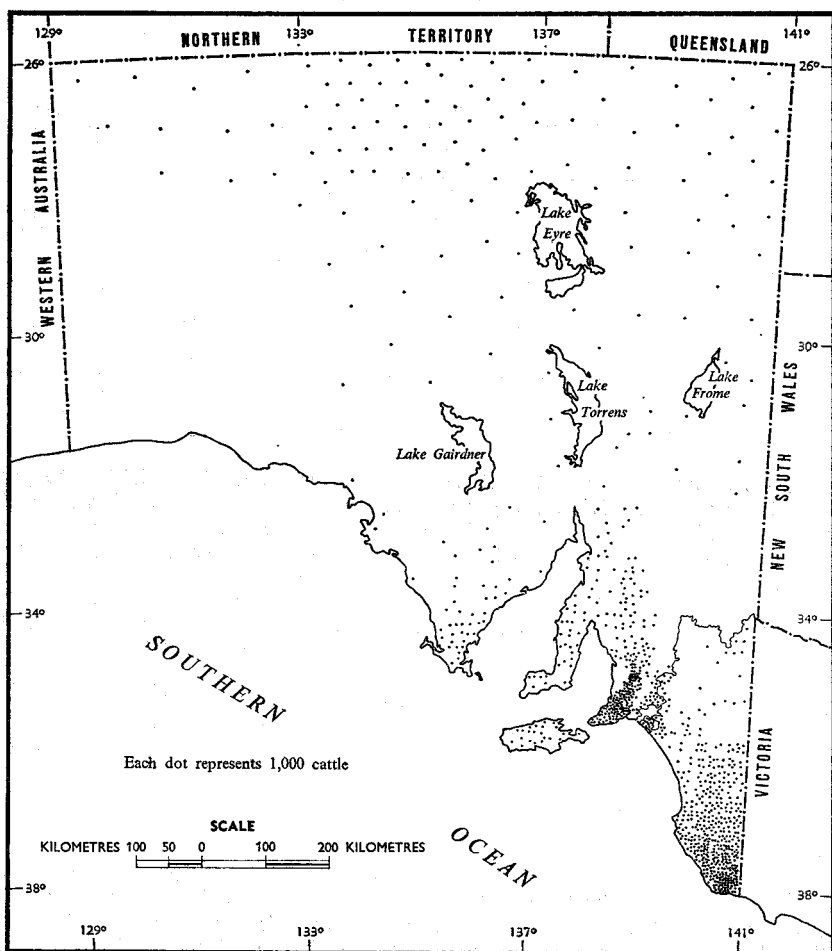
Cattle for Milk Production

From March 1964 to March 1968 the total number of cattle associated with milk production declined by 39 000 to 231 115. The total number at March 1976 was 209 000. Distribution within the State is little changed although there has been some tendency for concentration in the principal dairying areas.

Properties in South Australia on which dairying is the main activity are situated mainly in the areas where high rainfall or irrigation permits the growing of sown pastures, but many of the mixed farms in the better cereal growing areas carry herds used mainly for milk production. Dairy production on these farms is almost entirely in the form of cream for butter making, whereas the properties in the sown pasture areas mainly market whole milk, either for consumption in the Adelaide area or for cheese making.

SOUTH AUSTRALIA CATTLE DISTRIBUTION

At 31 March 1970.



Commercial dairying activities are located mainly within a 130 kilometre radius of Adelaide. Of greatest importance is the Adelaide Hills district, comprising the Mount Lofty Ranges and areas as far south as Cape Jervis and Encounter Bay. This district embraces some of the best dairy land in the State and includes most of the properties devoted specifically to dairy farming. Although some herds are grazed on natural pastures improved only by top dressing with superphosphate, the most common pasture consists of a sown combination of subterranean clover with perennial grasses such as perennial rye grass or phalaris.

Dairy production is mainly in the form of whole milk for consumption in Adelaide but the surplus from the flush period of the year is converted into cheese at factories situated at several centres throughout the Adelaide Hills.

Of the breeds used mainly for milk production, Friesians and Jerseys predominate, with Guernseys, Australian Illawarra Shorthorn, Ayrshires and their crosses in use to a lesser extent.

Other areas inside the 130 kilometre radius are the Lower Murray swamps and the Lakes District. The Lower Murray swamps extending from Mannum to Wellington are reclaimed areas ideally suited to dairying pursuits, combining the attributes of suitable climate, good soil, and an abundant water supply. The farms are flood irrigated through sluice gates in the levees and distributing channels and surplus water is led into a drainage system and pumped back into the river. The area has a very high carrying capacity of predominantly Friesian cattle. A significant proportion of the produce is sold as whole milk in the Adelaide market while the remainder is used for cheese, butter and casein production.

The Lakes District owes much to the barrages across the mouth of the Murray which have helped to maintain the waters of Lake Alexandrina and Lake Albert in a reasonably fresh state. These have greatly contributed to the improvement of the productivity of this area and also have had the effect of maintaining a greater control over the level of the water in the river, thereby greatly facilitating irrigation of the reclaimed swamps upstream. The outlet for dairy products is generally towards the processing plants situated on the Murray. On the eastern side both cream and milk are produced while on the western side most of the produce is sold as whole milk. The cattle for milk production are principally Jersey breed.

Outside the 130 kilometre radius, the most important dairying area is the Lower South East, where the high rainfall and low evaporation rate combine to allow a fairly long growth period after the autumn and winter rains and spring flush of feed. The intensity of dairying varies with the different areas, being greatest on the richer peat and peat-type soils close to the coast and the rich volcanic soils around Mount Gambier. Most breeds are well represented in the district, the Jersey and Friesian being slightly more popular than other breeds.

The annual average yields per cow shown in the following table are obtained by dividing the total production of whole milk for the year ended 31 March by the mean of the number of cows in milk and dry and the house cows at 31 March of that year and of the preceding year. They are, in effect, based on the approximate

number of cows which were in milk during any part of the year. The average shown is therefore less than that for cows which were yielding during the greater part of the year but it may be accepted as sufficiently reliable to show the general trend.

**Average Milk Production Per Cow, South Australia and Australia
Year Ended 31 March**

| Area | 1972 | 1973 | 1974 | 1975 | 1976 <i>p</i> |
|---------------------------|-------|-------|--------|-------|---------------|
| | | | Litres | | |
| South Australia | 3 117 | 2 806 | 3 120 | 3 045 | 2 927 |
| Australia | 2 590 | 2 571 | 2 719 | 2 587 | 2 627 |

The average yields shown in this table are greatly in excess of the yields recorded before 1960. This increased production has been achieved through a more scientific approach to management of herds for milk production including the keeping of detailed herd records, selective breeding and culling, supplementing the traditional diet of pasture, hay and silage with highly nutritious prepared feedstuffs, and the use of modern veterinary supplies and services. The continuing trend towards fewer but larger dairy farms reflects the pressures on the industry to achieve greater efficiency. At March 1966 there were 10 046 holdings with cattle used or intended to be used for milk production, but by March 1976 the number had fallen to 3 463.

**Number of Rural Holdings Classified by Size of Milk Cattle Herd
Statistical Divisions, South Australia
At 31 March 1976**

| Number of Cattle in Herd | Statistical Division | | | | | | | Total (a) |
|-----------------------------|----------------------|---------|--------------------------|--------|---------------|------|----------|--------------|
| | Adelaide | Central | Mount Lofty Ranges | Murray | South East | Eyre | Northern | |
| | Number of Holdings | | | | | | | |
| 1-9 | 32 | 165 | 196 | 198 | 114 | 67 | 99 | 895 |
| 10-19 | 15 | 62 | 111 | 96 | 47 | 10 | 37 | 383 |
| 20-29 | 9 | 31 | 85 | 38 | 31 | 5 | 11 | 213 |
| 30-39 | 9 | 27 | 109 | 16 | 44 | 3 | 11 | 221 |
| 40-49 | 18 | 19 | 92 | 24 | 30 | 1 | 8 | 193 |
| 50-59 | 13 | 11 | 105 | 21 | 29 | — | 5 | 184 |
| 60-69 | 11 | 9 | 105 | 25 | 39 | 1 | 3 | 194 |
| 70-79 | 7 | 8 | 84 | 21 | 33 | 2 | 5 | 160 |
| 80-99 | 15 | 10 | 140 | 48 | 60 | 5 | 5 | 285 |
| 100-124 | 9 | 3 | 153 | 63 | 82 | 1 | 4 | 316 |
| 125 and over | 12 | 4 | 168 | 96 | 133 | 1 | 5 | 419 |
| Total herds | 150 | 349 | 1 348 | 646 | 642 | 96 | 193 | 3 463 |

(a) Includes Kangaroo Island and Far North Divisions.

DAIRY PRODUCE

Milk

Total milk production in any one year is not known precisely. However, as details are known of two major components of total milk utilisation in South Australia, namely the amount consumed by factories in the production of milk, cheese, butter and other milk products and home consumption in the Metropolitan Milk Board area, a carefully considered estimate can be made.

The following table shows the estimated production of whole milk and the quantity of this milk used for various purposes in 1975-76 and earlier seasons.

Production and Utilisation of Milk, South Australia

| Year | Total Milk Produced | Butter (a) | Factory Cheese (b) | Milk Used for | | Other Purposes |
|-------------|---------------------|------------|--------------------|------------------|-------------------------|----------------|
| | | | | Home Consumption | | |
| | | | | Milk Board Area | Outside Milk Board Area | |
| '000 litres | | | | | | |
| 1966-67 | 448 822 | 135 719 | 171 433 | 88 476 | 44 461 | 8 733 |
| 1967-68 | 403 793 | 109 352 | 149 785 | 90 131 | 46 097 | 8 428 |
| 1968-69 | 467 374 | 130 268 | 192 959 | 90 154 | 45 625 | 8 374 |
| 1969-70 | 482 958 | 154 612 | 180 234 | 94 118 | 45 161 | 8 838 |
| 1970-71 | 469 775 | 130 655 | 190 490 | 95 486 | 43 802 | 9 342 |
| 1971-72 | 457 732 | 126 095 | 185 835 | 94 722 | 41 674 | 9 406 |
| 1972-73 | 424 265 | 101 865 | 174 500 | 96 222 | 41 708 | 9 969 |
| 1973-74 | 438 829 | 101 648 | 190 465 | 95 389 | 41 346 | 9 980 |
| 1974-75 | 426 371 | 89 458 | 194 335 | 91 828 | 39 917 | 10 833 |
| 1975-76 | 397 500 | 64 947 | 192 166 | 90 868 | 39 501 | 10 018 |

(a) Includes factory and farm production of butter.

(b) Factory production accounts for virtually all cheese produced.

Metropolitan Milk Board

Adelaide was the last of Australia's capital cities to establish a Milk Board or Dairy Authority. Attempts from 1936 onwards to introduce orderly marketing of liquid milk had, despite some quite long periods of successful operation, been frustrated by frequent breaches of the agreements entered into by milk treatment companies. Eventually, representations by producers through their organisation, the South Australian Dairymen's Association, resulted in legislation in 1946 to establish the Metropolitan Milk Board.

The Board, which was established in August 1947, is a statutory body responsible to the Minister of Agriculture. The Board derives its revenue from licenses to producers, vendors and milk treatment plants, and from levies on whole milk and cream sold for human consumption.

The functions of the Board are to:

- (1) regulate the conditions of production, treatment and storage of milk and table cream;

- (2) regulate the supply and distribution of milk and table cream to retail vendors and consumers;
- (3) control the activities of retail vendors and to delineate the areas in which they may operate;
- (4) fix the prices for milk and table cream which must be paid to producers, milk treatment plants, retail vendors and shops;
- (5) promote increased sale and consumption of milk and table cream.

The Board consists of three members appointed by the Governor on the recommendation of the Minister of Agriculture. The Chairman is a full-time member, and the two other members serve on a part-time basis. No member may have any interest direct or indirect in the dairy industry, nor may he represent any section of the industry in any way.

Milk Prices Equalisation Scheme

Legislative support for the Milk Prices Equalisation Scheme is provided in Section 43 of the Metropolitan Milk Supply Act, 1946-1971. The Board has authority to recommend to the Minister of Agriculture a monthly quota for that portion of the milk purchased by the holder of a milk treatment licence from producers licensed by the Board, which may be sold as whole milk for human consumption within the metropolitan area of Adelaide during the month to which the quota applies. The quota is regarded as being complied with if the holder of a milk treatment licence is a party to an Equalisation Scheme, and the total of such milk sold by all parties to the Scheme does not exceed the aggregate quota.

The knowledge that a quota exists which will, if necessary, be applied ensures that the milk treatment companies will remain in the Milk Prices Equalisation Scheme. Section 44 of the Act enables any company or person to which a milk treatment licence has been granted to apply to the Board for admission to such a Scheme.

The Scheme is effected by an agreement undertaken by all the milk treatment companies supplying the metropolitan area of Adelaide and its administration is carried out by the Metropolitan Milk Equalisation Committee Limited.

The Milk Prices Equalisation Scheme embraces every producer licensed by the Metropolitan Milk Board within a defined region extending approximately 100 kilometres north, east and south of Adelaide. This region contains the whole of the true dairying country in this part of South Australia; it is bounded on all sides, except a portion to the north, by either low rainfall country not suited to dairy farming or by the sea. All the producers receive, in any month, the same equalised price for the butterfat content of their milk. The fact that a dairy farm may be ten kilometres or 100 kilometres from the metropolitan area does not affect the return which a producer receives in any month, relative to that received by other producers.

Licensed milk produced within this area does not necessarily come to Adelaide to be used as liquid milk. In some cases the milk may not be used for liquid milk for months on end but, is diverted into the manufacture of cheese, butter, skim milk powder, casein and other perishable milk products. However during autumn, when milk production is at its lowest, nearly half the

total output of milk is treated as liquid milk for the metropolitan area. During the 12 months ended 30 June 1974, 37 per cent (representing the quota) of the milk produced by licensed producers was sold for human consumption within the Adelaide metropolitan area.

The price paid to licensed producers for milk for manufacture, termed the 'Basic Price', is calculated from the values for cheese determined by the Commonwealth Dairy Produce Equalisation Committee Limited by deducting from the value so determined the average costs of cheese manufacture, the contributions to research and promotion levied by the Australian Dairy Produce Board, and the average cost of transport from farm gate to treatment plant. The cheese values, and consequently the Basic Price, are of an interim nature and are adjusted from time to time throughout the course of the financial year. The Basic Price is paid monthly to each licensed producer for the butterfat contained in the milk supplied to the treatment plant during the previous month.

Each milk treatment company pays into the equalisation pool, for every litre of whole milk sold for human consumption, a levy which is the difference between the prices fixed by the Milk Board and the Basic Price referred to above (the Basic Price being converted to a litre rate at a nominal 4 per cent butterfat content). For example, the Basic Price ruling in July 1975 was 130.92 cents per kilogram of butterfat at the farm gate. The Milk Board price at the same time was 13.81 cents per litre. Converting the Basic Price expressed in kilograms of butterfat to litres of milk of 4 per cent butterfat content yields a rate per litre of 5.39 cents, and the levy is derived by subtracting from the Milk Board price of 13.81 cents the converted Basic Price of 5.39 cents, namely 8.42 cents per litre.

The result of this procedure is that each milk treatment company by paying the equalisation levy in addition to the Basic Price pays to the producer 13.81 cents per litre for all whole milk sold for human consumption as required by the regulations issued by the Board.

By the eighth day of every month, each milk treatment company submits to the Equalisation Committee a return showing its total intake in litres of milk and kilograms of butterfat, and its sales of whole milk in litres during the previous month. The total of all levies paid into the equalisation fund is divided by the total butterfat received by milk treatment plants from all licensed producers to calculate a rate per kilogram of butterfat, (the 'City Milk Bonus'), which is then paid to each licensed producer as his share of the equalisation pool for the whole of his output for the calendar month. The City Milk Bonus varies each month according to the proportion of the total intake from all licensed producers which is sold as whole milk for human consumption.

Under the Equalisation Scheme every licensed producer receives, in any month, exactly the same rate per kilogram of butterfat supplied. The total number of licensed producers is not distributed equally among the milk treatment plants, and it may become necessary, at times, for a treatment plant to purchase milk termed 'accommodation milk' from other treatment plants to enable it to maintain its milk trade. In the Equalisation Scheme each milk treatment company has agreed to provide such assistance at a price calculated from a formula set out in the Milk Prices Equalisation Agreement.

The Basic Price is paid on the actual butterfat content of the milk received from each licensed producer. The producer, knowing that he is being paid in this manner, has a greater incentive to produce milk of a maximum butterfat content and to carry the breed of cow best suited to the region in which his farm is situated. As a consequence there is, in the region supplying milk to the Adelaide metropolitan area, a far greater proportion of higher butterfat testing breeds than in other town milk supply regions. Over the years this has had the effect of raising the solids-not-fat content of the milk which has been to the advantage of both the consumer of liquid milk and the cheesemaker, as the yield of cheese manufactured from milk surplus to the liquid milk requirements is thereby raised.

This policy has also had the effect of increasing the average butterfat content of milk above the minimum standard set by the Milk Board for liquid milk (3.5 per cent).

Butter and Cheese

The quantities of butter and cheese produced during the last ten years are shown in the following table.

Butter and Cheese Production, South Australia

| Year | Butter (a) | Cheese (b) | Year | Butter (a) | Cheese (b) |
|---------|------------|------------|---------|------------|------------|
| | '000 kg | | | '000 kg | |
| 1966-67 | 6 915 | 17 508 | 1971-72 | 6 430 | 18 444 |
| 1967-68 | 5 566 | 14 866 | 1972-73 | 5 194 | 17 319 |
| 1968-69 | 6 637 | 19 151 | 1973-74 | 5 194 | 18 904 |
| 1969-70 | 7 883 | 17 888 | 1974-75 | 4 565 | 19 288 |
| 1970-71 | 6 661 | 18 906 | 1975-76 | 3 314 | 19 073 |

(a) Includes factory and farm production.

(b) Factory production only.

PIGS

In South Australia pigs were normally kept as a sideline on mixed farms or in conjunction with dairy cattle but the trend is towards holdings specialising in pigs.

There have been substantial fluctuations in the pig population from year to year induced by the exceptional variability of prices. In recent years the numbers have generally declined. The total number exceeded 200 000 for the first time in 1966 and has continued to exceed that number in subsequent years. Of the 326 000 pigs at 31 March 1976, approximately 55 per cent were in Central and Murray Divisions. The principal breeds in South Australia are Large White, Berkshire, Landrace and Tamworth.

The following table shows the number of pigs on rural holdings at 31 March for the last five years.

Pig Numbers, South Australia

| At 31 March | Boars | Breeding Sows | All other | Total |
|--------------|-------|---------------|-----------|---------|
| 1972 | 6 526 | 62 881 | 409 467 | 478 874 |
| 1973 | 6 113 | 57 711 | 435 637 | 499 461 |
| 1974 | 4 996 | 46 000 | 334 162 | 385 158 |
| 1975 | 4 664 | 44 318 | 299 973 | 348 955 |
| 1976 | 4 533 | 42 259 | 279 132 | 325 924 |

In the following table, rural holdings with pigs at 31 March 1976 are classified according to the size of the pig herd and the number of breeding sows. Of the 25 143 holdings of all types 4 016 carried pigs.

Rural Holdings Classified According to Number of Breeding Sows and Size of Pig Herd: South Australia, 1975-76 ^(a)

| Number of Breeding Sows | Size of Pig Herd (Numbers) | | | | | Holdings with Breeding Sows |
|-------------------------|----------------------------|-------|-------|-------|--------------|-----------------------------|
| | 1-9 | 10-19 | 20-49 | 50-99 | 100 and Over | |
| 1-4 | 287 | 309 | 370 | 33 | 6 | 1 005 |
| 5-9 | 51 | 66 | 436 | 310 | 26 | 889 |
| 10-19 | — | 20 | 94 | 343 | 223 | 680 |
| 20-49 | — | — | 9 | 50 | 313 | 372 |
| 50-99 | — | — | — | 3 | 90 | 93 |
| 100 and over .. | — | — | — | — | 26 | 26 |
| Total | 338 | 395 | 909 | 739 | 684 | 3 065 |

(a) 951 holdings with pig herds carried, no breeding sows.

MEAT PRODUCTION AND MARKETING

South Australia is a relatively small meat producer, providing only about 8 per cent of total Australian production. The South Australian Meat Corporation has the sole right within the Metropolitan Abattoirs area to slaughter stock for export as fresh meat in a frozen condition. It controls the handling and distribution of meat within this area and may fix the maximum number of stock sold in any one day in a Corporation controlled market.

The following table shows the number of livestock slaughtered for human consumption (including exports) and the production of meat during the last five years. Slaughtering and meat production on rural holdings are included in these figures.

Livestock Slaughtered and Meat Produced, South Australia

| Season | Livestock Slaughtered for Human Consumption | | | Meat Production (Bone-in-Weight) | | | |
|-----------------|---|-----------------|------|----------------------------------|-----------------|---------|---------|
| | Cattle and Calves | Sheep and Lambs | Pigs | Beef and Veal | Mutton and Lamb | Pigmeat | Total |
| | | '000 | | | Tonnes | | |
| 1971-72 | 291 | 5 144 | 436 | 50 068 | 91 503 | 23 094 | 164 665 |
| 1972-73 | 392 | 4 538 | 527 | 64 254 | 76 262 | 27 483 | 167 999 |
| 1973-74 | 359 | 2 595 | 448 | 63 211 | 50 116 | 24 195 | 137 522 |
| 1974-75 | 465 | 2 984 | 344 | 84 649 | 54 818 | 18 699 | 158 166 |
| 1975-76 | 549 | 3 561 | 342 | 92 012 | 62 971 | 19 264 | 174 247 |

Average market prices of some of the principal classes of livestock are set out in the next table. Generally prices fluctuate considerably from year to year, but a comparison of prices for fat cattle and fat sheep for 1973 and 1975 shows a dramatic fall.

Livestock, Average Prices at Adelaide Market

| Class of Stock | 1972 | 1973 | 1974 | 1975 | 1976 |
|-----------------------|---------|--------|--------|--------|--------|
| | Dollars | | | | |
| Fat cattle: | | | | | |
| Bullocks and steers; | | | | | |
| Prime, medium | 153.63 | 191.63 | 138.41 | 82.55 | 111.73 |
| Good | 131.80 | 161.89 | 116.77 | 68.79 | n.a. |
| Cows; | | | | | |
| Prime, medium | 128.14 | 162.92 | 117.85 | 53.73 | 85.87 |
| Good | 108.73 | 140.11 | 101.28 | 34.93 | 43.97 |
| Calves; | | | | | |
| Prime vealers | 49.29 | 60.44 | 66.80 | 31.10 | 33.46 |
| Good | 34.92 | 48.51 | 51.85 | 23.91 | 23.08 |
| Fat sheep: | | | | | |
| Merino wether; | | | | | |
| Prime | 6.35 | 18.15 | 12.51 | 6.17 | 9.05 |
| Medium | 4.42 | 13.05 | 10.14 | 3.90 | 5.31 |
| Lambs; | | | | | |
| Prime, medium | 6.56 | 14.16 | 12.23 | 9.56 | 10.83 |
| Good | 5.07 | 11.85 | 9.93 | 6.00 | 6.21 |
| Pigs: | | | | | |
| Choppers | 61.26 | 72.10 | 118.67 | 125.87 | 123.69 |
| Baconers | 34.63 | 42.69 | 68.06 | 69.04 | 68.95 |
| Porkers | 20.68 | 25.45 | 37.79 | 40.56 | 42.12 |

The Australian Meat Board, which was reconstituted under the *Meat Industry Act* 1964, is responsible for licensing companies to export meat, as well as assisting in the development and promotion of meat sales in overseas markets. The Board also advises on matters relating to quality and grading of meat for

export. The trading powers of the Board enable it to purchase and sell meat in its own right for the purpose of developing existing markets or creating new markets where there are special problems or circumstances which preclude the effective participation of private traders.

Finance for the Board's operations is derived from a levy imposed under the *Livestock Slaughter Levy Act 1964*. The levy is payable on the slaughter of all cattle (over 90 kg dressed weight), sheep and lambs for human consumption. The Act provides three elements in the levy for each class of livestock—an amount to finance meat research, an amount to finance the operations of the Australian Meat Board and an amount to finance service and investigation activities relating to meat processing. The first two elements are paid by producers while the third element is paid by meat processors.

In February 1964 the Governments of Australia and the United States concluded an agreement for the regulation of beef, veal and mutton exports from Australia to the United States with the object of promoting the orderly development of the trade in these classes of meat between the two countries. From year to year quotas on imports of meat may be imposed depending on the estimated level of imports into the United States.

OTHER RURAL INDUSTRIES

Poultry Farming

Poultry farming is a specialised and distinct industry and it is from the specialised hatcheries and chicken raising holdings that the bulk of commercial production is obtained. The industry can be divided into two categories; the production of eggs, and the raising of poultry for meat. Chickens, scientifically bred for rapid weight gain and known as 'broilers', account for over 90 per cent of total poultry slaughtered.

The main production centres for both categories of this industry are located within an 80 kilometre radius of Adelaide, near the processing works and main consumption outlets. Particular concentrations of growers are at Murray Bridge and Gawler, with some broiler growers established in the Adelaide Hills.

Poultry Industry, South Australia^(a)

At 31 March

| Particulars | 1972 | 1973 | 1974 | 1975 | 1976 |
|------------------------------|---------|---------|---------|---------|---------|
| | | | '000 | | |
| Hens and pullets | 1 899 | 1 558 | 1 671 | 1 716 | 1 410 |
| Other fowls and chickens .. | 1 993 | 2 332 | 2 728 | 2 476 | 2 976 |
| Ducks | 47 | 26 | 23 | 29 | 18 |
| Turkeys | 40 | 33 | 17 | 13 | 12 |
| Egg production (b) | 249 618 | 225 220 | 216 409 | 227 382 | 204 878 |

(a) Excludes poultry kept in backyards.

(b) Recorded by the South Australian Egg Board. Year ended 30 June.

Egg Industry

The South Australian Egg Board, operating under the Marketing of Eggs Act, 1941-1973, controls the marketing of eggs in this State. The Board determines the price at which it purchases eggs from producers, fixes the wholesale selling price in South Australia, makes available supplies to the local market through its grading agents and arranges with the Australian Egg Board for the export of eggs surplus to local requirements.

A stabilisation scheme, embodying three Acts has been in operation since 1 July 1965. The *Poultry Industry Levy Act 1965* provides for the imposition of a levy, the maximum being \$1.00 annually per hen, on hens not less than six months old kept for commercial purposes. Exemptions from payment are granted on the first twenty hens in each flock and on 'broiler breed hens'. In determining the rate of the hen levy, the Commonwealth Minister for Primary Industry is required to take into consideration any recommendations by the Council of Egg Marketing Authorities of Australia (CEMAA) which consists of all members of State egg marketing boards and is precluded from prescribing a rate in excess of such recommendations. The money obtained from the levy is used to meet trading losses on surplus eggs and sales to overseas markets.

Under the *Poultry Industry Levy Collection Act 1965* the South Australian Egg Board is responsible for the collection of the levy on behalf of the Commonwealth Government. The *Poultry Industry Assistance Act 1965* established a Poultry Industry Trust Fund for the receipt of the amount of the levy and other moneys. The Act provides for the payment from the Fund to this State, by way of financial assistance of such amounts as the Minister of Primary Industry may determine upon the recommendation of the CEMAA.

The trend in the egg industry in South Australia is towards a reduction in the total number of poultry farms, but an increase in average flock size. Housing of birds for commercial purposes is largely planned on the intensive principle, with deep litter pens or single and multiple bird cage units. Laying stock consists mainly of a specially produced crossbred between the White Leghorn and Australorp breeds.

Feed is the single most important cost to this industry, and its correct use is vital for efficient production. Feeding is based on cereal grains and the by-products bran and pollard. Meat and bone meats are a major source of protein supplement coupled with other essential vitamins, proteins and minerals.

The annual average egg production controlled by the South Australian Egg Board was 10.6 million dozen in the five years ended 1960-61, 10.1 million dozen over the next five years and 15.4 million dozen in the five years ended 1970-71. However, these figures do not take into account movement of eggs interstate independently of the Egg Board, which may represent a significant proportion of total egg production.

Broiler Industry

The broiler industry in South Australia has grown rapidly during the past seventeen years, annual production increasing from about half a million birds in 1959 to over 16 million birds at the present time. Broilers are specially

bred meat strain birds of either sex, that are slaughtered between eight and ten weeks of age at a live weight of approximately 1.5 kg. This rapid growth and efficient conversion of feed to meat has been achieved by extensive breeding programs; the use of specially prepared high protein and energy value poultry feeds; growth promotion and disease control drugs; and by the development of enclosed, factory-like broiler houses, with controlled temperature, ventilation and light, conducive to fast growth.

The broiler industry is a complex system requiring close co-operation between all links in the chain of production. Breeders, multipliers, hatcheries, growers, and poultry processors must combine to ensure efficient and streamlined production. This co-operation has produced a stable and efficient industry, bringing chicken meat to the consumer at a price comparing favourably with other meats. Growers are usually under contract to large broiler processing organisations receiving a price per bird at marketing or a price per kg live weight. Price per kg live weight is the most popular method; under this method the grower provides the shed, equipment and labour and the processor provides the chicken, cost of brooding, feed and medication. Usually the processor has a field serviceman who looks after his interests and ensures that growers are correctly rearing and caring for the stock. Nearly all South Australia's production is consumed locally, with some broilers being imported from Victoria and New South Wales.

The following tables show poultry slaughtered, the number of eggs set and chicks hatched for the last five years.

Poultry Slaughtered for Human Consumption
South Australia^(a)

| Period | Chickens (Broilers, Fryers, or Roasters) | Hens and Stags | Ducks and Drakes | Turkeys | Total |
|---|---|-------------------|---------------------|---------|--------|
| NUMBER SLAUGHTERED ('000) | | | | | |
| 1971-72 | 9 887 | 502 | 45 | 10 | 10 443 |
| 1972-73 | 11 124 | 438 | 41 | 17 | 11 620 |
| 1973-74 | 13 553 | 521 | 43 | 7 | 14 124 |
| 1974-75 | 15 249 | 524 | 24 | 7 | 15 805 |
| 1975-76 | 16 177 | 432 | 21 | 7 | 16 637 |
| LIVE WEIGHT OF POULTRY SLAUGHTERED (Tonnes) | | | | | |
| 1971-72 | 15 446 | 1 182 | 118 | 64 | 16 810 |
| 1972-73 | 17 258 | 1 010 | 110 | 97 | 18 475 |
| 1973-74 | 21 455 | 1 208 | 117 | 35 | 22 816 |
| 1974-75 | 24 248 | 1 227 | 71 | 42 | 25 588 |
| 1975-76 | 26 206 | 978 | 56 | 38 | 27 277 |
| DRESSED WEIGHT OF POULTRY SLAUGHTERED (Tonnes)^(b) | | | | | |
| 1971-72 | 11 077 | 800 | 84 | 46 | 12 006 |
| 1972-73 | 12 363 | 677 | 79 | 71 | 13 190 |
| 1973-74 | 15 164 | 832 | 86 | 25 | 16 108 |
| 1974-75 | 16 773 | 834 | 51 | 31 | 17 689 |
| 1975-76 | 18 064 | 661 | 40 | 28 | 18 793 |

(a) Excludes geese slaughtered.

(b) Dressed weight of whole birds, pieces and giblets as reported by producers.

**Eggs Set and Chicks Hatched in Commercial Hatcheries
South Australia**

| Year | Chicks Hatched (b) and Intended to be Raised for: | | | | | |
|---------------|---|-------------|-----------------------|----------------------------|--------------------------|------------------------------------|
| | Eggs Set (a) | | Chicken Meat | | Egg Production | Breeding (d) |
| | Meat Strains | Egg Strains | Meat Strains: Unsexed | Egg Strains: Cockerels (c) | Egg Strains: Pullets (c) | Egg Strains: Pullets and Cockerels |
| | | | | '000 | | |
| 1971-72 . . . | 13 253 | 4 933 | 10 431 | 117 | 1 876 | 30 |
| 1972-73 . . . | 12 944 | 3 739 | 10 131 | 103 | 1 408 | 47 |
| 1973-74 . . . | 17 529 | 4 842 | 13 384 | 95 | 1 770 | 25 |
| 1974-75 . . . | 20 448 | 4 260 | 16 089 | 65 | 1 723 | 13 |
| 1975-76 . . . | 21 884 | 4 585 | 17 789 | 52 | 1 833 | 12 |

(a) Including eggs which failed to hatch. (b) Excluding chicks destroyed. (c) Egg strain chicks sold as 'unsexed' have been allocated equally between chicks for chicken meat and chicks for egg production. The number so reported was 70 000 in 1971-72; 66 000 in 1972-73; 55 000 in 1973-74; 69 000 in 1974-75; and 54 000 in 1975-76. (d) Details of meat strain chicks for breeding purposes are not available for publication.

Beekeeping

Beekeeping in South Australia is a small industry—in 1975-76 there were 482 beekeepers with forty or more hives. Most commercial apiarists operate on a migratory basis, following the flowering of the various species of honey flora. The production of honey and beeswax fluctuates considerably from year to year, depending upon seasonal conditions.

In previous years, statistics on beekeeping have been compiled from returns from apiarists with five or more hives. In 1975-76, returns were requested from apiarists with forty or more hives, hence the figures for 1975-76 in the table below are not comparable with those for earlier years.

Beekeeping, South Australia^(a)

| Season | Beekeepers | Hives | | Honey Produced | Yield of Honey per Productive Hive | Beeswax Produced |
|------------|------------|------------|---------------|----------------|------------------------------------|------------------|
| | | Productive | Un-productive | | | |
| | No. | No. | No. | '000 kg | kg | '000 kg |
| 1971-72 .. | 821 | 73 412 | 14 055 | 4 277 | 58 | 60 |
| 1972-73 .. | 867 | 77 852 | 17 142 | 3 357 | 43 | 57 |
| 1973-74 .. | 894 | 84 944 | 16 730 | 4 650 | 55 | 76 |
| 1974-75 .. | 978 | 89 464 | 18 909 | 5 510 | 62 | 97 |
| 1975-76 .. | 482 | 83 870 | 16 107 | 4 592 | 55 | 80 |

(a) Excludes particulars for producers having less than five hives. For 1975-76, excludes producers with less than 40 hives.

VALUE OF AGRICULTURAL PRODUCTION

The value of agricultural production may be expressed in terms of gross value, local value and net value. Gross value is the value placed on recorded production at the wholesale prices realised in principal markets. Local value equals the gross value of production less marketing costs, and net value of production equals local value less the value of materials used in the process of production.

Details for the last five years of gross value of agricultural production are given in the following table.

Gross Value of Agricultural Production, South Australia

| Class of Production | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 p |
|-------------------------------|---------|---------|---------|---------|-----------|
| | \$'000 | | | | |
| Crops (including pastures) .. | 213 206 | 177 768 | 393 618 | 434 707 | 368 386 |
| Livestock slaughtering... .. | 93 057 | 126 633 | 164 997 | 102 786 | 127 029 |
| Livestock products | 124 440 | 198 914 | 214 779 | 169 943 | 177 183 |
| Total agriculture | 430 704 | 503 315 | 773 394 | 707 436 | 672 598 |

9.2 MINING, FORESTRY AND FISHERIES

MINING

South Australia has a well developed mineral industry and, although iron ore is the major product, the State also has very large resources of industrial minerals which make up a significant proportion of the total annual value of mineral production which exceeded \$131 million in 1975-76.

MINING ADMINISTRATION

The Mining Act, 1971-1976 reserves all minerals to the Crown and regulates and controls all mining operations in South Australia.

The state and conditions of the mine, machinery, ventilation, and all other matters relating to the safety, health and well-being of the employees and general public are regulated by the Mines and Works Inspection Act, 1920-1970.

The Petroleum Act, 1940-1971 and the Petroleum (Submerged Lands) Act, 1967-1969 provide for the control of petroleum exploration and the production, conservation and distribution of petroleum by pipeline.

The administration of these Acts is the responsibility of the Minister of Mines and Energy and the Director of Mines. The principal functions of the Department of Mines are:

- (i) the administration of mining and petroleum legislation including the granting of mineral leases and collection of royalties and fees;
- (ii) geological and geophysical investigations to ascertain the extent and nature of the State's mineral resources;

- (iii) drilling to test mineral deposits, petroleum reserves and underground water supplies;
- (iv) the testing and treatment of minerals, generally in arrangement with the Australian Mineral Development Laboratories;
- (v) control of mining and rehabilitation.

MINERAL INDUSTRY STATISTICS

Mining industry data (such as employment, costs, value of output) have been obtained annually since 1952 from the Mining and Quarrying Census carried out in association with the Department of Mines. The details have been collected from establishments employing, on the average, four or more persons during the period worked by the mine. For smaller mines employing less than four persons particulars were compiled from data made available by the Department of Mines. Statistics compiled from these Censuses have been published by the Australian Statistician in *Non-rural Primary Industries* bulletins and other publications of the Australian Bureau of Statistics.

In 1968 and earlier years, the annual Mining and Quarrying Census related to years ended 31 December. However, commencing with 1968-69, the Mining Census was changed to a year ended 30 June to conform with the period covered by other economic censuses in Australia.

Because the 1968-69 Census differed from previous censuses, the statistics obtained from it and subsequent censuses are not strictly comparable with statistics of the mining industry which have been published for previous years. Statistics for 1968-69 to 1974-75 have been published by the Australian Statistician in the bulletin *Mining Establishments, Details of Operations* (Reference No. 10.60).

Number of Establishments

The following table shows the number of establishments which operated during the year 1974-75. These relate to mining establishments as such and do not include the numbers of separately located administrative offices and ancillary units.

Mining Establishments: Number Operating, Persons Employed, Wages and Salaries, by Industry Subdivision, South Australia, 1974-75

| Industry Subdivision | ASIC Code (a) | Number of Establishments Operating at 30 June 1975 | Persons Employed (b) | | | Wages and Salaries | |
|---|---------------|--|----------------------|------------|--------------|--------------------|-----|
| | | | Males | Females | Total | | |
| Metallic minerals | 11 | 7 | 1 798 | 197 | 1 995 | \$ million | |
| Coal | 12 | 1 | | | | | |
| Crude petroleum including natural gas | 13 | 1 | | | | | |
| Construction materials | 14 | 54 | 509 | 43 | 552 | | 4.2 |
| Other non-metallic minerals | 15 | 28 | 309 | 7 | 316 | | 2.3 |
| Total mining, excluding services to mining | .. | 91 | 2 616 | 247 | 2 863 | 23.2 | |

(a) Australian Standard Industrial Classification.

(b) At 30 June 1975; includes working proprietors.

Employment

The statistics of the number of persons employed relate to working proprietors at the end of June 1975 and employees on the payroll of the last pay period in June 1975, including those working at separately located administrative offices and ancillary units in the State. Note that persons employed in South Australia (and their wages and salaries) relate to those employed at establishments, administrative offices or ancillary units located in this State, even though the administrative offices or ancillary units may have served establishments located in another State.

Wages and Salaries

The wages and salaries of all employees of the establishment include those working at separately located administrative offices and ancillary units in the State. Drawings of working proprietors are not included.

Turnover

The following table shows the turnover for mining establishments. Turnover includes sales, transfers out to other establishments of the same enterprise, bounties and subsidies on production, all other operating revenue from outside the enterprise (such as commission, repair and service revenue) and capital work for own use, or for rental or lease. Receipts from rents, leasing, interest (other than hire-purchase), royalties and the sale of fixed tangible assets are excluded.

Mining Establishments: Turnover and Value Added by Industry Subdivision, South Australia, 1974-75

| Industry Subdivision | ASIC Code (a) | Turnover | Stocks at 30 June | | Purchases, Transfers in and Selected Expenses | Value Added |
|---|---------------|--------------|-------------------|-------------|---|-------------|
| | | | 1974 | 1975 | | |
| | | | \$ million | | | |
| Metallic minerals | 11 | } 83.1 | 7.8 | 17.0 | 35.1 | 57.3 |
| Coal | 12 | | | | | |
| Crude petroleum including natural gas | 13 | | | | | |
| Construction materials | 14 | | | | | |
| Other non-metallic minerals | 15 | 15.1 | 1.1 | 1.2 | 4.4 | 10.9 |
| | | 15.0 | 1.6 | 2.0 | 8.6 | 6.7 |
| Total mining, excluding services to mining | .. | 113.2 | 10.5 | 20.2 | 48.1 | 74.9 |

(a) Australian Standard Industrial Classification.

Purchases, Transfers In and Selected Expenses

These figures include purchases of electricity, fuels, stores and other materials, transfers in of goods from other establishments of the same enterprise, charges for processing and other commission work and payments to mining contractors, repair and maintenance expenses, outward freight and cartage, motor vehicle running expenses and sales commission payments.

Stocks

Figures include all the stocks of materials, fuels, etc., and mine products and work-in-progress of the establishment whether located at the establishment or elsewhere.

The Iron Monarch deposit near Iron Knob has provided the bulk of the iron ore for Australia's steel industry for many years. Production from this and the smaller deposits of Iron Prince and Iron Baron is maintained by the Broken Hill Proprietary Company Limited (BHP)—in 1975-76 production was 4.5 million tonnes, a decrease of seventeen per cent from 1974-75. This fall was due mainly to lower demand and to BHP's use of increased quantities of iron ore from Mount Newman, Western Australia, for the steel works in New South Wales. The bulk of the South Australian ore is shipped to Newcastle and Port Kembla, but a proportion is exported in pellet form and some is used for the production of iron in the Whyalla blast furnaces. The molten iron is transferred from the blast furnaces to the basic oxygen steel plant, where ingot steel is produced for use in the Whyalla rolling mills.

Reserves of high grade iron ore are estimated at about 160 million tonnes. The grade of ore at more than 60 per cent iron is high by world standards. In view of the known limitation of high grade ore, BHP has carried out an active exploration program, and is also planning future use of the very large reserve of low grade siliceous ores known to exist in the Middleback Ranges.

Copper

Copper mining was very important in the early days of the settlement of South Australia. The rich discoveries at Kapunda in 1842, Burra in 1845, and Wallaroo-Moonta in 1859-60 came at a time when the colony's development was stagnating and severe financial difficulties were being encountered. Many small copper mines, scattered throughout the central metalliferous areas, were also opened but most of the mines only lasted until the richer secondary copper cut out at depths mostly less than 150 metres.

From 1842 to 1923, when the great Wallaroo-Moonta mines closed, copper was by far the State's most important mining produce. The copper products accounted for over eighty per cent of the State's recorded mineral production (construction materials were not recorded and so not included). The copper products sold during this period contained 450 000 tonnes of copper metal and were worth \$33 million, giving an average of \$72 per tonne of copper in the products.

During the next forty-five years (1924-1968), until the commencement of the mining boom, copper production was very small and intermittent with a production of only 5 600 tonnes of copper in the mineral products.

The renewed interest in copper mining during the boom led to the discovery of new, but lower grade, ore bodies at the old copper fields of Kanmantoo and Mount Gunson, and the working of remnant low-grade ore at Burra. These deposits are worked by open-cut methods which can produce much larger tonnages than the underground methods used to produce most of South Australia's copper during the earlier period of copper mining.

These three mines were the only copper producers in 1975-76 because the continued low world copper prices had caused the closure of the smaller producers. In 1975-76 the Kanmantoo, Mount Gunson and Burra mines together produced 18 433 tonnes of copper in the concentrates and copper oxide which they sold. This was eighty-three per cent higher than the output of 10 037

tonnes of copper for 1974-75, the previous record for South Australia, and almost twice the quantity of copper produced in 1875 during the hayday of the great Wallaroo-Moonta mines.

Ninety per cent of the production came from the Kanmantoo and Mount Gunson mines which sell copper sulphide flotation concentrates to Japanese smelters. The Kanmantoo mine also sells copper carbonate flotation concentrates to smelters in Port Kembla, NSW. The Samin Company at Burra uses the ammonia leaching process to produce high quality black copper oxide of seventy-seven per cent grade copper which is sold direct to industry in Australia and overseas.

The ex-mine site value of the copper products sold in 1975-76 was \$13.2 million compared with \$7.6 million in 1974-75. However the output will be lower next year because the Kanmantoo mine ceased production at the end of June 1976 and the mine is being run on a care and maintenance basis until world copper demand increases. The Burra mine has kept their production down to match their smaller markets.

Zinc

In South Australia the only production of zinc comes from a high grade (about forty per cent zinc) deposit of zinc silicate found at Pultapa near Beltana in the Flinders Ranges. Several other smaller occurrences of this unusual zinc ore have been found in this part of the State but they are not being mined at present. The deposit is high enough grade not to need concentration but is mined, crushed, and then sent to various markets in Europe, Africa and to Risdon in Tasmania with small amounts going direct to the Australian fertiliser industry for use as trace element supply for zinc deficient soils.

In 1975-76, 22 851 tonnes of zinc silicate ore of thirty-eight per cent zinc grade, worth about \$1.6 million, was sent to overseas and Australian users. This was a reduction of about thirty per cent on 1974-75 production.

Barite

There are widespread occurrences of barite (barytes) throughout the Adelaide System rocks of South Australia. Deposits are located in a number of areas including the Mount Lofty and Flinders Ranges and the Olary district. Barite is still used in the paint and other industries, but the main use is in drilling mud for oil exploration where the grade does not have to be so high. Production of barite totalled 10 600 tonnes in 1975-76.

The company operating the Oraparinna Mine in the Flinders Ranges was, until recently, the major Australian producer of barite; the company is now operating under receivership. A new company may be formed to take over the mill at Quorn and the mining interests at Oraparinna and elsewhere.

Gypsum

South Australian deposits contain by far the largest part of Australian reserves of gypsum. The deposits in general have been formed in coastal basins cut off from the ocean, giving rise to extensive deposits of rock gypsum. The most important coastal deposits are found at Lake MacDonnell and on Kangaroo

Island. Inland deposits mainly of seed gypsum occur at Moonabie, Lake Fowler, Cooke Plains and along the Murray River. The gypsum deposits have been worked extensively over the past fifty years to provide the bulk of Australasian requirements for the plaster industry and for portland cement manufacture. Production reached 735 000 tonnes in 1975-76.

Reserves of high grade gypsum at Lake MacDonnell have been proved by the Department of Mines to exceed 500 million tonnes, sufficient to meet Australasian requirements for the plaster industry and for portland cement for many years. The port of Thevenard, 55 kilometres from the deposit by rail, has been deepened to accommodate larger ships of up to 20 000 tonnes capacity. The value of overseas exports of gypsum from South Australia during 1975-76 amounted to \$1.1 million.

Salt

The semi-arid climate and high evaporation rate along much of South Australia's coastline, together with the high salinity of the gulf waters, create very favourable conditions for the production of salt by solar evaporation. In the early days the availability of sites close to cheap transport led to the establishment of solar salt works at the head of Spencer Gulf near Port Augusta and at Whyalla, at Price on the eastern shore of Yorke Peninsula, and in 1940 at Dry Creek near Adelaide. In addition several operators recover salt from shallow salt-lakes on Yorke Peninsula and elsewhere.

At present South Australia produces about 529 000 tonnes of salt annually. The industry in South Australia is capable of expansion, but the future export market appears to have been largely captured by salt development in Western Australia.

Opal

The estimated value of raw opal production in 1975-76 was \$22 million, a slight increase on 1974-75. In terms of value it ranked third to iron ore and construction material quarrying as the most important mineral produced in South Australia during 1975-76. Overseas exports of opal from South Australia during 1975-76 were reported at \$8.6 million but additional large quantities were exported through other States.

In spite of the value of opal being won at present, opal mining remains a small scale operation at Andamooka and Coober Pedy. The distances from Port Augusta to Andamooka and from Port Augusta to Coober Pedy are 290 and 630 kilometres respectively.

Mining at both centres is relatively shallow, rarely exceeding 30 metres. The Department of Mines is now searching for possible extensions to the Andamooka field because of the serious reduction of production experienced from this field.

Talc

The principal occurrences of talc are to be found at Mount Fitton in the Northern Flinders Ranges and in the Gumeracha and Lyndoch districts. From these sources 11 108 tonnes were mined in 1975-76. The Mount Fitton talc is particularly high grade, and is in demand for use by the cosmetic industry. Lower grade material is used in the rubber, paint, and ceramics industries.

Coal

South Australia is deficient in accessible bituminous coal resources and the only mining is of sub-bituminous coal at Leigh Creek. The present development of the field commenced with Department of Mines drilling operations in 1941. The Electricity Trust of South Australia assumed control of the field in 1948 and developed it as a source of fuel for the Port Augusta power station. Meanwhile testing by the Department of Mines continued for some years, proving a total of 52 million tonnes of coal available by open cut methods and a further 370 million tonnes of underground reserves. Changing economic conditions have caused these estimates to be revised to 150 million tonnes and 280 million tonnes respectively, of which approximately 33 million tonnes has been mined to date by open cut methods.

Coal production in 1975-76 was approximately 1.8 million tonnes. Almost the entire production is railed to Port Augusta for use in power generation.

Natural Gas

The natural gas production in 1975-76 was 1 447 million cubic metres valued at the plant outlet at \$16.3 million, a fifteen per cent increase in volume and a thirty-two per cent increase in value.

Limestone and Dolomite

The combined quantity of limestone and dolomite extracted for use in industry (*i.e.*, excluding road stone, etc.) each year is approximately two million tonnes. The principal deposits mined are limestone at Rapid Bay and dolomite at Ardrossan for the steel industry; limestone at Penrice, near Angaston, for the chemical and cement industries; and limestone at Klein Point for the cement industry. Details of limestone production for the years 1972-73 to 1975-76 are given in the following table.

Limestone Production, South Australia
(Excluding Limestone Used as Building Stone, Road Materials, Etc.)

| Classification | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--------------------|-------------|---------|---------|---------|
| | '000 tonnes | | | |
| Flux | 496 | 385 | 297 | 287 |
| Cement | 802 | 855 | 839 | 903 |
| Chemical | 321 | 366 | 387 | 370 |
| Other | 17 | 27 | 11 | 35 |
| Total | 1 636 | 1 633 | 1 535 | 1 594 |

Clay

South Australia possesses a wide variety of clays which are used for industrial purposes such as cement manufacture, building bricks and roofing tiles, refractory ware, pottery and ceramic purposes.

Because of the scarcity of local timber supplies, softwood excepted, much greater use is made of clay bricks for construction in South Australia than in

other parts of Australia. The clay brick industry is concentrated near Adelaide. There are also widely distributed occurrences of special clays for ceramic and refractory ware.

The Department of Mines, together with the Australian Mineral Development Laboratories, is continually engaged in investigations relating to the usage of clay deposits encountered during geological surveys throughout the State.

Details of clay production for the years 1972-73 to 1975-76 are given in the following table.

Clay Production, South Australia

| Classification | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--------------------------------|-------------|---------|---------|---------|
| | '000 tonnes | | | |
| Brick clay and shale | 660 | 700 | 671 | 797 |
| Cement clay (shale) | 43 | 84 | 91 | 123 |
| Fire clay | 22 | 27 | 29 | 29 |
| Kaolin and ball clay | 9 | 10 | 13 | 10 |
| Pottery clay | 20 | 1 | 17 | 7 |
| Total | 754 | 822 | 821 | 967 |

Construction Material Quarrying

Post-war industrial expansion, accompanied by extensive housing programs and highway construction has resulted in a rapidly increasing demand for construction materials. Production of aggregate, sand and roadstone (including all building stone) was 13 million tonnes in 1975-76 compared with 2.2 million tonnes in 1947.

Road and Other Construction Materials, South Australia

| Type of Material | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---------------------------|-------------|---------|---------|---------|
| | '000 tonnes | | | |
| Limestone | 4 983 | 4 281 | 3 553 | 3 043 |
| Quartzite | 3 749 | 3 917 | 3 461 | 3 384 |
| Sand | 2 447 | 2 619 | 2 419 | 2 690 |
| Other materials | 4 240 | 3 533 | 3 514 | 4 069 |
| Total | 15 419 | 14 350 | 12 948 | 13 186 |

A variety of building stones is quarried, including, Mount Lofty sandstone, a white stone which hardens in the atmosphere; Basket Range sandstone, a light coloured stone of pleasing appearance; and Mount Gambier limestone, a bryozoal limestone of the South East. Limestone deposits have also been worked at Overland Corner, Cadell and Waikerie. A quantity of granite is extracted each year and marble occurrences are worked at Angaston, Kapunda, Macclesfield and Paris Creek. The main sources of slate in South Australia are at Mintaro and Willunga. Both areas supply paving slate and a large quantity of Mintaro

in a new area west of Andamooka. This has stimulated interest in the entire area of the Stuart Shelf and has resulted in a large number of applications for exploration licences.

Coal investigations by private companies lessened during 1975-76 but this was offset by intensive exploration programs instigated by the Department of Mines and the Electricity Trust of South Australia (ETSA). ETSA completed the assessment of the deeper Leigh Creek coal resources and mining is planned there until at least the year 2005.

The Department of Mines has commenced an extensive coal exploration program in search of steaming coal for future power generation. More than \$200 000 will be spent on this exploration project, a combined program involving both ETSA and the Department of Mines.

The report of the State Energy Committee of South Australia dated May 1976 was released during mid-1976.

The testing by Utah Development of the Lake Phillipson coal deposits (found originally in 1905) has indicated that the total recoverable quantity could exceed 2 000 million tonnes. These deposits of medium to low grade steam coal, which have a marginally higher calorific value than Leigh Creek coal, are located about 90 kilometres south of Coober Pedy and near the proposed Tarcoola-Alice Springs railway.

Uranium has been reported to be associated with the newly discovered copper deposits at Roxby Downs, west of Andamooka. The Department of Mines, in association with the Australian Mineral Development Laboratories (AMDEL), is assisting in limited investigations into the possible future development of small deposits of uranium in the Lake Frome area by *in situ* leaching.

Mapping and shaft sinking by the Department of Mines have proved the opal level to exist in several previously untested areas in the Andamooka area. A new field was established and another site shows promise of developing into a field.

At June 30 1976, seventy exploration licences were current, involving thirty-six companies. The total area held under licence was approximately 66 000 square kilometres.

The Australian Mineral Foundation Inc., established at Frewville 4 kilometres to the east of the centre of Adelaide, provides short-term specialist training at professional and sub-professional levels for the mining and petroleum exploration and production industries.

The Australian Mineral Development Laboratories (AMDEL), also at Frewville, continue to carry out valuable research, development and laboratory service work for the mineral industry of Australia and neighbouring countries.

The Department of Mines spent \$4.5 million in 1975-76 (\$3.6 million in 1974-75) on geological and other investigations, drilling and mineral research work to assist the State's mineral industry.

The following table shows details of private mineral exploration, other than petroleum, in South Australia for 1974-75 and 1975-76.

Private Mineral Exploration (Other than Petroleum), South Australia^(a)

| Particulars | Unit | On Current Producing Leases | | On Other Areas | | Total Private Exploration | | |
|-----------------------|--------|-----------------------------|-------------|----------------|-------------|---------------------------|---------|--|
| | | 1974-75 | 1975-76 | 1974-75 | 1975-76 | 1974-75 | 1975-76 | |
| Depth drilled: | | | | | | | | |
| Core | '000 m | <i>n.a.</i> | — | <i>n.a.</i> | 13 | 31 | 13 | |
| Non-core | '000 m | <i>n.a.</i> | — | <i>n.a.</i> | 130 | 168 | 130 | |
| Total depth drilled.. | '000 m | <i>n.a.</i> | — | <i>n.a.</i> | 142 | 199 | 142 | |
| Expenditure: | | | | | | | | |
| Drilling: | | | | | | | | |
| Core | \$'000 | <i>n.a.</i> | — | <i>n.a.</i> | 603 | 810 | 603 | |
| Non-core | \$'000 | <i>n.a.</i> | — | <i>n.a.</i> | 920 | 832 | 920 | |
| Total drilling | \$'000 | <i>n.a.</i> | — | <i>n.a.</i> | 1 524 | 1 642 | 1 524 | |
| Other | \$'000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 3 978 | 3 594 | |
| Total expenditure | \$'000 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> | 5 621 | 5 118 | |

(a) Excludes exploration for water and all development work. Excludes details of exploration by business undertakings operated by State and local government authorities.

Details of private petroleum exploration and development for South Australia are shown in the following table for the years 1972 to 1975.

Private Petroleum Exploration and Development, South Australia

| Particulars | Unit | 1972 | 1973 | 1974 | 1975 |
|----------------------------|--------|--------|-------|-------|--------|
| Wells drilled (a) | No. | 17 | 6 | 1 | 6 |
| Depth drilled | '000 m | 44.7 | 21.1 | 2.4 | 9.9 |
| Expenditure: | | | | | |
| Private sources | \$'000 | 9 804 | 1 871 | 2 205 | 12 530 |
| Government subsidy (b) | \$'000 | 611 | 414 | 187 | 266 |
| Total expenditure .. | \$'000 | 10 415 | 2 285 | 2 392 | 12 796 |

(a) Number of wells reaching total depth during year.

(b) Payments under the *Petroleum Search Subsidy Act 1959*.

FORESTRY

There are an estimated 6 million hectares of land classified as wooded in South Australia, but much of this is too small or scattered to be of current economic value for wood production or is better retained in its present form for environment protection reasons. Some 780 000 hectares carry forest

or forest woodland, a decreasing part of which is still exploited for minor quantities of timber and fencing or firewood materials. Many of the forested or wooded areas are of considerable value for soil conservation, watershed protection, shelter, shade, conservation of indigenous plants and animals, and natural scenery.

Certain areas have been set aside as State forest reserves, the total area thus reserved at 30 June 1976 being 127 782 hectares. In addition the Woods and Forests Department is responsible for 2 176 hectares of reservoir lands, of which 1 118 are planted with pines.

In recent years the total area reserved has varied little, mainly because of the increasing unavailability of land. The net increase over the last five years was 5 774 hectares. During the same period the area under plantation on Forest Reserves increased by 7 573 hectares.

A more detailed history of forestry development in South Australia was included on pages 432-4 of the *South Australian Year Book* 1970.

Indigenous Forests

The natural forests of South Australia consist of eucalypt hardwoods restricted principally to the Mount Lofty Ranges, the lower Flinders Ranges, the southern portion of Eyre Peninsula, and the South East. A few species are of commercial value and these are used to a limited extent for the production of poles, posts, rails and sleepers.

Some areas of forest reserves not planted with conifers are maintained under native hardwoods but it is unlikely that further hardwood plantations will be established for timber purposes.

Plantations

Seedlings raised in nurseries are planted out in the forest at densities of 1 700-2 200 trees to the hectare. A series of thinnings, starting when the trees are about 20 metres high, reduces density to about 150 trees to the hectare by about age forty. These thinnings are carried out on a commercial basis and make the major contribution to present timber and pulpwood output. The final felling age is aimed at forty to fifty years although for management purposes some earlier felling has been made in the past. Trees of the same age may vary in height; on some sites trees reach 20 metres after ten years of growth, but on other sites this height may not be reached until after twenty years of growth.

Exotic softwoods accounted for approximately 99 per cent of the planted forest area at 31 March 1976. As can be seen from the accompanying tables, the majority of the planted forest is in the Lower South East. The 625 mm rainfall line roughly divides the South East in two; the Lower South East, with an annual rainfall in excess of 625 mm, is quite suitable for commercial forestry, but the Upper South East is not.

The following table clearly illustrates the predominant importance of one species, *Pinus radiata*, in the composition of South Australian forests. Areas of other species are now minor, although over a hundred species have been tried in earlier years.

Forests, South Australia
Area Planted During 1975 and Net Area of Plantations at 31 March 1976

| Location | Planted during 1975 | | | Plantations at 31 March 1976 | | |
|------------------------------------|----------------------|-------------|------------|------------------------------|-------------|------------|
| | Softwoods | | Hard-woods | Softwoods | | Hard-woods |
| | <i>Pinus Radiata</i> | Other Pinus | | <i>Pinus Radiata</i> | Other Pinus | |
| State forests: Hectares | | | | | | |
| Northern Region; | | | | | | |
| Bundaleer | 12.8 | — | — | 1 362.7 | 35.7 | 196.5 |
| Wirrabara | 30.3 | — | — | 1 812.0 | 68.6 | 53.8 |
| Other forests | — | — | — | — | — | 146.6 |
| Total Northern | 43.1 | — | — | 3 174.7 | 104.3 | 396.9 |
| Central Region; | | | | | | |
| Mount Crawford | 236.9 | — | 1.4 | 5 548.6 | 371.6 | 40.8 |
| Kuitpo | 81.6 | — | — | 2 163.0 | 389.4 | 114.0 |
| Blackwood | — | — | — | 7.4 | — | — |
| Second Valley | 102.3 | 0.6 | — | 1 594.3 | 187.6 | 10.8 |
| Total Central | 420.8 | 0.6 | 1.4 | 9 313.3 | 948.6 | 165.6 |
| Riverland Region; | | | | | | |
| Parilla | — | — | — | — | 6.1 | 48.6 |
| Other forests | — | — | — | — | — | — |
| Total Riverland | — | — | — | — | 6.1 | 48.6 |
| South Eastern Region; | | | | | | |
| Penola | 141.4 | — | — | 12 332.8 | 1 893.1 | 1.2 |
| Comaun | 46.3 | — | — | 2 857.9 | 304.0 | 6.7 |
| Mount Burr | — | — | — | 9 150.3 | 593.9 | 76.8 |
| Noolook | 337.4 | — | — | 2 788.0 | 4.0 | — |
| Mount Gambier | 294.9 | — | — | 6 801.4 | 701.3 | 7.5 |
| Kongorong | 87.1 | — | — | 1 328.3 | 6.3 | — |
| Tantanoola | 122.9 | — | — | 7 781.9 | 989.6 | 6.3 |
| Caroline | 109.8 | — | — | 6 273.5 | 670.8 | — |
| Myora | 235.7 | — | — | 5 894.0 | 217.3 | — |
| Cave Range | — | — | — | 206.9 | 105.2 | — |
| Total South Eastern | 1 375.5 | — | — | 55 415.0 | 5 485.5 | 98.5 |
| Western Region; | | | | | | |
| Wanilla | — | 0.3 | 2.7 | 46.6 | 23.5 | 349.5 |
| Waterworks reserves | — | — | — | 992.3 | 126.0 | 1.5 |
| Total State forests | 1 839.4 | 0.9 | 4.1 | 68 941.9 | 6 694.0 | 1 060.6 |
| Total private forests | 315 | — | — | 16 881 | 99 | — |
| Total forests | 2 155 | — | 4.1 | 92 517 | 1 159.6 | — |

Forests, South Australia
Net Area of Plantations at 31 March

| Location | 1972 | 1973 | 1974 | 1975 | 1976 |
|------------------------------|---------------|---------------|---------------|---------------|---------------|
| State forests: | | | | | |
| | Hectares | | | | |
| Northern Region; | | | | | |
| Bundaleer | 1 470 | 1 507 | 1 541 | 1 583 | 1 595 |
| Wirrabara | 1 596 | 1 703 | 1 845 | 1 872 | 1 934 |
| Other forests | 146 | 146 | 146 | 147 | 147 |
| Total Northern .. | 3 212 | 3 356 | 3 532 | 3 602 | 3 676 |
| Central Region; | | | | | |
| Mount Crawford | 4 937 | 5 131 | 5 451 | 6 214 | 5 961 |
| Kuitpo | 2 617 | 2 614 | 2 628 | 2 641 | 2 666 |
| Blackwood | 1 | 7 | 7 | 7 | 7 |
| Second Valley | 1 462 | 1492 | 1 578 | 1 697 | 1 793 |
| Other forests | — | — | — | — | — |
| Total Central | 9 017 | 9 244 | 9 664 | 10 559 | 10 427 |
| Riverland Region; | | | | | |
| Parilla | 55 | 55 | 55 | 55 | 55 |
| Other forests | — | — | — | — | — |
| Total Riverland .. . | 55 | 55 | 55 | 55 | 55 |
| South Eastern Region; | | | | | |
| Penola | 14 037 | 13 989 | 14 073 | 14 124 | 14 227 |
| Comaun | 3 006 | 3 027 | 3 090 | 3 125 | 3 169 |
| Mount Burr | 10 050 | 10 082 | 9 865 | 9 861 | 9 821 |
| Noolook | 1 581 | 1 823 | 2 151 | 2 455 | 2 792 |
| Mount Gambier | 7 715 | 7 807 | 7 402 | 7 350 | 7 510 |
| Kongorong | 648 | 814 | 1 164 | 1 248 | 1 335 |
| Tantanoola | 8 180 | 8 374 | 8 536 | 8 695 | 8 778 |
| Caroline | 6 076 | 6 434 | 6 681 | 6 840 | 6 944 |
| Myora | 5 725 | 5 725 | 5 753 | 5 927 | 6 111 |
| Cave Range | 314 | 314 | 312 | 312 | 312 |
| Total South Eastern | 57 332 | 58 389 | 59 027 | 59 937 | 60 999 |
| Western Region; | | | | | |
| Wanilla | 408 | 412 | 413 | 417 | 419 |
| Waterworks reserves .. . | 1 085 | 1 116 | 1 120 | 1 120 | 1 120 |
| Total State forests | 71 109 | 72 572 | 73 811 | 75 690 | 76 696 |
| Total private forests | 16 445 | 16 691 | 16 876 | 17 145 | 16 980 |
| Total forests | 87 554 | 89 263 | 90 687 | 92 835 | 93 676 |

FOREST ADMINISTRATION

State Forests

State forests are administered by the Woods and Forests Department which is responsible for the establishment, maintenance and exploitation of State forests, including the management of forest reserves and operation of mills for processing timber produced by those forests. The Forest Reserves are organised into Districts and are under the charge of professionally trained foresters. The Department is also the major timber producer in South Australia, and operates three sawmills and two wood preservation plants through its Commercial Division.

In earlier years, when large areas of plantations were being established, expenditure by the Department exceeded revenue, but since 1942-43 the revenue has exceeded expenditure including depreciation and interest on loans. By 1954-55 accumulated surpluses had matched expenditure on establishment and maintenance of plantations, and annual surpluses of the Department are now paid to Consolidated Revenue.

Funds employed by the Woods and Forests Department, including its milling operations, amounted to \$44 738 148 at 30 June 1976 of which \$26 716 580 was timber and land at net cost. The present value of the State pine forests is approximately \$140 million.

Private Forests

Private forests accounted for approximately 18 per cent of the planted area at 31 March 1976. Two private companies operating pine plantations in the South East control the bulk of private forest land, with the balance representing a large number of holdings of a few hectares on farming properties throughout the State.

PRODUCTION

The following table gives the quantity of forest logs used during the years 1971-72 to 1975-76.

Forest Log Usage, South Australia

| Year | Cubic Metres | |
|------------------|--------------|-----------|
| | Softwoods | Hardwoods |
| 1971-72 | 900 800 | 8 791 |
| 1972-73 | 918 744 | 5 909 |
| 1973-74 | 902 929 | 5 197 |
| 1974-75 | 902 142 | 7 017 |
| 1975-76 | 953 704 | 6 746 |

Log production is met from final fellings and thinning operations, and planned forest management ensures that the amount of timber cut each year does not exceed new growth. For many years thinnings have provided the bulk of the logs produced but with the increasing age of the plantations the quantity of logs coming from final fellings is rising. In 1975-76, twenty-five per cent of total log production was from final fellings. With the increasing area

of forest reaching the stage of regular and repeated thinning at intervals of about seven years, log production is rising steadily towards the full annual yield which can be cut indefinitely.

Other forest products include firewood, yacca gum, honey and wattle bark.

EMPLOYMENT

The number of persons directly employed by the Woods and Forests Department in forestry activity in recent years is given below. The Department also employs 778 persons in milling activities.

State Forestry Employees, South Australia At 30 June

| Classification | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|------------|------------|------------|------------|------------|
| Professional staff: | | | | | |
| Foresters | 49 | 53 | 51 | 53 | 49 |
| Other | 36 | 31 | 29 | 26 | 28 |
| Non-professional field staff | 27 | 31 | 35 | 38 | 42 |
| Clerical staff | 119 | 122 | 130 | 122 | 132 |
| Labour (silvicultural forest works, etc.) | 246 | 275 | 281 | 314 | 305 |
| Total | 477 | 512 | 526 | 553 | 556 |

The extraction of timber from State forests is carried out by contractors.

RESEARCH AND ADVISORY SERVICES

The virtual dependence of the South Australian forestry industry on a single species necessitates continued research into the maintenance and improvement of *Pinus radiata* resources, as well as into forestry in general.

The Woods and Forests Department maintains its own research facilities and works very closely with the South Australian Regional Station of the Division of Forest Research of the Commonwealth Scientific and Industrial Research Organization (CSIRO) at Mount Gambier. Certain aspects of forestry research are also undertaken by the Soils Division of CSIRO, the Waite Agricultural Research Institute, the University of Adelaide, the Flinders University and the Department of Forestry of the Australian National University.

Research activities aimed at an expansion of forestry production include the development of fertiliser use, both to stimulate growth and to bring into production land previously considered unsuitable, and the improvement of planting stock through selective breeding. Silvicultural research is concerned with the maintenance of soil fertility and with combating various diseases and pests. Permanent sample plots are maintained in departmental forests for research into various aspects of forest yield and management.

The Woods and Forests Department provides an advisory service in arboriculture and distributes, through its nurseries at Monarto, Belair and Berri, a wide variety of trees suitable for planting in various climatic and soil conditions.

FOREST PROTECTION

The hot dry summer conditions normal to the State require forest management to take considerable precautions and to maintain constant vigilance against forest fire. The clearing of undergrowth, the maintenance of fire-breaks, the manning of observation towers and the constant readiness of fire fighting units are all an integral part of forestry practice.

Other protective measures include spraying to prevent disorders, measures to control insect pests in the forest, and the eradication of the various weeds and pests which threaten young plants.

Since the discovery of the *Sirex* wood wasp in Victorian forests in 1961 constant watch has been maintained for any sign of this pest in South Australian pine forests, and the State has contributed to development of biological control measures.

FISHERIES

The entire coastline of South Australia, except for the unpopulated area west of Fowlers Bay, is fished commercially. In the sheltered waters of the gulfs, Kangaroo Island, the Coorong and the West Coast bays, there are prawn, net and handline fisheries; in the open off-shore waters tuna, lobster and shark are sought and on exposed coasts abalone are taken. Inland in the River Murray a small quantity of fresh water fish is caught each year.

ADMINISTRATION

Exploitation of the State's fish resources is controlled by three Acts, the South Australian Fisheries Act, 1971-1975, the Commonwealth *Fisheries Act* 1952 and the *Continental Shelf (Living Natural Resources) Act* 1968.

Under the State Act, which is administered by the Department of Agriculture and Fisheries, provision is made for the licensing of fishermen and the registration of boats and gear. Control of fishing activity is maintained by licence limitations, the establishment of size limits, closed areas and closed seasons, the regulation of amount and type of gear, the prohibition of the use of explosive or noxious substances in any waters and the establishment of aquatic resources.

The South Australian Fisheries Act, 1971-1975 provides for two classes of fishing licences. A person is granted a class A fishing licence if he satisfies the Director that he intends to carry on the business of fishing for profit as his principal business while a class B fishing licence is granted if the Director is satisfied that he intends to carry on the business of fishing for profit regularly as a seasonal or part-time business. In addition, in both cases the licensee has to satisfy the Director that he has the equipment, experience and resources sufficient to enable him to carry on the business of fishing efficiently and profitably. An applicant who fulfils the above requirements may still be refused a licence if the refusal is necessary for the purpose of giving effect to any administrative policy approved by the Minister for the conservation of any species of fish or the proper management of any fishery.

FISHING BOATS

Vessels exceeding 20 metres are engaged primarily in tuna fishing and prawn trawling while the majority of vessels in the 8 metres to 20 metres range are used for rock lobster fishing. Abalone divers generally operate from small aluminium

or fibreglass boats between 5 metres and 8 metres in length. The remainder are engaged mainly in handline and net fisheries. Boats and equipment were valued at \$41 081 000 in 1975-76. Details of the number of boats engaged in commercial fishing activities are shown in the following table.

Fishing: Boats Engaged, South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|----------------------------------|-------------|---------|---------|---------|---------|
| Boats engaged: | | | | | |
| Under 6 metres | <i>n.a.</i> | 1 596 | 1 771 | 1 150 | 1 000 |
| 6 metres and under 9 | <i>n.a.</i> | 376 | 410 | 327 | 292 |
| 9 metres and under 12 | <i>n.a.</i> | 175 | 181 | 162 | 167 |
| 12 metres and under 15 | <i>n.a.</i> | 104 | 114 | 108 | 109 |
| 15 metres and under 18 | <i>n.a.</i> | 34 | 42 | 39 | 42 |
| 18 metres and under 21 | <i>n.a.</i> | 17 | 21 | 19 | 22 |
| 21 metres and over | <i>n.a.</i> | 12 | 19 | 19 | 18 |
| Total | 1 652 | 2 314 | 2 558 | 1 824 | 1 650 |

PRODUCTION

Fish

Tuna, salmon, shark, whiting, snapper and garfish are the most important marine species.

Tuna are taken in the waters west and south of Eyre Peninsula and Kangaroo Island. Occasional catches are taken beyond the continental shelf. Although purse-seining has been attempted, the most successful technique to date is pole fishing with live bait. The use of spotting aircraft has increased the efficiency of fishing operations. Most tuna are landed at Port Lincoln or Streaky Bay although occasional landings have been made at Port Adelaide.

Whiting are taken commercially in Spencer and St Vincent Gulfs, Investigator Strait and the West Coast bays. In many areas hand lining continues to provide profitable catches as this fish attracts a high price. In other areas of the gulfs and the West Coast large quantities of whiting and garfish are netted.

Shark fishing extends from the Victorian border in the east to Fowlers Bay in the far west. The main landing ports are the South East lobster ports, Port Adelaide, Port Lincoln and Streaky Bay. Shark are taken by long line and, more recently, by mesh netting. A decline in shark catches occurred after 1972 because high levels of mercury in their tissue precluded their sale and fishermen have been encouraged to fish for scale fish.

Australian salmon provides useful off-season fishing for a number of tuna fishermen with the best catches being taken in Spencer Gulf and around Kangaroo Island. Most of these fish are landed at Port Lincoln for canning. In the South East large quantities of salmon trout are netted for rock lobster bait. Of other species mulloway and snapper are highly regarded as table fish. Mulloway are netted in the River Murray Mouth area and snapper are taken by hand and long line in most areas of the State, and by netting in shallower parts of the gulfs and West Coast bays.

The main commercial fish species, together with their production in recent years, are listed in the following table.

Fish: Production by Species, South Australia
Estimated Live Weight

| Species | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------------|---------------|---------------|---------------|--------------|---------------|
| Marine: | | | | | |
| | | | '000 kg | | |
| Australian salmon | 1 881 | 799 | 1 897 | 873 | 680 |
| Bream (black) | 15 | 25 | 14 | 23 | 18 |
| Garfish | 459 | 552 | 539 | 487 | 463 |
| Mullet | 229 | 353 | 408 | 252 | 427 |
| Mulloway | 40 | 56 | 55 | 107 | 67 |
| Ruff | 277 | 241 | 209 | 211 | 227 |
| Shark | 1 480 | 618 | 1 161 | 459 | 1 546 |
| Short finned pike | 115 | 134 | 160 | 136 | 118 |
| Snapper | 528 | 541 | 445 | 284 | 307 |
| Tuna | 4 348 | 6 696 | 7 403 | 4 842 | 7 530 |
| Whiting | 714 | 959 | 823 | 977 | 991 |
| Other marine species | 182 | 130 | 129 | 155 | 132 |
| Total | 10 268 | 11 104 | 13 243 | 8 806 | 12 506 |
| Freshwater: | | | | | |
| Golden perch (callop) | 22 | 24 | 80 | 190 | 188 |
| Murray cod | 19 | 12 | 9 | 4 | 5 |
| Bony bream | 362 | 339 | 315 | 58 | 51 |
| Tench | 156 | 248 | 224 | 42 | 1 |
| Catfish | 23 | 15 | 14 | 7 | 7 |
| Other freshwater species | 47 | 47 | 103 | 201 | 369 |
| Total | 631 | 686 | 745 | 502 | 621 |
| Total fish production | 10 898 | 11 790 | 13 988 | 9 308 | 13 127 |

Approximately 120 part-time commercial fishermen using drum nets, gill nets and set lines are engaged in fishing on the River Murray and Lakes area. This is the only commercial source of fresh water fish in the State because of the general lack of permanent streams and lakes. The river has been sectioned into 'reaches' and 'reserves' and each commercial river fisherman is issued with a permit to fish a separate reach.

Production in 1975-76 was valued at \$7 316 000, the gross values of the major species being:

| | |
|-----------------------------|-----------|
| | \$ |
| Tuna | 2 274 000 |
| Whiting | 2 394 000 |
| Snapper | 335 000 |
| Garfish | 510 000 |
| Australian salmon | 190 000 |
| Shark | 870 000 |
| All other | 743 000 |
| | 7 316 000 |

Crustaceans

Southern rock lobster are taken by pots from the shore to the edge of the continental shelf. The south-east coast between Kingston and the Victorian border is the main fishing area. Good catches are also taken from grounds around Kangaroo Island, near the Althorpe Islands and Port Lincoln, and along the West Coast. Rock lobster is South Australia's most important single fishery. However, with 80 per cent of the catch exported annually, mainly to the United States of America, its profitability is dependent on overseas markets.

Rock Lobster Production, South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------|---------|---------|---------|---------|
| Estimated gross weight (^{'000} kg) | 2 252 | 2 958 | 2 637 | 1 862 | 2 228 |
| Value (\$ ^{'000}) | 5 362 | 6 325 | 6 223 | 4 672 | 6 351 |

The prawn fishing industry operates in Spencer and St Vincent Gulfs, Investigator Strait and on the West Coast of the State. In the 1975-76 season approximately 2 679 tonnes of prawns valued at \$7 762 000 were landed.

Both the rock lobster and prawn fisheries are 'limited entry' fisheries because constraints are placed on the number and size of vessels that may fish and the type of gear that can be used to prevent over exploitation. The rock lobster fishery is experiencing some difficulties because of over-capitalisation and an economic appraisal is being undertaken of this industry.

Molluscs

Abalone are found in greatest numbers at depths of 12 to 30 metres on the extensive limestone bottom off the shores of western Eyre Peninsula. Smaller numbers are taken in Spencer Gulf, around Kangaroo Island and on the South East Coast. As yet there is no domestic market for this mollusc. Overseas exports of abalone from South Australia during 1975-76 were valued at \$1 043 106.

All abalone divers must hold a commercial fisherman's licence as well as a special abalone permit issued by the Department of Agriculture and Fisheries.

Abalone Production, South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------|---------|---------|---------|---------|
| Gross (in shell) weight (^{'000} kg) | 1 141 | 900 | 757 | 608 | 616 |
| Value (\$ ^{'000}) | 796 | 655 | 752 | 618 | 846 |

Squid and cuttlefish are taken in the general net fisheries and mainly sold for bait, although the domestic squid market for human consumption is increasing.

At present several private consortiums are interested in farming the Pacific oyster. This oyster was introduced into this State in September 1969 from Tasmania. Farms have been established in seawater ponds 28 kilometres north

of Adelaide, at Coffin Bay and near Edithburgh where young oysters (spat) are imported annually and grown to market size. The marketing of oysters from the farm just north of Adelaide commenced in February 1977.

MARKETING AND PROCESSING

Marketing and processing arrangements vary according to the species. Tuna are landed at Port Lincoln and then canned for local consumption or frozen for export. Large catches of salmon are generally landed and canned at Port Lincoln, a deep sea port. Southern rock lobster are tailed and frozen for export at most of the main ports, but some are cooked for local consumption. Some prawns are cooked and sold locally but most are frozen and exported. Abalone is either canned or frozen for export. Shark are gutted and headed at sea and are frozen at the port of landing for interstate markets. Other fish are generally iced for dispatch to the Adelaide market or are scaled, filleted and frozen for general distribution.

All of the main landing ports have chilling or freezing facilities and many have processing plants. Several of these are operated by individual buyers or co-operatives but most are depots of the South Australian Fishermen's Co-operative Limited (SAFCOL). In addition to collecting, processing and distributing fish from the outports, SAFCOL also operates the Adelaide fish market. This is an auction market which handles fish for both members and non-members.

RESEARCH

The realisation that research is essential for effective fisheries management has promoted several research programs. Scallop, rock lobster, shark and abalone resources are being investigated by joint Commonwealth Government and States research groups consisting of the Division of Fisheries and Oceanography of the Commonwealth Scientific and Industrial Research Organization (CSIRO), the Fisheries Division of the Commonwealth Department of Primary Industry and the Fisheries branches of New South Wales, Victoria, Tasmania and South Australia. In addition, the State Fisheries Branch is conducting rock lobster, prawn, yabbie, blue crab, abalone, freshwater fish, whiting and snapper research programs and is measuring commercial fish species to determine frequency and distribution of various sizes throughout the commercial fish catch. A co-operative research program on the Australian salmon by the CSIRO Fisheries and Oceanography Division and the Western Australian Department of Fisheries and Wildlife commenced also in 1975. The State Fisheries Branch is giving logistic support.

The decision in 1966 of the Commonwealth Government and the States to establish a joint Fisheries Research and Development Fund gave impetus to already expanding research programs. The Fishing Industry Research Trust Account was established under the *Fishing Industry Research Act 1969* which authorises an appropriation from Commonwealth Government revenue equal to amounts collected from the fishing industry by the State Fisheries Authorities and expended by them in 1976 for the development and management of State fisheries.

The State Government has financed exploratory deep-water trawling for gemfish in the South East and has purchased a twenty-three metre \$300 000 tuna pole boat for use as a fisheries research vessel in South Australian waters.

Conservation

The importance of protecting the marine and freshwater environment against pollution and other man-caused degradation is recognised in Section 56 of the Fisheries Act, 1971-1975 which enables the Governor to make regulations for regulating or prohibiting the discharge, placing or flow into waters of any matter (whether solid, liquid or gaseous) declared by the regulations to be poisonous or injurious to fish or their spawn thereof, and generally for protecting fish and the spawn thereof against destruction or injury by the discharge, placing or flow of any such matter into waters'.

The State Department of Agriculture and Fisheries has pioneered, in Australia, the concept of marine national parks and has created a number of aquatic reserves to protect seal colonies, mangrove communities and areas of scientific and educational interest. Mangrove communities and allied samphire flats have received particular attention because of their recently recognised contribution to the productivity of the near-shore marine environment. All mangroves in South Australia are fully protected.

9.3 MANUFACTURING

DEVELOPMENT

Early factory production was orientated to local needs: thus brick kilns, flour mills, tanneries, distilleries and a candle and soap works were among factories recorded in the 1840s. Also in operation were the smaller establishments of saddlers and coachbuilders, while various food and clothing industries were being established. Heavy industry can probably be traced to the production of agricultural machinery, beginning with the stripper of 1843 and including the stump-jump plough of 1876.

The discovery of copper in 1842 provided an impetus to certain industrial activities but the finding of gold in Victoria in 1851 encouraged many skilled persons to leave South Australia and the Colony's infant industries did not fully recover for two decades.

A highlight in the industrial progress of the State was the establishment at Port Pirie in 1889 of smelters for the processing of silver-lead ore from Broken Hill. This was primarily responsible for building up Port Pirie's population from about 900 at the 1881 Census to some 8 000 twenty years later, making the town at that time the largest country centre in South Australia.

Despite some industrial growth, South Australia in the 1930s was still basically a primary producing State, but since then a rapid growth in the relative contribution of secondary industry to total production has taken place. Development in the 1930s coincided with Government action which reduced company taxation and wharfage charges, and provided for a program of low-cost housing. The needs of war provided a further stimulus to the industrialisation process during the 1940s but it is since the 1939-45 War that the most impressive development has taken place.

Extensive development has occurred particularly in the consumer durable industries (e.g. motor vehicles, electrical and household appliances) and these industries now employ a significant proportion of the State's labour force. Major improvements also have been made in the State's energy sources with the development of the Torrens Island Power Station and the Port Stanvac Oil Refinery, and the introduction of natural gas as a fuel.

MANUFACTURING INDUSTRY STATISTICS

For the year ended June 1969, the Censuses of Manufacturing and Electricity and Gas Establishments were conducted for the first time on an integrated basis with Censuses of Mining, Retail Trade and Selected Services, and Wholesale Trade. The electricity and gas industries, which were previously included in the Annual Factory Census, were the subject of separate censuses in 1968-69. As well as this change in the method of obtaining information on economic activities, different criteria have been used to define factories and this has resulted in a significant fall in the number of establishments. In particular, service establishments such as dry cleaners and motor repair workshops are no longer classified as factories. In addition to the changes in industry classification information is now collected for all activities (including such things as installation work or wholesaling) undertaken by establishments which are defined as factories.

Thus, manufacturing industry statistics collected for the 1968-69 Census and subsequent censuses are not comparable with figures obtained from previous factory censuses. A more detailed explanation of these changes was included on pages 440-4 of the *South Australian Year Book 1972*.

Also, from 1974-75 detailed statistics have not been collected from single establishment enterprises employing less than four persons, so that compared with manufacturing censuses from 1968-69 to 1973-74 there is a decrease in the number of establishments. In 1974-75 there were 796 establishments employing less than four persons.

LEGISLATION

Industrial legislation is dealt with in Part 7, Labour. Other legislation is concerned with the location of factory premises and with the processes carried out therein.

Under the Local Government Act, 1934-1976 local government authorities may make by-laws restricting the erection of factory premises to certain sections of the area under their jurisdiction. The Manufacturing Industries Protection Act, 1937 provides for the proclamation of certain areas wherein proprietors and occupiers of factories are protected against civil action for noise and vibration problems. This Act, which takes precedence over zoning by-laws, currently applies to four relatively small zones. Regulations made under the Noxious Trade Act, 1943-1965 have defined certain processes as noxious trades for which a licence must be obtained. In addition an area between Wingfield and Dry Creek in the outer northern suburbs has been declared a noxious trade area with persons operating therein being protected from civil action.

Similarly the licensing of noisy trades may be required under a section of the Local Government Act. Protection against health hazards is provided under the Health Act, 1935-1976.

CLASSIFICATION OF MANUFACTURING ESTABLISHMENTS

The Australian Standard Industrial Classification (ASIC) described in the publication *The Australian Standard Industrial Classification (Preliminary Edition)*, 1969 Volume 1, defines the industries in the economy for statistical purposes, thus permitting the scope of the different economic censuses to be specified without gaps or overlapping between them.

The classes relevant to the Manufacturing sector of the economy were listed on pages 492-6 of the *South Australian Year Book 1975*.

STRUCTURE AND LOCATION OF SECONDARY INDUSTRY

Industrialisation since the 1939-45 War to a considerable extent has evolved around three major industrial groups. The motor vehicle, the electrical goods and the household appliance industries, together with their peripheral suppliers of components and services, have accounted for much of the post-war expansion. These industries are located in, or near Adelaide. In fact the tendency for manufacturing industries, particularly those supplying consumer goods, to congregate near their market has resulted in a heavy concentration of South Australian secondary industries in or near Adelaide.

In the next table some details are given for the Adelaide Statistical Division. The concentration of manufacturing industry in this Division can be seen by comparing the figures with those appearing in the subsequent two tables which summarise manufacturing operations for the whole State.

Manufacturing Establishments: Summary of Operations by Industry Subdivision
Adelaide Statistical Division, 1974-75 (a)

| Industry Subdivision | Number of Establishments at 30 June | Average Persons Employed | Wages and Salaries | Turnover | Value Added |
|---|-------------------------------------|--------------------------|--------------------|-----------|-------------|
| | Number | | | \$'000 | |
| Food, beverages and tobacco | 179 | 11 520 | 70 082 | 307 623 | 131 547 |
| Textiles | 34 | 2 111 | 13 097 | 51 444 | 20 224 |
| Clothing and footwear | 81 | 3 860 | 19 732 | 61 565 | 35 490 |
| Wood, wood products and furniture | 261 | 6 231 | 33 136 | 132 626 | 58 629 |
| Paper and paper products, printing | 149 | 5 834 | 38 726 | 116 516 | 68 583 |
| Chemical, petroleum and coal products | 45 | 2 636 | 20 637 | 89 405 | 37 827 |
| Non-metallic mineral products | 96 | 3 858 | 28 298 | 114 007 | 56 841 |
| Basic metal products | 39 | 4 248 | 31 074 | 126 197 | 49 101 |
| Fabricated metal products | 294 | 9 530 | 59 757 | 219 460 | 99 378 |
| Transport equipment | 115 | 23 856 | 167 548 | 562 550 | 222 003 |
| Other machinery and equipment | 269 | 19 593 | 123 813 | 375 444 | 187 364 |
| Miscellaneous manufacturing | 143 | 5 522 | 35 217 | 109 826 | 56 635 |
| Total manufacturing | 1 705 | 98 799 | 641 118 | 2 266 663 | 1 023 622 |

(a) Excludes single establishment enterprises employing less than 4 persons.

**Manufacturing Establishments: Summary of Manufacturing Operations by
Statistical Division, 1974-75 (a)**

| Statistical Division | Number of Establishments | Persons Employed | Wages and Salaries | Turnover | Value Added |
|---------------------------------|--------------------------|------------------|--------------------|-----------|-------------|
| | Number | | \$'000 | | |
| Adelaide | 1 705 | 98 799 | 641 118 | 2 266 663 | 1 023 622 |
| Outer Adelaide | 117 | 3 429 | 19 705 | 122 061 | 45 540 |
| Yorke and Lower North | 46 | 683 | 3 597 | 20 069 | 8 697 |
| Murray Lands | 84 | 2 977 | 18 728 | 102 793 | 39 305 |
| South East | 75 | 4 499 | 32 151 | 128 921 | 52 876 |
| Eyre | 24 | 666 | 3 638 | 15 771 | 6 619 |
| Northern | 80 | 10 188 | 77 865 | 346 707 | 158 614 |
| Total State | 2 131 | 121 241 | 796 801 | 3 002 987 | 1 335 276 |

(a) Excludes single establishment enterprises employing less than 4 persons.

In the following table details of factories for 1974-75 are classified according to industry class. The importance of the metal processing industries, e.g. transport equipment, fabricated metal products, machinery and equipment industries, to the State can be seen readily from this table.

**Manufacturing Establishments: Summary of Operations by Industry Subdivision
South Australia, 1974-75(a)**

| Industry Subdivision | Number of Establishments | Average Persons Employed | Wages and Salaries | Turnover | Value Added |
|---|--------------------------|--------------------------|--------------------|-----------|-------------|
| | at 30 June | Number | \$'000 | | |
| Food, beverages and tobacco | 373 | 18 091 | 109 502 | 543 836 | 216 894 |
| Textiles | 38 | 2 434 | 14 690 | 57 975 | 22 675 |
| Clothing and footwear | 84 | 4 052 | 20 546 | 62 760 | 36 452 |
| Wood, wood products and furniture | 313 | 8 684 | 48 862 | 189 446 | 86 247 |
| Paper and paper products, printing | 185 | 7 296 | 50 848 | 172 076 | 88 763 |
| Chemical, petroleum and coal products | 52 | 2 845 | 22 153 | 101 636 | 42 341 |
| Non-metallic mineral products | 130 | 4 215 | 30 753 | 127 001 | 62 721 |
| Basic metal products | 44 | 10 294 | 81 058 | 385 948 | 164 846 |
| Fabricated metal products | 329 | 10 173 | 63 329 | 237 893 | 109 403 |
| Transport equipment | 132 | 26 801 | 188 881 | 619 172 | 249 757 |
| Other machinery and equipment | 302 | 20 573 | 129 559 | 391 368 | 196 993 |
| Miscellaneous manufacturing | 149 | 5 777 | 36 620 | 113 875 | 58 180 |
| Total manufacturing | 2 131 | 121 241 | 796 801 | 3 002 987 | 1 335 276 |

(a) Excludes single establishment enterprises employing less than 4 persons.

Generally, industrial plants outside the Adelaide Statistical Division are orientated to raw materials sources of supply. At country centres there are either meat slaughtering, dairy produce or fish processing factories processing regional produce for local and export markets. There are exceptions to this, including the production of agricultural machinery at Mannum, woollen mills at Lobethal, clothing production at Mount Gambier and heavy engineering at Whyalla. Wallaroo and Port Lincoln, being central to their markets, are the sites of chemical fertiliser production.

The two most important undertakings beyond the vicinity of Adelaide are the iron and steel complex at Whyalla and the lead smelters at Port Pirie. These undertakings together with the power station at Port Augusta are sited for

important mineral sources. Other factories are located near sources of primary products—these include the sawmills and paper pulp industries of the South East, the fruit processing plants of the Riverland, the wineries and distilleries of the Barossa Valley and the Riverland, and various dairy produce factories and fish processing plants.

Transport equipment accounted for 19 per cent of value added while fabricated metal products, machinery and equipment etc., accounted for 23 per cent. Employment in these industries was 22 per cent and 25 per cent respectively of the total factory employment. Also of considerable importance to South Australia are the food and drink industries, particularly milk processing and winemaking.

The importance of manufacturing industry in South Australia relative to Australia as a whole can be gauged from the following comparison.

Manufacturing Establishments: Summary of Operations, South Australia and Australia, 1974-75 (a)

| Item | Unit | South Australia | Australia | South Australia as a Percentage of Australia |
|-------------------------------------|--------|-----------------|------------|--|
| Number of establishments at 30 June | number | 2 131 | 26 972 | Per cent 7.9 |
| Average employment: | | | | |
| Male | number | 94 275 | 917 066 | 10.3 |
| Female | number | 26 966 | 328 142 | 8.2 |
| Wages and salaries | \$'000 | 796 801 | 8 531 356 | 9.3 |
| Turnover | \$'000 | 3 002 987 | 35 140 908 | 8.5 |
| Stocks, closing | \$'000 | 634 458 | 6 542 067 | 9.7 |
| Value added | \$'000 | 1 335 276 | 15 246 448 | 8.8 |
| Fixed capital expenditure | \$'000 | 137 526 | 1 445 512 | 9.5 |

(a) Excludes single establishment enterprises employing less than 4 persons.

In the following table manufacturing establishments are grouped according to the number of persons employed.

Manufacturing Establishments: Selected Variables by Size of Establishment South Australia, 30 June 1975

| Size of Establishment (average employment) | Number of Establishments | Persons Employed (a) | Turnover | Value Added |
|--|--------------------------|----------------------|-----------|-------------|
| | | | | \$'000 |
| Less than 4 | 796 | 1 808 | 26 631 | 12 236 |
| 4 but less than 10 | 889 | 5 375 | 116 411 | 50 182 |
| 10 but less than 20 | 441 | 6 142 | 134 748 | 61 263 |
| 20 but less than 50 | 396 | 12 127 | 336 797 | 140 074 |
| 50 but less than 100 | 182 | 12 606 | 352 610 | 150 636 |
| 100 but less than 200 | 124 | 16 910 | 447 479 | 206 954 |
| 200 but less than 500 | 69 | 20 382 | 540 814 | 252 691 |
| 500 and over | 30 | 42 011 | 1 060 318 | 470 772 |

(a) Excludes persons employed at administrative offices and other separately located ancillary units, e.g. storage and transport depots.

Although there were 2 927 establishments (including the single establishment enterprises employing less than 4 persons) operating at 30 June 1975 only 223 or 7.6 per cent had an employment in excess of 100 persons while 1 685 establishments, or 58 per cent of the total, employed less than 10 persons. The thirty largest establishments employed 42 011 persons or 36 per cent of the total.

Details of persons employed in manufacturing establishments for 1974-75 are given in the following tables. Females constituted 22.2 per cent of the total employment, but industries traditionally associated with female employment had a much higher component; textiles, clothing and footwear industries, in particular, employ a large number of females.

Manufacturing Establishments: Average Number of Persons Employed
South Australia, 1974-75 (a)

| Industry Subdivision | Males | Females | Total |
|---|---------------|---------------|----------------|
| Food, beverages and tobacco | 12 613 | 5 478 | 18 091 |
| Textiles | 1 434 | 1 000 | 2 434 |
| Clothing and footwear | 1 068 | 2 984 | 4 052 |
| Wood, wood products and furniture | 7 386 | 1 298 | 86 84 |
| Paper and paper products, printing | 5 407 | 1 889 | 7 296 |
| Chemical, petroleum and coal products | 2 313 | 532 | 2 845 |
| Non-metallic mineral products | 3 826 | 389 | 4 215 |
| Basic metal products | 9 354 | 940 | 10 294 |
| Fabricated metal products | 8 149 | 2 024 | 10 173 |
| Transport equipment | 24 065 | 2 742 | 26 807 |
| Other machinery and equipment | 14 773 | 5 800 | 20 573 |
| Miscellaneous manufacturing | 3 887 | 1 890 | 5 777 |
| Total manufacturing | 94 275 | 26 966 | 121 241 |

(a) Excludes single establishment enterprises employing less than 4 persons.

Manufacturing Establishments: Average Number of Persons Employed by Type
of Employment, South Australia, 1974-75 (a)

| Industry Subdivision | Working | | Total |
|---|--------------|----------------|----------------|
| | Proprietors | Employees | |
| Food, beverages and tobacco | 181 | 17 910 | 18 091 |
| Textiles | 17 | 2 417 | 2 434 |
| Clothing and footwear | 44 | 4 008 | 4 052 |
| Wood, wood products and furniture | 230 | 8 454 | 8 684 |
| Paper and paper products, printing | 91 | 7 205 | 7 296 |
| Chemical, petroleum and coal products | 1 | 2 844 | 2 845 |
| Non-metallic mineral products | 37 | 4 178 | 4 215 |
| Basic metal products | 12 | 10 282 | 10 294 |
| Fabricated metal products | 162 | 10 011 | 10 173 |
| Transport equipment | 60 | 26 747 | 26 807 |
| Other machinery and equipment | 106 | 20 467 | 20 573 |
| Miscellaneous manufacturing | 81 | 5 696 | 5 777 |
| Total manufacturing | 1 022 | 120 219 | 121 241 |

(a) Excludes single establishment enterprises employing less than 4 persons.

WAGES, SALARIES AND OTHER COSTS

The following table shows costs associated with the usage of labour and materials by manufacturers. A comparison of wages and salaries paid against other costs reveals those industries that are relatively labour intensive; for example, wages and salaries constitute 48 per cent of the total cost for firms making clothing or footwear while in the food, beverages and tobacco group, only 26 per cent of the total costs are those associated with labour.

Manufacturing Establishments: Wages and Salaries and Other Selected Costs
South Australia, 1974-75 (a)

| Industry Subdivision | Wages and Salaries Paid to | | | Total Usage of Materials, Elec- tricity and Fuels, Containers, Etc. |
|--|---|--|---------------|--|
| | Administrative, Office, Sales and Distribution Employees | Production and All Other Workers | All Employees | |
| | | | \$'000 | |
| Food, beverages and tobacco | 37 087 | 72 415 | 109 502 | 306 011 |
| Textiles | 3 964 | 10 726 | 14 690 | 31 750 |
| Clothing and footwear | 4 449 | 16 097 | 20 546 | 22 065 |
| Wood, wood products and furniture | 11 512 | 37 351 | 48 862 | 87 656 |
| Paper and paper products, printing . | 16 308 | 34 539 | 50 848 | 68 698 |
| Chemical, petroleum and coal products | 8 803 | 13 350 | 22 153 | 50 321 |
| Non-metallic mineral products | 8 584 | 22 169 | 30 753 | 45 016 |
| Basic metal products | 22 655 | 58 403 | 81 058 | 199 940 |
| Fabricated metal products | 17 028 | 46 301 | 63 329 | 107 578 |
| Transport equipment | 42 576 | 146 305 | 188 881 | 363 619 |
| Other machinery and equipment . . . | 32 431 | 97 129 | 129 559 | 174 813 |
| Miscellaneous manufacturing | 8 279 | 28 340 | 36 620 | 48 990 |
| Total manufacturing | 213 676 | 583 125 | 796 801 | 1 506 455 |

(a) Excludes single establishment enterprises employing less than 4 persons.

SELECTED FACTORY PRODUCTS

The factory products listed in this section are not necessarily the principal items produced in this State. Where publication of details of an individual product would enable the output of a particular manufacturer to be determined, these figures are treated as confidential and are not separately available for publication. As a considerable number of products are produced in this State by industries containing one or two dominant firms, the list of publishable items is considerably restricted and the absence of a product from the list does not necessarily imply its non-production.

Selected Articles Produced: South Australia, 1973-74 and 1974-75 (a)

| Item | Units of Quantity | 1973-74 | | | 1974-75 | | |
|---|----------------------|------------|---------------------|--------|------------|---------------------|--------|
| | | Production | Sales and Transfers | | Production | Sales and Transfers | |
| | | Quantity | Quantity | Value | Quantity | Quantity | Value |
| | | | | \$'000 | | | \$'000 |
| Aerated and carbonated waters, bottled and canned | '000 l | 100 240 | 98 683 | 22 762 | 90 390 | 90 424 | 22 574 |
| Barrels, kegs, vats, drums and tanks | .. | .. | .. | 4 421 | .. | .. | 5 198 |
| Blinds and awnings: | | | | | | | |
| Metal venetian | .. | .. | .. | 541 | .. | .. | 595 |
| Outdoor, canvas | .. | .. | .. | 1 205 | .. | .. | 725 |
| Outdoor metal | .. | .. | .. | 1 113 | .. | .. | 1 079 |

Selected Articles Produced: South Australia, 1973-74 and 1974-75 (a) (continued)

| Item | Units of Quantity | 1973-74 | | | 1974-75 | | |
|--|-------------------|------------|---------------------|--------|------------|---------------------|--------|
| | | Production | Sales and Transfers | | Production | Sales and Transfers | |
| | | Quantity | Quantity | Value | Quantity | Quantity | Value |
| | | | | \$'000 | | | \$'000 |
| Brandy | '000 l al | 1 871 | 4 927 | 6 428 | 1 495 | 2 586 | 4 829 |
| Bricks, clay | '000 | 147 991 | 149 956 | 9 426 | 121 211 | 120 076 | 9 181 |
| Butter, from cream (excl. that from whey cream) | '000 kg | 4 810 | 4 123 | n.a. | n.a. | n.a. | n.a. |
| Cakes, pastry, pies and puddings (not canned) | .. | .. | .. | 18 590 | .. | .. | 20 919 |
| Cheese (excluding processed cheese) | '000 kg | 18 602 | 19 012 | n.a. | 18 061 | 19 360 | n.a. |
| Cheese, total value | | | | 15 229 | | | 18 028 |
| Chickens | '000 kg | 15 339 | 15 021 | 15 767 | 16 516 | 16 528 | 18 551 |
| Flour, white | tonnes | 96 600 | 88 305 | 10 972 | 103 392 | 104 106 | 13 470 |
| Fluorescent light fittings | .. | .. | .. | 3 543 | .. | .. | 4 786 |
| Fruit, crystallised and glace | '000 kg | 1 042 | 985 | 1 233 | 962 | 937 | 1 357 |
| Fruit juice | '000 l | 6 762 | 6 959 | 2 569 | 6 642 | 6 687 | 2 947 |
| Furniture: | | | | | | | |
| Sheet metal | .. | .. | .. | 5 007 | .. | .. | 6 946 |
| Wooden | .. | .. | .. | 24 748 | .. | .. | 25 950 |
| Gloves, work | doz. pairs | 65 247 | 63 249 | 778 | 61 212 | 62 027 | 842 |
| Ice | tonnes | 17 505 | 17 502 | 379 | 13 713 | 13 703 | 353 |
| Ice cream | '000 l | 17 220 | 17 039 | 5 608 | 16 063 | 16 458 | 6 342 |
| Machinery: | | | | | | | |
| Conveyors and appliances | .. | .. | .. | 5 328 | .. | .. | 11 600 |
| Hoists, cranes lifting machinery | .. | .. | .. | n.a. | .. | .. | 3 477 |
| Mining and drilling | .. | .. | .. | 2 783 | .. | .. | 4 570 |
| Pumping | .. | .. | .. | 2 530 | .. | .. | 3 131 |
| Mattresses, innerspring | number | 68 251 | 68 000 | 1 827 | 58 226 | 57 982 | 1 945 |
| Newspapers and periodicals printed and published | .. | .. | .. | 10 418 | .. | .. | 9 564 |
| Paints: | | | | | | | |
| Architectural and decorative: | | | | | | | |
| Primers and undercoats | '000 l | 714 | 712 | 758 | 729 | 750 | 997 |
| Finishing coats | '000 l | 4 368 | 4 413 | 5 148 | 4 176 | 4 158 | 5 918 |
| Industrial: | | | | | | | |
| Primers and undercoats | '000 l | n.a. | n.a. | n.a. | 1 155 | 1 145 | 1 275 |
| Finishing coats | '000 l | 4 223 | 4 134 | 4 046 | 3 161 | 3 161 | 4 262 |
| Ready-mixed concrete | m ³ | 1 053 613 | 1 074 374 | 24 315 | 1 021 334 | 1 498 024 | 24 307 |
| Smallgoods | .. | .. | .. | 15 292 | .. | .. | 15 611 |
| Steam, gas and water fittings | .. | .. | .. | 4 834 | .. | .. | 3 490 |
| Steel, fabricated constructional | tonnes | 78 184 | 79 963 | 26 536 | 103 931 | 104 263 | 31 977 |
| Tallow, inedible | '000 kg | 20 711 | 20 883 | 4 428 | n.a. | n.a. | n.a. |
| Tarpaulins | .. | .. | .. | 308 | .. | .. | 327 |
| Tents, flies and marquees | .. | .. | .. | 824 | .. | .. | 1 029 |
| Window frames, aluminium | .. | .. | .. | 5 860 | .. | .. | 6 852 |
| Wine: | | | | | | | |
| Fortified | '000 l | 24 953 | 49 750 | 19 587 | 38 490 | 38 008 | 22 643 |
| Unfortified | '000 l | 78 489 | 96 656 | 44 539 | 101 167 | 87 300 | 54 674 |

(a) Includes details for Northern Territory.

PASSENGER MOTOR VEHICLE INDUSTRY*

Development of the Industry

The development of automotive manufacturing has been closely associated with South Australia from the infant days of the industry. Its inception in South Australia can be traced from 19th century coachbuilding firms. Holden originated in the saddlery and coachbuilding business of Holden and Frost, which was established in 1884. Chrysler's development in Adelaide grew out its acquisition of T. J. Richards and Sons Ltd, who were originally coachbuilders.

Holden and Frost progressed modestly until, in 1917, the Commonwealth Government restricted the overseas import of motor car bodies in an attempt to divert expenditure away from luxury goods and to conserve shipping space.

When S.A. Cheney, an Adelaide dealer who held the Dodge franchise in Australia, heard of the impending embargo, he decided to try and have bodies made locally. After an approach by Cheney to an Adelaide furniture maker was rebuffed he turned to Holden and Frost. Holden and Frost promptly produced a sample body and submitted it to a conference of motor distributors. They gained Government approval to import bonnet, scuttle, dashboard, mudguards and running boards as part of the chassis, and obtained their first contract for twelve bodies. Holden and Frost were able to offer a body for \$114.20, whereas Ford, with local bodies, cost \$250 more than imported ones.

After the 1914-1918 War, most manufacturing industries were experiencing difficulties due to increased labour costs resulting from Commonwealth Arbitration Court decisions. However, the automotive industry, particularly in South Australia, grew rapidly due largely to the protection policies of the Commonwealth Government.

In 1920-21, the Commonwealth Government took tariff action to protect the local manufacture of bodies and body panels. In addition, duties on assembled chassis were increased, and duties on unassembled chassis were lowered in an attempt to encourage chassis assembly in Australia. In 1926, the General Motors Corporation of Detroit (USA) established a chassis assembly plant at Birkenhead in Adelaide.

In 1923, Holden's Motor Body Builders Ltd (the name Holden's Motor Body Builders was adopted in 1920) began making bodies for General Motors. By 1925 its Woodville plant was acclaimed the largest body building plant in the British Commonwealth. Holden's were supplying all of General Motor's Australian motor body needs by 1931. Total manufacturing employment in South Australia increased by more than a third over a five year period in the late 1920s with the automotive industry leading the way.

Chrysler's origins in Australia date back to 1922, when the distributors of Dodge vehicles in South Australia let a contract for Dodge bodies to T. J. Richards and Sons (established in 1885). The bodies were constructed at a plant built by Richards at Keswick in 1920.

From 1926 the automotive industry in South Australia progressed by stages to an increasing proportion of local assembly and manufacture of vehicles and parts. A serious deterioration of Australia's exchange position in 1929-30

*Contributed by Director and staff members of the Department of Economic Development.

induced the Commonwealth Government to substantially increase import duties. This stimulated the use of locally produced parts.

The onset of the Depression caused a crisis in the motor industry with new registrations falling dramatically. The ordinary shares of Holden's Motor Body Builders Ltd, quoted at \$5.75 in April 1930, plummeted to \$0.75, while their output of bodies fell by about 95 per cent. A devaluation and increases in import duties did little to alleviate the crisis. In 1931, General Motors (Australia) Pty Ltd bought all the ordinary capital of Holden's Motor Body Builders Ltd when their shares fell to \$0.75, forming General Motors-Holden's Ltd. At this time, interstate transport costs were relatively high, so it was cheaper for General Motors to operate decentralised assembly plants. During the Depression, the Butler administration in South Australia recognised that unemployment could not be solved by depending on primary industry, so it set out to encourage secondary industry. State tax rates were adjusted downward, a measure which played a big part in persuading General Motors-Holden's Ltd not to move to Melbourne.

Chrysler Dodge Distributors (Aust.) Pty Ltd was established in 1936 when the eighteen Australian distributors of Dodge Plymouth and De Soto cars and trucks bought a controlling interest in Richards. This enterprise was completely Australian owned, although it only had body-building facilities and had to import engines and many other parts from the United States. By 1937-38, all Australian bodies for GMH, Chrysler and Austin cars were assembled in South Australia, with some 6 000 workers involved.

The 1939-45 War saw the motor body producers converted completely to the manufacture of aircraft, military transport vehicles, artillery and other military equipment. During the War, automotive factory employees learned new skills and achieved higher production levels.

It is thought that the decisions by the Commonwealth Government to locate three major factory complexes for war production in South Australia was influenced by the metal working skills of the labour force. These three complexes were later used for further industrial expansion. (Philips Electrical Industries moved from Sydney to the Hendon complex and in 1945 Chrysler leased part of the wartime munitions complex at Finsbury, employing 200 workers.)

The Curtin Government believed that one means of ensuring employment in peace time was the manufacture of motor vehicles. In October 1944 the Comptroller-General of Customs, J. J. Kennedy, sent a letter to all companies engaged in car assembly or manufacture in Australia, inviting proposals for chassis and engine manufacture locally. If no satisfactory proposals were submitted, the Government would consider setting up a corporation to manufacture complete cars. The Managing Director of GMH, L. J. Hartnett, realising the implications of such a move, went to New York and won approval from the parent company to produce complete cars in Australia. However, the parent company insisted that the capital for the investment be found in Australia.

The Commonwealth Government also made three stipulations relating to GMH's proposed manufacture of a complete car in Australia:

- (1) imported components should not exceed 10 per cent of the list price of the car, or 5 per cent of its weight;

- (2) GMH would not receive any subsidies, bounties, additional tariff protection or guarantees if the project failed;
- (3) if any other organisation accepted the Government's invitation to manufacture, their agreement would be on the same basis as the one with GMH.

In late 1948, GMH produced the first Holden car at Fishermens Bend, Melbourne. Volume production of Holdens commenced in January 1949.

Meanwhile, Chrysler Dodge Distributors (Aust.) Pty Ltd was busy expanding its activities. In 1947 they completely absorbed T. J. Richards and Sons. Four years later Chrysler Dodge Distributors (Aust.) Pty Ltd was itself taken over by the Chrysler Corporation (USA), forming Chrysler Australia Ltd.

The 1950s saw the rise of the Holden to a position of complete domination. Holden held more than 44 per cent of the total market for new cars, light commercial vehicles and trucks in 1958. By 1959, GMH products held 51.1 per cent of the market for new cars and station wagons. The GMH body hardware plant at Elizabeth was built in 1958-59. The locations of other GMH plants at this time are shown below.

Victoria: Fishermens Bend, Melbourne—Head Office, chassis manufacture.
Dandenong—Body and chassis assembly.
South Australia: Woodville—Metal pressings and body building. Birkenhead—Chassis assembly.
New South Wales: Pagewood—Body and chassis assembly.
Queensland: Brisbane—Chassis assembly.
Western Australia: Perth—Chassis assembly.

In 1962 body assembly operations commenced at Elizabeth and a trim assembly plant and paint shop were introduced in 1963.

Although no direct monetary incentives were offered to GMH to locate at Elizabeth, a number of concessions were given to the company by the South Australian Housing Trust. Land was purchased by GMH from the Housing Trust at cost price. All services to the land were supplied at cost by the Housing Trust and a spur line was built to the factory by the State Transport Authority—Rail Division.

Until 1960, the industry had been protected by tariffs and, more importantly, by import licensing. The abolition of import licensing controls in February 1960 made it much easier for Chrysler to import components from overseas, a vital factor since Valiant and indeed all cars except Holden were based closely on overseas designs.

Competition in the late 1950s and early 1960s increased, and moved towards a composite market for small and medium sized cars. A substantial growth in the number of Japanese cars imported into Australia occurred during the mid-1960s and their share of the Australian market grew from 0.1 per cent in 1960 to almost 10 per cent in 1964. The Japanese were most competitive in the small car field. Concern over the rise in popularity of small cars induced Chrysler to manufacture the French Simca, and GMH the Vauxhall Viva. At this time, these models could not attain the same high degree of local content as the companies' medium sized cars.

In May 1964, the Commonwealth Government announced a system of motor vehicle plans aimed at increasing local content of passenger vehicles manufactured

and assembled in Australia. Plan A requiring 95 per cent of local content within five years (with all residual components admitted duty free) and two low-content plans with restricted by-law entry were introduced on 1 January 1965. Plan A benefits were guaranteed for ten years while the low content plans were interim arrangements only, pending an Industries Assistance Commission (IAC, previously known as the Tariff Board) enquiry.

Following the introduction of the plans in 1965, they were amended four times. In February 1966 following consideration of the IAC report, two low-content assembly plans were introduced. In December 1968 an 85 per cent plan was introduced because of problems relating to the development of the manufacture of light cars in Australia. A decision to phase out the low-content assembly plans was made in 1971, so as to overcome problems of fragmentation in the light car market. Two further amendments made in that year were the extension of the terms of the 85 per cent and 95 per cent plans until 1979, and the acceptance of approved exports as 'local content' under the plans.

In 1973, the IAC was given a reference which virtually required it to re-examine all aspects of the passenger motor vehicle industry in Australia. Its report, published in July 1974, became the subject of fierce controversy, since the major recommendation was the abandonment of the local content plans and reliance on reduced levels of tariff to afford protection for domestic manufacture. After prolonged public debate and intensive lobbying by affected groups, a new manufacturing plan was announced by the Commonwealth Government principally offering duty concessions for achievement of 85 per cent local content.

A key element of this plan is the encouragement it has presented to the two major Japanese car producers Nissan and Toyota to supply the Australian market from local manufacture rather than imports. At present the three existing vehicle manufacturers and the two new ones are adjusting their sourcing arrangements to maximise the benefits available under the new plan.

Importance to the South Australian Economy

Before the 1939-45 War, South Australia was essentially a primary production State whereas today manufacturing is the backbone of the State's economy. In 1973-74 (the latest year in which details are available for publication) the motor vehicle and component industries provided about 20 per cent of male employment and 20 per cent of total salaries and wages paid in manufacturing industries in South Australia. The corresponding figures for Australia were 8 per cent for male employment and 8 per cent for salaries and wages. Employment in these industries is clearly more important to the economy of South Australia than to the economy of other States. South Australia is by far the most important source of motor bodies in Australia.

The following table shows for 1973-74 selected characteristics of the passenger motor vehicle industry in South Australia and for Australia. It should be noted that these figures understate the importance of the passenger vehicle industry to South Australia as some firms involved in the manufacture of components and accessories are classified to other industries (e.g. firms making rubber components for the passenger vehicle industry are considered to be in the rubber industry).

Passenger Motor Vehicle Industry: Selected Characteristics, South Australia and Australia, 1973-74

| Item | Unit | South Australia | | Australia | |
|--|--------|----------------------------------|--|----------------------------------|--|
| | | Passenger Motor Vehicle Industry | Percentage of Total Manufacturing Industries | Passenger Motor Vehicle Industry | Percentage of Total Manufacturing Industries |
| | | | Per cent | | Per cent |
| Number of establishments at 30 June .. | number | 73 | 2.4 | 612 | 1.6 |
| Average employment: | | | | | |
| Males | number | 19 215 | 19.5 | 73 603 | 7.6 |
| Females | number | 2 478 | 8.4 | 16 806 | 4.6 |
| Wages and salaries .. | \$'000 | 133 269 | 20.0 | 540 035 | 7.5 |
| Turnover | \$'000 | 412 416 | 15.5 | 2 154 705 | 6.9 |
| Value added | \$'000 | 148 005 | 13.3 | 805 931 | 6.1 |
| Fixed capital expenditure | \$'000 | 14 171 | 12.6 | 67 651 | 5.6 |

For convenient analysis, the passenger motor vehicle industry can be divided into two parts—passenger vehicle assembly and passenger vehicle parts and equipment. In addition to the direct needs of these two sections of the industry, each purchase they make from other industries generates a succession of indirect requirements.

For each \$100 spent on the first time purchase of passenger motor vehicles, the Industries Assistance Commission estimates that about \$40 of production is generated in other industries. The relationship between the motor vehicle industry and the rest of the economy is shown in the following tables prepared by the Industries Assistance Commission. Although the statistics in these tables relate to Australia as a whole, they fairly well reflect the situation in South Australia, as most of the inputs to Chrysler and GMH come from industries located in the Adelaide metropolitan area.

Engine electricals, carburettors, shock absorbers, lampware and instruments, to name but a few, are produced for GMH and Chrysler by specialist component manufacturers. While some component manufacturers produce a range of products for other industries, the majority are heavily dependent on the motor vehicle industry, specialising in manufacturing to suit individual vehicle designs.

The relatively high cost areas of automotive component manufacture include the manufacture of panels, engines, transmissions, rear axles and certain electricals. A precise assessment of the employment supported in South Australia by these activities can not be made.

In addition to the direct employment benefits of the existence of the motor vehicle industry in South Australia, the location of such large factories in South Australia has been a significant factor in attracting other industries to the State. Major manufacturers of tyres, paint, and other products have come to Adelaide primarily to supply GMH plants. Other benefits include the introduction of new skills into the labour force, and possible technology spinoffs to the 'white goods' and other industries.

Input Structure of Passenger Vehicle Assembly and Passenger Vehicle Parts and Equipment Industries, Australia, 1967-68

| Supplying Industry | Passenger Vehicle Assembly | | Passenger Vehicle Parts and Equipment | |
|--|----------------------------|----------------------------|---------------------------------------|----------------------------|
| | Value of Input | Proportion of Total Inputs | Value of Input | Proportion of Total Inputs |
| | \$m. | Per cent | \$m. | Per cent |
| Primary industries | — | — | — | — |
| Mining | — | — | 0.05 | 0.02 |
| Food, drinks, tobacco | — | — | — | — |
| Textiles, leathergoods, clothing | 0.13 | 0.02 | — | — |
| Wood products | 0.60 | 0.10 | — | — |
| Paper products | — | — | 1.36 | 0.45 |
| Services | 14.60 | 2.32 | 7.40 | 2.43 |
| Chemicals | — | — | 0.58 | 0.19 |
| Paints | 9.50 | 1.51 | 0.40 | 0.13 |
| Other products | — | — | — | — |
| Retail and wholesale trade | 7.45 | 1.18 | 3.80 | 1.25 |
| Transport, storage, repairs, petrol | 13.50 | 2.15 | 9.20 | 3.02 |
| Other non-metallic mineral products | — | — | 0.58 | 0.19 |
| Glass and glass products | 8.42 | 1.34 | — | — |
| Basic iron and steel foundry products | 0.79 | 0.13 | 40.86 | 13.40 |
| Basic non-ferrous metal products | — | — | 16.21 | 5.32 |
| Metal products | 1.30 | 0.21 | 2.50 | 0.82 |
| Other metal products, plumbing hardware | 3.80 | 0.60 | 21.11 | 6.92 |
| Transport, agricultural equipment | — | — | 2.60 | 0.85 |
| Commercial vehicle assembly | — | — | — | — |
| Commercial vehicle parts and equipment | — | — | — | — |
| Commercial vehicle bodies and special purpose vehicles | — | — | — | — |
| Passenger vehicle assembly | — | — | — | — |
| Passenger vehicle parts and equipment | 292.95 | 46.56 | 7.78 | 2.55 |
| Other vehicles and equipment | — | — | — | — |
| Medical, photographic, electric equipment | — | — | — | — |
| Domestic appliances, other industrial equipment | 0.21 | 0.03 | 8.28 | 2.72 |
| Electric cable machinery and equipment | 9.91 | 1.58 | 0.20 | 0.07 |
| Rubber products | 29.34 | 4.66 | 2.12 | 0.70 |
| Plastic products | — | — | 1.22 | 0.40 |
| Electricity, gas, water | 4.74 | 0.75 | 3.02 | 0.99 |
| Building and construction | 0.93 | 0.15 | 0.77 | 0.25 |
| Total intermediate inputs | 398.17 | 63.28 | 130.04 | 42.66 |
| Wages and salaries, etc. | 113.39 | 18.02 | 104.75 | 34.36 |
| Gross operating surplus | 112.52 | 17.88 | 66.61 | 21.85 |
| Taxes | 5.11 | 0.81 | 3.45 | 1.13 |
| Total output | 629.19 | 100.00 | 304.85 | 100.00 |
| Competing imports and duty | 77.80 | .. | 187.10 | .. |
| Total supply on industry basis | 706.99 | .. | 491.95 | .. |

Output Structure of Passenger Vehicle Assembly and Passenger Vehicle Parts and Equipment Industries, Australia, 1967-68

| Using Industry or Final Demand Sector | Passenger Vehicle Assembly | | Passenger Vehicle Parts and Equipment | |
|--|----------------------------|----------------------------|---------------------------------------|----------------------------|
| | Value of Output | Proportion of Total Supply | Value of Output | Proportion of Total Supply |
| | \$m. | Per cent | \$m. | Per cent |
| Primary industries | — | — | — | — |
| Mining | — | — | — | — |
| Food, drinks, tobacco | — | — | — | — |
| Textiles, leathersgoods, clothing | — | — | 0.20 | 0.04 |
| Wood products | — | — | — | — |
| Paper products | — | — | — | — |
| Services | — | — | 16.50 | 3.30 |
| Chemicals | — | — | — | — |
| Paints | — | — | — | — |
| Other products | — | — | — | — |
| Retail and wholesale trade | — | — | — | — |
| Transport, storage, repairs, petrol | — | — | 117.80 | 23.56 |
| Other non-metallic mineral products | — | — | — | — |
| Glass and glass products | — | — | — | — |
| Basic iron and steel foundry products | — | — | — | — |
| Basic non-ferrous metal products | — | — | — | — |
| Metal products | — | — | 0.20 | 0.04 |
| Other metal products, plumbing hardware | — | — | 0.10 | 0.02 |
| Transport, agricultural equipment | — | — | 3.80 | 0.76 |
| Commercial vehicle assembly | — | — | 35.39 | 7.08 |
| Commercial vehicle parts and equipment | — | — | 1.60 | 0.32 |
| Commercial vehicle bodies and special purpose vehicles | — | — | 1.72 | 0.34 |
| Passenger vehicle assembly | — | — | 292.95 | 58.60 |
| Passenger vehicle parts and equipment | — | — | 7.78 | 1.56 |
| Other vehicles and equipment | — | — | 1.40 | 0.28 |
| Medical, photographic, electric equipment | — | — | — | — |
| Domestic appliances, other industry equipment | — | — | 0.90 | 0.18 |
| Electric cable machinery and equipment | — | — | 0.20 | 0.04 |
| Rubber products | — | — | 0.60 | 0.12 |
| Plastic products | — | — | — | — |
| Electricity, gas, water | — | — | — | — |
| Building and construction | — | — | — | — |
| Intermediate supply | — | — | 481.14 | 96.24 |
| Private consumption | 417.63 | 59.07 | — | — |
| Private and public investment | 260.96 | 36.91 | — | — |
| Change in stocks | 1.50 | 0.21 | — | — |
| Exports | 26.90 | 3.80 | 18.80 | 3.76 |
| Total supply and commodity bases | 706.99 | 100.00 | 499.94 | 100.00 |

In summary, the passenger motor vehicle industry has come to occupy a central place in the South Australian economy, representing approximately 20 per cent of manufacturing employment and 16 per cent turnover in the State. The changes that come about in the structure of that industry during the coming decade will inevitably have a significant impact on the well-being of a great number of South Australians.

OTHER INDIVIDUAL INDUSTRIES

In this section details are given of major South Australian secondary industries. However, statistics relating to a number of important industries are not published in order to maintain confidentiality of details for individual businesses.

Meat and Abattoir By-products

Most of the abattoirs in South Australia are located in country areas but the two largest establishments are within the Adelaide Statistical Division. Details of country butchers who slaughter livestock mainly for sale in their own retail shops are not included in the following table.

Meat and Abattoir By-products, South Australia, 1974-75 (a)

| Statistical Division | Number of Establishments | Persons Employed | Wages and Salaries | Purchases, Etc. | Turnover | Value Added |
|----------------------|--------------------------|------------------|--------------------|-----------------|----------|-------------|
| | Number | | | | \$'000 | |
| Adelaide | 12 | 1 991 | 13 065 | 21 196 | 41 562 | 20 634 |
| Other | 14 | 1 112 | 6 846 | 19 051 | 29 686 | 10 199 |
| Total | 26 | 3 103 | 19 911 | 40 247 | 71 247 | 30 833 |

(a) Excludes single establishment enterprises employing less than 4 persons.

Wine and Brandy

Winemaking has been established in this State for a long period. The industry employs both modern technology and traditional skills. Although relatively small by world standards the wine industry is important to Australia and particularly to this State. In 1974-75, South Australia accounted for 63 per cent of Australia's total wine production and 84 per cent of brandy. The size of the wineries in South Australia vary from small family-concerns to businesses employing about 200 persons.

A limited number of wineries still operate in the Adelaide metropolitan area but the three major areas in this State are the Barossa Valley, the Riverland irrigation areas and the Southern Vales area centred around Reynella and McLaren Vale. Considerable development has also taken place in the South East, particularly at Coonawarra.

In 1974-75, twenty-four wineries employing 48.9 per cent of the total employment of the industry in South Australia operated in the Barossa Valley, thirteen wineries with 16.4 per cent of employment were located in the Riverland irrigation areas and eighteen locations employing 14.4 per cent were in the Southern Vales area. The other locations are mainly in the metropolitan area, Clare and the South East of South Australia.

Wine and Brandy, South Australia, 1974-75 (a)

| Statistical Division | Number of Establishments | Persons Employed | Wages and Salaries | Purchases, Etc. | Turnover | Value Added |
|----------------------|--------------------------|------------------|--------------------|-----------------|----------|-------------|
| | Number | | | | \$'000 | |
| Adelaide | 25 | 687 | 4 065 | 15 241 | 21 622 | 11 089 |
| Other | 51 | 2 013 | 11 880 | 60 602 | 76 773 | 35 785 |
| Total | 76 | 2 700 | 15 945 | 75 842 | 98 395 | 46 874 |

(a) Excludes single establishment enterprises employing less than 4 persons.

Printing and Publishing

There are two large establishments producing newspapers in Adelaide. Newspaper printing offices are also located in most large towns, and a number of these produce newspapers for more than one locality. Particulars of general printing establishments, including the activities of the Government Printing Division of the Department of Services and Supply, are also incorporated in the following table.

Printing and Publishing, South Australia, 1974-75 (a)

| Statistical Division | Number of Establishments | Persons Employed | Wages and Salaries | Purchases, Etc. | Turnover | Value Added |
|----------------------|--------------------------|------------------|--------------------|-----------------|----------|-------------|
| | Number | | | | \$'000 | |
| Adelaide | 124 | 4 645 | 31 094 | 31 362 | 82 466 | 52 999 |
| Other | 32 | 352 | 1 881 | 1 405 | 4 489 | 3 158 |
| Total | 156 | 4 997 | 32 976 | 32 768 | 86 954 | 56 157 |

(a) Excludes single establishment enterprises employing less than 4 persons.

Cement and Concrete Products

One firm produces cement at two locations in South Australia, one at Birkenhead and the other at Angaston. The Angaston cement plant, based on the limestone deposits, is an example of a manufacturing location being established near the source of the raw material. In 1974-75 thirty-nine plants produced ready-mixed concrete, of which twenty-two were in the Adelaide Statistical Division and seventeen were in country areas. Two firms produce concrete pipes at five separate locations of which two are in the country.

Cement and Concrete Products, South Australia, 1974-75 (a)

| Statistical Division | Number of Establishments | Persons Employed | Wages and Salaries | Purchases, Etc. | Turnover | Value Added |
|----------------------|--------------------------|------------------|--------------------|-----------------|----------|-------------|
| | Number | | | | \$'000 | |
| Adelaide | 53 | 1 733 | 12 445 | 36 526 | 62 794 | 27 342 |
| Other | 24 | 256 | 1 952 | 6 715 | 11 621 | 5 214 |
| Total | 77 | 1 989 | 14 398 | 43 242 | 74 414 | 32 556 |

(a) Excludes single establishment enterprises employing less than 4 persons.

Basic Iron and Steel

In 1941 a blast furnace was installed at Whyalla to utilise the iron ore from the Middleback Ranges. The ore is transported by rail a distance of 55 kilometres to Whyalla. Before 1965 Whyalla was the major source of Australia's foundry iron but this changed in 1965 when the Basic Oxygen Steelmaking (BOS) plant began producing steel. The *BHP News* of February 1975 reported that the two vessels at the BOS in the first decade of operation produced over 8.7 million tonnes of steel.

There are a number of large pipe and tube making firms located in and near Adelaide. These firms accounted for slightly more than 18 per cent of the Australian output of ferrous pipes, tubes and fittings. Details for these plants, together with details for establishments making basic forgings and castings of iron and steel, are included in the following table.

Basic Iron and Steel, South Australia, 1974-75 (a)

| Statistical Division | Number of Establishments | Persons Employed | Wages and Salaries | Purchases, Etc. | Turnover | Value Added |
|----------------------|--------------------------|------------------|--------------------|-----------------|----------|-------------|
| | Number | | | | \$'000 | |
| Adelaide | 22 | x | x | x | x | x |
| Other | 4 | x | x | x | x | x |
| Total | 26 | 7 980 | 62 342 | 163 535 | 267 452 | 117 570 |

(a) Excludes single establishment enterprises employing less than 4 persons.

Transport Equipment Other than Motor Vehicles

The most important manufacturing establishments included in the table below are the ship building location at Whyalla and the large railway workshops at Islington and Port Augusta operated by the Rail Division of the State Transport Authority and the Australian National Railways, respectively.

In 1974-75 the transport equipment (other than motor vehicles) industries accounted for 5 per cent of the employment in manufacturing in South Australia. Motor vehicles and parts and other transport equipment together accounted for 23 per cent of total South Australian manufacturing employment.

Transport Equipment (Other than Motor Vehicles), South Australia, 1974-75 (a)

| Statistical Division | Number of Establishments | Persons Employed | Wages and Salaries | Purchases, Etc. | Turnover | Value Added |
|----------------------|--------------------------|------------------|--------------------|-----------------|----------|-------------|
| | Number | | | | \$'000 | |
| Adelaide | 38 | 2 582 | 17 362 | 15 557 | 37 366 | 23 088 |
| Other | 17 | 2 951 | 21 334 | 28 481 | 56 622 | 27 754 |
| Total | 55 | 5 533 | 38 695 | 44 038 | 93 988 | 50 842 |

(a) Excludes single establishment enterprises employing less than 4 persons.

Appliances and Electrical Equipment

For many years South Australia has been one of the leading States in the production of the larger household appliances, including refrigerators, washing machines and stoves. These items constitute a significant part of the total activity shown in the next table. Also represented are manufacturers of radios, television sets and components, waterheating systems, batteries and other electrical machinery.

This group of industries is the second most important in this State and in 1974-75 employed nearly 11 per cent of the total manufacturing labour force in South Australia. These industries, together with the motor vehicles and parts industry accounted for nearly 29 per cent of South Australia's manufacturing labour force and are susceptible to changes in demand for their products.

Appliances and Electrical Equipment, South Australia, 1974-75 (a)

| Statistical Division | Number of Establishments | Persons Employed | Wages and Salaries | Purchases, Etc. | Turnover | Value Added |
|----------------------|--------------------------|------------------|--------------------|-----------------|----------|-------------|
| | Number | | | | \$'000 | |
| Adelaide | 96 | 12 980 | 79 930 | 141 758 | 249 848 | 119 929 |
| Other | 6 | 167 | 625 | 971 | 2 185 | 1 240 |
| Total | 102 | 13 147 | 80 556 | 142 729 | 252 032 | 121 168 |

(a) Excludes single establishment enterprises employing less than 4 persons.

PART 10

COMMERCE

10.1 INTERNAL TRADE

Extensive statistics of retail trade have been collected and published over many years but the first full census of wholesale trade was conducted as part of the integrated Economic Censuses of 1968-69 which was discussed in detail on pages 446-57 of the *South Australian Year Book 1971*.

WHOLESALE TRADE

The term wholesale trade was used in the Wholesale Census in the broad sense to include the resale (by agents or principals) of new or used goods to retailers or other wholesalers or to institutional (including government), professional or other business users (including farmers and builders). The more important types of business engaged in wholesale trade are wholesale merchants, who take title to the goods they sell; manufacturers sales branches; commission agents, including import and export agents and purchasing agents; petroleum products distributors; and co-operative and marketing boards engaged in marketing farm products.

An indication of the level of wholesale trade in South Australia and Australia is given in the following table which includes details for the 1968-69 Wholesale Census.

Wholesale Establishments: South Australia and Australia, 1968-69

| Particulars | South Australia | Australia |
|---|-----------------|-----------|
| | Number | |
| Establishments operating at 30 June 1969 | 3 159 | 33 356 |
| Persons employed (a) | 32 462 | 358 811 |
| | \$ million | |
| Wages and salaries | 87.0 | 1 045.3 |
| Sales on own account, transfers out, commissions received and other operating revenue | 1 226.9 | 15 899.1 |
| Stocks at 30 June: | | |
| 1968 | 135.8 | 1 945.5 |
| 1969 | 144.9 | 2 343.4 |
| Purchases, transfers in and selected expenses . . | 1 006.7 | 13 524.0 |
| Value added (b) | 229.3 | 2 773.0 |

(a) At end of June 1969; includes working proprietors. (b) Sales on own account, transfers out and other operating revenue plus increase (or less decrease) in the value of stocks, less purchases, transfers in and selected expenses.

RETAIL TRADE

A Census of Retail Establishments and Selected Service Establishments for the year ended 30 June 1974 was conducted primarily to provide the necessary data to update the sample for the quarterly survey of retail sales. For this reason, bread and milk vendors, footwear repairers, motion picture theatres, and laundries and dry cleaners were not included and questions on purchases, stocks, capital expenditure, operating expenses, etc., were omitted from the census.

The 1973-74 Census thus included all establishments classified to retail trade in Subdivision 48 of the Australian Standard Industrial Classification (ASIC) with the exception of bread and milk vendors, footwear repairers and door to door salesmen. In addition the census included service establishments classified as cafes and restaurants; licensed hotels, motels and wine saloons; licensed clubs, and hairdressers and beauty salons.

The previous retail census taken for the year ended 30 June 1969 was conducted as part of the first integrated economic censuses which covered also wholesale, mining, manufacturing, electricity and gas production and distribution. These censuses were conducted on an integrated basis in 1968-69 in order to increase substantially the usefulness and comparability of economic statistics collected and published by the Bureau. Information was collected for the first time using a common framework of reporting units and data concepts and in accordance with a standard industrial classification. As a result the statistics covered by the censuses were provided with no overlaps or gaps in scope and in such a way that aggregates for economic data such as value added, employment, wages and salaries, fixed capital expenditure and stocks could be obtained on a consistent basis for all sectors of the economy covered by the censuses.

The definition of retail trade adopted in the 1973-74 Retail Census was the same as that used in previous censuses *i.e.* the sale of new and used goods to the final consumer for household and personal purposes. To conform with this definition sales of building materials, timber, commercial refrigerators and

freezers, agricultural machinery and implements, agricultural tractors, construction and earthmoving equipment were not treated as retail sales. For the same reason and because most retailers would have difficulty in providing separate details of the value of retail and wholesale sales of builders hardware and building supplies, grain, feed and fertilisers and agricultural supplies, business machines and equipment, these commodity items also, as in previous censuses, were not treated as retail sales.

For the 1973-74 Census, establishments which operated for part of the census year were included in the Census only if they had operated for at least two months and were still operating at the end of June.

Retail and Selected Service Establishments: Summary of Operations by Industry Class, South Australia, 1973-74

| Industry Class | Number of establishments at end of June | Employment at end of June | | Wages and Salaries | Retail Sales | Turnover (a) |
|---|---|---------------------------|---------|--------------------|--------------|--------------|
| | | Males | Females | | | |
| | | Number | | | \$'000 | |
| Retail establishments: | | | | | | |
| Department, variety and general stores; | | | | | | |
| Department stores | 24 | 3 440 | 7 872 | 35 684 | 223 400 | 233 558 |
| Variety stores and general stores | 197 | 591 | 1 667 | 5 661 | 42 436 | 44 614 |
| Food stores; | | | | | | |
| Supermarkets | 99 | 2 073 | 3 265 | 11 459 | 153 784 | 154 536 |
| Grocers and tobacconists | 1 639 | 1 977 | 4 210 | 7 705 | 135 157 | 136 889 |
| Butchers | 812 | 2 084 | 430 | 7 674 | 65 541 | 66 083 |
| Fruit and vegetable stores | 340 | 435 | 918 | 1 606 | 19 058 | 19 345 |
| Liquor stores | 61 | 119 | 70 | 498 | 7 480 | 7 758 |
| Confectionery and soft drink stores | 628 | 638 | 1 746 | 2 480 | 30 634 | 31 168 |
| Fish, chip and hamburger shops | 460 | 766 | 1 096 | 2 085 | 22 446 | 22 880 |
| Bread and cake shops | 224 | 257 | 849 | 1 860 | 11 155 | 11 547 |
| Clothing, fabric and furniture stores; | | | | | | |
| Furniture and floor covering stores | 215 | 1 269 | 520 | 6 782 | 60 520 | 61 466 |
| Fabrics and household textile stores | 221 | 187 | 661 | 1 690 | 14 039 | 14 184 |
| Men's and boys' wear stores . . . | 214 | 658 | 426 | 2 912 | 22 832 | 23 211 |
| Women's, girls' and infants' wear stores | 532 | 263 | 1 783 | 4 224 | 35 875 | 36 001 |
| Footwear stores | 215 | 274 | 676 | 2 147 | 18 119 | 18 281 |
| Household appliance and hardware stores; | | | | | | |
| Household appliance stores | 264 | 1 395 | 665 | 8 579 | 67 330 | 80 886 |
| Household electrical appliance repairers | 126 | 356 | 112 | 1 242 | 465 | 3 898 |
| China, glassware and domestic hardware stores | 174 | 268 | 324 | 1 094 | 8 542 | 10 208 |
| Watchmakers and jewellers | 186 | 310 | 384 | 1 674 | 10 580 | 12 224 |
| Musical instrument and record stores | 73 | 129 | 133 | 637 | 6 630 | 6 764 |
| Motor vehicle dealers, petrol and tyre retailers; | | | | | | |
| New motor vehicle dealers and motor vehicle repairers, n.e.c. . . . | 844 | 6 703 | 1 614 | 32 289 | 247 224 | 335 875 |
| Used motor vehicle and parts dealers | 267 | 1 070 | 271 | 5 483 | 64 666 | 73 960 |
| Tyre and battery retailers and tyre retreaders | 165 | 1 158 | 181 | 6 003 | 34 814 | 42 786 |
| Service stations | 859 | 3 455 | 1 370 | 8 651 | 87 977 | 100 553 |
| Smash repair workshops | 368 | 1 599 | 220 | 5 576 | 291 | 18 006 |
| Motor cycle dealers | 63 | 318 | 90 | 1 489 | 12 098 | 19 730 |
| Boat and caravan dealers | 82 | 260 | 99 | 1 119 | 13 593 | 14 672 |

Retail and Selected Service Establishments: Summary of Operations by Industry Class, South Australia, 1973-74 (continued)

| Industry Class | Number of establishments at end of June | Employment at end of June | | Wages and Salaries | Retail Sales | Turnover (a) |
|---|---|---------------------------|---------------|--------------------|------------------|------------------|
| | | Males | Females | | | |
| | | Number | | | \$'000 | |
| Other retailers; | | | | | | |
| Pharmacies | 528 | 860 | 1 723 | 7 062 | 47 796 | 48 116 |
| Photographic equipment stores | 26 | 55 | 31 | 240 | 2 650 | 2 704 |
| Sporting goods, bicycle and toy shops | 185 | 351 | 224 | 1 084 | 11 672 | 12 854 |
| Newsagents, stationers and book-sellers | 397 | 615 | 876 | 2 281 | 26 831 | 27 199 |
| Antique and secondhand goods dealers | 332 | 412 | 297 | 1 190 | 9 274 | 9 425 |
| Nurserymen and florists | 149 | 164 | 378 | 980 | 5 499 | 5 668 |
| Retailers, n.e.c. | 221 | 259 | 321 | 997 | 5 636 | 6 710 |
| Total retail establishments | 11 190 | 34 768 | 35 502 | 182 137 | 1 526 044 | 1 713 759 |
| Selected service establishments: | | | | | | |
| Restaurants and licensed hotels; | | | | | | |
| Cafes and restaurants | 246 | 905 | 1 968 | 5 977 | 5 682 | 20 297 |
| Licensed hotels, motels and wine saloons | 635 | 5 043 | 6 210 | 33 066 | 112 252 | 149 343 |
| Licensed clubs; | | | | | | |
| Licensed bowling clubs | 17 | 47 | 11 | 158 | 513 | 665 |
| Licensed golf clubs | 23 | 204 | 107 | 935 | 891 | 2 348 |
| Licensed clubs, n.e.c. | 121 | 598 | 532 | 2 563 | 8 117 | 10 473 |
| Hairdressing and beauty salons; | | | | | | |
| Men's hairdressing | 177 | 237 | 40 | 237 | 353 | 1 480 |
| Women's hairdressing and beauty salons | 771 | 273 | 2 395 | 4 177 | 554 | 10 307 |
| Total selected service establishments | 1 990 | 7 307 | 11 263 | 47 113 | 128 362 | 194 913 |
| Total retail and selected service establishments | 13 180 | 42 075 | 46 765 | 229 250 | 1 654 406 | 1 908 672 |

(a) Sales of goods (retail and wholesale) and all other operating revenue.

A comparison of retail trading in South Australia and in Australia during 1973-74 is shown in the following table. In this and in the earlier table showing employment and wages, employment figures include working proprietors but wages exclude the drawings of working proprietors.

Retail and Selected Service Establishments: South Australia and Australia 1973-74

| Particulars | South Australia | Australia |
|---|-----------------|-----------|
| | Number | |
| Establishments operating at 30 June 1974 | 13 180 | 151 120 |
| Persons employed at 30 June 1974 | 88 840 | 984 964 |
| | \$ million | |
| Wages and salaries | 229.3 | 2 739.0 |
| Retail sales | 1 654.4 | 19 070.7 |
| Wholesale sales | 84.2 | 1 403.2 |
| Other operating revenue | 170.1 | 2 259.8 |
| Turnover | 1 908.7 | 22 733.7 |

The value of sales of the commodity items collected in the 1973-74 Census are shown in the following table. Many establishments reported takings in more than one commodity item so that the number of establishments showing sales for individual items will exceed the total number of retail and selected service establishments.

**Retail and Selected Service Establishments: Sales by Commodity Group
South Australia, 1973-74**

| Commodity Item | Number of Establishments | Retail Sales of Goods | | |
|--|--------------------------|-----------------------|-------------------------|------------------------------|
| | | Total | Sales Per Establishment | Sales Per Head of Population |
| | | \$'000 | \$ | \$ |
| Groceries, other food items, etc.: | | | | |
| Groceries | 2 802 | 192 949 | 68 860 | 159.4 |
| Fresh meat | 1 163 | 80 819 | 69 490 | 66.7 |
| Confectionery, ice cream, soft drinks, etc. | 3 516 | 50 154 | 14 260 | 41.4 |
| Other food | 3 006 | 79 966 | 26 600 | 66.0 |
| Beer, wine and spirits, cigarettes, etc.: | | | | |
| Beer, wine and spirits | 1 033 | 127 317 | 123 250 | 105.2 |
| Cigarettes and other tobacco products | 4 827 | 50 218 | 10 400 | 41.5 |
| Fabrics, clothing and footwear: | | | | |
| Clothing and drapery | 1 733 | 200 292 | 115 580 | 165.4 |
| Footwear | 763 | 33 575 | 44 000 | 27.7 |
| Hardware: | | | | |
| Domestic hardware, china, glassware, jewellery, watches and clocks (including garden equipment) | 1 453 | 48 084 | 33 090 | 39.7 |
| Household appliances: | | | | |
| Radios, radiograms tape recorders, television sets and accessories, musical instruments, records, sheet music, etc. | 580 | 39 072 | 67 370 | 32.3 |
| Domestic refrigerators and freezers, washing machines, stoves, household heating appliances and other household appliances (including bottled liquid petroleum gas) | 543 | 56 384 | 103 840 | 46.6 |
| Furniture and floor coverings: | | | | |
| Furniture, mattresses, blinds, etc. (including installation and repairs) | 364 | 45 609 | 125 300 | 37.7 |
| Floor coverings, carpets, lino, etc. including laying of floor coverings | 354 | 32 754 | 92 530 | 27.1 |
| Motor vehicles, petrol, boats, caravans, etc.: | | | | |
| New motor vehicles, new and used motor cycles, boats and caravans | 486 | 193 634 | 398 424 | 159.9 |
| Used motor vehicles | 572 | 113 443 | 198 327 | 93.7 |
| New and used parts and accessories, petrol, oils, tyres, batteries, etc. | 1 970 | 150 857 | 76 577 | 124.6 |
| Miscellaneous: | | | | |
| Cosmetics, perfumes, toilet preparations | 1 774 | 24 129 | 13 600 | 19.9 |
| Prescription and patent medicines and therapeutic appliances | 836 | 35 387 | 42 330 | 29.2 |
| Books, stationery, newspapers, etc. | 1 735 | 37 737 | 21 750 | 31.2 |
| Goods not included above | 2 191 | 62 022 | 28 310 | 51.2 |
| Total retail sales | .. | 1 654 406 | .. | 1 366.4 |

Surveys of Retail Establishments

During periods between censuses, estimates of the value of retail sales are calculated from returns received from a sample of retail establishments covering businesses which account for approximately 45 per cent of all retail sales in Australia.

The sample of businesses from which the estimates of retail sales of goods are calculated was changed during 1975; the new sample being based on the results of the 1973-74 Retail Census, whereas the previous sample was based on the 1968-69 Census results. Estimates for the September quarter 1975 were the first to be published from the new sample.

The main differences in the scope and coverage between the two samples are the exclusion in the new survey of all retail establishments with retail sales of less than \$20 000 per annum (previously \$5 000), and retail sales made by businesses which are primarily non-retail, such as wholesalers and manufacturers. Retail sales by wholesalers and manufacturers in 1968-69 amounted to 1.8 per cent of total retail sales and in 1973-74 sales by retail establishments with less than \$20 000 sales represented 1.5 per cent of the total.

The following table shows the value of retail sales of goods in South Australia in broad commodity groups for the 1968-69 and 1973-74 Censuses, and retail survey estimates for the years 1974-75 and 1975-76 based on samples selected from the 1968-69 and 1973-74 Censuses respectively. Retail sales of motor vehicles and parts, petrol, etc., and of delivered milk and bread are excluded.

Value of Retail Sales: Commodity Groups, South Australia

| Commodity Group | Value of Retail Sales of Goods | | | |
|-----------------------------------|--------------------------------|----------------|----------------|----------------|
| | 1968-69 | 1973-74 | 1974-75 | 1975-76 |
| | \$ million | | | |
| Groceries | 128.1 | 192.9 | 231.7 | 289.6 |
| Butchers meat | 53.0 | 80.8 | 91.7 | 101.9 |
| Other food | 85.7 | 130.1 | 171.1 | 180.6 |
| Total food and groceries.. | 266.8 | 403.9 | 494.5 | 572.1 |
| Beer, wine and spirits | 80.4 | 127.3 | 158.1 | 198.2 |
| Clothing, drapery, etc. | 117.3 | 200.3 | 244.2 | 279.1 |
| Footwear | 20.6 | 33.6 | 39.8 | 45.5 |
| Hardware, china, etc. | 27.0 | 48.1 | 68.0 | 70.8 |
| Electrical goods | 48.7 | 95.5 | 142.8 | 186.0 |
| Furniture and floor coverings .. | 36.0 | 78.4 | 89.6 | 111.5 |
| Chemist goods | 38.8 | 59.5 | 72.5 | 90.7 |
| Newspapers, books and stationery | 24.5 | 37.7 | 48.2 | 57.3 |
| Other goods | 60.8 | 112.2 | 145.6 | 157.7 |
| Total | 721.0 | 1 196.5 | 1 503.3 | 1 768.9 |

TOURIST ACCOMMODATION

The importance of tourism is recognised by a wide cross section of the community and this has caused a demand for comprehensive statistics on the industry. To satisfy requests from various organisations expressing a need for statistics on tourism the Bureau conducted a Census of Tourist Accommodation Establishments for the year ended 30 June 1974 to identify and measure the amount, type and location of accommodation available.

The census covered establishments classified as hotels, motels and guest houses providing predominantly short-term accommodation (for periods of less than two months) to the general public. Caravan parks were also included. Establishments which had nil takings from accommodation, or in which the number of short-term guests was less than long-term guests, were excluded.

Census of Tourist Accommodation: South Australia, 1973-74

| Size of Establishment (Guest Rooms) | Establishments | Guest Rooms | | Employment at end of June | | Wages and Salaries | Takings from Accommodation |
|--|----------------|---------------------|-------|------------------------------|-------|--------------------|----------------------------|
| | | With all Facilities | Other | Full-time | Other | | |
| Number | | | | | | | |
| \$'000 | | | | | | | |
| LICENSED HOTELS | | | | | | | |
| 1-15 | 367 | 500 | 2 243 | 2 343 | 3 101 | 15 646 | 1 914 |
| 16-25 | 56 | 314 | 772 | 594 | 659 | 4 103 | 1 196 |
| 26 and over .. | 40 | 1 344 | 506 | 823 | 928 | 6 042 | 3 937 |
| Total | 463 | 2 158 | 3 521 | 3 760 | 4 688 | 25 791 | 7 047 |
| LICENSED MOTELS | | | | | | | |
| 1-15 | 7 | 71 | 7 | 20 | 29 | 72 | 158 |
| 16-25 | 15 | 275 | 34 | 55 | 131 | 385 | 710 |
| 26 and over .. | 37 | 1 680 | 36 | 657 | 497 | 3 529 | 6 699 |
| Total | 59 | 2 026 | 77 | 732 | 657 | 3 986 | 7 567 |
| UNLICENSED MOTELS | | | | | | | |
| 1-15 | 36 | 373 | — | 77 | 74 | 141 | 712 |
| 16-25 | 17 | 323 | 8 | 50 | 72 | 272 | 771 |
| 26 and over .. | 16 | 548 | 47 | 71 | 133 | 533 | 1 631 |
| Total | 69 | 1 244 | 55 | 198 | 279 | 946 | 3 114 |
| PRIVATE HOTELS AND GUEST HOUSES | | | | | | | |
| 1-15 | 22 | 29 | 169 | 38 | 30 | 56 | 161 |
| 16-25 | 6 | — | 116 | 10 | 5 | 11 | 69 |
| 26 and over .. | 8 | 26 | 389 | 35 | 42 | 207 | 432 |
| Total | 36 | 55 | 674 | 83 | 77 | 274 | 662 |
| TOTAL ESTABLISHMENTS | | | | | | | |
| 1-15 | 432 | 973 | 2 419 | 2 478 | 3 234 | 15 916 | 2 946 |
| 16-25 | 94 | 912 | 930 | 709 | 867 | 4 772 | 2 746 |
| 26 and over .. | 101 | 3 598 | 978 | 1 586 | 1 600 | 10 310 | 12 698 |
| Total | 627 | 5 483 | 4 327 | 4 773 | 5 701 | 30 998 | 18 391 |

In addition to type of establishment and type of guest, information was sought on the capacity of accommodation with and without facilities, i.e. rooms with private bath/shower and toilet, employment, wages, takings from accommodation, meals and liquor sales. Details collected for caravan parks included

the number of sites, on-site vans and cabins. The various items of data were tabulated for regions within the State and information for some items, depending on the number of establishments operating, is available for individual local government areas.

To support the census information, a series of accommodation surveys was introduced in September quarter 1975 to provide an indication of the utilisation of accommodation available by measuring occupancy rates. The surveys include establishments which provide accommodation predominantly to short-term visitors and calculates room occupancy rates as the proportion of guest rooms occupied to the number of rooms available for accommodating paying guests. Establishments in the surveys are grouped into three categories—licensed hotels with facilities *i.e.* bath or shower and toilet in most guest rooms; licensed or unlicensed motels, private hotels or guest houses with facilities; and licensed hotels, private hotels and guest houses without facilities.

The number of establishments identified in the survey varies slightly according to services and facilities provided, but 112 licensed hotels with facilities, 126 motels and 322 hotels without facilities were included in September 1976. The following table shows occupancy rates and takings from accommodation from September quarter 1975 to September quarter 1976.

Accommodation Survey, South Australia

| Particulars | Unit | Sept. Qtr 1975 | Dec. Qtr 1975 | Mar. Qtr 1976 | June Qtr 1976 | Sept. Qtr 1976 |
|---------------------------------|--------|----------------------|---------------------|---------------------|---------------------|----------------------|
| LICENSED HOTELS WITH FACILITIES | | | | | | |
| Room occupancy rate | % | 48.9 | 46.4 | 56.2 | 47.2 | 43.8 |
| Takings | \$'000 | 1 540 | 1 516 | 2 035 | 1 739 | 1 670 |
| MOTELS ETC. WITH FACILITIES | | | | | | |
| Room occupancy rate | % | 61.4 | 62.2 | 72.0 | 62.9 | 59.0 |
| Takings | \$'000 | 3 059 | 3 284 | 4 105 | 3 712 | 3 532 |
| HOTELS ETC. WITHOUT FACILITIES | | | | | | |
| Room occupancy rate | % | 28.7 | 28.5 | 32.7 | 27.8 | 26.1 |
| Takings | \$'000 | 762 | 789 | 855 | 775 | 744 |

10.2 OVERSEAS TRADE

LEGISLATION AFFECTING OVERSEAS TRADE

The power to make laws with respect to trade and commerce with other countries was conferred on the Commonwealth Parliament by the Commonwealth of Australia Constitution Act, Section 51(i). Under Section 86 of the Constitution, the collection and control of duties of customs and excise passed to the Commonwealth Government on 1 January 1901. Other references to trade and commerce are contained in Sections 87 to 95 of the Constitution.

The legislation affecting overseas trade includes the *Customs Act*, the *Customs Tariff*, and the *Customs Tariff (Dumping and Subsidies) Act*. The *Customs Act* is the administrative Act under which the Bureau of Customs of the Department of Business and Consumer Affairs operates, while the *Customs Tariff* provides the statutory authority for imposing the actual rates of duty operative from time to time and the *Customs Tariff (Dumping and Subsidies) Act* provides protection for Australian industry against various forms of unfair trading.

The Customs Tariff

The first Australian Customs Tariff was introduced by Resolution on 8 October 1901, from which date uniform duties for each State came into effect throughout Australia. The tariff has since been extensively amended—the last major amendment was in 1965 when the tariff was re-issued in Brussels Nomenclature form.

The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries and of granting preferential treatment to particular imports from certain countries of the British Commonwealth. Duties are also imposed on some goods, generally of a luxury nature, for revenue purposes. Customs collections are an important source of revenue, but in its protective character the tariff has an influence also on the Australian economy. The present tariff provides for preferential and general rates of duty.

The preferential rates apply to goods which are the produce or manufacture of the United Kingdom, Ireland, Canada, New Zealand and Papua New Guinea. The preferential treatment applies also to the products of countries which have been declared to be preference countries. At present the preference countries are comprised mainly of members of the British Commonwealth of Nations and most of the United Kingdom's dependencies. Certain less developed countries are given preferential treatment for selected products.

General rates apply to goods from all countries which do not qualify for preferential rates of duty under a particular tariff classification.

Primage Duties

In addition to the duties imposed by the *Customs Tariff*, *ad valorem* primage duties at rates of 3.75 per cent, 7.5 per cent or 10 per cent are charged on some goods according to the type and origin of the goods. Goods which are the produce or manufacture of New Zealand, Norfolk Island, Fiji, Cocos Islands, Christmas Island or Papua New Guinea, are exempt from primage duty.

By-laws

Under Customs by-laws, goods may be admitted free of duty or at rates of duty lower than those normally applicable. A pre-requisite for by-law admission is that suitably equivalent goods are not reasonably available from Australian production. There are provisions under the by-law system for remitting duty in certain circumstances on imported goods which are to be incorporated in goods for export.

Anti-dumping Legislation

The *Customs Tariff (Anti-Dumping) Act 1975* provides protection for Australian industry against various forms of unfair trading. This Act authorises the imposition of a dumping duty when goods are sold to Australia at a price which is less than the normal value of the goods, or a countervailing duty on subsidised goods, where the dumping or subsidy causes or threatens material injury to an Australian industry. Special duties may be collected also if dumped or subsidised goods are imported to the detriment of the trade of a third country in the Australian market.

Import Controls

A system of import licensing was introduced in 1939 as a war-time measure. In the post-war years these controls were gradually relaxed but were re-imposed in 1952. In 1962 most of these restraints were lifted but some goods remain under control for reasons associated with the protection of certain Australian industries. The Customs (Prohibited Imports) Regulations list those commodities the import of which is prohibited absolutely, or restricted, on social grounds. Other items are prohibited, or restricted, on health grounds (human, animal or plant) by the *Quarantine Act 1908* and the *Therapeutic Goods Act 1966*.

Export Controls

Under Section 112 of the *Customs Act* the export of goods from Australia may be prohibited absolutely, prohibited to a specific place, or prohibited unless prescribed conditions or restrictions are observed.

The *Banking Act 1959* contains provision to ensure that the full proceeds of goods exported from Australia are received into the Australian banking system and that these proceeds are received in the currency and in the manner prescribed by the Reserve Bank of Australia.

ADVISORY AUTHORITIES ON OVERSEAS TRADE

Industries Assistance Commission

The Tariff Board was replaced on 1 January 1974 by the Industries Assistance Commission appointed under the *Industries Assistance Commission Act 1973*. The Commission consists of not less than five and not more than nine members and its function is to hold inquiries and make reports to the Minister for Business and Consumer Affairs in respect of matters affecting assistance to industries and any other matters that may be referred to it in accordance with the Act.

The Minister is required to refer to the Commission for inquiry and report on among other matters, the necessity for new, increased or reduced import duties; the necessity for prohibition or restriction of importation of any goods into Australia, or the extension, reduction or removal of any such existing restriction; the necessity to provide financial assistance to an industry by the Commonwealth Government or for increase, reduction or withdrawal of such assistance.

The Minister may refer to the Commission for inquiry and report on the classification of goods in the Customs Tariff or Excise Tariff and matters in connection with the interpretation of these tariffs; the question of the value for duty of goods; whether goods not prescribed in departmental by-laws should be so prescribed; and any matters in respect of which action may be taken under the *Customs Tariff (Anti-Dumping) Act 1975*.

Temporary Assistance Authority

The Minister for Business and Consumer Affairs may also request the Temporary Assistance Authority to inquire into cases where urgent action appears necessary to protect an Australian industry against import competition pending receipt and consideration of a full report by the Industries Assistance Commission. The Temporary Assistance Authority's report must be submitted to the Minister within thirty days of the making of the request. Temporary protection recommended by the Temporary Assistance Authority may be imposed only if the matter is under reference to the Industries Assistance Commission and may operate only for a period of up to three months after the date of receipt by the Commission of the final report on the goods concerned.

ENCOURAGEMENT OF OVERSEAS TRADE

Trade Commissioner Service

The *Trade Commissioners Act 1933* provides for the appointment of Trade Commissioners and Assistant Trade Commissioners for Australia in such places as the Governor-General determines.

In 1957 Australia's official commercial representation was extended by the introduction of a system of Trade Correspondents. These correspondents who are appointed in countries where there is no Trade Commission, are engaged on a part-time basis and operate under the general direction of the Trade Commissioner in whose area they are located.

The Trade Commissioner Service is administered by the Department of Overseas Trade and is responsible for overseas commercial intelligence. Particular facilities offered to Australian exporters and export organisations include market surveys, advice on selling and advertising methods, arranging introductions with buyers and agents, providing reports on the standing of overseas firms, assisting business visitors and organising trade missions, trade displays and other publicity and promotion media.

Trade Commissioners participate in inter-governmental negotiations on economic and commercial matters and where necessary make representation to Government authorities of the countries in which they are located on behalf of the Commonwealth Government and Australian firms. A Trade Commissioner may also be called upon to act as the Commonwealth Government representative in areas where there is no Australian diplomatic or consular mission.

In a number of cities where there is a diplomatic or consular mission but no Trade Commissioner, Marketing Officers are appointed to assist Australian businessmen. They work under the direction of the Trade Commissioner whose territory includes the city in which the Marketing Officer is based.

Export Market Development Grants

The *Export Market Development Grants Act 1974* authorised the establishment of the Export Development Grant Board, to administer the grants scheme. The scheme—operative for five years from 1 July 1974—replaced the Export Market Development Allowance and Export Incentive Grants Schemes which expired on 30 June 1974. The grants are designed to encourage Australian exporters and prospective exporters to seek out and develop overseas markets for products, services, industrial property rights and know-how, which are substantially of Australian origin.

Export Finance and Insurance

The *Export Finance and Insurance Corporation Act 1974*, which came into operation on 1 February 1975, established the Export Finance and Insurance Corporation as a body corporate with the statutory duty of encouraging overseas trade and commerce.

The Corporation operates on commercial lines and assumes all the functions which, since 1957, had been performed by the Export Payment Insurance Corporation whose assets, liabilities and commitments were transferred to the new Corporation on 1 February 1975. These functions include the provision of a specialised range of insurance facilities to Australian exporters and investors and the giving of guarantees to banks and other lending institutions in support of export business.

The Corporation is additionally empowered to provide a direct lending facility. This new lending facility is for the purpose of financing, at internationally competitive interest rates, exports of machinery and equipment (and services associated with the export of such goods) sold on extended credit terms, especially if the credit period exceeds five years.

South Australian Trade Representatives

One of the functions of the Agent-General for South Australia, located in London, is to foster trade with the United Kingdom and other countries. There are also agencies in Djakarta, Hong Kong, Kuala Lumpur, Moscow, Singapore and Tokyo to investigate trade opportunities in these areas.

TRADE AGREEMENTS

The General Agreement on Tariffs and Trade (GATT), of which Australia is an original member, is an international trade agreement which has been in operation since 1 January 1948. The objectives of the GATT include the expansion of world trade and the raising of living standards throughout the world. The essential features of the GATT are the schedules of tariff concessions which its members have agreed to apply consequent to tariff negotiations with each other, the application of most-favoured-nation treatment among its members, the avoidance of trade discrimination, and a code of agreed commercial policy rules for fair international trading.

Six series of tariff negotiations have been conducted. As a result of the first five, Australia obtained tariff concessions on almost all the principal products of which it is an actual or potential exporter to the individual countries concerned.

The sixth series of tariff negotiations, the Kennedy Round, was based on a plan for linear tariff cuts by industrial countries on all industrial products, with a minimum of exceptions, and on the reduction of non-tariff barriers to trade and the creation of acceptable conditions of access to world markets for agricultural products. It began in May 1964 and concluded in May 1967. The average reduction in tariffs on industrial goods was approximately one-third, while in agriculture the most important item was the agreement reached on the basis for a world grains agreement (now superseded by later agreements; see International Grains Agreement page 465).

A seventh round of negotiations, held under the auspices of GATT, was inaugurated at a meeting of Ministers from over one hundred countries in Tokyo, Japan in September 1973. The new round is concerned with further reductions in tariffs on industrial goods and aims to lower tariff and non-tariff barriers to trade in manufactures and primary products, with particular emphasis on products important to the trade of developing countries.

Australia is also a party to trade agreements with a number of individual countries. These agreements are of two main types, preferential and other.

Preferential agreements are currently operative with Canada, Malaysia and New Zealand. In general these agreements provide for the exchange of preferential rates of duty on a range of commodities traded between Australia and the countries concerned.

Other agreements currently in force are those concluded with Japan (1964), Philippines (1965), Republic of Korea (1965), USSR (1965, 1973), Bulgaria (1966), Poland (1966), Hungary (1967), Romania (1967), Yugoslavia (1970), Czechoslovakia (1972), Indonesia (1972), the People's Republic of China (1973) and the German Democratic Republic (1974). These agreements relate to the operation of most-favoured-nation treatment and the development of trade in accordance with this principle between Australia and the country concerned.

There is also an agreement establishing a free trade area between Australia and New Zealand (NAFTA).

Details of these agreements are contained in various issues of the *Official Year Book of Australia*.

METHOD OF RECORDING IMPORTS AND EXPORTS

Overseas trade statistics are compiled from documents obtained under the *Customs Act 1901*. Statistics for South Australia apply to the imports into and exports from Australia which are documented (entered or cleared) at Customs recording points in South Australia.

Imports do not provide a record of the overseas goods used or consumed in South Australia, as some of the goods pass subsequently to other Australian States and some goods imported through other States pass into South Australia. Similarly, exports include some products of other States documented in South Australia, but exclude products of South Australia documented in other States. Commodities transported by sea, air or parcels post are included.

Since the introduction of container shipping early in 1969 containerised goods may be documented as South Australian exports or imports even though loaded or unloaded at ports in other States, particularly Melbourne. The interstate movement of the goods is predominantly by rail.

All values in overseas trade statistics are determined on a 'free on board (f.o.b.) port of shipment' basis. This means that all charges, in particular the cost of freight and insurance, incurred after the goods have been exported from the port of shipment are excluded. Only transport and service charges incurred before export are included in the determination of trade values.

The procedure adopted to value exports and imports is as follows:

Exports:

- (a) Goods sold to overseas buyers before export are valued at the Australian f.o.b. port of shipment equivalent of the actual price at which the goods were sold;
- (b) Goods shipped on consignment are valued at the Australian f.o.b. port of shipment equivalent of the price paid for similar goods of Australian origin in the principal markets of the country to which they are dispatched for sale.

Imports:

The recorded value of goods imported is the amount on which duty is payable or would be payable if the duty were *ad valorem*. Value for duty is the f.o.b. port of shipment equivalent of either:

- (a) the actual price paid or to be paid by the Australian importer plus any special deduction (transactions value); or
- (b) the 'current domestic value' of the goods, whichever is the higher.

'Current domestic value' is defined as 'the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of export of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country'.

Inclusions and Exclusions

Export tabulations do not include the value of stores loaded on foreign operated aircraft and ships (e.g. aircraft fuel, bunker oil, food and drink for passengers and crew, and ships' fittings installed on overseas-owned ships in Australian ports). The quantity and value of stores loaded on overseas operated vessels and aircraft in South Australia amounted to \$6.0 million in 1975-76. Outside packages (containers, crates) are included as a separate item in imports. For exports, however, the value recorded for each item includes the value of the outside package. Particulars of direct transit trade through Australia are not recorded.

Countries

'Country of origin' appearing in import tables should be taken to mean the country of production. 'Country of consignment' appearing in export tables means the country to which goods were consigned so far as this can be determined at the time of export. Where the country of consignment is not determined at the time of export, goods are shown as exported 'For orders'.

The following table shows, by commodity groups, the imports from principal countries during the year 1975-76. In comparison with 1974-75, imports of non-electric machinery from the United States increased by \$6.9 million to \$26.7 million.

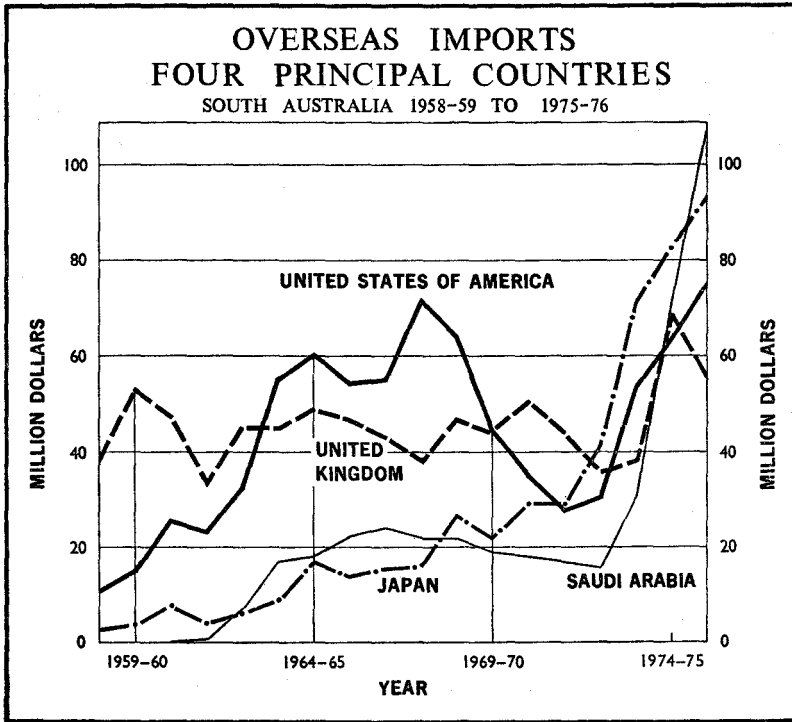
Overseas Imports to South Australia from Principal Countries
Commodity Groups, 1975-76

| Commodity Group | Germany, Federal Republic of | Japan | Saudi Arabia | United Kingdom | USA | Total (a) |
|--|---------------------------------------|---------------|-----------------|-------------------|---------------|----------------|
| | \$'000 | | | | | |
| Food and live animals: | | | | | | |
| Fish and fish preparations | 45 | 829 | — | 217 | 56 | 2 588 |
| Coffee, tea, cocoa, spices | 16 | — | — | 66 | 4 | 2 049 |
| Other | 151 | 94 | — | 856 | 335 | 5 552 |
| Beverages and tobacco | 69 | — | — | 720 | 2 | 1 860 |
| Crude materials, inedible: | | | | | | |
| Crude rubber | 16 | 17 | — | 32 | 333 | 1 711 |
| Wood, timber and cork | 9 | 4 | — | 1 | 4 841 | 16 773 |
| Textile fibres and waste | 34 | 171 | — | 8 | 11 | 789 |
| Crude fertilisers and crude minerals | 139 | 173 | — | 21 | 421 | 10 699 |
| Other | 9 | 17 | — | 30 | 232 | 1 161 |
| Mineral fuels, lubricants | 86 | 24 | 105 758 | 488 | 243 | 126 894 |
| Animal and vegetable oils and fats | 27 | — | — | 16 | 890 | 1 555 |
| Chemicals: | | | | | | |
| Chemical elements and compounds | 434 | 791 | — | 401 | 1 405 | 4 220 |
| Plastic materials and artificial resins | 456 | 1 006 | — | 1 565 | 1 472 | 5 947 |
| Other | 767 | 350 | — | 2 215 | 1 835 | 6 376 |
| Manufactured goods: | | | | | | |
| Rubber manufactures | 349 | 1 819 | — | 3 105 | 474 | 7 464 |
| Paper, paperboard and manufactures | 561 | 714 | — | 610 | 632 | 10 251 |
| Textile yarn, fabrics, made-up articles | 344 | 3 005 | — | 2 040 | 6 121 | 20 156 |
| Non-metallic mineral manufactures, n.e.s. | 665 | 4 118 | — | 967 | 778 | 14 720 |
| Iron and steel | 77 | 7 334 | — | 715 | 608 | 10 266 |
| Non-ferrous metals | 201 | 104 | — | 295 | 426 | 1 848 |
| Manufactures of metal, n.e.s. | 724 | 2 157 | — | 1 877 | 1 083 | 8 600 |
| Other | 53 | 84 | — | 814 | 317 | 5 811 |
| Machinery and transport equipment: | | | | | | |
| Machinery, other than electric | 11 634 | 6 658 | — | 18 052 | 26 678 | 78 480 |
| Electrical machinery and appliances | 1 839 | 12 572 | — | 5 618 | 7 152 | 37 547 |
| Transport equipment | 2 659 | 43 697 | — | 5 042 | 5 377 | 66 667 |
| Miscellaneous manufactured articles | 1 652 | 5 415 | — | 8 869 | 10 509 | 37 086 |
| Commodities and transactions not classified to kind | 493 | 1 944 | — | 1 201 | 2 196 | 14 406 |
| Total | 23 509 | 93 097 | 105 758 | 55 843 | 74 430 | 501 476 |

(a) Includes 'other'.

The proportions of imports obtained from the major sources have changed considerably in the years since the 1939-45 War *e.g.* in 1953-54 Japan supplied only 0.46 per cent of the total value of imports into South Australia but in 1975-76 accounted for 18.6 per cent; United Kingdom which supplied over half the imports in 1953-54 accounted for only 11.1 per cent in 1975-76, and imports from the United States of America which accounted for 8.9 per cent of total imports into South Australia in 1953-54, and 32.7 per cent in 1967-68, have declined to 14.8 per cent in 1975-76.

Saudia Arabia was the major source of imports into South Australia in 1975-76 with \$105.8 million, representing 21.1 per cent of the total value of imports.



Overseas Imports to South Australia, Principal Countries

| Country of Origin | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------|----------------|----------------|----------------|----------------|----------------|
| | \$'000 | | | | |
| Canada | 10 265 | 9 253 | 11 047 | 15 752 | 11 237 |
| France | 2 150 | 2 910 | 5 389 | 10 861 | 9 816 |
| Germany, Federal Republic of | 10 534 | 11 855 | 19 005 | 31 304 | 23 509 |
| Hong Kong | 1 900 | 2 393 | 3 523 | 6 866 | 6 058 |
| Italy | 3 698 | 3 765 | 6 273 | 13 879 | 9 872 |
| Japan | 28 612 | 40 955 | 70 852 | 92 430 | 93 097 |
| Malaysia | 1 944 | 3 169 | 5 215 | 4 849 | 6 103 |
| Netherlands | 7 420 | 4 199 | 6 836 | 9 296 | 10 359 |
| New Zealand | 3 502 | 3 795 | 5 638 | 6 787 | 8 815 |
| Saudi Arabia | 17 022 | 15 490 | 30 245 | 70 514 | 105 758 |
| Singapore | 1 450 | 2 163 | 2 654 | 5 079 | 11 625 |
| United Kingdom | 43 330 | 34 981 | 37 781 | 68 479 | 55 843 |
| United States of America .. | 27 473 | 30 152 | 53 087 | 63 140 | 74 430 |
| Other | 30 448 | 34 898 | 56 370 | 82 841 | 74 954 |
| Total | 189 748 | 199 978 | 313 915 | 482 077 | 501 476 |

EXPORTS

The total value of overseas exports from South Australia during 1975-76 was \$685.0 million, \$79.4 million below the level of 1974-75. There were considerable decreases in exports of cereal grains (\$205.6 million), iron and steel (\$50.4 million) and non-ferrous metals (\$52.7 million). Exports of meat, wool, and metalliferous ores and scrap showed significant increases.

Overseas Exports from South Australia, Principal Commodities

| Commodity | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|-----------|---------|---------|----------------|---------|
| | | | | QUANTITY | |
| Beef, lamb and mutton ('000 kg) | 34 215 | 37 760 | 23 635 | 24 693 | 34 261 |
| Wheat (tonnes) | 1 209 432 | 924 702 | 996 944 | 1 190 166 | 810 603 |
| Barley (tonnes) | 848 219 | 334 397 | 469 072 | 922 053 | 922 220 |
| Wool: | | | | | |
| Greasy ('000 kg) | 85 421 | 90 676 | 65 030 | 62 120 | 73 437 |
| Other ('000 kg) | 11 740 | 5 760 | 4 956 | 4 586 | 7 304 |
| Ores and concentrates: | | | | | |
| Iron ('000 tonnes) | 2 064 | 1 123 | 1 087 | 930 | 1 119 |
| Lead and lead alloys, unworked (tonnes) | 132 239 | 152 874 | 138 069 | 116 063 | 146 634 |
| Iron and steel; blooms, billets etc. (tonnes) | 97 051 | 434 750 | 369 672 | 547 303 | 466 123 |
| Passenger motor cars: | | | | | |
| Unassembled (No.) | 16 412 | 41 869 | n.a. | n.a. | n.a. |
| Assembled (No.) | 1 890 | 1 479 | 1 579 | 591 | 69 |
| | | | | VALUE (\$'000) | |
| Beef, lamb and mutton | 18 550 | 30 554 | 25 495 | 16 347 | 22 477 |
| Wheat | 61 363 | 46 251 | 98 674 | 163 411 | 98 978 |
| Barley | 35 652 | 17 250 | 40 790 | 99 517 | 90 290 |
| Wool: | | | | | |
| Greasy | 61 111 | 137 329 | 138 895 | 84 744 | 99 438 |
| Other | 7 077 | 12 627 | 14 307 | 8 528 | 16 122 |
| Ores and concentrates: | | | | | |
| Iron | 11 677 | 10 606 | 10 394 | 11 695 | 15 165 |
| Lead and lead alloys, unworked | 28 718 | 37 374 | 46 556 | 44 212 | 37 112 |
| Iron and steel; blooms, billets etc. | 6 123 | 27 910 | 32 176 | 73 658 | 46 081 |
| Passenger motor cars: | | | | | |
| Unassembled | 7 434 | 19 045 | 31 247 | 23 410 | 14 185 |
| Assembled | 2 735 | 3 680 | 4 499 | 1 653 | 311 |

Overseas Exports from South Australia, Principal Commodity Groups

| Commodity Group | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------|---------|---------|---------|---------|
| | | | | \$'000 | |
| Food and live animals: | | | | | |
| Meat and meat preparations | 20 389 | 34 942 | 28 311 | 17 800 | 25 357 |
| Dairy products and eggs | 5 508 | 8 238 | 6 099 | 5 705 | 5 940 |
| Cereal grains and cereal preparations | 102 253 | 66 900 | 147 027 | 276 412 | 205 551 |
| Fruit and vegetables | 9 581 | 9 870 | 11 863 | 8 424 | 7 964 |
| Other | 10 612 | 14 548 | 16 353 | 16 068 | 18 013 |
| Beverages and tobacco | 2 907 | 2 593 | 3 575 | 2 933 | 3 206 |
| Crude materials, inedible (except fuels): | | | | | |
| Hides and skins | 6 461 | 14 532 | 11 679 | 7 127 | 10 707 |
| Textile fibres and their waste | 68 278 | 149 997 | 153 133 | 93 487 | 115 735 |
| Metalliferous ores and metal scrap | 52 112 | 48 460 | 74 009 | 87 437 | 101 780 |
| Other | 4 578 | 4 371 | 3 664 | 5 029 | 4 237 |
| Mineral fuels, lubricants | 1 257 | 1 227 | 1 529 | 4 129 | 7 859 |
| Animal and vegetable oils and fats | 3 545 | 2 617 | 3 941 | 4 228 | 4 960 |
| Chemicals | 533 | 1 275 | 2 402 | 4 735 | 2 275 |
| Manufactured goods: | | | | | |
| Iron and steel | 10 375 | 33 240 | 39 624 | 80 548 | 50 391 |
| Non-ferrous metals | 39 446 | 47 962 | 59 124 | 71 296 | 52 656 |
| Manufactures of metals, n.e.s. | 4 438 | 4 554 | 3 990 | 9 348 | 4 109 |
| Other | 4 644 | 7 717 | 8 569 | 9 756 | 11 134 |
| Machinery and transport equipment | 41 291 | 62 819 | 80 759 | 53 010 | 40 893 |
| Miscellaneous manufactured articles | 4 804 | 4 922 | 6 020 | 5 850 | 7 767 |
| Commodities and transactions not classified to kind | 1 052 | 935 | 1 207 | 1 086 | 4 496 |
| Total | 394 064 | 521 720 | 662 881 | 764 410 | 685 029 |

Exports of manufactured goods have been increasing but the bulk of exports is still of goods usually classified as primary products. In 1975-76 the 'Crude materials, inedible' group accounted for \$232.5 million, or 33.9 per cent of exports (including wool \$115.6 million, 16.9 per cent), and the 'Food and live animals' group accounted for \$262.8 million or 38.4 per cent (including wheat \$99.0 million, 14.4 per cent).

Exports to principal countries during the year 1975-76 classified by commodity groups are shown below.

**Overseas Exports from South Australia to Principal Countries
Commodity Groups, 1975-76**

| Commodity Group | Germany, Federal Republic of | Japan | New Zealand | South Africa, Republic of | United Kingdom | USA | Total (a) |
|---|---------------------------------------|----------------|----------------|------------------------------------|-------------------|---------------|----------------|
| | \$'000 | | | | | | |
| Food and live animals: | | | | | | | |
| Meat and meat preparations .. | 50 | 6 495 | — | 4 | 1 659 | 8 965 | 25 357 |
| Dairy products and eggs .. | — | 4 293 | — | — | 34 | 380 | 5 940 |
| Fish and fish preparations .. | 62 | 4 252 | 11 | 727 | 115 | 4 760 | 11 639 |
| Cereal grains and cereal preparations .. | 2 001 | 30 904 | 8 116 | 4 | 7 829 | — | 205 551 |
| Fruit and vegetables .. | 336 | 1 426 | 765 | — | 40 | 738 | 7 964 |
| Other .. | 25 | 716 | 1 | 8 | 337 | 162 | 6 374 |
| Beverages and tobacco .. | 3 | 91 | 355 | 3 | 573 | 54 | 3 206 |
| Crude materials, inedible: | | | | | | | |
| Hides, skins and fur skins .. | 249 | 696 | — | — | 619 | 2 | 10 707 |
| Textile fibres and their waste .. | 7 489 | 30 700 | 45 | 32 | 4 149 | 3 103 | 115 735 |
| Metalliferous ores and metal scrap .. | 6 403 | 45 641 | — | 393 | 121 | 939 | 101 780 |
| Other .. | 214 | 143 | 1 514 | 489 | 236 | 121 | 4 237 |
| Mineral fuels and lubricants .. | 375 | — | 3 754 | — | — | — | 7 859 |
| Animal and vegetable oil and fats | 30 | 1 118 | 1 | 1 587 | 62 | 12 | 4 960 |
| Chemicals .. | 1 | 9 | 306 | 484 | 727 | 12 | 2 275 |
| Manufactured goods classified chiefly by material: | | | | | | | |
| Iron and steel .. | 14 000 | 3 989 | 2 241 | 188 | — | 39 | 50 391 |
| Non-ferrous metal manu- factures .. | — | 3 527 | 6 030 | 13 | 16 160 | 228 | 52 656 |
| Other .. | 1 529 | 253 | 1 454 | 175 | 558 | 1 315 | 15 243 |
| Machinery and transport equip- ment: | | | | | | | |
| Machinery, other than electric Electrical machinery and appliances .. | 42 | 53 | 2 531 | 2 107 | 285 | 1 451 | 12 829 |
| Transport equipment .. | 33 | 81 | 1 506 | 49 | 1 682 | 622 | 5 892 |
| | — | 227 | 7 465 | 9 434 | 1 523 | 24 | 22 172 |
| Miscellaneous manufactured articles .. | 105 | 264 | 864 | 248 | 1 767 | 1 357 | 7 767 |
| Commodities and transactions not classified to kind .. | 167 | 1 | 90 | 1 | 251 | 67 | 4 496 |
| Total .. | 33 114 | 134 881 | 37 050 | 15 946 | 38 728 | 24 351 | 685 029 |

(a) Includes 'other'.

The following table shows the value of exports to principal countries during each of the years 1971-72 to 1975-76. Japan replaced United Kingdom as South Australia's principal export market in 1966-67 and has retained that position. In 1975-76 Japan took goods valued at \$134.9 million, 19.7 per cent of total exports, compared with \$125.0 million (16.4 per cent) in 1974-75. USSR (\$59.0 million, 8.6 per cent) was the second largest market in 1975-76.

Overseas Exports from South Australia, Principal Countries

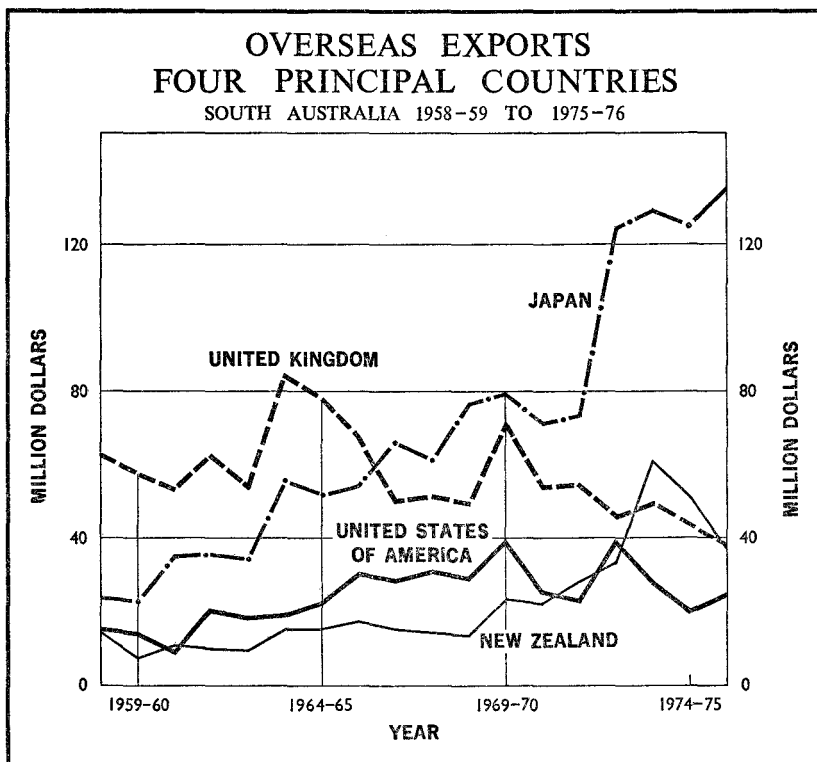
| Country of Consignment | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Arab Republic of Egypt | 14 500 | 3 785 | 9 845 | 16 403 | 19 477 |
| Belgium-Luxembourg | 6 827 | 8 622 | 8 602 | 11 983 | 28 856 |
| Canada | 7 701 | 7 295 | 8 510 | 12 317 | 13 844 |
| France | 12 892 | 23 363 | 19 410 | 15 741 | 14 694 |
| Germany, Federal Republic of | 13 102 | 32 264 | 23 320 | 47 219 | 33 114 |
| Hong Kong | 7 282 | 8 810 | 8 428 | 7 721 | 14 746 |
| India | 7 699 | 10 692 | 17 882 | 20 039 | 15 689 |
| Indonesia | 2 258 | 7 343 | 14 419 | 13 416 | 12 062 |
| Iran | 5 546 | 6 960 | 12 019 | 18 190 | 15 736 |
| Iraq | 8 629 | 18 | 11 725 | 41 532 | 13 967 |
| Italy | 7 086 | 10 814 | 15 210 | 8 736 | 15 026 |
| Japan | 73 462 | 124 592 | 129 074 | 125 042 | 134 881 |
| Netherlands | 5 831 | 4 710 | 12 739 | 21 739 | 37 050 |
| New Zealand | 28 422 | 33 458 | 60 822 | 51 429 | 26 586 |
| Singapore | 4 965 | 5 685 | 8 010 | 9 254 | 10 227 |
| South Africa, Republic of | 12 948 | 21 945 | 27 828 | 19 084 | 15 946 |
| United Kingdom | 54 515 | 46 114 | 49 346 | 43 650 | 38 728 |
| United States of America | 23 012 | 38 969 | 28 027 | 19 932 | 24 351 |
| USSR | 10 361 | 29 449 | 39 084 | 45 533 | 58 959 |
| Other | 87 026 | 96 816 | 158 581 | 215 450 | 141 090 |
| Total | 394 064 | 521 720 | 662 881 | 764 410 | 685 029 |

Exports of Wool

In 1975-76 the major export markets for South Australian wool were, Japan (\$30.6 million, 26.5 per cent), and USSR (\$21.5 million, 18.6 per cent).

Overseas Exports of Wool from South Australia

| Country of Consignment | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Belgium-Luxembourg | 1 973 | 4 919 | 4 162 | 2 165 | 2 124 |
| France | 7 386 | 12 038 | 10 821 | 9 594 | 7 230 |
| Germany, Federal Republic of | 4 796 | 9 589 | 5 263 | 9 671 | 7 487 |
| Italy | 3 463 | 6 420 | 6 889 | 4 017 | 8 869 |
| Japan | 22 344 | 60 717 | 37 002 | 18 108 | 30 635 |
| Netherlands | 1 987 | 2 145 | 5 236 | 3 602 | 2 837 |
| Poland | 2 012 | 5 050 | 7 744 | 2 734 | 3 908 |
| United Kingdom | 4 798 | 7 709 | 6 080 | 3 348 | 4 144 |
| USSR | 6 898 | 13 800 | 39 084 | 18 650 | 21 532 |
| Yugoslavia | 681 | 4 794 | 7 022 | 3 650 | 2 016 |
| Other | 11 851 | 22 773 | 23 900 | 17 735 | 24 778 |
| Total | 68 189 | 149 956 | 153 202 | 93 273 | 115 560 |



Exports of Wheat

The total value of wheat exported from South Australia in 1975-76, \$99.0 million, was \$64.4 million below the record of \$163.4 million in 1974-75.

The relative importance of countries of consignment fluctuates from year to year. In 1972-73 the USSR was the principal market for wheat from South Australia (33.8 per cent) but in 1973-74 it did not take any wheat from this State. In 1974-75 it returned as a major buyer with \$22.1 million (13.5 per cent), replacing Chile as the second largest market, but dropped to third with \$13.2 million (13.3 per cent) in 1975-76.

The principal market for South Australian wheat during 1975-76 was the Arab Republic of Egypt with \$16.5 million (16.7 per cent).

Overseas Exports of Wheat from South Australia

| Country of Consignment | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-------------------------------------|---------------|---------------|---------------|----------------|---------------|
| | | | \$'000 | | |
| Arab Republic of Egypt | 14 214 | 2 595 | 8 688 | 13 094 | 16 495 |
| China: | | | | | |
| Excluding Taiwan Province | — | 1 456 | 9 551 | 15 323 | 7 868 |
| Taiwan Province only | — | — | — | — | — |
| India | — | — | 6 007 | 5 321 | 2 198 |
| Indonesia | — | 4 709 | 9 598 | 4 055 | 2 292 |
| Iraq | 8 569 | — | 11 265 | 41 303 | 13 891 |
| New Zealand | 2 278 | — | 5 116 | 12 819 | 8 110 |
| Sri Lanka | 3 464 | 5 114 | 7 232 | 11 549 | 10 299 |
| USSR | 2 648 | 15 648 | — | 22 149 | 13 193 |
| Yemen, Arab Republic of | 4 516 | 1 450 | 5 071 | 1 169 | 3 377 |
| Zambia | — | — | — | 316 | 3 535 |
| Other | 25 674 | 15 279 | 36 146 | 36 313 | 17 720 |
| Total | 61 363 | 46 251 | 98 674 | 163 411 | 98 978 |

TRADE AT PRINCIPAL PORTS

Over 73 per cent of imports are unloaded at Port Adelaide but the proportion of exports loaded there is much lower—in 1975-76 it was approximately 54 per cent. Exports from Port Pirie principally comprise pig-lead, concentrates and ores (the produce of Broken Hill) and wheat. Shipments of wheat, and to a lesser extent barley, constitute the major part of exports from Port Lincoln, Wallaroo, Ardrossan and Thevenard.

The following table shows the value of imports and exports at the principal ports during each of the years 1971-72 to 1975-76.

Value of Overseas Trade: Principal Ports, South Australia

| Port | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-----------------------------|----------------|----------------|------------------|----------------|----------------|
| | | | IMPORTS (\$'000) | | |
| Port Adelaide (a) | 163 532 | 171 379 | 270 252 | 382 742 | 365 785 |
| Port Lincoln | 1 109 | 757 | 1 455 | 3 398 | 3 739 |
| Port Pirie | 1 414 | 2 080 | 1 037 | 3 059 | 2 274 |
| Port Stanvac | 20 037 | 18 100 | 36 871 | 84 490 | 111 100 |
| Thevenard | — | — | 1 | — | — |
| Wallaroo | 618 | 360 | 979 | 1 080 | — |
| Whyalla | 3 039 | 7 303 | 3 320 | 7 309 | 18 578 |
| Total | 189 748 | 199 978 | 313 915 | 482 077 | 501 476 |

Value of Overseas Trade: Principal Ports, South Australia (continued)

| Port | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|
| EXPORTS (\$'000) | | | | | |
| Arddrossan | 6 332 | 7 454 | 14 807 | 15 751 | 2 539 |
| Port Adelaide (a) | 232 015 | 356 487 | 405 920 | 357 929 | 372 564 |
| Port Augusta | 1 970 | — | 1 394 | 1 940 | — |
| Port Giles | 1 420 | 3 172 | 8 571 | 5 506 | 3 082 |
| Port Lincoln | 29 012 | 19 230 | 42 103 | 91 230 | 58 120 |
| Port Pirie | 73 299 | 72 251 | 98 224 | 115 587 | 109 370 |
| Port Stanvac | 520 | 113 | 549 | 1 276 | 7 374 |
| Thevenard | 10 948 | 11 408 | 24 193 | 35 967 | 17 160 |
| Walleroo | 18 550 | 9 297 | 19 763 | 46 920 | 51 292 |
| Whyalla | 19 998 | 42 306 | 47 357 | 92 304 | 63 528 |
| Total | 394 064 | 521 720 | 662 881 | 764 410 | 685 029 |

(a) Includes 'Parcels Post, Adelaide'; 'Adelaide City (including Adelaide Airport)', Stenhouse Bay and Woomera.

CUSTOMS AND EXCISE DUTY

Excise duty is levied on specific goods of Australian manufacture, principally for the purpose of raising revenue. Although these excise goods do not form a part of overseas trade, the rate of excise duty is in some cases related to the import duty on similar goods. The following table gives details of the value of customs duty and excise duty collected in South Australia during the years 1973-74 to 1975-76.

Customs and Excise: Net Revenue, South Australia

| Customs Tariff and Excise Tariff Item | 1973-74 | 1974-75 | 1975-76(a) |
|---|---------|---------|------------|
| CUSTOMS | | | |
| | | \$'000 | |
| Live animals; animal products | 49 | 43 | 62 |
| Vegetable products | 49 | 64 | —1 |
| Animal and vegetable oils and fats | 51 | 15 | 137 |
| Prepared foodstuffs; beverages; vinegar; tobacco: | | | |
| Spirituous and alcoholic preparations | 4 216 | 6 181 | 7 127 |
| Tobacco, cigarettes, etc. | 957 | 770 | 1 050 |
| Other | 370 | 647 | 545 |
| Automotive spirit and other mineral products | 1 782 | 2 065 | 4 916 |
| Chemicals and products thereof | 243 | 248 | 292 |
| Plastics, resins, rubber and manufactures thereof | 1 508 | 2 023 | 2 271 |
| Hides, skins, leather and articles thereof | 200 | 213 | 283 |
| Wood and wicker | 1 609 | 1 530 | 1 905 |
| Paper-making material; paper and paper manufactures | 615 | 639 | 468 |
| Textiles | 2 835 | 4 494 | 4 718 |
| Footwear, sunshades, whips, artificial flowers, etc. | 268 | 381 | 281 |
| Earthenware, cement, china, etc. | 642 | 845 | 1 018 |
| Pearls, precious stones and metals, imitation jewellery, coin, etc. | 142 | 198 | 304 |

Customs and Excise: Net Revenue, South Australia (continued)

| Customs Tariff and Excise Tariff Item | 1973-74 | 1974-75 | 1975-76(a) |
|--|----------------|----------------|----------------|
| CUSTOMS (continued) | | \$'000 | |
| Base metals and articles thereof | 1 409 | 1 695 | 2 226 |
| Electrical and mechanical machines and machinery | 6 704 | 12 747 | 11 876 |
| Transport equipment and parts thereof | 8 096 | 18 315 | 12 812 |
| Optical, surgical and scientific instruments, etc. . . | 741 | 838 | 799 |
| Arms and ammunition and parts thereof | 8 | 25 | 18 |
| Miscellaneous manufactured articles | 750 | 977 | 1 111 |
| Works of art, antiques, etc. | 3 | 4 | 5 |
| Other customs revenue | 149 | 9 | 3 |
| Primage | 150 | -14 | 133 |
| Total net customs and primage duties | 33 546 | 54 951 | 54 357 |
| EXCISE | | | |
| Petroleum products | 59 077 | 61 100 | 57 401 |
| Spirits | 8 550 | 12 264 | 13 062 |
| Tobacco, cigars and cigarettes | 37 145 | 44 585 | 51 656 |
| Other | 34 433 | 36 087 | 53 921 |
| Total net excise duties | 139 205 | 154 036 | 176 040 |
| Total net customs, primage and excise revenue | 172 751 | 208 988 | 230 397 |

(a) Duties for 1975-76 are 'gross' because statistics of the credits of duty are no longer available. Total customs primage and excise refunds and drawbacks for 1973-74 and 1974-75 were \$1 310 000 and \$2 254 000 respectively.

10.3 PRICES

MEASUREMENTS OF PRICE MOVEMENTS

The prices of a wide range of commodities and services are recorded at regular intervals by the Australian Statistician for the purpose of compiling various price indexes or for publication of series showing actual price levels.

Price indexes aim to measure the degree of change in price levels, or more specifically the proportionate change in the aggregate price, of specified quantities and qualities of a list of selected items. These indexes measure changes through time and it is traditional for presentation purposes to select a certain year, known as the base year, to equate the average aggregate price (of the list of items) in that year to 100 or some other suitable number, and to adjust other years on a proportionate basis.

When index numbers for different places are compared (e.g. Consumer Price Index, Capital Cities) the only legitimate comparison is the relative change i.e. that prices increased or decreased more in one place than another; even when a common base year is used the actual levels of prices, equated to 100 in each case, may differ substantially from place to place; in addition, selected items, qualities or weights may differ from place to place.

In constructing a price index it is necessary to limit attention to a selected list of items because it would clearly be impossible to determine at regular intervals the price of all items entering into a given field of expenditure (e.g. household expenditure in the case of the Consumer Price Index). The list of items selected must be as representative as possible of the field to be covered and consist of items for which price variations can be ascertained accurately at regular intervals. Each item must be assigned a relative importance (weight) in approximate proportion to actual expenditures on that item within the total field of expenditure being considered. Particular care must be taken to detect, assess, and make allowance for changes in quality of selected items.

Over time it becomes necessary to substitute new grades, qualities or types of articles for those formerly used as indicators of price movements in an effort to keep an index representative of current patterns of expenditure. These substitutions can normally be achieved without invalidating the index. From time to time major changes in the overall pattern of expenditure are noted, and in the past these have prompted the abandonment of an existing index in favour of a different index, the composition and weighting of which were more representative of expenditure at that time.

RETAIL PRICE INDEXES

A brief historical review of early price indexes was included on page 494 of the *South Australian Year Book* 1970. Details of movements in the 'C' Series Index from 1901 to 1959 are shown in the Statistical Summary Appendix A.

Consumer Price Index

The Consumer Price Index (CPI) is a chain of 'fixed weight aggregative' linked indexes with significant changes in composition and weighting effected at relatively short intervals. Links have previously been effected at June quarter 1952, June quarter 1956, March quarter 1960, December quarter 1963, December quarter 1968 and December quarter 1973 with a minor link at September quarter 1974. A further link in the series was made at September quarter 1976.

During each period between links the weighting pattern remains unchanged. At times of linking the weighting pattern is brought up-to-date and the content of the Index is reviewed. Under this method, in effect, average percentage price movements are assessed on one pattern up to the time of the link and on another pattern thereafter. The process of linking ensures that the series reflects only price variations and not differences in cost of the old and new combinations and lists of items. The introduction of new items and weights by linking does not, of itself, raise or lower the level of the Index.

There are no ideal points of time for linking the various series since, particularly in times of disparate and large price movements, the application of different weights to the same price series over the same periods of time would cause differences in aggregative changes. The ninth series was introduced from September quarter 1976, the earliest possible stage following availability of detailed data from the Household Expenditure Survey 1974-75.

The structure of the new series is derived from this Survey which was the first Survey of this type conducted by the Australian Bureau of Statistics. This enables the Index to be related more specifically to a 'target group' of the population (see next paragraph); and to have appropriate separate weighting patterns

for each of the seven cities for which index numbers are compiled. The ninth series measures variations in retail prices for goods and services representing more than 90 per cent of defined household expenditure by the target group.

The target group for the ninth CPI series comprises metropolitan wage and salary earner households with total income of more than the minimum adult wage but excluding the top 10 per cent of such households. 'Metropolitan wage and salary earner households' are those households (as defined in the Household Expenditure Survey) which derive at least 75 per cent of total income from wages and salaries. The minimum adult wage is that for each capital city separately. The 'top 10 per cent' of households excluded were those whose incomes are more than the ninth decile of the population of wage and salary earner households in all metropolitan areas combined.

This target group was determined as a suitable current basis which was also in keeping with the past general description of the CPI as a measure of variations in prices of goods and services as affecting a high proportion of the expenditure of wage earner households in the aggregate. A special tabulation from the Household Expenditure Survey 1974-75 for households within this target group supplied the basic weighting pattern for the Index. The households included had average weekly total household incomes which ranged from approximately \$60 to \$370 in 1974-75.

The structure of the Index after the eighth link is shown in the table below which describes the weights of the groups into which the Index has been subdivided in the form of percentages contributed by each group to the total Index aggregate for September quarter 1976. These percentages indicate the relative influence given to the various components in measuring the degree of price change from September quarter 1976 (*i.e.* from the beginning of the new linked series). These proportions represent the amounts of expenditure shown by the 1974-75 Household Expenditure Survey (for the target group) revalued at the price levels of September quarter 1976.

**Consumer Price Index: Six State Capital Cities Combined Composition
September Quarter 1976**

| Group | Percentage Contribution to Total Index Aggre- gate (a) |
|---|--|
| Food | 21·026 |
| Clothing | 10·141 |
| Housing | 13·544 |
| Household equipment and operation | 14·761 |
| Transportation | 18·453 |
| Health and personal care | 3·950 |
| Recreation | 7·878 |
| Tobacco and alcohol | 10·247 |
| All Groups | 100·000 |

(a) Percentage contributions shown are in proportion to expenditure in 1974-75 valued at relevant prices of September quarter 1976.

The wide range of commodities and services in the Consumer Price Index are arranged in eight major groups, with index numbers compiled for each of these groups as well as a total for all items. Index numbers for Adelaide for these individual groups and for 'All Groups' are recorded in the next table.

Consumer Price Index, Adelaide (a)

Base Year: 1966-67 = 100.0

| Quarter | Food | Clothing | Housing | Household Equipment and Operation | Trans- portation | Tobacco and Alcohol | Health and Personal Care | Recrea- tion | All Groups |
|--------------|-------|----------|---------|--|---------------------|---------------------------|-----------------------------------|-----------------|---------------|
| 1974: | | | | | | | | | |
| March | 149.7 | 144.2 | 152.7 | 128.2 | 142.6 | 143.5 | 152.9 | n.a. | 145.4 |
| June | 157.8 | 155.0 | 161.0 | 132.0 | 147.7 | 143.9 | 156.8 | n.a. | 151.7 |
| September | 160.3 | 161.8 | 169.9 | 140.1 | 159.7 | 157.2 | 166.9 | n.a. | 159.4 |
| December | 161.2 | 173.4 | 181.6 | 147.8 | 167.6 | 161.0 | 182.4 | n.a. | 166.4 |
| 1975: | | | | | | | | | |
| March | 163.4 | 176.2 | 191.3 | 153.3 | 178.1 | 171.7 | 208.1 | n.a. | 173.8 |
| June | 170.0 | 183.9 | 198.2 | 155.7 | 182.3 | 178.0 | 207.9 | n.a. | 179.3 |
| September | 171.5 | 189.6 | 204.0 | 159.9 | 188.5 | 182.9 | (b)136.3 | n.a. | (b)178.2 |
| December | 176.0 | 202.2 | 221.3 | 173.9 | 194.6 | 208.5 | (b)141.2 | n.a. | (b)188.6 |
| 1976: | | | | | | | | | |
| March | 185.9 | 205.0 | 228.0 | 177.2 | 198.7 | 214.2 | 145.2 | n.a. | 194.6 |
| June | 189.0 | 217.4 | 235.0 | 181.4 | 203.1 | 219.2 | 153.4 | n.a. | 200.4 |
| September | 197.4 | 220.7 | 241.3 | 184.2 | 207.6 | 220.7 | 156.7 | 100.0 | 205.5 |
| December | 203.8 | 235.8 | 252.5 | 187.0 | 213.5 | 224.7 | (b)310.2 | 101.0 | (b)220.0 |

(a) For 'Health and Personal Care' group index, base year December quarter 1968=100.0 and for 'Recreation' group index, base year September quarter 1976=100.0.

(b) Affected by Medibank changes.

The 'All Groups' index for Adelaide is shown in the following table with that for each of the other capital cities. It is emphasised that these numbers reflect changes in prices within each individual city, but they do *not* measure differences in the level of prices between cities, and the Consumer Price Index should *not* be regarded as a 'cost of living' index.

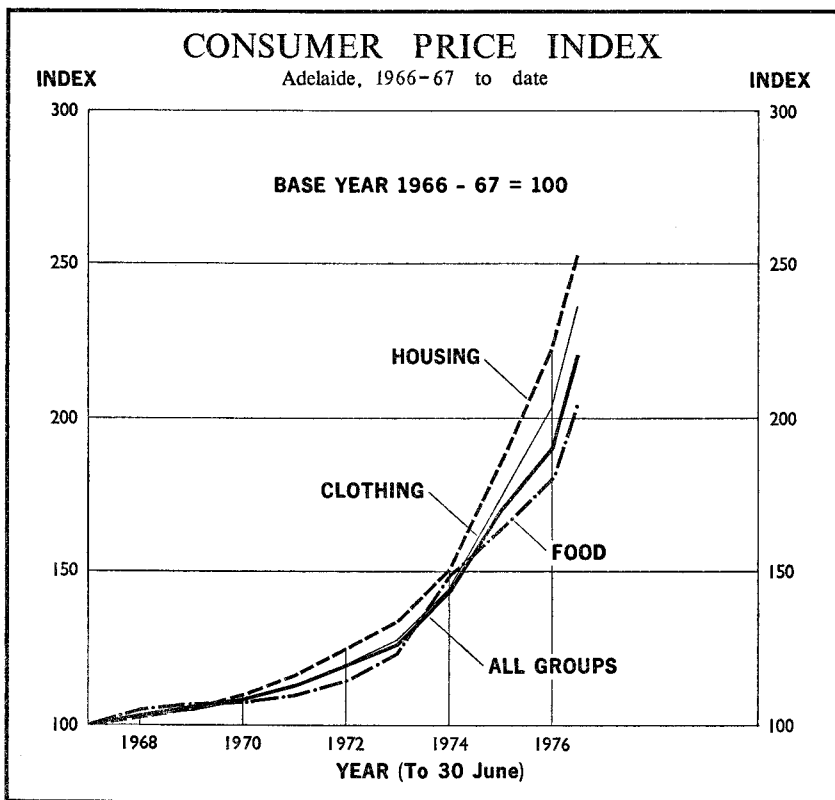
Consumer Price Index, Adelaide and Other Capital Cities(a)

| Year | Sydney | Melbourne | Brisbane | Adelaide | Perth | Hobart | Six State Capital Cities | Canberra |
|---------|--------|-----------|----------|----------|-------|--------|-----------------------------------|----------|
| 1966-67 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1967-68 | 103.2 | 103.7 | 103.3 | 102.9 | 102.9 | 104.6 | 103.3 | 102.6 |
| 1968-69 | 106.2 | 106.2 | 105.5 | 105.3 | 105.5 | 106.1 | 106.0 | 104.4 |
| 1969-70 | 110.6 | 108.7 | 108.4 | 108.2 | 109.4 | 108.5 | 109.4 | 107.4 |
| 1970-71 | 116.8 | 113.1 | 114.2 | 112.5 | 114.1 | 112.6 | 114.6 | 113.0 |
| 1971-72 | 126.3 | 119.7 | 121.6 | 119.2 | 120.7 | 119.9 | 122.4 | 119.4 |
| 1972-73 | 133.9 | 127.2 | 128.6 | 126.5 | 127.3 | 126.7 | 129.8 | 126.3 |
| 1973-74 | 151.3 | 144.0 | 146.1 | 143.9 | 140.6 | 142.6 | 146.6 | 142.8 |
| 1974-75 | 176.1 | 167.9 | 168.7 | 169.7 | 166.1 | 166.7 | 171.1 | 164.9 |
| 1975-76 | 199.0 | 189.5 | 190.9 | 190.5 | 189.6 | 190.0 | 193.3 | 187.3 |

(a) Base year 1966-67 = 100.0.

The quarterly information discussed above was supplemented in April 1973 by the release of monthly Consumer Price Index numbers for the food group and its component sub-groups for the period March 1972 to March 1973.

Further details and a continuation of the series may be obtained from the bulletin *Consumer Price Index: Monthly Food Group Index Numbers* (Reference No. 9.11) published by the Australian Statistician.



OTHER PRICE INDEXES

At December 1976 the following indexes covering non-retail sectors of the economy had been prepared and published by the Australian Statistician:

Export Price Index,
Price Index of Electrical Installation Materials,
Price Index of Metallic Materials Used in the Manufacture of Fabricated Metal Products,
Price Index of Copper Materials Used in the Manufacture of Electrical Equipment,
Price Index of Materials Used in Manufacturing Industry,
Price Index of Articles Produced by Manufacturing Industry,
Price Index of Materials Used in House Building,
Price Index of Materials Used in Building Other than House Building.

Separate State figures are published for the latter two indexes, and these are further explained below. A brief explanation of the Price Index of Articles Produced by Manufacturing Industry is also included, as it was first published in 1976. Details of the other indexes are available in bulletins published by the Australian Statistician.

Price Index of Materials Used in House Building

This Index measures changes in prices of selected representative materials used in the construction of houses and is complementary to the Price Index of Materials Used in Building Other than House Building which was introduced in 1969.

It is a fixed weights index, the composition of which is in accordance with the usage of materials in actual houses which were selected as representative for the purpose. The Index does not purport to represent buildings of any kind other than houses.

In the interests of uniformity and ease of use the reference base of the Index in the year 1966-67 = 100 the same as that used for the Price Index of Materials Used in Building Other than House Building. However, because of the later time at which the weighting source data were collected, the weighting base approximates more closely the year 1968-69. Each State capital city has a unique weighting pattern which reflects the difference in the estimated relative importance of given items as between cities. The weighting pattern for each capital city is applied to local price measures in calculating indexes for that city.

The price series used relate to specified standards of each commodity and are obtained from suppliers of materials used in house building. The Index includes 50 items in 11 groups combined in an 'All Groups' index, the selection of materials included being based on local usage. Some items carry the weight of similar items not directly priced and all items are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality. Prices are collected at or as near as possible to the mid-point of the month to which the Index refers. Figures are published to one decimal place to avoid distortions which would occur in rounding the index numbers to the nearest whole number.

The weighting pattern used in the Index and applicable to Adelaide is shown in the following table.

**Price Index of Materials Used in House Building: Composition and
Weighting Pattern, Adelaide
Base Year: 1966-67**

| Group | Percentage Contribution of Group to All Groups Index |
|---|--|
| | % |
| Concrete mix, cement and sand | 8.13 |
| Cement products | 6.98 |
| Clay bricks, tiles, etc. | 14.85 |
| Timber, board and joinery | 35.52 |
| Steel products | 6.67 |
| Other metal products | 7.24 |
| Plumbing fixtures, etc. | 3.42 |
| Electrical installation materials | 1.37 |
| Installed appliances | 4.20 |
| Plaster and plaster products | 4.19 |
| Miscellaneous materials | 7.43 |

The index numbers for separate groups of items and all groups combined for Adelaide and the weighted average index numbers for the six State capital cities are shown in the next table.

**Price Index of Materials Used in House Building
(Base of each Index: 1966-67 = 100.0)**

| Group | Adelaide | | | Weighted Average Six State Capital Cities | | |
|--|--------------|--------------|--------------|--|--------------|--------------|
| | 1973-74 | 1974-75 | 1975-76 | 1973-74 | 1974-75 | 1975-76 |
| Concrete, etc. | 132.9 | 160.9 | 193.2 | 137.5 | 165.7 | 195.1 |
| Cement products | 157.6 | 205.0 | 237.4 | 154.3 | 193.1 | 227.0 |
| Clay bricks, tiles, etc. | 143.4 | 181.4 | 209.1 | 146.8 | 180.3 | 205.1 |
| Timber, board, etc. | 182.9 | 230.5 | 255.9 | 169.1 | 203.5 | 226.2 |
| Steel products | 152.3 | 190.0 | 232.5 | 153.8 | 192.1 | 229.3 |
| Other metal products | 149.3 | 170.1 | 188.2 | 146.3 | 170.3 | 187.1 |
| Plumbing fixtures, etc. | 148.4 | 180.4 | 207.1 | 143.2 | 174.5 | 201.5 |
| Electrical installation materials | 144.0 | 163.4 | 174.6 | 146.4 | 168.3 | 183.5 |
| Installed appliances | 122.4 | 147.6 | 169.2 | 117.7 | 146.4 | 165.9 |
| Plaster and plaster products | 126.5 | 155.6 | 178.4 | 122.2 | 147.8 | 167.7 |
| Miscellaneous materials | 143.9 | 176.4 | 203.0 | 135.0 | 161.5 | 187.9 |
| All Groups | 157.2 | 195.4 | 222.5 | 151.3 | 183.4 | 208.1 |

The 'All Groups' index for Adelaide and each of the other State capitals is shown in the following table. It is emphasised that these numbers reflect price changes within each individual city and that they do not measure differences in the level of prices between cities.

Price Index of Materials Used in House Building
All Groups, State Capital Cities
 (Base of each Index: 1966-67 = 100·0)

| Period | Sydney | Melbourne | Brisbane | Adelaide | Perth | Hobart | Weighted Average Six State Capital Cities |
|---------------|--------|-----------|----------|----------|-------|--------|---|
| Year: | | | | | | | |
| 1971-72.. . . | 126·1 | 118·9 | 124·8 | 124·8 | 121·1 | 120·7 | 122·7 |
| 1972-73.. . . | 135·6 | 126·5 | 133·8 | 134·8 | 126·9 | 130·8 | 131·1 |
| 1973-74.. . . | 158·0 | 147·8 | 152·2 | 157·2 | 141·8 | 145·5 | 151·3 |
| 1974-75.. . . | 189·4 | 178·4 | 187·0 | 195·4 | 172·4 | 179·1 | 183·4 |
| 1975-76.. . . | 211·1 | 200·1 | 218·5 | 222·5 | 201·9 | 209·2 | 208·1 |

Price Index of Materials Used in Building Other than House Building

This Index measures changes in prices of selected materials used in the construction of buildings other than houses and low-rise flats. It is a fixed-weights index, the composition of which is in accordance with the materials usage in building projects selected as representative for the purpose: such usage was derived from reported values of each material used in selected representative buildings constructed in or about 1966-67.

The building types directly represented include high-rise flats (generally those exceeding three-storeys), offices, factories, health buildings, education buildings and other commercial premises.

The price series used relate to specified standards of each commodity and are obtained in all State capital cities from representative suppliers of materials used in building. Prices are collected at or as near as possible to the mid-point of the month to which the index refers. Items are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality. Figures are published to one decimal place to avoid distortions which would occur in rounding the index numbers to the nearest whole number.

The Index includes 72 items combined in 11 groups in an 'All Groups' index. The weighting pattern used in the Index is shown below. In calculating indexes for each State capital city a single weighting pattern for the whole of Australia is applied to price measures obtained, with a few minor exceptions, in each relevant city.

Price Index of Materials Used in Building Other than House Building
Composition and Weighting Pattern
Base Year: 1966-67

| Group | Percentage Contribution of Group to All Groups Index % |
|---|---|
| Concrete mix, cement, sand, etc. | 10.41 |
| Cement products | 3.64 |
| Bricks, stone, etc. | 5.28 |
| Timber, board and joinery | 11.90 |
| Steel and iron products | 30.58 |
| Aluminium products | 6.01 |
| Other metal products | 2.59 |
| Plumbing fixtures | 1.19 |
| Miscellaneous materials | 7.09 |
| Electrical installation materials | 8.61 |
| Mechanical services components | 12.70 |

The next table shows, for separate groups of items and all groups combined, the index numbers for Adelaide and the weighted average index numbers for the six State capital cities.

Wholesale Price Index of Materials Used in Building Other than House Building
(Base of each Index: 1966-67 = 100.0)

| Group | Adelaide | | | Weighted Average Six State Capital Cities (a) | | |
|-------------------------------------|--------------|--------------|--------------|--|--------------|--------------|
| | 1973-74 | 1974-75 | 1975-76 | 1973-74 | 1974-75 | 1975-76 |
| Concrete, etc. | 131.0 | 156.1 | 185.7 | 136.0 | 164.6 | 193.0 |
| Cement products | 151.8 | 194.4 | 233.8 | 147.7 | 183.9 | 220.0 |
| Bricks, stone, etc. | 149.2 | 191.4 | 221.1 | 146.3 | 179.4 | 202.7 |
| Timber, joinery, etc. | 165.7 | 212.4 | 244.3 | 160.2 | 194.7 | 219.3 |
| Steel and iron products | 147.6 | 187.5 | 225.1 | 148.8 | 189.2 | 223.4 |
| Aluminium products | 136.5 | 163.7 | 185.1 | 138.4 | 169.2 | 193.6 |
| Other metal products | 156.4 | 160.6 | 176.6 | 158.5 | 162.7 | 173.3 |
| Plumbing fixtures | 161.4 | 204.6 | 235.4 | 159.6 | 197.7 | 232.1 |
| Miscellaneous materials | 134.9 | 168.6 | 192.3 | 134.2 | 163.4 | 186.8 |
| Electrical installation materials | 138.3 | 157.4 | 177.4 | 138.3 | 157.4 | 177.4 |
| Mechanical services components | 143.7 | 181.6 | 201.4 | 143.9 | 181.3 | 201.3 |
| Special purpose index (b) | 146.9 | 183.5 | 215.5 | 147.0 | 181.3 | 210.1 |
| All Groups | 145.8 | 181.0 | 210.4 | 145.8 | 179.2 | 206.2 |

(a) See previous table for weighting pattern.

(b) All groups excluding electrical installation materials and mechanical services components.

The 'All Groups' index for Adelaide is shown in the following table with that for each of the other State capital cities. It is emphasised that these numbers

reflect price changes within each individual city, but they do not measure differences in the level of prices between cities.

Price Index of Materials Used in Building Other than House Building
All Groups, State Capital Cities
(Base of each Index: 1966-67 = 100·0)

| Period | Sydney | Melbourne | Brisbane | Adelaide | Perth | Hobart | Weighted Average Six State Capital Cities |
|--------------|--------|-----------|----------|--------------|-------|--------|---|
| Year: | | | | | | | |
| 1971-72.. .. | 122·4 | 123·9 | 124·4 | 122·7 | 121·3 | 122·6 | 123·0 |
| 1972-73.. .. | 127·2 | 131·2 | 130·4 | 129·8 | 126·3 | 129·7 | 128·9 |
| 1973-74.. .. | 144·1 | 148·0 | 149·0 | 145·8 | 142·9 | 143·8 | 145·8 |
| 1974-75.. .. | 176·0 | 180·6 | 186·6 | 181·0 | 176·7 | 179·3 | 179·2 |
| 1975-76.. .. | 199·0 | 209·4 | 216·3 | 210·4 | 208·3 | 210·4 | 206·2 |

Price Index of Articles Produced by Manufacturing Industry

The scope of the Index is those articles which are produced in sectors of Australian manufacturing industry as defined by the Australian Standard Industrial Classification (ASIC) for sale or transfer to other sectors or for export or for use as capital equipment. The Index may be described as being on a net sector basis because articles sold or transferred to other establishments within that particular manufacturing sector for further processing are excluded.

Index numbers for the manufacturing division and for selected subdivisions are shown in the following table.

Price Index of Articles Produced by Manufacturing Industry, Australia
(Base of each Index: 1968-69 = 100·0)

| ASIC Subdivision | 1969-70 | 1971-72 | 1973-74 | 1975-76 |
|---|--------------|--------------|--------------|--------------|
| Food, beverages and tobacco: | | | | |
| Total.. .. | 105·1 | 117·3 | 142·8 | 163·5 |
| Excluding meat and abattoir by-products, and raw sugar.. .. | 101·6 | 112·3 | 129·5 | 168·5 |
| Clothing and footwear | 102·5 | 112·8 | 136·7 | 185·2 |
| Wood, wood products and furniture .. | 104·5 | 118·4 | 148·8 | 219·9 |
| Glass, clay and other non-metallic mineral products.. .. | 102·9 | 114·7 | 129·6 | 183·2 |
| Fabricated metal products | 102·7 | 116·5 | 142·3 | 217·1 |
| Transport equipment | 102·4 | 111·3 | 124·9 | 175·8 |
| Other industrial machinery and equipment and household appliances | 103·2 | 114·0 | 132·4 | 179·2 |
| Manufacturing Division Index | 103·9 | 113·9 | 134·6 | 177·8 |

More detail on the composition and structure of this Index and/a monthly series from 1968-69 to the present is contained in the bulletin *Price Index of Articles Produced by Manufacturing Industry* (Reference No. 9.14) published by the Australian Statistician.

COMMODITY PRICES

Retail Prices of Food

The next table shows the average retail prices of selected food items in Adelaide during recent years. Items included are those which are considered identical or sufficiently comparable from place to place to warrant publication of comparative prices.

Average Retail Prices of Selected Food and Grocery Items, Adelaide

| Item | Unit | 1973 | 1974 | 1975 | 1976 |
|--|--------|----------|-------|-------|-------|
| Cents | | | | | |
| Bread, ordinary white (a) | 900 g | 25.0 | 31.2 | 38.8 | 45.7 |
| Self-raising flour | 1 kg | 21.8 | 24.9 | 29.5 | 35.1 |
| Rice | 500 g | 18.5 | 21.1 | 24.9 | 30.2 |
| Breakfast cereal, corn based | 500 g | n.a. (b) | 47.9 | 55.6 | 59.7 |
| Biscuits, dry | 225 g | n.a. (b) | 27.8 | 31.7 | 34.9 |
| Peaches, canned | 822 g | 31.7 | 40.3 | 47.4 | 57.6 |
| Peas, frozen | 500 g | n.a. | n.a. | n.a. | 56.5 |
| Potatoes | 1 kg | 23.9 | 34.0 | 19.5 | 34.3 |
| Onions | 1 kg | 39.5 | 38.3 | 35.6 | 43.4 |
| Butter | 500 g | 60.5 | 63.9 | 73.1 | 81.8 |
| Cheese, processed | 250 g | 32.0 | 35.1 | 44.2 | 47.1 |
| Margarine, table, poly-unsaturated | 500 g | n.a. (b) | 67.2 | 77.0 | 76.7 |
| Eggs (55 gram) | doz. | 66.6 | 80.7 | 88.7 | 101.2 |
| Milk; fresh, bottled (a) | 600 ml | 12.0 | 14.1 | 17.0 | 18.7 |
| Bacon rashers, pre-packed | 250 g | 61.7 | 80.2 | 92.5 | 107.0 |
| Chicken, frozen | 1 kg | n.a. | n.a. | n.a. | 161.7 |
| Sausages | 1 kg | 87.0 | 107.5 | 98.1 | 106.6 |
| Tea | 250 g | 33.1 | 34.3 | 44.6 | 45.6 |
| Coffee, instant, jar | 150 g | n.a. | n.a. | n.a. | 153.8 |
| Sugar | 2 kg | 46.2 | 45.7 | 48.9 | 53.0 |
| Salmon, imported pink | 220 g | n.a. (b) | 70.6 | 73.1 | 79.9 |
| Spaghetti (in tomato sauce) | 440 g | n.a. (b) | 22.1 | 25.5 | 29.6 |
| Tomato sauce | 300 ml | n.a. (b) | 28.3 | 33.4 | 35.3 |
| Prepared baby food | 125 g | n.a. (b) | 12.3 | 13.3 | 15.5 |
| Beef: | | | | | |
| Rib (without bone) | 1 kg | 176.4 | 188.8 | 168.5 | 188.3 |
| Rump steak | 1 kg | 299.7 | 304.4 | 266.9 | 307.9 |
| Corned silverside | 1 kg | 189.4 | 197.0 | 173.7 | 195.5 |
| Lamb: | | | | | |
| Leg | 1 kg | 143.8 | 174.0 | 177.7 | 198.7 |
| Loin chops | 1 kg | 168.9 | 192.2 | 198.4 | 228.1 |
| Forequarter chops | 1 kg | 152.2 | 174.6 | 172.1 | 197.4 |
| Pork: | | | | | |
| Leg | 1 kg | 171.4 | 235.5 | 275.9 | 321.5 |
| Chops | 1 kg | 172.7 | 240.3 | 277.5 | 325.4 |

(a) Delivered. (b) Average for six months July-December 1974.

A comparison of the prices of various food items in Adelaide with the prices of those same items in the other capital cities is given in the following table.

Average Retail Prices of Selected Food and Grocery Items, Australian Capital Cities, September 1976

| Item | Unit | Sydney | Mel- bourne | Brisbane | Adelaide | Perth | Hobart | Canberra |
|--|--------|---------|----------------|----------|----------|-------|---------|----------|
| Cents | | | | | | | | |
| Bread, ordinary white loaf (a) | 900 g | 45.0 | 44.0 | 40.6 | 47.0 | 43.0 | (b)46.0 | 46.0 |
| Self-raising flour | 1 kg | 39.0 | 41.2 | 33.6 | 35.5 | 43.1 | 47.6 | 41.5 |
| Breakfast cereal, corn based | 500 g | 60.9 | 60.3 | 61.0 | 61.5 | 73.7 | 67.6 | 62.5 |
| Biscuits, dry | 225 g | 34.3 | 35.9 | 32.5 | 34.9 | 40.5 | 36.4 | 34.1 |
| Tea | 225 g | 44.3 | 42.2 | 41.6 | 39.8 | 41.7 | 46.8 | 43.3 |
| Rice | 500 g | 28.8 | 31.6 | 30.9 | 32.2 | 32.0 | 31.9 | 30.3 |
| Jam, apricot | 680 g | 56.2 | 58.0 | 55.4 | 56.8 | 61.8 | 65.7 | 57.7 |
| Peaches, canned | 822 g | 53.2 | 56.9 | 63.5 | 62.5 | 61.0 | 69.1 | 55.2 |
| Potatoes | 1 kg | 36.8 | 33.5 | 32.0 | 36.6 | 36.6 | 30.9 | 36.2 |
| Onions | 1 kg | 47.0 | 50.0 | 40.6 | 46.7 | 54.7 | 43.0 | 54.5 |
| Butter, factory | 500 g | 82.5 | 79.9 | 83.3 | 81.7 | 81.0 | 86.5 | 87.3 |
| Cheese, processed | 250 g | 45.3 | 47.0 | 47.2 | 47.4 | 45.6 | 46.6 | 45.8 |
| Margarine, table, poly-unsaturated | 500 g | 77.8 | 81.3 | 76.7 | 80.8 | 74.9 | 79.7 | 69.0 |
| Eggs (55 gram) | doz. | 94.2 | 103.0 | 103.3 | 106.0 | 103.3 | 113.3 | 92.4 |
| Milk; fresh, bottled (a) | 60 ml | 23.5 | 18.0 | 21.0 | 19.0 | 22.0 | 18.0 | 20.0 |
| Bacon, rashers, pre-packed | 250 g | 98.1 | 111.5 | 97.5 | 108.6 | 92.2 | 114.4 | 96.7 |
| Sausages | 1 kg | 93.7 | 109.8 | 108.5 | 110.2 | 98.5 | 125.7 | 103.8 |
| Salmon, imported pink | 220 g | 76.9 | 82.2 | 84.5 | 82.6 | 83.2 | 86.4 | 80.3 |
| Tomato sauce | 300 ml | (c)60.2 | 34.6 | 39.0 | 35.6 | 38.2 | 39.6 | 34.6 |
| Spaghetti (in tomato sauce) | 440 g | 29.6 | 32.5 | 32.1 | 30.3 | 32.9 | 33.0 | 30.2 |
| Prepared baby food | 125 g | 14.8 | 16.1 | 17.0 | 16.1 | 17.3 | 17.0 | 15.2 |
| Beef: | | | | | | | | |
| Rib (without bone) | 1 kg | 166.4 | 171.1 | 172.8 | 204.8 | 151.7 | 175.0 | 165.8 |
| Rump Steak | 1 kg | 312.2 | 306.7 | 263.0 | 319.7 | 293.9 | 343.3 | 384.7 |
| Corned silverside | 1 kg | 173.3 | 174.8 | 185.8 | 198.6 | 181.0 | 212.7 | 193.6 |
| Lamb: | | | | | | | | |
| Leg | 1 kg | 211.9 | 192.0 | 229.5 | 218.0 | 219.8 | 241.6 | 255.7 |
| Loin chops | 1 kg | 221.3 | 228.2 | 236.0 | 251.1 | 228.4 | 244.3 | 280.0 |
| Forequarter chops | 1 kg | 173.1 | 157.6 | 236.0 | 217.8 | 199.7 | 220.2 | 188.7 |
| Pork: | | | | | | | | |
| Leg | 1 kg | 280.9 | 265.2 | 263.5 | 321.9 | 300.0 | 306.9 | 309.5 |
| Chops | 1 kg | 259.5 | 269.4 | 274.0 | 325.0 | 292.3 | 301.2 | 305.6 |

- (a) Delivered.
- (b) Wrapped.
- (c) Sydney 600 ml bottle.

Other Commodity Prices

South Australian prices of agricultural products are shown in the table on page 480, and separate details of wheat, barley, wool and livestock are given under the appropriate headings in Part 9.1.

PRICE CONTROL

Following the outbreak of the 1939-45 War the Commonwealth Government, acting under the authority of the National Security Act, established price control in Australia. A Commonwealth Prices Commissioner was appointed and given extensive powers in the regulation of prices. The National Security Act expired at the end of 1946 but temporary legislation provided for the continuation of price control until the end of 1948.

During 1948 the Commonwealth Government held a referendum seeking authority for permanent control over prices and rents. However, the proposal was rejected and the States agreed to assume responsibility for price control. In South Australia the necessary administrative structure was established by the Prices Act of 1948. Provision was made for the retention of existing Commonwealth Government price regulation orders altered in accordance with the State Act.

Under the provisions of the Prices Act, 1948-1976 the South Australian Prices and Consumer Affairs Branch determines maximum prices for controlled goods and services and investigates complaints concerning excessive prices for goods and charges for services whether subject to price control or not. Special investigations are carried out on behalf of the Government by the Branch which is responsible also for many aspects of consumer protection which are discussed in more detail on pages 207-9.

The Commonwealth Government held a further referendum in December 1973 seeking power to control the level of prices and incomes, but, as was the case in 1948, the proposal was rejected.

RENT CONTROL

Rent control was introduced in South Australia at the beginning of the 1939-45 War, with the passing of the Increase in Rent (War Restrictions) Act, 1939, which pegged rents at the level prevailing at 1 September 1939. In 1942 this Act was replaced by the Landlord and Tenant (Control of Rents) Act. Although providing the same benchmark, this Act allowed the South Australian Housing Trust to determine a variation in rent, upon application by either the landlord or tenant, or in certain cases on its own initiative. An appeal against such a determination could be made to a Local Court. From the beginning of 1943 to the end of 1962, 60 180 applications for rent determinations were dealt with by the Trust, of which 29 were varied by a Local Court.

Following an inquiry held in 1951 on the future of rent control, proportionate loadings were introduced to allow for increases in property costs since 1939. The gradual relaxation of rent control was achieved through periodic extensions of these loadings and through the exclusion of long-term leases from the provisions of the Act.

At the end of 1962 the Landlord and Tenant (Control of Rents) Act was replaced by the Excessive Rents Act, which currently provides that the tenant of any premises, except where a lease of two years or more exists, may apply to a Local Court to determine whether the rent is excessive.

Sub-standard Housing

To regulate the rents for sub-standard housing the Housing Improvement Act, 1940-1973 vests in the South Australian Housing Trust power to declare a house sub-standard, and fix a maximum rent on it for such time as the declaration remains in force.

The Act provides that before the Trust declares any house to be sub-standard, it must notify the owner of its intention to do so and then allow a period of time for the necessary improvements to be made. If the house is subsequently found

to remain in a sub-standard condition, a maximum rent fixation is made and then strictly controlled for such time as the house remains in a sub-standard classification.

In 1975-76 the Trust inspected 2 228 houses, commenced proceedings under the Housing Improvement Act on 746 of these properties, and fixed maximum rents on 396 houses.

10.4 TRANSPORT

A network of sea, rail, road and air services has been established between South Australia and the other States of Australia. Transport between the eastern States and Western Australia, and to a lesser extent Northern Territory, is made *via* South Australian services. Distances between Adelaide and other Australian capital cities, and Darwin, are shown in the following table.

Distances Between Adelaide and Other Capital Cities

| Method of Travel | Canberra | Sydney | Melbourne | Brisbane | Perth | Hobart | Darwin |
|------------------|----------|--------|-----------|-----------|-------|-----------|--------|
| Kilometres | | | | | | | |
| Road (a) | 1 212 | 1 432 | 747 | 2 443 | 2 721 | .. | 3 193 |
| Rail . . . | 1 619 | 1 654 | 777 | 2 641 | 2 654 | .. | .. |
| Sea . . . | .. | 1 787 | 954 | 2 741 (b) | 2 552 | 1 430 (c) | 5 821 |
| Air . . . | 988 | 1 196 | 660 | 1 967 | 2 216 | 1 283 | 2 766 |

(a) In some cases shorter but less popular routes are available.

(b) Fremantle. (c) *Via* Fremantle.

TRANSPORT CONTROL AND OPERATIONS

STATE TRANSPORT AUTHORITY

The State Transport Authority was constituted under the State Transport Authority Act, 1974, which became operative on 18 April 1974. The Authority consists of seven members including a full-time Chairman. The concept underlying the establishment of the Authority is that all Government owned public transport services throughout the State should be operated by a single Authority.

The State Transport Authority Act, 1974 vested in the Authority, power to co-ordinate all systems of public transport and powers of direction in respect of the South Australian Railways Commissioner, the Municipal Tramways Trust and the Transport Control Board. Provisions of the Act also required the Authority to recommend to the Minister the manner and means by which the Authority could assume and exercise the powers and functions of the above authorities.

The State Transport Authority Act Amendment Act was passed in November 1975, and provides for the dissolution of the statutory entity of the three authorities, and the assumption of their powers and functions by the State

Transport Authority. The Act was proclaimed into force on 8 December 1975 at which time the functions of the Transport Control Board, South Australian Railways Commissioner and the Municipal Tramways Trust were assumed by the Authority.

ROAD PASSENGER TRANSPORT CONTROL

The Transport Control Board, constituted under the Road and Railway Transport Act, 1930-1971, was concerned with the regulation and rationalisation of passenger transport services and in particular the co-ordination of road and railway passenger services. These powers have now been assumed by the State Transport Authority.

The Authority has power to declare roads outside a radius of 16 kilometres from the General Post Office, Adelaide to be controlled routes. Licences issued by the Authority specify the route or routes over which the licensee is permitted to operate vehicles; licences have a currency of seven years but many special permits are issued for periods up to twelve months.

At 30 June 1976 current licences totalled forty-three. Special annual permits included 118 charter coach, 124 hire car and 185 miscellaneous passenger permits while special permits for short periods issued during the year covered 5 219 passenger vehicles.

RAILWAYS

In Part 8.4, railways in South Australia were discussed under the headings of ownership and control, and standardisation of railway gauges. It was mentioned that both the South Australian and Commonwealth Governments operate railways in this State and that there are two privately-owned railways, from Iron Knob and Iron Baron to Whyalla, and from Coffin Bay to Port Lincoln; this section deals with the operation of the Rail Division of the State Transport Authority as a means of transport within and to and from the State. Details are not available on the operations of the private railways.

Transfer of Non-metropolitan Railways

As from 1 July 1975, by virtue of the Railways (Transfer Agreement) Act, 1975 and the *Railways Agreement (South Australia) Act 1975*, the Australian National Railways Commission became entitled to a transfer of the State's non-metropolitan railways and services. In the interim period, the termination of which is dependent on a date still to be declared, the State Transport Authority—Rail Division is administering, maintaining and operating the non-metropolitan railways and services subject to compliance with any directions from the Commission. The railways to be transferred are generally those outside the Adelaide metropolitan area. However, some facilities (principally freight yards and workshops) within the Adelaide metropolitan area are also to be transferred.

The transfer agreement provides for trains operated by the State and National systems respectively, to operate as may be necessary on lines of the other system by a 'running rights' agreement, and the two Governments have acknowledged a long-term goal of physical separation of the two systems in the metropolitan area.

The transfer agreement also provides a number of safeguards aimed at ensuring that rail services throughout the State are maintained generally at a level acceptable to the State Government.

STATE TRANSPORT AUTHORITY—RAIL DIVISION

Financial Summary

Capital indebtedness (see definition on page 661) of the Rail Division (Metrorail) at 30 June 1976 totalled \$21 736 000. Operations for 1975-76 resulted in a deficit of \$43 140 000.

Under the terms of the Railways Transfer Agreement, the State recouped from the Australian National Railways Commission \$22 300 000 on account of the estimated non-metropolitan railways deficit for 1975-76.

The determination of the metropolitan and non-metropolitan deficits are subject to clause 20 of the Railways Transfer Agreement which provides for:

- (1) the State during the interim period to receive the revenue from the operation of the non-metropolitan railways and services and bear the costs of their administration, maintenance and operation;
- (2) the Australian National Railways Commission to receive any surplus or bear any deficit from the operation of the non-metropolitan railways and services;
- (3) the costs of and revenue from operations common to both metropolitan and non-metropolitan railways and services to be apportioned on a basis to be agreed between the Commonwealth and the State Governments.

The following summary shows details of capital indebtedness, working expenses, and revenue for the four years to 1975-76.

State Transport Authority—Rail Division: Capital Indebtedness
Working Expenses and Revenue

| Particulars | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------|---------|---------|-----------|
| | | | \$'000 | |
| Capital indebtedness | 156 010 | 156 977 | 159 428 | (a)21 736 |
| Working expenses | 52 621 | 61 134 | 80 980 | 91 955 |
| Revenue | 35 332 | 39 827 | 48 315 | 50 099 |
| Deficit on operating | 17 289 | 21 307 | 32 665 | 41 856 |
| Debt charges | 8 595 | 8 679 | 9 092 | 1 284 |
| Total deficit for year | 25 884 | 29 986 | 41 758 | 43 140 |
| Less contributions from Con- solidated Revenue | 22 500 | 30 000 | 40 000 | — |
| Net surplus (+) or deficit (-) | -3 384 | +14 | -1 758 | -43 140 |

(a) Reduction due to the Commonwealth Government discharging or meeting liabilities of \$146 489 892 (including transfer of rollingstock) pending takeover of non-metropolitan assets.

Working Expenses

The cost of operating the Rail Division during 1975-76 was \$91 955 000 plus debt charges which amounted to \$1 284 000. The working expenses include the cost of administration, maintenance of permanent way, rollingstock maintenance and operation costs, salaries and wages of station staff, guards and conductors. A comparison of working expenses for the four years to 1975-76 is given in the following table.

State Transport Authority—Rail Division, Working Expenses

| Expenses | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------------|---------------|---------------|---------------|
| | | | | |
| Administration: | | | | |
| | | | | \$'000 |
| Salaries, wages, expenses, etc. | 1 929 | 2 308 | 2 888 | 3 256 |
| Payroll tax | — | — | 2 559 | 2 810 |
| Superannuation Act—Pensions | 1 735 | 1 899 | 2 824 | 3 865 |
| Way and works: | | | | |
| Maintenance and superintendence of permanent way, etc. | 13 068 | 13 948 | 17 324 | 19 612 |
| Rollingstock: | | | | |
| General superintendence | 367 | 444 | 568 | 635 |
| Maintenance of rollingstock | 7 779 | 8 515 | 11 347 | 12 856 |
| Motive power, lubrication, etc. | 6 856 | 8 696 | 11 300 | 13 326 |
| Transportation and traffic: | | | | |
| General superintendence, station staff, guards, etc. | 15 163 | 18 807 | 24 424 | 27 382 |
| Miscellaneous: | | | | |
| Refreshment services, road motors, etc. | 1 975 | 2 420 | 3 099 | 3 459 |
| Stores: | | | | |
| Salaries, wages, expenses. | 1 026 | 1 230 | 1 582 | 1 563 |
| Depreciation (a) | 2 723 | 2 867 | 3 065 | 3 190 |
| Total | 52 621 | 61 134 | 80 980 | 91 955 |

(a) Additional depreciation is included in 'Maintenance of rollingstock' and other accounts to cover depreciation of workshop machinery. The amount for 1975-76 was \$121 000.

The average number of persons employed in operations and maintenance during 1975-76 was 7 518. In addition an average of 737 persons were employed on special work including standardisation programs.

Debt Charges

These charges to the Rail Division have reduced considerably following the pending takeover of the capital indebtedness of non-metropolitan assets by the Commonwealth Government. Net funds provided from State Loan Fund were \$20 025 000 at 30 June 1976 as against \$143 040 000 at 30 June 1975.

Sources of Revenue

For the five year period ending 30 June 1976 approximately 75 per cent of railways operational revenue was derived from carriage of freight and about 14 per cent from passenger traffic. Sources of revenue and the amounts received for the years 1971-72 to 1975-76 are shown in the table below.

State Transport Authority—Rail Division, Sources of Revenue

| Source | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------------|---------------|---------------|---------------|---------------|
| | | | \$'000 | | |
| Country passengers | 1 944 | 2 026 | 2 550 | 2 902 | 3 198 |
| Suburban passengers | 2 152 | 2 285 | 2 417 | 2 736 | 2 960 |
| Parcels, mails, etc. | 815 | 774 | 836 | 1 018 | 1 189 |
| General merchandise and miscellaneous freight | 13 599 | 15 074 | 17 226 | 18 455 | 20 968 |
| Wool | 134 | 137 | 146 | 186 | 245 |
| Wheat | 3 365 | 2 419 | 3 546 | 5 596 | 2 799 |
| Barley and other grains | 1 963 | 584 | 1 136 | 2 224 | 2 407 |
| Livestock | 951 | 1 063 | 1 013 | 1 284 | 1 689 |
| Minerals | 7 537 | 7 106 | 6 751 | 8 389 | 8 181 |
| Rents and miscellaneous | 1 765 | 2 353 | 2 398 | 3 324 | 3 972 |
| Catering and trading services | 1 378 | 1 510 | 1 809 | 2 201 | 2 491 |
| Total | 35 603 | 35 332 | 39 827 | 48 315 | 50 097 |

Revenue from road motor services, amounting to \$411 000 in 1975-76, is included in the preceding table with revenue from passengers, parcels, mails, etc. and miscellaneous freight.

Railway Operations**Train Kilometres Run and Track Open**

The average length of track open for traffic during 1975-76 was 3 892 kilometres (including 47 kilometres in New South Wales between Cockburn and Broken Hill). The last lines closed were the Eudunda-Morgan (56 kilometres) and the Sandergrove-Milang (13 kilometres) in 1969-70, and the Wanbi-Yinkanie (50 kilometres) in 1970-71, while the last line opened was a 3.7 kilometre extension from Lonsdale to Christie Downs in January 1976. Train kilometres run during 1975-76 totalled 10 303 680.

Train kilometres run was 10.9 million in 1942-43 but fell to 9.7 million in 1946-47. By 1952-53 train kilometres run had risen to 11.6 million but in recent years it has been at a lower level. In general both revenue and working expenses per train kilometre have increased in recent years with working expenses per train kilometre showing the more rapid increase.

The following table shows revenue and working expenses for the five years to 1975-76.

State Transport Authority—Rail Division, Revenue and Working Expenses

| Year | Revenue | Working Expenses | Percentage of Working Expenses to Revenue | Train Kilometres Run | Revenue per Train Kilometre | Working Expenses per Train Kilometre |
|-------------------|---------|------------------|---|----------------------|-----------------------------|--------------------------------------|
| | \$'000 | \$'000 | Per cent | '000 km | \$ | \$ |
| 1971-72 | 35 603 | 46 801 | 131 | 10 018 | 3.55 | 4.67 |
| 1972-73 | 35 332 | 52 621 | 149 | 10 024 | 3.52 | 5.25 |
| 1973-74 | 39 827 | 61 134 | 153 | 10 313 | 3.86 | 5.93 |
| 1974-75 | 48 315 | 80 980 | 168 | 10 189 | 4.74 | 7.95 |
| 1975-76 | 50 099 | 91 955 | 184 | 10 304 | 4.86 | 8.92 |

Locomotives and Rollingstock

Significant steps in the development of traction in the Rail Division have been the introduction, particularly in the early 1920s of more powerful steam locomotives; the introduction of petrol-driven railcars from 1924 and their conversion to diesel operation from 1937; the change from steam to mainline diesel electric locomotives commencing in 1951; and the introduction of improved diesel railcars from 1955. The extent of the change from steam to diesel electric locomotives and from petrol to diesel railcars since 1955 is revealed in the following table.

**State Transport Authority—Rail Division, Locomotives and Rollingstock
(At 30 June in selected years)**

| Particulars | 1955 | 1960 | 1965 | 1970 | 1976 | | | | |
|--------------------------------------|------------|------------|------------|------------|------------|----|----|----|----|
| | Number | | | | | | | | |
| Locomotives: | | | | | | | | | |
| Steam | 365 | 225 | 151 | 4 | 4 | | | | |
| Diesel electric; | | | | | | | | | |
| Main line | 12 | 30 | 41 | 54 | 60 | | | | |
| Shunting and transfer | | | | | | 12 | 21 | 46 | 46 |
| General purpose | | | | | | 10 | 35 | 45 | 45 |
| Total | 377 | 277 | 248 | 149 | 155 | | | | |
| Rail cars: | | | | | | | | | |
| Power; | | | | | | | | | |
| Diesel | — | 118 | 134 | 124 | 125 | | | | |
| Petrol | 53 | 4 | — | — | — | | | | |
| Non-power; | | | | | | | | | |
| Control-equipped | — | 7 | 7 | 7 | 7 | | | | |
| Trailer | 28 | 52 | 58 | 40 | 37 | | | | |
| Coaches | 485 | 353 | 243 | 170 | 95 | | | | |
| Interstate coaches | 54 | 61 | 71 | 65 | 103 | | | | |
| Goods and livestock wagons | 8 895 | 8 000 | 7 962 | 7 694 | 7 176 | | | | |
| Service wagons and vans | 478 | 467 | 526 | 622 | 550 | | | | |

Historical Survey

A brief historical summary of tramways and bus services was included on pages 512-4 of the *South Australian Year Book 1970* under the headings 'Historical Survey' and 'Route Miles, Mileage Run and Passengers Carried'.

Main developments during the last twenty years have been the replacement of trams with diesel buses (with the exception of Glenelg tram service which runs mainly on enclosed land), the abandonment of electricity generation in favour of purchasing electric power from the Electricity Trust, the erection of new workshops and new parking and servicing depots.

Recent Developments

Several initiatives affecting the metropolitan bus and tram services have been taken in recent years. They included development of a new regional bus depot at Morphettville (officially opened in February 1977); placing of an order for 310 Volvo bus chassis and bodies—the first of these, featuring air cooling and turbo-charged engines for reduced noise and pollution were delivered in March 1977; extensions to several route services announced in February 1977; integration of former private bus services with other Authority services; a program of erection of passenger shelters at bus stops and preparations of plans for the future development of metropolitan public transport services including establishment of a new suburban ring route and a new regional bus depot in the Adelaide Hills.

In December 1973, a free bus service, the 'Bee-Line' Service was introduced and operates within city limits to improve distribution from existing transport terminals.

Route Length, Kilometres Run, Passengers Carried and Fares

The following two tables show the details of route length, kilometres run and passengers carried for the years 1971-72 to 1975-76. The details for electric trams refer to the Adelaide-Glenelg service, the only remaining tram service in this State.

State Transport Authority—Bus and Tram Division, Route Length and Traffic Kilometres

| Year | Route Length at End of Year | | | Kilometres Run During Year | | |
|---------------------|-----------------------------|----------------|-------|----------------------------|----------------|--------|
| | Electric Trams | Motor Buses | Total | Electric Trams | Motor Buses | Total |
| | Kilometres | | | '000 | | |
| 1971-72 | 11 | 264 | 275 | 673 | 16 663 | 17 336 |
| 1972-73 | 11 | 268 | 279 | 676 | 16 794 | 17 470 |
| 1973-74 (a) | 11 | 719 | 730 | 673 | 21 799 | 22 471 |
| 1974-75 | 11 | 754 | 765 | 676 | 30 819 | 31 495 |
| 1975-76 (b) | 11 | 820 | 832 | 710 | 32 513 | 33 223 |

(a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

(b) Not comparable with previous years: includes details of licensed private services taken over in December 1975 and April 1976.

State Transport Authority—Bus and Tram Division: Passengers, Traffic Kilometres and Revenue

| Year | Passengers | Traffic | Traffic | Average | Traffic |
|-------------|------------|---------|------------|---------|-------------------------------|
| | Carried | Revenue | Kilometres | Fare | Revenue per Traffic Kilometre |
| | '000 | \$'000 | '000 | Cents | Cents |
| 1971-72 | 40 842 | 6 783 | 17 336 | 16-33 | 39-13 |
| 1972-73 | 41 680 | 7 036 | 17 470 | 16-61 | 41-81 |
| 1973-74 (a) | 47 533 | 9 615 | 22 471 | 20-12 | 44-31 |
| 1974-75 | 58 298 | 12 711 | 31 495 | 21-29 | 42-63 |
| 1975-76 (b) | 58 336 | 13 459 | 33 223 | 22-27 | 43-51 |

(a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

(b) Not comparable with previous years: includes details of licensed private services taken over in December 1975 and April 1976.

A transfer ticket, costing 40 cents, enables a passenger to transfer on two routes in the same direction at a cheaper rate than paying a separate fare for each route. A periodical ticket is available on a weekly basis at a cost of 10 times the normal cash fare for the number of sections travelled; these tickets entitle the holder to unlimited travel over the route and sections specified on the pass seven days a week.

The table below shows passenger fares, from 1 February 1975, for travel over various distances measured in sections; in most cases a section is a distance of approximately 1.5 kilometres.

State Transport Authority—Bus and Tram Division, Passenger Fares

| Distance Measured in Sections | Adult Cash Fare | Child Cash Fare | Pensioner Cash Fare | Monthly Concession Tickets | |
|-------------------------------|-----------------|-----------------|---------------------|----------------------------|-------------------|
| | | | | School Students | Tertiary Students |
| | Cents | | | \$ | |
| 1 | 10 | 5 | 5 | 1-50 | .. |
| 2 | 20 | 10 | 5 | 3-00 | 5-00 |
| 3 | 25 | 10 | 10 | 3-00 | 6-50 |
| 4-7 | 30 | 15 | 10 | 4-50 | 6-50 |
| 8-9 | 35 | 15 | 10 | 4-50 | 8-00 |
| 10 or more | 35 | 15 | 15 | 4-50 | 8-00 |

Income and Expenditure

A table showing capital indebtedness, income and working expenses etc. for the last five years is given in Part 11.4 Public Finance—Public Corporations. Selected details for the five years to 1975-76 are shown in the following table.

State Transport Authority—Bus and Tram Division, Income and Expenditure

| Year | Traffic Receipts | Sundry Receipts | Government Grants | Working Expenses | Interest on Loans | Net Deficit |
|-----------------------|------------------|-----------------|-------------------|------------------|-------------------|-------------|
| \$'000 | | | | | | |
| 1971-72 | 6 783 | 195 | 630 | 7 282 | 340 | 14 |
| 1972-73 | 7 036 | 269 | 1 330 | 8 269 | 406 | 41 |
| 1973-74 (a) | 9 615 | 343 | 2 250 | 11 735 | 469 | —4 |
| 1974-75 | 12 711 | 716 | 5 900 | 18 951 | 874 | (b) 10 |
| 1975-76 (c) | 13 459 | 995 | 8800 | 22 446 | 1 230 | (d)—74 |

(a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

(b) After receipt of Commonwealth grant of \$488 000.

(c) Not comparable with previous years: includes details of licensed private services taken over in December 1975 and April 1976.

(d) After receipt of Commonwealth Government grant of \$394 000 and State Department of Transport contribution for revenue projects of \$102 000.

At 30 June 1976 loan indebtedness amounted to \$21 090 000; these loans are secured by debentures issued to the Treasurer of South Australia.

Working Expenses

Working expenses of the Bus and Tram Division were \$1 244 000 in 1940-41 and had nearly doubled by 1946-47 when they were \$2 402 000. In 1975-76 working expenses reached a record high level of \$22 446 000. Details for the last five years are given in the following table. The average number of persons employed by the Bus and Tram Division during 1975-76 was 1 695 (235 salaried and 1 460 wages staff): salaries and wages paid amounted to \$15 801 000 or over 70 per cent of total working expenses.

State Transport Authority—Bus and Tram Division, Working Expenses

| Working Expense | 1971-72 | 1972-73 | 1973-74 (a) | 1974-75 | 1975-76 (b) |
|--|--------------|--------------|---------------|---------------|---------------|
| \$'000 | | | | | |
| Traffic operations | 4 094 | 4 441 | 6 398 | 10 759 | 12 677 |
| Maintenance | 1 227 | 1 485 | 1 903 | 3 103 | 4 090 |
| Power for traffic | 31 | 31 | 37 | 40 | 47 |
| Fuel and oil for traffic | 349 | 379 | 630 | 1 036 | 1 226 |
| Highways contribution | 86 | 123 | 171 | 274 | 307 |
| Depreciation | 485 | 676 | 862 | 1 146 | 1 221 |
| Other expenses | 1 009 | 1 135 | 1 734 | 2 593 | 2 878 |
| Total | 7 282 | 8 269 | 11 735 | 18 951 | 22 446 |
| Cents | | | | | |
| Working expenses per traffic kilometre | 42·00 | 47·33 | 52·22 | 60·17 | 67·56 |

(a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

(b) Not comparable with previous years: includes details of licensed private services taken over in December 1975 and April 1976.

Accident Casualties

The following casualties resulted from accidents which occurred during the last five years.

State Transport Authority—Bus and Tram Division, Accident Casualties

| Year | Passengers | | Employees | | Total (including other) | |
|-------------|------------|---------|-----------|---------|----------------------------|---------|
| | Killed | Injured | Killed | Injured | Killed | Injured |
| 1971-72 | — | 119 | — | 88 | 3 | 235 |
| 1972-73 | — | 120 | — | 71 | — | 219 |
| 1973-74 (a) | — | 120 | — | 111 | — | 265 |
| 1974-75 | — | 167 | — | 209 | — | 413 |
| 1975-76 (b) | — | 239 | — | 332 | — | 646 |

(a) Not comparable with previous years: includes details of licensed private services taken over in March 1974.

(b) Not comparable with previous years: includes details of licensed private services taken over in December 1975 and April 1976.

Rollingstock

The change from electric traction to diesel operation is reflected in the following table which shows details of rollingstock in selected years.

State Transport Authority—Bus and Tram Division, Rollingstock and Seating Capacity at 30 June

| Particulars | 1950 (a) | 1955 | 1960 | 1965 | 1970 | 1976 (b) |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Rollingstock: | | | | | | |
| Electric trams | 279 | 178 | 30 | 30 | 26 | 26 |
| Motor buses | 81 | 140 | 364 | 353 | 344 | 720 |
| Trolley buses | 61 | 91 | 56 | — | — | — |
| Total vehicles | 421 | 409 | 450 | 383 | 370 | 746 |
| Seating capacity: | | | | | | |
| Electric trams | 14 280 | 10 147 | 1 908 | 1 908 | 1 664 | 1 664 |
| Motor buses | 3 998 | 5 268 | 14 428 | 14 112 | 14 234 | 31 867 |
| Trolley buses | 2 984 | 4 184 | 2 006 | — | — | — |
| Total seating | 21 262 | 19 599 | 18 342 | 16 020 | 15 898 | 33 531 |

(a) At 31 January.

(b) Not comparable with previous years: includes details of licensed private services taken over in December 1975 and April 1976.

Under a three year program, completed late in 1972 at a cost of \$5.2 million, the Bus and Tram Division replaced its fleet of buses with vehicles

designed for one-man operation. These vehicles have rear mounted engines, lower step height and two-way radio contact with the depot.

The vehicles obtained through takeover of the licensed private operators will be gradually replaced with the standard types.

METROPOLITAN PRIVATE MOTOR BUS SERVICES

The route length of private motor bus services licensed by the Bus and Tram Division increased from 74.70 kilometres in 1941 to 465.02 kilometres in 1972-73, while the number of passengers carried increased from 2.3 million to 16.6 million. A large part of the increase in the number of passengers carried occurred in the ten years from 1941 (2.3 million) to 1951 (10.7 million). The transfer of the licensed private bus operators to the Bus and Tram Division commenced in March 1974 and is reflected in the decreased figures for subsequent years.

Private Motor Buses, Metropolitan Services

| Year | Route Length | Kilometres Run | Passengers Carried | Rolling-stock | Traffic Receipts (Gross) |
|-------------------|----------------|----------------|--------------------|----------------|--------------------------|
| | At End of Year | | | At End of Year | |
| | Kilometres | '000 km | '000 | No. | \$'000 |
| 1971-72 | 409 | 10 854 | 15 329 | 257 | 2 716 |
| 1972-73 | 465 | 11 032 | 16 600 | 267 | 2 992 |
| 1973-74 | 48 | 7 746 | 11 257 | 30 | 2 291 |
| 1974-75 | 13 | 805 | 1 434 | 5 | 313 |
| 1975-76 | 9 | 84 | 194 | 5 | 28 |

COUNTRY TOWN BUS SERVICES

Commencing in May 1975, the State Government offered financial assistance, through local government, to urban bus services outside of the metropolitan area. Under the new arrangement, financial responsibility for the provision of bus services is vested in the local government authority but the State Government contributes two-thirds of the operating loss.

Councils have the option of acquiring local bus fleets, or arranging for a local bus proprietor to provide the bus service under contract. In the case of the contract system, the fare revenue is retained by the local government authority and the contractor is paid an agreed sum per kilometre to operate buses on routes and timetables determined by a three-man management committee. The committee consists in each case of an elected council representative, the Town Clerk or his deputy, and a representative of the State Government.

Contract services are operated in Port Pirie, Port Augusta, Port Lincoln and Mount Gambier. In Whyalla, the City Council has purchased the assets of the former bus proprietor, and since 13 October 1975 the bus service has been municipally owned and operated.

INTERSTATE AND COUNTRY SERVICES

Regular interstate coach services and special tours operate to all States. In addition, a network of coachlines operates on radial routes from Adelaide to all parts of the State. These services are provided by 14 private companies, under licence to the State Transport Authority, and share a modern off-street terminal in Franklin Street, Adelaide.

Passenger services on all roads south of the 32nd parallel of south latitude are controlled by the State Transport Authority. Generally, pick-up and set-down rights on the routes are non-competitive with rail services or with other road service operations. The Authority also issues permits for coach charter trips within the State.

TAXICABS

The Metropolitan Taxi-Cab Act, 1956-1974, administered by the Metropolitan Taxi-Cab Board, is the governing legislation providing for the control of taxi-cabs within a 16 kilometre radius of the GPO, Adelaide and the District Councils of Stirling and Munno Para, the Cities of Tea Tree Gully, Elizabeth and Salisbury and the Municipality of Gawler. The Board is responsible for the granting of licences or permits to operate taxi-cabs, the allotment of vehicles to stands and the charging of permit fees.

Regulations under the Act provide for the examination of taxi-cabs: all taxi-cabs are examined for roadworthiness, and all metres are checked and tested twice a year on the Board's premises by mechanics employed by the Board. It is compulsory for taxis to be fitted with metres which record progressively the cost of each journey at rates prescribed from time to time. At January 1977 the rates were 45 cents for 'flag fall' and the first 180 metres, then 5 cents each additional 180 metres. The area in which these metred charges apply is determined by the Board and is known as the 'metred area'. Outside of this zone but within an area of 40 kilometres radius from the GPO Adelaide, a 50 per cent loading applies. For journeys which extended beyond the 40-kilometre radius contract rates not to exceed 19 cents per outward and return kilometre are charged. From 8 p.m. to 6 a.m. Monday to Friday and from 8 p.m. Saturday to 6 a.m. Monday and on public holidays there is a 20 cent surcharge per journey.

Licences issued at 30 June 1976 include taxi-cabs, white plates (*i.e.* restricted) 250; green plates 595; hire cars 46; and funeral cars 11. Drivers' licences current totalled 3 513.

Taxi licence fees are \$50 a year and private hire licence fees are \$35. Revenue received during 1975-76 was \$42 398 from taxi licences, \$1 770 from hire car licences and \$15 144 from drivers' licences. Total revenue from all sources was \$159 924, and expenditure was \$164 276.

In areas not under the control of the Metropolitan Taxi-Cab Board, taxi licences are issued by local government authorities under the provisions of the Local Government Act.

MOTOR VEHICLES

Control of Road Traffic

Legislation covering the registration of motor vehicles, licensing of drivers and third party insurance in South Australia is contained in the Motor Vehicles Act, 1959-1976.

The present legislation for the control of road traffic in South Australia is set out in the Road Traffic Act, 1961-1976 and the Motor Vehicles Act, 1959-1976.

Registration of Motor Vehicles

Under the provisions of the Motor Vehicles Act, 1959-1976 all motor vehicles, unless specifically exempted, must be registered with the Registrar of Motor Vehicles at the Motor Registration Division of the Department of Transport before being driven on any public road.

The Motor Vehicles Act defines a motor vehicle as:

(a) a vehicle, tractor or mobile machine driven or propelled by a steam engine, internal combustion engine, electricity or any other power not being human or animal; or

(b) a trailer;

but does not include a vehicle run upon a railway or tramway.

Permits to use vehicles, without registration, between farm blocks may be granted by the Registrar. A 14-day permit to drive a motor vehicle pending registration may be issued, under certain circumstances, by a member of the police force stationed at a police station more than 40 kilometres from the GPO, Adelaide, except in those places where a branch of the Motor Registration Division is in operation.

Registration fees vary according to the power-weight (PW) of the vehicle; this is calculated by a formula which takes into account the diameter and number of the cylinders and the vehicle's weight in kilograms. A special formula applies for vehicles fitted with non-piston engines. Fees for trailers and caravans are based on unladen weight and vehicles fitted with solid rubber or metal tyres are subject to higher rates.

For motor cycles the fees vary between \$7 for a vehicle weighing 50 kilograms or less, to \$13 for a motor cycle having a side-car attached. For commercial vehicles with unladen mass of 1780 kilograms or less, the range of annual fees is from \$12 for a vehicle not exceeding 10 PW, to \$511 plus \$11.70 for each 5 PW or portion thereof exceeding 250 PW for vehicles exceeding 250 PW. For commercial vehicles with unladen mass over 1780 kilograms a minimum fee of \$51 applies for vehicles that do not exceed 40 PW and for vehicles in excess of 1000 PW a maximum fee of \$2459 plus \$12.70 for each additional 5 PW or portion thereof the PW exceeds 1000.

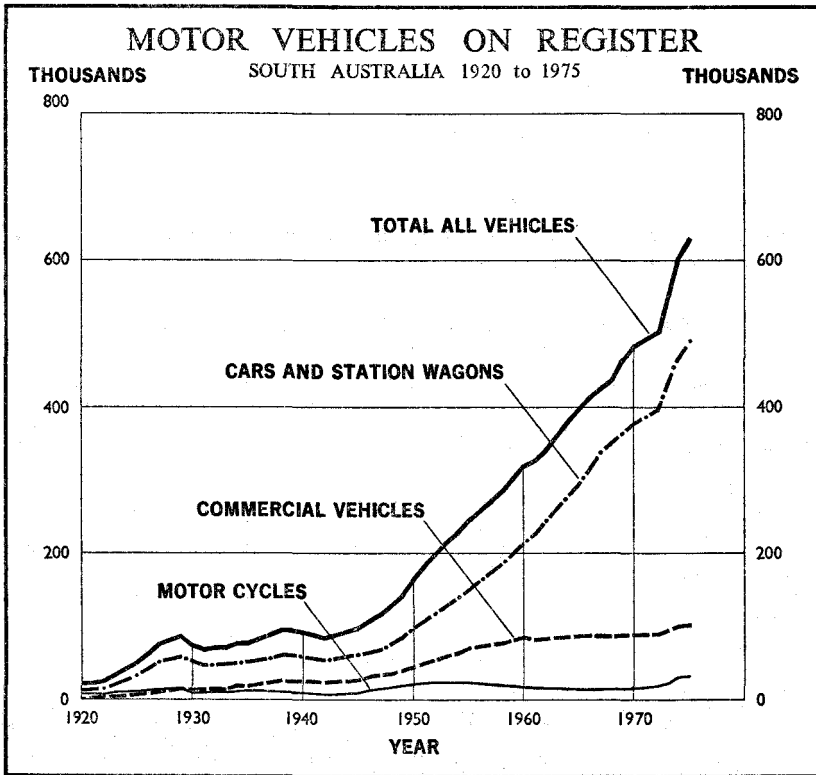
Registration fees for non-commercial vehicles, which include buses, mobile cranes and fork lift vehicles in addition to cars and station wagons, range from \$12 for vehicles not exceeding 10 PW to \$1445 plus \$7.50 for each 5 PW or portion thereof exceeding 1000 PW, for vehicles exceeding 1000 PW.

Registration fees for trailers (with pneumatic tyres) range from \$10 for trailers of unladen weight up to 260 kilograms to \$28 for trailers of unladen weight exceeding 2030 kilograms. Registration fees for caravans range from \$10 for caravans of unladen weight up to 260 kilograms to \$19.00 for caravans of unladen weight exceeding 2030 kilograms.

Motor vehicles used for certain purposes are registered without fee, *e.g.* vehicles owned by the Fire Brigades Board and other firefighting organisations, ambulances (for the use of which no charge is made), council vehicles used solely or mainly for the collection and transport of household refuse, etc. Registration at reduced rates is allowed for primary producers' commercial vehicles and tractors, prospectors' vehicles, and for vehicles used wholly or mainly in outer areas. Reduced rates are available to incapacitated ex-servicemen also, and to some persons in receipt of Commonwealth Government pensions. Vehicles used solely for interstate trade can be registered for \$5 for a period of twelve months.

The Act provides for registered vehicles to carry number plates and for a registration label to be affixed to each registered vehicle. It also provides for the issue of general traders plates and limited traders plates.

Third party bodily injury insurance as a prerequisite to registration of a motor vehicle is discussed on page 602.



Motor Vehicles on Register

The following table shows the number of motor vehicles on the register at 30 June from 1972 to 1976.

Motor Vehicles on Register, South Australia^(a)

At 30 June

| Type of Vehicle | 1972 | 1973 | 1974 | 1975 | 1976 |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|
| | | | '000 | | |
| Cars | 343.8 | 362.9 | 382.8 | 413.3 | 429.3 |
| Station wagons | 62.3 | 64.6 | 66.5 | 70.0 | 71.8 |
| Commercial vehicles | 90.7 | 93.9 | 97.6 | 101.5 | 107.3 |
| Motor cycles | 19.6 | 25.7 | 30.7 | 32.5 | 32.6 |
| Total on register . . | 516.4 | 547.1 | 577.6 | 617.3 | 641.0 |
| | | | Persons | | |
| Population per vehicle | 2.30 | 2.19 | 2.11 | 2.00 | 1.94 |
| | | | '000 | | |
| Tractors, plant, equipment . . | 7.3 | 7.4 | 7.7 | 7.7 | 7.8 |
| Trailers and caravans | 100.6 | 109.8 | 120.0 | 128.0 | 138.3 |
| Traders plates | 2.7 | 2.6 | 2.7 | 2.8 | 3.1 |

(a) Includes Commonwealth Government owned vehicles except defence services vehicles.

New Motor Vehicle Registrations

New motor vehicle registrations during the financial years 1971-72 to 1975-76 are shown in the following table.

New Motor Vehicle Registrations, South Australia^(a)

| Type of Vehicle | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---------------------------------|---------------|---------------|---------------|---------------|---------------|
| Cars | 33 376 | 35 235 | 38 330 | 45 538 | 40 485 |
| Station wagons | 4 136 | 4 440 | 4 929 | 6 353 | 6 571 |
| Light commercial type vehicles: | | | | | |
| Open (b) | 2 787 | 3 437 | 3 581 | 4 390 | 4 074 |
| Closed (c) | 1 309 | 1 549 | 1 749 | 2 684 | 3 204 |
| Trucks (d) | 2 140 | 2 664 | 2 721 | 3 201 | 3 695 |
| Other truck type vehicles (e) | 114 | 88 | 45 | 22 | 36 |
| Buses | 352 | 273 | 221 | 237 | 342 |
| Motor cycles | 5 071 | 9 073 | 10 960 | 8 256 | 7 052 |
| Total | 49 285 | 56 759 | 62 536 | 70 681 | 65 459 |

(a) Includes Commonwealth Government owned vehicles except defence services vehicles.

(b) Includes utilities and trucks with carrying capacity under 1 tonne. (c) Includes panel vans and trucks with carrying capacity under 1 tonne. (d) Includes utilities, panel vans and trucks with carrying capacity over 1 tonne. (e) Includes truck type vehicles not designed for freight carrying e.g. tow trucks and fire engines.

Drivers' Licences

From 1 April 1973, the following classes of drivers' licences have applied in South Australia:

- Class 1: to drive (a) any motor car or (b) any motor vehicle, the weight of which (excluding the weight of any trailer) does not exceed 1 780 kilograms, except an articulated motor vehicle, a motor cycle or a motor omnibus;
- Class 2: to drive any motor vehicle except an articulated motor vehicle, a motor cycle or a motor omnibus;
- Class 3: to drive any motor vehicle except a motor cycle or a motor omnibus;
- Class 4: to drive a motor cycle;
- Class 5: to drive a motor omnibus.

A licence may be endorsed with more than one class number.

The Motor Vehicles Act provides that an applicant must apply for a permit to learn to drive a motor vehicle and will be issued with a learner's permit once he has passed a written examination on the rules of the road. The permit is for a period not exceeding three months during which time the holder is expected to undergo a practical test conducted by a Motor Registration Division examiner. If he passes the test he will be issued with a certificate stating the type and make of vehicle used and that he was capable of driving this class of motor vehicle. He may then apply to the Registrar for the appropriate licence.

Provision is also made for the testing of drivers suspected of being incompetent or suffering from a disease or disability which may impair their ability to drive, and for the suspension of their licences should they fail the test. Persons who will reach the age of 70 years during the currency of their next licence are tested before that licence is issued. Optical tests also are imposed at age 75 years.

Before July 1976, licences were issued for a period of one year: from July 1976 three-year licences were introduced initially on a staggered basis so that some drivers will be issued with one-year licences (\$6), some with two-year licences (\$12) and some with three-year licences (\$18). However, from July 1977 all drivers will be issued with three-year licences except those aged 70 years and over who will have to continue renewing their licences annually subject to passing the required tests. The fee for a learner's permit is \$3. Licences and permits are not issued to persons under sixteen years of age.

In 1961 licences for motor driving instructors were introduced and are compulsory where instruction is given for reward. The licence fee is \$20 for a period of three years.

Drivers' and riders' licences current at 31 December 1976 totalled 658 671. The number in force first exceeded 100 000 in 1931, totalled 215 157 by 1951, 315 044 by 1957, and had risen to 447 985 at December 1965.

Revenue from Registrations and Licences

Revenue from registration fees and drivers' and riders' licence fees totalled \$32 130 000 in 1975-76. These fees are paid into Consolidated Revenue Account; but after deductions have been made for sinking fund and interest on loans raised

for roads and bridges, and the administration expenses of the Highways Department and Motor Registration Division of the Department of Transport, the balance is paid into the Highways Fund.

Third Party Insurance

Under the Motor Vehicles Act, 1959-1976 every motor vehicle driven on a public road, unless specifically exempted, must be covered by an insurance policy. This policy insures the owner of the motor vehicle and any other person who at any time drives the vehicle whether with or without the consent of the owner, in respect of all liability for negligence that may be incurred by the owner or other person in respect of the death of, or bodily injury to, any person caused by, or arising out of the use of the vehicle in any part of Australia.

Insurance must be effected with the State Government Insurance Commission, which is now the only approved third party insurer. Liabilities of the insurer, set out in the Motor Vehicles Act, include the liability to pay for emergency treatment and hospital treatment to a person injured (including fatally injured) by or arising out of the use of an insured motor vehicle.

Where the driver of a motor vehicle has caused death or bodily injury in the use of that vehicle and the identity of the vehicle cannot be ascertained, then a person who could have obtained a judgment against the driver may give notice to the Minister of Transport and recover by action against a 'nominal defendant' named by the Minister of Transport. Payment by the nominal defendant is out of money contributed by the Commission under a scheme administered by the Minister of Transport.

The Minister of Transport appoints a 'nominal defendant' where a claim is made by a person in respect of death or bodily injury caused by negligence in the use of an uninsured motor vehicle on a road. Payments made by the 'nominal defendant' are recoverable from the driver of the motor vehicle or any person liable for the negligence of that driver.

An injured person may claim against his or her spouse where the spouse is an insured person and has caused that person bodily injury by negligence in the use of a motor vehicle.

A committee appointed by the Governor on the recommendation of the Minister of Transport having all the powers of a royal commission periodically inquires into and determines what premiums for third party insurance are fair and reasonable.

From 2 March 1977, premiums for private and business cars in metropolitan and country areas were increased by \$18 to \$89. Premiums for goods-carrying vehicles in the metropolitan area were increased by \$21 to \$106 while those in country areas were increased by \$14 to \$69. Premiums for primary producers' trucks in the metropolitan area were increased by \$8 to \$38 and those in country areas were increased by \$4 to \$19. Premiums for taxis in the metropolitan area were increased by \$69 to \$344. Premiums for omnibuses in the metropolitan area were increased by \$63 to \$313 while those in country areas were increased by \$11 to \$56. Premiums for omnibuses not used for hire,

fare or reward, in the metropolitan area were increased by \$19 to \$94 while those in country areas were increased by \$10 to \$50. Premiums for other miscellaneous vehicles such as ambulances, tow trucks, mobile cranes, hearses etc., in the metropolitan area were increased by \$13 to \$63 and those in country areas were increased by \$5 to \$25. Premiums for motor cycles with an engine capacity exceeding 250 cc in the metropolitan area were increased by \$24 to \$119 and those in country areas were unchanged at \$55. Premiums for motor cycles with an engine capacity not exceeding 250 cc in the metropolitan area were increased by \$9 to \$44 while those in country areas were reduced by \$20 to \$15.

Census of Motor Vehicles

A census of motor vehicles on the register at 30 September 1971 was completed in Australia during 1972. Details relating to South Australia appear in the *South Australian Year Book 1975*, pages 559-61. A further census was conducted at 30 September 1976.

Motor Vehicle Usage

In September 1971, a sample survey of motor vehicle usage during the year ended 30 September 1971 was conducted throughout Australia. Details relating to South Australia appear in the *South Australian Year Book 1975*, pages 561-2. A further sample survey was conducted in respect of the year ended 30 September 1976.

Road Traffic Board

The Road Traffic Board of South Australia, set up in 1960 under the provisions of the Road Traffic Board Act, 1960, is now constituted under the Road Traffic Act, 1961-1976; its functions are to:

- (1) make recommendations to the Minister on roads and traffic generally, on the use of traffic control devices and other measures to be taken to prevent road traffic accidents;
- (2) promote uniformity in the design and use of traffic control devices;
- (3) conduct research and collect statistics relating to road traffic accidents and other traffic problems;
- (4) disseminate information and advice on road safety and traffic laws and regulations;
- (5) investigate and report on proposals for alterations of and additions to traffic laws and regulations.

Road Safety

Some recent moves towards greater road safety were detailed on pages 514-5 of the *South Australian Year Book 1973*. These mainly related to the operations of the new Road Safety Instruction Centre and the points demerit scheme.

The latter scheme has been in operation since 29 April 1971. In 1976 warning notices were sent to 15 157 drivers who had accumulated six or more demerit points and 2 651 drivers with twelve or more demerit points had their driving licences suspended.

A Road Traffic Act Regulation introduced on 1 January 1973 requires that any modification to a motor vehicle should meet certain standards and that permission must be obtained from the Road Traffic Board before certain types of modifications can be made.

All imported motor vehicles must bear a compliance plate showing that the vehicle has been approved by the Australian Motor Vehicle Certification Board in regard to compliance with Australian Design Rules for Motor Vehicle Safety applicable to the year of manufacture. Road Traffic Board exemption from this requirement is limited to migrants and returning overseas visitors who wish to register their vehicles in this State. Generally, vehicles originally manufactured as left-hand drive vehicles can only be registered in South Australia if they were manufactured before 1 January 1970 and converted to right-hand drive under the supervision of the Board.

Following an amendment to the Road Traffic Act, a different interpretation of 'STOP' signs became operative on 1 March 1975. Under the new legislation, a driver facing a 'STOP' sign must give way to all traffic, whether it is coming from the left or from the right. Previously, drivers had to give way only to the traffic from the right. The new legislation conforms with the National Traffic Code. Similar legislation is in force in most States.

In July 1975, a system of 'priority' roads was introduced in the State. Initially the main arterial roads in the metropolitan area were proclaimed 'priority' roads; this will be progressively extended to national highways and rural arterial traffic routes.

'STOP' and 'GIVE WAY' signs are used to control side street traffic. A heavy broken white line across the mouth of the side street together with 'PRIORITY ROAD' signs warn the motorists that the arterial road traffic has priority over traffic entering from the left or right.

The Road Traffic Act now requires a seat belt to be worn by the driver and passenger of a motor vehicle where seat belts are fitted irrespective of the year of manufacture of the vehicle. An amendment to the Act, which came into operation on 1 March 1977, greatly strengthened the penalty provisions of the Act. The penalties are classified into (a) general penalty offences which included the majority of offences and carry a maximum penalty of \$300 and (b) special penalty offences which deal with the more serious offences e.g. a driver convicted on a drink-driving offence for the first time can face the following charges (i) disqualification from holding a driver's licence for not less than six months and (ii) a fine of not less than \$300 and not more than \$600 or imprisonment for not more than three months.

Road Traffic Accidents

Statistics of road traffic accidents are compiled from reports made to members of the South Australian Police Department by persons involved in such accidents. Section 43 of the Road Traffic Act sets out the obligations of the driver of a vehicle involved in an accident—he must stop his vehicle at once, render any assistance of which he is capable to anyone injured in the accident, state his name and address if requested to any person having reasonable grounds for such request, and report the accident to the Police as soon as possible, or at least within twenty-four hours of the accident. However, it is a defence against a charge relating to non-reporting of an accident if a defendant can prove either

that he did not know that an accident occurred or that the only damage or injury resulting from the accident was to property and that a fair estimate of the damage did not exceed \$100.

For the purpose of these statistics, a road traffic accident is defined as an accident which occurs because of the presence of a vehicle on a road (or other public thoroughfare, e.g. public car park, beach) and which involves property damage exceeding \$100 or casualty; a casualty occurring if the accident resulted in:

- (1) the death of any person within a period of thirty days of the accident, or
- (2) bodily injury to any person to an extent requiring surgical or medical treatment.

With the introduction of a more comprehensive accident report form on 1 October 1967, statistics have become available as a result of a joint effort by the South Australian Police Department, the Road Traffic Board of South Australia and the Australian Bureau of Statistics. Before this date, the South Australian Police Department was the sole authority preparing statistics of road traffic accidents.

The following table shows summary details of road traffic accidents for the years 1971 to 1975. During 1975 the total number of recorded road traffic accidents increased by more than 13 per cent (from 39 633 in 1974 to 44 964 in 1975). The number of accidents which resulted in casualties decreased by about 7 per cent (from 9 469 in 1974 to 8 793 in 1975).

Road Traffic Accidents, South Australia

| Year | Total Accidents Re-corded | Accidents Involving Casualties | Persons Killed | Persons Injured | Rate per 100 000 Motor Vehicles on Register (a) | | | Rate per 100 000 of Mean Population | | |
|----------------|---------------------------|--------------------------------|----------------|-----------------|---|----------------|-----------------|-------------------------------------|----------------|-----------------|
| | | | | | Total Accidents Re-corded | Persons Killed | Persons Injured | Total Accidents Re-corded | Persons Killed | Persons Injured |
| 1971 | 27 859 | 7 386 | 292 | 10 132 | 5 632 | 59 | 2 062 | 2 754 | 25 | 861 |
| 1972 | 29 569 | 8 116 | 312 | 10 997 | 5 689 | 60 | 2 116 | 2 855 | 26 | 925 |
| 1973 | 33 960 | 9 267 | 329 | 12 625 | 6 167 | 60 | 2 293 | 3 176 | 27 | 1 050 |
| 1974 | 39 633 | 9 469 | 382 | 12 725 | 6 808 | 66 | 2 186 | 3 247 | 31 | 1 042 |
| 1975 | 44 964 | 8 793 | 339 | 12 020 | 7 297 | 55 | 1 951 | 3 633 | 27 | 971 |

(a) 'Motor vehicles on register' is the mean number for each year; includes Commonwealth Government owned vehicles except defence services vehicles; excludes road tractors and trailers.

The likelihood of sustaining serious injury when involved in an accident is more than ten times higher for motor cycle riders than for drivers of motor vehicles: 61 per cent of motor cycle riders involved in accidents received medical or hospital treatment compared with 6 per cent of drivers of other vehicles.

The following table shows casualties by type of road user for each of the last five years. In each of these years more motor vehicle drivers were killed or injured than any other type of road user.

Road Traffic Accidents: Casualties, South Australia

| Year | Drivers of Motor Vehicles | Motor Cyclists | Pedal Cyclists | Pass- engers | Pedes- trians | All Other | Total |
|------------------------|---------------------------------|-------------------|-------------------|-----------------|------------------|--------------|--------|
| PERSONS KILLED | | | | | | | |
| 1971 | 109 | 14 | 9 | 103 | 57 | — | 292 |
| 1972 | 120 | 28 | 12 | 88 | 64 | — | 312 |
| 1973 | 135 | 23 | 9 | 99 | 63 | — | 329 |
| 1974 | 151 | 46 | 17 | 110 | 58 | — | 382 |
| 1975 | 136 | 30 | 14 | 98 | 61 | — | 339 |
| PERSONS INJURED | | | | | | | |
| 1971 | 3 991 | 930 | 546 | 3 862 | 799 | 4 | 10 132 |
| 1972 | 4 267 | 1 313 | 524 | 3 998 | 885 | 10 | 10 997 |
| 1973 | 4 906 | 1 736 | 564 | 4 499 | 914 | 6 | 12 625 |
| 1974 | 4 946 | 1 820 | 541 | 4 392 | 1 021 | 5 | 12 725 |
| 1975 | 4 663 | 1 738 | 529 | 4 209 | 876 | 5 | 12 020 |

In the following table, the types of road users killed and injured are shown according to age groups for 1975.

Road Traffic Accidents: Age Groups of Casualties, South Australia
1975

| Age Group of Casualty (years) | Drivers of Motor Vehicles | Motor Cyclists | Pedal Cyclists | Passengers | Pedestrians | All Other | Total |
|-------------------------------------|---------------------------------|-------------------|-------------------|------------|-------------|--------------|--------|
| PERSONS KILLED | | | | | | | |
| Under 5 | — | — | — | 6 | 5 | — | 11 |
| 5-16 | 1 | 4 | 8 | 16 | 10 | — | 39 |
| 17-20 | 23 | 20 | — | 24 | 3 | — | 70 |
| 21-29 | 35 | 4 | — | 16 | 5 | — | 60 |
| 30-39 | 19 | — | 1 | 4 | 3 | — | 27 |
| 40-49 | 22 | 1 | — | 5 | 4 | — | 32 |
| 50-59 | 16 | — | 2 | 14 | 7 | — | 39 |
| 60 and over | 20 | 1 | 3 | 13 | 24 | — | 61 |
| Total | 136 | 30 | 14 | 98 | 61 | — | 339 |
| PERSONS INJURED | | | | | | | |
| Under 5 | — | — | 4 | 216 | 87 | — | 307 |
| 5-16 | 172 | 196 | 298 | 942 | 249 | 3 | 1 860 |
| 17-20 | 1 078 | 804 | 40 | 837 | 66 | 1 | 2 826 |
| 21-29 | 1 215 | 431 | 31 | 573 | 84 | — | 2 334 |
| 30-39 | 658 | 83 | 17 | 235 | 39 | — | 1 032 |
| 40-49 | 479 | 40 | 22 | 205 | 57 | 1 | 804 |
| 50-59 | 379 | 25 | 30 | 196 | 63 | — | 693 |
| 60 and over | 323 | 6 | 28 | 195 | 117 | — | 669 |
| Not stated | 359 | 153 | 59 | 810 | 114 | — | 1 495 |
| Total | 4 663 | 1 738 | 529 | 4 209 | 876 | 5 | 12 020 |

Drivers (including motor cyclists) under twenty-one years of age, representing only 12 per cent of licence holders at 30 June 1975, accounted for 21 per cent of drivers involved in accidents, 29 per cent of drivers killed and 35 per cent of drivers injured during 1975. For drivers aged twenty-one to twenty-four years involvements were 11 per cent, deaths 14 per cent and injuries 14 per cent while their representation in the driving population was 12 per cent.

Pedestrians sixty years and over accounted for 15 per cent of pedestrians involved, 13 per cent of pedestrians injured and 39 per cent of pedestrians killed.

Details of road traffic accidents for 1975 according to time and day of occurrence are shown in the next table. More accidents occurred on Fridays (8 132 accidents) and Saturdays (7 744) than on other days of the week and more accidents occurred between 4 p.m. and 6 p.m. than during any other two-hour period. More accidents occurred between 4 p.m. and 6 p.m. on Fridays than on other days in that period and more deaths resulted from accidents occurring on Saturdays.

Road Traffic Accidents: Day of Week and Time of Occurrence, South Australia 1975

| Time of Occurrence | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday | Total | |
|------------------------|---------------|---------|-----------|----------|--------|----------|--------|-------|--------|
| TOTAL ACCIDENTS | | | | | | | | | |
| After: Midnight | Until: 2 a.m. | 78 | 73 | 97 | 111 | 149 | 625 | 706 | 1 839 |
| 2 a.m. | 4 a.m. | 28 | 19 | 42 | 35 | 47 | 140 | 205 | 516 |
| 4 a.m. | 6 a.m. | 37 | 27 | 27 | 21 | 25 | 50 | 58 | 245 |
| 6 a.m. | 8 a.m. | 411 | 464 | 504 | 394 | 449 | 139 | 62 | 2 423 |
| 8 a.m. | 10 a.m. | 644 | 679 | 722 | 699 | 786 | 637 | 186 | 4 353 |
| 10 a.m. | 12 noon | 559 | 563 | 630 | 593 | 676 | 1 160 | 469 | 4 650 |
| 12 noon | 2 p.m. | 603 | 564 | 578 | 669 | 763 | 837 | 566 | 4 580 |
| 2 p.m. | 4 p.m. | 751 | 779 | 759 | 836 | 956 | 775 | 823 | 5 679 |
| 4 p.m. | 6 p.m. | 1 444 | 1 450 | 1 430 | 1 599 | 1 873 | 1 155 | 868 | 9 819 |
| 6 p.m. | 8 p.m. | 591 | 597 | 665 | 730 | 1 131 | 1 104 | 631 | 5 449 |
| 8 p.m. | 10 p.m. | 319 | 336 | 371 | 374 | 614 | 522 | 306 | 2 842 |
| 10 p.m. | Midnight | 232 | 226 | 289 | 362 | 663 | 600 | 197 | 2 569 |
| Total | ... | 5 697 | 5 777 | 6 114 | 6 423 | 8 132 | 7 744 | 5 077 | 44 964 |

| PERSONS KILLED | | | | | | | | | |
|-----------------------|---------------|----|----|----|----|----|----|----|-----|
| After: Midnight | Until: 2 a.m. | 2 | — | 1 | 2 | 3 | 14 | 3 | 25 |
| 2 a.m. | 4 a.m. | 1 | — | 1 | — | 1 | 5 | 5 | 13 |
| 4 a.m. | 6 a.m. | 1 | — | — | — | — | 2 | 1 | 4 |
| 6 a.m. | 8 a.m. | 2 | — | 4 | — | 2 | 2 | — | 10 |
| 8 a.m. | 10 a.m. | 1 | — | 3 | 1 | 3 | 3 | 1 | 12 |
| 10 a.m. | 12 noon | 2 | 2 | 2 | — | 2 | 7 | 1 | 16 |
| 12 noon | 2 p.m. | 2 | — | 1 | 5 | 6 | 6 | 5 | 25 |
| 2 p.m. | 4 p.m. | 3 | 5 | 6 | 5 | 11 | 8 | 10 | 48 |
| 4 p.m. | 6 p.m. | 11 | 5 | 1 | 7 | 8 | 14 | 6 | 52 |
| 6 p.m. | 8 p.m. | 7 | 3 | 4 | 9 | 10 | 24 | 7 | 64 |
| 8 p.m. | 10 p.m. | 8 | 4 | 2 | 4 | 12 | 4 | 3 | 37 |
| 10 p.m. | Midnight | 6 | 2 | 5 | 3 | 7 | 8 | 2 | 33 |
| Total | ... | 46 | 21 | 30 | 36 | 65 | 97 | 44 | 339 |

| PERSONS INJURED | | | | | | | | | |
|------------------------|---------------|-------|-------|-------|-------|-------|-------|-------|--------|
| After: Midnight | Until: 2 a.m. | 22 | 25 | 39 | 53 | 83 | 280 | 308 | 810 |
| 2 a.m. | 4 a.m. | 10 | 4 | 21 | 13 | 19 | 68 | 94 | 229 |
| 4 a.m. | 6 a.m. | 16 | 15 | 17 | 4 | 11 | 28 | 29 | 120 |
| 6 a.m. | 8 a.m. | 107 | 129 | 133 | 104 | 125 | 43 | 38 | 679 |
| 8 a.m. | 10 a.m. | 137 | 121 | 128 | 147 | 157 | 117 | 60 | 867 |
| 10 a.m. | 12 noon | 108 | 85 | 100 | 94 | 122 | 223 | 152 | 884 |
| 12 noon | 2 p.m. | 112 | 110 | 105 | 138 | 178 | 272 | 231 | 1 146 |
| 2 p.m. | 4 p.m. | 176 | 175 | 143 | 151 | 221 | 264 | 281 | 1 411 |
| 4 p.m. | 6 p.m. | 336 | 300 | 286 | 320 | 345 | 391 | 316 | 2 294 |
| 6 p.m. | 8 p.m. | 199 | 165 | 201 | 207 | 334 | 326 | 186 | 1 618 |
| 8 p.m. | 10 p.m. | 108 | 123 | 125 | 131 | 184 | 195 | 129 | 995 |
| 10 p.m. | Midnight | 99 | 78 | 95 | 146 | 264 | 217 | 68 | 967 |
| Total | ... | 1 430 | 1 330 | 1 393 | 1 508 | 2 043 | 2 424 | 1 892 | 12 020 |

Although more than two-thirds of all accidents occurred between 6 a.m. and 6 p.m. the severity of accidents, judged on the basis of death and injury rates, was considerably greater during the 'night' hours, as can be seen from the following table. Both deaths and injuries, expressed as a proportion of accidents occurring, were significantly higher during each two-hour 'night' period than for any two-hour period between 6 a.m. and 6 p.m.

**Accidents and Casualties: Time of Day, Fatality and Injury Rates
South Australia, 1975**

| Time of Occurrence | Accidents Occurring | Persons Killed | Persons Injured | Persons Killed Per 100 Accidents Occurring | Persons Injured Per 100 Accidents Occurring |
|--------------------------|---------------------|----------------|-----------------|--|---|
| After: Until: | | | | | |
| Midnight 2 a.m. | 1 839 | 25 | 810 | 1.4 | 44 |
| 2 a.m. 4 a.m. | 516 | 13 | 229 | 2.5 | 44 |
| 4 a.m. 6 a.m. | 245 | 4 | 120 | 1.6 | 49 |
| 6 a.m. 8 a.m. | 2 423 | 10 | 679 | 0.4 | 28 |
| 8 a.m. 10 a.m. | 4 353 | 12 | 867 | 0.3 | 20 |
| 10 a.m. 12 noon | 4 650 | 16 | 884 | 0.3 | 19 |
| 12 noon 2 p.m. | 4 580 | 25 | 1 146 | 0.5 | 25 |
| 2 p.m. 4 p.m. | 5 679 | 48 | 1 411 | 0.8 | 25 |
| 4 p.m. 6 p.m. | 9 819 | 52 | 2 294 | 0.5 | 23 |
| 6 p.m. 8 p.m. | 5 449 | 64 | 1 618 | 1.2 | 30 |
| 8 p.m. 10 p.m. | 2 842 | 37 | 995 | 1.3 | 35 |
| 10 p.m. Midnight | 2 569 | 33 | 967 | 1.3 | 38 |
| Total | 44 964 | 339 | 12 020 | 0.8 | 27 |

Details concerning use or non-use of seat belts by drivers involved in accidents in 1975, as reported to Police, are shown in the following table.

**Road Traffic Accidents: Seat Belt Usage of Motor Vehicle Drivers and
Front Seat Passengers, South Australia, 1975**

| Seat Belt Details | Drivers (a) | | | Front Seat Passengers (b) | |
|-------------------------------------|-------------|---------|-------------|---------------------------|---------|
| | Killed | Injured | Not Injured | Killed | Injured |
| Seat belts fitted: | | | | | |
| Reported as worn | 20 | 1 511 | 38 622 | 14 | 589 |
| Reported as not worn | 39 | 421 | 3 610 | 19 | 196 |
| Seat belts not fitted | 22 | 683 | 8 973 | 8 | 270 |
| Information not available | 55 | 2 019 | 20 985 | 25 | 1 333 |
| Total | 136 | 4 634 | 72 190 | 66 | 2 388 |

(a) Any person occupying the driver's seat in a parked vehicle is excluded.

(b) Refers to passengers in front seat, left side. Excludes front seat occupants of parked vehicles.

The following table shows details of features of the roadways on which the accidents occurred. During 1975 there were 22 587 accidents at intersections (50 per cent of accidents reported) and approximately one-half of the total number of injuries occurred at intersections. However, of the 339 road deaths, 44 per cent were on straight roads compared with 25 per cent at intersections: a further 22 per cent of deaths occurred on bends or curves.

**Road Traffic Accidents: Features of Roadways on which Accidents Occurred
South Australia, 1975**

| Features of Roadway | Total Accidents Reported | Accidents Involving Casualties | Persons Killed | Persons Injured |
|----------------------------------|--------------------------------|--------------------------------------|-------------------|--------------------|
| Intersections: | | | | |
| Controlled | 7 210 | 1 220 | 21 | 1 790 |
| Uncontrolled | 15 377 | 3 143 | 63 | 4 342 |
| Other than intersections: | | | | |
| Straight road | 16 701 | 3 207 | 150 | 4 109 |
| Bend or curve | 2 494 | 833 | 74 | 1 269 |
| Railway level crossing: | | | | |
| Controlled | 119 | 30 | 3 | 35 |
| Uncontrolled | 72 | 20 | 7 | 17 |
| Other location | 2 991 | 340 | 21 | 458 |
| Total | 44 964 | 8 793 | 339 | 12 020 |

The following table shows the nature of accidents which occurred in 1975.

Road Traffic Accidents: Nature, South Australia, 1975

| Nature of Accidents | Total Accidents Reported | Accidents Involving Casualties | Persons Killed | Persons Injured |
|---|--------------------------------|--------------------------------------|-------------------|--------------------|
| Collisions between vehicles (a): | | | | |
| Head on | 810 | 364 | 54 | 652 |
| Rear end | 12 310 | 1 372 | 13 | 1 821 |
| Right angles | 13 785 | 2 953 | 68 | 4 347 |
| Other | 6 051 | 603 | 7 | 771 |
| Vehicles: | | | | |
| Overturning or leaving road (b) | 1 918 | 920 | 44 | 1 272 |
| Colliding with; | | | | |
| Fixed object | 3 946 | 1 209 | 80 | 1 664 |
| Parked vehicle | 4 533 | 326 | 7 | 420 |
| Pedestrian | 906 | 894 | 60 | 891 |
| Other | 523 | 84 | 1 | 104 |
| Passenger accidents | 41 | 41 | 2 | 48 |
| Other | 141 | 27 | 3 | 30 |
| Total | 44 964 | 8 793 | 339 | 12 020 |

(a) 'Vehicles' includes motor vehicles, motor cycles, pedal cycles, trains, trams, etc.
 (b) Vehicles leaving road and then colliding are shown in the four categories below.

Collisions between vehicles accounted for 73 per cent of all accidents and 42 per cent of deaths, while vehicles overturning or leaving the road and vehicles colliding with pedestrians accounted for 4 per cent and 2 per cent of all accidents respectively, and 13 per cent and 18 per cent of deaths.

The next table shows the age group and sex of persons holding drivers licences and permits at 30 June 1975 and involvements in accidents during 1975 of drivers and riders within the same classifications. In this table figures for involvements relate to accidents occurring in South Australia whereas licence and permit holders are those licences, etc., issued in South Australia, and the licences on issue at 30 June are only an approximation of the average for the year.

Road Traffic Accidents: Age and Sex of Licensed Drivers and of Drivers and Riders Involved in Accidents, South Australia^(a)
1975

| Age (Years) | Licensed Drivers Riders and Permit Holders at 30 June 1975 | | Accident Involvement of Drivers and Riders (b) | | Accident Involvement Rate per 100 Licensed Drivers and Riders | |
|------------------------|---|----------------|--|---------------|--|------------|
| | Males | Females | Males | Females | Males | Females |
| Under 20 | 38 405 | 22 928 | 12 025 | 2 479 | 31.3 | 10.8 |
| 20-24 | 51 758 | 37 818 | 10 987 | 3 002 | 21.2 | 7.9 |
| 25-29 | 51 342 | 38 335 | 7 644 | 2 402 | 14.9 | 6.3 |
| 30-34 | 40 356 | 30 217 | 5 185 | 1 862 | 12.8 | 6.2 |
| 35-39 | 34 692 | 24 392 | 4 342 | 1 527 | 12.5 | 6.3 |
| 40-44 | 32 313 | 20 480 | 3 964 | 1 216 | 12.3 | 5.9 |
| 45-49 | 35 986 | 20 946 | 4 285 | 1 122 | 11.9 | 5.4 |
| 50-54 | 32 955 | 18 744 | 3 595 | 916 | 10.9 | 4.9 |
| 55-59 | 25 902 | 13 727 | 2 680 | 578 | 10.3 | 4.2 |
| 60-64 | 22 388 | 10 773 | 2 211 | 486 | 9.9 | 4.5 |
| 65-69 | 15 046 | 6 214 | 1 253 | 264 | 8.3 | 4.2 |
| 70-74 | 8 418 | 2 813 | 646 | 166 | 7.7 | 5.9 |
| 75-79 | 3 982 | 1 253 | 335 | 89 | 8.4 | 7.1 |
| 80 and over | 1 961 | 415 | 152 | 32 | 7.8 | 7.7 |
| Not stated | — | — | 7 772 | 1 707 | — | — |
| Total | 395 504 | 249 055 | 67 076 | 17 848 | 17.0 | 7.2 |

(a) Includes both licensed riders and permit holders.

(b) Drivers and riders involved in more than one accident during the year are included once for each accident.

It should be noted in particular that these figures do not measure exposure to risk: for example they take no account of distances driven, times of day into which driving may be concentrated or traffic conditions during those times.

The following additional limitations should be observed when interpreting the figures:

- (i) All figures include permit holders; the accident involvement of permit holders, who are permitted to drive a vehicle only when accompanied by a fully licensed driver, appears, from an examination of the relevant data, to be significantly lower than that of fully licensed drivers. At 30 June 1975, there were 12 503 permit holders; of these 4 707 or approximately one-third were aged 16 years and 8 854 or just over two-thirds of the total were aged 20 years or less: thus if permit holders and their involvements in accidents were excluded from the table, it could be expected that the involvement rates in the lower age groups would be higher than those shown.
- (ii) The number of involvements with ages not stated is high; and their age distribution, if known, might be different from that of known cases.

SHIPPING

Control of Shipping

The Commonwealth Parliament is empowered under the Constitution to make laws in respect of trade and commerce with other countries and among the States.

Navigation and shipping are regulated under the *Navigation Act 1912* and the provisions of the Act apply to ships registered in Australia (except those engaged solely in the domestic trade of any one State) and other British ships whose first port of clearance and whose port of destination are within Australia. Other shipping Acts under the trade and commerce power are the *Sea-Carriage of Goods Act 1924*, the *Seamen's Compensation Act 1911*, the *Seamen's War Pensions and Allowance Act 1940*, the *Australian Coastal Shipping Commission Act 1966*, the *Australian Coastal Shipping Agreement Act 1956* and the *Stevedoring Industry Act 1956*.

Shipping in South Australia is controlled by the *Navigation Act 1912* and, where this does not apply, by the *Harbors Act, 1936-1974* and the *Marine Act, 1936-1976*. Both of the State Acts are administered by the Department of Marine and Harbors.

Registration of Ships

Registration of ships in Australia is in accordance with the *Merchant Shipping Act 1894* of the Imperial Parliament, under sections which apply to the United Kingdom and all British dominions. Registration is not compulsory for vessels of less than 15 net tons engaged in river or coastal trade or for larger vessels not engaged in trade. Yachts and small trading vessels may be registered at the request of the owners as registration facilitates the sale or mortgage of these vessels. An annual review of the register is carried out but some vessels whose present ownership or use cannot be traced, are retained on the register in the absence of any positive justification for their removal.

Four different measures of tonnage (gross, net, displacement, or deadweight) may be applied to a vessel. Gross tonnage is the total enclosed cubic capacity of the ship on a basis of 2.83 cubic metres a ton; net tonnage is the cubic capacity available for cargo in terms of 2.83 cubic metres a ton; displacement tonnage is the weight of water displaced by a ship; deadweight tonnage is the total weight of fuel, water, stores and cargo that a ship can carry. Passenger ships are commonly rated by the gross tonnage, cargo ships by their net tonnage, warships by their displacement tonnage, and oil tankers by their deadweight tonnage.

The following table shows the number of vessels on the South Australian Register at 31 December 1976.

**Shipping, Vessels on South Australian Register
At 31 December 1976**

| Net Tonnage | Steam and Motor | | | Sailing (including Fitted with Auxiliary Power) | | | Barges, Hulks, Dredges, etc. not Self-propelled | | |
|----------------|-----------------|---------------|-------------|---|---------------|-------------|---|---------------|-------------|
| | Vessels | Gross Tonnage | Net Tonnage | Vessels | Gross Tonnage | Net Tonnage | Vessels | Gross Tonnage | Net Tonnage |
| Under 50 .. | 89 | 5 249 | 1 913 | 103 | 1 706 | 1 381 | — | — | — |
| 50-99 .. | 33 | 3 519 | 2 306 | 5 | 701 | 444 | — | — | — |
| 100-199 .. | 11 | 2 579 | 1 758 | 2 | 678 | 313 | 1 | 179 | 179 |
| 200-499 .. | 1 | 350 | 234 | — | — | — | 1 | 319 | 319 |
| 500-999 .. | 2 | 4 237 | 1 543 | — | — | — | 1 | 762 | 762 |
| 1 000-2 999 .. | 1 | 4 174 | 1 327 | — | — | — | — | — | — |
| 3 000 and over | 2 | 14 686 | 8 910 | — | — | — | — | — | — |
| Total .. | 139 | 34 794 | 17 991 | 110 | 3 085 | 2 138 | 3 | 1 260 | 1 260 |

Registration of Motor Boats

The Boating Act, 1974-1975 gives power to the South Australian Minister of Marine to regulate boating and other activities within South Australian waters. The main provisions of the Act refer to the registration of motor boats and the licensing of motor boat operators.

Any boat that is propelled by an engine, whether or not that engine is the main means of propulsion, must be registered and have its registration number displayed on the hull. The registration number consists of two letters followed by two digits and the letter 'S' denoting South Australia. The fee for the initial registration period is currently \$5.00. A registration must be renewed annually, but, for a boat that is less than 3.048 metres in length and powered with an engine that develops less than 5 horsepower, a renewal fee is not required.

Only persons, sixteen years of age or older, may be issued with a motor boat operator's licence which remains in force without renewal unless cancelled or suspended under the Act or voluntarily surrendered. A person aged between twelve and sixteen years may be issued a permit to operate a motor boat subject to certain restrictions. The other provisions of the Act deal with unseaworthy boats, wrecks and abandoned boats, speed restrictions, rules for water ski-ing, reckless and dangerous operation, the reporting of accidents, etc.

Details of the minimum safety equipment required to be carried in a motor boat are listed in the Act's Regulations; these vary according to the length of the motor boat and whether it operates in in-shore or off-shore waters.

Shipping Search and Rescue

The Shipping Search and Rescue organisation (SAR), administered by the Department of Transport, co-ordinates the marine search and rescue operations for which the Commonwealth Government is responsible. The SAR also co-operates with the appropriate authorities in other marine emergencies.

Shipping Arrivals at South Australian Ports

Shipping figures are based on returns rendered to the Collector of Customs by shipping companies, or their agents, in respect of trading vessels exceeding 200 net tons: each arrival at and departure from a South Australian port is recorded. In the following tables the column headings, coastal and overseas, indicate the classification of vessels regardless of the division of trade on which the vessels were engaged at any particular time.

The two tables below show arrivals of coastal and overseas vessels at individual Customs ports and at all ports in South Australia respectively.

Shipping: Vessels Entered at Customs Ports, South Australia, 1975-76

| Port | Coastal | | | | Overseas | | Total | |
|----------------------------|------------|-------------|------------|-------------|----------|-------------|--------|-------------|
| | Intrastate | | Interstate | | Number | Net Tonnage | Number | Net Tonnage |
| | Number | Net Tonnage | Number | Net Tonnage | | | | |
| | | '000 | | '000 | | '000 | | '000 |
| Ardrossan | 29 | 122 | 23 | 87 | 35 | 153 | 87 | 362 |
| Ballast Head | — | — | — | — | 13 | 44 | 13 | 44 |
| Port Adelaide (a) | 388 | 354 | 165 | 554 | 587 | 3 145 | 1 140 | 4 053 |
| Port Augusta | — | — | — | — | 3 | 8 | 3 | 8 |
| Port Giles | 1 | 6 | — | — | 24 | 196 | 25 | 202 |
| Port Lincoln | 55 | 50 | 13 | 100 | 72 | 517 | 140 | 667 |
| Port Pirie | 10 | 80 | 40 | 268 | 107 | 628 | 157 | 976 |
| Port Stanvac | 26 | 249 | 32 | 421 | 39 | 935 | 97 | 1 605 |
| Rapid Bay | 46 | 83 | 5 | 20 | 2 | 4 | 53 | 107 |
| Thevenard | 10 | 44 | 14 | 61 | 42 | 190 | 66 | 295 |
| Wallaroo | — | — | 2 | 14 | 30 | 227 | 32 | 241 |
| Whyalla | 42 | 119 | 144 | 932 | 97 | 1 009 | 283 | 2 060 |

(a) Inner and outer harbour.

Shipping, Vessels Entered at South Australian Ports

| Year | Coastal | | | | Overseas | | Total | |
|------------------|------------|-------------|------------|-------------|----------|-------------|--------|-------------|
| | Intrastate | | Interstate | | Number | Net Tonnage | Number | Net Tonnage |
| | Number | Net Tonnage | Number | Net Tonnage | | | | |
| | | '000 | | '000 | | '000 | | '000 |
| 1971-72 | 744 | 1 181 | 632 | 3 767 | 1 069 | 6 765 | 2 445 | 11 714 |
| 1972-73 | 913 | 1 515 | 604 | 3 786 | 1 006 | 6 172 | 2 523 | 11 472 |
| 1973-74 | 915 | 1 422 | 542 | 3 226 | 1 005 | 6 413 | 2 462 | 11 061 |
| 1974-75 | 912 | 1 233 | 522 | 2 982 | 1 024 | 6 760 | 2 458 | 10 975 |
| 1975-76 | 963 | 1 360 | 434 | 2 427 | 1 041 | 6 960 | 2 438 | 10 746 |

The next table shows arrivals of vessels exceeding 200 net tons at selected Customs ports, according to country of registration of the vessels.

**Shipping: Country of Registration, Vessels Entered at Selected Customs Ports
South Australia**

| Customs Port | Country of Registration | Vessels | | Net Tonnage | |
|------------------------|---------------------------|--------------|------------------|------------------|----------------|
| | | 1974-75 | 1975-76 | 1974-75 | 1975-76 |
| Ardrossan . . . | Australia | 49 | 62 | 160 842 | 221 314 |
| | Other countries | 18 | 25 | 111 579 | 140 159 |
| | Total | 67 | 87 | 272 421 | 361 473 |
| Port Adelaide . . | Australia | 504 | 546 | 949 671 | 980 816 |
| | Greece | 33 | 19 | 224 044 | 146 336 |
| | India | 17 | 17 | 80 427 | 81 558 |
| | Japan | 49 | 75 | 290 320 | 375 330 |
| | Liberia | 46 | 47 | 309 572 | 318 257 |
| | Netherlands | 22 | 11 | 112 108 | 47 903 |
| | New Zealand | 26 | 18 | 32 410 | 25 398 |
| | Norway | 34 | 28 | 219 647 | 209 418 |
| | Sweden | 36 | 26 | 232 855 | 207 364 |
| | United Kingdom | 136 | 123 | 722 957 | 683 796 |
| | Other countries | 205 | 230 | 913 005 | 976 596 |
| Total | 1 108 | 1 140 | 4 087 016 | 4 052 772 | |
| Port Lincoln . . . | Australia | 70 | 70 | 169 128 | 158 919 |
| | Greece | 16 | 11 | 110 165 | 88 403 |
| | Liberia | 10 | 8 | 80 326 | 71 753 |
| | United Kingdom | 18 | 11 | 160 191 | 99 590 |
| | Other countries | 44 | 40 | 289 433 | 248 018 |
| Total | 158 | 140 | 809 243 | 666 683 | |
| Port Pirie | Australia | 54 | 54 | 300 504 | 358 373 |
| | Greece | 8 | 9 | 55 489 | 61 037 |
| | India | 9 | 15 | 45 742 | 74 501 |
| | New Zealand | 6 | 5 | 11 073 | 24 275 |
| | United Kingdom | 40 | 40 | 281 464 | 312 261 |
| | Other countries | 29 | 34 | 168 777 | 145 338 |
| Total | 146 | 157 | 863 049 | 975 785 | |
| Port Stanvac . . . | Australia | 43 | 51 | 524 947 | 634 139 |
| | Norway | 5 | 10 | 145 996 | 183 151 |
| | United Kingdom | 5 | 13 | 101 410 | 104 809 |
| | Other countries | 15 | 23 | 465 524 | 683 281 |
| Total | 68 | 97 | 1 237 877 | 1 605 380 | |
| Thevenard | Australia | 47 | 28 | 201 176 | 119 222 |
| | Liberia | 2 | 4 | 13 582 | 25 619 |
| | New Zealand | 21 | 10 | 39 715 | 17 926 |
| | Other countries | 30 | 24 | 175 162 | 132 403 |
| Total | 100 | 66 | 429 635 | 295 170 | |
| Whyalla | Australia | 207 | 176 | 1 189 899 | 887 921 |
| | Liberia | 17 | 19 | 191 375 | 225 814 |
| | United Kingdom | 34 | 26 | 478 799 | 295 914 |
| | Other countries | 53 | 62 | 508 741 | 650 485 |
| Total | 311 | 283 | 2 368 814 | 2 060 134 | |

Cargo Handled at Major Ports

The South Australian Department of Marine and Harbors records details of cargo handled at major ports in this State and the following table shows details for each of the last five years.

Cargo Handled: Major Ports, South Australia

| Port | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--------------------------|-------------|---------|---------|---------|---------|
| | '000 tonnes | | | | |
| American River | 39 | 43 | 46 | 37 | 41 |
| Ardrossan | 581 | 519 | 522 | 541 | 744 |
| Ballast Head | 177 | 184 | 200 | 192 | 193 |
| Kingscote | 144 | 164 | 209 | 176 | 188 |
| Klein Point | 576 | 606 | 559 | 550 | 605 |
| Port Adelaide | 3 510 | 3 574 | 4 357 | 3 862 | 3 640 |
| Port Augusta | 33 | 42 | 31 | 11 | — |
| Port Giles | 129 | 73 | 99 | 119 | 145 |
| Port Lincoln | 748 | 588 | 739 | 970 | 783 |
| Port Pirie | 1 399 | 1 292 | 1 324 | 1 272 | 1 318 |
| Port Stanvac | 2 887 | 2 912 | 2 964 | 2 816 | 3 719 |
| Proper Bay | 353 | 231 | 102 | 48 | 33 |
| Rapid Bay | 205 | 291 | 243 | 229 | 228 |
| Stenhouse Bay | 159 | 24 | 14 | 5 | — |
| Thevenard | 721 | 757 | 975 | 924 | 630 |
| Walleroo | 286 | 221 | 303 | 362 | 385 |
| Whyalla | 7 053 | 7 869 | 6 930 | 6 520 | 5 538 |
| Other ports | 5 | 3 | 1 | — | — |
| Total | 19 006 | 19 393 | 19 618 | 18 634 | 18 190 |

Overseas Shipping Cargo

Overseas shipping cargo statistics are compiled from returns submitted by shipping companies, or their representatives, to Customs Houses at each port in South Australia. A return is required for each movement of a vessel into and out of a port except for naval vessels, yachts and other craft used for pleasure, foreign fishing vessels that neither load nor discharge cargo and vessels not exceeding 200 net tons.

Cargo is recorded in terms of either units of weight or units of volume depending on the basis on which freight is charged. The statistics show separate figures for cargo recorded in tonnes weight and cargo recorded in cubic metres. The aggregates for weight and volume cargo are not added to a figure for total cargo because they are unlike quantities, and comparisons of total cargo between ports, trade routes or periods of time could be affected by variations in the cargo mix and in the basis on which freight is charged.

The following figures show, for the years 1974-75 and 1975-76, particulars of cargo loaded in South Australia for discharge overseas, and of cargo discharged in South Australia from overseas, classified according to major trade areas.

Shipping: Cargo Loaded in South Australia, Trade Area of Destination

| Cargo Loaded for Ports in— | 1974-75 | | 1975-76 | |
|--|------------------|-----------------|------------------|-----------------|
| | Tonnes Weight | Cubic Metres | Tonnes Weight | Cubic Metres |
| North America and Hawaiian Islands: | | | | |
| Northern Area; | | | | |
| USA | 13 993 | 2 163 | 22 021 | 1 941 |
| Canada | 3 819 | 3 968 | 4 684 | 2 296 |
| Central America | 1 | 5 | 402 | — |
| Bermuda and Caribbean Area | 69 | 1 904 | — | — |
| South America | 191 231 | 3 | 102 633 | — |
| Europe (excluding USSR): | | | | |
| North-western, Central and Baltic; | | | | |
| United Kingdom | 81 893 | — | 24 755 | 12 |
| Other | 757 877 | 5 811 | 668 135 | 20 384 |
| Southern Area | 65 086 | 490 | 78 691 | 528 |
| USSR (in Europe and Asia) | 192 491 | 5 279 | 410 116 | 1 |
| Africa | 229 753 | 48 625 | 162 265 | 29 601 |
| Asia (excluding USSR) | 2 846 373 | 84 614 | 2 816 435 | 183 062 |
| Papua and New Guinea, New Zealand and Pacific Islands | 355 486 | 44 892 | 280 749 | 46 997 |
| Indian Ocean Islands and Antarctica | 52 | 316 | 5 | 115 |
| Total cargo loaded | 4 738 124 | 198 070 | 4 570 891 | 284 937 |

Shipping: Cargo Discharged in South Australia, Trade Area of Origin

| Cargo Discharged from Ports in— | 1974-75 | | 1975-76 | |
|--|------------------|-----------------|------------------|-----------------|
| | Tonnes Weight | Cubic Metres | Tonnes Weight | Cubic Metres |
| North America and Hawaiian Islands: | | | | |
| Northern Area; | | | | |
| USA | 73 967 | 39 039 | 41 242 | 55 249 |
| Canada | 73 270 | 65 223 | 6 842 | 51 160 |
| Central America | 22 300 | — | — | — |
| Bermuda and Caribbean Area | 1 000 | — | 25 201 | 27 |
| Europe (excluding USSR): | | | | |
| North-western, Central and Baltic; | | | | |
| United Kingdom | 4 799 | 21 664 | 3 474 | 1 083 |
| Other | 10 139 | 52 804 | 7 809 | 26 164 |
| Southern Area | 1 812 | 8 830 | 630 | 7 077 |
| USSR (in Europe and Asia) | — | 29 | 49 | 18 |
| Africa | 5 687 | 3 066 | 13 855 | 1 000 |
| Asia (excluding USSR) | 1 716 821 | 254 811 | 2 093 519 | 212 727 |
| Papua and New Guinea, New Zealand and Pacific Islands | 257 431 | 8 967 | 216 872 | 20 998 |
| Indian Ocean Islands and Antarctica | 107 422 | — | 146 257 | — |
| Total cargo discharged | 2 274 648 | 454 433 | 2 555 750 | 375 503 |

Distances to Overseas Ports

Distances in kilometres from Port Adelaide to principal overseas ports are shown in the following table. Distances by sea from Port Adelaide to the ports of other Australian capital cities are given on page 583.

Distances from Port Adelaide to Principal Overseas Ports

| Port Adelaide to: | Kilometres | Port Adelaide to: | Kilometres |
|----------------------|------------|--------------------------|------------|
| <i>Africa;</i> | | <i>North America;</i> | |
| Cape Town | 10 377 | <i>East Coast,</i> | |
| <i>Asia;</i> | | Baltimore | (a) 23 135 |
| Colombo | 7 982 | | (c) 19 059 |
| Djakarta | 5 643 | Montreal | (a) 23 541 |
| Hong Kong | 8 856 | | (c) 21 368 |
| Singapore | 6 510 | New York | (a) 22 961 |
| Yokohama | 9 780 | | (c) 19 200 |
| <i>Europe;</i> | | <i>West Coast,</i> | |
| Liverpool | (a) 21 630 | San Francisco | 13 653 |
| | (b) 19 774 | Vancouver | 14 357 |
| London | (a) 21 705 | | |
| | (b) 19 839 | <i>Central America;</i> | |
| Marseilles | (a) 21 144 | Panama | 15 385 |
| | (b) 16 688 | <i>East Coast,</i> | |
| Naples | (a) 21 663 | Buenos Aires | (d) 14 388 |
| | (b) 15 940 | Rio de Janeiro | (d) 15 901 |
| <i>New Zealand;</i> | | <i>West Coast,</i> | |
| Auckland | 3 769 | Valparaiso | 12 353 |
| Wellington | 3 482 | | |

(a) Via Cape Town. (b) Via Suez Canal. (c) Via Panama Canal. (d) Via Cape Horn.

Passenger Movement by Sea

Statistics of passengers disembarking, embarking and passing through Australian ports are compiled according to type of passenger—namely overseas, direct transit, interstate or cruise. 'Overseas' passengers are defined as persons travelling to or from overseas destinations and who embark or disembark in Australia; 'direct transit' as persons on vessels calling at Australian ports and who have embarked at an overseas port for an overseas destination; 'interstate' as persons travelling by sea from one Australian State to another, or travelling from and to the same port or a port in the same State via other States; and 'cruise' as persons on an overseas journey which begins and ends in Australia, does not exceed thirty days, is confined to specific ports in the South-West Pacific area and has been classified as a cruise to enable certain documentation requirements to be waived. Information about passengers is obtained from ships' manifests, passenger cards completed by passengers, the Department of Transport, and the Bureau of Customs.

The following table shows numbers and types of passengers who disembarked, embarked and passed through South Australian ports during the five years 1971 to 1975.

Shipping: Passenger Movement by Sea, South Australian Ports^(a)

| Year | Type of Passenger | | | | | |
|------|-------------------|----------|----------------|-----------------------------|----------|----------------|
| | Overseas | | | Total (including Other (b)) | | |
| | Disembarked | Embarked | Passed Through | Disembarked | Embarked | Passed Through |
| 1971 | 5 127 | 4 825 | 32 500 | 6 547 | 6 206 | 40 280 |
| 1972 | 2 939 | 3 311 | 24 139 | 4 102 | 4 338 | 30 710 |
| 1973 | 2 126 | 3 609 | 22 383 | 3 126 | 4 137 | 29 465 |
| 1974 | 1 188 | 1 918 | 11 989 | 1 727 | 2 343 | 16 411 |
| 1975 | 407 | 479 | 3 124 | 725 | 1 189 | 5 935 |

(a) Almost exclusively Port Adelaide.

(b) Interstate, direct transit and cruise passengers.

CIVIL AVIATION

Control of Civil Aviation

In Australia, civil aviation is subject to the Commonwealth *Air Navigation Act* 1920 and to regulations made under the Act. The South Australian *Air Navigation Act*, 1937 provided for 'the application of Commonwealth *Air Navigation Regulations* to, and in relation to, air navigation within the State of South Australia'. The regulations under the Commonwealth Act were drawn up to give effect to the 1944 Chicago Convention on Civil Aviation. Regulations based on the resolutions of the Paris Convention in 1919 were no longer adequate in the years after the 1939-45 War because of the immense wartime development of aerial transport.

The present regulations, administered by the Department of Transport, cover the registration of aircraft and the issue of certificates of airworthiness; the licensing of aircraft services, aircraft operating crews, aerodromes, and flying training schools, and the rules of the air. The Department is responsible for the operation of Air Traffic Control and has assumed responsibility for co-ordination of Search and Rescue operations.

Under the *Australian National Airlines Act* 1945 the Australian National Airlines Commission was established and empowered to operate Commonwealth Government-owned air services. The Commission operates under the name Trans-Australia Airlines.

The *Civil Aviation Agreement Act* 1952 ratified an agreement between the Commonwealth Government and Australian National Airways Pty Ltd to ensure the efficient and economical operation of air services within Australia by eliminating wasteful competition between that company and Trans-Australia Airlines and to rationalise the services of both airlines. The *Civil Aviation Agreement Act* 1957 was enacted to extend the privileges and obligations of the 1952 Act to the new proprietor of the major private airline after the purchase of Australian National Airways Pty Ltd by Ansett Transport Industries Ltd. The Commonwealth Parliament passed the *Airlines Equipment Act* in 1958 and this provided for further financial assistance to both airlines for the purchase of new aircraft and empowered the Commonwealth Government to limit the aircraft capacity being provided on competitive routes by these two operators.

The Airlines Agreement approved by the *Airlines Agreement Act 1961* consolidated all the arrangements and principles developed by the Government over the past decade for maintaining and securing the competitive airline system and made important arrangements affecting the introduction of new aircraft on Australian domestic routes. The *Civil Aviation Agreement Act 1952*, amended by the 1961 Act, is now cited as the *Airlines Agreement Act 1952*.

For reference to international agreements on civil aviation see the *Official Year Book of Australia* No. 48, and for references to international organisations see Year Book No. 37.

Aircraft on Register

The total number of aircraft listed at 30 June 1976 on the Australian register, was 4 431. The following table shows figures for registered aircraft based in the South Australia-Northern Territory Region, classified by type of operation.

Aircraft Based in South Australia-Northern Territory Region Type of Operation

| Type of Operation | At 30 June | | | | |
|--|------------|------------|------------|------------|------------|
| | 1972 | 1973 | 1974 | 1975 | 1976 |
| Regular public transport (a) | 14 | 13 | 11 | 11 | 9 |
| Private | 178 | 185 | 227 | 247 | 272 |
| Charter | 125 | 117 | 121 | 130 | 123 |
| Other (b) | 99 | 103 | 107 | 116 | 114 |
| Total | 416 | 418 | 466 | 504 | 518 |

(a) Excludes major airlines servicing interstate routes.

(b) Includes agricultural work, ambulance, survey and pilot training functions.

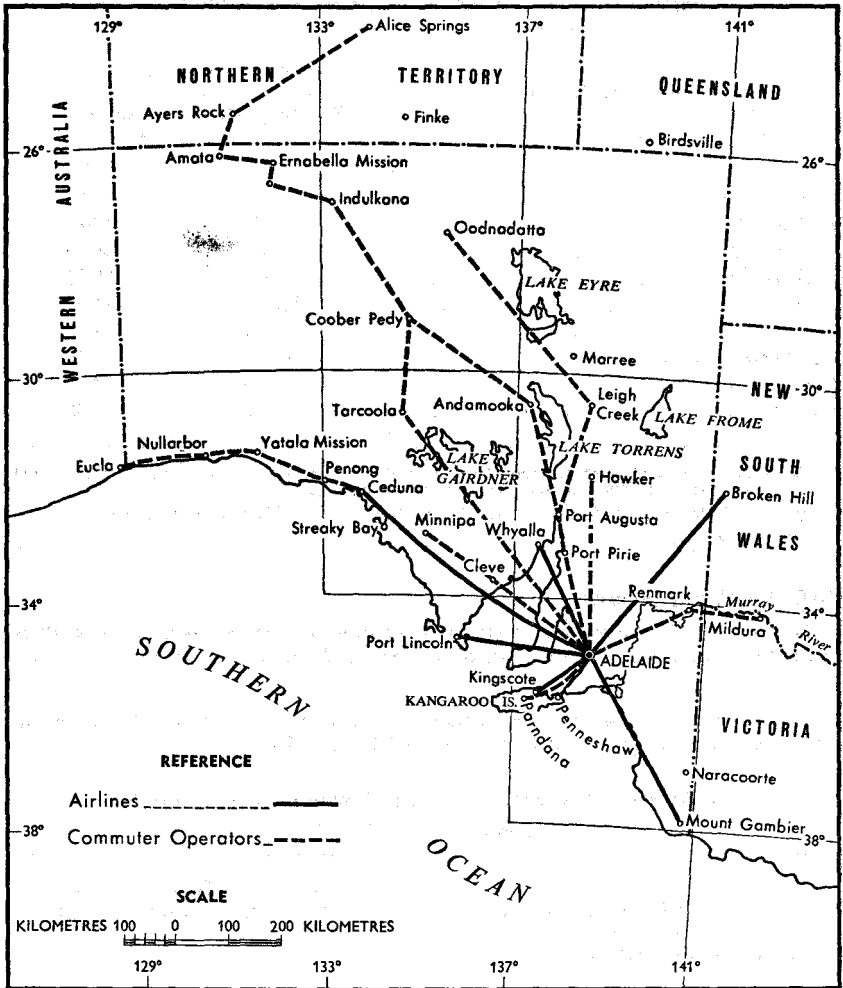
General Air Services

Adelaide has no direct links by air with overseas: these are provided through Sydney, Melbourne and Perth. However, it is on the scheduled flights of regular interstate services from Sydney, Melbourne, Perth, Canberra and Darwin.

Adelaide is also the terminus for intrastate services. Regular connections to Ceduna, Kingscote, Mount Gambier, Port Lincoln and Whyalla are provided by Ansett Airlines of South Australia.

Since 1966-67, when the Commonwealth Government approved introduction of commuter services in country areas, there has been a significant increase in regular air services between country towns and areas which were either not served by the major airlines or had no direct air service with Adelaide or the nearest major provincial city. Such services usually utilise single or twin engined aircraft and operate to fixed and published time-tables.

SOUTH AUSTRALIA AIR SERVICES



The first commuter service in Australia, between Adelaide and opal fields at Andamooka and Coober Pedy, commenced during 1966-67. This service was later extended to Ayers Rock, and now also services a number of remote localities *en route*.

The next table shows adult passenger single air fares, in force at 1 April 1977, between Adelaide and selected Australian cities.

Passenger Air Fares, Adelaide to Selected Australian Cities

| Between Adelaide and: | Adult, Single Fare (a) | |
|-------------------------|------------------------|-------------|
| | Economy Class | First Class |
| | \$ | \$ |
| Alice Springs | 82.80 | 103.50 |
| Brisbane (b) | 115.80 | 144.80 |
| Broken Hill | — | 36.50 |
| Canberra (c) | 71.20 | 89.00 |
| Darwin | 155.80 | 194.80 |
| Hobart (d) | 79.40 | 99.30 |
| Melbourne | 45.00 | 56.30 |
| Perth | 127.20 | 159.00 |
| Sydney | 74.20 | 92.80 |

- (a) Fares at reduced rates are applicable to children under 15 years of age, to students and to groups of fifteen persons or more travelling together.
- (b) Via Melbourne or Sydney. (c) Either direct or via Melbourne or Sydney.
- (d) Via Melbourne.

Civil Aviation Accidents

During 1975-76 there were four civil aviation accidents involving casualties in South Australia and these resulted in the death of seven persons and injury to one.

The table below shows the details of civil aviation accidents involving casualties during the ten year period 1966-67 to 1975-76.

**Civil Aviation Accidents Involving Casualties, South Australia
1966-67 to 1975-76 (a)**

| Class of Operation | No. of Accidents | Persons Killed | Persons Injured |
|------------------------------------|------------------|----------------|-----------------|
| Regular public transport | — | — | — |
| Charter | 5 | 16 | 2 |
| Training | 1 | — | 1 |
| Private | 22 | 47 | 7 |
| Gliding | 8 | 3 | 5 |
| Other | 1 | — | 1 |
| Total | 37 | 66 | 16 |

(a) Excludes parachutists killed or injured on contact with earth after an uninterrupted fall.

Passengers and Freight Carried

The number of passengers and the tonnage of freight carried on civil airlines in South Australia has more than doubled on both interstate and intrastate services during the last ten years. Details of movements at principal airports for the last five years are shown in the following table. A full list of Government and licensed aerodromes in South Australia appears on page 421.

Principal Airports, South Australia
Passengers, Freight and Aircraft Movements

| Airport | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|
| PASSENGERS (a) | | | | | |
| Adelaide (b) (c) | 1 050 104 | 1 156 808 | 1 376 891 | 1 425 860 | 1 454 917 |
| Kingscote | 47 993 | 48 609 | 59 107 | 61 121 | 58 887 |
| Port Lincoln | 43 648 | 49 758 | 60 956 | 61 737 | 65 498 |
| Woomera | 17 719 | 15 564 | 14 209 | 14 032 | 8 876 |
| Whyalla | 31 063 | 32 662 | 39 454 | 41 267 | 42 939 |
| Mount Gambier | 21 890 | 24 958 | 29 464 | 30 148 | 33 748 |
| FREIGHT—TONNES (d) | | | | | |
| Adelaide (b) (c) | 14 617 | 14 469 | 18 549 | 18 957 | 16 390 |
| Kingscote | 129 | 136 | 151 | 142 | 133 |
| Port Lincoln | 123 | 119 | 124 | 121 | 130 |
| Woomera | 210 | 168 | 99 | 90 | 64 |
| Whyalla | 112 | 122 | 129 | 133 | 108 |
| Mount Gambier | 112 | 109 | 101 | 98 | 102 |
| AIRCRAFT MOVEMENTS (e) | | | | | |
| Adelaide (c) | 21 780 | 22 659 | 24 351 | 24 225 | 23 978 |
| Kingscote | 1 455 | 1 745 | 1 992 | 2 081 | 2 239 |
| Port Lincoln | 1 382 | 1 742 | 2 234 | 2 325 | 2 332 |
| Woomera | 608 | 536 | 474 | 458 | 361 |
| Whyalla | 1 106 | 1 188 | 1 378 | 1 432 | 1 540 |
| Mount Gambier | 1 251 | 1 257 | 1 398 | 1 567 | 1 753 |

(a) Total of embarkations and disembarkations. (b) Figures of passengers and freight movements are overstated to the extent of through traffic transferring between flights. (c) Includes Edinburgh Airfield. (d) Total of freight loaded and unloaded. (e) Total of arrivals and departures.

10.5 COMMUNICATION

As a result of Federation all the former colonial post and telegraph services were taken over by the Commonwealth Government on 1 March 1901 and until 1 July 1975 were controlled, pursuant to the provisions of the *Post and Telegraph Act 1901*, by the Postmaster-General through the Postmaster-General's Department. A detailed history of Posts, Telegraphs and Telephones was included on pages 469-70 of the *South Australian Year Book 1967*. In performing its functions, the Department worked in close co-operation with three important agencies: the Overseas Telecommunications Commission, which is responsible for establishing, maintaining, and operating public cable and radio telegraph services with overseas countries and ships at sea; the Australian Broadcasting Control Board, which ensured the provision of services by broadcasting stations and television stations in accordance with plans prepared by the Board; and the Australian Broadcasting Commission, which controls the activities of the National Broadcasting Service and the National Television Service.

In February 1973 a Commission was established to conduct an inquiry into what changes, if any, should be made in the organisation, administration and operations of postal and telecommunication services. In their Report, presented in April 1974, the Commissioners recommended establishment of separate postal and telecommunication corporations independent of the jurisdiction of the Public Service Board.

As a result of the Government's acceptance of this recommendation the Australian Telecommunications Commission and the Australian Postal Commission took over from the Australian Post Office on 1 July 1975 under the provisions of the *Telecommunications Act 1975*, the *Postal Services Act 1975*, and the *Postal and Telecommunications Commissions (Transitional Provisions) Act 1975*.

POSTAL SERVICES

The Australian Postal Commission (Australia Post) commenced with a staff of 35 000. The Commission's aim is to provide a fast and efficient postal service, at the least possible cost, to standards which reasonably meet the needs of the Australian community. Each week day Australia Post services about 4·8 million delivery points, and distributes 8·7 million articles.

During 1975-76 there were substantial increases in postal charges including a rise of eighty per cent in the basic postage rate. These increases were considered necessary in order to satisfy the statutory requirement for the Commission to break even financially and to fund at least fifty per cent of its capital requirements.

On 5 July 1976 the Australia Post Courier service was extended to include Adelaide. The service provides full pick-up and delivery and now operates in all capital cities.

Details of post offices for the years 1972 to 1976 are given in the following table.

Post Offices: South Australia and Northern Territory
Number at 30 June

| Particulars | 1972 | 1973 | 1974 | 1975 | 1976 |
|------------------------|------|------|------|------|------|
| Post Offices: | | | | | |
| Official | 175 | 171 | 171 | 171 | 171 |
| Non-official | 651 | 650 | 615 | 590 | 569 |
| Total | 826 | 821 | 786 | 761 | 740 |

Non-official post offices are conducted by persons who are not employed under the *Postal Services Act 1975* and who receive an allowance based on business transacted—in many instances this type of business is conducted in conjunction with some other business activity.

At 30 June 1976, there were 3 874 persons employed in postal services in South Australia and Northern Territory including 3 115 official staff employed under the *Postal Services Act 1975* and 759 non-official staff. In addition there were 276 mail contractors who held mail service contracts with Australia Post.

The Australia Post financial statements are prepared on an accrual accounting basis and in accordance with accounting principles generally applied in commercial practice. Revenue and expenditure figures for individual States are not available as some items are not recorded on a State basis. However, some financial data on a cash basis are available. Gross postage receipts collected in South Australia and Northern Territory by Australia Post during 1975-76 totalled \$33.4 million including \$17.8 million from postage stamps, \$8.5 million from postal debtors and \$4.3 million from franking machines.

Postal Articles Handled

Details of articles handled by post offices in South Australia and the Northern Territory during the years 1971-72 to 1975-76 are shown in the following table.

Postal Articles Handled, South Australia and Northern Territory

| Year | Standard Articles (a) (b) | Non-standard Articles (a) (c) | Parcels (d) | Registered Articles | All Articles |
|---------------------------------|---------------------------|-------------------------------|-------------|---------------------|--------------|
| Posted for delivery: | | | '000 | | |
| Within Australia; | | | | | |
| 1971-72 | 200 023 | 18 897 | 1 738 | 660 | 221 317 |
| 1972-73 | 203 236 | 18 317 | 1 888 | 606 | 224 048 |
| 1973-74 | 209 303 | 21 095 | 1 884 | 579 | 232 860 |
| 1974-75 | 186 909 | 25 967 | 1 642 | 589 | 215 107 |
| 1975-76 | 156 073 | 20 989 | 1 362 | 438 | 178 862 |
| Beyond Australia; | | | | | |
| 1971-72 | 9 129 | 690 | 92 | 74 | 9 986 |
| 1972-73 | 9 619 | 787 | 93 | 85 | 10 584 |
| 1973-74 | 4 517 | 318 | 85 | 79 | 4 999 |
| 1974-75 | 4 453 | 316 | 82 | 89 | 4 940 |
| 1975-76 | 8 408 | 365 | 68 | 67 | 8 908 |
| Received from beyond Australia; | | | | | |
| 1971-72 | 6 692 | 2 293 | 94 | 36 | 9 114 |
| 1972-73 | 5 745 | 1 731 | 85 | 30 | 7 590 |
| 1973-74 | 5 405 | 1 876 | 98 | 32 | 7 411 |
| 1974-75 | 6 569 | 2 288 | 110 | 36 | 9 003 |
| 1975-76 | 5 975 | 1 840 | 224 | 33 | 8 072 |

(a) Includes Certified and Messenger Delivery mail. (b) Before 1974-75 includes all letter form articles. (c) Before 1974-75 includes only newspapers and packets. (d) Includes registered parcels.

Money Orders and Postal Orders

The value of money orders and postal orders issued in 1944-45 amounted to \$3 128 000 and \$1 801 000 respectively; in 1975-76 the corresponding values were \$20 594 000 and \$5 597 000. Total commission charged on money orders issued in 1975-76 amounted to \$375 507. The fee on postal orders issued in 1975-76 amounted to \$376 000.

The value of money orders and postal orders paid in 1944-45 amounted to \$2 995 000 and \$1 072 000 respectively; in 1975-76 the corresponding values were \$20 252 000 and \$4 457 000.

Money Orders Issued and Paid
South Australia and Northern Territory

| Year | Money Order Offices | Issued For Payment | | | | Paid, Having Been Issued | | | |
|---------|---------------------|--------------------|--------|------------------|--------|--------------------------|--------|------------------|--------|
| | | Within Australia | | Beyond Australia | | Within Australia | | Beyond Australia | |
| | | Number | Value | Number | Value | Number | Value | Number | Value |
| | Number | '000 | \$'000 | '000 | \$'000 | '000 | \$'000 | '000 | \$'000 |
| 1971-72 | 540 | 410 | 12 226 | 61 | 716 | 395 | 11 473 | 22 | 550 |
| 1972-73 | 541 | 386 | 12 375 | 59 | 723 | 361 | 11 548 | 20 | 510 |
| 1973-74 | 534 | 337 | 13 138 | 57 | 726 | 317 | 12 184 | 18 | 438 |
| 1974-75 | 529 | 336 | 17 547 | 41 | 755 | 308 | 15 333 | 15 | 511 |
| 1975-76 | 517 | 337 | 19 418 | 35 | 606 | 299 | 16 883 | 9 | 369 |

Postal Orders Issued and Paid
South Australia and Northern Territory

| Year | Postal Order Offices | Postal Orders Issued | | Postal Orders Paid | |
|---------|----------------------|----------------------|-------|--------------------|-------|
| | | Number | Value | Number | Value |
| | | Number | '000 | '000 | '000 |
| 1971-72 | 824 | 2 518 | 8 948 | 1 945 | 7 614 |
| 1972-73 | 822 | 2 364 | 9 059 | 1 888 | 7 755 |
| 1973-74 | 814 | 2 305 | 9 660 | 1 869 | 8 075 |
| 1974-75 | 762 | 2 026 | 8 933 | 1 647 | 7 457 |
| 1975-76 | 740 | 1 220 | 5 597 | 960 | 4 457 |

TELECOMMUNICATION SERVICES

The Australian Telecommunications Commission (Telecom Australia) has responsibility for telecommunication services within Australia. On commencement the Commission had approximately 3.5 million telephone subscribers, net assets of \$4 000 million, a staff of 88 600 and a projected budget for 1975-76 of \$1 900 million.

During 1975-76 there was a considerable growth in the provision of services e.g. the telephone network increased by four per cent, telex by sixteen per cent and 'Datel' by fifty-two per cent; the Commission in conjunction with Overseas Telecommunications Commission provided a new service, International Subscriber Dialling (ISD), to thirteen countries. In addition, existing services are being improved e.g. modernisation of public telephone services including the provision of Subscriber Trunk Dialling (STD) from public telephones.

Telecom Australia also provides a Datel service for the transmission of digital data between computer systems over private lines or the ordinary telephone network. The data are converted into a form suitable for transmission over a telephone type circuit by a 'modulator/demodulator' unit known as a 'Modem'. Before data are presented to the computer or terminal they are restored to their original form.

Telephone Services

Telecom Australia provides subscriber services, trunk line circuits and automatic telephone exchanges. There has been a continuous growth in these facilities and at 30 June 1976 there were 3 031 trunk line channels and 363 country automatic telephone exchanges in the State. There are sixty-one automatic exchanges in the Adelaide Telephone District. From 1 September 1975 the normal charges for selected telephone services are as follows:

Installation charge for a new telephone service is \$120. Annual rental charges are based on the facilities provided; where continuous exchange facilities exist the charge for a non-business service is \$85 or in the case of pensioners \$56.67, paid half-yearly in advance. The corresponding rental charges to subscribers with non-continuous exchanges are \$40 and \$26.66 respectively. Annual rental charges for continuous exchange and non-continuous exchange business services are \$120 and \$50 respectively. Approximately 99 per cent of subscribers now have continuous service.

Private calls between subscribers within a single telephone zone, and between subscribers in adjoining zones, are charged at a 'local call' rate of 9 cents per call. The corresponding charge for calls from public telephones is 10 cents. Trunk call rates, which vary according to duration and distances, are charged for calls between non-adjoining telephone zones: lower rates are charged for calls between 6 p.m. and 8 a.m.

Telephone Services, South Australia and Northern Territory

| At 30 June | Telephone Exchanges | Telephone Services | | | | | Trunk Line Channels in Service (a) | |
|---------------|------------------------|----------------------|--------|---------------|-------------------------------|----------------------|---|-------|
| | | Ordinary Exchange | Duplex | Party Line | Private Branch Exchange | Public Telephones | | Total |
| 1972 | 698 | 225 325 | 2 | 1 097 | 32 168 | 3 016 | 261 608 | 2 291 |
| 1973 | 690 | 239 467 | 2 | 995 | 35 178 | 3 045 | 278 687 | 2 378 |
| 1974 | 674 | 257 146 | 2 | 915 | 37 140 | 3 097 | 298 300 | 2 726 |
| 1975 | 670 | 270 036 | 2 | 870 | 37 818 | 3 078 | 311 804 | 2 829 |
| 1976 | 667 | 289 875 | 2 | 804 | 41 128 | 3 139 | 334 948 | 3 031 |

(a) Excludes trunk junctions.

A Telecom Australia objective is the establishment of a nationwide subscriber to subscriber direct trunk calling system known as subscriber trunk dialling (STD). The provision of STD facilities at telephone exchanges in South Australia has increased rapidly since its introduction in January 1967 and at 30 June 1976 STD facilities were available to approximately 235 000 subscribers in the

Adelaide Telephone District and about 51 600 country subscribers for two-way contact with selected exchanges in New South Wales, Victoria, Queensland, Western Australia and Tasmania. In addition, either one-way or two-way direct dialling between a number of other country exchanges and Adelaide was available to approximately 6 500 country subscribers.

Because approximately 56 per cent of trunk calls originate in country areas, directed either to the capital city or to other country exchanges, great benefit will accrue when all country exchanges are linked with the STD system. However, many years will elapse before the majority of exchanges can be connected because of the amount of work and the complex equipment involved.

All metropolitan and outer metropolitan services are operated through automatic exchanges, whereas at 30 June 1976, 71 500 country and Northern Territory services were automatic and 15 400 services were manually operated. Metropolitan and outer metropolitan services totalled approximately 248 000 and of these 181 900 were non-business. In the country, business telephone services accounted for a larger share (about 51 per cent) of services.

RADIO AND TELEVISION SERVICES

On 1 July 1975 Telecom Australia took over certain broadcasting responsibilities which had been vested in the former Postmaster-General's Department, under the *Broadcasting and Television Act 1942*. Telecom Australia is now required to provide and operate for the purposes of broadcasting and televising programs of the Australian Broadcasting Commission (ABC) the following:

- (1) transmitting stations (including translator stations) for the National and Radio Australia services;
- (2) interconnection facilities to connect each studio of the ABC to its appropriate local transmitting station;
- (3) technical equipment for the reception of broadcasting transmissions from other countries for re-broadcast by the ABC.

Under the abovementioned charter, Telecom Australia is currently operating all transmitting station and program link facilities associated with the ABC's broadcasting services *viz*, medium frequency, high frequency inland, frequency modulation (FM), Television and Radio Australia (International). In addition, Telecom Australia is the construction authority for all new transmitting facilities required for these services.

A new commercial television station, based at Loxton, was opened on 27 November 1976.

The first four stations of the National FM broadcasting network began transmission on 24 January 1976. The high power stereo transmissions which serve Sydney, Melbourne, Canberra and Adelaide originate from the Australian Broadcasting Commission's Adelaide studios and are relayed over specially prepared lines.

Further information on radio and television services is contained in Part 6.4 Culture and Recreation.

Details of radio and television stations licensed in South Australia at 30 June in the years 1972 to 1976 are shown in the following table.

Radio and Television Stations, South Australia

At 30 June^(a)

| Radio Communication Stations | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---------------|---------------|---------------|---------------|---------------|
| Broadcasting: | | | | | |
| National | 10 | 10 | 10 | 10 | 10 |
| Commercial | 8 | 8 | 8 | 8 | 9 |
| Public (b) | — | 1 | 1 | 1 | 1 |
| Television: | | | | | |
| National | 4 | 4 | 6 | 6 | 6 |
| Commercial | 5 | 5 | 5 | 5 | 5 |
| Transmitting and receiving: | | | | | |
| Fixed; | | | | | |
| Outpost | 168 | 171 | 185 | 190 | 158 |
| Other | 151 | 154 | 153 | 174 | 256 |
| Land; | | | | | |
| Aeronautical | 29 | 35 | 38 | 40 | 39 |
| Base stations for mobile services | 1 133 | 1 275 | 1 448 | 1 521 | 1 632 |
| Coast | 25 | 24 | 25 | 25 | 26 |
| Experimental | 69 | 66 | 72 | 78 | 79 |
| Repeater | — | — | — | — | 1 |
| Mobile | 13 773 | 15 437 | 17 332 | 19 219 | 20 922 |
| Space services | 1 | 1 | 1 | 1 | 1 |
| Amateur | 740 | 748 | 778 | 789 | 795 |
| Receiving only: | | | | | |
| Fixed | 17 | 19 | 20 | 21 | 22 |
| Mobile | — | 10 | 10 | 24 | 24 |
| Total stations | 16 133 | 17 968 | 20 092 | 22 112 | 23 986 |

(a) Excludes stations in Northern Territory.

(b) University of Adelaide station 5UV.

NOTE: A fixed station is established at a fixed location for the exchange of radio messages with other fixed stations whereas a land station is established at a fixed location for the exchange of radio messages with mobile stations. An outpost station is established in an outback area and communicates with control stations operated by such organisations as the Royal Flying Doctor Service. A space service is a radiocommunication service between earth stations and space stations, between space stations, or between earth stations when signals are retransmitted by space stations, or transmitted by reflection from objects in space.

OVERSEAS TELECOMMUNICATIONS SERVICES

The Overseas Telecommunications Commission (Australia) was established under the *Overseas Telecommunications Act 1946*. The Commission, in association with the Australian Telecommunications Commission in Australia and with telecommunication authorities in overseas countries, provides telecommunication services between Australia and other countries. These services are provided through high-frequency radio, coaxial submarine cable, and satellite communication systems, and include international public message telegraph, telephone (including International Subscriber Dialling), telex, phototelegraph and leased

teleprinter and telephone-type services. A service providing computer to computer high-speed data transfer is also available to some countries, while international television programs are provided by means of satellite communication facilities. In addition, the Commission operates the Australian coastal radio services for communication with ships at sea in Australian waters, and high-frequency radio services for communication with ships in any part of the world.

Earth stations at Carnarvon in Western Australia and at Moree in New South Wales operate through the INTELSAT IV Pacific Ocean communications satellites.

The station at Carnarvon is also one of six world-wide stations which provide satellite tracking, telemetry, command and communications monitoring for the system of INTELSAT satellites.

In February 1970 Australia's third earth station near Ceduna was opened. This station faces westward to INTELSAT IV which is located over the Indian Ocean and can carry all types of communications traffic: subject to establishment of earth stations in relevant countries it provides facilities for direct links with Europe, Africa, India, most of South-East Asia, and the western part of Japan. The first direct broadcast *via* this satellite was received in Australia from the United Kingdom on 20 February 1970.

Details of the overseas telecommunications services and traffic are published in various issues of the *Official Year Book of Australia*, e.g. No. 60, 1974, pages 405-7.

PART 11

PUBLIC FINANCE

11.1 STRUCTURE OF PUBLIC FINANCE

The collection of public revenue and the expenditure of public money in South Australia are the responsibility of four groups of authorities: (i) Commonwealth Government; (ii) South Australian Government; (iii) public corporations; and (iv) local government.

The power to raise revenue from taxation is vested in the various governments and authorities by Acts of Parliament. Other revenue comes from the proceeds of the sale of goods and services to the public and to other governments and authorities. A major proportion of the revenue of the State Government, and a smaller proportion of the revenue of local government authorities and some public corporations is derived from grants from other levels of government. A further source of funds is the loan market; government securities are issued for loan raisings in Australia and overseas.

Authorisation for expenditure by Commonwealth and State Government departments is given by Appropriation Acts or by Special Acts of their respective Parliaments. Each State public corporation derives its authority for expenditure from the provisions of the specific Act under which it has been established. The Local Government Act, 1934-1976 contains sections relating to local government expenditure. The following sections of this part provide some details of the financial transactions of the government sector in South Australia. Special attention is given to transactions within the State Government budget, transactions

of a number of public corporations, and transactions of all local government authorities. In addition, details of some Commonwealth Government expenditures are included.

Commonwealth Government Transactions

Reference is made to the revenue and expenditure of the Commonwealth Government only to the extent that it affects the finances of the State Government. As indicated in more detail below, not all of the transactions listed relate directly to the State budget; many of the items are negotiated wholly through State Trust Funds. The transactions which are included represent only a small proportion of total expenditure by the Commonwealth Government within South Australia. A more detailed analysis of Commonwealth Government finance may be obtained from the *Official Year Book of Australia*.

State Government Accounts

Statistics relating to the State Government Budget are derived from accounts prepared by the Treasurer each year and included in the Report of the Auditor-General of South Australia. These accounts, which are on a cash basis, cover the Consolidated Revenue Account which in general terms is the current account of the Government, and the Loan Fund through which is handled all money raised by public borrowing; the receipt and disbursement of some special purpose Commonwealth Government grants are also handled through these accounts.

State Government Budget receipts include (in addition to loan raisings) taxation, proceeds of sale of goods and services by trading undertakings, some of the grants made by the Commonwealth Government, fees, rents, recoups and other sundry items. State Government disbursements are made for capital works, for provision of services (such as health, education and water supply), for general administrative expenses, and for interest and redemption payments.

The State Government Budget excludes many transactions negotiated through State Government Deposit and Suspense Accounts (including working accounts) and Trust Funds. The volume of such transactions is considerable. For example, road works financed through Road Maintenance Act charges and by Commonwealth Government grants are handled through working accounts, as are the operating costs and revenue of the Woods and Forests Department.

Some idea of the framework of the various funds may be obtained from the following table showing sources and disposal of funds in which the balances of Trust Funds and of Departmental Accounts appear.

Government of South Australia, Sources and Disposal of Funds at 30 June 1976

| Sources and Nature of Funds | \$'000 |
|---|-----------|
| Public Debt: | |
| Securities current at 1 July 1975 | 1 555 333 |
| New Loans raised during 1975-76 | 314 170 |
| | <hr/> |
| | 1 869 503 |
| Less: Securities redeemed and converted | 220 801 |
| Debt taken over by Commonwealth (a) | 254 000 |
| | <hr/> |
| Public Debt at 30 June 1976 | 1 394 702 |

**Government of South Australia, Sources and Disposal of Funds
at 30 June 1976 (continued)**

| Sources and Nature of Funds (continued) | \$'000 |
|---|-----------|
| Other interest bearing indebtedness: | |
| Trust Fund balances | 19 165 |
| Liabilities to Commonwealth Government; | |
| Housing Agreements | 398 882 |
| Other | 105 105 |
| Non-interest bearing indebtedness: | |
| Trust Fund balances | 38 307 |
| Departmental balances and other funds . . | 47 621 |
| | 2 003 782 |
| Disposal of Funds | |
| Loan Account: | |
| Total of Loan Works at 1 July 1975 . . | 1 423 429 |
| Payments during 1975-76 | 271 592 |
| | 1 695 021 |
| Less: Repayments | 91 269 |
| Securities cancelled | 19 721 |
| Other credits (b) | 180 475 |
| | 291 465 |
| Loan Works Account balances at 30 June 1976 | 1 403 557 |
| Consolidated Revenue Account: | |
| Surplus at 1 July 1975 | -22 782 |
| Plus: Special grant (c) | -2 500 |
| Surplus in respect of period to 30 June 1975 | -25 282 |
| Receipts for Year | 1 036 985 |
| Payments for Year | 1 034 698 |
| | -2 287 |
| Surplus for Year | -27 569 |
| Rural Industry Assistance Agreement: | |
| Advances to primary producers | 15 238 |
| Housing Agreements: | |
| Advances to SA Housing Trust | 225 531 |
| Advances to Home Builders Accounts . . | 173 351 |
| | 398 882 |
| Natural Gas Pipeline Agreement: | |
| Advances to Pipelines Authority of South Australia | 7 500 |
| Land Acquisition: | |
| Advances to SA Land Commission . . | 41 269 |
| Other Agreements | 41 560 |
| Cash at bank and short-term deposits . . . | 123 345 |
| | 2 003 782 |

(a) Pursuant to the Amending Financial Agreement Act, 1976 (\$130 000 000) and the Railways (Transfer Agreement) Act, 1975 (\$124 000 000). (b) Includes Public Debt taken over by the Commonwealth pursuant to the Railways (Transfer Agreement) Act, 1975 (\$124 000 000) and Capital Works Grant, in lieu of loan raising (\$56 475 000). (c) Pursuant to Section 96 of Commonwealth Constitution on account of the period to 30 June 1974.

Public Corporation Accounts

Most of the details included under this classification are based on the Auditor-General's annual reports prepared for a number of public corporation business undertakings, including those engaged in banking. Information is given from both revenue statements and balance sheets.

Local Government Accounts

Details included for local government authorities are based on annual statements prepared on an income and expenditure (accrual) basis in accordance with the 'Local Government Accounting Regulations, 1967'. Details of loan raisings are based on returns furnished separately.

Consolidated State and Local Government and Public Corporations Accounts

Any analysis of financial transactions of the Government sector would be incomplete without a comprehensive consolidation of all levels and funds of Government. Such data is released in the *Public Authority Finance* bulletin published by the Australian Statistician: this bulletin shows net receipts and outlays of the Commonwealth Government and each State separately and of the Commonwealth Government combined with all States. The figures are net and consolidated: net figures are those for which expenditures within a given classification have been reduced to the extent of any relevant receipt (and *vice versa*); and consolidated figures are those for which inter-authority, inter-level and inter-fund transactions are eliminated on consolidation of those authorities, levels and funds.

The tables which follow show figures on a consolidated net basis for State and local government and major public corporations in South Australia for the four years to 1974-75.

State and Local Government Authorities and Public Corporations South Australia, Receipts and Financing Items

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|----------------------------------|------------|---------|---------|---------|
| | \$ million | | | |
| Receipts: | | | | |
| Taxes, fees, fines, etc. | 140.4 | 168.9 | 213.6 | 287.3 |
| Income from public enterprises | 42.7 | 39.8 | 35.3 | 21.4 |
| Property income; | | | | |
| Interest | 20.1 | 21.3 | 26.5 | 32.9 |
| Land rent, royalties | 3.5 | 4.0 | 4.8 | 5.0 |
| Total property income | 23.6 | 25.3 | 31.3 | 37.9 |

**State and Local Government Authorities and Public Corporations
South Australia, Receipts and Financing Items (continued)**

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|--|------------|---------|---------|---------|
| | \$ million | | | |
| Grants from the Commonwealth Government: | | | | |
| For current purposes | 195.0 | 240.6 | 291.8 | 445.0 |
| For capital purposes | 69.7 | 80.6 | 105.1 | 151.5 |
| Total receipts | 471.3 | 555.2 | 677.2 | 943.0 |
| Financing items: | | | | |
| Net borrowing; | | | | |
| Local authority and public corporation securities . . | 23.4 | 23.7 | 28.6 | 33.2 |
| Other general government securities | 0.6 | 5.2 | 3.6 | 4.0 |
| Net advances from the Commonwealth Government; | | | | |
| For loan works purposes . | 76.2 | 83.4 | 61.3 | 79.8 |
| Other | 2.1 | 2.3 | 46.2 | 87.3 |
| Net receipts of private trust funds | 3.1 | 5.1 | -0.1 | 2.7 |
| Reduction in; | | | | |
| Cash and bank balances . | -5.2 | -26.4 | -28.4 | -35.7 |
| Security holdings | 0.4 | -0.3 | 4.3 | 2.4 |
| Other funds available (including errors and omissions) | 22.2 | 26.8 | 34.1 | 39.8 |
| Total financing items | 122.9 | 120.0 | 149.5 | 213.5 |
| Total funds available | 594.2 | 675.2 | 826.6 | 1 156.5 |

**State and Local Government Authorities and Public Corporations
South Australia, Outlay**

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|--|------------|---------|---------|---------|
| | \$ million | | | |
| Final consumption expenditure . . | 238.7 | 287.1 | 382.2 | 548.4 |
| Gross capital formation: | | | | |
| Increase in stocks | 0.5 | 0.5 | 1.8 | 3.3 |
| Expenditure on new fixed assets | 211.1 | 226.9 | 253.7 | 379.9 |
| Expenditure on existing assets (net) | 12.1 | 14.1 | 35.7 | 45.7 |
| Total gross capital formation | 223.6 | 241.5 | 291.2 | 428.9 |

State and Local Government Authorities and Public Corporations
South Australia, Outlay (continued)

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|---|--------------|--------------|--------------|----------------|
| | \$ million | | | |
| Transfer payments: | | | | |
| Interest | 98.8 | 104.9 | 111.3 | 124.7 |
| Transfer to persons | 9.2 | 11.6 | 12.6 | 14.5 |
| Subsidies | 0.7 | 0.6 | 0.6 | 0.8 |
| Grants for private capital purposes | 3.2 | 6.5 | 5.6 | 6.7 |
| Total transfer payments | 111.9 | 123.6 | 130.1 | 146.7 |
| Net advances: | | | | |
| To the private sector | 8.7 | 8.2 | 4.6 | 6.6 |
| To public financial enterprises | 11.3 | 14.8 | 18.6 | 25.9 |
| Total net advances | 19.9 | 23.0 | 23.1 | 32.5 |
| Total outlay | 594.2 | 675.2 | 826.6 | 1 156.5 |
| Current outlay | 350.6 | 410.7 | 512.3 | 695.1 |
| Capital outlay | 243.5 | 264.5 | 314.3 | 461.4 |

11.2 COMMONWEALTH-STATE GOVERNMENTS FINANCIAL RELATIONS

The Commonwealth of Australia Constitution Act and the 1927 Financial Agreement represent significant events in Commonwealth-State financial relations. Under the former, the States surrendered the right to levy customs and excise duties which passed exclusively to the Commonwealth and under the latter, the Commonwealth became the borrowing agent for the States. Further details appear on page 537 of the *South Australian Year Book 1972*.

Since Federation the Commonwealth has made payments of various descriptions to the States. Before the 1939-45 War, Commonwealth payments were confined, for the most part, to special grants to assist the financially weaker States and to certain specific purpose grants relating to such matters as Commonwealth assistance for roads and contributions under the Financial Agreement.

Since the 1939-45 War there has been a marked increase in the amount and variety of Commonwealth assistance to the States. This has reflected, among other things, increases in the range and variety of government activities which have accompanied economic and social developments in this period of rapid growth of the Australian economy; greater participation by the Commonwealth in matters which were previously considered to be the sole responsibility of the

States; and the effects of the introduction and continuation of uniform income tax and of other changes on the basic allocation of financial resources between the Commonwealth and the States.

There are various ways of classifying Commonwealth payments to the States. They may be classified as 'capital' as opposed to 'current' transactions; to general purpose grants compared with payments for purposes specified by the Commonwealth; or in accordance with the constitutional authority under which the payments are made. Many of the recently introduced grants have been for specified purposes and instituted under Section 96 of the Constitution.

SPECIAL GRANTS

The Constitution provides, in Section 96, for the granting of special financial assistance to the States. Before 1933 financial assistance of varying amounts was granted to South Australia, Western Australia and Tasmania.

In 1933 the Commonwealth appointed the Grants Commission, of three members, to inquire into and report upon claims made by any State for a grant of financial assistance and any matters relevant thereto. From 1933 to 30 June 1959 applications were lodged by each of the three States already mentioned. South Australia ceased to be a claimant State from 1 July 1959; and at the Premiers' Conference in June 1968, following a request from Western Australia, it was agreed that (subject to certain considerations) claims by Western Australia would cease after payments in respect of 1967-68 leaving Tasmania as the only claimant State during 1968-69 and 1969-70. Following the Premiers' Conference in June 1970 the Government of South Australia decided to again submit a claim; it did this on 6 July 1970. On 30 September 1971 Queensland also made application for a special grant. In 1974, following the Commonwealth's agreement to provide additional financial assistance, Tasmania withdrew from the special grants system.

In June 1975, as part of the agreement to transfer its non-metropolitan railway network to the Commonwealth, South Australia again withdrew from the special grants system. In September 1974 the Commission recommended a completion grant for South Australia of \$8.5 million in respect of 1972-73 and an advance grant to this State of \$15 million for 1974-75. In connection with the State's withdrawal from the grants system further payments totalling \$16 434 000 were made to South Australia. The grants announced by the Commission are authorised by States Grants (Special Assistance) Acts.

During 1975-76, South Australia was paid a completion grant of \$2.5 million in respect of 1973-74.

FINANCIAL ASSISTANCE GRANTS

Financial assistance grants, formerly called tax reimbursement grants, make up the bulk of the assistance provided for general revenue purposes and are determined annually on the basis of an agreed formula.

A discussion of grants applicable before 1970-71 appears on pages 538-9 of the *South Australian Year Book 1972*. Financial assistance grants applicable for 1970-71 and later years were discussed at Premiers' Conferences between February 1970 and June 1972; further details appear on pages 596-8 of the *South Australian Year Book 1975* and page 592 of *South Australian Year Book 1976*.

At the June 1975 Premiers' Conference the Commonwealth agreed to changes in the financial assistance grants arrangements. For 1975-76 a further \$220 million was paid to the States in addition to the financial assistance grants otherwise payable in that year. An amount of \$5.0 million was added to the base grants on which Western Australia's financial assistance grants for 1975-76 and subsequent years are calculated. For the calculation of grants for 1976-77 and subsequent years the 'betterment' factor will be increased from 1.8 per cent to 3.0 per cent.

These arrangements were to have applied for the five years 1975-76 to 1979-80. However, the Commonwealth has since introduced personal income tax sharing arrangements with the States to replace the financial assistance grants. The new scheme of assistance was discussed at Premiers' Conferences in February, April and June 1976 and brought into operation from the beginning of 1976-77: it provides for the States to receive a certain percentage of personal income tax collections. For 1976-77 and subsequent years, the Commonwealth has set the States' share of these collections at 33.6 per cent.

From 1977-78, however, in addition to the personal income tax imposed by the Commonwealth, each State will have the right to impose a surcharge or grant a rebate on personal income in its State. The Commonwealth will remain the sole collecting and administrative authority for all personal income tax.

SPECIAL REVENUE ASSISTANCE

From time to time the Commonwealth has provided general revenue assistance to the States in addition to that payable under the financial assistance grants arrangements or by way of special grants recommended by the Grants Commission.

A Premiers' Conference was held in February 1975 to discuss special revenue assistance for 1974-75. The Commonwealth agreed to provide the States with an additional \$60 million of which South Australia received \$6.6 million. As part of arrangements for the transfer of the non-metropolitan railway system of South Australia and the railway system of Tasmania to the Commonwealth, payments classified as special revenue assistance were made to the two States during 1974-75. South Australia received \$10 million and Tasmania \$5 million. No such grants were made during 1975-76.

CAPITAL GRANTS

At the June 1970 Premiers' Conference the Commonwealth undertook to provide a portion of the State's Loan Council programs in the form of capital grants. As a result of the *States Grants (Capital Assistance) Act 1970*, the Commonwealth distributed \$200 million to the States in 1970-71 in the same proportions as their borrowing programs. South Australia's share of this grant was \$27.4 million. This assistance was continued in 1971-72 under the 1971 Act, South Australia's share being \$30.0 million.

As well as increasing the 1971-72 grants and providing for similar grants in 1972-73, *States Grants (Capital Assistance) Acts* passed in 1972 provided for additional grants by way of capital assistance to the States for government primary and secondary schools during 1971-72 and 1972-73. South Australia's

share of the general works and housing grant for 1972-73 was \$34.1 million and its share of the government primary and secondary schools grant for the same year was \$1.8 million. For 1973-74 South Australia's share of the general works grant, after allowance for the Commonwealth's assumption of full responsibility for tertiary education from 1 January 1974, was \$37.6 million.

In 1974-75 the Commonwealth paid \$346 million in capital assistance grants to the States; South Australia's share of this was \$46.9 million.

From 1975-76, capital grants will constitute one-third of each State's total Loan Council Program. During 1975-76, the Commonwealth paid grants totalling \$430 million to the States, including \$56.5 million to South Australia.

OTHER FINANCIAL ASSISTANCE

In addition to grants under the Financial Agreement, special grants recommended by the Grants Commission, financial assistance grants, special revenue assistance and capital grants, the Commonwealth makes payments to the States for many specific purposes, some details of which are given below.

Schools

From 1964 the Commonwealth has provided grants to assist education and research in the States. A discussion of grants made from their inception to 1972 appears on page 593 of the *South Australian Year Book* 1976.

On 12 December 1972 the Commonwealth established the Interim Committee for the Australian Schools Commission which has advised on the financial needs of government and non-government schools. The Commission itself was established by the *Schools Commission Act* 1973, which came into effect in December 1973. Initially, grants were made to the States for government schools and for non-government schools on the recommendations of the Interim Committee for the Schools Commission.

The recommendations of the Interim Committee envisaged grants totalling \$693 million to be paid to the States during 1974 and 1975. Recent revisions have increased the grants payable during the two years to \$794 million. The grants are being made for both government and non-government schools according to the following categories: general recurrent grants, general building grants, and grants for science laboratories and equipment, libraries, schools for the handicapped, disadvantaged schools, teacher development, innovatory projects and information programs.

Due to the Commonwealth's policy of budgetary restraint it was unable to support the recommendations of the Schools Commission for the 1976-78 triennium. As a result, the Commonwealth provided for 1976 as a year outside the normal triennium and set up the normal three year period as 1977-79.

Universities

Grants to the States for recurrent expenditure of universities commenced in 1951-52; similar grants for capital works and equipment for universities were introduced in 1958.

The Commonwealth assumed full financial responsibility for universities from 1 January 1974. As a result, assistance for the three years 1973 to 1975 was revised to \$1 152.7 million. The Report of the Universities Commission, presented to the Commonwealth in May 1975, recommended that the Government make financial assistance to State universities during the three calendar years 1976 to 1978 of \$1 590.0 million, of which \$1 292.3 million is for recurrent purposes and \$297.7 million is for capital purposes.

As with grants for schools, the Commonwealth treated 1976 outside the normal triennium. In May 1977 the Commonwealth announced that there would be a 2 per cent growth in real terms for 1977 compared with the program approved for 1976. For the year 1977 the total estimated assistance to be paid to the States is \$531.7 million.

Colleges of Advanced Education

Grants to the States for colleges of advanced education commenced in March 1965. These grants were initially for capital purposes but at the start of the 1967-69 triennium were extended to cover recurrent grants. Total grants for the three calendar years 1973 to 1975 were set at \$798.7 million. This estimate took into consideration the decisions of the Commonwealth to accept full financial responsibility for tertiary education and the abolition of tuition fees from 1 January 1974.

Grants have been set at \$406.9 million for 1977 as part of the 1977-79 triennium; this is a 5 per cent growth in real terms compared with the program approved for 1976 which the Commonwealth treated outside the normal period.

Medibank

The *Health Insurance Act 1973* authorised the Commonwealth to enter into agreements with the States 'for the provision of hospital services' by the States. Payments to the States under this Act were suspended in May 1976 following legal advice that the agreements negotiated with the States were invalid. As an interim measure, until new cost-sharing arrangements are negotiated with the States, the *States Grants (Hospital Operating Costs) Act 1976* was passed; this Act authorised payments of up to \$315 million to the States to meet 50 per cent of net operating costs of hospitals incurred before 1 October 1976.

School Dental Scheme

In 1973, agreement was reached between the Commonwealth and the States in respect of a program to provide an Australia-wide School Dental Service. The capital and operating costs of training facilities for dental therapists and capital costs of school dental clinics were borne in full by the Commonwealth, while operation costs of the clinics were shared between the Commonwealth and the States on a \$3 for \$1 basis. In 1973-74, grants totalling \$7.5 million were paid to the States under this scheme. Payments made to the States in 1974-75 totalled \$18.6 million, of which South Australia received \$3.9 million.

During 1975-76 South Australia was granted \$3.4 million of a total payment to all States of \$24.0 million. From 1 July 1976 the Commonwealth will pay 90 per cent of the capital costs of all new facilities, 90 per cent of the operating costs of the training centres and 65 per cent of the operating costs of the school clinics.

Unemployment Relief

In December 1971, the Commonwealth announced grants to be spent on activities which create employment in rural areas. The original plan,

subject to later review, provided that for the first seven months South Australia would receive \$945 000 but this was increased in February 1972 when the monthly rate of payment to each State was doubled. A further increase was announced in June 1972 when the monthly rate was raised to \$6 million (South Australia's share being \$360 000 a month). In December 1972, further grants were made for the subsequent six months with South Australia receiving an additional \$120 000 a month; grants totalling \$30.35 million were also made for the relief of unemployment in metropolitan areas during the same period. Non-metropolitan unemployment grants totalling \$12 million were paid to the States on a reducing basis during the period July to September 1973 when they were terminated because of an improvement in the overall employment situation. At the February 1975 Premiers' Conference the Commonwealth agreed to grant additional assistance to the States for the remaining months of 1974-75. Total payments of \$40.0 million were made in 1974-75 with South Australia's share being \$3.6 million. This money was used to increase the number of employees of State Governments, local governments, public corporations or other bodies above what they would usually be; these grants were continued in 1975-76 on a phasing-out basis. During 1975-76 the Commonwealth granted \$30 million, of which South Australia received \$2.4 million.

The Regional Employment Development Scheme was introduced during 1974-75 to create employment opportunities in areas of relatively high unemployment. Payments made to State Governments and public corporations totalled \$8.5 million, South Australia's share being \$1.1 million. In addition, grants of \$43.6 million were made to local government authorities—South Australian authorities receiving \$3.6 million.

No new projects have been approved under this scheme since September 1975. Payments made to the States during 1975-76 totalled \$109.0 million; comprising \$15.0 million to State Government departments or public corporations and \$94.0 million to local government authorities. South Australia's share was \$3.3 million to State Government authorities and \$6.4 million to local government authorities.

Housing

Under successive Commonwealth-State Housing Agreements between 1 July 1956 and 30 June 1971, housing advances determined by the States from within their Loan Council allocations were made by the Commonwealth to the States at concessional rates of interest. A new arrangement under the *States Grants (Housing) Act* 1971 applicable from 1 July 1971 provided that the interest concession be replaced by annual grants payable over a period of thirty years. Total recurrent grants paid during 1971-72 were \$4.2 million. Of the \$7.0 million provided in 1974-75 South Australia received \$1.1 million.

At the June 1973 Premiers' Conference and Loan Council meeting, the arrangements for housing finance were again changed. Further changes were made in 1973-74 to provide for special advances to the States under a new Housing Agreement and outside the programs determined by Loan Council. Total payments made during 1975-76 were \$371.6 million with South Australia receiving \$1.1 million in the form of grants and \$56.4 million in the form of advances.

Land Acquisition

The *Land Commissions (Financial Assistance) Act 1973* authorised the provision of financial assistance to the States in respect of expenditure by approved State authorities on programs of land acquisition. South Australia was the first State to accept the principles of the Land Commission program and the South Australian Land Commission began operating in 1973-74. Payments to the States in 1973-74 totalled \$11.5 million including a loan of \$8.0 million to the South Australian Land Commission. Assistance made by the Commonwealth during 1974-75 was \$41.1 million, including \$19.6 million to South Australia: of this \$1.9 million was in the form of grants and \$17.6 million in the form of loans.

Total payments made to the States in 1975-76 were \$54.4 million; South Australia's share of this was \$19.9 million, including \$19.4 million in the form of loans and \$0.5 million in the form of grants.

Growth Centres

The *Growth Centres (Financial Assistance) Act 1973* provided that the then Minister of Urban and Regional Development may approve programs of financial assistance to the States in respect of the development of eleven specified growth centres. Assistance in 1973-74 totalled \$6.5 million, including \$4.4 million for the development of Monarto in South Australia. Payments made during 1974-75 for growth centres other than Albury-Wodonga were \$17.5 million. This includes assistance on account of Monarto of \$0.8 million in grants and \$5.0 million in loans.

Payments in 1975-76 were \$60.8 million; assistance on account of Monarto comprised \$0.6 million in the form of loans and \$0.1 million by way of grants. Total payments for Albury-Wodonga during the same period were \$35.1 million.

Sewerage

During 1973-74, the Commonwealth introduced a program of assistance to the States designed to eliminate the backlog of sewerage works in principal urban areas. Loans of \$27.9 million for capital works were made during 1973-74, South Australia's share being \$1.6 million. Capital works assistance of \$117.7 million consisting of \$33.0 million in grants and \$84.7 million in loans was provided to the States during 1974-75; in addition, the Commonwealth paid \$0.9 million in the form of grants for current purposes. Payments to South Australia were current grants of \$0.3 million, capital grants of \$1.7 million and loans of \$4.0 million.

Total assistance to the States during 1975-76 was \$112.1 million for capital works and \$1.2 million for current purposes; this comprised grants of \$34.8 million and loans of \$78.5 million. South Australia received \$0.1 million for current grants, \$1.7 million for capital grants and \$4.0 million for advances on capital works.

Urban Water Supply

During 1974-75, an amount of \$4.4 million was advanced to South Australia under the *Urban and Regional Development (Financial Assistance) Act 1974* to assist construction associated with the Adelaide water treatment scheme.

Further assistance of \$8.9 million was made during 1975-76; this consisted of \$2.7 million in the form of grants and \$6.3 million as advances.

Roads

Grants for road works have been made since 1923, and from 1931 to 1958 were based on a percentage of Commonwealth petrol taxation. A new scheme of assistance to the States for roads was established by the *Commonwealth Aid Roads Act* 1959 in which the Commonwealth undertook to provide \$500 million for distribution, according to stated criteria, to the States during the five years to 30 June 1964. The *Commonwealth Aid Roads Act* 1964 stipulated a sum of \$750 million for distribution to the States during the five years from 1 July 1964. For the five years commencing 1 July 1969 the relevant sum was \$1.252 million. The Commonwealth planned to provide \$1.126 million to the States for road expenditure during the period 1974-75 to 1976-77. Actual payments have, however, varied from the estimates; total assistance of \$368.0 million and \$442.1 million were made to the States during 1974-75 and 1975-76 respectively, with South Australia receiving \$31.9 million and \$41.5 million respectively.

Urban Public Transport

The *States Grants (Urban Public Transport) Act* 1974, and the *Urban Public Transport (Research and Planning) Act* 1974 authorised the payment of grants up to \$72.9 million to the States as part of a five-year program to assist in the upgrading of urban public transport (including railways).

In 1974, agreement was reached between the States and the Commonwealth for two-thirds of the costs of approved urban transport projects in the States to be met by the Commonwealth. No funds were made available during 1973-74 but grants of \$45.3 million were paid in 1974-75, South Australia's share being \$6.2 million. During 1975-76, an additional \$34.1 million was made available to the States with South Australia receiving \$6.8 million.

Grants Commission

In 1973, new legislation passed by the Commonwealth Parliament laid down procedures for regional organisations of local government to apply for financial assistance from the Commonwealth. As a result of evidence placed before the Australian Grants Commission, total grants of \$56.3 million in 1974-75 and \$79.9 million in 1975-76 were recommended to be paid to local government authorities throughout Australia. South Australian authorities received \$4.8 million and \$6.8 million in the respective years.

As part of the new personal income tax sharing arrangements between the Commonwealth and the States introduced at the beginning of 1976-77, a new agreement was reached for general assistance to local government authorities; this provided that local government authorities throughout Australia would receive 1.52 per cent of personal income tax in each year. For 1976-77 and subsequent years the Australian Grants Commission will recommend the grant to be paid to each State for assistance to local government authorities in that State. State Grants Commissions or their equivalents subsequently will apportion this among separate authorities with consideration to a per capita element and a needs element. A more detailed explanation of the State Grants Commission for South Australia appears on page 108 of this publication.

Commonwealth Payments To or For the States, South Australia

| Particulars | 1965-66 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Financial assistance grants | 86 467 | 181 430 | 204 918 | 261 737 | 363 091 |
| Special grants | — | 21 000 | 19 900 | 39 934 | 2 500 |
| Special revenue assistance | — | — | 2 764 | 16 616 | — |
| Loan Council borrowings | 61 892 | 100 554 | 79 587 | 99 261 | 112 950 |
| Capital grants | — | 34 074 | 37 625 | 46 927 | 56 475 |
| SPECIFIC PURPOSE PAYMENTS: RECURRENT PURPOSES | | | | | |
| Sinking fund on State Debt | 2 335 | 3 689 | 3 896 | 4 072 | 4 000 |
| Debt charges assistance | — | 4 487 | 5 982 | 7 478 | — |
| Schools | — | 2 529 | 6 464 | 19 017 | 27 452 |
| Technical and further education . . | — | — | 889 | 2 639 | 3 770 |
| Universities | 3 420 | 7 898 | 19 808 | 38 067 | 43 107 |
| Colleges of advanced education . . | — | 2 638 | 13 518 | 24 531 | 28 838 |
| Pre-schools and child care | — | — | 690 | 3 233 | 5 025 |
| School dental scheme | — | — | 1 066 | 1 700 | 2 549 |
| Medibank | — | — | — | — | 92 367 |
| Employment grants | — | 9 660 | 941 | 3 600 | 2 400 |
| Regional employment develop- ment scheme | — | — | — | 1 113 | 3 294 |
| Aboriginal advancement | — | 694 | 1 003 | 1 501 | 2 167 |
| Local government (Grants Commission) | — | — | — | 4 774 | 6 785 |
| Other | 2 499 | 6 530 | 9 646 | 11 154 | 13 581 |
| Total recurrent purposes | 8 254 | 38 125 | 63 903 | 122 879 | 235 335 |
| SPECIFIC PURPOSE PAYMENTS: CAPITAL PURPOSES | | | | | |
| Schools | 859 | 3 805 | 9 430 | 19 159 | 11 056 |
| Technical and further education . . | 350 | 1 130 | 2 063 | 2 800 | 1 208 |
| Colleges of advanced education . . | — | 3 639 | 6 196 | 12 579 | 6 886 |
| Universities | 2 597 | 2 697 | 7 050 | 7 320 | 3 421 |
| Pre-schools and child care | — | — | 514 | 2 773 | 1 498 |
| Hospitals | — | — | 441 | 3 236 | 12 900 |
| School dental scheme | — | — | 895 | 2 247 | 825 |
| Aboriginal advancement | — | 1 046 | 3 696 | 4 058 | 3 558 |
| Housing | 21 057 | 500 | 32 750 | 56 360 | 56 360 |
| Growth centres | — | — | 4 414 | 5 829 | 1 504 |
| Land acquisition | — | — | 8 000 | 19 553 | 19 935 |
| Sewerage | — | — | 1 598 | 5 750 | 5 700 |
| Rural reconstruction | — | 6 100 | 4 300 | 2 000 | 5 100 |
| Dartmouth Dam | — | 675 | 950 | 2 500 | 2 800 |
| Urban water supply | — | — | — | 4 400 | 8 931 |
| Roads | 16 024 | 28 000 | 31 000 | 31 888 | 41 484 |
| Railway projects | 6 431 | 556 | 319 | 909 | 4 960 |
| Urban public transport | — | — | — | 6 215 | 6 757 |
| Other | 334 | 4 911 | 4 783 | 7 129 | 10 632 |
| Total capital purposes | 47 652 | 53 059 | 118 399 | 196 705 | 205 515 |

NATIONAL WELFARE FUND

The States receive, from the Commonwealth Government through the National Welfare Fund, payments in respect of hospital and pharmaceutical benefits and reimbursement of maintenance expenditure on tuberculosis sanatoria.

In South Australia the receipts are paid into the Consolidated Revenue Account. Receipts for the year 1975-76 were hospital benefits \$159 000, nursing home benefits \$683 000, pharmaceutical benefits \$1 443 000, tuberculosis reimbursements \$705 000 and domiciliary care assistance \$850 000.

11.3 STATE GOVERNMENT FINANCE

State Government accounting in South Australia is on a 'cash' basis. Receipts and payments fall into five main divisions, namely the Consolidated Revenue Account and Loan Fund (which together constitute the budget sector), Special Commonwealth Advances, Trust Fund Accounts and Deposit and Suspense Accounts.

CONSOLIDATED REVENUE ACCOUNT

This account is credited with receipts from many items of State taxation, fees, licences and charges for services, recoveries of interest and sinking fund, financial assistance grants (originally entitled tax reimbursement grants) and some other Commonwealth grants. The account is debited with the cost of revenue collection, legislative and administrative functions, interest and sinking fund on the public debt, provision of education, health, social security and welfare and other services, operation of business undertakings and development of State resources. The resultant balance represents the State's surplus or deficit for the year.

Consolidated Revenue Account, South Australia

| Particulars | 1939-40 | 1949-50 | 1959-60 | 1969-70 | 1975-76 |
|-------------------------------|---------|---------|---------|---------|-----------|
| | | | \$'000 | | |
| Receipts | 25 511 | 58 721 | 160 555 | 338 498 | 1 036 985 |
| Payments | 25 837 | 59 100 | 161 177 | 335 578 | 1 034 698 |
| Surplus (+) or deficit (—): | | | | | |
| Current year | —325 | —379 | —622 | +2 920 | +2 287 |
| Cumulative | +1 999 | +3 215 | —3 376 | —4 579 | +27 569 |
| Per Head of Population | | | | | |
| | | | Dollars | | |
| Receipts | 42.72 | 85.50 | 171.99 | 293.06 | 835.34 |
| Payments | 43.28 | 86.05 | 172.65 | 290.53 | 833.49 |

Receipts

The receipts for the financial years 1972-73 to 1975-76 were as follows:

Consolidated Revenue Account: Receipts, South Australia

| Source | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|----------------|----------------|----------------|------------------|
| | \$'000 | | | |
| Net taxation (a) | 120 474 | 156 903 | 219 190 | 272 760 |
| Business undertakings (b) | 108 251 | 126 120 | 153 586 | 126 916 |
| Territorial: Land sales, rents, etc. | 3 238 | 3 532 | 3 299 | 3 661 |
| Other: | | | | |
| Interest and exchange | 31 335 | 35 312 | 40 300 | 46 327 |
| Fees, fines, rents, etc. | 56 745 | 90 145 | 100 255 | 199 034 |
| Commonwealth grants | 200 824 | 229 955 | 312 355 | 388 287 |
| Total | 520 866 | 641 967 | 828 985 | 1 036 985 |

Per Head of Population

| | Dollars | | | |
|--|---------------|---------------|---------------|---------------|
| Net taxation (a) | 100.76 | 129.58 | 178.13 | 219.72 |
| Business undertakings | 90.54 | 104.16 | 124.82 | 102.24 |
| Territorial: Land sales, rents, etc. | 2.71 | 2.92 | 2.68 | 2.95 |
| Other: | | | | |
| Interest and exchange | 26.21 | 29.16 | 32.75 | 37.32 |
| Fees, fines, rents, etc. | 47.46 | 74.46 | 81.48 | 160.33 |
| Commonwealth grants | 167.97 | 189.92 | 253.84 | 312.78 |
| Total | 435.65 | 530.20 | 673.70 | 835.34 |

Proportion of Total Receipts

| | Per cent | | | |
|--|---------------|---------------|---------------|---------------|
| Net taxation (a) | 23.13 | 24.44 | 26.44 | 26.30 |
| Business undertakings | 20.78 | 19.65 | 18.53 | 12.24 |
| Territorial: Land sales, rents, etc. | 0.62 | 0.55 | 0.40 | 0.35 |
| Other: | | | | |
| Interest and exchange | 6.02 | 5.50 | 4.86 | 4.47 |
| Fees, fines, rents, etc. | 10.89 | 14.04 | 12.09 | 19.19 |
| Commonwealth grants | 38.56 | 35.82 | 37.68 | 37.45 |
| Total | 100.00 | 100.00 | 100.00 | 100.00 |

(a) Some items and amounts differ slightly from State Treasury classifications.

(b) For details see table on page 651.

Space limits the information which can be given for separate receipts and outlay items. Other significant outlay items and their values for 1975-76 are: interest (\$98 353 000), repayments of Commonwealth advances (\$19 676 000), intra-sector transfers (\$54 161 000) and inter-fund transfers (\$65 948 000). Major receipt items and their values for 1975-76 are: general purpose inter-authority transfers (\$366 999 000), interest (\$44 522 000), taxation (\$272 760 000) and inter-fund transfers (\$107 635 000). Details for 1975-76 include the effects of the introduction of Medibank and the non-payment of a State Treasury grant to cover the deficit of railway operations.

Consolidated Revenue Account: Outlay, South Australia^(a)

| Purpose | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|----------------|----------------|----------------|----------------|
| | | | \$'000 | |
| General public services: | | | | |
| General administration n.e.c. | 15 757 | 19 774 | 26 463 | 35 332 |
| Law, order and public safety | 24 998 | 31 738 | 44 381 | 53 957 |
| Other general public services | 22 | 14 | 14 | 19 |
| Education (b) | 145 950 | 194 097 | 212 751 | 272 399 |
| Health | 51 225 | 70 515 | 108 570 | 174 499 |
| Social security and welfare | 13 845 | 15 836 | 21 326 | 40 793 |
| Housing and community amenities: | | | | |
| Housing | 1 606 | 1 547 | 1 705 | 12 625 |
| Community and regional development | 774 | 1 233 | 1 526 | 1 837 |
| Protection of the environment | -8 687 | -8 450 | -6 922 | -9 368 |
| Community amenities n.e.c. | 63 | 76 | 143 | 185 |
| Recreation and related cultural services | 5 476 | 7 973 | 10 523 | 15 651 |
| Economic services: | | | | |
| General administration, regulation and research | 2 699 | 3 905 | 5 724 | 7 054 |
| Agriculture, forestry and fishing | 6 498 | 8 015 | 11 904 | 14 525 |
| Mining, manufacturing and construction | 4 075 | 4 142 | 4 840 | 6 620 |
| Electricity, gas and water | -11 175 | -11 805 | -8 038 | -9 690 |
| Transport and communication: | | | | |
| Rail (non-urban) | 26 348 | 35 273 | 49 601 | 5 764 |
| Road | 17 810 | 18 863 | 24 583 | 28 602 |
| Sea | -2 591 | -4 245 | -3 289 | -2 393 |
| Urban transit systems (including urban rail) | 11 881 | 16 115 | 24 027 | 39 046 |
| Other transport and communication | 44 | 61 | 200 | 244 |
| Other economic services | 2 899 | 3 324 | 4 635 | 14 983 |
| Other purposes | 98 589 | 105 776 | 128 685 | 132 198 |
| Total | 408 106 | 513 777 | 663 352 | 834 882 |

(a) Charges for goods and services supplied have been excluded from receipts and deducted in calculating outlay. Incorporates receipts and operating expenses of public trading enterprises.

(b) From 1 January 1974 the Commonwealth assumed financial responsibility for tertiary education.

Taxation

Until the introduction of the uniform income tax scheme in 1942-43, income tax was the major source of taxation receipts in South Australia. Receipts

from this form of taxation for the years 1939-40 to 1941-42 were \$4 718 000, \$4 952 000 and \$5 638 000 respectively or 51·70 per cent, 57·02 per cent, and 59·45 per cent of total receipts from taxation. The following table shows receipts of taxation into Consolidated Revenue Account over the last five years: receipts of taxation into other accounts are shown on pages 660-1, the major forms of taxation now left to the State are payroll tax, motor tax, succession and stamp duties, and land tax.

Consolidated Revenue Account: Receipts from Taxation, South Australia (a)

| Tax | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--------------------------------|---------------|----------------|----------------|----------------|----------------|
| | | | \$'000 | | |
| Land tax | 9 732 | 10 212 | 10 796 | 12 673 | 19 547 |
| Succession duty | 10 659 | 11 699 | 12 598 | 15 635 | 19 077 |
| Gift duty | 834 | 814 | 1 184 | 1 197 | 1 445 |
| Racing tax | 1 295 | 1 444 | 1 643 | 2 130 | 2 735 |
| Motor tax | 19 593 | 20 832 | 22 427 | 29 518 | 32 206 |
| Stamp duties (b) | 21 980 | 30 516 | 41 899 | 45 499 | 64 459 |
| Payroll tax | 22 804 | 34 029 | 52 788 | 86 759 | 100 506 |
| ETSA levy | 2 081 | 2 242 | 3 755 | 4 863 | 5 810 |
| Business franchises | — | — | — | 8 923 | 11 636 |
| Licences: | | | | | |
| Liquor | 3 591 | 3 650 | 4 159 | 5 351 | 7 424 |
| Other | 1 063 | 1 303 | 1 790 | 2 231 | 2 534 |
| Court fees and fines | 3 636 | 3 531 | 3 613 | 4 135 | 4 940 |
| Other | 209 | 201 | 251 | 275 | 440 |
| Total | 97 476 | 120 474 | 156 903 | 219 190 | 272 760 |

Proportion of Total Taxation

| | Per cent | | | | |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|
| Land tax | 9·98 | 8·48 | 6·88 | 5·78 | 7·17 |
| Succession duty | 10·93 | 9·72 | 8·03 | 7·13 | 6·99 |
| Gift duty | 0·86 | 0·67 | 0·75 | 0·55 | 0·53 |
| Racing tax | 1·33 | 1·20 | 1·05 | 0·97 | 1·00 |
| Motor tax | 20·10 | 17·29 | 14·30 | 13·47 | 11·81 |
| Stamp duties (b) | 22·55 | 25·33 | 26·71 | 20·76 | 23·63 |
| Payroll tax | 23·40 | 28·24 | 33·64 | 39·58 | 36·85 |
| ETSA levy | 2·14 | 1·86 | 2·39 | 2·22 | 2·13 |
| Business franchises | — | — | — | 4·07 | 4·27 |
| Licences: | | | | | |
| Liquor | 3·68 | 3·03 | 2·65 | 2·44 | 2·72 |
| Other | 1·09 | 1·08 | 1·14 | 1·02 | 0·93 |
| Court fees and fines | 3·73 | 2·93 | 2·30 | 1·89 | 1·81 |
| Other | 0·21 | 0·17 | 0·16 | 0·12 | 0·16 |
| Total | 100·00 | 100·00 | 100·00 | 100·00 | 100·00 |

(a) Some items and amounts differ slightly from State Treasury classifications.

(b) Excludes stamp duty on third party insurance.

Receipts from Business Undertakings, South Australia (a)

| Undertaking | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|
| | | | \$'000 | | |
| Railways (b) | 55 243 | 57 910 | 68 688 | 90 130 | 48 567 |
| Marine and harbors | 7 813 | 7 324 | 10 037 | 10 889 | 10 705 |
| Waterworks | 21 682 | 25 373 | 28 383 | 29 550 | 39 269 |
| Sewers | 13 077 | 14 269 | 15 806 | 17 542 | 22 408 |
| Produce | 1 016 | 999 | 743 | 1 438 | 1 530 |
| Woods and forests (c) | 1 740 | 1 800 | 1 920 | 2 500 | 2 616 |
| Savings Bank of SA (c) | — | — | — | 525 | 360 |
| State Bank of SA (c) | 614 | 576 | 542 | 1 012 | 1 462 |
| Total | 101 183 | 108 251 | 126 120 | 153 586 | 126 916 |

(a) Receipts into Consolidated Revenue but excluding recoveries of interest and sinking fund.

(b) Before 1975-76 included grant from Treasury. No grant was made from Consolidated Revenue in 1975-76 following the transfer of the non-metropolitan railways to the Commonwealth.

(c) Contribution to Consolidated Revenue from surplus earned.

Business Undertakings, Payments

Details of the payments of business undertakings for the years 1971-72 to 1975-76 are given in the next table. Payments in respect of interest and sinking fund have not been taken into account in deriving these figures.

Business Undertakings: Payments, South Australia (a)

| Undertaking | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------|---------------|---------------|---------------|----------------|----------------|
| | | | \$'000 | | |
| Railways | 44 565 | 49 446 | 57 461 | 77 487 | 88 376 |
| Marine and harbors | 4 659 | 4 736 | 5 795 | 7 600 | 8 214 |
| Waterworks | 11 429 | 13 703 | 16 069 | 20 662 | 24 920 |
| Sewers | 4 414 | 4 974 | 6 689 | 9 192 | 10 675 |
| Produce | 1 095 | 1 173 | 1 190 | 1 776 | 2 091 |
| Total | 66 162 | 74 032 | 87 204 | 116 717 | 134 276 |

(a) Excludes interest and sinking fund.

TRUST FUNDS ACCOUNTS

These are principally moneys lodged with the Treasurer by public authorities and other bodies on current account; funds held for specific purposes pursuant to legislation, not necessarily expendable in any one year; contractors' and

statutory deposits and unclaimed moneys. At 30 June 1976 they represented approximately 2.9 per cent of the indebtedness of the South Australian Government. Total balances at 30 June 1974, 1975 and 1976, with many of the larger balances itemised, are shown in the following table.

Trust Funds Accounts, South Australia
Balances at 30 June

| Particulars | 1974 | 1975 | 1976 |
|---|---------------|---------------|---------------|
| | | \$'000 | |
| Fire Brigades Board | 1 278 | 1 523 | 2 347 |
| Institute of Medical and Veterinary Science | 160 | 410 | 506 |
| Pipelines Authority of South Australia | 235 | 2 020 | 21 |
| Planning and Development Fund | 3 146 | 2 181 | 2 105 |
| Police Pensions Fund | 428 | 648 | 726 |
| South Australian Film Corporation | 574 | 309 | 434 |
| South Australian Housing Trust Fund | 1 854 | 8 568 | 7 975 |
| South Australian Superannuation Fund | 846 | 330 | 548 |
| State Bank of South Australia | 1 000 | 250 | 250 |
| Swine Compensation Fund | 701 | 796 | 892 |
| Other | 7 845 | 3 830 | 3 360 |
| Balances on which interest is paid | 18 067 | 20 865 | 19 165 |
| | | \$'000 | |
| Commonwealth Grant for Education Purposes | 4 460 | 8 305 | 4 683 |
| Beef Industry Assistance Program | — | 1 500 | 1 164 |
| Coast Protection Fund | 200 | 1 050 | 815 |
| Crown Solicitors Trust Account | 2 145 | 2 425 | 1 245 |
| Extractive Areas Rehabilitation Fund | 531 | 750 | 741 |
| Lotteries Fund | 394 | 753 | 1 099 |
| Medibank Hospital Program | — | — | 21 155 |
| Softwood Forestry | 616 | 427 | 993 |
| Universities and Colleges of Advanced Education: | | | |
| State grants for capital purposes | 1 567 | 717 | 98 |
| Urban Transport | — | 2 388 | — |
| Other | 4 917 | 6 132 | 6 314 |
| Balances on which no interest is paid | 14 830 | 24 447 | 38 307 |
| Total Trust Funds | 32 898 | 45 312 | 57 472 |

LOAN FUND ACCOUNTS

These accounts record the capitalised payments for construction or acquisition of assets such as schools, reservoirs, hospitals, forests, plant and stores; advances to public authorities; and for primary production and housing. During recent years some capital grants (e.g. for university, advanced education and non-government hospital buildings) have also been made from loan funds.

State borrowing programs are subject to consideration and agreement at meetings of the Australian Loan Council. Funds are raised by the sale of Commonwealth securities on behalf of the State pursuant to the Financial Agreement which also provides for the redemption of such securities over specified periods from sinking funds contributed by the State and Commonwealth Governments to the National Debt Commission. Gross payments from these accounts for the years 1971-72 to 1975-76 are shown in the next table.

Loan Fund Accounts: Gross Payments, South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|----------------|----------------|----------------|----------------|----------------|
| | \$'000 | | | | |
| Undertakings: | | | | | |
| Afforestation | 2 741 | 3 200 | 3 300 | 4 700 | 5 797 |
| Country water supply and sewers | 13 449 | 11 541 | 11 087 | 16 654 | 25 452 |
| Metropolitan water supply and sewers | 18 327 | 18 971 | 19 078 | 31 816 | 36 724 |
| Harbours and jetties | 4 788 | 6 043 | 6 006 | 7 220 | 8 617 |
| Railways (a) | 8 121 | 5 218 | 7 950 | 9 983 | 11 292 |
| Loans and advances: | | | | | |
| Advances for housing (b) | 27 717 | 29 863 | 20 | 809 | 13 016 |
| Advances to primary producers | 2 135 | 2 338 | 2 925 | 3 034 | 2 911 |
| Bus and Tram Division | 1 000 | 400 | 4 400 | 4 400 | 5 000 |
| Electricity Trust (c) | 4 500 | 3 000 | 3 000 | 6 000 | 5 000 |
| Pipelines Authority | — | — | — | 5 000 | — |
| South Australian Land Commission | — | — | 4 125 | — | — |
| State Bank of SA | 1 000 | 2 000 | 2 000 | 2 000 | 13 500 |
| Other loans and advances | 1 495 | 1 756 | 4 901 | 1 939 | 1 696 |
| Other purposes: | | | | | |
| Buildings: | | | | | |
| Hospitals | 13 911 | 13 873 | 20 042 | 25 425 | 31 875 |
| Schools | 22 315 | 29 770 | 30 741 | 46 861 | 48 050 |
| Other | 8 992 | 12 259 | 16 418 | 22 246 | 30 076 |
| Capital Grants (d) | 11 315 | 14 579 | 20 246 | 6 697 | 11 998 |
| Community health | — | — | — | — | 2 011 |
| Data processing equipment | 205 | 728 | 692 | 1 505 | 799 |
| Irrigation works | 1 034 | 792 | 1 609 | 2 619 | 3 543 |
| Metropolitan floodwaters, etc. | 1 472 | 1 464 | 1 517 | 1 931 | 2 574 |
| Parks and reserves | 363 | 901 | 580 | 913 | 2 128 |
| River Murray, weirs, etc. | 119 | 814 | 1 033 | 2 575 | 2 923 |
| Transport research | 33 | 131 | 198 | 483 | 1 120 |
| Other | 4 658 | 4 711 | 6 660 | 6 391 | 5 491 |
| Total | 149 690 | 164 353 | 168 526 | 211 201 | 271 592 |

(a) Includes non-metropolitan rail services funded by the Commonwealth from 1975-76.

(b) For 1971-72 and 1972-73 includes amounts previously provided under the Housing Agreement.

(c) From 1975-76 includes Leigh Creek Coal Fund.

(d) From 1 January 1974, following Commonwealth assumption of full financial responsibility for tertiary education, includes only non-government hospital and institution buildings.

The following table shows payments from loan fund accounts for the year ended 30 June 1976 together with credits and net balances.

borrowed by that State are deemed to be money borrowed by the Commonwealth for and on behalf of the State. The Commonwealth agreed to contribute one-third of sinking funds required to repay those debts over a period of fifty-eight years.

Also for a period of fifty-eight years from 1 July 1927 the Commonwealth agreed to contribute the sum of \$15 169 824 (\$1 407 632 for South Australia) each year towards the interest payable on the State debts. The balance of the interest payable on State debts was to be paid into the National Debt Sinking Fund by the States.

The Commonwealth in 1970 passed legislation providing for its assumption of responsibility for charges on \$200 million of existing State debt at the beginning of each of the five years commencing 1970-71. The amount of South Australian debt taken over at 30 June 1975 was \$130 000 000.

As a result of the transfer of the South Australian non-metropolitan railway system, \$124 000 000 of State debt was taken over by the Commonwealth.

Australian Loan Council

One of the main features of the Financial Agreement was the establishment of the Australian Loan Council which was set up to co-ordinate the borrowings of the Commonwealth and State Governments. It consists of the Prime Minister of Australia, or another Minister nominated by him in writing, as chairman, and the State Premiers, or Ministers nominated by them in writing.

Each year, the Loan Council examines the loan programs of the Commonwealth and State Governments and determines the total amount to be borrowed during the year. Borrowings by the Commonwealth for defence purposes are not subject to decisions of the Loan Council.

Subject to the decisions of the Loan Council the Commonwealth arranges for all borrowings for or on behalf of itself or any State, and for all conversions, renewals, redemptions, and consolidations of the securities issued on behalf of the Commonwealth and State Governments. If the Loan Council unanimously decides, however, a State may borrow outside Australia in its own name, and may issue securities for the amount so borrowed. The Commonwealth then guarantees that the State will fulfil its obligations to bondholders in respect of the money so borrowed, and the money is deemed to be borrowed by the Commonwealth for and on behalf of the State.

Subject to any maximum limits decided upon by the Loan Council for interest, brokerage, discount, and other charges, the Commonwealth or any State Government may borrow within its own territory, for any purpose, money from any authorities, bodies, funds, or institutions (including savings banks) constituted or established under Commonwealth or State law or practice; borrow from the public by means of counter sales of securities; and use any available public moneys. However, any securities issued for moneys so borrowed or used must be Commonwealth Government securities on terms approved by the Loan Council.

Since 1936 the Australian Loan Council has, by the consent of its members, exercised substantial control over the limits of borrowing by local government and public corporations.

National Debt Commission

The National Debt Commission and the National Debt Sinking Fund, which it administers, were created under the *National Debt Sinking Fund Act 1923*. All previously existing sinking funds relating to Commonwealth debt were merged in the National Debt Sinking Fund at the time of its establishment; and under the provisions of the Financial Agreement of 1927 all relevant interest and principal contributions by both the Commonwealth and State Governments, in respect of State debts, are negotiated through the Fund.

These contributions are not accumulated but are applied by the Commission to the redemption of the public debts of the States, and the repurchase of securities issued in respect thereof. Under the provisions of the Financial Agreement, repurchased or redeemed securities must be cancelled, and the debts of the States are reduced accordingly.

Contributions by the Commonwealth on behalf of South Australia, and by the State Government to the National Debt Sinking Fund, and redemptions and repurchases of securities by payment from the Fund for the financial years 1974-75 and 1975-76 are given in the following table. Corresponding figures for all States are also stated.

National Debt Sinking Fund

| Particulars | 1974-75 | | 1975-76 | |
|---|--------------------|----------------|--------------------|----------------|
| | South Australia | All States | South Australia | All States |
| Receipts: | | | | |
| | | | \$'000 | |
| Contributions by Commonwealth | 4 072 | 30 805 | 4 000 | 30 200 |
| Contributions by State (a) | 4 312 | 32 791 | 16 100 | 121 500 |
| 4½ per cent contributions by State on cancelled debt | 10 686 | 82 085 | — | 9 |
| 4 per cent contributions on funded deficits . . | 50 | 2 623 | — | — |
| Contributions by State on loans for wasting assets | 313 | 696 | — | — |
| Interest received from State in respect of repurchased securities to date of can- cellation of securities | 8 | 96 | 1 | 18 |
| Interest on the temporary investments of State funds during the year | 36 | 213 | 27 | 192 |
| Special contributions in respect of loans converted at a discount | — | 92 | — | — |
| Total receipts | 19 477 | 149 400 | 20 129 | 151 919 |
| Expenditure: | | | | |
| Redemptions and repurchases: | | | | |
| In Australia | 13 978 | 111 935 | 16 284 | 121 043 |
| In London | 8 661 | 45 107 | 629 | 5 425 |
| In New York | 736 | 6 823 | 840 | 7 380 |
| In Canada | 63 | 465 | 34 | 257 |
| In Netherlands | 82 | 644 | 84 | 654 |
| In Switzerland | — | — | 2 154 | 15 993 |
| Total expenditure | 23 520 | 164 975 | 20 025 | 150 752 |

(a) Includes 0.75 per cent contributions on Commonwealth Government debentures issued on behalf of the States.

The Loan Fund

A summary of loan raisings to finance State Government loan works in South Australia during 1975-76 is given in the following statement.

The Loan Fund, South Australia

| | | \$'000 |
|---|--|-----------|
| (1) Cash operations: | | |
| Surplus at 30 June 1975 | | 1 903 |
| Receipts: | | |
| New loan raising | | 113 090 |
| Repayments | | 91 269 |
| Capital works grant | | 56 475 |
| | | 262 737 |
| Payments | | 271 592 |
| | | 8 855 |
| (2) Movement in public debt: | | |
| The public debt at 30 June 1975 | | 1 555 333 |
| <i>Add:</i> Face value of new loans raised: | | |
| For cash | | 113 090 |
| For conversion | | 193 080 |
| | | 1 861 503 |
| <i>Less:</i> Face value of securities redeemed and cancelled by | | |
| National Debt Commission | | 19 721 |
| Loans converted | | 193 080 |
| Public debt taken over by the Commonwealth (a) | | 254 000 |
| | | 466 801 |
| The public debt at 30 June 1976 | | 1 394 702 |

(a) Pursuant to the Amending Financial Agreement Act, 1976 (\$130 000 000) and the Railways (Transfer Agreement) Act, 1975 (\$124 000 000).

The Public Debt

The following table gives details of the public debt and total indebtedness of South Australia at 30 June 1976 and for the four previous years.

Public Debt and Total Indebtedness, South Australia

| At 30 June | Public Debt—Being Interest Bearing Securities Outstanding | | Other Interest Bearing Indebted- ness (a) | Non- interest Bearing Indebted- ness (a) | Total Indebtedness | |
|------------------|---|----------|---|--|--------------------|----------|
| | Total | Per Head | | | Total | Per Head |
| | \$'000 | \$ | | | \$'000 | \$ |
| 1972 | 1 333 720 | 1 124.08 | 312 274 | 5 615 | 1 651 610 | 1 392.00 |
| 1973 | 1 415 129 | 1 180.16 | 330 521 | 8 842 | 1 754 492 | 1 463.17 |
| 1974 | 1 481 337 | 1 216.00 | 362 977 | 14 830 | 1 859 143 | 1 526.14 |
| 1975 | 1 555 333 | 1 260.30 | 451 080 | 24 447 | 2 030 859 | 1 645.62 |
| 1976 | 1 394 702 | 1 120.56 | 523 152 | 38 307 | 1 956 161 | 1 571.66 |

(a) Gross less securities held on these accounts.

Public Debt: Interest Payable and Average Rate, South Australia

| At 30 June | Annual Interest on Debt (a) in | | | | Average Rate Per Cent (a) | | | |
|------------------|--------------------------------|--------|-------|--------|---------------------------|--------|-------|-------|
| | Aus- tralia | London | Other | Total | Aus- tralia | London | Other | Total |
| | \$'000 | | | | Dollars | | | |
| 1972 | 71 472 | 1 044 | 753 | 73 268 | 5.53 | 3.97 | 5.31 | 5.49 |
| 1973 | 76 461 | 966 | 621 | 78 048 | 5.54 | 3.95 | 5.36 | 5.52 |
| 1974 | 84 594 | 953 | 562 | 86 109 | 5.85 | 3.94 | 5.35 | 5.81 |
| 1975 | 97 612 | 648 | 500 | 98 759 | 6.37 | 4.68 | 5.35 | 6.35 |
| 1976 | 98 918 | 595 | 376 | 99 888 | 7.19 | 4.59 | 5.51 | 7.16 |

(a) Based on the Debt converted at rates current at the time of the several raisings, and nominal rate of interest payable at 30 June taking no account of exchange.

Rates of interest on the public debt of South Australia are shown in the following table.

Public Debt According to Rate of Interest, South Australia
At 30 June

| Nominal Rate Per Cent | 1974 | 1975 | 1976 | | |
|--------------------------------|------------------|------------------|------------------|------------------|---------------|
| | | | Total | Redeemable In | |
| | | | | Australia | Other (a) |
| | | | \$'000 | | |
| 10½ per cent and over | — | 18 826 | 18 826 | 18 826 | — |
| 10 and under 10½ per cent . . | — | 2 979 | 84 093 | 84 093 | — |
| 9½ and under 10 per cent . . . | — | 56 307 | 107 707 | 107 707 | — |
| 9 and under 9½ per cent . . . | — | 44 558 | 79 865 | 79 865 | — |
| 8½ and under 9 per cent . . . | 49 838 | 120 885 | 201 755 | 201 755 | — |
| 8 and under 8½ per cent . . . | 69 541 | 67 033 | 80 959 | 80 959 | — |
| 7 and under 7½ per cent . . . | 106 678 | 106 678 | 71 705 | 71 705 | — |
| 6½ and under 7 per cent . . . | 106 368 | 101 718 | 35 537 | 35 537 | — |
| 6 and under 6½ per cent . . . | 136 849 | 136 755 | 110 088 | 109 482 | 606 |
| 5½ and under 6 per cent . . . | 103 393 | 98 991 | 64 684 | 52 119 | 12 565 |
| 5 and under 5½ per cent . . . | 667 569 | 625 824 | 420 483 | 418 687 | 1 796 |
| Under 5 per cent | 142 173 | 79 082 | 22 728 | 17 934 | 4 794 |
| Special bonds (b) | 98 925 | 95 696 | 94 851 | 94 851 | — |
| Australian savings bonds . . . | — | — | 1 420 | 1 420 | — |
| Total | 1 481 337 | 1 555 333 | 1 394 702 | 1 374 941 | 19 761 |

(a) \$12 938 000 redeemable in UK, \$5 334 000 in USA, \$1 074 000 in Canada and \$414 000 in Netherlands. Converted at rates current at the time of the several raisings. Debt redeemable at rates of exchange obtaining at 30 June 1976 totalled \$14 588 000 resulting in a contingent asset of \$5 173 000.

(b) Rate of interest varies from 5.4 to 9.4 per cent according to date of maturity.

In the following table, the public debt of South Australia is classified according to the year of maturity.

**Public Debt According to Year of Maturity, South Australia
At 30 June**

| Year of Maturity | 1972 | 1973 | 1974 | 1975 | 1976 | | | |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------------|---|
| | | | | | Total | Redeemable In | | |
| | | | | | | Australia | Other (a) | |
| | | | | | | | | |
| | | | | \$'000 | | | | |
| 1972-73 | 102 073 | — | — | — | — | — | — | — |
| 1973-74 | 134 097 | 133 638 | — | — | — | — | — | — |
| 1974-75 | 82 082 | 115 859 | 117 668 | — | — | — | — | — |
| 1975-76 | 122 659 | 181 021 | 206 318 | 205 646 | — | — | — | — |
| 1976-77 | 50 474 | 49 796 | 81 710 | 124 412 | 154 415 | 154 415 | — | — |
| 1977-78 | 71 319 | 70 015 | 63 638 | 104 718 | 174 325 | 172 435 | 1 891 | — |
| 1978-79 | 68 571 | 67 387 | 61 683 | 61 315 | 54 677 | 51 543 | 3 134 | — |
| 1979-80 | 38 922 | 38 753 | 38 645 | 83 073 | 98 221 | 97 720 | 501 | — |
| 1980-81 | 45 057 | 44 958 | 104 158 | 84 931 | 123 199 | 121 583 | 1 616 | — |
| 1981-82 | 51 781 | 65 734 | 65 396 | 89 700 | 86 504 | 82 678 | 3 825 | — |
| 1982-83 | 23 413 | 49 232 | 39 085 | 42 573 | 42 449 | 40 790 | 1 658 | — |
| 1983-84 | 48 842 | 56 645 | 88 887 | 90 937 | 63 210 | 62 604 | 606 | — |
| 1984-85 | 60 450 | 60 450 | 60 450 | 88 629 | 91 893 | 91 893 | — | — |
| 1985-90 | 250 463 | 250 186 | 249 872 | 273 089 | 238 424 | 236 689 | 1 735 | — |
| 1990-95 | 61 122 | 99 357 | 171 728 | 174 213 | 170 291 | 170 291 | — | — |
| 1995-2000 | 3 626 | 3 626 | 3 626 | 3 626 | 3 626 | 3 626 | — | — |
| 2000-2005 | 82 456 | 83 777 | 83 777 | 83 777 | 58 777 | 58 777 | — | — |
| 2005-2010 | 30 521 | 38 949 | 38 949 | 38 949 | 28 949 | 28 949 | — | — |
| Optional | 5 594 | 5 547 | 5 547 | 5 545 | 5 543 | 748 | 4 794 | — |
| Interminable | 197 | 197 | 197 | 197 | 197 | 197 | — | — |
| Indefinite | 2 | 2 | 2 | 2 | 2 | 2 | — | — |
| Total | 1 333 720 | 1 415 129 | 1 481 337 | 1 555 333 | 1 394 702 | 1 374 941 | 19 761 | |

(a) \$12 938 000 redeemable in UK, \$5 334 000 in USA, \$1 074 000 in Canada and \$414 000 in Netherlands. Converted at rates current at the time of the several raisings. Debt redeemable at rates of exchange obtaining at 30 June 1976 totalled \$14 588 000, resulting in a contingent asset of \$5 173 000.

DEPOSIT AND SUSPENSE ACCOUNTS

Reference to these accounts was made in Part 11.1. Although the main function of many of them is to facilitate the allocation of charges and recoups to various headings of receipts and payments within the Budget sector, some contain, as already noted, substantial transactions which are not reflected in the Budget. Deposit and Suspense accounts showed a credit balance of \$48 669 000 at 30 June 1976.

STATE TAXATION

In addition to those items received into Consolidated Revenue Account the State Government receives certain items of taxation into other accounts. These, together with similar receipts by public corporations, constitute 'total taxation to other accounts' as recorded in the following table.

State Taxation, South Australia^(a)

| Tax | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--------------------------------------|---------|---------|---------|---------|---------|
| | \$'000 | | | | |
| To Consolidated Revenue | 97 476 | 120 474 | 156 903 | 219 190 | 272 760 |
| To other accounts: | | | | | |
| Road maintenance charges | 3 287 | 3 401 | 3 859 | 4 050 | 4 243 |
| Lottery tax | 1 903 | 1 967 | 2 351 | 3 648 | 4 978 |
| Racing taxes | 3 005 | 3 745 | 4 613 | 6 169 | 7 122 |
| Stamp duty | 1 122 | 1 138 | 1 251 | 1 643 | 2 072 |
| Fire Brigades Board (b) | 1 474 | 1 840 | 2 586 | 4 597 | 6 088 |
| Reserves contributions (c) | 237 | 561 | 1 010 | 1 109 | 1 165 |
| Other | 267 | 403 | 472 | 679 | 1 175 |
| Total to other accounts | 11 295 | 13 056 | 16 141 | 21 894 | 26 843 |
| Total taxation | 108 772 | 133 529 | 173 044 | 241 084 | 299 603 |
| | Dollars | | | | |
| Per head of population | 91-89 | 111-68 | 142-92 | 195-92 | 241-34 |

(a) Some items and amounts differ slightly from State Treasury classifications.

(b) Levy on insurance companies.

(c) Paid to State Planning Authority under Planning and Development Act and Real Property Act.

11.4 PUBLIC CORPORATION FINANCE

For the purpose of determining the scope of public corporation finance statistics, a public corporation is defined as a body (other than a local government authority) created by or under legislation to carry out an activity or activities on behalf of a government, or a body in which a government has a controlling interest.

Many public corporations produce annual reports reviewing their activities and most of them publish financial statements. In South Australia there is no consolidated tabulation of statistics covering revenue and expenditure of public corporations.

Business Undertakings

Some public corporations are classified as business undertakings because they seek to cover a substantial part of their costs by selling goods and services to the public. The following tables show revenue and expenditure of some of those business undertakings for the financial years 1971-72 to 1975-76. Capital indebtedness refers to the amount outstanding at the end of the relevant period on indebtedness incurred initially for a period exceeding twelve months.

Electricity Trust of South Australia ^(a)

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--------------------------------|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Income | 74 883 | 80 290 | 92 178 | 108 492 | 130 401 |
| Operating expenses | 58 159 | 62 040 | 72 594 | 91 149 | 108 017 |
| Surplus on operating | 16 724 | 18 250 | 19 584 | 17 343 | 22 384 |
| Debenture interest | 17 058 | 17 841 | 18 650 | 19 758 | 22 136 |
| Net surplus | —334 | 409 | 934 | —2 415 | 248 |
| Capital indebtedness | 304 660 | 312 215 | 318 788 | 332 439 | 353 759 |

(a) From 1975-76 includes Leigh Creek Coal Fund which was dissolved on 1 July 1975.

State Transport Authority—Bus and Tram Division ^(a)

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---------------------------------|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Income | 6 978 | 7 304 | 9 958 | 13 427 | 14 454 |
| Operating expenses | 7 282 | 8 269 | 11 735 | 18 951 | 22 446 |
| Deficit on operating | 304 | 965 | 1 777 | 5 524 | 7 991 |
| Interest charges | 340 | 406 | 469 | 874 | 1 230 |
| Deficit | 644 | 1 371 | 2 246 | 6 398 | 9 221 |
| Grant from SA Government | 630 | 1 330 | 2 250 | 5 900 | 8 800 |
| Transfer from reserve | — | — | — | 488 | 394 |
| Contribution (b) | — | — | — | — | 102 |
| Net surplus | —14 | —41 | 4 | —10 | 75 |
| Capital indebtedness | 7 268 | 7 596 | 11 920 | 16 219 | 21 090 |

(a) Formerly the Municipal Tramways Trust.

(b) Contribution from State Government for revenue projects.

State Bank of South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Income | 11 266 | 12 141 | 14 783 | 20 055 | 23 166 |
| Management expenses, etc. | 2 039 | 2 270 | 2 733 | 3 946 | 5 083 |
| Interest on customers' deposits | 1 532 | 1 549 | 2 074 | 3 809 | 4 788 |
| Interest on advances from the Treasurer of SA | 6 415 | 7 118 | 7 952 | 9 376 | 11 104 |
| Net profit | 1 280 | 1 205 | 2 024 | 2 924 | 2 191 |
| Capital indebtedness | 133 802 | 149 700 | 169 469 | 197 236 | 238 066 |

Pipelines Authority of South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------------|---------|---------|---------|---------|---------|
| | | | | | |
| | | | \$'000 | | |
| Income | 3 738 | 3 990 | 7 107 | 17 451 | 24 493 |
| Operating expenditure | 1 209 | 1 363 | 4 250 | 15 101 | 19 321 |
| Surplus on operating | 2 529 | 2 628 | 2 857 | 2 351 | 5 172 |
| Interest on loan capital | 2 529 | 2 628 | 2 704 | 3 094 | 4 105 |
| Net surplus | — | — | 153 | —743 | 1 067 |
| Capital indebtedness | 43 650 | 44 046 | 44 431 | 54 359 | 59 190 |

South Australian Housing Trust

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|------------------------------------|---------|---------|---------|---------|---------|
| | | | | | |
| | | | \$'000 | | |
| Income | 20 091 | 21 939 | 24 820 | 28 617 | 36 897 |
| Expenditure | 9 393 | 11 091 | 12 657 | 16 625 | 19 921 |
| Surplus on operating | 10 699 | 10 848 | 12 162 | 11 992 | 16 976 |
| Interest on loan capital | 10 323 | 11 471 | 11 699 | 12 514 | 14 487 |
| Net surplus | 376 | —623 | 463 | —522 | 2 489 |
| Capital indebtedness | 272 156 | 294 341 | 317 445 | 353 860 | 407 977 |

Savings Bank of South Australia

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|---------|---------|---------|---------|---------|
| | | | | | |
| | | | \$'000 | | |
| Income | 28 965 | 33 148 | 40 385 | 53 890 | 68 096 |
| Management expenses, etc. | 9 446 | 11 259 | 13 556 | 17 523 | 22 859 |
| Interest on customers' deposits | 18 311 | 20 067 | 25 577 | 35 445 | 42 716 |
| Net profit | 1 209 | 1 821 | 1 252 | 922 | 2 520 |
| Depositors' balances (a) | 469 607 | 537 953 | 591 822 | 697 459 | 776 473 |

(a) At end of period. Figures include deposit stock.

South Australian Meat Corporation

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--------------------------------|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Income | 9 078 | 11 026 | 10 633 | 13 757 | 19 495 |
| Operating expenses | 9 441 | 10 973 | 10 452 | 12 793 | 18 301 |
| Surplus on operating | —364 | 53 | 181 | 964 | 1 194 |
| Interest | 110 | 124 | 303 | 705 | 619 |
| Net surplus | —474 | —71 | —122 | 259 | 575 |
| Capital indebtedness | 2 320 | 2 662 | 6 080 | 12 469 | 16 323 |

GRANTS FROM STATE GOVERNMENT

The following table shows grants to a number of public corporations during each of the five years ended 30 June 1976. Grants from Consolidated Revenue Account and from Loan Fund have been consolidated and the figures represent actual amounts paid to authorities, free of all duplication. Payments for goods and services supplied by public corporation business undertakings are not included in the table. Repayable advances from Loan Fund are also excluded. The table excludes grants to universities and hospitals other than subsidised hospitals as for the purpose of Public Finance statistics these are considered to be final expenditure. Details of grants made to colleges of advanced education before 1 January 1974 are also excluded because from that date the Commonwealth Government assumed full financial responsibility for all tertiary education.

Public Corporations: Grants From State Government, South Australia

| Name | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Adelaide Festival Centre Trust . . | 28 | 312 | 812 | 1 126 | 2 608 |
| Coast Protection Board (a) | — | 600 | 676 | 281 | 245 |
| Fire Brigades Board | 354 | 410 | 590 | 872 | 1 194 |
| Institute of Medical and Veterinary Science | 1 703 | 2 290 | 3 342 | 5 392 | 1 010 |
| State Transport Authority—Bus and Tram Division | 630 | 1 330 | 2 250 | 5 900 | 8 800 |
| SA Film Corporation | — | 25 | 505 | 720 | 1 238 |
| SA Institute of Technology | 3 962 | 4 803 | 6 679 | 579 | 561 |
| SA Theatre Company | — | 140 | 293 | 466 | 498 |
| State Planning Authority | 300 | 300 | 300 | 300 | 300 |
| Subsidised hospitals | 3 613 | 2 293 | 2 752 | 3 955 | 10 586 |
| Other (b) | 326 | 714 | 466 | 927 | 1 799 |
| Total | 10 916 | 13 217 | 18 665 | 20 518 | 28 839 |

(a) Includes advances from State Loan Fund that are cleared of liability by allocations from Commonwealth capital works grants.

(b) Includes Unemployment Relief Grants paid to various public corporations (\$553 000 in 1975-76).

LOAN RAISINGS AND DEBT OUTSTANDING

Details of public corporation loan raisings and debt outstanding are included in the following tables. New loans raised during the year include new loan liabilities incurred during the year, loans raised to repay indebtedness to the Government, and interest capitalised. Loans raised and redeemed within the year, increases in overdrafts, and loans raised for conversion or redemption of existing debts are excluded.

Debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalised, and amounts due for the capital cost of assets or for services rendered which are to be repaid over a period of one year or more, have also been included. Current liabilities such as interest accrued (but not capitalised), trade creditors, amounts held in trust and other debts which are to be repaid in less than one year are not included. Net overdraft is the gross overdraft of all funds, less all bank credit balances (including fixed deposits), which do not form part of a sinking fund to repay a loan.

The next two tables show, respectively, new money loan raisings and funds provided for redemption of debt for the year ended 30 June 1975 and debt outstanding at 30 June 1974 and 1975. A further table shows debt outstanding at 30 June 1975 according to rate of interest and year of maturity.

**Public Corporations: New Money Loan Raisings and Funds
Provided for Redemption of Debt, South Australia, 1974-75**

| Activity | New Loan Raisings in Australia | | | Funds for Redemption of Debt (a) | | |
|---|-----------------------------------|---------------|----------------|-------------------------------------|--------------|---------------|
| | From Government Lenders | Other | Total | To Government Lenders | Other | Total |
| | \$'000 | | | | | |
| Abattoirs | — | 6 500 | 6 500 | 40 | 71 | 111 |
| Banking | 30 950 | — | 30 950 | 3 183 | — | 3 183 |
| Buses and trams | 4 400 | — | 4 400 | 102 | — | 102 |
| Community and regional development | 30 621 | 3 700 | 34 321 | 2 977 | 9 | 2 986 |
| Electricity supply | 6 000 | 7 833 | 13 833 | 1 721 | 1 285 | 3 006 |
| Gas pipelines | 5 000 | 6 850 | 11 850 | 1 875 | 47 | 1 922 |
| Housing | 34 482 | 4 800 | 39 282 | 2 056 | 760 | 2 817 |
| Other | 565 | 7 495 | 8 060 | 119 | 110 | 227 |
| Total | 112 018 | 37 178 | 149 196 | 12 073 | 2 282 | 14 354 |

(a) Includes amounts credited to Sinking Funds and excludes amounts redeemed from Sinking Funds.

Public Corporations: Debt Outstanding, South Australia

| Activity | Debt in Australia at | | | | | |
|------------------------------------|----------------------------------|---------|---------|-----------------------|---------|-----------|
| | 30 June 1974 | | | 30 June 1975 | | |
| | To Government Lenders | Other | Total | To Government Lenders | Other | Total |
| | \$'000 | | | | | |
| Abattoirs | — | — | — | 1 896 | 10 573 | 12 469 |
| Banking | 169 469 | — | 169 469 | 195 086 | 2 150 | 197 236 |
| Buses and trams | 11 920 | — | 11 920 | 16 219 | — | 16 219 |
| Community and regional development | 22 643 | 2 850 | 25 493 | 50 286 | 6 541 | 56 827 |
| Electricity supply . . . | 154 223 | 167 599 | 321 823 | 158 692 | 174 147 | 332 839 |
| Gas pipelines | 15 500 | 27 681 | 43 181 | 19 875 | 34 484 | 54 359 |
| Housing | 240 686 | 76 759 | 317 445 | 273 111 | 80 749 | 353 860 |
| Other | 9 471 | 15 003 | 24 474 | 10 132 | 15 948 | 26 080 |
| Total debt | 623 912 | 289 893 | 913 805 | 725 298 | 324 590 | 1 049 888 |
| | Annual Interest Payable (\$'000) | | | | | |
| Total interest | 30 694 | 18 596 | 49 288 | 37 141 | 22 674 | 59 814 |

Public Corporations: Debt Outstanding According to Rate of Interest and Year of Maturity, South Australia, At 30 June 1975

| Rate of Interest | Debt | Year of Maturity | Debt |
|---------------------------|-----------|----------------------------|-----------|
| | \$'000 | | \$'000 |
| No interest | 21 016 | Five years ending 30 June: | |
| Under 4 per cent | 27 576 | 1980 | 73 155 |
| 4 and under 4½ per cent | 174 014 | 1985 | 89 584 |
| 4½ and under 5 per cent | 118 040 | 1990 | 74 258 |
| 5 and under 5½ per cent | 202 488 | 1995 | 78 411 |
| 5½ and under 6 per cent | 164 051 | 2000 | 112 345 |
| 6 and under 6½ per cent | 107 369 | 2005 | 118 314 |
| 6½ and under 7 per cent | 6 841 | 2010 | 55 334 |
| 7 and under 7½ per cent | 78 701 | 2015 | 54 487 |
| 7½ and under 8 per cent | 2 252 | 2020 | 18 718 |
| 8 and under 8½ per cent | — | 2025 | 62 695 |
| 8½ and under 9 per cent | 47 812 | 2030 | 85 564 |
| 9 and under 9½ per cent | 6 315 | Overdraft | 236 |
| 9½ and under 10 per cent | 38 204 | Indefinite | 158 412 |
| 10 and under 10½ per cent | 20 397 | Undetermined | 68 375 |
| 10½ per cent and over . . | 7 373 | | |
| Not specified | 27 439 | | |
| Total debt | 1 049 888 | Total debt | 1 049 888 |

11.5 LOCAL GOVERNMENT FINANCE

For the purpose of determining the scope of local government finance statistics, a local government authority is defined as:

- (i) An authority set up under a local government Act to carry out the functions of local government in a defined area (known as a municipality or district council area) and which is elected by persons enrolled as electors for the House of Assembly in respect of an address within the area, or who are ratepayers in respect of ratable property within the area. A body corporate is enrolled under the name of a nominated agent;
- (ii) An authority created or acquired by a local government authority (as defined above) or by two or more local government authorities. (In South Australia an authority established under Part XIX or Section 666(c) of the Act.)

REVENUE AND EXPENDITURE

The expenditure of moneys by local government bodies is authorised by the Local Government Act, 1934-1976. Under the Act each council is required to prepare a balance sheet and statement of its accounts on an accrual basis for each financial year and these statements are the basis of the statistics published on local government finance.

Government Grants

Local government authorities receive general purpose and specific purpose grants from the Commonwealth and State Governments. Some Commonwealth grants are paid direct to local government authorities while the remainder are paid to the State Government for on-passing to the relevant authorities.

The following table shows Commonwealth grants paid direct to local government authorities for the last three years.

Commonwealth Grants Paid Direct to Local Government Authorities

| Grant | 1973-74 | 1974-75 | 1975-76 |
|--|---------|---------|---------|
| | | \$'000 | |
| Aged or disabled persons homes | 57 | 367 | 1 008 |
| Child care and pre-schools | 3 | 155 | 604 |
| Aboriginal advancement | 296 | 225 | 163 |
| Aerodrome local ownership plan | 10 | 23 | 41 |
| Regional Employment Development Scheme | — | 3 596 | 6 363 |
| Community arts activities | — | — | 5 |
| Total | 366 | 4 366 | 8 184 |

Details of the amounts on-passed by the State Government during the last three years are given in the following table. These grants are included with the grants to State and local government authorities shown on page 644.

Commonwealth Grants On-passed by the State Government to Local Government Authorities

| Grant | 1973-74 | 1974-75 | 1975-76 |
|---|-----------|--------------|--------------|
| | | \$'000 | |
| Senior citizens centres | 47 | 423 | 673 |
| Aboriginal advancement | 10 | — | — |
| National Estate | — | 92 | 30 |
| Capital assistance for leisure facilities | — | 284 | 694 |
| Grants Commission | — | 4 774 | 6 785 |
| Regional organisations assistance | — | 66 | 24 |
| Area improvement | — | 292 | 679 |
| Tourism development | — | 58 | 134 |
| Pre-school and child care | — | — | 50 |
| Total | 57 | 5 989 | 9 069 |

The State Government also makes various grants to local government authorities. Details of these grants made over the last three years are shown in the table below.

State Government Grants Paid to Local Government Authorities

| Grant | 1973-74 | 1974-75 | 1975-76 |
|--|---------------|---------------|---------------|
| | | \$'000 | |
| Civil defence | 9 | 9 | 11 |
| Libraries | 216 | 317 | 699 |
| Roads | 3 721 | 3 981 | 4 713 |
| Urban stormwater drainage | 753 | 811 | 1 094 |
| Urban effluent drainage | 139 | 839 | 1 300 |
| Weed control | 136 | 156 | 223 |
| Public parks and parklands maintenance | 635 | 386 | 944 |
| Fire protection | 109 | 151 | 197 |
| Drought relief | 107 | — | — |
| Unemployment relief (a) | 3 660 | 1 373 | 5 859 |
| Pensioner rate concession | 1 336 | 2 045 | 2 464 |
| Swimming pools | 8 | 7 | — |
| Tourism | 100 | 132 | 196 |
| Sporting and recreation facilities | — | 281 | 556 |
| Senior citizens centres | 12 | 56 | 86 |
| Rundle Street Mall | — | 40 | 202 |
| Festival Theatre | 480 | 76 | — |
| Debt Servicing (Festival Theatre) | — | 148 | 148 |
| Provision for the arts | — | — | 20 |
| Residential rate rebate | — | — | 50 |
| Total | 11 421 | 10 808 | 18 762 |

(a) Includes \$3 659 000 in 1973-74, \$1 373 000 in 1974-75 and \$2 487 000 in 1975-76 from Commonwealth grants to the State for unemployment relief.

Assessments

Assessments for property rating are based upon annual value or land value. Annual value is based on the estimated gross annual rental at which a rateable property would be let from year to year with an allowance, not exceeding one-quarter, to cover all outgoings; whereas land value is an estimate of the value of the land (regardless of structural improvements) included in a property. A council may adopt the 'annual' valuations or the 'land' valuations of the State Valuer-General or may make its own valuation of properties.

Rating of Properties

A council may declare general or differential rates on properties in its area. Special rates may be levied for street watering or other purposes.

Revenue Transactions

The following tables show revenue transactions for local government authorities for 1974-75 prepared on an accrual basis.

Local Government Authorities**General Fund, Reserve Fund and Government Grants Fund, Income
South Australia, 1974-75**

| Particulars | Adelaide Statistical Division (a) | Other Areas | Total |
|--|---|----------------|--------|
| \$'000 | | | |
| Taxation: | | | |
| Rates; | | | |
| Declared for year | 37 960 | 15 358 | 53 318 |
| Fines on overdue rates | 120 | 48 | 167 |
| <i>Ex gratia</i> payments in lieu of rates | 103 | 216 | 319 |
| Total rates | 38 182 | 15 621 | 53 804 |
| Licences and permits; | | | |
| Building | 502 | 123 | 625 |
| Dog | 126 | 69 | 194 |
| Other | 81 | 35 | 116 |
| Total licences and permits | 709 | 227 | 936 |
| Total taxation | 38 891 | 15 849 | 54 740 |
| Public works: | | | |
| Reimbursements for roadworks; | | | |
| State Government (b) | 1 394 | 745 | 2 139 |
| Ratepayers (moieties) | 528 | 184 | 712 |
| Other | 1 553 | 265 | 1 818 |
| Sewerage and effluent drainage fees | 264 | 662 | 926 |
| Stormwater drains | 1 189 | 497 | 1 686 |
| Total public works | 4 928 | 2 353 | 7 281 |

Local Government Authorities
General Fund, Reserve Fund and Government Grants Fund, Income
South Australia, 1974-75 (continued)

| Particulars | Adelaide Statistical Division (a) | Other Areas | Total |
|--|---|----------------|---------------|
| | | \$'000 | |
| Public services: | | | |
| Ferries | — | 523 | 523 |
| Fire protection | 82 | 143 | 225 |
| Hospitals and health (including cemeteries) | 148 | 159 | 307 |
| Libraries | 308 | 85 | 393 |
| Sanitary and garbage | 164 | 132 | 296 |
| Traffic and parking | 2 762 | 12 | 2 773 |
| Weed control | 29 | 243 | 273 |
| Other | 704 | 718 | 1 423 |
| Total public services | 4 198 | 2 014 | 6 212 |
| Council properties: | | | |
| Current; | | | |
| Halls and theatres | 620 | 120 | 741 |
| Houses | 550 | 115 | 665 |
| Markets | 206 | 14 | 221 |
| Parks, gardens, recreation, etc. | 1 610 | 1 247 | 2 857 |
| Swimming pools | 248 | 78 | 327 |
| Other (c) | 1 362 | 2 165 | 3 527 |
| Capital; | | | |
| Land and buildings | 2 527 | 81 | 2 608 |
| Other | 223 | 78 | 301 |
| Total council properties | 7 346 | 3 900 | 11 247 |
| Government grants for roadworks: | | | |
| Grants (d) | 749 | 3 171 | 3 920 |
| Reimbursements (e) | 823 | 1 689 | 2 512 |
| Total Government grants for roadworks | 1 572 | 4 860 | 6 432 |
| Grants Commission grants | 2 608 | 2 166 | 4 774 |
| Other income: | | | |
| Fines (mainly traffic and parking) | 758 | 12 | 770 |
| Interest | 1 546 | 293 | 1 839 |
| Reimbursements for private works | 561 | 852 | 1 413 |
| Other | 670 | 623 | 1 292 |
| Total other income | 6 143 | 3 945 | 10 088 |
| Total income | 63 078 | 32 922 | 96 000 |

(a) Adjusted to include the whole of Meadows and Willunga District Council areas and to exclude the whole of Mudla Wirra. (b) Mainly reinstatements. (c) Includes income from Regional Employment Development Scheme allocated to 'Council Properties'. (d) Other grants and subsidies are included under respective functional headings above. (e) For work done on behalf of Highways Department.

Local Government Authorities
General Fund, Reserve Fund and Government Grants Fund, Expenditure
South Australia, 1974-75

| Particulars | Adelaide Statistical Division (a) | Other Areas | Total |
|--|---|----------------|--------|
| | | \$'000 | |
| General administration | 5 478 | 3 474 | 8 952 |
| Debt services: | | | |
| Interest; | | | |
| On loans | 4 042 | 816 | 4 858 |
| On overdraft | 47 | 103 | 150 |
| Principal redeemed | 3 021 | 1 701 | 4 722 |
| Total debt services | 7 110 | 2 620 | 9 730 |
| Public works: | | | |
| Roads, streets and bridges; | | | |
| Construction | 8 464 | 7 336 | 15 800 |
| Maintenance | 6 632 | 5 379 | 12 011 |
| Road, etc. plant—running costs unallocated | 2 262 | 1 829 | 4 091 |
| Sewerage and effluent drains; | | | |
| Construction | 73 | 878 | 950 |
| Maintenance | 84 | 76 | 160 |
| Contributions to stormwater drainage schemes (b) | 2 243 | 630 | 2 873 |
| Total public works | 19 758 | 16 128 | 35 886 |
| Public services: | | | |
| Building Act | 888 | 193 | 1 082 |
| Ferries | — | 526 | 526 |
| Fire protection | 853 | 379 | 1 232 |
| Hospitals and health (including cemeteries, etc.) | 2 321 | 1 146 | 3 467 |
| Libraries | 829 | 230 | 1 059 |
| Sanitary and garbage | 3 059 | 803 | 3 862 |
| Street cleaning | 567 | 23 | 590 |
| Street lighting | 1 326 | 340 | 1 666 |
| Tourism | 20 | 211 | 231 |
| Town planning | 963 | 59 | 1 022 |
| Traffic and parking | 2 221 | 43 | 2 264 |
| Vermin control | 34 | 79 | 113 |
| Weed control | 154 | 581 | 735 |
| Other | 229 | 419 | 648 |
| Total public services | 13 465 | 5 032 | 18 497 |

Local Government Authorities
General Fund, Reserve Fund and Government Grants Fund, Expenditure
South Australia, 1974-75 (continued)

| Particulars | Adelaide Statistical Division (a) | Other Areas | Total |
|---|---|----------------|---------------|
| | | \$'000 | |
| Council properties: | | | |
| Current; | | | |
| Halls and theatres | 791 | 336 | 1 127 |
| Houses | 368 | 103 | 470 |
| Parks, gardens, recreation, etc. | 6 556 | 2 872 | 9 428 |
| Swimming pools | 400 | 155 | 554 |
| Other | 328 | 295 | 622 |
| Capital (c); | | | |
| Land and buildings, | | | |
| Halls and theatres | 311 | 103 | 414 |
| Offices | 423 | 17 | 440 |
| Houses | 386 | 74 | 460 |
| Libraries | 284 | 12 | 296 |
| Parks, gardens, recreation, etc. | 1 885 | 575 | 2 460 |
| Senior citizens centres | 630 | 61 | 690 |
| Other | 632 | 564 | 1 196 |
| Plant and machinery, | | | |
| Roadmaking | 1 409 | 1 008 | 2 417 |
| Other | 269 | 100 | 370 |
| Other assets | 342 | 69 | 411 |
| Total council properties | 15 013 | 6 343 | 21 356 |
| Other expenditure: | | | |
| Cost of private works | 595 | 720 | 1 314 |
| Donations to charitable organisations, clubs, etc. | 102 | 106 | 207 |
| Other | 358 | 292 | 650 |
| Total other expenditure | 1 054 | 1 117 | 2 171 |
| Total expenditure | 61 878 | 34 715 | 96 593 |

(a) Adjusted to include the whole of Meadows and Willunga District Council areas and to exclude the whole of Mudla Wirra.

(b) Expenditures in respect of South-Western Suburbs Drainage Scheme are included under debt services above.

(c) These values are understated to the extent that some councils report expenditures net of trade-ins.

LOAN FUND INCOME AND EXPENDITURE

The following table shows the major items of loan fund income and expenditure for 1974-75 prepared on an accrual basis.

The principal source of income was from new money loan raisings (\$14 019 000), while the major expenditure items were the construction of roads, streets and bridges (\$3 538 000), and stormwater drains (\$1 872 000).

The table below shows new money loan raisings and funds provided for redemption of debt for the years 1965-66 to 1974-75.

**Local Government Authorities: New Money Loan Raisings and
Funds Provided for Redemption of Debt, South Australia**

| Year | New Loan Raisings in Australia | | | Funds for Redemption of Debt(a) | | |
|---------------|--------------------------------|--------|--------|---------------------------------|-------|-------|
| | From Govt | Other | Total | To Govt | Other | Total |
| | \$'000 | | | | | |
| 1965-66(b) .. | 3 263 | 5 282 | 8 545 | 1 144 | 1 331 | 2 474 |
| 1966-67 | 2 291 | 6 981 | 9 272 | 1 101 | 1 817 | 2 917 |
| 1967-68 | 1 027 | 7 365 | 8 392 | 1 009 | 1 853 | 2 862 |
| 1968-69 | 470 | 7 455 | 7 925 | 905 | 2 068 | 2 973 |
| 1969-70 | 504 | 9 430 | 9 934 | 822 | 2 481 | 3 303 |
| 1970-71 | 939 | 10 338 | 11 277 | 671 | 2 851 | 3 522 |
| 1971-72 | 328 | 10 111 | 10 439 | 537 | 3 409 | 3 946 |
| 1972-73 | 290 | 9 546 | 9 836 | 520 | 3 809 | 4 329 |
| 1973-74 | 30 | 10 815 | 10 845 | 367 | 3 971 | 4 338 |
| 1974-75 | 40 | 13 979 | 14 019 | 335 | 4 476 | 4 811 |

(a) Includes amounts credited to Sinking Funds and excludes amounts redeemed from Sinking Funds: both these figures are small in South Australia.

(b) Includes South-Western Suburbs Drainage Scheme.

The following table shows for local government authorities total debt outstanding and annual interest payable on this debt for the years 1965-66 to 1974-75. A further table shows debt outstanding at 30 June 1975 classified according to rate of interest and purpose.

**Local Government Authorities: Debt Outstanding and
Annual Interest Payable, South Australia**

| Year | Debt in Australia | | | Annual Interest Payable | | |
|---------------|-------------------|--------|--------|-------------------------|-------|-------|
| | To Govt | Other | Total | To Govt | Other | Total |
| | \$'000 | | | | | |
| 1965-66(a) .. | 6 185 | 31 160 | 37 345 | 256 | 1 674 | 1 931 |
| 1966-67 | 7 368 | 36 350 | 43 718 | 324 | 1 980 | 2 305 |
| 1967-68 | 7 380 | 42 079 | 49 459 | 337 | 2 323 | 2 660 |
| 1968-69 | 6 956 | 47 479 | 54 435 | 316 | 2 645 | 2 961 |
| 1969-70 | 6 637 | 54 389 | 61 025 | 290 | 3 106 | 3 396 |
| 1970-71 | 6 914 | 62 198 | 69 112 | 304 | 3 719 | 4 023 |
| 1971-72 | 6 798 | 69 007 | 75 806 | 300 | 4 240 | 4 539 |
| 1972-73 | 6 581 | 74 951 | 81 535 | 289 | 4 627 | 4 915 |
| 1973-74 | 4 639 | 82 119 | 86 758 | 203 | 5 261 | 5 465 |
| 1974-75 | 2 652 | 91 953 | 94 605 | 111 | 6 395 | 6 506 |

(a) Includes South-Western Suburbs Drainage Scheme.

Local Government Authorities: Debt Outstanding According to Rate of Interest and Purpose, South Australia, At 30 June 1975

| Rate of Interest | Debt | Purpose | Debt |
|-----------------------------------|---------------|---|---------------|
| | \$'000 | | \$'000 |
| No interest | 637 | Council properties | 26 779 |
| Under 5 per cent | 792 | Light and power | 3 260 |
| 5 and under 5½ per cent | 9 011 | Parks, gardens and recreational reserves | 8 484 |
| 5½ and under 6 per cent | 26 605 | Roads, streets, bridges and footpaths | 35 616 |
| 6 and under 6½ per cent | 17 757 | Water supply, sewerage and drainage (a) | 16 984 |
| 6½ and under 7 per cent | 2 294 | Other (including not stated) | 3 484 |
| 7 and under 7½ per cent | 17 967 | | |
| 7½ and under 8 per cent | — | | |
| 8 and under 8½ per cent | 24 | | |
| 8½ and under 9 per cent | 6 062 | | |
| 9 per cent and over | 13 355 | | |
| Not specified | 104 | | |
| Total debt | 94 605 | Total debt | 94 605 |

(a) Includes South-Western Suburbs Drainage Scheme.

BUSINESS UNDERTAKINGS

Some local government authorities operate electricity undertakings, water supply services and quarries. Expenditure by authorities for goods and services supplied by their business undertakings are included both in expenditures from general, etc. funds and in income of the business undertakings. Loan raisings and subsequent expenditures are included under Loan Fund income and expenditure.

**Local Government Authorities: Business Undertakings, Income and Expenditure
South Australia, 1974-75**

| | \$'000 |
|---------------------------------------|--------|
| Current account transactions (a): | |
| Electricity undertakings; | |
| Current income, | |
| Electricity sales | 1 262 |
| Other | 661 |
| Total current income | 1 923 |
| Current expenditure; | |
| Generation and distribution | 1 030 |
| Purchase of electricity | 448 |
| Debt services, | |
| Interest | 202 |
| Principal redeemed | 147 |
| Administration and other | 441 |
| Total current expenditure | 2 269 |
| Deficit | 346 |

Local Government Authorities
Business Undertakings, Income and Expenditure
South Australia, 1974-75 (continued)

| | | |
|--|--|-----|
| Quarries; | | |
| Current income | | 71 |
| Current expenditure | | 82 |
| | | 11 |
| Deficit | | 11 |
| Deficit (all undertakings) | | 357 |
| Capital account transactions (b): | | |
| Expenditure on construction or purchase of assets; | | |
| Electricity undertakings | | 5 |
| | | 5 |
| Total capital expenditure (b) | | 5 |

(a) Transactions relating to construction or purchase of capital assets are not taken into account in arriving at surplus or deficit.

(b) Excludes loan fund transactions.

11.6 AUSTRALIAN NATIONAL ACCOUNTS

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially of those that relate to the production and use of goods and services, and to transfers of income or capital between sectors of the economy.

Concepts

The fundamental concepts of domestic product and national income and expenditure are described below.

Gross Domestic Product at Market Prices (usually referred to as Gross Domestic Product) is defined as the total market value of goods and services produced in Australia after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital. It is the sum for all producers of the value of their sales (including any indirect taxes levied thereon), plus increases in their stocks, less their purchases of intermediate goods and services from other producers. For those producers, like general government, who do not generally sell their output, it includes output valued at cost instead of sales.

Gross Domestic Product at Factor Cost is that part of the cost of producing the Gross Domestic Product which consists of gross payments to factors of production (labour, land, capital and enterprise). It represents the value added by these factors in the process of production and is equivalent to Gross Domestic Product less indirect taxes plus subsidies. Gross Farm Product at Factor Cost is that part of Gross Domestic Product at Factor Cost arising from production in rural industries.

Domestic Factor Incomes is that part of the value added within a given period by factors of production which accrues as income to their suppliers after allowing for the depreciation of fixed capital. It is equivalent to Gross Domestic Product sector comprises only resident enterprises, but the concept of resident enterprises

National Income is the net income accruing within a given period to Australian residents from their services in supplying factors of production in Australia or overseas plus indirect taxes less subsidies. It is equivalent to Domestic Factor Incomes plus indirect taxes less subsidies and net income paid overseas. It is also equivalent to Gross Domestic Product less depreciation allowances and net income paid overseas.

National Disposable Income is the net income accruing within a given period to Australian residents from their services in supplying factors of production, from net indirect taxes and from re-distributive transfers. It is equivalent to National Income less net transfers overseas.

National Turnover of Goods and Services is the total flow within a given period of final goods and services (*i.e.* excluding any goods and services used up during the period in the process of production) entering the Australian economy from production and imports. This value is equivalent to Gross Domestic Product plus imports of goods and services or, alternatively, to Gross National Expenditure plus exports of goods and services.

Gross National Expenditure is the total expenditure within a given period on final goods and services (*i.e.* excluding goods and services used up during the period in the process of production) bought by Australian residents. It is equivalent to Gross Domestic Product plus imports of goods and services less exports of goods and services.

Sectors

A brief description of the sectors into which the economy is divided for the purpose of National Accounts follows.

The *Corporate Trading Enterprise Sector* includes companies and public enterprises other than financial enterprises. It thus includes all trading enterprises other than unincorporated enterprises and dwellings owned by persons. This sector comprises only resident enterprises, but the concept of resident enterprises includes Australian subsidiaries and branches of overseas-owned companies and excludes overseas subsidiaries and branches of Australian companies. All public trading enterprises are included in this sector whether they are incorporated bodies or not.

The *Financial Enterprise Sector* includes both private and public financial enterprises. Financial enterprises are enterprises which are primarily engaged in financial transactions in the market consisting of both incurring liabilities and acquiring financial assets. These are organisations which are regarded as providing the financial mechanism for the functioning of the economy. They include life insurance and general insurance offices and superannuation funds as well as other organisations mainly engaged in borrowing and lending in the market.

The *Household Sector* includes all resident persons, their unincorporated enterprises located in Australia and dwellings owned by persons, and non-profit organisations serving households, other than non-profit organisations included in the Financial Enterprises Sector.

The *General Government Sector* excludes public financial and trading enterprises, but otherwise includes the whole of the activities of the Commonwealth Government, State Governments, local authorities and public corporations.

The *Overseas Sector* account records all transactions between Australian persons, businesses and governments and overseas residents. Australian subsidiaries and branches of overseas companies are classified as resident units, while overseas subsidiaries and branches of Australian companies are classified as non-residents.

Description of the Accounts

The *Domestic Production Account* is shown as receiving the revenue from the sale of goods and services to final buyers; all intermediate goods and services are cancelled out, since they represent a cost to one producer to offset the revenue of the other. On the payments side are shown the payments of indirect taxes less subsidies and, since the account is presented from the point of view of the producing unit, the wages and salaries paid to employees.

The *National Income and Outlay Account* is shown as receiving wages, salaries and supplements, net operating surplus and indirect taxes less subsidies from the Domestic Production Account. From this income are deducted net payments of income and miscellaneous transfers to overseas, and the remainder is the National Disposable Income. The outlay side of the account shows this disposable income is largely used for final consumption expenditure and the balance is the nation's saving. The *National Income and Outlay Account* is a consolidation of the sector income and outlay accounts.

The *National Capital Account* is a consolidation of the sector capital accounts. It shows on the receipts side depreciation allowances transferred from the *Domestic Production Account* and saving transferred from the *National Income and Outlay Account* (or from the sector income and outlay accounts). On the payments side are shown purchases by all sectors of new buildings and capital equipment, the increase in stocks of all sectors and a balance described as net lending to overseas. This concept of net lending to overseas includes the increases (and, negatively, decreases) in Australia's overseas monetary reserves. The net lending to overseas is also the balance on current transactions in the *Overseas Transactions Account*.

The *Overseas Transactions Account* records all transactions of a current nature between Australian and overseas residents. Although this is an account for the Overseas Sector, the items are named from the Australian viewpoint. The account shows that Australia's current receipts from overseas consist of the value of (Australia's) exports of goods and services, property income received from overseas and transfers from overseas. These receipts are used for (Australia's) imports of goods and services and payments of property income and transfers to overseas; and the balance of current receipts represents net

lending to overseas. Positive net lending to overseas corresponds to a surplus on current transactions with overseas and negative net lending corresponds to a deficit.

Domestic Production Account, 1974-75

| | \$m | | \$m |
|---|--------|---|--------|
| Wages, salaries and supplements | 35 190 | Final consumption expenditure: | |
| Gross operating surplus: | | Private | 34 541 |
| Trading enterprises; | | Government | 9 092 |
| Companies | 6 201 | Gross fixed capital expenditure: | |
| Unincorporated enterprises | 7 005 | Private | 8 788 |
| Dwellings owned by persons | 3 478 | Public enterprises | 2 654 |
| Public enterprises | 1 146 | General government | 2 710 |
| Financial enterprises | 937 | Increase in stocks | 836 |
| Less Imputed bank service charge | 1 625 | Statistical discrepancy | 547 |
| Gross Domestic Product at Factor Cost | 52 332 | Gross national expenditure | 59 168 |
| Indirect taxes less subsidies.. | 6 671 | Exports of goods and services.. | 9 782 |
| | | National turnover of goods and services | 68 950 |
| | | Less Imports of goods and services | 9 947 |
| Gross Domestic Product | 59 003 | Expenditure on Gross Domestic Product | 59 003 |

National Income and Outlay Account, 1974-75

| | \$m | | \$m |
|--------------------------------|--------|---|--------|
| Final consumption expenditure: | | Wages, salaries and supplements | 35 190 |
| Private | 34 541 | Net operating surplus.. . . . | 13 151 |
| Government | 9 092 | Domestic factor incomes | 48 341 |
| Saving | 10 657 | Less Net income paid overseas .. | 457 |
| | | Indirect taxes | 6 999 |
| | | Less Subsidies | 328 |
| Disposal of Income | 54 290 | National Income | 54 555 |
| | | Less Net transfers to overseas.. | 265 |
| | | National Disposable Income | 54 290 |

National Capital Account, 1974-75

| | \$m | | \$m |
|---|---------------|--|---------------|
| Gross fixed capital expenditure: | | Depreciation allowances | 3 991 |
| Private; | | Saving: | |
| Dwellings | 2 501 | Increase in income tax provisions | -452 |
| Other building and construction | 1 978 | Undistributed (company) income | -179 |
| All other | 4 309 | Retained income of public financial enterprises | 209 |
| Public enterprises | 2 654 | Household saving | 7 728 |
| General government | 2 710 | General government surplus on current transactions | 3 000 |
| Increase in stocks: | | General government grants for private capital purposes | 133 |
| Farm and miscellaneous | 359 | Extraordinary insurance claims | 218 |
| Private non-farm | 477 | | |
| Statistical discrepancy | 547 | | |
| Net lending to overseas | -887 | | |
| Gross accumulation | 14 648 | Finance of gross accumulation | 14 648 |

Overseas Transactions Account, 1974-75

| | \$m | | \$m |
|---|---------------|--|---------------|
| Exports of goods and services | 9 782 | Imports of goods and services | 9 947 |
| Property income from overseas | 370 | Property income to overseas | 827 |
| Transfers from overseas: | | Transfers to overseas: | |
| Personal | 245 | Personal | 235 |
| Extraordinary insurance claims | 75 | General government | 350 |
| Current receipts from overseas | 10 472 | Net lending to overseas | -887 |
| | | Use of current receipts | 10 472 |

The next three tables give details for South Australia of farm income, household income, and private final consumption expenditure respectively for the years 1970-71 to 1974-75.

Farm Income, South Australia (a)

| Particulars | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|--------------------------------------|------------|------------|------------|------------|------------|
| | \$ million | | | | |
| Gross value of farm production: | | | | | |
| Wool (including skin wool) | 66 | 86 | 165 | 173 | 122 |
| Livestock slaughterings | 104 | 116 | 165 | 190 | 114 |
| Wheat | 41 | 76 | 44 | 189 | 161 |
| Other grain crops | 40 | 47 | 32 | 77 | 127 |
| Other crops | 84 | 91 | 93 | 120 | 142 |
| Other livestock products | 35 | 39 | 34 | 43 | 48 |
| Total | 370 | 455 | 533 | 792 | 714 |

Farm Income, South Australia (continued)

| Particulars | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|---|------------|------------|------------|------------|------------|
| | \$ million | | | | |
| Less Stock valuation adjustment | 1 | 7 | 16 | -10 | |
| Less Production costs other than wages and depreciation: | | | | | |
| Marketing costs | 36 | 45 | 41 | 54 | } 279 |
| Seed and fodder | 30 | 30 | 46 | 48 | |
| Other costs | 94 | 100 | 105 | 132 | |
| Gross farm product at factor cost | 209 | 273 | 325 | 568 | 435 |
| Less Depreciation | 50 | 49 | 49 | 49 | } 164 |
| Wages, net rent and interest paid and third party insurance transfers | 65 | 64 | 71 | 92 | |
| Farm income | 94 | 160 | 205 | 427 | |
| Less Farm income of companies | — | 3 | 9 | 16 | 6 |
| Income of farm unincorporated enterprises | 94 | 157 | 196 | 411 | 265 |

(a) Includes Northern Territory.

Household Income, South Australia (a)

| Particulars | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|--|--------------|--------------|--------------|--------------|--------------|
| | \$ million | | | | |
| Wages, salaries and supplements | 1 591 | 1 792 | 2 008 | 2 532 | 3 284 |
| Income of farm unincorporated enterprises | 94 | 157 | 196 | 411 | 265 |
| Income of other unincorporated enterprises | 181 | 208 | 234 | 269 | 296 |
| Income from dwellings | 47 | 58 | 70 | 79 | 94 |
| Transfers from general government . . | 180 | 210 | 256 | 315 | 437 |
| All other income | 224 | 249 | 287 | 342 | 426 |
| Total household income | 2 317 | 2 674 | 3 051 | 3 948 | 4 802 |
| Less | | | | | |
| Income tax payable | 257 | 321 | 352 | 535 | * |
| Other direct taxes, fees, fines, etc. . . | 33 | 39 | 42 | 44 | * |
| Consumer debt interest | } 33 | 39 | 47 | 63 | * |
| Transfers overseas | | | | | |
| Household disposable income | 1 994 | 2 275 | 2 610 | 3 306 | * |

(a) Includes Northern Territory.

Private Final Consumption Expenditure, South Australia (a)

| Particulars | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| | \$ million | | | | |
| Food | 350 | 386 | 436 | 497 | 585 |
| Cigarettes and tobacco | 52 | 58 | 69 | 78 | 91 |
| Alcoholic drinks | 115 | 128 | 131 | 148 | 172 |
| Clothing, etc. | 166 | 179 | 206 | 246 | 287 |
| Health | 114 | 134 | 149 | 170 | 209 |
| Rent | 195 | 223 | 257 | 299 | 366 |
| Gas, electricity, fuel | 40 | 42 | 44 | 51 | 60 |
| Household durables | 140 | 162 | 189 | 241 | 294 |
| Newspapers, books, etc. | 26 | 29 | 31 | 38 | 46 |
| All other goods n.e.i. | 71 | 81 | 98 | 115 | 140 |
| Travel and communication | 290 | 313 | 341 | 400 | 498 |
| All other services | 189 | 217 | 252 | 295 | 356 |
| Total.. | 1 748 | 1 952 | 2 203 | 2 578 | 3 104 |

(a) Includes Northern Territory

The information included in this section has been derived from the publication, *Australian National Accounts, National Income and Expenditure* (Reference No. 7·1), 1974-75, published by the Australian Statistician, Canberra.

PRIVATE FINANCE

12.1 BANKING AND CURRENCY

BANKING

The banking system in Australia comprises a central bank (the Reserve Bank of Australia); thirteen trading banks (one owned by the Commonwealth Government, three by State Governments, and nine privately owned); the Commonwealth Development Bank and the Australian Resources Development Bank Ltd (specialist banks, owned respectively by the Commonwealth Government and a consortium of the seven major trading banks); and thirteen savings banks of which one is owned by the Commonwealth Government and three by State Governments, two are trustee savings banks, and seven are associated with privately owned trading banks.

LEGISLATION

Under Section 51 of the Constitution Act the Commonwealth Parliament has power to legislate with respect to 'Banking, other than State banking; also State banking extending beyond the limits of the State concerned, the incorporation of banks, and the issue of paper money'.

The principal Acts at present in force relating to banking are:

- (a) The *Reserve Bank Act* 1959, providing for the constitution and management of the Reserve Bank and the management of the Australian note issue;
- (b) The *Commonwealth Banks Act* 1959, providing for the constitution and management of the Commonwealth Banking Corporation; and
- (c) The *Banking Act* 1959, providing for the regulation of banking and the protection of the currency and public credit of Australia.

The *Banking Act 1959* applies to all banks operating in Australia or its Territories, except State banks trading in their own State. Following an amendment in 1973 the *Banking Act* ceased to apply to Papua New Guinea. The objects of the Act are: (1) to provide a uniform legal framework for regulating the banking system; (2) to safeguard depositors from loss; (3) to provide for the co-ordination of banking policy under the direction of the Reserve Bank; (4) to control bank interest rates and the volume of credit in circulation; (5) to mobilise and to provide machinery for the control of foreign exchange and gold reserves of the Australian economy.

State banking legislation relates to the incorporation of banks and the constitution and management of State Banks. South Australian Acts at present in force relating to banking are the *State Bank Act, 1925-1975* and the *Savings Bank of South Australia Act, 1929-1975*.

THE RESERVE BANK

The Reserve Bank of Australia functions as a central bank, controls the Australian note issue through the Note Issue Department, provides special banking facilities through the Rural Credits Department, and acts as banker to the Commonwealth and some of the States. Liabilities and assets of each department of the Reserve Bank are shown in the table below.

Reserve Bank of Australia, Liabilities and Assets at 30 June 1976

| Particulars | Central Bank Department | Note Issue Department | Rural Credits Department | Total (a) |
|---|-------------------------------|-----------------------------|--------------------------------|------------------|
| LIABILITIES (\$'000) | | | | |
| Capital | 40 000 | — | 9 428 | 49 428 |
| Reserve funds | 5 568 | — | 14 351 | 19 919 |
| Special Reserve: | | — | | |
| International Monetary Fund Special Drawing Rights | 200 602 | — | — | 200 602 |
| Development fund | — | — | 1 360 | 1 360 |
| Notes on issue | — | 2 921 408 | — | 2 921 408 |
| Deposits, bills payable and other: | | | | |
| Statutory reserve deposits | 779 725 | — | — | 779 725 |
| Other trading bank deposits | 74 670 | — | — | 74 670 |
| Savings bank deposits | 1 053 900 | — | — | 1 053 900 |
| Other | 2 286 849 | 83 660 | 156 322 (a) | 1 269 754 |
| Total | 4 441 314 | 3 005 068 | 181 461 (a) | 6 370 766 |
| ASSETS (\$'000) | | | | |
| Gold and foreign exchange (b) | 2 242 812 | 179 155 | — | 2 421 967 |
| Commonwealth Government securities | 1 193 042 | 1 513 654 | — | 2 706 696 |
| All other | 1 005 460 | 1 312 259 | 181 461 (a) | 1 242 103 |
| Total | 4 441 314 | 3 005 068 | 181 461 (a) | 6 370 766 |

(a) Inter-departmental accounts totalling \$1 257 077 000 have been offset in totals.

(b) Includes IMF Special Drawing Rights.

Further details of the activities of the Reserve Bank are given in the *Official Year Book of Australia*.

THE COMMONWEALTH BANKING CORPORATION

The Commonwealth Banking Corporation was established under the *Commonwealth Banks Act 1959* and commenced operations on 14 January 1960. It is the controlling body for the Commonwealth Trading Bank, the Commonwealth Savings Bank and the Commonwealth Development Bank.

Particulars relating to the Development Bank are given below, while details of the other two banks are included in later sections relating to trading banks and savings banks.

COMMONWEALTH DEVELOPMENT BANK

The Development Bank is a supplementary source of finance for primary production and for the establishment or development of industrial undertakings and does not compete with conventional lenders, but provides financial help when such help is thought desirable and finance is not otherwise available on suitable terms. The primary consideration of the Bank's operations in deciding whether finance should be made available is the prospect of success and not necessarily the value of security available.

In South Australia all the major private banks and the State Bank of South Australia are agents of the Development Bank for the receipt of loan applications. The averages of weekly figures for loans, advances and bills discounted for the month of June in the years 1973 to 1976 were \$295, \$307, \$345 and \$369 million respectively. Of the last mentioned amount, \$36.4 million was advanced in South Australia.

At 30 June 1976 the capital of the Development Bank was \$61.7 million.

AUSTRALIAN RESOURCES DEVELOPMENT BANK LIMITED

This corporation was formed by the major trading banks with the support of the Reserve Bank and was given bank status by an amendment to the Banking Act in 1967. It provides finance for the development of Australia's natural resources mainly in the form of refinanced trading bank loans but also by direct lending and equity participation. Other services offered to intending developers include the organising of consortia financing, assessments of feasibility and independent verification of reserves. The averages of weekly figures for loans and advances outstanding for the month of June in the years 1973 to 1976 were \$294, \$351, \$449 and \$559 million respectively. This finance is provided from the Australian capital market (mainly in the form of public issues of transferable deposits) and from subordinated loans by the shareholding banks and the Reserve Bank of Australia. Overseas borrowing remains a minor source of funds.

Authorised capital of the Bank is \$10 million of which \$7 million (at 30 September 1976) has been issued as fully paid capital. The shareholders (the major trading banks) have approximately equal shareholdings. Although not a shareholder, the Reserve Bank of Australia initially subscribed \$2.1 million in loan capital on which interest is paid.

TRADING BANKS

For statistical purposes trading banks are often divided into two groups, 'major' and 'other'. The 'major trading banks' comprise the six private trading banks and the Commonwealth Trading Bank, all of which have interests throughout Australia: in June 1976 they accounted for approximately 90 per cent of all general trading bank assets in Australia.

The group 'other trading banks' consists of the three State Government banks (including the State Bank of South Australia) which trade mainly in their respective States, and three other banks (two of them overseas institutions) whose business is either specialised (*e.g.* financing overseas trade), or both specialised and limited to particular areas.

Banks Originating in South Australia

With a subscribed capital of \$500 000 in 50 000 shares of \$10 each, the first trading bank promoted in South Australia was The Bank of Adelaide which was opened for business on 11 December 1865 and now has branches in all States and the Australian Capital Territory.

Pursuant to the State Advances Act of 1895 the State Bank of South Australia commenced business in 1896. The original Act directed that advances were to be made on first mortgage to farmers, other primary producers and local government authorities. The State Bank Act, 1925 repealed the State Advances Act and enlarged the scope of the activities of the bank by making provision for loans on overdraft and all business of general banking. The State Bank also administers the following Acts on behalf of the State:

Advances for Homes Act, 1928-1970;

Advances to Settlers Act, 1930-1972;

Loans to Producers Act, 1927-1962;

Advances for wire-netting and vermin proof materials under the Vertebrate Pests Act, 1975;

Loans for Fencing and Water Piping Act, 1938-1975;

Student Hostels (Advances) Act, 1961.

The State Bank of South Australia does not operate branches or agencies outside the State.

Assets

Under the provisions of the *Banking Act* 1959 all trading banks (except State banks trading in their own State) have limitations on their portfolio of assets. These banks are required to hold a certain percentage of total deposits in the form of liquid assets or government securities (this minimum LGS ratio which had remained at 18 per cent since 1962 was changed to 23 per cent from January 1976). They are also required to maintain a fixed percentage of total deposits as a deposit with the Reserve Bank (Statutory Reserve Deposit): the SRD ratio for major trading banks changed during 1976 to 7.6 per cent on 16 January; to 6.6 per cent on 14 April; to 5.6 per cent on 28 April; to 5 per cent on 23 June and to 6.0 per cent on 16 November.

The following table gives some particulars of assets held by trading banks in Australia. The figures quoted are averages of assets at the close of business on each Wednesday in June 1976.

Trading Banks: Assets within Australia, June 1976^(a)

| Assets | Major Trading Banks | Other Trading Banks | All Trading Banks |
|---|---------------------------|---------------------------|-------------------------|
| | | \$'000 | |
| Gold, bullion and Australian notes | 319 275 | 18 214 | 337 489 |
| Cash with Reserve Bank | 5 875 | 2 199 | 8 075 |
| Commonwealth public securities: | | | |
| Commonwealth Government and State .. | 3 352 900 | 249 003 | 3 601 903 |
| Local authorities and public corporations | 12 817 | 20 012 | 32 829 |
| Statutory Reserve Deposit Account with Reserve Bank | 827 469 | 13 028 | 840 497 |
| Loans to authorised dealers in short-term money market | 122 731 | 59 548 | 182 279 |
| Other loans, advances and bills discounted .. | 11 016 536 | 1 542 986 | 12 559 522 |
| Bank premises, furniture and sites | 270 424 | 55 029 | 325 453 |
| Other assets | 2 237 382 | 227 170 | 2 464 553 |
| Total assets | 18 165 410 | 2 187 189 | 20 352 600 |

(a) Excludes inter-branch accounts and contingencies.

Branches and Agencies

Of the thirteen trading banks which operate in Australia, the eight banks listed below conduct business in South Australia:

Government banks;

Commonwealth Trading Bank of Australia
State Bank of South Australia

Private banks;

Australia and New Zealand Banking Group Ltd
The Bank of Adelaide
Bank of New South Wales
Commercial Bank of Australia Ltd
Commercial Banking Co of Sydney Ltd
National Bank of Australasia Ltd

Trading Banks: Branches and Agencies at 30 June, South Australia

| Bank | Branches | | | Agencies | | |
|--|------------|------------|------------|------------|------------|------------|
| | 1974 | 1975 | 1976 | 1974 | 1975 | 1976 |
| Commonwealth Trading Bank | 51 | 54 | 57 | 47 | 46 | 41 |
| State Bank of South Australia | 36 | 36 | 37 | 16 | 16 | 15 |
| Private banks | 349 | 355 | 358 | 138 | 114 | 95 |
| Total—Metropolitan area (a) | 228 | 239 | 250 | 92 | 71 | 61 |
| Country | 208 | 206 | 202 | 109 | 105 | 90 |
| Total State | 436 | 445 | 452 | 201 | 176 | 151 |

(a) As determined by individual banks for administrative purposes.

Deposits, Advances and Debits to Customers Accounts

Deposits not bearing interest are on current account and may be withdrawn on demand. Deposits bearing interest include some deposits on current account, but most are deposits for fixed terms ranging from three months to four years and for large amounts from thirty days to four years. Until December 1970 the maximum term for fixed deposits was two years.

Debits to customers accounts generally represent the total of all cheques drawn by customers of the banks.

**Trading Banks: Balance of Deposits and Advances and Debits to
Customers Accounts, South Australia**

| Year | Depositors Balances (a) | | | Loans, Advances, and Bills Discounted (a) (b) | Debits to Customers Accounts (c) | Proportion to Total Deposits (a) | |
|-------------------|-------------------------|----------------------------|-----------|---|---|-------------------------------------|---|
| | Bearing Interest | Not Bearing Interest | Total | | | Deposits Bearing Interest | Loans, Advances, and Bills Discounted (b) |
| | | | \$'000 | | | | Per cent |
| 1971-72 | 251 057 | 218 926 | 469 983 | 419 682 | 293 329 | 53.4 | 89.3 |
| 1972-73 | 298 161 | 265 511 | 563 670 | 470 070 | 336 581 | 52.9 | 83.4 |
| 1973-74 | 427 839 | 321 344 | 749 182 | 585 505 | 414 861 | 57.1 | 78.2 |
| 1974-75 | 581 109 | 320 751 | 901 858 | 688 337 | 456 883 | 64.4 | 76.3 |
| 1975-76 | 781 662 | 393 968 | 1 175 629 | 814 384 | 578 253 | 66.5 | 69.3 |

(a) Average of balances at close of business on Wednesdays during the period.

(b) Excludes loans to authorised dealers in the short-term money market.

(c) Weekly average, i.e. average of debits during weeks ending on Wednesdays in the period. Includes the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank.

Separate details for 1975-76 for each of the Government banks and for all private banks are as follows.

Trading Banks: Balance of Deposits and Advances, South Australia, 1975-76(a)

| Bank | Depositors Balances | | | Loans, Advances, and Bills Discounted (b) |
|-----------------------------------|---------------------|-------------------------|------------------|---|
| | Bearing Interest | Not Bearing Interest | Total | |
| | | | | \$'000 |
| Commonwealth Trading Bank . . . | 138 814 | 66 263 | 205 077 | 116 490 |
| State Bank of South Australia . . | 59 302 | 22 708 | 82 010 | 252 316 |
| Private trading banks | 583 546 | 304 997 | 888 542 | 445 578 |
| Total | 781 662 | 393 968 | 1 175 629 | 814 384 |

(a) Average of balances at close of business on Wednesdays during the period.

(b) Excludes loans to authorised dealers in the short-term money market.

The following table relates to trading bank advances outstanding for all banks in South Australia and the Northern Territory except the State Bank of South Australia. Advances are classified according to type of borrower in July of each year from 1972 to 1976.

Major Trading Banks, South Australia and Northern Territory
Advances to Resident Borrowers by Type of Borrower^(a)
(At Second Wednesday in July)

| Classification | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|--------------|--------------|--------------|--------------|--------------|
| | \$ million | | | | |
| Business advances: | | | | | |
| Agriculture, grazing and dairying (b) . | 75.3 | 78.8 | 86.4 | 91.8 | 108.8 |
| Manufacturing | 47.7 | 43.2 | 65.2 | 66.7 | 67.0 |
| Transport, storage and communication | 5.3 | 8.4 | 12.3 | 9.9 | 13.0 |
| Finance | 15.6 | 15.7 | 27.4 | 21.5 | 19.1 |
| Commerce: | | | | | |
| Retail trade | 30.3 | 33.5 | 37.3 | 42.1 | 51.9 |
| Wholesale trade (c) | 14.6 | 20.8 | 23.9 | 21.7 | 28.4 |
| Total commerce | 44.9 | 54.3 | 61.2 | 63.8 | 80.2 |
| Building and construction | 11.1 | 18.2 | 19.8 | 21.3 | 25.4 |
| Other business | 38.8 | 61.0 | 78.9 | 81.9 | 96.4 |
| Unclassified | 2.3 | 2.5 | 2.9 | 5.4 | 11.2 |
| Total business advances | 241.0 | 282.0 | 354.3 | 362.3 | 421.1 |
| Distribution of business advances: | | | | | |
| To companies | 126.6 | 148.4 | 195.8 | 199.2 | 225.8 |
| Other | 114.5 | 133.6 | 158.4 | 163.1 | 195.3 |
| Advances to public authorities | 0.7 | 1.1 | 1.4 | 1.6 | 3.1 |
| Personal advances: | | | | | |
| Building or purchasing own home . . | 21.8 | 30.9 | 40.4 | 40.7 | 52.8 |
| Other | 43.1 | 77.6 | 105.8 | 141.8 | 202.3 |
| Total personal advances | 64.9 | 108.5 | 146.1 | 182.5 | 255.1 |
| Advances to non-profit organisations . . | 2.9 | 3.3 | 5.4 | 3.8 | 4.5 |
| Total advances to resident borrowers | 309.6 | 394.9 | 507.2 | 550.2 | 683.7 |

(a) Covers advances by the Commonwealth Trading Bank and all private trading banks, but excludes advances by the State Bank of South Australia. 'Resident borrowers' comprise all institutions (including branches of overseas institutions) engaged in business in Australia and individuals permanently residing in Australia.

(b) Includes farm development loan component.

(c) Includes temporary advances to woolbuyers.

Interest Rates

The following table shows trading banks interest rates current at 30 September 1976, the dates from which they became operative and the rates which were applicable before those dates.

Trading Banks, Interest Rates at 30 September 1976

| Particulars | Rate per Annum | Date from which Operative | Previous Rate per Annum |
|--|----------------|---------------------------|-------------------------|
| | % | LENDING RATES | % |
| Overdraft: | | | |
| Under \$100 000 (a) | 10.50 | Feb. 1976 | 11.50 |
| \$100 000 and over | (b) | 4.2.72 | 8.25 |
| Unsecured personal loans (a) (c) | 7.75 | Feb. 1976 | 7.25 |
| | | DEPOSIT RATES | |
| Fixed deposits (less than \$50 000): | | | |
| 3 months and less than 6 months | 7.00-8.25 | June 1976 | 7.00-8.00 |
| 6 months and less than 24 months | 7.25-8.75 | May 1976 | 7.25-8.50 |
| 24 months and less than 48 months | 8.00-9.50 | April 1976 | 8.25-9.25 |
| Fixed deposits (\$50 000 and over) (a) (b): | | | |
| 30 days to 48 months | 10.00 | 9.7.74 | 8.00 |
| Certificates of deposit (\$50 000 and over) (b): | | | |
| 3 months to 48 months | (d) | 17.9.73 | 6.50 |

(a) Maximum rate. (b) Actual rates are a matter for negotiation between banks and their customers. (c) Flat rate. (d) Not subject to maximum rate.

Bank interest rates are not formally determined under the Banking Act. Maximum rates are fixed after discussions between the Reserve Bank and the banks, and with the approval of the Treasurer. State Government banks, although not bound by rulings of the Reserve Bank, tend to conform to them.

SAVINGS BANKS

Development of Savings Banks

The prime object of the foundation of savings banks in Australia was the encouragement of thrift, and deposits as small as 10 cents are still accepted. Generally, depositors cannot operate on their savings accounts by means of cheques, although most savings banks extend this facility to non-profit organisations such as friendly, co-operative and charitable societies. In addition the Savings Bank of South Australia provides personal cheque account facilities for other depositors. Savings accounts have the advantages that deposits may be withdrawn on demand and that depositors receive interest on their minimum monthly balances. No charge is made by the banks for keeping these accounts or the cheque accounts of some non-profit organisations. However, early in 1970 concessions relating to charges and interest on trading accounts were withdrawn from hospital and medical benefit organisations, building societies, credit unions and investment clubs. Savings banks may not accept deposits from a profit-making body unless it is acting as a trustee for a non-profit making beneficiary.

Post Offices in South Australia acted as agencies for the Savings Bank of South Australia until 1912 when they became agents of the Commonwealth Bank from the date of its establishment.

Savings bank business was conducted exclusively by these two government banks until 1956, when the first of the private banks entered this field. Savings bank facilities in South Australia are now provided by the eight banks listed below:

Government;

Commonwealth Savings Bank of Australia
Savings Bank of South Australia

Private;

Australia and New Zealand Savings Bank Ltd
The Bank of Adelaide Savings Bank Ltd
Bank of New South Wales Savings Bank Ltd
Commercial Savings Bank of Australia Ltd
CBC Savings Bank Ltd
National Bank Savings Bank Ltd

Savings Bank of South Australia

The Savings Bank of South Australia commenced operations on 11 March 1848 following the enactment of an ordinance in 1847. At 30 June 1976 there were 142 branches, 686 agencies and 833 school bank agencies within South Australia. The Savings Bank of South Australia does not operate branches in other Australian States but has agent banks to act for it in other States and in the United Kingdom. Since April 1974 a resident officer has been located in London.

The total of depositors balances first exceeded \$200 million in 1956, reached \$400 million in July 1969 and at 30 June 1976 amounted to more than \$776 million. During 1975-76, the Bank made loans exceeding \$86.6 million to depositors for housing, for rural development and for institutional and other purposes, and at 30 June 1976 the total of such loans outstanding was over \$300 million.

Savings Bank of South Australia, Summary of Business

| Year | Operative Accounts | Cash Turnover (a) | Depositors Balances (b) | Government Securities Held | |
|------------------|-----------------------|-------------------------|-------------------------------|----------------------------------|---------|
| | | | | Loans (b) (c) | (b) (d) |
| | No. | \$m | \$'000 | \$'000 | \$'000 |
| 1971-72 | 962 023 | 1 351 | 469 607 | 287 633 | 143 652 |
| 1972-73 | 977 345 | 1 693 | 537 953 | 310 282 | 140 000 |
| 1973-74 | 1 007 671 | 2 262 | 591 822 | 341 853 | 157 713 |
| 1974-75 | 1 064 468 | 3 037 | 697 458 | 396 454 | 166 865 |
| 1975-76 | 1 074 646 | 3 821 | 776 473 | 457 096 | 176 578 |

(a) Sum of deposits and withdrawals; includes some duplication from amounts transferred by depositors from one type of account to another.

(b) At end of year, as published in the Bank's Annual Report.

(c) Includes loans guaranteed by South Australian Government and to statutory and local government bodies.

(d) Commonwealth Government Securities only.

Branches and Agencies

The number of branches of savings banks increased in 1975-76 for the third time since 1969-70 because of an increase in the number of branches of private banks in the metropolitan area. However, the number of agencies of savings banks decreased in each of the years 1968-69 to 1975-76.

Savings Banks: Branches and Agencies at 30 June, South Australia

| Bank | Branches | | | Agencies | | |
|---|------------|------------|------------|--------------|--------------|--------------|
| | 1974 | 1975 | 1976 | 1974 | 1975 | 1976 |
| Commonwealth Savings Bank | 78 | 78 | 79 | 688 | 671 | 642 |
| Savings Bank of South Australia | 140 | 142 | 142 | 745 | 726 | 686 |
| Private Banks | 349 | 355 | 358 | 560 | 511 | 472 |
| Total—Metropolitan area (a) . . | 322 | 330 | 338 | 1 318 | 1 254 | 1 196 |
| Country | 245 | 245 | 241 | 675 | 654 | 604 |
| Total State | 567 | 575 | 579 | 1 993 | 1 908 | 1 800 |

(a) As determined by individual banks for administrative purposes.

School Banking

Special banking facilities for school children were introduced into South Australia with the inauguration of the School Banking Department of the Savings Bank of South Australia on 28 April 1908. The Commonwealth Savings Bank of Australia and some private banks provide similar services at some private schools. However, the Savings Bank of South Australia has sole access to State schools, and retains a major share of school banking business. With a view to encouraging thrift in school children, deposits as small as one cent are accepted.

Details of school banking in this State are as follows:

| | Agencies | Operative Accounts '000 | Depositors Balances \$'000 |
|------------------------|----------|-------------------------------|----------------------------------|
| 30 June 1972 | 920 | 166 | 3 532 |
| 1973 | 908 | 161 | 3 618 |
| 1974 | 910 | 157 | 3 684 |
| 1975 | 902 | 155 | 3 582 |
| 1976 | 881 | 153 | 3 829 |

Assets

Under the provisions of the *Banking Act* 1959 all savings banks (except State banks trading in their own State) are required to maintain in prescribed investments an amount that together with cash on hand in Australia is not less than the amount on deposit in Australia with the savings bank. These prescribed investments include deposits with the Reserve Bank, deposits with or loans to other banks, Commonwealth Government or State securities, loans for housing, loans to authorised dealers in the short-term money market and loans to the Australian Banks Export Refinance Corporation Ltd.

A further limitation on the portfolio of assets held by savings banks is that they are required to hold in cash and other prescribed assets, funds equivalent to 50 per cent of depositors balances. Within this amount, funds equivalent to 7.5 per cent of depositors balances must be held in deposits with the Reserve Bank and in Treasury notes. These ratios were previously 60 and 10 per cent respectively, and were varied by an amendment to the Banking (Savings Banks) Regulations on 12 September 1974.

Deposits

Until 1961, the total of depositors balances in savings banks per head of population was higher in South Australia than in any other State. Although deposits per head are now higher in Victoria than in South Australia, the figure for this State is still well above the Australian average.

Savings Banks: Accounts and Deposits, South Australia and Australia

| At 30 June | South Australia | | | Australia | | |
|---------------|------------------------------|------------------------|---------------------------------------|------------------------------|------------------------|---------------------------------------|
| | Accounts Operative (a) | Depositors Balances | Deposits per Head of Population | Accounts Operative (a) | Depositors Balances | Deposits per Head of Population |
| | '000 | \$m | \$ | '000 | \$m | \$ |
| 1972 | 1 705 | 874.1 | 737 | 16 726 | 8 391.4 | 648 |
| 1973 | 1 770 | 1 060.4 | 884 | 17 468 | 10 237.9 | 780 |
| 1974 | 1 861 | 1 174.8 | 964 | 18 369 | 11 195.6 | 839 |
| 1975 | 1 991 | 1 394.6 | 1 130 | 19 390 | 12 868.5 | 953 |
| 1976 | 2 049 | 1 617.3 | 1 319 | 20 171 | 14 822.5 | 1 090 |

(a) Excludes school bank and inoperative accounts.

The Savings Bank of South Australia has always held a very high proportion of the total of depositors balances in this State, although its share of total on deposit has dropped from about 75 per cent in 1961 to approximately 48 per cent in 1976. During that time the private banks have increased their share from less than 12 per cent to approximately 29 per cent.

Savings Bank Deposits, South Australia

| At 30 June | Commonwealth Savings Bank | Savings Bank of South Australia | Private Savings Banks | Total |
|------------|------------------------------|------------------------------------|--------------------------|---------|
| | \$ million | | | |
| 1972 | 203.5 | 469.6 | 201.0 | 874.1 |
| 1973 | 248.8 | 538.0 | 273.7 | 1 060.4 |
| 1974 | 276.6 | 591.8 | 306.4 | 1 174.8 |
| 1975 | 322.9 | 697.5 | 374.2 | 1 394.6 |
| 1976 | 374.4 | 776.5 | 466.5 | 1 617.3 |

The next table gives an indication of the amount of business conducted by savings banks during a year. It shows that in each of the last five years, both the amount deposited and the amount withdrawn during the year exceeded the total amount on deposit at the end of the year.

Movements in Savings Bank Deposits, South Australia

| Year | Amount on Deposit at Beginning of Year | Deposits during Year (a) | Withdrawals during Year (a) | Interest Added during Year | Increase in Depositors Balances during Year | Amount on Deposit at End of Year |
|------------|--|--------------------------|-----------------------------|----------------------------|---|----------------------------------|
| \$ million | | | | | | |
| 1971-72 .. | 787.9 | 1 400.2 | 1 345.0 | 31.1 | 86.2 | 874.1 |
| 1972-73 .. | 874.1 | 1 841.7 | 1 691.3 | 35.8 | 186.3 | 1 060.4 |
| 1973-74 .. | 1 060.4 | 2 392.2 | 2 325.1 | 47.4 | 114.5 | 1 174.8 |
| 1974-75 .. | 1 174.8 | 3 135.6 | 2 982.0 | 66.2 | 219.8 | 1 394.6 |
| 1975-76 .. | 1 394.6 | 3 754.0 | 3 612.5 | 81.2 | 222.8 | 1 617.3 |

(a) Includes inter-branch transfers.

Interest Rates

The following table shows savings banks interest rates current at 30 September 1976, the dates from which they became operative and the rates which were applicable before those dates. State Government savings banks are not bound by rulings of the Reserve Bank, but are generally guided by them.

Savings Banks Interest Rates at 30 September 1976

| Particulars | Rate per Annum | Date from which Operative | Previous Rate per Annum |
|--|----------------|---------------------------|-------------------------|
| | % | LENDING RATES | % |
| Housing loans to individuals | (a) 9.00-10.00 | Sept. 1975 | 8.75-10.00 |
| Other loans: | | | |
| Under \$100 000 (b) | 10.50 | 2/2/76 | 11.50 |
| \$100 000 and over | (c) | 10/3/72 | 7.75 |
| | | DEPOSIT RATES | |
| Ordinary accounts (d): | | | |
| Up to and including \$4 000 | (e) 3.75- 6.25 | April 1975 | (e) 3.75- 6.50 |
| Over \$4 000 | (e) 5.00- 6.25 | April 1975 | (e) 6.00- 6.50 |
| Investment accounts (d) (f) | 8.00- 8.50 | June 1976 | 7.50- 8.50 |

(a) Range of rates predominantly charged. (b) Maximum rate. (c) Actual rates are a matter for negotiation between banks and their customers. (d) For other than society accounts the maximum interest bearing amount of \$20 000 in any one account was removed on 19/3/74 for Ordinary accounts and Investment accounts. (e) There is no limit on the maximum interest bearing amount for society accounts. (f) For the majority of banks the lower rate quoted has predominated; however, for amounts over \$4 000, the rate offered by most banks since March 1975 has continued to be 6 per cent. (f) Subject to special notice and minimum balance requirements.

CURRENCY

Under the Commonwealth Constitution the control of currency, coinage and legal tender in Australia is vested in the Commonwealth.

The Commonwealth Treasurer is empowered by legislation to arrange for the making and issuing of coins of specified denominations. Australia's coin requirements are met by the Royal Australian Mint in Canberra. Australian notes are printed by the Note Printing Branch of the Reserve Bank in Melbourne, while their issue is controlled by the Note Issue Department of that bank.

Notes in circulation are of the denominations \$1, \$2, \$5, \$10, \$20 and \$50, the last mentioned becoming available to the public on 9 October 1973. Coins in circulation are 1 cent and 2 cent (bronze) and 5, 10, 20 and 50 cents (cupro-nickel).

The following table shows the value of notes in circulation in Australia for the past five years. Separate details for South Australia are not available.

Notes in Circulation, Australia

| Denomination | Last Wednesday in June | | | | |
|------------------------|------------------------|------------------|------------------|------------------|------------------|
| | 1972 | 1973 | 1974 | 1975 | 1976 |
| | | | \$'000 | | |
| \$1 and 10s. | 43 552 | 48 487 | 53 196 | 52 657 | 53 561 |
| \$2 and £1 | 118 451 | 123 670 | 130 195 | 129 098 | 127 834 |
| \$5 | 85 283 | 94 378 | 103 525 | 110 239 | 116 407 |
| \$10 and £5 | 560 268 | 639 899 | 701 083 | 675 172 | 655 151 |
| \$20 and £10 | 691 476 | 851 381 | 960 629 | 1 186 745 | 1 334 591 |
| \$50 | .. | .. | 197 462 | 403 158 | 633 848 |
| £50 | 38 | 8 | 8 | 7 | 3 |
| £100 | 31 | 19 | 18 | 17 | 12 |
| Total | 1 499 099 | 1 757 842 | 2 146 116 | 2 557 092 | 2 921 408 |
| Notes held by: | | | | | |
| Banks | 182 648 | 229 222 | 300 787 | 339 943 | 352 500 |
| Public | 1 316 451 | 1 528 620 | 1 845 329 | 2 217 149 | 2 568 908 |

Minting of the 50 cent coin in its original form of 80 per cent silver and 20 per cent copper, ceased in April 1968. A twelve sided version of the 50 cent coin, in cupro-nickel, was issued in September 1969. Special 50 cent coins were issued in 1970 to commemorate the two-hundredth anniversary of Captain James Cook's discovery of the east coast of Australia, and in 1977 to commemorate the twenty-fifth anniversary of Queen Elizabeth's accession to the throne.

More complete details of Australian currency, including historical references, were included on pages 552-6 of the *South Australian Year Book* 1968.

Rates of Exchange

The following table shows the average telegraphic transfer selling rates of exchange for Sydney, New South Wales, on a selection of overseas countries. The figures appearing in the table, which are averages of daily quotations, are based generally on rates quoted by the Commonwealth Trading Bank of Australia.

**Overseas Exchange Rates: Average Telegraphic Transfer Selling Rates
Sydney, 1973-74 to 1975-76**

| Country | Basis of Quotation | 1973-74 | 1974-75 | 1975-76 |
|---------------------------|------------------------|---------|---------|---------|
| Belgium (Financial) (a) | Francs to \$A1 | 57.17 | 50.69 | 50.11 |
| Belgium (Convertible) (a) | Francs to \$A1 | 56.32 | 49.75 | 48.65 |
| Canada | Dollars to \$A1 | 1.4441 | 1.3547 | 1.2598 |
| China (Mainland) (b) | New Yuan to \$A1 | 2.849 | 2.536 | 2.435 |
| Fiji | Dollars to \$A1 | 1.167 | 1.082 | 1.0763 |
| France | Francs to \$A1 | 6.308 | 6.039 | 5.622 |
| Germany (West) | Deutsche Marks to \$A1 | 3.710 | 3.342 | 3.213 |
| Hong Kong | Dollars to \$A1 | 7.397 | 6.676 | 6.250 |
| India | Rupees to \$A1 | 11.477 | 10.846 | 11.135 |
| Italy | Lire to \$A1 | 892.00 | 878.00 | 925.00 |
| Japan | Yen to \$A1 | 404.52 | 401.70 | 376.06 |
| Netherlands | Guilders to \$A1 | 3.929 | 3.436 | 3.336 |
| New Zealand | Dollars to \$A1 | 1.031 | 1.014 | 1.1905 |
| Singapore | Dollars to \$A1 | 3.501 | 3.184 | 3.090 |
| South Africa | Rands to \$A1 | 0.9765 | 0.9253 | 1.0376 |
| Sri Lanka | Rupees to \$A1 | 9.560 | 9.013 | 9.789 |
| Switzerland | Francs to \$A1 | 4.471 | 3.662 | 3.250 |
| Thailand | Bahts to \$A1 | 29.54 | 27.42 | 25.31 |
| United Kingdom | Pounds to \$A1 | 0.614 | 0.581 | 0.630 |
| USA | Dollars to \$A1 | 1.4711 | 1.3675 | 1.2588 |
| USSR (b) | Roubles to \$A1 | 1.056 | 0.983 | n.a. |

(a) Where two rates are quoted 'Convertible' and/or 'Commercial' rates are for trade transactions accompanied by documentation and 'Financial' rate is for other transactions.

(b) Rates of exchange used in converting import values to Australian currency for purposes of calculating customs duty.

12.2 INSURANCE

LIFE INSURANCE

The activities of life insurance companies operating in South Australia have been regulated by Commonwealth legislation since 1945. Under the *Life Insurance Act 1945*, every company transacting life insurance business must be registered and must lodge a deposit of up to \$100 000, as security for policy holders, with the Commonwealth Treasurer. The Act is administered by the Insurance Commissioner who has wide powers of inquiry into the activities of any registered company.

Each company must establish at least one statutory fund and all moneys received in respect of life insurance business must be paid to, and form part of, the assets of these funds. An actuarial investigation must be conducted at least once every five years, with the distribution of shareholders dividends and policy holders bonuses subject to sufficient surplus being revealed by such investigation. All premiums must be actuarially approved and the Commissioner has powers to suppress policies or proposals which he deems misleading.

Companies are required to furnish to the Commissioner certain accounting reports and statistical returns and it is from these returns that the statistical details in this section are obtained.

The individual returns cover operations for the accounting year ending in the calendar year shown. For a majority of companies the closing date is 31 December, but a number balance earlier in the year.

During 1975, there were forty companies operating in South Australia. All conducted ordinary life insurance business; thirty-seven also undertook superannuation business, *i.e.*, the issuing of policies to the trustees of funds established for the provision of superannuation or retirement benefits, and five recorded industrial business whereby premiums are collected at intervals of less than two months.

Policies in Force

There has been a rapid growth in life insurance business since the end of 1945 when, for policies in force, the sum assured plus bonus additions amounted to \$130 million; by 1956 the \$500 million mark was reached and by 1975 the figure was \$5 347 million.

The next table illustrates the growth in life insurance business over the last ten years. Although total business has been increasing, the number of industrial policies has actually declined and industrial premiums have risen only slowly. The heavy relative decline in this form of business has resulted from the high cost of collecting premiums and the development of superannuation and group schemes.

Life Insurance: Policies in Force, South Australia

| 31 Dec. | Ordinary | | | Superannuation | | | Industrial (a) | | |
|------------|----------|-------------|-----------------|----------------|-------------|-----------------|----------------|-------------|-----------------|
| | Policies | Sum Assured | Annual Premiums | Policies | Sum Assured | Annual Premiums | Policies | Sum Assured | Annual Premiums |
| | No. | \$'000 | \$'000 | No. | \$'000 | \$'000 | No. | \$'000 | \$'000 |
| 1966 .. | 458 212 | 1 140 650 | 30 500 | 44 789 | 212 918 | 7 806 | 275 966 | 85 515 | 3 615 |
| 1967 .. | 477 753 | 1 272 160 | 33 383 | 45 243 | 256 144 | 8 947 | 269 364 | 89 808 | 3 761 |
| 1968 .. | 497 847 | 1 413 230 | 37 087 | 47 003 | 298 861 | 10 301 | 262 780 | 94 949 | 3 936 |
| 1969 .. | 523 417 | 1 588 831 | 41 321 | 48 453 | 341 571 | 11 588 | 257 049 | 101 077 | 4 163 |
| 1970 .. | 550 226 | 1 802 721 | 46 011 | 49 784 | 399 458 | 13 347 | 253 464 | 111 065 | 4 493 |
| 1971 .. | 580 218 | 2 073 174 | 51 801 | 51 275 | 470 677 | 15 882 | 249 993 | 123 800 | 4 894 |
| 1972 .. | 608 290 | 2 374 762 | 58 022 | 52 875 | 542 580 | 17 921 | 241 651 | 135 827 | 5 263 |
| 1973 .. | 642 956 | 2 757 993 | 63 221 | 52 292 | 658 235 | 20 543 | 237 018 | 149 526 | 5 756 |
| 1974 .. | 657 011 | 3 150 075 | 68 845 | 54 059 | 868 020 | 25 992 | 224 517 | 157 078 | 5 901 |
| 1975 .. | 667 507 | 3 653 848 | 74 707 | 55 320 | 1 112 366 | 33 494 | 210 213 | 161 548 | 5 984 |

(a) Includes industrial business for the Northern Territory.

In the following table, the distinction between endowment insurance and an endowment policy is that endowment insurance provides for the payment of the sum assured upon the insured reaching a specified age or upon his prior death, whereas the sum assured under an endowment policy is paid only upon the insured reaching the specified age.

Life Insurance: Policies in Force, South Australia, 1975

| Type of Policy | Ordinary | | Superannuation | | Industrial (a) | |
|------------------------------|------------------|-----------------|------------------|-----------------|----------------|-----------------|
| | Sum Assured | Annual Premiums | Sum Assured | Annual Premiums | Sum Assured | Annual Premiums |
| | \$'000 | | | | | |
| Whole life insurances | 2 249 633 | 40 793 | 124 323 | 3 092 | 10 134 | 378 |
| Endowment insurances | 565 629 | 27 095 | 362 752 | 14 233 | 148 924 | 5 471 |
| Other insurances | 810 066 | 4 527 | 608 280 | 15 309 | 1 396 | 82 |
| Endowment | 28 519 | 2 293 | 17 011 | 860 | 1 094 | 52 |
| Total | 3 653 848 | 74 707 | 1 112 366 | 33 494 | 161 548 | 5 984 |

(a) Includes industrial business for the Northern Territory.

Of the forty companies undertaking ordinary business in 1975, ten accounted for 87 per cent of business registered at the end of the year, with the five largest accounting for 73 per cent. Although thirty-seven companies had superannuation policies registered, ten companies accounted for 95 per cent, and three for 66 per cent of all superannuation business.

New Policies

During 1975 a total of 72 646 new life insurance policies, with an assured value of \$1 095 897 000, were issued in South Australia. The value, *i.e.*, amount assured, of new policies has increased continuously since 1945.

The number and value of new ordinary, superannuation, and industrial policies issued during the five years to 1975 is shown in the next table. The relative importance of industrial policies declined from approximately 25 per cent of total value in 1945 to just below 2 per cent in 1975. The average value of industrial policies is much lower than for ordinary and superannuation policies.

Life Insurance: New Policies Issued, South Australia

| Policy | 1971 | 1972 | 1973 | 1974 | 1975 |
|----------------------------|----------------------|----------------|----------------|----------------|------------------|
| | NUMBER ISSUED | | | | |
| Ordinary | 63 576 | 63 668 | 60 229 | 58 082 | 55 914 |
| Superannuation. | 6 494 | 6 555 | 7 020 | 8 706 | 9 858 |
| Industrial (a) | 14 281 | 13 978 | 13 629 | 9 210 | 6 874 |
| Total (a) | 84 351 | 84 201 | 80 878 | 75 998 | 72 646 |
| | SUM ASSURED (\$'000) | | | | |
| Ordinary | 388 117 | 440 164 | 526 639 | 584 349 | 715 427 |
| Superannuation. | 114 596 | 121 193 | 173 089 | 300 011 | 359 673 |
| Industrial (a) | 23 166 | 25 306 | 28 270 | 24 416 | 20 797 |
| Total (a) | 525 879 | 586 663 | 727 998 | 908 775 | 1 095 897 |

(a) Includes industrial business for the Northern Territory.

Annual premiums on new policies issued in 1975 amounted to \$22 481 000 and of this amount \$6 840 000 was for endowment insurances and \$8 257 000 for whole of life insurances. Details of sum assured and premiums payable for the various types of policy issued in 1975 are shown in the following table.

Life Insurance: New Business, South Australia, 1975

| Type of Policy | Ordinary | | Superannuation | | Industrial (a) | |
|------------------------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|
| | Sum Assured | Annual Premiums | Sum Assured | Annual Premiums | Sum Assured | Annual Premiums |
| | \$'000 | | | | | |
| Whole life insurances | 427 196 | 7 238 | 42 503 | 982 | 909 | 37 |
| Endowment insurances | 52 750 | 2 256 | 100 902 | 3 946 | 19 479 | 639 |
| Other insurances. | 233 152 | 1 073 | 210 324 | 5 873 | 409 | 6 |
| Endowment | 2 329 | 160 | 5 944 | 272 | — | — |
| Total | 715 427 | 10 727 | 359 673 | 11 073 | 20 797 | 681 |

(a) Includes industrial business for the Northern Territory.

Policies Discontinued

The following table gives details of policies discontinued according to reason for discontinuance. The item 'transfer' represents the net balance from the transfer of policies between the South Australian register and those of other States. Alterations to existing policies which result in policies being replaced, sometimes by an increased number of policies, are included in 'other'.

Life Insurance: Policies Discontinued or Reduced, South Australia, 1975

| Reason for Discontinuance | Ordinary | | Superannuation | | Industrial (a) | |
|---------------------------|---------------|----------------|----------------|----------------|----------------|---------------|
| | Policies | Sum Assured | Policies | Sum Assured | Policies | Sum Assured |
| | No. | \$'000 | No. | \$'000 | No. | \$'000 |
| Death. | 2 517 | 7 220 | 236 | 2 273 | 1 258 | 367 |
| Maturity | 9 926 | 10 486 | 766 | 6 165 | 11 832 | 2 214 |
| Surrender | 25 676 | 105 560 | 6 013 | 79 205 | 5 836 | 6 805 |
| Forfeiture | 9 239 | 73 789 | 282 | 4 560 | 2 446 | 6 767 |
| Transfer | —243 | —4 325 | —165 | 4 324 | 116 | 136 |
| Other | —1 697 | 18 924 | 1 465 | 18 799 | —310 | 38 |
| Total | 45 418 | 211 654 | 8 597 | 115 327 | 21 178 | 16 328 |

(a) Includes industrial business for the Northern Territory.

Annuity Business

Life insurance companies also issue annuity policies but this form of business is at present a relatively minor aspect of life insurance activity. In 1975 there were 185 annuities in force with a total sum assured of \$81 000 a year.

Premiums and Claims

Details of premium income and of cash payments made in respect of policies are shown in the following table. This table does not show investment income or management and commission expenses and accordingly is not a revenue and expenditure table.

Life Insurance: Premiums and Policy Payments, South Australia

| Year | Premiums and Considerations for Annuities | Payments | | | | | Total |
|------------|---|-------------------------|----------|------------|-----------|--------------|--------|
| | | Death or Disability (a) | Maturity | Surrenders | Annuities | Cash Bonuses | |
| | | | | | | | |
| | | | | \$'000 | | | |
| 1971 . . . | 72 151 | 8 461 | 13 997 | 10 861 | 83 | 158 | 33 560 |
| 1972 . . . | 81 381 | 9 224 | 17 047 | 13 075 | 125 | 164 | 39 635 |
| 1973 . . . | 90 332 | 10 387 | 19 681 | 16 380 | 103 | 185 | 46 735 |
| 1974 . . . | 100 290 | 12 528 | 23 219 | 22 869 | 121 | 196 | 58 933 |
| 1975 . . . | 114 824 | 14 296 | 24 599 | 27 776 | 86 | 395 | 67 152 |

(a) Includes 'Other'.

Loans Outstanding

A considerable proportion of the assets of life insurance companies is held as loans, particularly loans on the mortgage of real estate. In the following table details are given of mortgages on South Australian real estate, loans on policies registered in, and 'other' loans to persons resident in this State. Only those loans which form assets of the statutory funds are included.

Life Insurance: Loans Outstanding, South Australia

| Nature of Collateral | 1971 | 1972 | 1973 | 1974 | 1975 |
|-------------------------------|---------|---------|---------|---------|---------|
| | | | \$'000 | | |
| Mortgage of real estate . . . | 80 620 | 81 054 | 79 671 | 83 150 | 84 969 |
| Policies: | | | | | |
| Advances of premiums . . . | 3 800 | 4 129 | 4 350 | 4 729 | 5 070 |
| Other | 20 327 | 21 286 | 21 561 | 22 093 | 22 352 |
| Other collateral | 2 761 | 2 868 | 3 009 | 2 618 | 2 209 |
| Total | 107 507 | 109 338 | 108 590 | 112 591 | 114 600 |

GENERAL INSURANCE

General insurance in South Australia is conducted by private organisations and the State Government Insurance Commission which commenced business in January 1972. Some government insurance, in particular workmen's compensation, is carried by the State Government's Accident Insurance Office and in addition, the State Bank of South Australia insures certain properties on which it has provided mortgage finance.

A number of Commonwealth Government instrumentalities also are engaged in insurance in South Australia, notably in respect of housing loans and export payments, but these activities are not included in South Australian statistics.

Companies, persons or firms of persons carrying on general insurance business are required under the Stamp Duties Act, 1923-1976 to take out an annual licence, such licence being the authority to carry on insurance business in the State. The licence fee varies with premium income. Under the Fire Brigades Act, 1936-1976 insurance companies contribute approximately 75 per cent of the cost of maintaining the services of the Fire Brigades Board.

Insurance for workmen's compensation and motor vehicle third party risks is compulsory under State legislation. Employers, unless specifically exempted, are required under the Workmen's Compensation Act, 1971-1974 to effect an insurance cover providing compensation for workmen suffering injuries in the course of their employment. Details of workmen's compensation provisions are given in Part 7.4 pages 393-4.

Under the Motor Vehicles Act, 1959-1976 all vehicles other than those belonging to the Crown must be covered by a third party policy protecting the owner against any liability for death or injury to others resulting from use of the vehicle. Particulars are given in Part 10.4 page 602.

Legislation affecting all insurance companies operating in Australia is embodied in the *Insurance Act 1973* which seeks to ensure the continued financial stability of these companies. This Act is concerned only with the solvency of all companies engaged in insurance business and not with contractual arrangements between policy holders and insurers or with the rate of premiums charged. It also provides for the continuation of the provisions of the State Acts referred to above. All deposits lodged with the Commonwealth Treasurer under the *Insurance (Deposits) Act 1932* will eventually be returned to insurers.

The statistics in this section are compiled from returns covering transactions of the State Government Insurance Commission, the Government Accident Insurance Office, State Bank and approximately 100 companies and company groups licensed to conduct general insurance business. Each return gives details of the organisation's activities during a twelve-month period ending within the year shown. Some re-insurance transactions are excluded from the returns to avoid duplication.

The following tables show some details of revenue and expenses relating to general insurance for the years 1972-73 to 1975-76. The tables contain selected items of statistics and should not be combined and construed as profit and loss statements or revenue accounts.

The first table shows premiums and investment income earned by the companies. Premiums represent the full amount receivable in respect of policies issued and renewed in the year less returns, rebates, and bonuses, paid or credited

to policy holders in the year. They are not adjusted to provide for premiums unearned at the end of the year and consequently the amounts shown differ from 'earned premium income' for the year. Premiums have increased over the period covered by the table and hence have been greater than earned premium income in each year. Investment income relates to interest, dividends, rents, etc. from investments made within the State.

General Insurance: Revenue, South Australia (a)

| Source of Revenue | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------------|----------------|----------------|----------------|
| Premiums: | | | \$'000 | |
| Fire and sprinkler leakage | 10 594 | 12 398 | 13 113 | 16 863 |
| Houseowners' and householders' .. | 8 545 | 10 420 | 12 322 | 16 379 |
| Loss of profits | 1 487 | 1 679 | 2 106 | 2 818 |
| Crop (including hailstone) (b) | 181 | 864 | 1 242 | 1 144 |
| Marine | 3 204 | 3 552 | 3 933 | 4 244 |
| Motor vehicle: | | | | |
| Compulsory third party | 15 469 | 19 670 | 33 902 | 43 357 |
| Comprehensive (including motor cycles) | 27 271 | 28 693 | 38 216 | 52 552 |
| Employers' liability and workmen's compensation | 18 639 | 34 246 | 61 576 | 68 984 |
| Personal accident | 4 256 | 4 908 | 4 890 | 5 530 |
| Public liability | 2 357 | 2 607 | 2 904 | 3 370 |
| Burglary | 1 112 | 1 215 | 1 279 | 1 605 |
| Other | 4 237 | 5 505 | 7 374 | 8 749 |
| Total premiums | 97 352 | 125 756 | 182 857 | 225 595 |
| Revenue from investments | 1 326 | 1 717 | <i>n.a.</i> | <i>n.a.</i> |
| Total | 98 678 | 127 473 | <i>n.a.</i> | <i>n.a.</i> |

(a) Before 1974-75 includes Northern Territory.

(b) Before 1974-75 'crop' was included with 'fire and sprinkler leakage'.

Details of claims and other expenses are given in the next table. Claims include provision for outstanding claims and represent claims incurred during the year. Other expenses mainly represent payments made during the year. Before 1974-75 income tax was included in taxation, and was based on income earned in previous years.

General Insurance: Expenses, South Australia (a)

| Type of Expense | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------|---------|---------------|---------|
| Claims: | | | \$'000 | |
| Fire and sprinkler leakage | 3 177 | 4 696 | 15 293 | 7 418 |
| Houseowners' and householders' .. | 2 982 | 3 679 | 27 747 | 12 892 |
| Loss of profits | 185 | 783 | 1 894 | 798 |
| Crop (including hailstone) (b) | 33 | 1 287 | 395 | 276 |
| Marine | 1 538 | 2 514 | 3 771 | 3 159 |

General Insurance: Expenses South Australia^(a) (continued)

| Type of Expense | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|--|---------------|----------------|----------------|----------------|
| Claims: (continued) | \$'000 | | | |
| Motor vehicle; | | | | |
| Compulsory third party | 17 239 | 25 645 | 41 304 | 50 334 |
| Comprehensive (including motor cycles) | 17 743 | 21 078 | 31 391 | 32 477 |
| Employers' liability and workmen's compensation | 19 059 | 28 488 | 48 879 | 44 100 |
| Personal accident | 1 835 | 2 056 | 2 107 | 2 343 |
| Public liability | 931 | 1 249 | 2 065 | 2 648 |
| Burglary | 682 | 657 | 944 | 930 |
| Other | 1 764 | 2 501 | 4 968 | 4 937 |
| Total claims | 67 168 | 94 635 | 180 756 | 162 314 |
| Other expenses: | | | | |
| Contributions to fire brigades (c) . . | 1 752 | 2 437 | 3 350 | 4 935 |
| Commission and agent charges . . . | 9 776 | 11 612 | 14 016 | 14 142 |
| Management | 18 685 | 21 465 | 28 296 | 31 215 |
| Taxation | 1 839 | 1 355 | 2 379 | 2 065 |
| Other underwriting expenses (c) . . | <i>n.a.</i> | <i>n.a.</i> | 1 364 | 1 280 |
| Total expenses | 99 221 | 131 503 | 230 161 | 215 952 |

(a) Before 1974-75 includes Northern Territory.

(b) Before 1974-75 'crop' was included with 'fire and sprinkler leakage'.

(c) Includes Northern Territory.

12.3 OTHER PRIVATE FINANCE**THE STOCK EXCHANGE OF ADELAIDE LIMITED**

The Stock Exchange of Adelaide was formed in 1887 by the amalgamation of the Adelaide Stock Exchange and the Stock Exchange of South Australia. Basically the Exchange provides facilities for trading in securities, with transactions being conducted by brokers who act as agents for the investing public.

The Exchange operates under a set of rules and regulations which govern both the behaviour of companies, through the various listing requirements, and the conduct of members. Management is by a chairman, a vice-chairman and a committee of four, elected by the members.

Lists of quotations are issued by the Exchange twice daily and lists of dividends and new issues are produced weekly. The *Australian Stock Exchange Journal* providing enlarged and additional information is published monthly. Transfer marking and noting services are available to members of the Exchange and to the public through solicitors and accountants. A visitors gallery overlooking the trading floor enables the proceedings to be observed.

The figures in the following table have been supplied by the Stock Exchange and show that the total market value and turnover of both industrial and mining shares have fallen considerably since 1972.

It should be noted that several companies with diverse activities, including extensive oil and/or mining interests, are classified by stock exchanges as 'industrial' and are shown in that category in the table.

Stock Exchange of Adelaide, Recorded Turnover of Securities

| Particulars | Year Ended 30 June | | | | |
|---|--------------------|---------------|---------------|---------------|---------------|
| | 1972 | 1973 | 1974 | 1975 | 1976 |
| TRANSACTIONS ('000) | | | | | |
| Shares, Commonwealth Government loans, public corporation loans, debentures and unsecured notes | 61 | 55 | 43 | 32 | 35 |
| Shares: NUMBER OF SHARES ('000) | | | | | |
| Industrial | 20 431 | 19 950 | 17 379 | 14 767 | 19 521 |
| Mining and Oil | 27 963 | 21 883 | 14 908 | 9 202 | 11 588 |
| Total shares | 48 394 | 41 833 | 32 287 | 23 969 | 31 109 |
| Shares: MARKET VALUE (\$'000) | | | | | |
| Industrial | 25 362 | 31 123 | 23 215 | 12 739 | 21 066 |
| Mining and Oil | 14 011 | 10 780 | 7 072 | 4 354 | 7 674 |
| Total shares | 39 373 | 41 903 | 30 287 | 17 093 | 28 740 |
| Commonwealth Government loans, public corporation loans, debentures and unsecured notes: \$'000 | | | | | |
| Face value | 3 256 | 3 698 | 2 232 | 2 339 | 2 224 |
| Market value | 3 165 | 3 720 | 1 972 | 1 892 | 1 902 |

On 2 January 1972, the Member Exchanges of the Australian Associated Stock Exchanges (which includes Adelaide) adopted the policy of 'national listing'. This common listing meant that, at 30 June 1976, The Stock Exchange of Adelaide Limited had 1 321 companies on its Official List with a total equity market capitalisation (i.e. total market value of ordinary shares) of \$19 573 million. The face value of other listed securities at 30 June 1976 was Commonwealth Government loans \$14 500 million, semi-government loans \$1 157 million, debentures \$2 641 million, and unsecured notes \$167 million.

BUILDING SOCIETIES

The operations of building societies in South Australia are regulated by the Building Societies Act, 1975-1976 which is administered by the Registrar of Building Societies with whom all building societies must be registered. The societies fall into two categories—permanent societies and Starr-Bowkett societies.

Permanent societies, which have no fixed arrangement for termination of operations, derive their funds from the issue of shares and by receiving deposits and loans. An additional source of funds for certain permanent societies has been provided by the Commonwealth Government through the Housing Agreements and the *State Grants (Housing) Act 1971* (see pages 445-6). Advances for the purpose of building or acquiring homes are made to members and other persons by way of mortgage. Two permanent building societies are approved organisations in which the trustee of an estate may legally invest funds.

Starr-Bowkett societies have a limited life and derive their funds from regular subscription from members. These funds are used to make interest-free advances to members, with priority being determined by ballot. When all members have received a loan the process of winding up commences with share capital being returned to members as loans are repaid.

Building Societies: Societies, Shareholders and Borrowers, South Australia

| Year | Societies | | Shareholders | | Borrowers | |
|------------|-----------|---------------|--------------|---------------|-----------|---------------|
| | Permanent | Starr-Bowkett | Permanent | Starr-Bowkett | Permanent | Starr-Bowkett |
| 1970-71 .. | 10 | 21 | 36 352 | 5 318 | 6 783 | 2 001 |
| 1971-72 .. | 10 | 20 | 44 925 | 4 879 | 7 482 | 2 075 |
| 1972-73 .. | 10 | 19 | 62 276 | 4 577 | 8 701 | 1 829 |
| 1973-74 .. | 11 | 18 | 94 788 | 4 255 | 11 608 | 1 594 |
| 1974-75 .. | 10 | 17 | 126 844 | 4 205 | 13 243 | 1 397 |

Details of financial transactions by building societies during 1974-75 are given in the next table.

Building Societies: Transactions, South Australia, 1974-75

| Particulars | Permanent | Starr-Bowkett | Total |
|--|---------------|---------------|---------------|
| | | | |
| Income: | | | |
| Interest on mortgage loans | 11 307 | — | 11 307 |
| Other | 2 084 | 101 | 2 185 |
| Total | 13 391 | 101 | 13 492 |
| Expenditure: | | | |
| Interest on borrowed funds | 10 453 | — | 10 453 |
| Administration and taxation | 2 666 | 35 | 2 701 |
| Total | 13 119 | 35 | 13 154 |
| Deposits: | | | |
| Received | 17 955 | — | 17 955 |
| Repaid | 16 712 | — | 16 712 |

Building Societies: Transactions, South Australia, 1974-75 (continued)

| Particulars | Permanent | Starr-Bowkett | Total |
|--------------------------------------|-----------|---------------|--------|
| \$'000 | | | |
| Government housing funds (a): | | | |
| Received | — | — | — |
| Repaid | 368 | — | 368 |
| Advances: | | | |
| Paid | 30 065 | 311 | 30 376 |
| Repaid | 14 209 | 414 | 14 623 |

(a) Transactions between Societies and State Treasury.

Details of assets and liabilities of these societies, given in the following table, are compiled from individual returns with a variety of balancing dates. The figures for each year represent the aggregate of returns with balancing dates in that year.

Building Societies: Assets and Liabilities, South Australia

| Particulars | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|---|---------------|---------------|---------------|----------------|----------------|
| Assets: | | | | | |
| \$'000 | | | | | |
| Advances on mortgages and shares | 45 439 | 54 134 | 71 982 | 106 639 | 122 398 |
| Land and buildings | 996 | 1 903 | 1 966 | 2 206 | 2 620 |
| Other investments (a) | 3 651 | 5 402 | 14 641 | 18 669 | 12 839 |
| Cash and deposits | 296 | 1 151 | 4 405 | 2 987 | 3 561 |
| Other | 164 | 740 | 906 | 1 160 | 1 549 |
| Total assets | 50 545 | 63 331 | 93 900 | 131 662 | 142 968 |
| Liabilities: | | | | | |
| Subscriptions | 30 542 | 39 262 | 66 011 | 101 919 | 111 279 |
| Reserves and profits | 1 316 | 1 319 | 1 404 | 1 547 | 1 733 |
| Deposits | 4 892 | 6 389 | 7 757 | 7 644 | 8 890 |
| Loans due: | | | | | |
| To Government (b) | 12 903 | 14 606 | 16 546 | 17 221 | 16 861 |
| To other lenders (incl. bank overdraft) | 683 | 1 392 | 1 857 | 2 756 | 3 427 |
| Other | 210 | 363 | 325 | 575 | 778 |
| Total liabilities | 50 545 | 63 331 | 93 900 | 131 662 | 142 968 |

(a) Includes fixed deposits.

(b) Loans made to permanent building societies under the Housing Agreements and the *States Grants (Housing) Act 1971*.

CO-OPERATIVE SOCIETIES

For the purpose of collecting the statistics in this section co-operative societies have been defined as producing, manufacturing, marketing or distributing societies which substantially fulfil the following conditions:

- (1) the greater part of the business of such a society to be transacted with its own shareholders;
- (2) any distribution of surplus after payment of dividend on share capital to be amongst suppliers or customers in proportion to the business transacted with the society;
- (3) limitation of voting power to one vote per person;
- (4) dividend on share capital not to exceed 10 per cent.

All such societies must be registered under the Industrial and Provident Societies Act, 1923-1974. The Registrar of Industrial and Provident Societies must approve the rules of each society before it may be registered.

Co-operative societies may be classified under three broad headings—those serving producers, those serving consumers, and those fulfilling both functions. In the following table societies and members have been classified under these headings.

Co-operative Societies: Societies and Membership, South Australia

| Particulars | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|---|----------------|----------------|----------------|----------------|----------------|
| Societies: | | | | | |
| Producers societies | 39 | 39 | 41 | 43 | 39 |
| Consumers societies | 12 | 12 | 12 | 14 | 11 |
| Producers and consumers societies | 12 | 11 | 11 | 11 | 11 |
| Total societies | 63 | 62 | 64 | 68 | 61 |
| Members: | | | | | |
| Producers societies | 14 380 | 14 618 | 14 157 | 15 253 | 15 624 |
| Consumers societies | 105 887 | 105 317 | 103 938 | 103 592 | 103 395 |
| Producers and consumers societies | 3 754 | 3 820 | 3 798 | 3 717 | 3 682 |
| Total members | 124 021 | 123 755 | 121 893 | 122 562 | 122 701 |

Of the thirty-nine producers societies operating in 1974-75, seven were co-operative wineries or distilleries, five represented dairy producers, and fifteen were associated with fruit and vegetable production. Six of the remaining twelve societies were associated with other rural production. Of the eleven co-operative consumers societies, six were trading as general storekeepers, the remainder offering specialised products or services. Producer-consumer societies were generally associated with the fruitgrowing industry.

Particulars of the aggregate income and expenditure of co-operative societies for the five years to 1974-75 are given in the following table.

**Co-operative Societies: Assets and Liabilities, South
Australia, 1974-75 (continued)**

| Particulars | Producers Societies | Consumers Societies | Producers and Consumers Societies | Total |
|--|------------------------|------------------------|--|---------------|
| | \$'000 | | | |
| Liabilities: | | | | |
| Capital | 7 494 | 3 125 | 791 | 11 410 |
| Loan capital | 16 126 | 3 031 | 4 645 | 23 802 |
| Bank overdraft | 14 695 | 407 | 2 387 | 17 490 |
| Sundry creditors | 5 186 | 700 | 2 421 | 8 306 |
| Accumulated profits | 283 | 678 | — | 961 |
| Reserves and reserve funds (c) | 9 463 | 1 618 | 1 049 | 12 129 |
| Other (d) | 15 030 | 998 | 1 380 | 17 408 |
| Total | 68 276 | 10 557 | 12 673 | 91 506 |

(a) Assets are shown at net value after deduction of provisions.

(b) Includes investments and advances to members.

(c) Excludes provision for depreciation and bad debts.

(d) Includes amounts due to members.

CO-OPERATIVE CREDIT SOCIETIES

Co-operative Credit Societies are defined as 'financial' organisations, registered under the Industrial and Provident Societies Act, 1923-1974, which have more than half of their assets in the form of loans to members and/or derive more than half of their income from such loans.

Societies included in this collection, which began in 1970-71, are mainly Credit Unions or Savings and Loans Societies. The figures below are excluded from the statistics of Co-operative Societies on pages 707-9.

Details of assets and liabilities of these societies, given in the following table, are compiled from individual returns with a variety of balance dates. The figures are aggregates of returns submitted by societies for their relevant accounting periods closing on various dates during the financial years shown.

Co-operative Credit Societies, South Australia

| Particulars | 1972-73 | 1973-74 | 1974-75 |
|--------------------------------|---------|---------|---------|
| | | Number | |
| Societies | 37 | 41 | 38 |
| Shareholders (a) | 42 323 | 52 387 | 62 003 |
| Deposit accounts (a) | 46 077 | 57 098 | n.a. |
| Borrowing members | 20 246 | 25 140 | n.a. |

Co-operative Credit Societies, South Australia (continued)

| Particulars | 1972-73 | 1973-74 | 1974-75 |
|---|---------------|---------------|---------------|
| | | \$'000 | |
| Selected Receipts and Payments: | | | |
| Deposits received (b) | 19 657 | 32 395 | 52 398 |
| Deposits repaid (c) | 11 333 | 22 611 | 41 466 |
| Loans paid over | 17 209 | 22 853 | 27 302 |
| Loan repayments (c) | 10 665 | 16 030 | 18 637 |
| Budget savings deposits received . . | 2 764 | 2 905 | n.a. |
| Budget savings payments made . . . | 2 546 | 2 846 | n.a. |
| Income: | | | |
| Interest on loans to members | 1 573 | 2 520 | 3 597 |
| Other | 108 | 156 | 501 |
| Total | 1 680 | 2 676 | 4 099 |
| Expenditure: | | | |
| Interest on deposits | 966 | 1 633 | 2 462 |
| Other (d) | 804 | 1 245 | 1 767 |
| Total | 1 770 | 2 878 | 4 230 |
| Assets: | | | |
| Loans to members | 19 746 | 29 415 | 37 898 |
| Cash in hand and at bank | 439 | 366 | 965 |
| Deposits with Credit Union Associations and Leagues | n.a. | n.a. | 1 759 |
| Investments | 1 032 | 1 644 | 1 158 |
| Other | 166 | 244 | 508 |
| Total | 21 383 | 31 669 | 42 288 |
| Liabilities: | | | |
| Share capital | 447 | 519 | 543 |
| Reserves and accumulated profits . . | —152 | —361 | —499 |
| Deposits | 19 957 | 29 812 | 40 040 |
| Budget savings accounts | 423 | 479 | 483 |
| Bank overdraft | 124 | 338 | 278 |
| Other borrowings (e) | n.a. | n.a. | 735 |
| Other | 584 | 882 | 707 |
| Total | 21 383 | 31 669 | 42 288 |

(a) Shareholders may or may not have deposit accounts. Deposit account holders are not always shareholders. (b) Includes interest accrued. (c) Includes interest. (d) Includes dividends on shares, salaries and wages, administrative expenses, and provisions for taxation, doubtful debts, and long service leave. (e) Includes Credit Union Associations and Leagues.

ESTATES OF DECEASED PERSONS

During recent years more than 80 per cent of the estates of deceased persons subject to the jurisdiction of the Supreme Court have been administered by executors following the grant of probate on wills left by the deceased. Should the executorship of a will fail for any reason, for example by the death or

renunciation of a nominated executor, the Court issues 'letters of administration with the will annexed' but the more usual 'letters of administration' relate to the estates of persons who died intestate. Tables in this section contain details of estates covered by the three types of grant during specified years. The aggregate number of these estates is considerably less than the number of deaths in South Australia in corresponding periods.

Estates generally are those located in South Australia and not necessarily estates of deceased residents of this State. The net value of an estate is the gross value less proved liabilities; these liabilities do not include Commonwealth Government estate duty or State succession duties.

The following table shows the number and value of estates for which probate or administration was granted by the Supreme Court during the five years to 1975.

Estates of Deceased Persons, South Australia

| Year | Estates No. | Gross Value of Estates | | Net Value of Estates \$'000 | Average Net Value per Estate \$ |
|----------------|----------------|------------------------|--------------------|-----------------------------------|--|
| | | Real \$'000 | Personal \$'000 | | |
| MALES | | | | | |
| 1971 | 3 276 | 18 307 | 46 584 | 60 052 | 18 330 |
| 1972 | 2 995 | 20 353 | 44 248 | 59 237 | 19 778 |
| 1973 | 2 995 | 20 932 | 46 272 | 62 404 | 20 836 |
| 1974 | 3 005 | 23 623 | 45 303 | 64 111 | 21 334 |
| 1975 | 3 347 | 35 151 | 59 514 | 87 131 | 26 033 |
| FEMALES | | | | | |
| 1971 | 2 588 | 10 261 | 24 892 | 32 980 | 12 743 |
| 1972 | 2 296 | 10 849 | 22 720 | 31 644 | 13 782 |
| 1973 | 2 278 | 12 258 | 23 951 | 33 800 | 14 838 |
| 1974 | 2 301 | 16 160 | 28 279 | 42 053 | 18 276 |
| 1975 | 2 806 | 22 579 | 33 935 | 53 035 | 18 901 |
| PERSONS | | | | | |
| 1971 | 5 864 | 28 568 | 71 476 | 93 032 | 15 864 |
| 1972 | 5 291 | 31 202 | 66 968 | 90 881 | 17 176 |
| 1973 | 5 273 | 33 190 | 70 223 | 96 203 | 18 244 |
| 1974 | 5 306 | 39 782 | 73 581 | 106 164 | 20 008 |
| 1975 | 6 153 | 57 730 | 93 449 | 140 166 | 22 780 |

The distribution of estates through various size groups and the gross value of real and personal estate respectively in each group are shown in the following table for the years 1974 and 1975.

In 1975, estates with an individual net value under \$2 000 accounted for approximately 15 per cent of the total number but less than 1 per cent of total net value. Estates under \$10 000 constituted approximately 47 per cent of total numbers but less than 8 per cent of total net value, while the few estates, about 10 per cent of the total, with an individual net value of \$50 000 or more accounted for approximately 49 per cent of the total net value. Real estate formed approximately 38 per cent of the total gross value for all estates in 1975.

Estates of Deceased Persons: Size and Structure of Estates, South Australia

| Size of Net Estate (\$'000) | 1974 | | | | 1975 | | | |
|--------------------------------|---------|------------------|----------|---------|---------|------------------|----------|---------|
| | Estates | Value of Estates | | | Estates | Value of Estates | | |
| | | Gross | | | | Gross | | |
| | | Real | Personal | Net | | Real | Personal | Net |
| No. | \$'000 | \$'000 | \$'000 | No. | \$'000 | \$'000 | \$'000 | |
| Under 2 | 967 | 228 | 1 651 | 901 | 944 | 734 | 1 697 | 919 |
| 2 and under 4 | 643 | 201 | 2 093 | 1 896 | 728 | 199 | 2 463 | 2 151 |
| 4 and under 6 | 475 | 350 | 2 370 | 2 342 | 511 | 339 | 2 625 | 2 535 |
| 6 and under 8 | 341 | 689 | 2 022 | 2 372 | 392 | 589 | 2 481 | 2 748 |
| 8 and under 10 | 291 | 947 | 1 998 | 2 603 | 306 | 755 | 2 331 | 2 738 |
| 10 and under 20 | 1 138 | 9 350 | 8 600 | 16 616 | 1 208 | 9 463 | 10 421 | 18 196 |
| 20 and under 30 | 593 | 7 669 | 7 360 | 14 292 | 839 | 12 179 | 9 616 | 20 231 |
| 30 and under 40 | 259 | 3 646 | 5 882 | 8 946 | 362 | 5 800 | 7 371 | 12 528 |
| 40 and under 50 | 150 | 2 452 | 4 597 | 6 685 | 206 | 4 127 | 5 542 | 9 161 |
| 50 and under 100 | 296 | 6 137 | 15 013 | 20 197 | 419 | 10 075 | 21 121 | 29 032 |
| 100 and under 200 | 121 | 4 987 | 11 869 | 16 302 | 193 | 9 050 | 17 949 | 26 135 |
| 200 and under 400 | 22 | 1 548 | 4 575 | 5 978 | 38 | 2 910 | 7 453 | 9 968 |
| 400 and over | 10 | 1 578 | 5 550 | 7 034 | 7 | 1 510 | 2 377 | 3 824 |
| All estates | 5 306 | 39 782 | 73 581 | 106 164 | 6 153 | 57 730 | 93 449 | 140 166 |

The following table provides an analysis of estates on which probate or administration was granted during 1975 according to the age group of persons leaving those estates.

Estates of Deceased Persons: Age and Sex of Deceased, Value of Estates South Australia, 1975

| Age of Deceased | Males | | | | Females | | | |
|-----------------|---------|------------------|--------|-------------|---------|------------------|--------|-------------|
| | Estates | Value of Estates | | | Estates | Value of Estates | | |
| | | Gross | Net | Average Net | | Gross | Net | Average Net |
| | | | | | | | | |
| Under 21 | 30 | 386 | 356 | 11.9 | 6 | 79 | 76 | 12.7 |
| 21 to 29 | 60 | 1 349 | 1 217 | 20.3 | 16 | 107 | 92 | 5.7 |
| 30 to 39 | 64 | 1 853 | 1 577 | 24.6 | 18 | 271 | 222 | 12.3 |
| 40 to 49 | 160 | 4 608 | 3 354 | 21.0 | 70 | 1 288 | 1 184 | 16.9 |
| 50 to 59 | 433 | 10 901 | 9 823 | 22.7 | 212 | 4 687 | 4 160 | 19.6 |
| 60 to 69 | 851 | 23 613 | 22 033 | 25.9 | 407 | 8 915 | 8 384 | 20.6 |
| 70 to 79 | 917 | 27 740 | 26 261 | 28.6 | 779 | 15 660 | 14 825 | 19.0 |
| 80 and over | 799 | 23 738 | 22 054 | 27.6 | 1 271 | 24 939 | 23 554 | 18.5 |
| Not stated | 33 | 478 | 455 | 13.8 | 27 | 567 | 538 | 19.9 |
| All ages | 3 347 | 94 665 | 87 131 | 26.0 | 2 806 | 56 514 | 53 035 | 18.9 |

REAL ESTATE MORTGAGES

The Real Property Act, 1886-1975, provides for the registration of mortgages on real estate and details of new loans and discharges are given in the following table. The average value of new loans in 1975-76 was \$18 257 compared with \$15 261 in 1974-75.

Mortgages: Real Estate, South Australia

| Year | New Loans | | Discharges | |
|---------|-----------|-----------|------------|---------|
| | No. | \$'000 | No. | \$'000 |
| 1966-67 | 37 937 | 215 926 | 30 689 | 104 808 |
| 1967-68 | 36 513 | 209 450 | 30 291 | 97 343 |
| 1968-69 | 35 409 | 209 402 | 30 620 | 117 409 |
| 1969-70 | 37 942 | 224 132 | 34 940 | 126 941 |
| 1970-71 | 38 920 | 315 793 | 35 995 | 146 011 |
| 1971-72 | 46 099 | 398 775 | 41 220 | 190 008 |
| 1972-73 | 56 801 | 514 203 | 52 939 | 241 141 |
| 1973-74 | 60 390 | 704 678 | 58 246 | 363 310 |
| 1974-75 | 47 204 | 720 366 | 46 434 | 308 546 |
| 1975-76 | 58 888 | 1 075 131 | 52 764 | 361 022 |

INSTALMENT CREDIT FOR RETAIL SALES

Instalment credit is defined as covering all schemes under which repayment is made by regular predetermined instalments, such as time payment, budget accounts and certain personal loans. Credit schemes which do not involve repayment by regular predetermined instalments, lay-bys and all credit transactions related mainly to the financing of 'producer' type goods such as plant, machinery and motor vehicles normally used for commercial purposes are excluded from the following statistics (before July 1973 the financing of 'producer' type goods was included). Also excluded are the financing of sales of land and buildings, property improvements, services such as repair work and travel facilities, and rental and leasing schemes.

Legislation controlling instalment credit schemes in South Australia is embodied in the Consumer Transactions Act, 1972-1973 and the Consumer Credit Act, 1972-1973, both effective from 1 November 1973. Since that date, it has not been possible to enter into a hire-purchase agreement in South Australia.

The Consumer Transactions Act repealed the Hire-Purchase Agreements Act, 1960-1971 and originated 'consumer contracts', 'consumer credit contracts' and 'consumer mortgages'. Generally consumer contracts and consumer credit contracts refer to the purchase by an individual of goods or services, where their price and the principal amount of credit extended does not exceed \$10 000. The Act specifies certain conditions and warranties to be implied in all consumer contracts and provides that these cannot be excluded, limited or modified by

agreement between the parties to the contract. In contrast with previous legislation, under a consumer mortgage the consumer becomes the owner of the goods when they are delivered to him and the credit provider holds a mortgage over the goods as security for the amount payable. Hence goods may still be repossessed if the consumer breaches certain conditions of the agreement. However, subject to the conditions stipulated in the Act, the consumer may return the goods and rescind the consumer mortgage at any time. The Act also ensures that written contracts meet certain prescribed printing sizes to be enforceable.

The Consumer Credit Act repealed the Money-lenders Act and established a Credit Tribunal to which, in certain circumstances, consumers may apply for relief from the terms of a contract. The Tribunal also acts as licensing authority for those persons and corporations deemed to be credit providers under the Act and controls the conditions of operation of 'revolving charge accounts'. Information to be included in a credit contract, including the credit charge, is specified in detail by the Act.

Details of instalment credit provided during the years 1971-72 to 1975-76 are given in the following tables. In each of these tables the motor vehicle group includes new and used motor cars, motor cycles, caravans, motor parts and accessories. Included in household and personal goods are furniture and furnishings, domestic refrigerators, electrical goods, musical instruments, bicycles, and other household and personal goods. For the definition of finance companies see page 715.

Instalment Credit for Retail Sales, South Australia^(a)

| Year | Amount Financed (b) | | | | | | Balances Outstanding at End of Period (d) | |
|-------------------|--------------------------|------------------|------------------------------|------------------|-------------------|------------------|---|------------------|
| | Motor Vehicles, etc. (c) | | Household and Personal Goods | | Total | | Finance Companies | Other Businesses |
| | Finance Companies | Other Businesses | Finance Companies | Other Businesses | Finance Companies | Other Businesses | | |
| | \$ million | | | | | | | |
| 1971-72 | 88.0 | | 34.5 | | 122.5 | | 188.4 | |
| 1972-73 | 93.0 | | 37.0 | | 130.0 | | 195.8 | |
| 1973-74 | 84.8 | 1.1 | 7.5 | 29.3 | 92.3 | 30.4 | 151.6 | 26.0 |
| 1974-75 | 90.4 | 0.9 | 9.6 | 32.1 | 100.0 | 33.0 | 173.8 | 25.9 |
| 1975-76 | 118.9 | 0.9 | 11.0 | 37.3 | 129.8 | 38.1 | 216.4 | 269.9 |

(a) Before 1973-74 the figures covered both South Australia and the Northern Territory and all businesses were included. From 1973-74 they cover only South Australia and relate only to those finance companies or other businesses which (individually or as a group of related finance companies or other businesses respectively) have balances outstanding on an Australia-wide basis of \$500 000 or more on all types of finance agreements.

(b) Excludes hiring charges etc.

(c) From 1973-74 excludes motor vehicles normally used for commercial purposes.

(d) Includes hiring charges etc. Before 1973-74 includes balances for 'producer' type goods.

**Instalment Credit for Retail Sales, Motor Vehicles etc.
South Australia^(a)**

| Year | Cars and Station Wagons | | | | Other- Amount Financed (b) |
|---------|-------------------------|------|---------------------|------|-------------------------------------|
| | Number Financed | | Amount Financed (b) | | |
| | New | Used | New | Used | |
| | '000 | | \$ million | | |
| 1971-72 | n.a. | | 88.0 | | |
| 1972-73 | n.a. | | 93.0 | | |
| 1973-74 | 14.7 | 31.1 | 34.0 | 46.4 | 5.4 |
| 1974-75 | 16.5 | 27.8 | 42.8 | 43.5 | 4.9 |
| 1975-76 | 15.1 | 29.7 | 48.6 | 60.0 | 11.1 |

(a) Before 1973-74 the figures covered both South Australia and the Northern Territory and all businesses were included. From 1973-74 they cover only South Australia and relate only to those finance companies or other businesses which (individually or as a group of related finance companies or other businesses respectively) have balances outstanding on an Australia-wide basis of \$500 000 or more on all types of finance agreements. From 1973-74 excludes motor vehicles normally used for commercial purposes.

(b) Excludes hiring charges etc.

FINANCE COMPANIES

Finance companies are defined as incorporated companies which are mainly engaged in providing to the general public (businesses as well as persons in their private capacity) credit facilities of the following types: instalment credit for retail sales; personal loans; wholesale finance; factoring; other consumer and commercial loans; financial leasing of business plant and equipment; and bills of exchange. Special classes of financial institutions such as banks, insurance, investment and pastoral finance companies, and building and friendly societies are excluded, although merchant banking companies are included if they come within the scope of the collection.

From July 1971 the scope of the monthly collection (from which the following tables are compiled) was altered to exclude all finance companies whose balances outstanding on such finance agreements are less than \$500 000 on an Australia-wide basis. Before July 1971 the limit was \$100 000. From July 1972 the definition of other consumer and commercial loans was amended to exclude factoring of trade debts (now included in wholesale finance), loans to persons for alterations or additions to existing dwelling units estimated to cost less than \$10 000 (now included in personal loans) and liquidity placements (now excluded from these tables). In addition, the category other consumer and commercial loans was divided into finance for housing and other commercial loans. From July 1973 companies mainly engaged in financing the operations of related companies by directly writing agreements with the general public have been

included in the collection. Until that date, companies mainly engaged in the financial leasing of business plant and equipment and/or bill of exchange transactions with the general public were excluded, unless they were related to a finance company. Also from July 1973, statistics of credit transactions related to the financing of 'producer' type goods such as plant, machinery and motor vehicles normally used for commercial purposes were excluded from instalment credit for retail sales and included almost entirely in other commercial loans. The definitions and statistics of finance companies and instalment credit for retail sales given in this and the previous section are directly comparable from July 1973. The following table gives a summary of the transactions of finance companies during the last five years.

Finance Companies: Summary of Transactions
South Australia (a) (b)

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|---|------------|-----------|-----------|---------|---------|
| | \$ million | | | | |
| Leasing of business equipment and plant: | | | | | |
| Goods leased during the period | 23.6 | 30.7 | (e) 46.0 | 41.9 | 83.7 |
| Balances outstanding at end of period (c) | 51.9 | 60.8 | (e) 88.8 | 105.6 | 156.1 |
| Other transactions: | | | | | |
| Amount financed | 452.3 | (d) 379.0 | (f) 485.9 | 455.8 | 697.3 |
| Cash collections and other liquidations | 478.8 | (d) 414.1 | (f) 501.8 | 581.8 | 707.2 |
| Balances outstanding at end of period | 388.5 | (d) 388.0 | (f) 466.5 | 502.4 | 696.4 |

(a) Includes Northern Territory for all years except 1972-73 and 1973-74, other than the amount financed category which included Northern Territory for 1971-72 only.

(b) Excludes finance companies with balances outstanding of less than \$500 000.

(c) Basis of valuation is 'gross receivables'.

(d) From 1972-73 excludes liquidity placements.

(e) From 1973-74 includes all financial leasing companies.

(f) From 1973-74 includes companies directly financing the sales of related companies to the general public.

The value of goods leased during the period is the capital cost of new goods plus the depreciated value of goods re-leased plus the purchase price of secondhand goods newly leased during the period. Before July 1971 the basis of valuation of leasing agreements at the end of the period was the 'initial capital cost of the goods less depreciation to date'. From July 1971 provision has also been made for finance companies to report on a 'gross receivables' basis, i.e. the value of expected future receipts from existing leasing agreements including unearned income plus the agreed residual value of the goods at the end of the leasing period. Although most companies are now reporting on the 'gross receivables' basis, some data is still being reported on the 'capital cost less depreciation' basis and therefore the figures for the 'balances outstanding at end of period' from 1971-72 are partly estimated.

The amount financed, which is the actual amount of cash provided, may be classified according to the purpose of the loan. The comments below are offered to clarify the content of various items in the tables which follow:

1. Instalment credit for retail sales is defined in the same way as in the previous section (see page 713);
2. Personal loans include all loans to persons in their private capacity, other than loans classified as instalment credit or finance for housing and from 1972-73 includes loans to persons for alterations or additions to existing dwelling units estimated to cost less than \$10 000;
3. Wholesale finance relates mainly to the financing of motor vehicle dealers stocks held under bailment or floor-plan schemes but includes also financing of other trading stock and from 1972-73 the factoring of trade debts;
4. Finance for housing includes finance for houses, flats, home units and other dwelling units (excluding hotels, hostels, etc.), loans to persons for alterations or additions to existing dwelling units estimated to cost \$10 000 or more and finance for the purchase of residential blocks of land;
5. Other commercial loans include loans for the purpose of developing a tract of land into residential blocks, construction other than housing and the financing of sales of 'producer' type goods.

Finance Companies: Amount Financed
South Australia (a) (b)

| Purpose of Loan | 1971-72 | 1972-73 | 1973-74 (e) | 1974-75 | 1975-76 |
|---|--------------|------------------|----------------|--------------|--------------|
| | | | \$ million | | |
| Instalment credit for retail sales.. | 95.4 | 91.2 | (f) 92.3 | 100.0 | 129.8 |
| Personal loans | 11.1 | (c) 20.8 | 24.0 | 24.7 | 43.6 |
| Wholesale finance | 130.5 | (c) 134.4 | 174.4 | 228.8 | 304.8 |
| Other consumer and commercial loans: | | | | | |
| Finance for housing; | | | | | |
| Purchase of existing housing | | (c) 49.4 | 64.9 | 22.9 | 70.3 |
| Construction of housing | | (c) 41.9 | 51.5 | 32.1 | 71.8 |
| Purchase of individual residential blocks of land | 215.3 | | | | |
| Other commercial loans | | (c) 13.4 | 20.6 | 9.5 | 20.9 |
| | | (c) 28.0 | (f) 58.1 | 37.7 | 56.2 |
| Total | 452.3 | (d) 379.0 | 485.9 | 455.8 | 697.3 |

(a) Before 1972-73, includes Northern Territory.

(b) Excludes finance companies with balances outstanding of less than \$500 000.

(c) From 1972-73 the definition of other consumer and commercial loans has been amended to exclude factoring of trade debts (now included in wholesale finance), loans to persons for alterations or additions to existing dwelling units estimated to cost less than \$10 000 (now included in personal loans), and liquidity placements.

(d) From 1972-73 excludes liquidity placements.

(e) From 1973-74 includes companies directly financing the sales of related companies to the general public.

(f) From 1973-74 the financing of 'producer' type goods was excluded from instalment credit for retail sales and included in other commercial loans.

Although finance for housing is dissected into three components for the amount financed, a similar dissection is not available for collections and other liquidations, or balances outstanding which are detailed in the following tables.

Finance Companies: Collections and Other Liquidations, South Australia (a) (b)

| Purpose of Loan | 1971-72 | 1972-73 (a) | 1973-74 (a) (e) | 1974-75 | 1975-76 |
|---------------------------------------|------------|----------------|--------------------|---------|---------|
| | \$ million | | | | |
| Instalment credit for retail sales .. | 126.3 | 118.5 | (f) 115.6 | 129.1 | 156.9 |
| Personal loans | 11.1 | (c) 19.2 | 24.1 | 30.5 | 41.9 |
| Wholesale finance | 130.4 | (c) 137.0 | 176.9 | 236.3 | 307.8 |
| Other consumer and commercial loans: | | | | | |
| Finance for housing } | 211.0 | (c) 107.6 | 137.9 | 131.9 | 146.9 |
| Other commercial loans } | | (c) 31.8 | (f) 47.6 | 54.1 | 53.6 |
| Total | 478.8 | (d) 414.1 | 501.8 | 581.8 | 707.2 |

For footnotes see following table.

Finance Companies: Balances Outstanding, South Australia (a) (b)

| Purpose of Loan | 1971-72 | 1972-73 (a) | 1973-74 (a) (e) | 1974-75 | 1975-76 |
|---------------------------------------|------------|----------------|--------------------|---------|---------|
| | \$ million | | | | |
| Instalment credit for retail sales .. | 159.0 | 150.6 | (f) 151.6 | 183.4 | 226.3 |
| Personal loans | 18.2 | (c) 28.4 | 34.1 | 41.0 | 61.5 |
| Wholesale finance | 23.7 | (c) 22.0 | 23.0 | 31.1 | 56.3 |
| Other consumer and commercial loans: | | | | | |
| Finance for housing } | 187.6 | (c) 147.6 | 193.5 | 175.6 | 246.5 |
| Other commercial loans } | | (c) 39.4 | (f) 64.3 | 71.4 | 105.7 |
| Total | 388.5 | (d) 388.0 | 466.5 | 502.4 | 696.4 |

(a) Includes Northern Territory for all years except 1972-73 and 1973-74.

(b) Excludes finance companies with balances outstanding of less than \$500 000.

(c) From 1972-73 the definition of other consumer and commercial loans has been amended to exclude factoring of trade debts (now included in wholesale finance), loans to persons for alterations or additions to existing dwelling units estimated to cost less than \$10 000 (now included in personal loans), and liquidity placements.

(d) From 1972-73 excludes liquidity placements.

(e) From 1973-74 includes companies directly financing the sales of related companies to the general public.

(f) From 1973-74 the financing of 'producer' type goods was excluded from instalment credit for retail sales and included in other commercial loans.

FINANCIAL CORPORATIONS ACT

The *Financial Corporations Act 1974* which was assented to on 7 August 1974, enables the Reserve Bank to examine and regulate the business activities of non-bank financial intermediaries (finance companies, building societies, credit unions, etc.) and large retailers which finance their sales by instalment credit schemes.

In order to perform its monitoring and control function, the Reserve Bank is empowered by the Act to collect monthly information from each of the larger financial corporations (assets in excess of \$5 million) and from the larger retailers (balances outstanding in excess of \$5 million on instalment credit for retail sales agreements). Other financial corporations with total assets in excess of \$1 million are also required to submit information at less frequent intervals.

Some types of financial institutions such as banks and insurance companies are specifically excluded from the provisions of the Act.

REGIONAL STUDIES

KANGAROO ISLAND

Size and Location

Kangaroo Island is the predominant island off the South Australian coastline and lies near the mouth of Gulf St Vincent. It is thirteen kilometres from the mainland at its closest point and is separated from the mainland by Investigator Strait to the north and Backstairs Passage to the east.

The island covers an area of 4 350 square kilometres and has a circumference of 480 kilometres. It is approximately 145 kilometres long, up to 55 kilometres wide and approximately 300 metres above sea level at its highest point.

Land Formation and Soils

Kangaroo Island is structurally an extension of the Mount Lofty-Flinders Ranges system (Mount Lofty Horst). The underlying rocks are derived from sediments deposited in a basin over 500 million years ago. These sediments were subsequently folded by movements in the Earth's Crust and intruded by granite. Since that time the rocks have been eroded by various weathering agents including glaciation. Occasional earth tremors still occur in this region even though the faulting which resulted in the uplift of the Mount Lofty Horst and subsidence of the Spencer and St Vincent Grabens was accomplished sixty million years ago.

The greater part of the island is occupied by a plateau region with high vertical cliffs in the north and a belt of low-lying country along the south coast. The plateau region is flat and poorly drained along an axis between Cape Borda

and Parndana but has numerous streams and rolling countryside elsewhere. Soils in this region are mainly lateritic podsols, yellow-brown sands and sandy loams over mottled clays. Grey-brown podsol soils with patches of ironstone gravel are found on the heavily scoured slopes of the northern coast.

The west and south coasts of the coastal region consist mainly of a band of calcareous and siliceous soils with scrub-covered sand dunes adjoining the coast at Cape du Couedic, Cape Gantheaume and Cape Hart. Over much of the remaining area the wind has removed sand from beach dunes and left sheet limestone exposed.

On the plains and lowland regions of the island, grey-brown soils overlying mottled clay predominate; the soils being derived from material deposited on ancient limestone beaches. The Nepean Plain, inland from Kingscote, has a complex mosaic of grey-brown, sandy, saline and alluvial soils and grey cracking clays.

It is interesting to note that the gravelly ironstone soils of Kangaroo Island are among the most impoverished in the world, containing only between 5 and 40 parts per million of phosphorous in their surface soils.

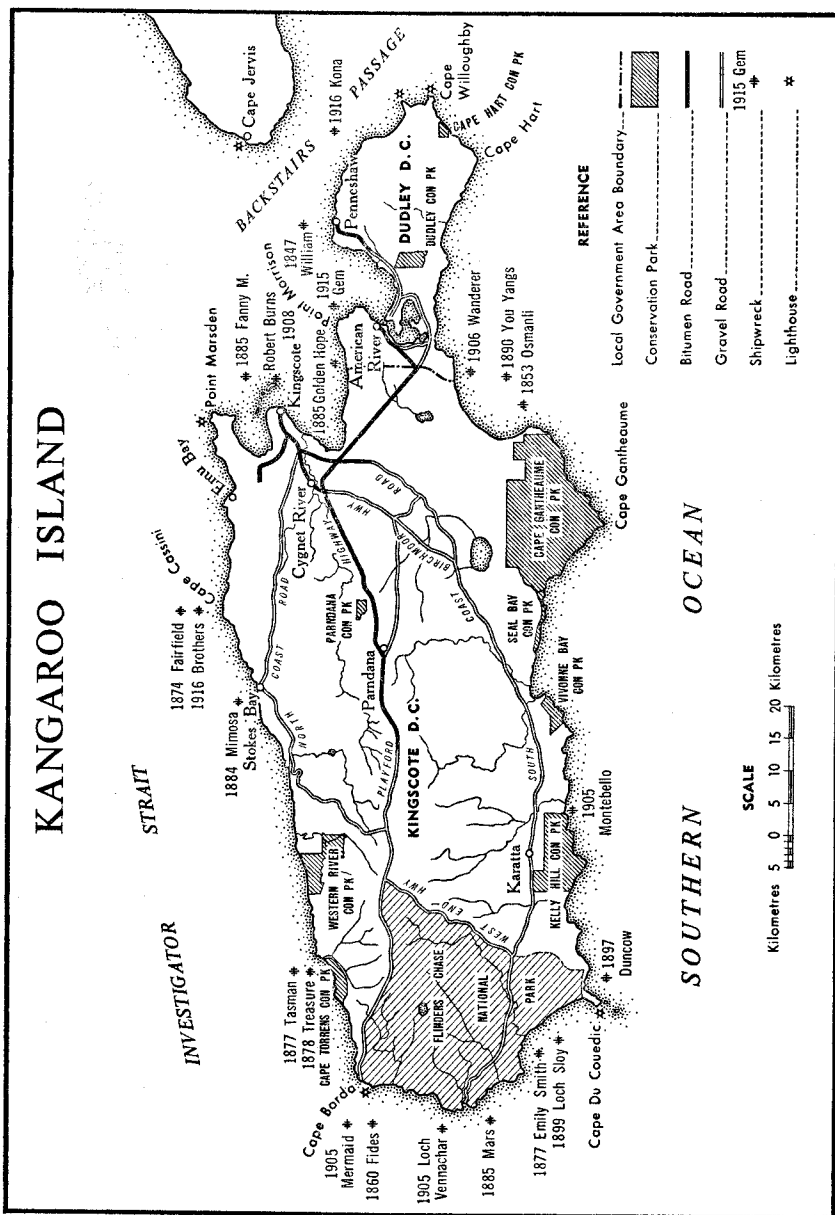
Vegetation

The vegetation of Kangaroo Island is most commonly described by both scientist and layman as 'interminable scrub'. It is generally a thick sclerophyllous cover between three and ten metres in height dominated by eucalypts, with *Melaleucas* and *Acacias* as the principal secondary genera. Many of the eucalypts exhibit the mallee morphology. The density and small nature of individual trees has, until recent years, made clearing slow, laborious and expensive. There are few species of commercial value on the island.

On the northern and eastern parts of the main plateau, *Eucalyptus baxteri* (Brown stringybark), a small to medium sized tree which often exhibits a mallee-like habit, is the most dominant species. *Eucalyptus obliqua* (Messmate stringybark) is more common on the western portion of the plateau and under favourable conditions may replace *Eucalyptus baxteri* completely, but its occurrence decreases eastward with rainfall. *Eucalyptus cosmophylla* (Cup gum) is found throughout this region but is more common in the moister situations such as along stream banks, in depressions and around lagoon margins. Among the taller shrubs, *Casuarina stricta* (Drooping sheoak) is the most common. Other prominent shrubs are *Banksia marginata* (Silver banksia), *Banksia ornata* (Bull honeysuckle), *Hakea rostrata*, and *Xanthorrhoea tateana*.

On the southern and eastern slopes marginal to the main plateau, *Eucalyptus obliqua* is replaced by the mallee *Eucalyptus diversifolia* (South Australian Coastal Mallee). *Eucalyptus baxteri* is less dominant or locally absent. Neither the height nor density of the vegetation in this region is as great as that found on the main plateau region.

At the western end of the main plateau, *Eucalyptus remota* (Mount Taylor Mallee), a whipstick mallee restricted to Kangaroo Island, is the dominant species. *Eucalyptus ovata* (Swamp gum), *Eucalyptus fasciculosa* (Pink gum), *Eucalyptus leucoxylon* (Blue gum) grow with *Hakeas*, *Acacias*, *Banksias* in the wetter western part of the island. Much of this dry sclerophyll forest occurs in its natural state in Flinders Chase and is of the same type as that found in parts of the Mount Lofty Ranges.



In the eastern region of the island, where the rainfall is lower, mallee scrub is the dominant vegetation. *Eucalyptus creoricifolia* (Kangaroo Island Narrow Leaf Mallee) once grew prolifically on the solonised soils of this region but since the 1939-45 War, a greater part of this vegetation has been cleared.

Climate and Meteorology

The waters surrounding Kangaroo Island tend to have a moderating influence on the island's climate which can be briefly described as a cool temperate climate with a winter rainfall maximum. Adelaide, by comparison, has a warm temperate climate, also with a winter rainfall maximum. The ridge of high ground in the western section of the island introduces noticeable local variations in climate, particularly rainfall, over small areas.

Rainfall

The annual average rainfall on Kangaroo Island ranges from 480 mm at Cygnet River to more than 850 mm on the uplands of the western section. A secondary rainfall maximum with averages greater than 600 mm occurs on the eastern end of the island.

The monthly distribution of rainfall is shown in the following table. Approximately 10 per cent of the average annual rainfall is recorded during summer, compared with approximately 45 per cent during the winter months. Spring and autumn rainfall is approximately 20 and 25 per cent, respectively, of the annual average total.

Average Rainfall and Days of Rain: Selected Stations, Kangaroo Island

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|--------------------------------|------|------|------|------|-----|------|------|------|-------|------|------|------|------|
| AVERAGE RAINFALL (millimetres) | | | | | | | | | | | | | |
| American River | 16 | 21 | 16 | 38 | 58 | 73 | 89 | 72 | 54 | 38 | 24 | 21 | 520 |
| Brookland Park | 21 | 26 | 36 | 77 | 106 | 113 | 139 | 119 | 79 | 61 | 33 | 33 | 843 |
| Cape Borda . . . | 16 | 19 | 23 | 48 | 80 | 108 | 106 | 88 | 55 | 42 | 27 | 21 | 633 |
| Cape du Coeudic | 15 | 25 | 23 | 47 | 74 | 107 | 110 | 83 | 57 | 42 | 32 | 24 | 639 |
| Cape Willoughby | 20 | 20 | 20 | 41 | 63 | 75 | 82 | 71 | 56 | 42 | 29 | 23 | 542 |
| Cygnet River . . | 17 | 20 | 15 | 40 | 53 | 66 | 79 | 69 | 43 | 38 | 24 | 16 | 480 |
| Hawks Nest . . | 16 | 23 | 18 | 42 | 63 | 75 | 85 | 72 | 52 | 41 | 26 | 20 | 533 |
| Karatta | 11 | 23 | 25 | 44 | 72 | 87 | 102 | 77 | 54 | 36 | 24 | 28 | 583 |
| Kingscote . . . | 15 | 18 | 18 | 37 | 60 | 73 | 79 | 65 | 46 | 37 | 24 | 19 | 491 |
| Parndana . . . | 17 | 25 | 26 | 52 | 78 | 82 | 107 | 86 | 61 | 48 | 29 | 24 | 635 |
| Western River . | 17 | 21 | 20 | 53 | 79 | 101 | 118 | 96 | 63 | 47 | 33 | 21 | 669 |
| Wilsons River . | 20 | 23 | 23 | 47 | 74 | 85 | 98 | 77 | 59 | 43 | 28 | 25 | 602 |
| AVERAGE NUMBER OF DAYS OF RAIN | | | | | | | | | | | | | |
| American River | 4 | 4 | 4 | 9 | 15 | 13 | 15 | 16 | 12 | 10 | 6 | 5 | 113 |
| Brookland Park | 8 | 6 | 9 | 13 | 19 | 19 | 23 | 24 | 16 | 16 | 11 | 9 | 173 |
| Cape Borda . . . | 5 | 5 | 7 | 12 | 17 | 19 | 22 | 20 | 16 | 13 | 9 | 8 | 153 |
| Cape du Coeudic | 5 | 6 | 8 | 12 | 16 | 19 | 20 | 18 | 15 | 12 | 9 | 7 | 147 |
| Cape Willoughby | 5 | 5 | 8 | 12 | 16 | 16 | 21 | 20 | 16 | 13 | 10 | 8 | 150 |
| Cygnet River . . | 4 | 4 | 4 | 9 | 13 | 16 | 18 | 18 | 13 | 11 | 7 | 6 | 123 |
| Hawks Nest . . | 3 | 3 | 5 | 10 | 13 | 15 | 18 | 16 | 12 | 10 | 7 | 5 | 117 |
| Karatta | 5 | 5 | 4 | 9 | 17 | 17 | 16 | 18 | 12 | 12 | 7 | 6 | 128 |
| Kingscote . . . | 4 | 4 | 5 | 10 | 14 | 16 | 19 | 18 | 13 | 11 | 8 | 7 | 129 |
| Parndana | 6 | 6 | 10 | 12 | 18 | 16 | 22 | 22 | 18 | 15 | 12 | 8 | 165 |
| Western River . | 4 | 4 | 5 | 10 | 14 | 17 | 20 | 19 | 15 | 12 | 8 | 6 | 134 |
| Wilsons River . | 3 | 3 | 3 | 7 | 10 | 11 | 13 | 11 | 9 | 7 | 5 | 4 | 86 |

For agricultural purposes rainfall during January, February and March is of little value. The growing season on Kangaroo Island generally commences in mid-April and continues until late October.

Temperature

Monthly mean maximum and minimum temperatures recorded at Cape Borda, Cape du Coedic, Kingscote and Parndana are shown in the following tables.

Mean Maximum Temperatures: Selected Stations, Kangaroo Island

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|-----------------|------|------|------|------|------|------|------|------|-------|------|------|------|------|
| °Celsius | | | | | | | | | | | | | |
| Cape Borda... | 22.4 | 22.6 | 21.0 | 18.4 | 16.1 | 14.3 | 13.6 | 13.6 | 14.8 | 16.7 | 19.0 | 20.6 | 17.7 |
| Cape du Coedic | 21.5 | 21.0 | 20.8 | 18.9 | 16.8 | 15.3 | 14.4 | 14.6 | 14.4 | 15.7 | 16.4 | 18.8 | 17.4 |
| Kingscote | 23.5 | 23.2 | 22.0 | 19.5 | 17.2 | 15.2 | 14.3 | 14.8 | 16.3 | 18.3 | 20.4 | 22.1 | 18.9 |
| Parndana..... | 24.9 | 25.3 | 22.9 | 20.4 | 16.7 | 14.4 | 13.6 | 13.8 | 15.3 | 17.5 | 20.1 | 22.2 | 18.9 |

Mean Minimum Temperatures: Selected Stations, Kangaroo Island

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|-----------------|------|------|------|------|------|------|------|------|-------|------|------|------|------|
| °Celsius | | | | | | | | | | | | | |
| Cape Borda.... | 13.6 | 14.0 | 13.5 | 12.2 | 11.1 | 9.8 | 8.9 | 8.7 | 9.2 | 9.8 | 11.1 | 12.2 | 11.2 |
| Cape du Coedic | 14.2 | 14.7 | 14.2 | 13.1 | 11.6 | 10.4 | 9.3 | 9.2 | 8.3 | 9.2 | 10.1 | 11.5 | 11.3 |
| Kingscote | 14.6 | 15.1 | 14.1 | 12.2 | 10.6 | 9.3 | 8.3 | 8.1 | 8.9 | 10.2 | 11.7 | 13.3 | 11.4 |
| Parndana..... | 12.4 | 13.1 | 12.3 | 10.8 | 8.8 | 7.2 | 6.8 | 6.3 | 7.0 | 8.1 | 9.0 | 10.8 | 9.4 |

The average daily maximum temperatures in summer are between 20°C and 25°C, but extreme values of over 40°C have been recorded. During winter, the average maxima range from 13°C to 15°C. On occasional days, the maximum temperature may not reach 10°C. Mean daily minima range from 10°C to 15°C in summer and from 6°C to 10°C in winter. Extreme minima have been colder than -3°C.

The moderating influence of the sea is particularly noticeable at coastal stations where the average temperature range is smaller than the inland station at Parndana. Average monthly temperatures (the average of the mean daily/monthly maxima and minima) have special significance to agriculture. During the winter months, the average temperature approaches 10°C and plant growth is retarded. This effect would be most noticeable inland.

During summer, coastal areas are slightly more humid than those inland, but in the winter, the difference is marginal.

Frost

Light frosts occur infrequently, generally between May and September, although frosts are more frequent in those localities where air drainage is poor.

Wind

In summer, the predominant wind direction at 9 a.m. is from the south to south-east. Wind speeds generally range from 13 to 25 kilometres per hour. At 3 p.m. the prevailing winds are from the south-east to south-west quadrant, with the most frequent wind speeds again ranging from 13 to 25 kilometres per

hour. Wind direction at 3 p.m. is largely dependent on the sea breeze effect and the orientation of the coastline. Winds from the south-west tend to be more common at the western end of the island.

In winter, wind speeds of 15 to 30 kilometres per hour are most frequent. The predominant wind directions at 9 a.m. and 3 p.m. are from north to west. However, winds from the south-west are also frequent at Cape Borda.

Evaporation

Parndana is the only site on Kangaroo Island where evaporation has been measured. Monthly figures for an American Class A Pan fitted with a bird guard range from 256 mm in January to 52 mm in July. An average total of 1 628 mm of evaporation is recorded annually.

History

Discovery

The first recorded sighting of Kangaroo Island was by Matthew Flinders in the *Investigator* on 20 March 1802. Flinders had sailed from England on 18 July 1801 on a voyage of discovery supported by the President of the Royal Society, Sir Joseph Banks.

On his voyage of circumnavigation of the Australian continent he thoroughly explored the coast of South Australia. After clearing Spencer Gulf, Flinders sought shelter from a south-westerly gale and named the sheltering coast of Kangaroo Island Point Marsden and the bay Nepean Bay, which he named after the First Secretary of the Admiralty.

On 22 March 1802, Flinders landed at Kangaroo Head. It was here that Flinders took his first survey and named Mount Lofty which can be plainly seen from the Head on a calm day. The crew of the *Investigator* had been without fresh provisions for some months and the morning was spent in the slaughter of thirty-one kangaroos. Flinders subsequently named the island Kangaroo Island.

Flinders sailed from Kangaroo Island on 24 March 1802 to complete his examination of Gulf St Vincent and while returning to Kangaroo Island named Investigator Strait after his ship. Flinders finally left Kangaroo Island on 6 April 1802 and, sailing eastward, gave the name Backstairs Passage to the narrow strait separating the island and Cape Jervis. He also named the eastern extremity of the island Cape Willoughby.

Sailing further eastward, Flinders met the French explorer Captain Nicholas Baudin at Encounter Bay on 8 April 1802. After the meeting at Encounter Bay, Baudin sailed westward and along the northern shore of Kangaroo Island to Murat Bay before being forced to abandon further exploration and to return to Port Jackson in June 1802. Baudin, after re-equipping his expedition, and with the addition of another ship (*Casuarina*) for charting work in shallow waters, returned to Kangaroo Island. Circumnavigating the whole island he gave many places French names and re-named some of Flinders' discoveries, including the island which he named 'L' Isle Decres'. Most of the places surveyed by Baudin have retained their French names including D'Estrees Bay, Cape Gantheaume, Vivonne Bay, Cape du Couedic, Cape Borda and Cape Cassini.

Colonisation

Although the discovery of Kangaroo Island did not lead to immediate colonisation, there began an increasing series of visits by sealing vessels. In 1803, a party of American sealers in the *Union* met Baudin off the coast of West Australia, learnt of Kangaroo Island and settled at American River to build a whaling boat. Apart from this party, there were possibly no other residents on the island before 1806. Sealers also came from Sydney with Joseph Murrell to make their home at Harvey's Return on the north coast. The presence of salt on Kangaroo Island was a deciding factor for sealers using the island as a base camp.

French exploration in the area had led the British authorities to fear that it might result in French colonisation, and although not greatly valuing the area for itself, the British would have found it an embarrassment to have the French settled on the Australian continent. As a result, in 1804, the British sent Grimes, a government surveyor, to Kangaroo Island to report on it as a possible site for colonisation. The Grimes Report was most unfavourable, stating that the soil was poor and that the island lacked fresh water. On the other hand, in 1819 Captain Sutherland visited the island and wrote an over-optimistic report on its future. It was this report which later led the South Australian Company into establishing their first station there in 1836.

The *Duke of York*, the first ship chartered by the Company to bring emigrants to this State, arrived at Nepean Bay on 27 July 1836. The site of the first settlement was chosen and named Kingscote in honour of the director of the South Australian Company.

Colonel William Light, who had been appointed Surveyor-General of the new colony, sailed from England in the *Rapid* on 4 May 1836 with instructions to select a site for the capital of the colony. After a brief visit to Encounter Bay, which he found unsuitable, he landed at Nepean Bay. Light was impressed with the harbour but rejected the site because of the poor soil and lack of water.

By 1838, the small town of Kingscote had an estimated population of 400 and besides huts and tents the town had a boarding house, store, workshops and brick and stone cottages. However, in 1838, the South Australian Company moved its headquarters to Adelaide and the majority of inhabitants followed. As a consequence there was little progress on the island during the next forty years with ships calling infrequently and the economy existing barely above subsistence level.

Salt was the first economic mineral discovered on Kangaroo Island and in 1843, 13 tonnes of salt were shipped to Adelaide and a further 83 tonnes were shipped in the following year. Red gums growing on the river flats near Cygnet River were selected for railway sleepers used in South Australia's first steam railway built between Adelaide and Port Adelaide in 1856.

The island's first official post office was opened at Cygnet River in 1870 followed by post offices at Kingscote (1871), Cape Borda (1877), Wisanger (1882) and Cape Willoughby (1883). Mail services from Kingscote to Cygnet, Cygnet to Eleanor and Kingscote to Cape Borda commenced in 1883. A telegraph cable was laid from Kingscote to Normanville and communication established with Adelaide in 1875.

Around 1880 two pastoralists, Stockdale and Taylor, attempted to establish a large scale sheep industry when they acquired approximately 2 000 square kilometres of leasehold property on the southern portion of the island. Despite reliable rainfall, the soils and pastures were generally unsuitable and brought failure to this and other similar ventures. Kangaroo Island was officially gazetted a county (County Carnarvon) in 1874 and later the towns of Penneshaw, Brownlow and Maxwell (later Emu Bay) were proclaimed.

A further period of rural activity occurred in 1905 when it was thought that the application of superphosphate would improve the fertility of the soils. Additional hundreds were laid out and jetties were erected at American River, Emu Bay, Vivonne Bay and Penneshaw. However, agricultural yields did not improve markedly with the application of superphosphate and a further period of inactivity followed.

Around the turn of the century, Kangaroo Island was gaining a reputation for its excellent fishing facilities and in 1907, the Ozone Hotel was built at Kingscote to cater for the increased tourist trade. In addition the 550 ton ship *Karatta* began a regular service between Adelaide and Kingscote to handle the increasing number of visitors to the island.

At an Australian and New Zealand Association for the Advancement of Science (ANZAAS) meeting held in Hobart in 1892, a motion was passed that the western end of Kangaroo Island be made a reserve for the protection of flora and fauna. However, it was not until 1919 when the Flora and Fauna Reserve Act was passed that the wild-life sanctuary of Flinders Chase was established.

In 1926, telephone exchanges were opened at Kingscote and Penneshaw and on 22 October 1929 the island's first telephonic communication with the mainland was achieved with the opening of the new telephone and telegraphic cable from Cape Jervis to Cuttlefish Bay.

In 1930, the Kingscote District Nursing Home was opened and later became a district hospital when the management was taken over by the Kingscote District Council in 1938.

During the 1930s it was found that the occurrence of 'coast disease' in sheep and the failure of pasture crops was due to deficiencies in copper and other elements in the island's soils. Large scale rural development took place after these deficiencies were remedied. In 1947 approximately 100 000 hectares of arable land on the undeveloped plateau which covers over half of the island was opened up under the War Service Land Settlement Scheme. Other Government and private schemes added a further 60 000 hectares to the island's pastoral development.

The first air passenger service to the island was undertaken by Adelaide Airways Limited, the first flight being made from Adelaide to Kingscote on 10 January 1936. This service was later extended to American River and Penneshaw.

The population of Kangaroo Island was approximately 170 in 1860 and had risen to 700 by 1901 and 1 500 by 1947. At 30 June 1976 the population of the island was 3 266.

Land Tenure and Settlement

In the following table, occupied land on Kangaroo Island is classified according to its present form of tenure.

**Land Tenure, Kangaroo Island
At 30 June 1976**

| Particulars | Area Hectares | Proportion Per Cent |
|---|------------------|------------------------|
| Area sold, dedicated, etc.: | | |
| Sold in fee simple | 215 926 | 49.62 |
| Granted for public purposes | 55 | 0.01 |
| Dedicated for forest reserves | — | — |
| Leased land resumed for closer settlement | 1 812 | 0.42 |
| Under agreement to purchase | 6 810 | 1.57 |
| Total | 224 603 | 51.62 |
| Area under lease and licence (a): | | |
| Perpetual | 96 633 | 22.21 |
| Pastoral | — | — |
| Other | 1 063 | 0.24 |
| Total | 97 696 | 22.45 |
| Area in occupation | 322 300 | 74.07 |
| Remainder unoccupied (b) | 112 818 | 25.93 |
| Total area of Kangaroo Island | 435 118 | 100.00 |

(a) Includes areas held under Mining Acts.

(b) Includes surveyed roads, reserves, etc.

It was not until the 1870s that any large areas of land were occupied on a permanent tenure although small pockets of land around Kingscote, along the Cygnet River, and at Penneshaw were surveyed and became freehold before 1860.

Reliable rainfall attracted cereal farmers to the island and in response to a demand for land the hundreds of Menzies, Haines and Dudley were laid out and land was made freehold along the coast near Penneshaw. However, it was not until the first decade of the twentieth century that large sections were taken up in the hundreds of Menzies and Haines when it was thought that the application of superphosphate would be sufficient to increase the fertility of soils.

In the period 1906-1910, six hundreds were laid out as far west as the hundred of McDonald and new settlers were allocated sections under Right of Purchase Leases in the hundreds of Menzies, Haines and MacGillivray.

Many graziers who had held large tracts of land under pastoral leases in the centre of the island surrendered these for freehold 'concession blocks'. The State Government resumed the country under lease and granted the lessees the freehold of approximately 16 hectares per square kilometre of leased land for the nominal payment of 12 cents per hectare. Over 180 000 hectares were alienated in this manner and the form of some of these blocks is still evident in the hundreds of Gosse, Duncan, Newland, Seddon and MacGillivray.

Further freeholding took place before 1920 around the bays and river mouths which were the only access points to station properties but in the main, few areas

other than the 'concession blocks' were made freehold. Surveying of sections in the western hundreds stopped later when the application of superphosphate failed to increase soil fertility.

After the 1939-45 War, trace element deficiencies were remedied in the soils of the main plateau and the War Service Land Settlement Scheme resulted in the development of large areas of unoccupied Crown land held under Pastoral lease. The War Service Land Settlement Scheme commenced in 1947 when a depot and camp were established at an experimental farm in the hundred of Seddon. In the same year the hundred of MacGillivray was preliminarily subdivided into holdings. In 1948 full-scale logging operations commenced and by 1950 approximately 18 600 hectares had been logged and 5 000 hectares seeded.

In the period 1950-1961, development continued at an established rate of approximately 4 900 hectares annually (12 to 15 holdings annually). Development progressed from the hundred of MacGillivray through the hundreds of Seddon, Newland, Duncan, Ritchie, McDonald, Gosse and Borda with the final initial seeding being completed on section 4, hundred of Borda in May, 1961.

By May, 1966, when development under the War Service Land Settlement Scheme ceased, 103 477 hectares were held under War Service Perpetual Lease of which 57 754 hectares were developed to pasture by the Land Development Branch. In addition, 168 houses had been erected, 2 450 kilometres of fencing laid down and 550 dams excavated with a total storage capacity of 682 megalitres.

Other large tracts of the island were taken up in the post-war years by private developers who hold the land under perpetual lease of freehold tenure.

Population

Kangaroo Island had a population of 3 266 at 30 June 1976, representing 0.26 per cent of the State population. The population of the island has a very high rural component with Kingscote being the only centre with a population in excess of 1 000 (1 121 at 30 June 1976).

The population and masculinity of the population of Kangaroo Island and South Australia at the 1971 and 1976 Censuses are shown in the following table.

Population and Masculinity, Kangaroo Island and South Australia

| Area | Population, Census 30 June | | | | | |
|---------------------------------|----------------------------|-----------|---------------|---------|-------------|---------------|
| | 1971 | | 1976 <i>p</i> | | Masculinity | |
| | Persons | Persons | Males | Females | 1971 | 1976 <i>p</i> |
| Dudley DC | 486 | 534 | 276 | 258 | 110.39 | 106.98 |
| Kingscote DC | 2 670 | 2 732 | 1 386 | 1 346 | 110.90 | 102.97 |
| Total Kangaroo Island | 3 156 | 3 266 | 1 662 | 1 604 | 110.82 | 103.62 |
| Total State | 1 173 707 | 1 244 768 | 620 190 | 624 578 | 99.73 | 99.30 |

The masculinity of the population is considerably higher for Kangaroo Island (103.62 at 30 June 1976) than for the total State (99.30 at 30 June 1976). However, the masculinity of Kangaroo Island has fallen from 110.82 at the 1971 Census to 103.62 at the 1976 Census.

The population of Kangaroo Island increased from 1 479 to 2 522 persons in the period 1947-54, an increase of 70.5 per cent. This high rate of increase corresponded with the clearing and development of large areas of land for farming under the War Service Land Settlement Scheme. Since 1954 the rate of increase in population has declined sharply and in the period 1966-71 the population on the island actually fell from 3 375 to 3 156. In the period 1966-71, although the natural increase in population was 240, the population fell by 219 indicating a large outward migration of population.

The following table shows the Census population figures since 1954 for Kangaroo Island and the total State.

Population, Kangaroo Island and South Australia

| Area | Census 30 June | | | | |
|---------------------------|----------------|---------|-----------|-----------|---------------|
| | 1954 | 1961 | 1966 | 1971 | 1976 <i>p</i> |
| Dudley DC | 363 | 447 | 451 | 486 | 534 |
| Kingscote DC | 2 159 | 2 838 | 2 924 | 2 670 | 2 732 |
| Total Kangaroo Island . . | 2 522 | 3 285 | 3 375 | 3 156 | 3 266 |
| Total State | 797 094 | 969 340 | 1 094 984 | 1 173 707 | 1 244 768 |

The next table shows percentage birthplace figures for the population of Kangaroo Island and the State. This table shows that a very high proportion of the population of Kangaroo Island are Australian born (90.7 per cent at the 1976 Census); the corresponding State figure was 74.7 per cent. Although overseas migration has been an important component of population growth for the State, the growth in the proportion of overseas-born persons on Kangaroo Island has been marginal.

Percentage Birthplace of Population, Kangaroo Island and South Australia

| Country of Birth | Census 30 June | | | | |
|--------------------------|-----------------|------|------|------|---------------|
| | 1954 | 1961 | 1966 | 1971 | 1976 <i>p</i> |
| | KANGAROO ISLAND | | | | |
| Australia | 93.9 | 94.3 | 94.4 | 93.9 | 90.7 |
| United Kingdom | 4.1 | 3.9 | 3.6 | 3.9 | 4.7 |
| Other | 2.1 | 1.8 | 2.0 | 2.2 | 4.7 |
| | SOUTH AUSTRALIA | | | | |
| Australia | 86.1 | 80.8 | 77.5 | 76.2 | 74.7 |
| United Kingdom | 6.3 | 8.1 | 11.2 | 12.6 | 12.4 |
| Other | 7.6 | 11.1 | 11.3 | 11.2 | 12.9 |

The next table shows the percentage age distribution of the population of Kangaroo Island and the State. The table indicates that the age distribution of Kangaroo Island and the State follow similar patterns, except that Kangaroo Island has a slightly higher age distribution in the 50-69 age group with 23.3 per cent of the population in that age group compared with 18.2 per cent for the State.

Age Distribution of Population, Kangaroo Island and South Australia, Census 1976

| Age Group (Years) | Kangaroo Island | | South Australia | |
|-----------------------|-----------------|----------|-----------------|----------|
| | Persons | Per Cent | Persons | Per Cent |
| 0-9 | 567 | 17.4 | 213 254 | 17.1 |
| 10-19 | 598 | 18.3 | 233 302 | 18.7 |
| 20-29 | 529 | 16.2 | 206 494 | 16.6 |
| 30-39 | 368 | 11.3 | 154 304 | 12.4 |
| 40-49 | 317 | 9.7 | 136 600 | 11.0 |
| 50-59 | 445 | 13.6 | 130 322 | 10.5 |
| 60-69 | 292 | 8.9 | 95 330 | 7.7 |
| 70 and over | 150 | 4.6 | 75 162 | 6.0 |
| Total | 3 266 | 100.0 | 1 244 768 | 100.0 |

Births and Deaths

When compared with the State as a whole, Kangaroo Island has, in recent years, a higher birth rate and a significantly lower death rate.

Live Births: Number Registered and Rate, Kangaroo Island and South Australia

| Year | Kangaroo Island | | South Australia | |
|----------------|-----------------|----------|-----------------|----------|
| | No. | Rate (a) | No. | Rate (a) |
| 1971 | 64 | 20.3 | 22 996 | 19.6 |
| 1972 | 55 | 17.5 | 21 844 | 18.4 |
| 1973 | 62 | 19.7 | 20 407 | 17.0 |
| 1974 | 62 | 20.0 | 20 181 | 16.5 |
| 1975 | 52 | 16.8 | 19 986 | 16.2 |

(a) Number of births per 1 000 mean population.

The masculinity rate, *i.e.*, the number of male births per hundred female births, for Kangaroo Island was 82.23 for the period 1971 to 1975 compared with 106.12 for the whole State.

**Deaths: Number Registered and Rate, Kangaroo Island and
South Australia**

| Year | Kangaroo Island | | South Australia | |
|----------------|-----------------|----------|-----------------|----------|
| | No. | Rate (a) | No. | Rate (a) |
| 1971 | 22 | 7.0 | 9 686 | 8.2 |
| 1972 | 20 | 6.4 | 9 764 | 8.2 |
| 1973 | 13 | 4.1 | 9 835 | 8.2 |
| 1974 | 21 | 6.8 | 10 236 | 8.4 |
| 1975 | 24 | 7.7 | 9 947 | 8.0 |

(a) Number of deaths per 1 000 of mean population.

Education

Schools

With improved roads, the increased incidence of motor cars and other forms of transport, together with a general decrease in population in rural areas, formal educational facilities on Kangaroo Island have been gradually centralised over the years. At 30 June 1976, the only schools remaining of the 24 which have operated at various stages since 1836 are a kindergarten and area school at Kingscote, an area school at Parndana and a special rural school at Penneshaw.

For much of the last century however, particularly during times of hardship and long periods of isolation, the children of farmers, sealers and the caretakers of the island's lighthouses relied on their parents for what education they could receive. Although for many, formal schooling seemed irrelevant in an isolated rural environment and frequently older children were required to remain at home to help on the farm, parents and other interested people often went to great lengths to provide schooling for their young.

Although settlement of the island coincided with a strong movement in Great Britain for government support of education and efforts to bring schooling within reach of the working classes, and with the subsequent formation of a British Education Commission and Education Act, it was not until 1847 that the nominee Legislative Council in South Australia passed an ordinance authorising payment of a subsidy of 1s 8d (17 cents) a month per pupil. In 1852 a Central Board of Education was established to promote and improve teaching standards and conditions in schools.

The island's first school, which was opened in 1836 by Captain Walter Bromley at Reeves Point, operated at the teacher's and parents' personal expense. For a penny (1 cent) per day, 24 children received their instruction 'under the shade of a large beautiful currant' for about eight months until Bromley secured his appointment to position of Protector of the Aborigines, in Adelaide.

With the failure of the whaling industry and mismanagement on the part of the South Australian Company, the Nepean Bay settlement was abandoned and, by 1839, the bulk of stores withdrawn from Kingscote. During the following decade,

the island was left almost entirely to the remaining few who had chosen to establish farms, the majority of whom were sealers who had taken women from aboriginal tribes on the mainland and Van Diemen's Land as wives and workers.

Hence, educational developments which were taking place on the mainland had little impact on life on the island, although reference can be traced to the existence of a school in 1859. In 1869, with the island's population between 500 to 600, the Central Board of Education acknowledged that Kangaroo Island had been neglected to this stage and supported the local residents' requests for teachers at Hog Bay, and at Cygnet River and Kingscote where two full-time schools were to operate under the same master and teaching assistant. As on the mainland in isolated country areas, the practice of sharing teachers by several schools became an established pattern in which parents took responsibility for arranging for the teachers' accommodation or board.

In 1870 the Board responded to requests to bring schooling within reach of families residing at the lighthouses of Cape Willoughby and American River on an alternative weekly basis. Schools were also formed at the Troubridge Light, and Capes Borda and Jaffa where children shared books and materials funded by the Marine Board.

Over the remaining part of the nineteenth century, these small schools, sometimes with an enrolment of only eight children, closed and re-opened according to need and the ability of parents to accommodate the teachers.

A greater impact was made by the provisions of the Education Act of 1875, which rendered the teacher's income more secure by reducing school fees which were paid directly to the teacher and supplementing this revenue with a Government grant. The Council of Education which replaced the Central Board of Education proved ineffectual in increasing the numbers of schools in the colony and in raising teaching standards, and was subsequently abolished and its powers conferred to an Education Department.

Under the new Department, regional inspectors were appointed to report on conditions and standards in schools and to recommend changes in teachers' salaries where required. Kangaroo Island fell within the Southern District which embraced the area extending from Sellick's Hill to Murray Bridge, Adelaide, Kangaroo Island and Port Lincoln to Streaky Bay. It is not surprising then that the Inspector at the time lamented to the Minister his inability to reach all schools in his region. Through isolation once again, some schools on the island were neglected in favour of schools in more accessible locations.

During the 1880s and 1890s, as the island developed a stronger agricultural and pastoral base, the population in turn increased and more frequent contact was made with the mainland. To meet the growing demand for educational facilities, schools were established at Wisanger in 1885, and at Hog Bay and Antechamber Bay in 1893; in 1895 two third-time schools were opened at American River and Cuttlefish Bay to operate in conjunction with Antechamber Bay under one teacher. Meanwhile, established schools were in operation at Hog Bay and Queenscliffe.

The small number of Catholic families on Kangaroo Island had access to religious instruction through correspondence courses and priests from the mainland who visited homes on the island, particularly following the appointment of Father Peter Hughes to the Willunga Mission in 1853; a further influence being the opening of a Josephite convent school at the port of Yankalilla in 1867.

Families were later encouraged to send their daughters to a boarding school which was opened by the Dominican Convent in Franklin Street, Adelaide, in 1869, and which operated until 1886 when Cabra College continued the provision of boarding facilities.

The sending of children to boarding schools on the mainland for an education which included religious instruction or other experience not provided by the secular schools became an established pattern.

At the turn of the century, the attempts by the Surveyor-General and the Land Board to develop large-scale cereal growing on Kangaroo Island brought a further stimulus to the population and to new industries such as yacca gumming and the distillation of eucalyptus oil. During this period, twelve schools operated at various stages. In 1904, with the greater importance placed on the township of Kingscote, the Queenscliffe School was re-named Kingscote School. New schools opened at Salt Lagoon, Shoal Bay, MacGillivray, Cape Cassini and Willson River, and improved and extended roads gradually expanded the catchment area of schools, enabling them to maintain numbers and remain open for longer periods of time.

During the period between the 1914-18 War and the 1939-45 War, thirteen schools were opened at various stages; Wisanger, Cygnet River, Kingscote, Hog Bay, American River and Shoal Bay schools continuing throughout the whole period. Wattle Grove school opened in 1916 and closed in 1934; other earlier schools re-opened for varying periods.

By the end of the 1939-45 War, many of these schools had again closed. With the increasing use of cars and buses and the general up-grading of roads, schools tended to further extend their catchment areas engulfing smaller schools. This development together with the possibility of offering a higher level of educational facilities more economically at a centralised level, led to the formation of area schools at Kingscote in 1945 and Parndana in 1959, following the closure of the American River school in 1951.

During the development of the western end of Kangaroo Island for the settlement of returned soldiers, a small rural school was opened under the name of Karatta in 1955 which continued until December 1973, after which children were transported by bus to Parndana area school. Hog Bay school, renamed Penneshaw in 1924, has remained a special rural school offering Years 1 to 10, while Kingscote and Parndana area schools provide Years 1 to matriculation and 11 Year, respectively. The kindergarten at Kingscote has been operating for 14 years.

At 1 August 1975, there were 744 students (473 primary and 271 secondary students) attending school on Kangaroo Island. The number of teachers employed was 52.

The raising of educational standards and the introduction of matriculation, together with the lack of local employment, has brought about an inevitable movement of young people away from the island to the mainland for tertiary studies and employment.

Adult Education

For the farmer, the formation of informal organisations called Agricultural Bureaux at MacGillivray in 1911, Penneshaw in 1924, Pioneer Bend in 1946 and Parndana in 1949 has facilitated informational exchange on agricultural and

pastoral problems. Additional consultancy services are made available by the Department of Agriculture and Fisheries through the media of these bureaux, the local press and the Parndana Research Centre.

The Women's Agricultural Bureau and the Rural Youth Movement have also had an important function in drawing women and young people together for home economics classes, and for lectures, field-trips, debating, home economics and leadership schools.

In the cultural sphere, a precursor of the present 'Island Forum' was formed for discussion and debate in the early years of this century, under the name of the Kangaroo Island Literary Society. Few islanders recalled this earlier society when an association bearing the same name was formed in 1952, 'for the mutual improvement of its members and the public generally'. The new society drew upon the resources of the University of Adelaide Department of Adult Education for its speakers until 1973, when a decision was made to manage its activities independently. The name was subsequently changed to the 'Island Forum' to reflect more clearly the broader interests of the group and new links were created with Flinders University, which now assists the Forum with speakers, on request.

Kingscote area school is open to the community for adult leisure and technical classes, which the residents organise according to demand and the availability of local instructors and which are funded by the Department of Further Education through the South Coast Community College. Before 1972 and as far back as 1950, Gawler College of Further Education was responsible for the supervision of further education courses on the island. Staff visited, annually, apprentices studying through the Department's College of External Studies correspondence program and discussed any problems with their employers; today, apprentices attend courses on the mainland on a block-release basis.

Tuition by correspondence has been available through the College of External Studies for thirty years and in more recent years, most common courses taken have tended to include the business studies, land broker's and meat inspection certificates.

Recreation

Sporting Activities

Kangaroo Island has a full range of sporting facilities both for its inhabitants and visitors. Team sports are popular and tennis, basketball, cricket, bowls and softball are played.

The Kangaroo Island Football League is the administrative body for Australian Rules football, the most popular sport played on Kangaroo Island. There are five affiliated clubs with matches played between A and B grades and colts teams. There are ovals at Kingscote, Parndana, Shoal Bay, Penneshaw and Gosse.

There are golf courses at Kingscote, Vivonne Bay, Parndana and Birchmore. Surfing, swimming, fishing, yachting and power boating are all popular. The Bay of Shoals, near Kingscote, is reserved exclusively for power boats and yachting takes place on the broader waters of Nepean Bay. American River is a popular holiday resort and a point of departure for sightseeing and fishing trips organised by the local guest houses.

Apart from a small picnic meeting, the only major racing event is a two-day meeting held near Kingscote in March each year.

Parks and Reserves

Kangaroo Island has many large tracts of land which have been set aside as National or Conservation Parks. The largest of these, Flinders Chase, was established as a fauna and flora reserve in 1919 and is situated at the western end of Kangaroo Island and encompasses an area of 59 000 hectares. It has become a refuge for fauna indigenous to the island and also for mainland species in danger of extinction, such as the koala. Birds of 167 species have been recorded on the island and most of these are found within the Chase.

A brief description of some of the major Conservation Parks on Kangaroo Island are detailed below:

| | Area (Hectares) | Description |
|---------------------------|--------------------|--|
| Beatrice Islet | 10 | Small sandpit off Kingscote. Breeding ground for birds. |
| Busby Islet | 10 | Small island covered with teatree, located in Bay of Shoals, off Kingscote. |
| Cape Gantheaume | 20 489 | Located 48 km south of Kingscote. Not accessible by vehicle. Very rough wilderness area of high coastal sand ridges. Low limestone hills and outcrops. Dense dune vegetation and mallee eucalypt scrub. Kangaroo Island Kangaroos and Dama Wallabies. |
| Cape Hart | 291 | Located 32 km south-east of Penneshaw. Coastal cliffs and scenery. Cliff top vegetation and dense mallee scrub. Kangaroo Island Kangaroos and Dama Wallabies. |
| Cape Torrens | 748 | On north-west coast of Kangaroo Island. Magnificent coastal scenery with spectacular cliffs to 214 metres in height. Cliff top vegetation with some mallee scrub. Kangaroo Island Kangaroos, Dama Wallabies and Stone-Curlews. Wildflowers in abundance. |
| Dudley | 933 | South-west of Penneshaw, this Park contains tall Mallee scrub of several species, including Kangaroo Island Narrow-leaved Mallee. Kangaroo Island Kangaroo and Dama Wallabies. |

| | | |
|--------------------------|-------|---|
| Kelly Hill | 6 307 | Located 89 km south-west of Kingscote. Coastal dunes and vegetation with eucalypt forest, mallee eucalypt scrub, heath and swamps inland. Contains beaches and mouth of Sou' West River. Popular cave formations which are open to the public. Kangaroo Island Kangaroos, Dama Wallabies, Brush-tailed Possums. |
| Mount Taylor | 18 | Located 80 km south-west of Kingscote. Small area set aside to protect the rare Trigger Plant. Limestone caves. |
| Nepean Bay | 30 | Small coastal park. |
| Parndana | 310 | Situated on edge of Kohinoor plateau. Drops steeply several hundred feet to a tributary of the Cygnet River. Kangaroo Island Kangaroos and Dama Wallabies. |
| Pelican Lagoon | 36 | Series of small islands in Pelican Lagoon, American River. Many birds (Pelicans) and reptiles. |
| Seal Bay | — | Most notable feature is a colony of seals (Australian Sea Lions). Normally over 100 can be seen on main viewing beach. Prohibited beaches on east and west of the reserve. Large area of bushland comprising mallee over limestone. Scenic coastal views. Kangaroo Island Kangaroos, Dama Wallabies. |
| Seddon | 24 | Located 7 km south of Parndana and noted for eucalypt scrub, and forest. Kangaroo Island Kangaroos and Dama Wallabies. |
| The Pages | 20 | Rocky islands in Backstairs Passage. Noted for colony of Australian Hair Seals (Sea Lions). |
| Vivonne Bay | 848 | On south coast of Kangaroo Island, 64 km from Kingscote. Small area coastal dunes with vegetation and cliff top vegetation. Large area of windswept coastal heath. |
| Western River | 2 286 | On north coast of Kangaroo Island. Spectacular coastal scenery—steep gorges and waterfalls. Kangaroo Island Kangaroos and Dama Wallabies in eucalypt forest. |

Health Facilities

The main health facilities are located at Kingscote, the island's most important centre.

The Kangaroo Island General Hospital at Kingscote is a training hospital with a capacity of eighteen beds, including a maternity section. Penneshaw has a small three-bed hospital, managed by a triple-certificated sister, which caters for casualties and minor medical cases. More serious cases are admitted to the Kangaroo Island General Hospital.

There is a resident general practitioner at Kingscote who also consults at Penneshaw and a qualified medical practitioner at Parndana undertakes a small local practice.

General dental services are provided by an Adelaide dentist who visits Kingscote once a week. The dental health of school children is provided for by a resident school dentist at a clinic at the Kingscote School.

Kingscote also contains branches of the St John Ambulance Brigade, the Mothers and Babies Health Association and the Red Cross Society.

Employment

The following table shows that 53.9 per cent of employed males on Kangaroo Island are employed in the agriculture, forestry and fishing industries, as compared with 10.0 per cent for South Australia. However, employment in manufacturing industries on Kangaroo Island is insignificant compared with the State as a whole with only 1.5 per cent of males being employed in manufacturing compared with the State figure of 28.6 per cent.

**Industry of Employed Persons: Kangaroo Island and South Australia
Census 1971**

| Industry | Kangaroo Island | | South Australia | |
|--|-----------------|----------|-----------------|----------|
| | No. | Per Cent | No. | Per Cent |
| MALES | | | | |
| Agriculture, forestry, fishing, etc. | 522 | 53.9 | 32 632 | 10.0 |
| Mining | 34 | 3.5 | 3 428 | 1.1 |
| Manufacturing | 15 | 1.5 | 93 062 | 28.6 |
| Electricity, gas and water | 9 | 0.9 | 8 247 | 2.5 |
| Construction | 51 | 5.3 | 33 458 | 10.3 |
| Wholesale and retail trade | 92 | 9.5 | 55 591 | 17.1 |
| Transport and storage | 50 | 5.2 | 20 209 | 6.2 |
| Communication | 27 | 2.8 | 6 842 | 2.1 |
| Finance, business services, etc. | 21 | 2.2 | 15 939 | 4.9 |
| Public administration, defence | 28 | 2.9 | 13 479 | 4.1 |
| Community services | 52 | 5.4 | 24 090 | 7.4 |
| Entertainment, recreation | 32 | 3.3 | 8 468 | 2.6 |
| Other and not stated | 36 | 3.7 | 10 037 | 3.1 |
| Total employed population | 969 | 100.0 | 325 482 | 100.0 |

Industry of Employed Persons: Kangaroo Island and South Australia
Census 1971 (continued)

| Industry | Kangaroo Island | | South Australia | |
|--|-----------------|--------------|-----------------|--------------|
| | No. | Per Cent | No. | Per Cent |
| FEMALES | | | | |
| Agriculture, forestry, fishing, etc. | 90 | 27.7 | 8 273 | 5.4 |
| Mining | 2 | 0.6 | 340 | 0.2 |
| Manufacturing | 7 | 2.2 | 23 551 | 15.5 |
| Electricity, gas and water | — | — | 510 | 0.3 |
| Construction | 3 | 0.9 | 1 791 | 1.2 |
| Wholesale and retail trade | 72 | 22.2 | 38 655 | 25.4 |
| Transport and storage | 7 | 2.2 | 2 831 | 1.8 |
| Communication | 9 | 2.8 | 2 195 | 1.4 |
| Finance, business services, etc. | 8 | 2.5 | 12 198 | 8.0 |
| Public administration, defence | 9 | 2.8 | 5 714 | 3.8 |
| Community services | 55 | 16.9 | 36 082 | 23.7 |
| Entertainment, recreation | 52 | 16.0 | 14 761 | 9.7 |
| Other and not stated | 11 | 3.4 | 5 185 | 3.4 |
| Total employed population | 325 | 100.0 | 152 086 | 100.0 |

A higher proportion of self-employed persons and employers is evident on Kangaroo Island with 40.6 per cent of the labour force on Kangaroo Island falling into the 'self-employed' and 'employer' categories compared with only 13.0 per cent for the State.

Occupational Status of Labour Force: Kangaroo Island and
South Australia, Census 1971

| Occupational Status | Kangaroo Island | | South Australia | |
|-------------------------------------|-----------------|--------------|-----------------|--------------|
| | Persons | Per Cent | Persons | Per Cent |
| Employer | 166 | 12.7 | 25 300 | 5.2 |
| Self-employed | 365 | 27.9 | 38 015 | 7.8 |
| Employees | 716 | 54.8 | 411 004 | 84.6 |
| Unpaid helper | 47 | 3.6 | 3 249 | 0.7 |
| Unemployed | 12 | 0.9 | 8 355 | 1.7 |
| Total labour force | 1 306 | 100.0 | 485 923 | 100.0 |

In addition, there is a larger than average proportion of non-qualified persons in the labour force on Kangaroo Island. A factor that may account for this is the dominance of the agriculture and fishing industries on the island, as this particular industry group is usually characterised by a low proportion of persons with academic qualifications.

**Population Aged 15 and Over: Level of Qualifications Obtained
Kangaroo Island and South Australia, Census 1971**

| Qualification | Kangaroo Island | | South Australia | |
|--------------------------------------|-----------------|--------------|-----------------|--------------|
| | Persons | Per Cent | Persons | Per Cent |
| Trade | 127 | 6.0 | 84 283 | 10.1 |
| Technician | 92 | 4.4 | 26 770 | 3.2 |
| Non-degree Tertiary | 71 | 3.4 | 25 090 | 3.0 |
| Bachelor Degree | 20 | 0.9 | 12 404 | 1.5 |
| Higher Degree | — | — | 1 779 | 0.2 |
| Not classified by level | 24 | 1.1 | 12 505 | 1.5 |
| Studying for qualification | 33 | 1.6 | 34 930 | 4.2 |
| No qualifications | 1 742 | 82.6 | 636 096 | 76.3 |
| Total | 2 109 | 100.0 | 833 857 | 100.0 |

Water Supply and Sewerage

There are reticulated water supply schemes in the townships of Kingscote, Parndana and Penneshaw.

The township of Kingscote is supplied from a reservoir of 550 megalitres capacity constructed on the Middle River, fifty kilometres west of Kingscote. Water from this reservoir is pumped approximately five kilometres to a 4.5 megalitres reinforced concrete surface tank and from there gravitates a distance of forty-five kilometres to four surface tanks, with a total capacity of thirty-seven megalitres at Kingscote. Farmlands along the route of the pipeline are also supplied and branch mains have been laid to supply the small township of Parndana and the Emu Bay district.

This scheme replaced in 1965 an earlier one which supplied Kingscote only with water pumped from the Cygnet River. Consumption from the Middle River Reservoir in 1976 amounted to approximately 370 megalitres.

The township of Penneshaw is supplied from a privately owned dam approximately four kilometres south-east of the township. Water is pumped from the dam to two surface tanks each of 136 megalitres capacity and from there gravitates through a pipeline to Penneshaw. The scheme is leased and operated by the District Council of Dudley.

There is no piped sewerage system in any of the towns on the island and septic tanks are used extensively. A common effluent drainage scheme, which has an outfall to the sea, serves a number of dwellings in Kingscote.

Electricity and Gas

Electric power is transmitted from the mainland to the island by a 33 000 volt undersea cable across Backstairs Passage. This cable, laid in April 1965, is 13.7 kilometres in length and is the longest undersea crossing of its type in Australia.

A 33 000 volt line carries power from a substation at Penneshaw to the American River and MacGillivray transformer stations, from which it is distributed to various parts of the island by 11 000 volt lines.

The supply of electricity at Kingscote was taken over from a private contractor by the Electricity Trust on 30 June 1966. By November 1971, supply had been extended to the whole of the island and 1 500 consumers were being supplied from Trust mains. At 30 June 1976, this figure had increased to 1 968 consumers.

Gas is not reticulated on Kangaroo Island but is available as bottled gas.

The following table compares gas and electricity facilities available on Kangaroo Island with the State as a whole. The use of these facilities on the island follows the same general pattern as for the whole State.

Occupied Private Dwellings: Facilities, Kangaroo Island and South Australia, Census 1971

| Facilities | Kangaroo Island | | South Australia | |
|---------------------------------------|-----------------|--------------|-----------------|--------------|
| | Number | Per Cent | Number | Per Cent |
| Gas only | 3 | 0.3 | 570 | 0.2 |
| Electricity only | 402 | 45.9 | 168 070 | 49.1 |
| Gas and electricity | 463 | 52.9 | 170 854 | 50.0 |
| Neither gas nor electricity | 4 | 0.5 | 913 | 0.2 |
| Not stated | 4 | 0.5 | 1 657 | 0.5 |
| Total | 876 | 100.0 | 342 064 | 100.0 |

Housing

Since the 1939-45 War, the number of occupied private dwellings on Kangaroo Island has grown by approximately 134 per cent with most of this development occurring in the Kingscote District Council. Growth in the State was nearly 106 per cent over the same period. The following table gives the actual number of occupied private dwellings at each Census since 1947 for both Kangaroo Island and the State. Details of occupied private dwellings are not yet available from the 1976 Census.

Occupied Private Dwellings, Kangaroo Island and South Australia

| Area | Census 30 June | | | | |
|--|----------------|----------------|----------------|----------------|----------------|
| | 1947 | 1954 | 1961 | 1966 | 1971 |
| Dudley DC | 94 | 108 | 116 | 124 | 139 |
| Kingscote DC | 281 | 511 | 640 | 716 | 737 |
| Total Kangaroo Island | 375 | 619 | 756 | 840 | 876 |
| Total State | 116 118 | 212 095 | 259 344 | 299 629 | 342 067 |

At the 1971 Census, 93·7 per cent of the occupied private dwellings on Kangaroo Island were separate houses compared with 78·3 per cent for the State. As may be expected by reason of the large rural component of the population, the proportion of self-contained flats on Kangaroo Island was only 1·3 per cent of total occupied private dwellings compared with 4·8 per cent for the State.

**Occupied Private Dwellings by Class of Dwelling, Kangaroo Island
and South Australia, Census 1971**

| Dwelling | Kangaroo Island | | South Australia | |
|-------------------------------|-----------------|--------------|-----------------|--------------|
| | Number | Per Cent | Number | Per Cent |
| Separate house | 821 | 93·7 | 267 979 | 78·3 |
| Semi-detached house | 6 | 0·7 | 33 116 | 9·7 |
| Attached house | 11 | 1·3 | 3 890 | 1·1 |
| Villa unit | 3 | 0·3 | 13 430 | 3·9 |
| Self-contained flat | 11 | 1·3 | 16 569 | 4·8 |
| Other | 24 | 2·7 | 7 080 | 2·2 |
| Total | 876 | 100·0 | 342 064 | 100·0 |

A comparison of figures for material of outer walls of dwellings shows that fibro-cement has been the most important material for dwelling construction on Kangaroo Island. Approximately half (50·7 per cent) of the dwellings on Kangaroo Island had fibro-cement as the material of outer walls with only 14·2 per cent having brick. For the total State, only 6·7 per cent of dwellings had fibro-cement as material for outer walls while 61·2 per cent of dwellings had brick. Most of the very old dwellings on Kangaroo Island were built with stone.

**Occupied Private Dwellings: Material of Outer Walls, Kangaroo Island
and South Australia, Census 1971**

| Material of Outer Walls | Kangaroo Island | | South Australia | |
|---|-----------------|--------------|-----------------|--------------|
| | Number | Per Cent | Number | Per Cent |
| Brick | 124 | 14·2 | 209 231 | 61·2 |
| Brick-veneer | 12 | 1·4 | 19 558 | 5·7 |
| Stone | 133 | 15·2 | 56 679 | 16·6 |
| Concrete | 23 | 2·6 | 10 154 | 3·0 |
| Timber | 73 | 8·3 | 13 833 | 4·0 |
| Metal | 51 | 5·8 | 7 785 | 2·3 |
| Fibro-cement | 444 | 50·7 | 23 128 | 6·7 |
| Other | 16 | 1·8 | 1 696 | 0·5 |
| Total occupied private dwellings | 876 | 100·0 | 342 064 | 100·0 |

Agriculture

The economy of the island is based mainly on the raising of sheep for wool and meat. In addition many holdings carry herds of beef cattle as a source of income supplementary to sheep farming. Dairy cattle are raised only for local milk supply and there is little market gardening mainly owing to the lack of good quality water in sufficient quantity to grow vegetables. Honey from a pure strain of the Ligurian bee has been produced in commercial quantities in recent years.

**Number and Area of Holdings, Artificial Fertilisers Used for Crops
Kangaroo Island**

| Year | Number of Holdings (a) | Area of Holdings | Area Under Crop (b) | Artificial Fertilisers Used for Crops | | |
|-------------|------------------------|------------------|---------------------|---------------------------------------|-----------------|-----------------------------|
| | | | | Area Fertilised | Fertiliser Used | Fertiliser used per Hectare |
| | | | Hectares | | Tonnes | kg |
| 1915-16 | n.a. | 196 289 | 4 074 | 3 726 | 458 | 122.92 |
| 1925-26 | 190 | 186 032 | 3 940 | 3 726 | 485 | 130.17 |
| 1935-36 | 222 | 192 584 | 3 170 | 2 959 | 404 | 136.53 |
| 1945-46 | 201 | 163 201 | 4 365 | 4 037 | 502 | 124.35 |
| 1955-56 | 376 | 247 104 | 6 368 | 3 974 | 712 | 179.16 |
| 1965-66 | 453 | 324 484 | 11 664 | 10 002 | 1 839 | 183.86 |
| 1975-76 (c) | 441 | 308 970 | 11 767 | 8 376 | 1 486 | 177.41 |

(a) All holdings including those not growing crops.

(b) Excludes pastures harvested for hay or seed, or cut for green feed or silage.

(c) Excludes holdings of less than 10 hectares.

During the 1930s it was found that deficiencies of copper and other elements in the island's soils were responsible for 'coast disease' in sheep and the failure of pastures. It was considered that with the introduction of suitable trace elements and superphosphate, a vast area of land on the island's central plateau could be made economically productive. Following the 1939-45 War, large tracts of land were acquired for settlement by ex-servicemen under the War Service Land Settlement Scheme. The eastern part of the island has a longer agricultural history and while there have been steady increases in livestock and cereal production these have been less dramatic than those which have occurred since the 1939-45 War in the plateau region. The number of rural holdings on the island has more than doubled in the 30 year period 1946-1976. In the same period, the area of rural holdings increased from 163 201 hectares to 308 970 hectares, an increase of 89 per cent.

Livestock

Sheep on Kangaroo Island have been bred mainly for wool although there has been some change to prime lamb production in recent years. In the period 1946-1976 the number of sheep carried rose from 87 000 to nearly 793 000, or 4.6 per cent of the State total. Most of this increase occurred on the main plateau where War Service Land Settlement holdings have been progressively developed westward from the hundred of MacGillivray.

The following table shows for the last five years the number of sheep on Kangaroo Island classified by age and sex. Sheep numbers have generally stabilised on the island although numbers have fluctuated with seasonal conditions.

**Sheep: Numbers by Age and Sex, Kangaroo Island
At 31 March**

| Year | Rams | Ewes | | Wethers | Lambs | Total |
|------|-------|----------|--------|---------|---------|---------|
| | | Breeding | Other | | | |
| 1972 | 8 467 | 339 175 | 48 995 | 229 305 | 188 307 | 814 249 |
| 1973 | 7 704 | 318 140 | 31 356 | 213 156 | 129 680 | 700 036 |
| 1974 | 7 731 | 330 649 | 20 073 | 188 751 | 157 496 | 704 700 |
| 1975 | 8 526 | 345 322 | 30 302 | 199 345 | 184 381 | 767 876 |
| 1976 | 8 546 | 334 299 | 41 041 | 216 279 | 192 358 | 792 523 |

Details of the number of sheep and lambs shorn, wool clip and average weight per fleece are shown in the following table.

**Sheep and Lambs Shorn, Wool Clip and Average Weight per Fleece
Kangaroo Island**

| Particulars | Unit | 1972 | 1973 | 1974 | 1975 | 1976 |
|-----------------------|------|-----------|-----------|-----------|-----------|-----------|
| Sheep and lambs shorn | No. | 992 384 | 846 002 | 794 897 | 850 544 | 898 736 |
| Wool clip | kg | 4 510 672 | 3 669 453 | 3 737 274 | 4 258 554 | 4 009 248 |
| Average per fleece | kg | 4.55 | 4.34 | 4.70 | 5.01 | 4.46 |

Numbers of cattle associated with meat production have increased markedly since the 1939-45 War. At 31 March 1946, 457 cattle associated with meat production were recorded; by 31 March 1966 this number had risen to 10 699 and at 31 March 1976 there were 57 070 cattle for meat production (approximately 3 per cent of the total State figure of 1 682 566 cattle for meat production).

Cattle for milk production are raised only for local milk supply and numbered 893 in 1976. The number of cattle for milk production has steadily declined over the last twenty years.

Cattle Numbers, Kangaroo Island

| Year | Cattle for Meat Production | | | | Cattle for Milk Production | | | | | Total Cattle |
|------|----------------------------|--------|--------|--------|----------------------------|------|-----------------------------------|--------|-------|--------------|
| | Bulls | Cows | Calves | Total | Bulls | Cows | Heifers (one year and over) | Calves | Total | |
| 1972 | 585 | 20 719 | 11 279 | 35 045 | 40 | 636 | 115 | 210 | 1 204 | 36 249 |
| 1973 | 692 | 23 572 | 13 344 | 40 840 | 28 | 569 | 171 | 185 | 1 149 | 41 989 |
| 1974 | 752 | 25 676 | 13 732 | 43 528 | 19 | 376 | 71 | 117 | 815 | 44 343 |
| 1975 | 908 | 30 559 | 16 351 | 53 154 | 25 | 449 | 98 | 164 | 996 | 54 150 |
| 1976 | 934 | 32 967 | 18 034 | 57 070 | 16 | 356 | 145 | 113 | 893 | 57 963 |

Crops

Cereals have been grown on the island for over a century, but the area sown is minor in relation to the State total. Cereals are grown mainly on the mixed crop-livestock farms of the Nepean Plain and Dudley Peninsula.

Oats are grown for fodder in rotation with pastures. The area sown to oats for grain at 31 March 1976 was 5 210 hectares and the production of oats was

5 363 tonnes, an average yield of 1.03 tonnes per hectare. The principal varieties of oats sown were Swan and Avon.

Prize-winning malt barley has been grown in the Nepean Plain and Dudley Peninsula areas, but the production of barley has fallen from 3 229 tonnes in 1945-46 to 2 482 tonnes in 1975-76. The principal variety of barley sown was Clipper.

Wheat growing is of little importance on the island and at 31 March 1976 only 143 hectares were sown to wheat.

There is little market gardening on the island mainly owing to a lack of good quality water in sufficient quantity to grow vegetables. However, there is a small area of good loamy soil west of Kingscote which has been cultivated since the early days of settlement and on which apples, pears and potatoes are grown. Fresh fruit and vegetable production is of little significance and production details for 1975-76 were apples 19 tonnes, apricots 13 tonnes, nectarines 3 tonnes, peaches 5 tonnes, pears 10 tonnes, plums and prunes 4 tonnes and potatoes 129 tonnes.

Machinery on Rural Holdings

The following table shows details of machinery on rural holdings for the period 1972-1975.

Machinery on Rural Holdings, Kangaroo Island

| | Tractors | | | Rotary Hoes, Rotary Tillers | Harvesters, Headers, Strippers | Hay Balers (Pick-up) |
|--------------|----------|---------|-------|-----------------------------------|--------------------------------------|-------------------------|
| | Wheeled | Crawler | Total | | | |
| 1972 | 611 | 117 | 728 | 67 | 215 | 132 |
| 1973 | 611 | 120 | 731 | 62 | 207 | 133 |
| 1974 | 630 | 115 | 745 | 66 | 198 | 141 |
| 1975 | 646 | 116 | 762 | 68 | 189 | 147 |

Mining

Gypsum is currently the only mineral worked on a large scale on Kangaroo Island. The gypsum deposits occur beneath the salt crust of Salt Lake near Pennington Bay. This lake originally contained a reserve of over 2.5 million tonnes of gypsum which has been worked by the Colonial Sugar Refining Company (CSR) since 1961. These deposits are the chief source of raw material for the CSR plaster and 'Gyprock' plasterboard works in Sydney, Melbourne and Adelaide.

A bulk ship loading installation has been built by CSR at Ballast Head, north of American River. Crushed and washed gypsum from their treatment works on Salt Lake is transported by road to Ballast Head. The gypsum for the Adelaide Gyprock plaster works is delivered by ketch from American River.

The gypsum deposits at Salt Lake have almost been fully exploited. CSR has recently opened a second deposit near Pelican Lagoon about 20 kilometres east of Salt Lake. The gypsum is trucked to the treatment plant at Salt Lake for crushing, screening and working. More than half the Kangaroo Island pro-

duction is now coming from this new deposit. In 1975, about 225 000 tonnes of high grade rock gypsum was produced on Kangaroo Island, representing approximately thirty per cent of the State's total production of gypsum.

Some of the sands in the coastal area near Redbanks (south-east of Kingscote) contain minor quantities of rutile, zircon and ilmonite. These deposits are of low grade and are insignificant compared with those currently being worked in the eastern States.

Small occurrences of gold (the Kobinoor Mine) and silver-lead (Western River area) have been explored without success. Some alluvial gold and small gemstones have been found at Dawes Diggings (south of Parndana) and amateur fossickers are still interested in this area.

Before the first settlement, salt was taken from the surface of the salt lakes for use by whalers who visited the island and in 1919 the white clay deposits near Hog Bay were tested to determine their usefulness as china clay, but there has been no reported production of either salt or clay for the past 50 years.

Sufficient rock and sand is mined on Kangaroo Island to fully meet the island's requirements for construction material.

Forestry

Considering the large number of plant species found on Kangaroo Island there are few of any commercial value. Timber cutting has been of some importance but the scattered nature of the stands and lack of suitable sized trees has precluded any stable industry.

Stands along the Cygnet and De Mole Rivers and behind Stokes Bay have at various times yielded mine and sleeper timber for the mainland. In addition, use has been made of timber found on the island for fence posts, the most favoured species for this purpose being swamp gum, sugar gum and pink gum.

The principal industries utilising the island's species have been extractive. For many years a natural resin (yacca gum), produced by the yacca or grass tree, was of commercial value and widely gathered on the island for use in the varnish and explosive industries. Clearing operations and poor markets have been responsible for the decline in the industry. A second extractive industry was the distillation of eucalyptus oil. This industry was largely restricted to the Hundreds of Menzies, Haines and MacGillivray and was for the most part carried out on a family basis. Unstable markets and extensive clearing have also led to a decline in this industry.

Fisheries

Commercial fishing around Kangaroo Island is undertaken for all major species. The most important species taken are rock lobster, whiting and shark. In 1975 prawn grounds were discovered in Investigator Strait and the landings during 1975-76 indicate that this is likely to develop into a most important fishery. Landings of abalone have fluctuated markedly since commercial fishing for this mollusc began. This is, in part, due to the absence of resident licensed divers in recent years.

The following table shows the size and composition of the commercial fish catch landed on Kangaroo Island for the past five years.

Fishing: Production by Species, Kangaroo Island
Estimated Landed Weight^(a)

| Species | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|
| Kilograms | | | | | |
| Rock Lobster | 95 419 | 115 413 | 79 073 | 117 094 | 157 421 |
| Prawns | — | — | 517 | 7 214 | 105 929 |
| Shark | 4 288 | 7 407 | 8 866 | 33 362 | 83 732 |
| Whiting | 28 828 | 41 519 | 48 251 | 46 921 | 54 620 |
| Ruff | (b) | 7 518 | 4 504 | 5 677 | 9 366 |
| Snapper | 17 953 | 16 416 | 19 248 | 6 349 | 9 238 |
| Garfish | 1 804 | 7 913 | 2 481 | 4 470 | 7 658 |
| Australian Salmon | (b) | 14 222 | 2 236 | 7 427 | 7 062 |
| Pike | (b) | 7 029 | 4 177 | 4 784 | 6 852 |
| Abalone | 30 396 | 27 000 | 30 651 | 7 127 | 136 |
| Other | 1 800 | 12 455 | 12 724 | 16 503 | 13 534 |
| Total landed weight . . . | 180 488 | 256 892 | 212 728 | 256 928 | 455 548 |

(a) Based on fisherman's catch returns collected by the Department of Agriculture and Fisheries.

(b) Included with 'other'.

In 1975-76, the value of the catch landed on Kangaroo Island exceeded \$1 million for the first time. This was largely due to the increase in the size of the rock lobster catch and the establishment of a prawn industry. The gross value of the major species were:

| | |
|------------------------|-----------|
| | \$ |
| Rock lobster | 449 000 |
| Prawns | 307 000 |
| Whiting | 149 000 |
| Shark | 75 000 |
| Snapper | 11 000 |
| Garfish | 8 000 |
| All other | 18 000 |
| | 1 017 000 |

Fluctuations have occurred in the total catches of all species with shark and abalone being the most variable. The market for shark has been depressed by the necessity for all shark imports into Victoria to have levels less than 0.5 parts per million of mercury.

Much of the fish landed on Kangaroo Island is transported to the mainland for further processing and/or distribution to the retail market either through the Adelaide fish market or direct to wholesalers. On the island itself, there is one fish factory located at Kingscote and operated by the South Australian Fishermen's Co-operative Limited (SAFCOL). In addition there are two fish buyers located at American River.

Although there are four ports of landing on Kangaroo Island, Kingscote is by far the most important with, on average, over eighty per cent of the catch being

landed there. American River, Vivonne Bay and Penneshaw are the other ports at which fish are landed.

At 31 December 1976, there were 77 vessels with their home port on Kangaroo Island (55 at Kingscote, 19 at American River and 3 at Penneshaw). Sixty-four of these vessels were involved in line and net fishing while 10 were licensed rock lobster vessels and 3 had Ministerial permits to fish for prawns in the waters of Investigator Strait. Excluding those employed on fish processing and vessel maintenance and servicing there were 142 persons employed in the fishing industry (108 in the line and net fishery, 24 on rock lobster vessels and 10 in the prawn fishery).

Manufacturing

There is little manufacturing industry on Kangaroo Island and future prospects for its establishment appear to be slight. At 30 June 1975 there were three manufacturing establishments on the island including a bakery, printery and a metal fabricating plant. These three establishments employed on average 18 persons during 1974-75 and had a turnover of \$235 000.

Retail Establishments

Much of the retail trade on Kangaroo Island is orientated towards the tourist industry. Retailers provide a reasonable range of consumer goods but the more expensive and specialised durable goods such as furniture, are purchased in Adelaide.

At 30 June 1974, there were 44 retail establishments operating on Kangaroo Island, with retail sales valued at \$2.6 million during 1973-74.

Of the total retail establishments operating on the island there were 3 general stores; 17 food stores; 3 clothing, fabrics and furniture stores; 2 household appliance and hardware stores; 14 motor vehicle dealers, petrol and tyre repairers; one pharmacy; one newsagent; one antique dealer and two other retailers.

Transport

Roads

The construction of roads on Kangaroo Island has been directly related to agricultural development. In the early years of settlement, rough roads were formed at the eastern end of the island and by 1908 these totalled approximately 220 kilometres in length. However, on the main plateau to the west there were virtually no tracks apart from the one which followed the telegraph line between Kingscote and Cape Borda.

By 1945 there were approximately 580 kilometres of formed roads on the island but few of these, other than the Cape Borda and South Coast roads, were on the western part of the island. After 1947, a large scale road construction program was undertaken in conjunction with the War Service Land Settlement Scheme.

The following table shows the length of roads, as advised by the Highways Department, classified by type of surface at 30 June 1972.

**Length of Roads: Type of Surface, Kangaroo Island
At 30 June 1972**

| Particulars | Natural Surface | Formed Only | Paved | | Total |
|------------------------|--------------------|----------------|------------|-----------|------------|
| | | | Unsealed | Sealed | |
| Kilometres | | | | | |
| Arterial roads: | | | | | |
| Dudley DC | — | — | 14 | 11 | 25 |
| Kingscote DC | — | — | — | 39 | 39 |
| Local roads: | | | | | |
| Dudley DC | 27 | 46 | 42 | 4 | 118 |
| Kingscote DC | 78 | 502 | 85 | 29 | 693 |
| Total | 104 | 548 | 142 | 82 | 875 |

Motor Vehicles On Register

At 31 December 1975 there were 1 079 cars, 169 station wagons and 533 commercial vehicles registered on Kangaroo Island. The population per vehicle at 31 December 1975 was 1.61 compared with 1.97 for the whole State.

Shipping

There are five ports operated by the State on Kangaroo Island, namely Emu Bay, Kingscote, American River, Hog Bay and Vivonne Bay. The CSR owns and operates a bulk loading installation at Ballast Head.

The first regular large capacity freight service began in 1907 with the introduction of the 550 ton steamship *Karatta* which provided a twice-weekly service to Kingscote, a weekly service to American River and Penneshaw and irregular calls to north coast landing points at shearing time. Since the establishment of new soldier settlements in the 1950s, shipping to and from Kangaroo Island has increased. The *Pardana* was introduced to supplement the service provided by the *Karatta* and in November 1961 these vessels were replaced by the m.v. *Troubridge* a roll-on roll-off vessel which can carry approximately 550 tonnes of cargo. The *Troubridge* runs a schedule between Kingscote, Port Adelaide and Port Lincoln, and is primarily a freight vessel with facility for the carriage of private vehicles and passengers.

Air

Kangaroo Island has one airport situated approximately 13 kilometres south-west of Kingscote. Airlines of South Australia operate a daily air service between Adelaide and Kingscote, the 128 kilometre flight takes approximately half an hour. Regular services are supplemented by additional flights during public and school holiday periods.

Two commuter operators, Emu Airways and PAGAS, operate daily flights to Kangaroo Island; Emu Airways operate flights to Penneshaw and PAGAS to Parndana and American River.

Details of aircraft movements and the number of passengers and freight carried by civilian airlines to Kingscote are shown in the following table.

Passengers, Freight and Aircraft Movements, Kingscote

| Particulars | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 |
|----------------------------------|---------|---------|---------|---------|---------|
| Passengers (a) | 47 993 | 48 609 | 59 107 | 61 121 | 58 887 |
| Freight (tonnes) (b) | 129 | 136 | 151 | 142 | 133 |
| Aircraft movements (c) | 1 455 | 1 745 | 1 992 | 2 081 | 2 239 |

(a) Total of embarkations and disembarkations.

(b) Total of freight loaded and unloaded.

(c) Total of arrivals and departures.

Communications

There is one official post office at Kingscote and four unofficial post offices at Parndana, Cygnet River, American River and Penneshaw.

Apart from public holidays, mails are received into and leave the island at least once daily, five days a week. A private mail-bag system operates for persons in outlying areas.

The island is serviced by a network of 15 telephone exchanges, 13 of which are automatic and whose subscribers have direct dialling facilities. Kingscote is connected to Adelaide by a number of small capacity radio telephone systems.

Media

In addition to State-wide newspapers, Kangaroo Island has its own newspaper 'The Islander' which is published every Wednesday and has a circulation of about 1 300. This newspaper was first published in 1967. From 1907 to 1968 the island's newspaper was the 'Kangaroo Island Courier'.

There are no national or commercial radio or television stations on the island.

Tourism

Tourist activity on Kangaroo Island is derived from its varied and scenically attractive 480 kilometre coastline. This contains a diversity of broad sandy beaches, sheer cliffs, dune country, rocky headlands and sheltered coves.

A major attraction is the natural bushland and wildlife of Flinders Chase, a 59 000 hectare flora and fauna reserve covering most of the western end of the island.

Apart from general sightseeing activities, other recreational pursuits undertaken by visitors to the island are fishing, pleasure boating, camping and bush-walking.

On Kangaroo Island at 30 June 1976 there were four licensed hotels, three licensed motels, and two unlicensed motels providing accommodation for visitors, with a total of 229 rooms. There were also four caravan parks and a number of public camping grounds. Takings from accommodation during 1975-76 were \$612 000.

APPENDIX A

STATISTICAL SUMMARY

In the next 22 pages, a historical summary of some of the more important statistics relating to South Australia is shown. This is intended to present a general picture of the development of the State, with details being given (wherever they are available) for every fifth year for the period 1836-1956, and for each single year thereafter. Naturally the range of statistics available for the early years of the colony is very limited, and in addition it is not always possible to achieve perfect comparability in presenting details covering a period in excess of 130 years. Generally, all series on each page relate to either financial or calendar years but some financial year series have been included on pages which contain information shown in calendar years.

The first year shown on each page is the earliest for which any series on that page is available. Blanks at the top of some columns indicate that information relating to these particular series either was not collected or is not available for these early years, or is not available on a basis comparable to more recent statistics.

All major breaks in series are covered by footnotes, but minor changes are not so recorded, and the statistics should be interpreted with this in mind. An example can be quoted from the table on deaths from principal causes (page 753) where comparability is affected somewhat by changes in classification, particularly in 1950, but no footnote to this effect has been included.

The following standard symbols have been used throughout the summary:

- n.a.* not collected, not available for publication
- nil
- p* preliminary information subject to revision
- * not yet available
- break in continuity of figures

POPULATION(a)

| Year | Population Estimate at 31 Dec. | | | Annual Population Growth | | | |
|----------|--------------------------------|------------|------------|-------------------------------|------------------------------|----------------|---------------------------|
| | | | | Recorded Natural Increase (b) | Rate of Natural Increase (c) | Total Increase | Rate of Population Growth |
| | Males | Females | Persons | | | | |
| 1836 | 309 | 237 | 546 | | | 546 | |
| 1841 | 8 755 | 6 730 | 15 485 | | | 855 | 5.84 |
| 1846 | 14 711 | 11 182 | 25 893 | 577 | 22.29 | 3 433 | 15.29 |
| 1851 | 37 321 | 29 217 | 66 538 | 1 786 | 26.85 | 2 838 | 4.46 |
| 1856 | 56 264 | 51 622 | 107 886 | 3 341 | 30.97 | 10 499 | 10.78 |
| 1861 | 67 409 | 63 403 | 130 812 | 3 589 | 28.00 | 5 230 | 4.17 |
| 1866 | 88 024 | 80 883 | 168 907 | 4 029 | 24.39 | 7 430 | 4.60 |
| 1871 | 97 019 | 91 625 | 188 644 | 4 704 | 25.21 | 4 098 | 2.22 |
| 1876 | 116 894 | 107 666 | 224 560 | 4 674 | 21.51 | 14 484 | 6.89 |
| 1881 | 152 453 | 133 518 | 285 971 | 6 696 | 23.81 | 9 578 | 3.47 |
| 1886 | 160 814 | 145 896 | 306 710 | 6 943 | 22.54 | -2 603 | -0.84 |
| 1891 | 168 826 | 155 895 | 324 721 | 6 526 | 20.23 | 5 774 | 1.81 |
| 1896 | 179 024 | 173 043 | 352 067 | 5 974 | 16.95 | 0 073 | 0.03 |
| 1901 | (d)180 440 | (d)178 890 | (d)359 330 | (d) 5 105 | 14.29 | (d) 2 080 | 0.58 |
| 1906 | 184 803 | 181 710 | 366 513 | 5 049 | 13.90 | 3 892 | 1.07 |
| 1911 | 214 061 | 205 331 | 419 392 | 7 019 | 17.05 | 12 530 | 3.08 |
| 1916 (e) | 212 585 | 229 253 | 441 838 | 6 780 | 15.35 | -4 147 | -0.93 |
| 1921 | 251 170 | 250 572 | 501 742 | 6 992 | 14.07 | 10 736 | 2.19 |
| 1926 | 285 013 | 275 912 | 560 925 | 6 606 | 11.92 | 13 877 | 2.54 |
| 1931 | 289 397 | 287 682 | 577 079 | 4 191 | 7.28 | 2 612 | 0.45 |
| 1936 | 294 835 | 294 935 | 589 770 | 3 447 | 5.86 | 3 008 | 0.51 |
| 1941 (e) | 301 645 | 304 721 | 606 366 | 4 677 | 7.78 | 7 310 | 1.22 |
| 1946 (e) | 317 238 | 323 180 | 640 418 | 9 352 | 14.72 | 9 536 | 1.51 |
| 1951 | 375 188 | 368 597 | 743 785 | 10 279 | 14.03 | 20 942 | 2.90 |
| 1956 | 436 807 | 425 145 | 861 952 | 11 371 | 13.40 | 27 291 | 3.27 |
| 1957 | 448 411 | 437 841 | 886 252 | 11 960 | 13.68 | 24 300 | 2.82 |
| 1958 | 458 401 | 449 652 | 908 053 | 12 304 | 13.72 | 21 801 | 2.46 |
| 1959 | 471 868 | 462 629 | 934 497 | 12 429 | 13.49 | 26 444 | 2.91 |
| 1960 | 483 802 | 473 220 | 957 022 | 13 162 | 13.93 | 22 525 | 2.41 |
| 1961 | 494 600 | 484 800 | 979 400 | 14 584 | 15.03 | 22 400 | 2.68 |
| 1962 | 503 200 | 495 000 | 998 200 | 13 149 | 13.31 | 18 800 | 1.93 |
| 1963 | 514 700 | 507 700 | 1 022 400 | 13 185 | 13.05 | 24 200 | 2.42 |
| 1964 | 529 100 | 522 900 | 1 052 000 | 12 002 | 11.57 | 29 600 | 2.89 |
| 1965 | 544 300 | 538 700 | 1 083 000 | 12 146 | 11.38 | 31 000 | 2.95 |
| 1966 | 554 000 | 549 800 | 1 103 700 | 11 017 | 10.07 | 20 700 | 1.92 |
| 1967 | 559 300 | 556 700 | 1 115 900 | 11 315 | 10.19 | 12 200 | 1.10 |
| 1968 | 566 700 | 565 400 | 1 132 100 | 11 291 | 10.06 | 16 200 | 1.45 |
| 1969 | 574 700 | 574 700 | 1 149 400 | 12 640 | 11.09 | 17 200 | 1.52 |
| 1970 | 584 400 | 585 900 | 1 170 200 | 12 479 | 10.77 | 20 900 | 1.81 |
| 1971 | 597 200 | 598 400 | 1 195 600 | 13 310 | 11.32 | 18 500 | 1.55 |
| 1972 | 603 900 | 605 800 | 1 209 700 | 12 080 | 10.05 | 14 100 | 1.17 |
| 1973 | 612 800 | 614 500 | 1 227 300 | 10 572 | 8.68 | 17 700 | 1.44 |
| 1974 | 625 700 | 627 900 | 1 253 600 | 9 945 | 8.04 | 26 300 | 2.10 |
| 1975 | 628 000 | 629 400 | 1 257 300 | 10 039 | 8.01 | 3 700 | 0.30 |
| 1976 | * | * | p1 268 600 | 8 946 | 7.09 | 11 300 | 0.90 |

(a) Figures before January 1962 exclude full-blood Aborigines. Figures post-1970 include preliminary adjustment for census underenumeration. (b) Births and deaths of full-blood Aborigines, where identified in registrations, have been excluded from natural increase figures before 1 January 1962. (c) Excess of births over deaths per 1 000 of mean population. (d) Northern Territory included before 1901, but subsequently excluded. (e) During the 1914-18 War, defence personnel leaving the State were treated as departures, but during the 1939-45 War they were retained in the population and troops of other States and countries were excluded.

DEMOGRAPHY

| Year | Live Births | | Infant Deaths (a) | | Deaths | | Rates from Principal Causes (b) | | |
|----------|-------------|----------|-------------------|----------|--------|----------|---------------------------------|--------|-------------------|
| | Number | Rate (b) | Number | Rate (c) | Number | Rate (b) | Diseases of the Heart | Cancer | Tuber- culosis |
| | | | | | | | | | |
| 1846 | 937 | 36.19 | | | 360 | 14.02 | | | |
| 1851 | 2 759 | 41.47 | 539 | 195.36 | 973 | 14.62 | | | |
| 1856 | 4 488 | 41.60 | 610 | 135.92 | 1 147 | 10.63 | | | |
| 1861 | 5 551 | 43.30 | 1 064 | 191.68 | 1 962 | 15.30 | | 0.05 | 0.98 |
| 1866 | 6 782 | 41.06 | 1 385 | 204.22 | 2 753 | 16.67 | | 0.16 | 1.25 |
| 1871 | 7 082 | 37.95 | 851 | 120.16 | 2 378 | 12.74 | | 0.18 | 1.05 |
| 1876 | 8 224 | 37.84 | 1 228 | 149.32 | 3 550 | 16.34 | | 0.35 | 1.22 |
| 1881 | 10 708 | 38.08 | 1 364 | 127.38 | 4 012 | 14.27 | | 0.32 | 1.16 |
| 1886 | 11 177 | 36.29 | 1 409 | 126.06 | 4 234 | 13.75 | | 0.34 | 1.34 |
| 1891 | 10 737 | 33.36 | 976 | 90.77 | 4 211 | 13.08 | | 0.49 | 1.31 |
| 1896 | 10 012 | 28.44 | 1 015 | 101.02 | 4 038 | 11.47 | | 0.53 | 1.17 |
| 1901 | 9 079 | 25.41 | 909 | 100.12 | 3 974 | 11.12 | | 0.60 | 1.06 |
| 1906 | 8 921 | 24.57 | 675 | 75.66 | 3 872 | 10.66 | | 0.77 | 1.08 |
| 1911 | 11 057 | 28.86 | 670 | 60.60 | 4 038 | 9.81 | 1.04 | 0.74 | 0.85 |
| 1916 | 11 857 | 26.85 | 868 | 73.21 | 5 077 | 11.50 | 1.29 | 0.81 | 0.93 |
| 1921 | 11 974 | 24.09 | 784 | 65.48 | 4 982 | 10.02 | 1.13 | 0.92 | 0.80 |
| 1926 | 11 483 | 20.73 | 509 | 44.33 | 4 877 | 8.81 | 1.00 | 0.96 | 0.71 |
| 1931 | 9 079 | 15.77 | 330 | 36.35 | 4 888 | 8.49 | 1.39 | 1.20 | 0.58 |
| 1936 | 8 911 | 15.16 | 277 | 31.09 | 5 464 | 9.29 | 1.87 | 1.26 | 0.40 |
| 1941 | 10 965 | 18.24 | 356 | 32.47 | 6 288 | 10.46 | 2.62 | 1.26 | 0.37 |
| 1942 | 11 278 | 18.51 | 448 | 39.72 | 6 712 | 11.02 | 2.73 | 1.25 | 0.41 |
| 1943 | 13 145 | 21.43 | 482 | 36.67 | 6 482 | 10.57 | 2.82 | 1.31 | 0.35 |
| 1944 | 13 311 | 21.49 | 387 | 29.07 | 5 984 | 9.66 | 2.64 | 1.27 | 0.30 |
| 1945 | 14 033 | 22.38 | 394 | 28.08 | 6 049 | 9.65 | 2.87 | 1.23 | 0.32 |
| 1946 | 15 813 | 24.90 | 428 | 27.07 | 6 461 | 10.17 | 3.03 | 1.29 | 0.29 |
| 1947 | 16 317 | 25.23 | 396 | 24.27 | 6 215 | 9.61 | 2.86 | 1.28 | 0.30 |
| 1948 | 15 870 | 24.00 | 472 | 29.74 | 6 748 | 10.20 | 3.08 | 1.42 | 0.28 |
| 1949 | 16 042 | 23.58 | 444 | 27.68 | 6 373 | 9.37 | 2.90 | 1.23 | 0.21 |
| 1950 | 17 306 | 24.39 | 416 | 24.04 | 6 740 | 9.50 | 3.05 | 1.24 | 0.19 |
| 1951 | 17 463 | 23.84 | 428 | 24.51 | 7 184 | 9.81 | 3.24 | 1.24 | 0.15 |
| 1952 | 17 884 | 23.69 | 413 | 23.09 | 7 050 | 9.34 | 3.10 | 1.29 | 0.12 |
| 1953 | 18 156 | 23.39 | 375 | 20.65 | 6 962 | 8.97 | 3.00 | 1.27 | 0.06 |
| 1954 | 18 227 | 22.89 | 388 | 21.29 | 7 179 | 9.01 | 3.11 | 1.22 | 0.08 |
| 1955 | 18 494 | 22.55 | 431 | 23.30 | 7 536 | 9.19 | 3.12 | 1.28 | 0.06 |
| 1956 | 18 964 | 22.35 | 377 | 19.88 | 7 593 | 8.95 | 3.24 | 1.16 | 0.05 |
| 1957 | 19 536 | 22.35 | 403 | 20.63 | 7 576 | 8.67 | 2.91 | 1.29 | 0.05 |
| 1958 | 20 047 | 22.35 | 449 | 22.40 | 7 743 | 8.63 | 2.93 | 1.26 | 0.07 |
| 1959 | 20 372 | 22.12 | 422 | 20.71 | 7 943 | 8.62 | 2.89 | 1.22 | 0.05 |
| 1960 | 20 966 | 22.19 | 397 | 18.94 | 7 804 | 8.26 | 3.06 | 1.21 | 0.04 |
| 1961 | 22 399 | 23.09 | 448 | 20.00 | 7 815 | 8.06 | 2.92 | 1.26 | 0.06 |
| 1962 | 21 361 | 21.67 | 409 | 19.15 | 8 232 | 8.35 | 3.06 | 1.37 | 0.03 |
| 1963 | 21 367 | 21.20 | 399 | 18.67 | 8 201 | 8.14 | 2.99 | 1.27 | 0.04 |
| 1964 | 20 866 | 20.16 | 397 | 19.03 | 8 906 | 8.61 | 3.24 | 1.32 | 0.01 |
| 1965 | 20 891 | 19.63 | 385 | 18.43 | 8 788 | 8.26 | 3.11 | 1.30 | 0.03 |
| 1966 (d) | 20 362 | 18.61 | 364 | 17.88 | 9 345 | 8.54 | 3.22 | 1.32 | 0.02 |
| 1967 | 20 386 | 18.37 | 346 | 16.97 | 9 071 | 8.17 | 3.09 | 1.35 | 0.02 |
| 1968 | 21 207 | 18.89 | 345 | 16.27 | 9 916 | 8.83 | 3.29 | 1.41 | 0.02 |
| 1969 | 21 977 | 19.28 | 347 | 15.79 | 9 337 | 8.19 | 2.96 | 1.47 | 0.02 |
| 1970 | 22 617 | 19.52 | 367 | 16.23 | 10 138 | 8.75 | 3.20 | 1.43 | 0.01 |
| 1971 | 22 996 | 19.55 | 366 | 15.92 | 9 686 | 8.23 | 2.91 | 1.41 | 0.02 |
| 1972 | 21 844 | 18.37 | 367 | 16.80 | 9 764 | 8.21 | 2.97 | 1.48 | 0.01 |
| 1973 | 20 407 | 16.97 | 276 | 13.52 | 9 835 | 8.18 | 2.98 | 1.49 | 0.01 |
| 1974 | 20 181 | 16.52 | 312 | 15.46 | 10 236 | 8.40 | 3.01 | 1.51 | 0.01 |
| 1975 | 19 986 | 16.15 | 222 | 11.11 | 9 947 | 8.04 | 2.88 | 1.54 | 0.01 |
| 1976 | 18 947 | p 15.02 | 276 | 14.57 | 9 999 | p 7.92 | p 2.91 | p 1.45 | — |

(a) Under one year of age from 1871, under two years of age in prior years.
 (b) Rate per 1 000 of mean population. (c) Rate per 1 000 live births registered.
 (d) Vital events of full-blood Aborigines, where identified in registrations, were excluded before 1966.

SOCIAL DEVELOPMENT

Marriages and Divorces; Law and Order

| Year | Marriages | | Divorces (b) | Bank- ruptcies | Court Convictions | | Police | |
|----------------|-----------|----------|-----------------|-------------------|----------------------|---|--------------------|-------------------------------------|
| | Total | Rate (a) | | | Supreme Court (c) | Courts of Summary Juris- diction (d) | Active Strength | Net Expendi- ture by State |
| | | | | | | | | \$'000 |
| 1841 | | | | 36 | 37 | | | |
| 1846 | 220 | 8.50 | | 16 | 40 | | | |
| 1851 | 189 | 2.84 | | 106 | 103 | | 127 | |
| 1856 | 1 171 | 10.85 | | 88 | 85 | 2 919 | 174 | |
| 1861 | 1 158 | 9.03 | | 115 | 62 | 3 025 | 151 | |
| 1866 | 1 299 | 7.86 | | 252 | 107 | 4 341 | 208 | 90 |
| 1871 | 1 250 | 6.70 | | 247 | 91 | 4 864 | 187 | 74 |
| 1876 | 1 852 | 8.52 | | 200 | 129 | 7 905 | 257 | 108 |
| 1881 | 2 308 | 8.21 | | 696 | 213 | 13 231 | 371 | 164 |
| 1886 | 1 976 | 6.42 | 10 | 535 | 121 | 6 808 | 401 | 178 |
| 1891 | 2 315 | 7.21 | 5 | 142 | 85 | 6 918 | 388 | 172 |
| 1896 | 2 183 | 6.20 | 6 | 240 | 110 | 5 149 | 347 | 150 |
| 1901 | 2 304 | 6.45 | 6 | 165 | 98 | 4 968 | 359 | 152 |
| 1906 | 2 679 | 7.38 | 3 | 172 | 92 | 5 249 | 373 | 153 |
| 1911 | 4 036 | 9.80 | 20 | 190 | 74 | 7 303 | 423 | 183 |
| 1916 | 3 602 | 8.16 | 14 | 324 | 52 | 7 145 | 541 | 262 |
| 1921 | 4 383 | 8.82 | 88 | 155 | 97 | 8 968 | 566 | 391 |
| 1926 | 4 503 | 8.13 | 71 | 439 | 174 | 21 417 | 633 | 499 |
| 1931 | 3 069 | 5.33 | 138 | 996 | 274 | 14 760 | 763 | 641 |
| 1936 | 5 182 | 8.81 | 213 | 551 | 171 | 14 920 | 701 | 570 |
| 1941 | 6 855 | 11.40 | 273 | 284 | 177 | 21 990 | 707 | 689 |
| 1946 | 6 700 | 10.55 | 654 | 23 | 231 | (e) 20 585 | (e) 830 | (e) 819 |
| 1947 | 6 668 | 10.31 | 695 | 32 | 246 | 24 491 | 833 | 888 |
| 1948 | 6 704 | 10.14 | 630 | 32 | 185 | 24 164 | 869 | 1 052 |
| 1949 | 6 247 | 9.18 | 590 | 52 | 205 | 22 834 | 928 | 1 208 |
| 1950 | 6 585 | 9.28 | 661 | 44 | 207 | 25 496 | 942 | 1 398 |
| 1951 | 6 646 | 9.07 | 637 | 53 | 307 | 28 675 | 913 | 1 647 |
| 1952 | 6 241 | 8.27 | 581 | 76 | 328 | 27 432 | 952 | 2 073 |
| 1953 | 6 149 | 7.92 | 628 | 91 | 330 | 30 229 | 982 | 2 429 |
| 1954 | 6 190 | 7.77 | 594 | 89 | 312 | 25 482 | 986 | 2 617 |
| 1955 | 6 226 | 7.59 | 624 | 106 | 340 | 29 264 | 969 | 2 517 |
| 1956 | 6 277 | 7.40 | 567 | 150 | 362 | 28 221 | 1 018 | 3 060 |
| 1957 | 6 581 | 7.53 | 529 | 244 | 459 | 30 658 | 1 143 | 3 303 |
| 1958 | 6 505 | 7.25 | 483 | 278 | 457 | 32 621 | 1 183 | 3 677 |
| 1959 | 6 614 | 7.18 | 503 | 366 | 499 | 34 203 | 1 243 | 4 084 |
| 1960 | 6 607 | 6.99 | 610 | 368 | 580 | 42 531 | 1 301 | 4 499 |
| 1961 | 6 804 | 7.01 | 718 | 561 | 606 | 52 155 | 1 376 | 5 043 |
| 1962 | 7 021 | 7.12 | 685 | 620 | 718 | 53 531 | 1 466 | 5 651 |
| 1963 | 7 302 | 7.24 | 765 | 584 | 745 | 57 189 | 1 441 | 5 825 |
| 1964 | 7 765 | 7.50 | 887 | 675 | 629 | 55 408 | 1 496 | 6 245 |
| 1965 | 8 680 | 8.16 | 852 | 582 | 713 | 62 238 | 1 558 | 6 912 |
| 1966 | 9 051 | 8.27 | 1 069 | 648 | 738 | 71 694 | 1 595 | 7 319 |
| 1967 | 9 434 | 8.50 | 929 | 660 | 707 | 87 110 | 1 660 | 8 417 |
| 1968 | 9 652 | 8.60 | 915 | 759 | 692 | 105 027 | 1 777 | 9 137 |
| 1969 | 10 599 | 9.30 | 963 | 659 | 712 | 105 966 | 1 845 | 9 568 |
| 1970 | 10 864 | 9.38 | 939 | 611 | (f) 694 | 114 499 | 1 881 | 10 621 |
| 1971 | 10 833 | 9.21 | 1 264 | (g) 626 | 931 | 110 543 | 1 971 | 12 181 |
| 1972 | 10 829 | 9.10 | 1 235 | 643 | 964 | 123 063 | 2 063 | 12 961 |
| 1973 | 10 806 | 9.01 | 1 582 | 554 | 982 | (h) 94 068 | 2 167 | 15 107 |
| 1974 | 10 769 | 8.84 | 1 561 | 373 | 906 | 93 037 | 2 264 | 19 334 |
| 1975 | 9 843 | 7.95 | 1 812 | 437 | 989 | 104 402 | 2 461 | 28 035 |
| 1976 | 10 902 | * | * | 351 | 1 107 | * | 2 548 | 37 488 |

(a) Rate per 1 000 of mean population. (b) Dissolutions made absolute. (c) Distinct persons only. (d) Each type of offence counted separately when there are multiple charges against an individual. (e) Year ended 30 June from 1943. (f) From late 1970 covers also District Criminal Courts to which some jurisdiction transferred. (g) Year ended 30 June from 1971. (h) Excludes juvenile offenders from 1973.

SOCIAL DEVELOPMENT

Education

| Year | Primary and Secondary | | | | Tertiary | | Further Student Enrol- ments |
|------|------------------------|---------|------------------------|---------|---------------------|---|---------------------------------------|
| | Government Schools (a) | | Non-government Schools | | Uni- versities | Colleges of Advanced Education | |
| | Students | | Students | | | | |
| | No. | Primary | Secondary | No. | Primary | Secondary | |
| 1851 | 115 | 3 031 | | | | | |
| 1856 | 147 | 6 516 | | | | | |
| 1861 | 219 | 10 711 | | 236 | | | |
| 1866 | 292 | 14 690 | | n.a. | | | |
| 1871 | 307 | 15 791 | | n.a. | | | |
| 1876 | 281 | 25 889 | | 326 | | 58 | |
| 1881 | 405 | 36 888 | | 363 | | 74 | |
| 1886 | 504 | 44 405 | | n.a. | | 197 | |
| 1891 | 552 | 47 094 | | 285 | | 246 | |
| 1896 | 639 | 59 944 | | 232 | | 320 | |
| 1901 | 706 | 63 183 | | 230 | | 591 | |
| 1906 | 708 | 57 270 | | 215 | (c) 9 753 | 626 | |
| 1911 | 743 | 53 494 | 1 800 | 179 | (c) 11 121 | 641 | |
| 1916 | 857 | 63 935 | 3 047 | (d) 218 | (d) 12 785 | 491 | |
| 1921 | 973 | 77 111 | 3 067 | 171 | 13 951 | 1 338 | |
| 1926 | 1 019 | 79 204 | 6 527 | 188 | 16 139 | 1 575 | |
| 1931 | 1 075 | 81 218 | 10 503 | 186 | 14 310 | 2 092 | |
| 1936 | 1 100 | 75 411 | 9 280 | 174 | 13 993 | 2 025 | |
| 1941 | 1 006 | 63 303 | 10 761 | 167 | 13 915 | 2 211 | |
| 1946 | 811 | 61 242 | 11 870 | 145 | 16 310 | 3 723 | |
| 1947 | 782 | 63 853 | 11 723 | 143 | 16 468 | 4 045 | |
| 1948 | 773 | 66 653 | 11 550 | 142 | 17 169 | 4 266 | |
| 1949 | 759 | 71 337 | 11 922 | 146 | 18 426 | 4 126 | |
| 1950 | 743 | 76 369 | 12 732 | 148 | 19 655 | 4 069 | |
| 1951 | 728 | 81 642 | 14 106 | 146 | 20 677 | 3 720 | |
| 1952 | 716 | 89 630 | 15 121 | 146 | 22 393 | 3 612 | |
| 1953 | 723 | 97 262 | 16 933 | 148 | 23 631 | 3 565 | |
| 1954 | 716 | 105 022 | 17 972 | 157 | 24 949 | 3 555 | |
| 1955 | 701 | 111 909 | 19 485 | 157 | 26 840 | 3 617 | |
| 1956 | 699 | 118 365 | 22 134 | 163 | 29 050 | 3 828 | |
| 1957 | 694 | 123 132 | 24 734 | 163 | 30 504 | 4 424 | |
| 1958 | 674 | 125 678 | 28 189 | 161 | 32 425 | 4 816 | |
| 1959 | 668 | 129 850 | 33 042 | 162 | 33 896 | 5 300 | |
| 1960 | 681 | 132 372 | 37 901 | 163 | 35 370 | 5 723 | |
| 1961 | 688 | 135 274 | 41 889 | 165 | 35 652 | 6 250 | |
| 1962 | 682 | 136 924 | 46 499 | 164 | (e)24 962 (e)11 440 | 6 824 | |
| 1963 | 682 | 140 520 | 49 637 | 166 | 24 677 | 12 354 | 7 416 |
| 1964 | 685 | 145 042 | 54 026 | 170 | 24 761 | 12 890 | 8 203 |
| 1965 | 700 | 150 809 | 57 811 | 172 | 24 605 | 13 007 | 8 658 |
| 1966 | 700 | 154 253 | 60 834 | 172 | 24 188 | 12 999 | 9 364 |
| 1967 | 674 | 157 424 | 65 630 | 173 | 23 533 | 13 469 | 9 658 |
| 1968 | 683 | 157 997 | 68 814 | 171 | 22 814 | 13 599 | 9 803 |
| 1969 | 676 | 159 682 | 71 599 | 171 | 22 257 | 14 203 | 10 128 |
| 1970 | 681 | 156 922 | 71 866 | 170 | 22 464 | 14 642 | 10 176 |
| 1971 | 662 | 156 458 | 74 982 | 169 | 22 669 | 15 018 | 10 682 |
| 1972 | (f) 615 | 154 886 | 77 926 | 163 | 22 232 | 15 233 | 11 124 |
| 1973 | 614 | 152 698 | 79 088 | 163 | 21 929 | 15 806 | 11 497 |
| 1974 | 613 | 152 901 | 79 578 | 157 | 22 399 | 16 494 | 12 264 |
| 1975 | 619 | 151 975 | 82 737 | 151 | 22 479 | 16 818 | 12 876 |
| 1976 | 625 | 151 499 | 82 115 | 147 | 22 177 | 17 122 | 13 493 |
| | | | | | | | 14 560 |
| | | | | | | | 124 305 |

(a) Net enrolment to 1969, thereafter at census date (at or about 1 August). Includes Northern Territory before 1958. (b) Excludes students at Conservatorium of Music not also enrolled for degree or diploma subject. (c) On last school day. (d) Non-government schools compulsorily registered, previous years incomplete. From 1916 to 1961 net enrolment including Northern Territory. (e) From 1962 at census date (at or about 1 August). Excludes Northern Territory. (f) From 1972 includes only primary and secondary, before 1972 included technical institutions. (g) In approved courses at colleges of advanced education.

SOCIAL DEVELOPMENT

Health

| Year | Recognised Hospitals | | | | Mental Hospitals (a) | | Medical Practitioners Registered | General Nurses Registered |
|---------------|----------------------|------------------|----------------|---------|------------------------|-------------------------|----------------------------------|---------------------------|
| | Number of Hospitals | Patients Treated | Revenue | | Admissions During Year | Patients at end of Year | | |
| | | | State Govt Aid | Total | | | | |
| | | | '000 | '000 | | | | |
| 1846 | 1 | | | | 10 | 6 | 22 | |
| 1851 | 1 | 413 | | | 9 | 11 | 68 | |
| 1856 | 1 | 559 | | | 69 | 73 | 101 | |
| 1861 | 1 | 795 | | | 68 | 167 | 111 | |
| 1866 | 1 | 1 257 | | | 88 | 224 | 85 | |
| 1871 | 1 | 1 433 | | | 111 | 324 | 77 | |
| 1876 | 1 | 2 282 | | | 149 | 427 | 94 | |
| 1881 | 1 | 2 258 | | | 199 | 606 | 113 | |
| 1886 | 1 | 2 022 | | | 207 | 744 | 152 | |
| 1891 | 1 | 2 301 | | | 224 | 815 | 177 | |
| 1896 | 1 | 2 633 | | | 195 | 934 | 279 | |
| 1901 | 1 | 3 554 | | | 214 | 988 | 341 | |
| 1906 | 9 | 4 476 | | | 231 | 994 | 242 | |
| 1911 | 21 | 8 547 | 96 | 132 | 273 | 1 084 | 299 | |
| 1916 | 27 | 12 453 | 130 | 186 | 302 | 1 158 | 326 | |
| 1921 | 31 | 15 642 | 254 | 397 | 272 | 1 190 | 360 | |
| 1926 | 45 | 22 438 | 467 | 730 | 249 | 1 282 | 445 | 1 271 |
| 1931 | 51 | 26 505 | 356 | 574 | 250 | 1 395 | 457 | 1 601 |
| 1936 | 52 | 34 014 | 383 | 730 | 272 | 1 627 | 477 | 1 886 |
| 1941 | 55 | 40 593 | 607 | 1 063 | 247 | 1 905 | 814 | 2 562 |
| 1942 | 55 | 40 137 | 625 | 1 200 | 219 | 1 892 | 839 | 2 768 |
| 1943 | 57 | 41 620 | 642 | 1 301 | 197 | 1 889 | 846 | 2 914 |
| 1944 | 58 | 43 582 | 762 | 1 479 | 276 | 1 925 | 866 | 3 006 |
| 1945 | (b) | (b) | (b) | (b) | (b) | (b) | 883 | 3 153 |
| 1946 | 58 | 46 696 | 836 | 1 697 | 302 | 2 024 | 947 | 3 314 |
| 1947 | 59 | 52 388 | 1 135 | 2 133 | 332 | 2 107 | 983 | 3 380 |
| 1948 | 59 | 50 480 | 1 382 | 2 476 | 330 | 2 165 | 1 012 | 3 589 |
| 1949 | 60 | 53 558 | 1 671 | 3 065 | 398 | 2 213 | 1 053 | 3 808 |
| 1950 | 59 | 54 334 | 2 109 | 3 719 | 379 | 2 310 | 1 111 | 4 018 |
| 1951 | 60 | 57 401 | 2 694 | 4 503 | 452 | 2 411 | 1 172 | 4 199 |
| 1952 | 61 | 59 374 | 3 739 | 6 110 | 426 | 2 425 | 1 244 | 4 461 |
| 1953 | 62 | 61 681 | 4 673 | 7 442 | 498 | 2 534 | 1 202 | 4 585 |
| 1954 | 62 | 62 138 | 4 340 | 7 386 | 548 | 2 644 | 1 265 | 4 724 |
| 1955 | 63 | 64 310 | 5 524 | 8 819 | 516 | 2 612 | 1 348 | 4 884 |
| 1956 | 65 | 69 295 | 8 214 | 11 702 | 553 | 2 658 | 1 395 | 5 026 |
| 1957 | 65 | 73 249 | 11 370 | 15 449 | 543 | 2 594 | 1 469 | 5 122 |
| 1958 | 64 | 75 282 | 10 425 | 15 372 | 659 | 2 667 | 1 507 | 5 475 |
| 1959 | 65 | 79 426 | 10 260 | 15 638 | 712 | 2 643 | 1 601 | 5 583 |
| 1960 | 65 | 82 948 | 10 474 | 16 829 | 1 637 | 2 810 | 1 681 | 5 817 |
| 1961 | 66 | 87 386 | 10 155 | 17 414 | 1 846 | 2 833 | 1 739 | 6 123 |
| 1962 | 65 | 89 409 | 10 366 | 18 350 | 1 925 | 2 914 | 1 821 | 6 523 |
| 1963 | 65 | 94 144 | 10 007 | 19 307 | 2 604 | 2 799 | 1 883 | 6 879 |
| 1964 | 65 | 99 491 | 12 094 | 21 166 | 3 132 | 2 838 | 2 002 | 7 255 |
| 1965 | 65 | 105 098 | 14 171 | 24 084 | 3 061 | 2 752 | 2 080 | 7 699 |
| 1966 | 67 | 111 313 | 19 681 | 30 386 | 2 810 | 2 646 | 2 175 | 8 065 |
| 1967 | 65 | 117 693 | 22 138 | 34 532 | 2 866 | 2 497 | 2 282 | 8 467 |
| 1968 | 65 | 122 835 | 16 626 | 31 039 | 2 733 | 2 465 | 2 372 | 8 832 |
| 1969 | 65 | 132 864 | 21 364 | 37 064 | 2 964 | 2 283 | 2 474 | 9 275 |
| 1970 | 66 | 135 433 | 23 198 | 41 500 | 3 378 | 2 269 | 2 568 | 9 855 |
| 1971 | 67 | 135 927 | 32 971 | 53 942 | 3 527 | 2 193 | 2 707 | 10 506 |
| 1972 | 68 | 147 058 | 29 671 | 53 750 | 3 602 | 2 159 | 3 054 | 11 201 |
| 1973 | 69 | 158 261 | 37 951 | 64 633 | 3 225 | 2 208 | 3 154 | 11 923 |
| 1974 | 70 | 164 797 | 53 893 | 85 255 | 3 309 | 2 123 | 3 348 | 12 717 |
| 1975 | 71 | 168 832 | 82 194 | 124 930 | * | * | 3 767 | 13 863 |
| 1976 | 73 | 179 733 | 70 730 | 158 278 | * | * | * | * |

(a) From 1959-60 covers all in-patients (certified and voluntary) in institutions. Before this covered only certified patients in two 'long-term' institutions. (b) Year ended 30 June from 1946.

SOCIAL DEVELOPMENT

Social Welfare

| Year | Children Maintained or Subsidised by SA Govt | Pensions and Benefits Paid in South Australia by Commonwealth Government | | | | | Pensioners | | |
|---------|--|--|--------------------------|-------------------------------------|----------------------|--------------------------|------------------------|-----------------|----------------------------|
| | | Expenditure | Age and Invalid Pensions | Disability and Service Pensions (a) | Family Allowance (b) | National Health Services | Total (includes Other) | Age and Invalid | Disability and Service (a) |
| 1895-96 | 28.4 | | | | | | | | |
| 1900-01 | 35.4 | | | | | | | | |
| 1905-06 | 38.2 | | | | | | | | |
| 1910-11 | 46.4 | | | | | | 7 237 | | |
| 1915-16 | 67.0 | 544 | 20 | | | | 10 993 | 794 | |
| 1920-21 | 95.0 | 910 | 1 028 | | | 2 060 | 12 320 | 14 663 | |
| 1925-26 | 100.7 | 1 404 | 978 | | | 2 496 | 14 098 | 16 144 | |
| 1930-31 | 103.7 | 1 982 | 994 | | | 3 074 | 20 602 | 16 653 | |
| 1931-32 | 95.2 | 1 878 | 908 | | | 2 848 | 21 897 | 15 801 | |
| 1932-33 | 90.9 | 1 826 | 844 | | | 2 726 | 21 461 | 15 517 | |
| 1933-34 | 88.8 | 1 896 | 854 | | | 2 804 | 22 805 | 15 352 | |
| 1934-35 | 87.8 | 2 068 | 892 | | | 3 016 | 24 517 | 15 248 | |
| 1935-36 | 89.4 | 2 298 | 942 | | | 3 298 | 26 134 | 15 997 | |
| 1936-37 | 89.4 | 2 522 | 1 036 | | | 3 622 | 27 308 | 16 340 | |
| 1937-38 | 93.7 | 2 868 | 1 076 | | | 4 010 | 28 039 | 16 865 | |
| 1938-39 | 94.0 | 2 836 | 1 098 | | | 4 008 | 28 857 | 16 680 | |
| 1939-40 | 99.2 | 2 908 | 1 104 | | | 4 086 | 29 521 | 16 145 | |
| 1940-41 | 101.4 | 3 032 | 1 088 | | | 4 192 | 29 642 | 15 424 | |
| 1941-42 | 106.6 | 3 274 | 1 108 | 1 720 | | 6 162 | 28 422 | 15 296 | |
| 1942-43 | 113.3 | 3 628 | 1 274 | 1 810 | | 7 076 | 27 423 | 16 333 | |
| 1943-44 | 131.5 | 3 688 | 1 654 | 1 908 | | 8 076 | 27 530 | 18 472 | |
| 1944-45 | 143.1 | 3 624 | 1 838 | 1 870 | | 8 276 | 27 507 | 22 071 | |
| 1945-46 | 155.2 | 4 670 | 2 272 | 2 854 | 244 | 11 262 | 29 512 | 30 687 | |
| 1946-47 | 197.8 | 5 102 | 2 692 | 3 196 | 856 | 13 212 | 32 387 | 35 117 | |
| 1947-48 | 224.4 | 6 284 | 3 046 | 3 212 | 770 | 14 708 | 34 229 | 38 505 | |
| 1948-49 | 255.6 | 7 170 | 3 718 | 4 024 | 1 054 | 17 442 | 35 470 | 42 931 | |
| 1949-50 | 287.5 | 7 888 | 4 178 | 4 938 | 1 220 | 19 966 | 36 524 | 47 303 | |
| 1950-51 | 337.6 | 8 600 | 5 214 | 7 564 | 2 122 | 25 216 | 36 582 | 51 589 | |
| 1951-52 | 446.7 | 10 360 | 6 442 | 8 298 | 3 554 | 30 532 | 37 363 | 54 758 | |
| 1952-53 | 466.8 | 12 616 | 7 130 | 9 540 | 4 154 | 25 878 | 39 700 | 58 591 | |
| 1953-54 | 475.7 | 14 150 | 7 686 | 9 154 | 4 880 | 38 202 | 42 216 | 61 039 | |
| 1954-55 | 491.2 | 15 310 | 8 778 | 9 428 | 5 824 | 41 560 | 45 147 | 63 767 | |
| 1955-56 | 553.0 | 17 718 | 9 074 | 10 998 | 6 140 | 46 322 | 47 754 | 66 535 | |
| 1956-57 | 494.0 | 19 244 | 9 575 | 10 500 | 6 710 | 48 926 | 50 209 | 68 291 | |
| 1957-58 | 545.6 | 21 432 | 10 664 | 10 860 | 7 704 | 54 256 | 52 699 | 69 852 | |
| 1958-59 | 674.6 | 23 150 | 10 860 | 12 618 | 9 868 | 60 460 | 55 181 | 71 331 | |
| 1959-60 | 778.1 | 26 366 | 12 697 | 11 794 | 11 977 | 66 157 | 57 336 | 72 013 | |
| 1960-61 | 914.8 | 28 537 | 13 722 | 14 092 | 12 811 | 73 594 | 60 483 | 72 695 | |
| 1961-62 | 1 107.5 | 32 844 | 14 241 | 12 671 | 14 567 | 80 283 | 64 374 | 74 454 | |
| 1962-63 | 1 129.9 | 33 951 | 14 867 | 12 861 | 16 066 | 83 393 | 64 156 | 73 239 | |
| 1963-64 | 1 275.5 | 36 120 | 16 224 | 15 916 | 17 080 | 91 514 | 65 573 | 72 518 | |
| 1964-65 | 1 516.8 | 38 509 | 16 006 | 16 563 | 18 948 | 96 362 | 66 798 | 70 678 | |
| 1965-66 | 1 716.6 | 39 691 | 17 692 | 16 988 | 21 254 | 102 661 | 67 999 | 68 439 | |
| 1966-67 | 1 914.4 | 43 720 | 16 776 | 19 063 | 23 100 | 111 394 | 70 521 | 66 624 | |
| 1967-68 | 2 008.2 | 46 711 | 17 252 | 17 835 | 25 448 | 116 625 | 74 016 | 65 078 | |
| 1968-69 | 2 235.9 | 50 828 | 19 065 | 18 162 | 28 411 | 128 940 | 76 616 | 62 986 | |
| 1969-70 | 2 466.6 | 58 720 | 19 435 | 20 287 | 33 476 | 145 857 | 85 076 | 61 928 | |
| 1970-71 | 2 912.8 | 64 714 | 20 405 | 18 284 | 41 773 | 161 687 | 88 936 | 60 406 | |
| 1971-72 | 2 628.5 | 76 545 | 22 493 | 19 766 | 50 587 | 189 255 | 92 771 | 58 682 | |
| 1972-73 | 3 079.3 | 101 625 | 25 917 | 22 780 | 57 851 | 236 747 | 104 350 | 59 707 | |
| 1973-74 | 3 537.7 | 131 771 | 31 350 | 20 098 | 66 005 | 291 823 | 116 117 | 59 522 | |
| 1974-75 | 4 858.0 | 184 218 | 41 774 | 20 237 | 82 399 | 400 590 | 123 627 | 59 130 | |
| 1975-76 | 5 509.5 | 234 266 | 49 377 | 22 896 | 222 397 | 631 658 | 130 229 | 59 536 | |

(a) From 1974-75, war pensions called disability pensions.

(b) Family allowance known as child endowment before 1975-76.

EMPLOYMENT AND UNEMPLOYMENT

| Year | Total Wage and Salary Earners (a) | | Factory Employment (b) | | Rural Employment (c) | | Unemployment Benefits | | Unemployed Registered (end June) (d) |
|-------------------|-----------------------------------|----------|------------------------|-------------|----------------------|-------------|------------------------|-------------|--------------------------------------|
| | Males | Females | Males | Females | Males | Females | Average No. on Benefit | Amount Paid | |
| | '000 | '000 | '000 | '000 | '000 | '000 | | \$'000 | |
| 1911 | | | 22.6 | 5.3 | | | | | |
| 1925-26 | | | 33.1 | 6.9 | 38.8 | 3.2 | | | 1 391 |
| 1930-31 | | | 19.3 | 4.6 | 38.9 | 2.6 | | | 23 588 |
| 1931-32 | | | 18.9 | 4.9 | 39.2 | 2.8 | | | 23 738 |
| 1932-33 | | | 20.9 | 5.4 | 39.7 | 3.1 | | | 20 516 |
| 1933-34 | | | 23.7 | 5.7 | 40.0 | 3.4 | | | 16 559 |
| 1934-35 | | | 27.3 | 6.2 | 41.4 | 3.1 | | | 13 111 |
| 1935-36 | | | 31.4 | 7.1 | 41.7 | 2.6 | | | 10 970 |
| 1936-37 | | | 33.4 | 7.3 | 42.3 | 3.0 | | | 8 033 |
| 1937-38 | | | 36.3 | 7.8 | 41.4 | 2.9 | | | 7 737 |
| 1938-39 | | | 35.4 | 8.0 | 41.3 | 2.5 | | | 8 574 |
| 1939-40 | | | 36.3 | 8.7 | 38.7 | 2.8 | | | 5 978 |
| 1940-41 | | | 40.1 | 10.8 | <i>n.a.</i> | <i>n.a.</i> | | | 1 745 |
| 1941-42 | | | 49.9 | 15.3 | <i>n.a.</i> | <i>n.a.</i> | | | — |
| 1942-43 | | | 52.8 | 20.0 | 29.6 | 5.1 | | | — |
| 1943-44 | | | 50.7 | 18.9 | 32.9 | 6.5 | | | — |
| 1944-45 | | | 49.1 | 16.4 | 33.6 | 6.2 | | | — |
| 1945-46 | | | 49.5 | 13.7 | 35.7 | 5.5 | 778 | 146.4 | 3 147 |
| 1946-47 | | | 56.7 | 14.0 | 38.1 | 5.0 | 200 | 40.2 | 1 310 |
| 1947-48 | | | 59.1 | 14.3 | 38.1 | 5.8 | 51 | 8.0 | 778 |
| 1948-49 | | | 60.9 | 14.9 | 38.1 | 5.5 | 14 | 1.2 | 654 |
| 1949-50 | | | 63.1 | 15.3 | 38.6 | 7.0 | 326 | 66.2 | 431 |
| 1950-51 | | | 66.8 | 16.2 | 36.9 | 6.1 | 6 | 0.8 | 406 |
| 1951-52 | | | 68.0 | 15.9 | 37.4 | 4.7 | 17 | 2.0 | 1 613 |
| 1952-53 | | | 67.1 | 13.4 | 38.3 | 5.0 | 841 | 264.0 | 2 343 |
| 1953-54 | 178.6 | 55.7 | 70.7 | 14.8 | 37.8 | 5.6 | 270 | 100.4 | 964 |
| 1954-55 | 183.9 | 60.1 | 73.7 | 15.9 | 37.6 | 5.0 | 66 | 24.8 | 1 207 |
| 1955-56 | 194.0 | 64.0 | 76.1 | 16.4 | 37.3 | 4.7 | 77 | 22.2 | 1 948 |
| 1956-57 | 193.3 | 64.1 | 75.5 | 16.4 | 36.4 | 3.9 | 681 | 227.4 | 3 363 |
| 1957-58 | 194.4 | 65.9 | 75.9 | 16.6 | 35.2 | 2.7 | 1 534 | 611.0 | 5 082 |
| 1958-59 | 201.1 | 68.4 | 77.4 | 16.7 | 35.0 | 3.6 | 1 641 | 724.8 | 3 958 |
| 1959-60 | 206.4 | 72.6 | 81.3 | 17.7 | 33.8 | 2.6 | 1 223 | 498.2 | 4 547 |
| 1960-61 | 207.5 | 72.3 | 81.9 | 18.1 | 34.0 | 2.3 | 1 610 | 685.6 | 9 035 |
| 1961-62 | 211.2 | 76.7 | 81.8 | 17.3 | 33.7 | 2.1 | 3 643 | 1 785.6 | 6 886 |
| 1962-63 | 219.6 | 80.9 | 86.7 | 18.6 | 33.3 | 1.9 | 2 244 | 1 184.7 | 6 479 |
| 1963-64 | 229.4 | 86.0 | 90.9 | 19.9 | 33.2 | 1.4 | 1 513 | 751.1 | 4 339 |
| 1964-65 | 239.9 | 93.4 | 94.7 | 21.5 | 32.6 | 1.3 | 800 | 390.4 | 3 533 |
| 1965-66 | (e)242.8 | (e)106.1 | 96.2 | 22.1 | 32.1 | 1.0 | 1 306 | 708.9 | 7 357 |
| 1966-67 | 245.7 | 109.8 | 96.1 | 22.1 | 31.3 | 0.8 | 3 094 | 1 653.2 | 8 484 |
| 1967-68 | 254.0 | 116.2 | 98.9 | 22.5 | 29.7 | 0.7 | 3 299 | 1 637.4 | 8 359 |
| 1968-69 | 261.6 | 121.4 | (f) 91.0 | (f) 22.1 | 29.4 | 0.6 | 2 576 | 1 286.1 | 6 300 |
| 1969-70 | 266.6 | 129.9 | 94.6 | 23.8 | 28.9 | 0.6 | 1 636 | 1 008.4 | 6 360 |
| 1970-71 | (g)263.6 | (g)133.5 | <i>n.a.</i> | <i>n.a.</i> | 28.2 | 0.5 | 2 043 | 1 378.3 | 7 975 |
| 1971-72 | 263.4 | 136.8 | 96.2 | 25.4 | 27.3 | 0.5 | 3 564 | 2 930.1 | 12 328 |
| 1972-73 | 270.5 | 145.9 | 95.6 | 25.8 | 27.1 | 0.4 | 4 350 | 5 106.9 | 9 339 |
| 1973-74 | 278.4 | 161.0 | 98.7 | 29.4 | 26.6 | 0.4 | 3 246 | 6 142.9 | (h) 7 983 |
| 1974-75 | 278.3 | 159.5 | (i) 94.3 | (i) 27.0 | 26.6 | 0.3 | 10 941 | 20 474.8 | 20 336 |
| 1975-76 | 278.5 | 166.5 | p 89.4 | p 25.7 | <i>n.a.</i> | <i>n.a.</i> | 15 118 | 36 002.0 | 19 331 |

(a) At June; includes all industries except rural, defence forces and private domestic service.
 (b) Average employment including working proprietors during the year.
 (c) Permanent employees only. (d) Includes Northern Territory registrations.
 (e) From June 1966 a new definition of Labour Force (affecting mainly females) was adopted. (f) Direct comparisons with figures for previous years are not possible because of changes in the scope of the census and in the census units. (g) From June 1971 excludes trainee teachers, some of whom were classified as wage earners for earlier periods. Figures from June 1971 to June 1974 revised using 1971 Census benchmarks. (h) From July 1973 the definition of school leavers was changed. (i) From 1974-75 exclude single establishment enterprises employing less than four persons.

WAGES

| Year | State Living Wage (a) | | Federal Basic and Minimum Wage Rates (a) (d) | | Minimum Weekly Wage Rates (b) | |
|------|-----------------------|-----------|--|-----------|-------------------------------|----------|
| | Males | Females | Males | Females | Males | Females |
| | \$ | \$ | \$ | \$ | \$ | \$ |
| 1911 | | | 5-10 | | | |
| 1916 | 5-40 | | 6-15 | | 5-90 | 2-48 |
| 1921 | 7-95 | 3-50 | 7-95 | | 8-94 | 4-52 |
| 1926 | 8-55 | 3-95 | 8-55 | | 9-57 | 5-00 |
| 1931 | 6-30 | 3-15 | 5-81 | | 7-50 | 4-39 |
| 1932 | 6-30 | 3-15 | 5-72 | | 7-26 | 4-09 |
| 1933 | 6-30 | 3-15 | 5-96 | | 7-34 | 4-10 |
| 1934 | 6-30 | 3-15 | 6-30 | | 7-55 | 4-19 |
| 1935 | 6-60 | 3-15 | 6-70 | | 7-79 | 4-24 |
| 1936 | 6-60 | 3-30 | 6-90 | | 7-95 | 4-33 |
| 1937 | 7-40 | 3-65 | 7-40 | | 8-58 | 4-68 |
| 1938 | 7-40 | 3-65 | 7-60 | | 8-71 | 4-78 |
| 1939 | 7-80 | 3-80 | 7-70 | | 9-41 | 4-96 |
| 1940 | 8-40 | 4-10 | 8-00 | | 9-85 | 5-21 |
| 1941 | 8-70 | 4-35 | 8-40 | | 10-58 | 5-54 |
| 1942 | 9-40 | 4-62 | 9-30 | | 11-50 | 6-02 |
| 1943 | 9-40 | 4-62 | 9-40 | | 11-61 | 6-12 |
| 1944 | 9-40 | 4-62 | 9-30 | | 11-58 | 6-53 |
| 1945 | 9-40 | 4-62 | 9-30 | | 11-60 | 6-72 |
| 1946 | 9-85 | 5-50 | 10-20 | | 12-41 | 7-60 |
| 1947 | 10-60 | 5-90 | 10-60 | | 13-78 | 8-80 |
| 1948 | 11-70 | 6-65 | 11-60 | | 15-22 | 9-51 |
| 1949 | 12-50 | 6-85 | 12-60 | | 16-44 | 10-10 |
| 1950 | 15-80 | 11-85 | 15-80 | 11-85 | 19-79 | 14-21 |
| 1951 | 19-50 | 14-60 | 19-50 | 14-60 | 23-60 | 17-02 |
| 1952 | 22-90 | 17-15 | 22-90 | 17-15 | 27-08 | 19-68 |
| 1953 | 23-10 | 17-30 | 23-10 | 17-30 | 27-35 | 19-91 |
| 1954 | 23-10 | 17-30 | 23-10 | 17-30 | 28-16 | 19-99 |
| 1955 | 23-10 | 17-30 | 23-10 | 17-30 | 28-50 | 20-18 |
| 1956 | 24-10 | 18-05 | 24-10 | 18-05 | 29-63 | 20-92 |
| 1957 | 25-10 | 18-80 | 25-10 | 18-80 | 30-69 | 21-95 |
| 1958 | 25-60 | 19-20 | 25-60 | 19-20 | 31-24 | 22-38 |
| 1959 | 27-10 | 20-30 | 27-10 | 20-30 | 33-99 | 23-92 |
| 1960 | 27-10 | 20-30 | 27-10 | 20-30 | 34-22 | 24-29 |
| 1961 | 28-30 | 21-20 | 28-30 | 21-20 | 35-46 | 25-20 |
| 1962 | 28-30 | 21-20 | 28-30 | 21-20 | 35-65 | 25-23 |
| 1963 | 28-30 | 21-20 | 28-30 | 21-20 | 36-40 | 25-52 |
| 1964 | 30-30 | 22-70 | 30-30 | 22-70 | 38-69 | 27-29 |
| 1965 | 30-30 | 22-70 | 30-30 | 22-70 | 39-48 | 27-75 |
| 1966 | 32-30 | 24-20 | 32-30 | 24-20 | 41-75 | 29-42 |
| 1967 | 33-30 | 25-20 | (c) 37-05 | | 43-79 | 31-32 |
| 1968 | 34-65 | 26-55 | 38-40 | | 48-23 | 33-60 |
| 1969 | (d) 34-65 | (d) 26-55 | 41-90 | | 50-76 | 35-94 |
| 1970 | (d) 34-65 | (a) 26-55 | 41-90 | | 52-12 | 37-51 |
| 1971 | 37-85 | 29-00 | 45-90 | | 59-38 | 44-16 |
| 1972 | 39-85 | 31-00 | 50-60 | | 65-82 | 50-50 |
| 1973 | 43-15 | 34-10 | 59-60 | | 75-20 | 62-11 |
| 1974 | 46-50 | 37-30 | 67-60 | (e) 60-80 | 103-32 | 91-47 |
| 1975 | (f) | (f) | 82-40 | | 115-13 | 103-34 |
| 1976 | (f) | (f) | 100-20 | | p 132-19 | p 125-11 |

(a) At end of year. (b) Adult rates, at end of year, for all industries excluding rural. (c) Provisions for minimum wages (for adult males only) were inserted in Federal Awards in July 1966 and basic wages were replaced by the total wage concept in July 1967. (d) An economic loading of 3 per cent of the sum of the living wage plus margin was added to all award rates of pay from December 1969 to January 1971. (e) Between May 1974 and June 1975 the minimum wage for adult males was extended to adult females in three steps. (f) Increased to \$48.20 and \$38.60 for males and females respectively from May 1975 and abolished in September 1975, award rates thereafter being specified as total wages.

PRICES

| Year | Retail Price Indexes: Adelaide | | | | | | Agricultural Produce at Principal Markets | | |
|--------------|--------------------------------|----------------|------------|--------------|---------|------------|---|--------------------|---------------|
| | 'C' Series (a) | | | Consumer (b) | | | Wheat (per tonne) (c) | Barley (per tonne) | Wool (per kg) |
| | Food and Groceries | Rent | All Groups | Food | Housing | All Groups | | | |
| | | | | | | | \$ | \$ | cents |
| 1901 | 575 | | | | | | | | |
| 1906 | 549 | | | | | | | | |
| 1911 | 570 | | | | | | 12.71 | 16.53 | 15.59 |
| 1916 | 835 | 573 | 798 | | | | 17.45 | 14.33 | 19.78 |
| 1921 | 941 | 819 | 989 | | | | 29.39 | 19.49 | 24.74 |
| 1926 | 1 045 | 927 | 1 026 | | | | 22.82 | 17.64 | 27.45 |
| 1931 | 789 | 755 | 837 | | | | 8.41 | 9.92 | 12.52 |
| 1932 | 761 | 691 | 802 | | | | 11.65 | 13.05 | 12.63 |
| 1933 | 731 | 694 | 789 | | | | 10.33 | 9.83 | 13.45 |
| 1934 | 767 | 700 | 806 | | | | 9.66 | 10.67 | 25.07 |
| 1935 | 780 | 736 | 820 | | | | 11.17 | 11.95 | 15.04 |
| 1936 | 798 | 795 | 839 | | | | 14.07 | 9.83 | 21.89 |
| 1937 | 826 | 832 | 859 | | | | 18.92 | 17.90 | 25.09 |
| 1938 | 861 | 868 | 888 | | | | 13.08 | 15.52 | 20.72 |
| 1939 | 897 | 888 | 906 | | | | 8.34 | 11.95 | 16.71 |
| 1940 | 900 | 892 | 936 | | | | 14.92 | 15.61 | 21.94 |
| 1941 | 905 | 893 | 988 | | | | 16.42 | 21.43 | 21.76 |
| 1942 | 1 046 | 893 | 1 075 | | | | 16.76 | 14.64 | 21.58 |
| 1943 | 1 003 | 893 | 1 102 | | | | 19.51 | 19.84 | 25.07 |
| 1944 | 993 | 892 | 1 098 | | | | 22.71 | 19.05 | 24.96 |
| 1945 | 1 002 | 892 | 1 102 | | | | 20.69 | 24.07 | 24.71 |
| 1946 | 1 006 | 894 | 1 120 | | | | 29.47 | 27.91 | 24.78 |
| 1947 | 1 067 | 897 | 1 165 | | | | 36.49 | 39.33 | 40.50 |
| 1948 | 1 230 | 903 | 1 277 | | | | 56.70 | 74.30 | 65.92 |
| 1949 | 1 351 | 912 | 1 393 | 38.6 | 38.4 | 45.0 | 45.64 | 36.95 | 81.09 |
| 1950 | 1 494 | 929 | 1 521 | 41.7 | 40.0 | 48.4 | 52.98 | 49.69 | 106.13 |
| 1951 | 1 931 | 949 | 1 833 | 48.2 | 42.5 | 54.6 | 53.76 | 51.54 | 237.28 |
| 1952 | 2 380 | 1 055 | 2 159 | 62.5 | 47.6 | 66.8 | 60.63 | 71.74 | 118.54 |
| 1953 | 2 444 | 1 155 | 2 246 | 68.7 | 55.9 | 73.1 | 61.77 | 71.12 | 137.74 |
| 1954 | 2 525 | 1 174 | 2 277 | 71.2 | 61.5 | 74.7 | 53.35 | 44.84 | 138.18 |
| 1955 | 2 657 | 1 247 | 2 354 | 72.9 | 63.2 | 75.6 | 49.05 | 59.97 | 120.66 |
| 1956 | 2 871 | 1 358 | 2 466 | 76.2 | 67.6 | 78.1 | 49.60 | 46.74 | 103.57 |
| 1957 | 2 710 | 1 468 | 2 463 | 78.9 | 72.3 | 81.2 | 53.28 | 48.50 | 135.63 |
| 1958 | 2 768 | 1 592 | 2 536 | 76.9 | 74.9 | 81.8 | 53.50 | 52.38 | 103.09 |
| 1959 | 2 998 | 1 674 | 2 647 | 80.7 | 76.7 | 83.6 | 51.51 | 49.43 | 83.84 |
| 1960 | | | | 84.6 | 78.3 | 86.2 | 53.83 | 44.53 | 98.88 |
| 1961 | | | | 90.9 | 83.2 | 89.8 | 55.37 | 40.39 | 88.49 |
| 1962 | | | | 87.7 | 85.9 | 89.5 | 55.70 | 49.43 | 91.69 |
| 1963 | | | | 86.6 | 86.7 | 89.1 | 53.94 | 48.94 | 98.92 |
| 1964 | | | | 88.8 | 88.7 | 90.2 | 52.65 | 49.12 | 119.53 |
| 1965 | | | | 93.9 | 92.1 | 93.9 | 51.88 | 50.84 | 97.31 |
| | | Not calculated | | | | | | | |
| 1966 | | | | 97.1 | 95.7 | 97.0 | 55.15 | 51.85 | 102.98 |
| 1967 | | | | 100.0 | 100.0 | 100.0 | 54.67 | 52.56 | 99.69 |
| 1968 | | | | 104.7 | 102.1 | 102.9 | 58.86 | 52.47 | 82.87 |
| 1969 | | | | 106.4 | 104.7 | 105.3 | 50.01 | 41.09 | 91.76 |
| 1970 | | | | 107.1 | 109.3 | 108.2 | 51.88 | 36.82 | 75.02 |
| 1971 | | | | 109.5 | 115.9 | 112.5 | 52.98 | 49.21 | 59.74 |
| 1972 | | | | 113.6 | 124.4 | 119.2 | 55.26 | 40.96 | 72.21 |
| 1973 | | | | 123.1 | 133.3 | 126.5 | 56.09 | 59.30 | 178.07 |
| 1974 | | | | 148.3 | 150.6 | 143.9 | 103.20 | 87.59 | 176.54 |
| 1975 | | | | 163.7 | 185.3 | 169.7 | 108.41 | 106.11 | 120.12 |
| 1976 | | | | 180.6 | 222.1 | 190.5 | p 104.92 | p 98.05 | 134.46 |

(a) Base: Average all groups six capital cities 1923 to 1927 = 1 000.

(b) Base of each group 1966-67 = 100.0. Index numbers are for year ended 30 June in the year stated.

(c) Bulk wheat from 1962, previously bagged.

METEOROLOGY, ADELAIDE

| Year | Rainfall | | Evaporation | Sunshine | Temperature | | |
|--------------|--------------|-------|-------------|----------|-----------------|-----------------|------|
| | Days of Rain | Total | Total | Total | Extreme Maximum | Extreme Minimum | Mean |
| | Days | mm | mm | Hours | °C | °C | °C |
| 1841 | 93 | 456 | | | | | |
| 1846 | 114 | 683 | | | | | |
| 1851 | 128 | 786 | | | | | |
| 1856 | 118 | 633 | | | | | |
| 1861 | 147 | 611 | | | 42·8 | 1·7 | 17·4 |
| 1866 | 116 | 511 | | | 43·1 | 2·9 | 17·7 |
| 1871 | 137 | 591 | 1 345 | | 44·1 | 3·0 | 17·8 |
| 1876 | 110 | 341 | 1 548 | | 45·7 | 0·3 | 16·9 |
| 1881 | 135 | 458 | 1 422 | | 41·0 | 1·8 | 16·7 |
| 1886 | 141 | 366 | 1 421 | 2 588·0 | 44·7 | 2·0 | 17·1 |
| 1891 | 113 | 356 | 1 322 | 2 752·7 | 39·3 | 2·3 | 16·8 |
| 1896 | 121 | 385 | 1 337 | 2 643·9 | 44·0 | 1·3 | 17·4 |
| 1901 | 124 | 457 | 1 494 | 2 522·6 | 43·3 | 1·8 | 17·5 |
| 1906 | 127 | 674 | 1 400 | 2 366·4 | 45·1 | 2·3 | 17·6 |
| 1911 | 127 | 407 | 1 223 | 2 415·0 | 39·3 | 1·6 | 17·2 |
| 1916 | 142 | 715 | 1 411 | 2 511·9 | 41·9 | 3·5 | 16·7 |
| 1921 | 100 | 575 | 1 478 | 2 658·0 | 43·1 | 2·8 | 18·2 |
| 1926 | 116 | 564 | 1 473 | 2 688·6 | 40·1 | 3·0 | 17·3 |
| 1931 | 145 | 565 | 1 517 | 2 534·5 | 45·9 | 3·1 | 16·8 |
| 1936 | 123 | 491 | 1 525 | 2 430·8 | 39·8 | 2·8 | 17·1 |
| 1941 | 126 | 573 | 1 604 | 2 471·8 | 43·3 | 3·3 | 16·9 |
| 1942 | 133 | 646 | 1 674 | 2 422·2 | 44·7 | 3·4 | 17·3 |
| 1943 | 135 | 453 | 1 595 | 2 416·7 | 44·6 | 2·7 | 16·4 |
| 1944 | 114 | 435 | 1 633 | 2 333·7 | 39·7 | 0·3 | 16·8 |
| 1945 | 105 | 453 | 1 523 | 2 431·2 | 41·7 | 1·1 | 16·7 |
| 1946 | 135 | 574 | 1 385 | 2 301·0 | 41·3 | 2·0 | 16·3 |
| 1947 | 145 | 556 | 1 573 | 2 311·3 | 40·7 | 3·3 | 16·9 |
| 1948 | 122 | 544 | 1 622 | 2 401·7 | 43·4 | 2·9 | 16·3 |
| 1949 | 119 | 463 | 1 492 | 2 317·7 | 38·0 | 2·6 | 15·8 |
| 1950 | 91 | 408 | 1 657 | 2 677·5 | 40·0 | 3·6 | 17·0 |
| 1951 | 135 | 646 | 1 645 | 2 338·7 | 40·5 | 2·6 | 16·9 |
| 1952 | 128 | 508 | 1 523 | 2 459·2 | 40·8 | 1·6 | 15·8 |
| 1953 | 121 | 508 | 1 712 | 2 584·7 | 41·3 | 3·9 | 16·6 |
| 1954 | 109 | 425 | 1 680 | 2 502·6 | 39·4 | 3·4 | 16·7 |
| 1955 | 134 | 624 | 1 677 | 2 396·1 | 42·8 | 3·6 | 16·7 |
| 1956 | 154 | 692 | 1 638 | 2 378·6 | 38·3 | 4·1 | 16·4 |
| 1957 | 110 | 424 | 1 736 | 2 672·5 | 40·9 | 3·4 | 16·8 |
| 1958 | 121 | 446 | 1 672 | 2 454·7 | 39·0 | 1·2 | 16·4 |
| 1959 | 88 | 288 | 1 750 | 2 591·9 | 43·3 | 3·1 | 17·3 |
| 1960 | 129 | 586 | 1 606 | 2 355·6 | 41·8 | 2·4 | 16·3 |
| 1961 | 122 | 379 | <i>n.a.</i> | 2 586·3 | 40·8 | 2·9 | 17·8 |
| 1962 | 125 | 456 | <i>n.a.</i> | 2 559·1 | 42·7 | 4·2 | 17·2 |
| 1963 | 118 | 621 | 1 620 | 2 369·1 | 39·9 | 3·3 | 17·0 |
| 1964 | 135 | 556 | 1 507 | 2 199·5 | 40·3 | 2·3 | 16·3 |
| 1965 | 111 | 339 | 1 648 | 2 439·1 | 38·8 | 2·6 | 17·3 |
| 1966 | 123 | 495 | 1 612 | 2 431·6 | 40·7 | 3·3 | 16·9 |
| 1967 | 89 | 257 | 1 939 | 2 841·3 | 39·0 | 3·9 | 17·3 |
| 1968 | 141 | 653 | 1 870 | 2 409·7 | 43·1 | 2·2 | 17·0 |
| 1969 | 112 | 525 | 1 783 | 2 664·7 | 41·1 | 3·9 | 16·7 |
| 1970 | 149 | 483 | 1 866 | 2 657·8 | 40·5 | 2·9 | 16·6 |
| 1971 | 147 | 672 | 1 813 | 2 624·4 | 39·6 | 4·2 | 17·1 |
| 1972 | 106 | 446 | 1 947 | 2 966·8 | 39·6 | 2·3 | 17·3 |
| 1973 | 129 | 675 | 1 740 | 2 686·4 | 40·5 | 3·7 | 17·7 |
| 1974 | <i>n.a.</i> | 639 | 1 561 | 2 584·3 | 36·9 | 3·6 | 17·2 |
| 1975 | <i>n.a.</i> | 522 | 1 635 | 2 596·2 | 41·2 | 3·8 | 17·4 |
| 1976 | <i>n.a.</i> | 366 | 1 636 | 2 831·0 | 40·5 | 3·3 | 16·7 |

RURAL PRODUCTION

Land Cultivation

| Year | Rural Holdings | Area of Rural Holdings | Area under Crop | | Area of Pastures Top-dressed | Area Under Irrigation |
|---------|----------------|------------------------|-----------------|---------------|------------------------------|-----------------------|
| | | | Fertilised | Total | | |
| | No. | | | '000 hectares | | |
| 1841-42 | | | | 3 | | |
| 1846-47 | | | | 14 | | |
| 1851-52 | | | | 33 | | |
| 1856-57 | | | | 82 | | |
| 1861-62 | | | | 162 | | |
| 1866-67 | | | | 245 | | |
| 1871-72 | | | | 339 | | |
| 1876-77 | | | | 497 | | |
| 1881-82 | | | | 873 | | |
| 1886-87 | | | | 925 | | |
| 1891-92 | | | | 780 | | |
| 1896-97 | | | | 830 | | |
| 1901-02 | | | 335 | 905 | | |
| 1906-07 | | | 629 | 873 | | |
| 1911-12 | | 27 120 | 47 012 | 1 010 | 1 200 | |
| 1916-17 | | 29 278 | 52 475 | 1 156 | 1 468 | |
| 1921-22 | | 29 693 | 54 311 | 1 197 | 1 367 | 9.1 |
| 1926-27 | | 29 654 | 54 867 | 1 430 | 1 572 | 14.3 |
| 1931-32 | | 30 648 | 52 354 | 1 705 | 2 112 | 17.3 |
| 1936-37 | | 31 321 | 55 433 | 1 619 | 1 853 | 366 |
| 1941-42 | | 30 565 | 58 936 | 1 409 | 1 609 | 427 |
| 1942-43 | | 27 934 | 58 859 | 1 062 | 1 391 | 382 |
| 1943-44 | | 27 826 | 58 488 | 789 | 1 117 | 285 |
| 1944-45 | | 27 867 | 55 639 | 926 | 1 287 | 293 |
| 1945-46 | | 27 635 | 57 670 | 1 228 | 1 548 | 346 |
| 1946-47 | | 28 040 | 59 154 | 1 366 | 1 572 | 450 |
| 1947-48 | | 27 597 | 57 624 | 1 367 | 1 559 | 563 |
| 1948-49 | | 28 110 | 59 377 | 1 327 | 1 521 | 705 |
| 1949-50 | | 27 900 | 59 312 | 1 263 | 1 464 | 725 |
| 1950-51 | | 28 248 | 61 403 | 1 316 | 1 488 | 753 |
| 1951-52 | | 28 698 | 61 425 | 1 284 | 1 496 | 870 |
| 1952-53 | | 28 860 | 61 791 | 1 270 | 1 449 | 940 |
| 1953-54 | | 29 220 | 60 830 | 1 350 | 1 529 | 1 144 |
| 1954-55 | | 28 092 | 60 452 | 1 404 | 1 576 | 1 272 |
| 1955-56 | | 28 585 | 60 689 | 1 378 | 1 607 | 1 416 |
| 1956-57 | | 27 936 | 60 675 | 1 376 | 1 610 | 1 488 |
| 1957-58 | | 27 971 | 61 530 | 1 401 | 1 581 | 1 621 |
| 1958-59 | | 28 105 | 61 639 | 1 494 | 1 679 | 1 504 |
| 1959-60 | | 28 527 | 62 903 | 1 489 | 1 643 | 1 405 |
| 1960-61 | | 28 711 | 63 316 | 1 751 | 2 010 | 1 335 |
| 1961-62 | | 28 886 | 63 494 | 1 644 | 1 825 | 1 450 |
| 1962-63 | | 28 922 | 63 413 | 1 787 | 1 996 | 1 518 |
| 1963-64 | | 28 711 | 64 307 | 1 938 | 2 177 | 1 616 |
| 1964-65 | | 28 754 | 63 517 | 1 932 | 2 141 | 1 908 |
| 1965-66 | | 28 759 | 64 505 | 1 971 | 2 142 | 2 061 |
| 1966-67 | | 28 957 | 65 361 | 2 073 | 2 322 | 2 119 |
| 1967-68 | | 29 058 | 65 059 | 2 037 | 2 270 | 2 076 |
| 1968-69 | | 29 137 | 65 603 | 2 431 | 2 783 | 1 728 |
| 1969-70 | | 29 035 | 65 839 | 2 138 | 2 407 | 2 008 |
| 1970-71 | | 29 087 | 65 795 | 1 884 | 2 141 | 1 938 |
| 1971-72 | | 29 095 | 65 146 | 2 113 | 2 478 | 1 822 |
| 1972-73 | | 29 001 | 65 372 | 1 864 | 2 084 | 2 033 |
| 1973-74 | | 28 738 | 64 843 | 2 146 | 2 451 | 2 425 |
| 1974-75 | | 28 185 | 63 825 | 1 986 | 2 257 | 2 138 |
| 1975-76 | | (a) 25 143 | 63 577 | 1 821 | 2 116 | 1 133 |

(a) Change in scope of the Agricultural Census. See Part 9.1.

RURAL PRODUCTION
Crop Areas and Yields

| Year | Cereals for Grain | | | | | | Hay (a) | Orchards (b) (c) | Vineyards (b) |
|----------------|-------------------|-------------------|--------|-------------------|--------|-------------------|------------|---------------------|------------------|
| | Wheat | | Barley | | Oats | | | | |
| | Area | Yield per Hectare | Area | Yield per Hectare | Area | Yield per Hectare | | | |
| '000 hectares | Tonnes | '000 hectares | Tonnes | '000 hectares | Tonnes | '000 hectares | | | |
| 1841-42 . . . | 2 | 1.40 | | 1.12 | | 1.12 | | | |
| 1846-47 . . . | 11 | 1.34 | 1 | 1.68 | 1 | 0.90 | | | |
| 1851-52 . . . | 22 | 0.85 | 2 | 0.92 | 1 | 0.98 | | | 0.1 |
| 1856-57 . . . | 66 | 1.68 | 3 | 1.19 | 1 | 0.90 | 9 | 0.4 | 0.3 |
| 1861-62 . . . | 126 | 0.74 | 4 | 0.89 | 1 | 0.91 | 25 | 0.7 | 1.6 |
| 1866-67 . . . | 186 | 0.96 | 5 | 1.13 | 2 | 1.00 | 45 | 0.9 | 2.6 |
| 1871-72 . . . | 280 | 0.39 | 7 | 0.53 | 2 | 0.49 | 40 | 1.1 | 2.2 |
| 1876-77 . . . | 439 | 0.36 | 4 | 0.60 | 1 | 0.48 | 37 | 1.3 | 1.8 |
| 1881-82 . . . | 716 | 0.31 | 5 | 0.64 | 1 | 0.48 | 135 | 1.8 | 1.7 |
| 1886-87(d) . . | 797 | 0.37 | 7 | 0.73 | 3 | 0.56 | 128 | n.a. | 2.1 |
| 1891-92 . . . | 628 | 0.28 | 5 | 0.52 | 5 | 0.29 | 123 | 3.6 | 5.0 |
| 1896-97 . . . | 685 | 0.11 | 6 | 0.42 | 16 | 0.21 | 137 | 4.8 | 7.4 |
| 1901-02 . . . | 706 | 0.31 | 6 | 0.88 | 14 | 0.61 | 150 | 6.6 | 8.4 |
| 1906-07 . . . | 683 | 0.70 | 11 | 0.98 | 23 | 0.70 | 121 | 7.4 | 9.1 |
| 1911-12 . . . | 887 | 0.62 | 17 | 0.97 | 44 | 0.56 | 211 | 9.4 | 9.7 |
| 1916-17 . . . | 1 124 | 1.11 | 42 | 0.94 | 61 | 0.54 | 196 | 11.7 | 11.8 |
| 1921-22 . . . | 965 | 0.70 | 69 | 1.08 | 51 | 0.46 | 226 | 13.1 | 16.8 |
| 1926-27 . . . | 1 120 | 0.86 | 104 | 1.01 | 62 | 0.50 | 201 | 12.8 | 20.3 |
| 1931-32 . . . | 1 648 | 0.79 | 98 | 1.06 | 84 | 0.50 | 218 | 11.8 | 21.2 |
| 1936-37 . . . | 1 238 | 0.63 | 123 | 0.78 | 168 | 0.26 | 218 | 12.0 | 22.7 |
| 1941-42 . . . | 941 | 0.88 | 194 | 1.37 | 118 | 0.58 | 226 | 12.0 | 23.5 |
| 1946-47 . . . | 1 019 | 0.75 | 203 | 0.94 | 102 | 0.49 | 133 | 11.4 | 23.6 |
| 1947-48 . . . | 961 | 0.92 | 228 | 1.53 | 125 | 0.78 | 120 | 11.5 | 23.8 |
| 1948-49 . . . | 835 | 0.85 | 282 | 0.97 | 116 | 0.41 | 95 | 12.0 | 24.2 |
| 1949-50 . . . | 767 | 1.01 | 281 | 1.03 | 106 | 0.59 | 119 | 10.9 | 24.4 |
| 1950-51 . . . | 748 | 1.13 | 310 | 1.23 | 110 | 0.58 | 106 | 11.6 | 25.1 |
| 1951-52 . . . | 653 | 1.14 | 337 | 1.13 | 157 | 0.63 | 104 | 11.9 | 24.8 |
| 1952-53 . . . | 648 | 1.48 | 379 | 1.55 | 150 | 0.81 | 87 | 11.6 | 24.5 |
| 1953-54 . . . | 619 | 1.34 | 454 | 1.42 | 113 | 0.69 | 106 | 12.0 | 25.1 |
| 1954-55 . . . | 687 | 1.25 | 413 | 1.01 | 138 | 0.60 | 104 | 12.3 | 24.5 |
| 1955-56 . . . | 651 | 1.21 | 422 | 1.32 | 172 | 0.77 | 132 | 13.4 | 24.2 |
| 1956-57 . . . | 582 | 1.47 | 494 | 1.56 | 173 | 0.87 | 121 | 13.8 | 23.2 |
| 1957-58 . . . | 539 | 0.75 | 490 | 0.81 | 173 | 0.36 | 118 | 14.3 | 23.2 |
| 1958-59 . . . | 570 | 1.53 | 539 | 1.58 | 195 | 1.12 | 170 | 15.1 | 23.0 |
| 1959-60 . . . | 627 | 0.52 | 522 | 0.52 | 205 | 0.22 | 99 | 15.1 | 23.0 |
| 1960-61 . . . | 797 | 1.58 | 630 | 1.52 | 207 | 1.00 | 159 | 15.3 | 23.0 |
| 1961-62 . . . | 902 | 1.02 | 514 | 0.94 | 131 | 0.61 | 84 | 15.6 | 23.4 |
| 1962-63 . . . | 1 050 | 0.99 | 426 | 0.96 | 168 | 0.62 | 116 | 16.4 | 23.6 |
| 1963-64 . . . | 1 134 | 1.30 | 455 | 1.21 | 203 | 0.82 | 145 | 16.9 | 23.7 |
| 1964-65 . . . | 1 104 | 1.30 | 443 | 1.38 | 180 | 0.91 | 127 | 17.4 | 23.8 |
| 1965-66 . . . | 1 111 | 0.98 | 444 | 0.94 | 184 | 0.55 | 121 | 17.8 | 23.8 |
| 1966-67 . . . | 1 198 | 1.22 | 448 | 1.20 | 206 | 0.91 | 195 | 17.9 | 23.1 |
| 1967-68 . . . | 1 159 | 0.63 | 468 | 0.60 | 212 | 0.28 | 174 | 18.3 | 23.5 |
| 1968-69 . . . | 1 517 | 1.49 | 572 | 1.17 | 209 | 1.03 | 249 | 18.0 | 24.5 |
| 1969-70 . . . | 1 299 | 1.24 | 560 | 1.23 | 150 | 0.80 | 155 | 18.1 | 26.2 |
| 1970-71 . . . | 802 | 0.98 | 693 | 1.07 | 195 | 0.78 | 196 | 18.3 | 27.7 |
| 1971-72 . . . | 1 069 | 1.32 | 784 | 1.34 | 169 | 0.98 | 245 | 17.2 | 28.8 |
| 1972-73 . . . | 986 | 0.83 | 692 | 0.74 | 142 | 0.52 | 210 | 16.7 | 29.5 |
| 1973-74 . . . | 1 432 | 1.25 | 627 | 1.26 | 152 | 0.93 | 268 | 16.9 | 29.6 |
| 1974-75 . . . | 1 220 | 1.22 | 701 | 1.62 | 135 | 0.83 | 190 | 16.6 | 30.4 |
| 1975-76 . . . | 958 | 1.19 | 832 | 1.32 | 119 | 0.90 | 159 | 16.5 | 31.2 |

(a) Wheaten only to 1905-07, thence all kinds.

(b) Bearing and non-bearing.

(c) From 1949-50, private orchards and those no longer worked have been omitted.

(d) Statistics not collected and particulars estimated.

RURAL PRODUCTION
Livestock and Associated Produce; Farm Machinery

| Year | Livestock Numbers | | Wool Production | Milk Production | Slaughtering | | Farm Machinery | | |
|--------------|-------------------|--------|-----------------|-----------------|-----------------|-------------------|----------------|-------------------|------------------|
| | Sheep | Cattle | | | Sheep and Lambs | Cattle and Calves | Tractors | Shearing Machines | Milking Machines |
| | | Total | Dairy Cows | | | | | | |
| | | '000 | '000 kg | '000l | | '000 | No. | | |
| 1841-42 .. . | 250 | 21 | | | | | | | |
| 1846-47 .. . | 681 | 57 | | | | | | | |
| 1851-52 .. . | 1 250 | 100 | | | | | | | |
| 1856-57 .. . | 1 962 | 273 | | | | | | | |
| 1861-62 .. . | 3 038 | 265 | 5 791 | | | | | | |
| 1866-67 .. . | 3 912 | 124 | 8 954 | | | | | | |
| 1871-72 .. . | 4 412 | 143 | 11 752 | | | | | | |
| 1876-77 .. . | 6 133 | 219 | 19 253 | | | | | | |
| 1881-82 .. . | 6 804 | 294 | 22 118 | | | | | | |
| 1886-87 .. . | 6 542 | 285 | 22 934 | | | | | | |
| 1891-92 .. . | 7 646 | 399 | 80 26 133 | | | | | | |
| 1896-97 .. . | 6 324 | 337 | 84 23 558 | | | | | | |
| 1901-02 .. . | 5 012 | 225 | 75 20 209 | | | | | | |
| 1906-07 .. . | 6 625 | 326 | 98 22 193 | | | | | | |
| 1911-12 .. . | 6 172 | 394 | 122 27 372 | 127 077 | 1 276 | 87 | | | |
| 1916-17 .. . | 5 091 | 289 | 114 17 025 | 136 174 | 686 | 62 | | | |
| 1921-22 .. . | 6 257 | 419 | 166 26 202 | 188 199 | 1 208 | 95 | | | |
| 1926-27 .. . | 7 284 | 340 | 127 32 824 | 183 817 | 1 091 | 143 | 1 820 | | 420 |
| 1931-32 .. . | 6 609 | 265 | 128 30 400 | 227 309 | 1 379 | 81 | 3 992 | | 380 |
| 1936-37 .. . | 7 905 | 328 | 170 34 747 | 289 581 | 1 697 | 166 | 4 563 | | 409 |
| 1941-42 .. . | 10 246 | 399 | 179 47 683 | 358 687 | 2 070 | 154 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| 1942-43 .. . | 10 371 | 424 | 185 49 277 | 357 323 | 2 272 | 171 | 6 705 | 2 976 | 1 659 |
| 1943-44 .. . | 10 360 | 415 | 188 52 374 | 355 304 | 2 480 | 189 | 7 064 | 3 297 | 1 963 |
| 1944-45 .. . | 8 474 | 391 | 187 48 402 | 328 228 | 3 065 | 175 | 8 044 | 3 770 | 2 206 |
| 1945-46 .. . | 6 787 | 374 | 176 33 386 | 360 732 | 2 017 | 148 | 9 211 | 3 978 | 2 349 |
| 1946-47 .. . | 7 959 | 424 | 187 42 193 | 426 878 | 1 662 | 146 | 9 456 | 4 306 | 2 839 |
| 1947-48 .. . | 9 055 | 445 | 197 52 821 | 420 513 | 1 665 | 148 | 9 664 | 4 932 | 3 238 |
| 1948-49 .. . | 9 366 | 461 | 203 52 120 | 415 058 | 2 011 | 189 | 11 271 | 5 817 | 3 665 |
| 1949-50 .. . | 9 477 | 464 | 203 54 997 | 406 420 | 2 317 | 201 | 13 709 | 6 846 | 4 198 |
| 1950-51 .. . | 10 167 | 433 | 184 56 873 | 379 826 | 2 022 | 218 | 16 128 | 8 134 | 4 590 |
| 1951-52 .. . | 11 470 | 437 | 176 61 454 | 393 237 | 1 547 | 216 | 18 184 | 9 054 | 4 909 |
| 1952-53 .. . | 12 037 | 483 | 183 71 966 | 382 781 | 2 353 | 187 | 19 750 | 9 733 | 5 418 |
| 1953-54 .. . | 11 838 | 491 | 192 66 002 | 386 418 | 2 637 | 220 | 20 842 | 10 302 | 5 876 |
| 1954-55 .. . | 12 817 | 524 | 199 70 652 | 412 330 | 2 799 | 233 | 23 110 | 11 452 | 6 363 |
| 1955-56 .. . | 13 585 | 566 | 195 78 788 | 410 739 | 2 358 | 227 | 24 345 | 12 134 | 6 920 |
| 1956-57 .. . | 14 984 | 622 | 195 85 642 | 408 694 | 2 329 | 252 | 26 012 | 12 690 | 7 208 |
| 1957-58 .. . | 15 237 | 597 | 191 84 297 | 366 415 | 3 278 | 283 | 27 288 | 13 280 | 7 344 |
| 1958-59 .. . | 15 634 | 576 | 188 84 750 | 373 234 | 3 145 | 287 | 28 532 | 13 778 | 7 537 |
| 1959-60 .. . | 14 025 | 500 | 170 89 942 | 357 323 | 3 899 | 238 | 28 965 | 13 973 | 7 575 |
| 1960-61 .. . | 14 952 | 561 | 170 80 473 | 395 510 | 2 784 | 174 | 30 674 | 14 317 | 7 589 |
| 1961-62 .. . | 16 415 | 659 | 183 93 886 | 434 152 | 3 140 | 201 | 31 788 | 14 532 | 7 707 |
| 1962-63 .. . | 15 737 | 679 | 190 94 050 | 433 697 | 3 467 | 254 | 31 671 | 14 595 | 7 553 |
| 1963-64 .. . | 16 402 | 694 | 185 95 481 | 433 244 | 2 996 | 279 | 33 231 | 14 885 | 7 438 |
| 1964-65 .. . | 17 289 | 697 | 182 97 856 | 465 065 | 3 100 | 275 | 34 164 | 15 172 | 7 328 |
| 1965-66 .. . | 17 993 | 690 | 176 104 160 | 447 325 | 3 474 | 277 | 33 998 | 15 386 | 7 040 |
| 1966-67 .. . | 17 864 | 687 | 170 107 725 | 448 699 | 3 358 | 265 | 35 829 | 15 392 | 6 634 |
| 1967-68 .. . | 16 405 | 695 | 157 101 000 | 403 693 | 4 019 | 245 | 36 590 | 15 758 | 6 645 |
| 1968-69 .. . | 18 392 | 865 | 163 105 714 | 467 377 | 2 977 | 220 | 36 574 | 15 693 | 6 263 |
| 1969-70 .. . | 19 747 | 1 026 | 149 124 529 | 482 959 | 4 232 | 249 | 37 264 | 15 746 | 5 947 |
| 1970-71 .. . | 19 166 | 1 196 | 145 117 258 | 469 773 | 5 101 | 264 | 37 023 | 15 852 | 5 571 |
| 1971-72 .. . | 17 970 | 1 495 | 151 117 922 | 457 732 | 5 144 | 290 | 37 197 | <i>n.a.</i> | <i>n.a.</i> |
| 1972-73 .. . | 15 651 | 1 583 | 148 106 006 | 424 265 | 4 549 | 384 | 37 258 | <i>n.a.</i> | <i>n.a.</i> |
| 1973-74 .. . | 16 431 | 1 692 | 138 100 131 | 434 107 | 2 595 | 359 | 37 588 | <i>n.a.</i> | <i>n.a.</i> |
| 1974-75 .. . | 17 621 | 1 869 | 142 107 452 | 426 371 | 2 984 | 465 | 38 555 | <i>n.a.</i> | <i>n.a.</i> |
| 1975-76 .. . | 17 279 | 1 891 | 142 101 418 | 397 500 | 3 561 | 549 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

MINING AND FACTORY PRODUCTION

| Year | Mining | | | Factories (a) | | |
|--------------------|-----------------------------|-------------|-------------|-------------------------|--------------------------|---------------|
| | Principal Minerals Produced | | | Value of Production (b) | Number of Establishments | Value Added |
| | Copper Ore and Concentrate | Coal | Iron Ore | | | |
| | Tonnes | '000 tonnes | '000 tonnes | \$'000 | | \$'000 |
| 1846 | 6 565 | | | 285 | | |
| 1851 | 7 841 | | | 622 | | |
| 1856 | 11 980 | | | 825 | | |
| 1861 | 11 440 | | | 920 | | |
| 1866 | 23 661 | | | 1 657 | | |
| 1871 | 26 948 | | | 1 347 | | |
| 1876 | 28 597 | | | 1 205 | | |
| 1881 | 25 871 | | | 842 | | |
| 1886 | 18 713 | | | 554 | | |
| 1891 | 16 894 | | 7 | 551 | | |
| 1896 | 5 030 | | — | 496 | | |
| 1901 | 8 743 | | — | 1 079 | | |
| 1906 | 8 340 | | 76 | 1 652 | | |
| 1911 | 6 017 | | 43 | 900 | 1 314 | 9 148 |
| 1916 | 7 396 | | 191 | 2 504 | 1 266 | 9 748 |
| 1921 | 1 557 | | 515 | 2 086 | 1 438 | 14 556 |
| 1926 | 235 | | 593 | 2 924 | 1 791 | 25 348 |
| 1931 | 22 | | 293 | 1 297 | 1 644 | 15 510 |
| 1936 | 458 | | 1 918 | 5 241 | 1 895 | 23 339 |
| 1941 | 615 | | 2 276 | 7 074 | 2 230 | 33 832 |
| 1942 | 398 | 2 | 2 156 | 6 342 | 2 167 | 49 132 |
| 1943 | 104 | — | 2 218 | 6 287 | 2 134 | 56 732 |
| 1944 | 137 | 35 | 2 062 | 6 085 | 2 149 | 56 823 |
| 1945 | 136 | 42 | 1 544 | 4 917 | 2 182 | 54 530 |
| 1946 | — | 138 | 1 847 | 6 101 | 2 395 | 51 203 |
| 1947 | — | 196 | 2 180 | 7 253 | 2 707 | 62 133 |
| 1948 | 4 | 243 | 2 067 | 7 514 | 2 865 | 77 339 |
| 1949 | 3 | 350 | 1 471 | 6 236 | 2 927 | 87 443 |
| 1950 | — | 266 | 2 388 | 8 857 | 3 046 | 104 706 |
| 1951 | 2 | 395 | 2 439 | 9 875 | 3 141 | 135 618 |
| 1952 | 5 | 424 | 2 727 | 12 094 | 3 245 | 166 493 |
| 1953 | 2 | 456 | 2 633 | 12 406 | 3 339 | 178 378 |
| 1954 | 3 | 503 | 2 913 | 17 160 | 3 577 | 200 443 |
| 1955 | — | 463 | 3 093 | (c) 41 419 | 3 750 | 222 055 |
| 1956 | 12 | 489 | 3 645 | 47 853 | 3 908 | 241 872 |
| 1957 | 40 | 619 | 3 444 | 46 352 | 4 063 | 253 532 |
| 1958 | 53 | 767 | 3 406 | 47 076 | 4 168 | 266 570 |
| 1959 | 67 | 701 | 3 478 | 49 332 | 4 235 | 279 620 |
| 1960 | 30 | 899 | 3 492 | 50 870 | 4 684 | 325 947 |
| 1961 | 8 | 1 133 | 4 055 | 58 242 | 5 042 | 340 123 |
| 1962 | 4 | 1 414 | 3 567 | 53 958 | 5 519 | 347 828 |
| 1963 | 16 | 1 536 | 4 310 | 62 431 | 5 766 | 379 142 |
| 1964 | 55 | 1 764 | 4 437 | 67 597 | 5 826 | 427 356 |
| 1965 | 116 | 2 048 | 4 463 | 67 863 | 5 887 | 498 588 |
| 1966 | 143 | 2 053 | 4 876 | 72 342 | 6 065 | 527 477 |
| 1967 | 1 470 | 2 077 | 4 645 | 69 345 | 6 222 | 563 764 |
| 1968 | 518 | 2 112 | 5 566 | 77 398 | 6 255 | 631 104 |
| 1969 | 3 666 | 2 246 | 7 042 | 98 526 | (d) 2 994 | (d) 643 079 |
| 1970 (e) | (f) 2 249 | 2 155 | 7 425 | 104 195 | 2 977 | 714 579 |
| 1971 | 2 287 | 1 626 | 7 400 | 112 276 | n.a. | n.a. |
| 1972 | 2 819 | 1 536 | 6 301 | 111 623 | 2 979 | 802 975 |
| 1973 | 9 662 | 1 571 | 6 874 | 134 274 | 2 914 | 896 691 |
| 1974 | 8 830 | 1 494 | 6 065 | 131 446 | 2 984 | 1 109 748 |
| 1975 | 10 037 | 1 798 | 5 448 | 125 978 | (g) 2 131 | (g) 1 335 276 |
| 1976 | 18 433 | 1 819 | 4 479 | 131 847 | p 2 243 | p 1 453 000 |

(a) Year ended 30 June. (b) Value at site of production. Quarries included from 1916. (c) Comparability affected by revaluation of iron ore. (d) For a description of the changes in definitions see page 530. (e) Year ended 30 June from 1970. (f) Metallic content from 1969-70. (g) From 1974-75 excludes single establishment enterprises employing less than four persons.

GROSS VALUE OF RURAL PRODUCTION

| Year | Agricultural | | | Total | Pastoral | | Dairying | Total Rural Production |
|----------------------|--------------|---------|------------------------|---------|----------|-------------|-------------|------------------------|
| | Wheat | Barley | Vine and Orchard Fruit | | Wool (a) | Total | | |
| \$'000 | | | | | | | | |
| 1916-17 | 21 729 | 599 | 1 653 | 27 677 | 4 274 | 11 200 | 2 759 | 42 909 |
| 1921-22 | 12 577 | 1 227 | 3 491 | 23 221 | 5 752 | 8 296 | 3 678 | 37 273 |
| 1925-26 | 17 979 | 1 656 | 3 352 | 28 307 | 8 591 | 12 930 | 4 171 | 47 629 |
| 1926-27 | 19 052 | 1 685 | 4 082 | 30 181 | 8 937 | 12 140 | 3 895 | 48 357 |
| 1927-28 | 13 247 | 1 497 | 3 394 | 23 257 | 11 338 | 14 584 | 4 125 | 44 464 |
| 1928-29 | 12 845 | 1 737 | 3 909 | 23 880 | 9 308 | 12 472 | 3 810 | 42 375 |
| 1929-30 | 10 243 | 1 448 | 3 819 | 21 059 | 5 098 | 8 183 | 3 892 | 35 055 |
| 1930-31 | 8 091 | 893 | 3 241 | 15 708 | 3 608 | 5 801 | 3 121 | 26 335 |
| 1931-32 | 17 163 | 1 363 | 3 442 | 25 291 | 3 843 | 5 452 | 3 140 | 35 444 |
| 1932-33 | 13 097 | 1 371 | 3 463 | 20 921 | 4 619 | 5 834 | 3 654 | 32 030 |
| 1933-34 | 10 933 | 1 280 | 3 618 | 19 533 | 9 013 | 10 608 | 3 108 | 34 776 |
| 1934-35 | 10 318 | 1 553 | 3 882 | 19 965 | 5 309 | 7 706 | 3 091 | 32 489 |
| 1935-36 | 13 135 | 1 457 | 3 953 | 22 863 | 8 116 | 10 885 | 3 797 | 39 126 |
| 1936-37 | 14 955 | 1 766 | 4 191 | 26 044 | 8 720 | 12 315 | 4 310 | 44 366 |
| 1937-38 | 15 665 | 3 040 | 4 964 | 29 453 | 8 141 | 11 443 | 5 291 | 48 241 |
| 1938-39 | 8 580 | 2 046 | 4 056 | 20 008 | 7 802 | 12 327 | 5 171 | 39 613 |
| 1939-40 | 16 692 | 3 524 | 4 637 | 30 132 | 10 470 | 14 792 | 5 585 | 52 487 |
| 1940-41 | 8 379 | 2 321 | 4 873 | 20 167 | 10 532 | 14 757 | 6 079 | 43 134 |
| 1941-42 | 13 913 | 4 490 | 4 725 | 30 142 | 10 294 | 13 875 | 6 735 | 53 016 |
| 1942-43 | 19 399 | 2 709 | 6 481 | 35 423 | 12 359 | 16 917 | 7 917 | 63 091 |
| 1943-44 | 12 765 | 2 188 | 9 159 | 32 088 | 13 067 | 18 277 | 8 807 | 63 003 |
| 1944-45 | 6 065 | 1 931 | 6 283 | 23 548 | 11 963 | 17 928 | 8 880 | 54 810 |
| 1945-46 | 17 490 | 4 956 | 7 729 | 40 434 | 8 275 | 14 535 | 9 959 | 69 399 |
| 1946-47 | 27 685 | 7 598 | 8 283 | 51 209 | 17 092 | 22 602 | 10 950 | 90 106 |
| 1947-48 | 50 154 | 26 228 | 9 677 | 99 477 | 32 606 | 37 487 | 12 525 | 155 615 |
| 1948-49 | 32 450 | 10 242 | 10 087 | 64 138 | 40 268 | 47 636 | 13 440 | 131 527 |
| 1949-50 | 40 834 | 14 524 | 10 616 | 81 707 | 56 268 | 63 058 | 16 148 | 167 594 |
| 1950-51 | 45 587 | 19 803 | 13 720 | 97 871 | 132 494 | 139 895 | 15 500 | 259 627 |
| 1951-52 | 45 288 | 27 706 | 20 382 | 120 507 | 72 394 | 86 034 | 21 145 | 234 587 |
| 1952-53 | 57 302 | 42 128 | 19 161 | 139 160 | 97 158 | 109 154 | 23 527 | 279 982 |
| 1953-54 | 43 939 | 28 804 | 20 788 | 115 744 | 88 868 | 105 950 | 24 238 | 254 537 |
| 1954-55 | 41 591 | 23 243 | 17 426 | 104 914 | 83 204 | 101 059 | 25 037 | 239 022 |
| 1955-56 | 38 514 | 25 227 | 20 335 | 110 570 | 79 822 | 100 882 | 30 826 | 250 685 |
| 1956-57 | 44 846 | 34 022 | 23 265 | 129 994 | 114 578 | 138 118 | 29 003 | 305 365 |
| 1957-58 | 20 970 | 19 573 | 24 435 | 90 089 | 84 708 | 111 027 | 26 384 | 235 337 |
| 1958-59 | 43 791 | 39 889 | 23 984 | 140 858 | 67 595 | 99 135 | 32 103 | 280 007 |
| 1959-60 | 16 495 | 10 999 | 21 394 | 71 092 | 85 382 | 123 351 | 29 454 | 231 751 |
| 1960-61 | 68 001 | 37 977 | 24 525 | 161 437 | 70 484 | 94 451 | 30 306 | 294 087 |
| 1961-62 | 51 515 | 22 952 | 27 051 | 124 022 | 85 801 | 111 850 | 29 848 | 273 451 |
| 1962-63 | 56 285 | 19 152 | 25 857 | 128 417 | 92 514 | 127 386 | 31 968 | 295 043 |
| 1963-64 | 77 660 | 26 399 | 29 567 | 165 634 | 113 409 | 150 466 | 34 267 | 358 802 |
| 1964-65 | 74 550 | 30 135 | 36 200 | 178 132 | 94 328 | 135 916 | 37 533 | 360 507 |
| 1965-66 | 59 559 | 20 234 | 31 411 | 144 017 | 103 635 | 152 224 | 39 293 | 345 015 |
| 1966-67 | 79 612 | 26 912 | 36 779 | 184 090 | 104 588 | 169 226 | 40 303 | 404 864 |
| 1967-68 | 42 183 | 12 818 | 32 423 | 127 288 | 79 925 | 129 504 | 37 163 | 306 222 |
| 1968-69 | 112 551 | 25 657 | 37 815 | 221 097 | 92 932 | 136 070 | 39 016 | 408 842 |
| 1969-70 | 82 332 | 23 724 | 43 330 | 184 284 | 91 348 | 148 939 | 40 834 | 386 041 |
| 1970-71 | 40 562 | 34 902 | 45 991 | 164 895 | 67 029 | 123 858 | 43 918 | 347 038 |
| 1971-72 | 76 381 | 40 295 | 49 753 | 213 206 | 70 093 | 153 068 | 47 262 | 430 704 |
| 1972-73 | 44 588 | 27 506 | 54 415 | 177 768 | 141 713 | 261 753 | 47 808 | 511 795 |
| 1973-74 | 196 444 | 68 276 | 52 347 | 393 618 | 183 227 | <i>n.a.</i> | <i>n.a.</i> | 773 394 |
| 1974-75 | 163 922 | 119 305 | 77 719 | 434 707 | 125 044 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |
| 1975-76 <i>p.</i> .. | 118 337 | 105 709 | 71 797 | 368 386 | 118 884 | <i>n.a.</i> | <i>n.a.</i> | <i>n.a.</i> |

(a) Shares of profits from sale of wool under war-time disposal schemes excluded.

NET VALUE OF PRODUCTION

| Year | Rural | | | | Other Primary (a) | Mining and Quarrying (a) |
|-------------------|--------------|----------|----------|---------|-------------------|--------------------------|
| | Agricultural | Pastoral | Dairying | Total | | |
| \$'000 | | | | | | |
| 1926-27 | 19 755 | 10 697 | 2 955 | 34 098 | 1 618 | 2 924 |
| 1927-28 | 13 661 | 12 861 | 3 146 | 30 858 | 1 784 | 3 254 |
| 1928-29 | 12 840 | 10 912 | 2 721 | 27 514 | 1 639 | 2 755 |
| 1929-30 | 10 521 | 6 795 | 2 988 | 21 189 | 1 685 | 3 270 |
| 1930-31 | 4 368 | 4 684 | 2 285 | 12 051 | 1 304 | 2 882 |
| 1931-32 | 16 681 | 4 450 | 2 435 | 24 259 | 1 357 | 1 297 |
| 1932-33 | 12 565 | 4 775 | 2 839 | 20 758 | 1 458 | 1 885 |
| 1933-34 | 11 820 | 9 122 | 2 278 | 23 768 | 1 445 | 2 456 |
| 1934-35 | 12 751 | 6 363 | 2 242 | 22 121 | 1 460 | 3 724 |
| 1935-36 | 14 673 | 9 205 | 2 786 | 27 242 | 1 489 | 4 739 |
| 1936-37 | 18 115 | 10 435 | 3 176 | 32 270 | 1 683 | 4 874 |
| 1937-38 | 18 320 | 9 713 | 3 782 | 32 510 | 1 758 | 4 941 |
| 1938-39 | 10 978 | 10 110 | 3 886 | 25 903 | 1 722 | 5 909 |
| 1939-40 | 19 482 | 12 413 | 4 388 | 37 412 | 1 931 | 6 887 |
| 1940-41 | 12 290 | 12 427 | 4 204 | 29 862 | 2 062 | 6 659 |
| 1941-42 | 19 314 | 11 559 | 4 276 | 36 181 | 2 495 | 6 595 |
| 1942-43 | 24 495 | 14 265 | 6 207 | 46 688 | 2 793 | 5 899 |
| 1943-44 | 22 086 | 15 577 | 6 991 | 47 063 | 2 961 | 5 949 |
| 1944-45 | 13 995 | 15 391 | 6 912 | 39 113 | 2 886 | 5 870 |
| 1945-46 | 29 935 | 12 396 | 7 652 | 52 640 | 3 417 | 4 756 |
| 1946-47 | 39 525 | 19 170 | 8 484 | 70 571 | 4 124 | 5 937 |
| 1947-48 | 83 901 | 33 861 | 9 970 | 131 832 | 4 858 | 7 037 |
| 1948-49 | 47 901 | 42 913 | 10 511 | 105 545 | 5 850 | 7 194 |
| 1949-50 | 65 579 | 57 116 | 13 637 | 140 976 | 5 814 | 5 882 |
| 1950-51 | 72 805 | 131 594 | 12 629 | 221 425 | 6 944 | 8 375 |
| 1951-52 | 93 807 | 77 929 | 17 714 | 193 792 | 8 862 | 9 292 |
| 1952-53 | 102 488 | 99 837 | 18 854 | 225 741 | 10 363 | 10 305 |
| 1953-54 | 83 399 | 94 847 | 20 514 | 203 296 | 11 598 | 10 075 |
| 1954-55 | 78 361 | 90 440 | 21 330 | 193 795 | 11 702 | 14 202 |
| 1955-56 | 82 542 | 89 249 | 26 547 | 202 430 | 12 151 | (b) 37 302 |
| 1956-57 | 99 376 | 124 187 | 25 022 | 252 554 | 11 966 | 43 008 |
| 1957-58 | 64 635 | 89 726 | 15 651 | 173 506 | 10 287 | 41 249 |
| 1958-59 | 101 141 | 76 849 | 18 725 | 200 694 | 11 254 | 42 458 |
| 1959-60 | 48 492 | 100 135 | 18 281 | 170 450 | 10 694 | 44 311 |
| 1960-61 | 116 647 | 72 237 | 16 926 | 208 842 | 11 012 | 45 773 |
| 1961-62 | 90 933 | 91 256 | 19 826 | 204 484 | 10 911 | 52 623 |
| 1962-63 | 93 357 | 103 991 | 19 741 | 218 828 | 11 574 | 49 603 |
| 1963-64 | 125 180 | 125 979 | 21 195 | 274 720 | 12 279 | 57 836 |
| 1964-65 | 134 239 | 110 054 | 25 005 | 271 350 | 14 173 | 62 727 |
| 1965-66 | 105 657 | 123 757 | 25 127 | 256 934 | 15 817 | 62 727 |
| 1966-67 | 137 042 | 134 608 | 25 238 | 300 112 | 14 941 | 66 909 |
| 1967-68 | 90 903 | 98 722 | 22 169 | 214 300 | 15 482 | 63 492 |
| 1968-69 | 161 605 | 106 329 | 23 253 | 293 682 | 16 120 | 71 618 |
| 1969-70 | 131 082 | 117 337 | 28 188 | 281 217 | 18 614 | n.a. |
| 1970-71 | 119 749 | 94 717 | 31 097 | 251 448 | 19 888 | n.a. |
| 1971-72 | 158 796 | 123 412 | 32 163 | 319 185 | 22 821 | n.a. |
| 1972-73 | 131 119 | 223 308 | 33 822 | 393 891 | 24 057 | n.a. |
| 1973-74 | 327 549 | n.a. | n.a. | 625 494 | 29 616 | n.a. |

(a) To 1934-35, local value, i.e. gross value less marketing costs.

(b) Comparability affected by revaluation of iron ore.

TRADE
Overseas Exports

| Year | Value of Exports | | | | | Proportion of Total Exports Classified by Principal Countries of Destination | | | | |
|---------------|------------------|-----------------|--------|---------|--------------|--|-------------|-------|-------|-----------------|
| | Total | Wheat and Flour | Barley | Wool | Minerals (a) | Japan | New Zealand | UK | USA | Other Countries |
| | | | | | \$'000 | | | | | Percent |
| 1861 | 1 837 | 76 | | 1 302 | 362 | | 3.42 | 89.46 | | 7.12 |
| 1866 | 2 837 | 146 | | 1 518 | 1 030 | | 4.62 | 81.48 | 2.44 | 11.46 |
| 1871 | 3 630 | 578 | | 1 948 | 744 | | 4.00 | 89.62 | n.a. | 6.38 |
| 1876 | 5 928 | 2 146 | | 2 884 | 658 | | 1.96 | 89.58 | 0.07 | 8.39 |
| 1881 | 6 311 | 1 846 | | 3 496 | 488 | | 0.71 | 82.03 | — | 17.26 |
| 1886 | 5 877 | 420 | | 3 508 | 1 126 | | 0.69 | 86.90 | 0.04 | 12.37 |
| 1891 | 11 197 | 2 728 | | 3 776 | 3 714 | 0.01 | 0.29 | 80.82 | 0.90 | 17.98 |
| 1896 | 8 111 | 222 | | 3 038 | 3 878 | 1.38 | 0.48 | 56.39 | 0.28 | 41.47 |
| 1901 | 8 866 | 2 232 | | 2 208 | 3 252 | 0.07 | 0.65 | 51.62 | 0.10 | 47.56 |
| 1906 | 13 742 | 4 780 | | 3 360 | 3 574 | — | 0.26 | 51.68 | 0.24 | 47.82 |
| 1911 | 20 350 | 7 671 | 2 | 4 007 | 6 195 | 0.04 | 0.17 | 45.96 | 0.13 | 53.70 |
| 1915-16 | 12 272 | 3 511 | 19 | 2 824 | 4 747 | — | 1.01 | 42.92 | 21.15 | 34.92 |
| 1920-21 | 35 339 | 28 675 | 1 175 | 6 035 | 828 | — | 1.11 | 59.40 | 1.16 | 38.33 |
| 1925-26 | 38 900 | 14 825 | 275 | 8 865 | 10 745 | 6.88 | 1.70 | 51.94 | 1.16 | 38.32 |
| 1930-31 | 20 123 | 6 078 | 685 | 3 006 | 5 656 | 2.38 | 0.81 | 54.11 | 0.79 | 41.91 |
| 1935-36 | 30 762 | 9 020 | 707 | 7 561 | 6 860 | 6.66 | 2.05 | 67.44 | 1.11 | 22.74 |
| 1940-41 | 26 393 | 8 617 | 226 | 6 656 | 2 606 | 5.29 | 3.46 | 50.46 | 15.48 | 25.31 |
| 1941-42 | 29 624 | 3 863 | 338 | 11 596 | 6 220 | 1.01 | 3.39 | 32.02 | 34.14 | 29.44 |
| 1942-43 | 18 847 | 4 085 | 122 | 6 843 | 2 084 | — | 10.61 | 45.27 | 15.12 | 29.00 |
| 1943-44 | 31 170 | 10 504 | 410 | 8 509 | 2 313 | — | 9.18 | 40.36 | 8.61 | 41.85 |
| 1944-45 | 38 334 | 13 175 | 115 | 8 376 | 5 589 | — | 6.30 | 42.34 | 13.18 | 38.18 |
| 1945-46 | 40 307 | 7 407 | 718 | 14 917 | 6 550 | — | 4.95 | 25.45 | 26.43 | 43.17 |
| 1946-47 | 65 023 | 12 304 | 2 998 | 16 095 | 16 138 | 0.01 | 5.37 | 39.47 | 8.86 | 46.29 |
| 1947-48 | 105 805 | 24 507 | 16 030 | 25 608 | 17 460 | — | 4.44 | 39.01 | 8.51 | 48.04 |
| 1948-49 | 138 866 | 38 990 | 11 952 | 40 619 | 24 230 | 0.07 | 2.31 | 44.37 | 8.04 | 45.21 |
| 1949-50 | 127 864 | 23 227 | 10 564 | 49 621 | 23 262 | 2.95 | 6.38 | 42.42 | 7.63 | 40.62 |
| 1950-51 | 215 348 | 36 852 | 14 662 | 109 900 | 29 893 | 5.90 | 2.39 | 39.58 | 14.41 | 37.72 |
| 1951-52 | 194 501 | 42 155 | 18 035 | 65 806 | 42 995 | 4.60 | 7.26 | 39.36 | 14.65 | 34.13 |
| 1952-53 | 245 897 | 36 062 | 30 975 | 87 135 | 56 007 | 8.17 | 3.32 | 45.12 | 12.93 | 30.46 |
| 1953-54 | 220 498 | 30 518 | 24 465 | 78 817 | 54 059 | 6.35 | 5.80 | 41.66 | 10.57 | 35.62 |
| 1954-55 | 190 158 | 24 075 | 15 794 | 69 195 | 50 620 | 5.05 | 6.59 | 40.78 | 11.57 | 36.01 |
| 1955-56 | 195 332 | 26 266 | 14 069 | 70 063 | 53 972 | 6.71 | 7.47 | 38.70 | 10.71 | 36.41 |
| 1956-57 | 245 848 | 32 558 | 18 535 | 98 924 | 63 707 | 13.62 | 7.40 | 31.73 | 13.09 | 34.16 |
| 1957-58 | 199 764 | 24 868 | 17 183 | 73 082 | 50 249 | 11.23 | 7.85 | 31.50 | 9.32 | 40.10 |
| 1958-59 | 181 831 | 23 656 | 20 404 | 63 208 | 38 682 | 13.25 | 7.86 | 34.81 | 8.50 | 35.58 |
| 1959-60 | 181 652 | 19 028 | 12 251 | 74 830 | 38 085 | 12.91 | 4.30 | 32.08 | 7.91 | 42.80 |
| 1960-61 | 198 557 | 36 598 | 19 219 | 64 328 | 44 203 | 18.11 | 5.60 | 27.55 | 4.71 | 44.03 |
| 1961-62 | 243 975 | 47 819 | 23 422 | 83 107 | 51 374 | 14.80 | 4.14 | 25.83 | 8.56 | 46.67 |
| 1962-63 | 212 945 | 32 603 | 6 968 | 83 400 | 47 555 | 16.45 | 4.57 | 25.87 | 8.69 | 44.42 |
| 1963-64 | 322 159 | 76 337 | 13 828 | 107 398 | 63 489 | 17.59 | 4.83 | 26.63 | 5.99 | 44.96 |
| 1964-65 | 302 242 | 53 256 | 15 247 | 92 535 | 79 005 | 17.22 | 5.06 | 25.82 | 7.49 | 44.41 |
| 1965-66 | 296 276 | 45 864 | 7 050 | 94 486 | 76 896 | 18.38 | 5.89 | 22.81 | 10.37 | 42.55 |
| 1966-67 | 325 170 | 55 675 | 13 056 | 98 013 | 76 855 | 20.43 | 4.69 | 15.46 | 8.85 | 50.57 |
| 1967-68 | 282 767 | 31 432 | 2 321 | 77 008 | 88 579 | 21.81 | 5.05 | 18.20 | 11.03 | 43.91 |
| 1968-69 | 300 934 | 27 421 | 11 683 | 84 747 | 92 806 | 25.52 | 4.55 | 16.46 | 9.78 | 43.69 |
| 1969-70 | 417 030 | 59 457 | 16 133 | 81 797 | 119 292 | 19.02 | 5.58 | 17.03 | 9.41 | 48.96 |
| 1970-71 | 393 737 | 83 629 | 23 670 | 62 828 | 93 209 | 18.07 | 5.66 | 13.70 | 6.39 | 56.18 |
| 1971-72 | 394 064 | 64 599 | 35 652 | 68 189 | 84 508 | 18.64 | 7.21 | 13.83 | 5.84 | 54.48 |
| 1972-73 | 521 720 | 48 684 | 17 250 | 149 956 | 94 626 | 23.89 | 6.41 | 8.84 | 7.47 | 53.39 |
| 1973-74 | 662 881 | 103 168 | 40 790 | 153 202 | 131 566 | 19.47 | 9.18 | 7.44 | 4.23 | 59.68 |
| 1974-75 | 764 410 | 174 405 | 99 517 | 93 273 | 147 873 | 16.35 | 6.73 | 5.71 | 2.61 | 68.60 |
| 1975-76 | 685 029 | 109 526 | 90 290 | 115 560 | 149 434 | 19.69 | 5.41 | 5.65 | 3.55 | 65.70 |

(a) Rocks, minerals and hydrocarbons, pig iron, pig lead, other lead and lead-base alloys, refined and unrefined silver.

TRADE

Overseas Imports; Retail Sales

| Year | Value of Imports | | Proportion of Total Imports Classified by Principal Countries of Origin | | | | Value of Retail Sales of Goods | |
|---------------|------------------|---|---|-------|-------|-------|-------------------------------------|---------------------|
| | Total | Metals, Metal Manufactures, and Machinery | Japan | UK | USA | Other | Total Excluding Motor Vehicles etc. | Motor Vehicles etc. |
| | \$'000 | | Per cent | | | | \$ million | |
| 1861 | 2 756 | 310 | | 80.14 | 0.32 | 19.54 | | |
| 1866 | 4 193 | 570 | | 89.69 | 1.80 | 8.51 | | |
| 1871 | 2 891 | 342 | | 81.85 | 1.45 | 16.70 | | |
| 1876 | 6 428 | 1 084 | | 81.30 | 1.44 | 17.26 | | |
| 1881 | 7 133 | 1 022 | | 79.06 | 3.80 | 17.14 | | |
| 1886 | 5 003 | 770 | 0.01 | 78.90 | 6.82 | 14.27 | | |
| 1891 | 8 063 | 1 644 | 0.02 | 71.36 | 7.91 | 20.71 | | |
| 1896 | 6 475 | 1 198 | 0.18 | 68.59 | 7.82 | 23.41 | | |
| 1901 | 7 854 | 1 432 | 0.38 | 56.91 | 14.17 | 28.54 | | |
| 1906 | 7 965 | 2 104 | 0.64 | 63.10 | 10.17 | 26.09 | | |
| 1911 | 12 492 | 4 132 | 1.31 | 58.60 | 12.81 | 27.28 | | |
| 1915-16 | 10 304 | 2 816 | 3.12 | 47.68 | 19.81 | 29.39 | | |
| 1920-21 | 24 764 | 6 558 | 1.55 | 42.07 | 21.25 | 35.13 | | |
| 1925-26 | 28 160 | 10 602 | 1.13 | 43.30 | 27.84 | 27.73 | | |
| 1930-31 | 7 833 | 1 802 | 1.14 | 36.96 | 16.66 | 45.24 | | |
| 1935-36 | 10 839 | 3 616 | 2.24 | 38.65 | 21.16 | 37.95 | | |
| 1940-41 | 10 924 | 3 158 | 1.56 | 38.09 | 12.01 | 48.34 | | |
| 1941-42 | 14 924 | 5 164 | 0.10 | 28.11 | 12.36 | 59.43 | | |
| 1942-43 | 11 718 | 3 580 | — | 20.56 | 14.44 | 65.00 | | |
| 1943-44 | 9 562 | 2 128 | — | 24.97 | 33.53 | 41.50 | | |
| 1944-45 | 9 313 | 1 388 | — | 24.49 | 19.91 | 55.60 | | |
| 1945-46 | 17 556 | 3 622 | — | 62.28 | 10.13 | 27.59 | | |
| 1946-47 | 23 875 | 6 788 | 0.03 | 35.25 | 13.79 | 50.93 | | |
| 1947-48 | 45 908 | 12 740 | — | 37.96 | 15.45 | 46.59 | | |
| 1948-49 | 60 914 | 21 678 | 0.12 | 49.33 | 9.02 | 41.53 | | |
| 1949-50 | 91 509 | 44 334 | 1.77 | 52.15 | 8.81 | 37.27 | | |
| 1950-51 | 112 002 | 50 446 | 1.98 | 48.31 | 8.42 | 41.29 | | |
| 1951-52 | 186 062 | 80 450 | 5.16 | 39.99 | 9.37 | 45.48 | | |
| 1952-53 | 86 549 | 41 456 | 1.14 | 43.53 | 11.71 | 43.62 | 271.7 | 84.3 |
| 1953-54 | 102 945 | 47 142 | 0.46 | 50.63 | 8.93 | 39.98 | 294.4 | 97.6 |
| 1954-55 | 129 607 | 63 144 | 1.28 | 49.18 | 13.28 | 36.26 | 324.4 | 113.4 |
| 1955-56 | 125 504 | 64 656 | 3.18 | 49.17 | 11.70 | 35.95 | 347.8 | 123.6 |
| 1956-57 | 90 813 | 40 536 | 1.39 | 44.01 | 12.26 | 42.34 | 362.3 | 124.7 |
| 1957-58 | 94 205 | 40 792 | 1.85 | 46.37 | 11.91 | 39.87 | 367.2 | 125.4 |
| 1958-59 | 90 693 | 40 534 | 2.56 | 42.08 | 11.50 | 43.86 | 387.2 | 138.0 |
| 1959-60 | 119 493 | 57 962 | 2.69 | 43.89 | 12.15 | 41.27 | 436.6 | 160.2 |
| 1960-61 | 142 764 | 72 570 | 5.37 | 32.66 | 17.61 | 44.36 | 448.9 | 156.1 |
| 1961-62 | 103 386 | 46 774 | 3.28 | 31.95 | 21.87 | 42.90 | 451.6 | 143.1 |
| 1962-63 | 139 826 | 71 820 | 4.08 | 31.83 | 22.92 | 41.17 | 479.9 | 180.5 |
| 1963-64 | 179 651 | 94 302 | 4.72 | 24.75 | 30.63 | 39.90 | 525.3 | 212.5 |
| 1964-65 | 204 856 | 108 243 | 8.01 | 23.72 | 29.11 | 39.16 | 574.5 | 238.0 |
| 1965-66 | 198 156 | 103 032 | 6.84 | 23.32 | 27.25 | 42.59 | 602.0 | 220.4 |
| 1966-67 | 196 771 | 97 861 | 7.69 | 21.64 | 27.72 | 42.95 | 627.1 | 214.7 |
| 1967-68 | 215 619 | 113 215 | 7.16 | 17.29 | 32.71 | 42.84 | 663.6 | 242.0 |
| 1968-69 | 231 956 | 134 222 | 11.19 | 19.82 | 27.35 | 41.64 | 706.9 | 261.1 |
| 1969-70 | 201 223 | 98 204 | 10.77 | 21.49 | 21.50 | 46.23 | 762.3 | 285.7 |
| 1970-71 | 198 358 | 98 358 | 14.44 | 25.10 | 17.32 | 43.14 | 818.8 | 297.6 |
| 1971-72 | 189 748 | 83 083 | 15.08 | 22.83 | 14.48 | 47.61 | 890.9 | 322.5 |
| 1972-73 | 199 978 | 88 271 | 20.48 | 17.49 | 15.08 | 46.95 | 1 037.1 | n.a. |
| 1973-74 | 313 915 | 99 861 | 22.57 | 12.03 | 16.91 | 48.49 | 1 237.3 | 457.9 |
| 1974-75 | 482 077 | 136 079 | 19.17 | 14.20 | 13.10 | 53.53 | 1 503.3 | n.a. |
| 1975-76 | 501 476 | 203 407 | 18.57 | 11.14 | 14.84 | 55.45 | p 1 775.1 | n.a. |

TRANSPORT AND COMMUNICATION

Public Transport

| Year | Railways | | | Buses and Trams (a) | | Shipping (Entering SA) (b) |
|---------|-----------------------|------------------|-----------|-----------------------|-----------|-------------------------------------|
| | Passengers Carried | Goods Carried | Revenue | Passengers Carried | Revenue | |
| | '000 | '000 tonnes | \$'000 | '000 | \$'000 | '000 net tonnes |
| 1841 | | | | | | 18 |
| 1846 | | | | | | 25 |
| 1851 | | | | | | 75 |
| 1856 | 248 | 32 | 44 | | | 114 |
| 1861 | 310 | 145 | 185 | | | 103 |
| 1866 | 425 | 171 | 236 | | | 169 |
| 1871 | 394 | 228 | 235 | | | 187 |
| 1876 | 1 400 | 387 | 402 | | | 347 |
| 1880-81 | 2 902 | 683 | 837 | | | 641 |
| 1885-86 | 3 962 | 779 | 1 098 | | | 771 |
| 1890-91 | 5 296 | 1 427 | 2 448 | | | 1 288 |
| 1895-96 | 5 436 | 1 057 | 1 973 | | | 1 661 |
| 1900-01 | 8 864 | 1 628 | 2 473 | | | 1 967 |
| 1905-06 | 10 715 | 1 732 | 2 700 | | | 2 785 |
| 1910-11 | 16 620 | 2 731 | 4 030 | 34 013 | 480 | 3 625 |
| 1915-16 | 20 513 | 2 397 | 3 931 | 43 372 | 649 | 2 566 |
| 1920-21 | 23 788 | 2 682 | 5 884 | 55 324 | 1 111 | 2 887 |
| 1925-26 | 25 752 | 3 563 | 8 524 | 66 207 | 1 322 | 4 526 |
| 1930-31 | 15 453 | 2 175 | 5 201 | 52 756 | 1 444 | 4 166 |
| 1935-36 | 17 431 | 2 482 | 5 781 | 50 625 | 1 347 | 5 318 |
| 1940-41 | 20 360 | 2 770 | 7 060 | 56 518 | 1 537 | 3 047 |
| 1945-46 | 23 119 | 2 997 | 9 794 | 90 239 | 2 469 | 1 733 |
| 1950-51 | 17 178 | 3 519 | (c)14 715 | 78 141 | 3 238 | 5 283 |
| 1951-52 | 18 269 | 4 966 | 19 022 | 75 436 | 3 684 | 5 529 |
| 1952-53 | 17 565 | 4 172 | 24 976 | 66 571 | (d) 4 232 | 5 900 |
| 1953-54 | 17 605 | 4 457 | 25 848 | 66 972 | 4 145 | 6 108 |
| 1954-55 | 16 849 | 4 497 | 26 522 | 66 446 | 4 267 | 6 123 |
| 1955-56 | 16 434 | 4 436 | 26 662 | 63 515 | 4 668 | 6 282 |
| 1956-57 | 17 406 | 4 518 | 28 132 | 62 190 | 4 578 | 6 360 |
| 1957-58 | 17 564 | 4 166 | 27 033 | 60 083 | 4 988 | 6 569 |
| 1958-59 | 16 805 | 4 227 | 26 179 | 59 613 | 5 056 | 6 744 |
| 1959-60 | 17 038 | 4 059 | 25 652 | 58 168 | 5 641 | 6 745 |
| 1960-61 | 15 574 | 4 537 | 27 883 | 58 912 | 5 515 | 7 613 |
| 1961-62 | 15 176 | 4 638 | 27 984 | 57 950 | 5 430 | 7 646 |
| 1962-63 | 14 922 | 4 530 | 27 826 | 58 039 | 5 436 | 7 886 |
| 1963-64 | 15 227 | 5 213 | 29 673 | 58 571 | 5 473 | 9 486 |
| 1964-65 | 15 196 | 5 131 | 29 960 | 56 434 | 5 899 | 9 697 |
| 1965-66 | 15 511 | 4 823 | 29 137 | 53 112 | 6 049 | 9 517 |
| 1966-67 | 15 432 | 4 909 | 30 417 | 49 735 | 6 270 | 10 220 |
| 1967-68 | 15 242 | 4 401 | 28 244 | 47 813 | 6 225 | 10 028 |
| 1968-69 | 14 423 | 5 037 | 30 522 | 45 393 | 6 472 | 10 345 |
| 1969-70 | 13 990 | 5 922 | 33 566 | 43 345 | 6 696 | 12 213 |
| 1970-71 | 13 946 | 6 025 | 34 635 | 41 259 | 6 881 | 11 303 |
| 1971-72 | 13 433 | 5 948 | 35 603 | 40 842 | 6 978 | 10 533 |
| 1972-73 | 13 320 | 5 820 | 35 332 | 41 680 | 7 304 | 9 957 |
| 1973-74 | 13 597 | 6 655 | 39 827 | (e)47 533 | (e)9 958 | 9 639 |
| 1974-75 | 12 697 | 6 783 | 48 315 | 58 298 | 13 427 | 9 743 |
| 1975-76 | 12 672 | 6 184 | 50 099 | 58 336 | 14 454 | 9 386 |

(a) Buses and trams operated by Bus and Tram Division of the State Transport Authority. Years ended 31 July from 1912 to 1939. 31 January from 1940 to 1952, and 30 June from 1953.

(b) Years ended 31 December to 1913; thereafter year ended 30 June.

(c) Excludes Treasury grant from 1949-50. (d) Excludes Government grant from 1952-53.

(e) From March 1974 includes details of licensed private services taken over by the Bus and Tram Division.

TRANSPORT AND COMMUNICATION

| Year | Motor Vehicles on Register | | | Drivers and Riders Licences in Force | Telephone Services in Operation (a) | Radio Licences in Force (b) | Post Office Revenue | | | |
|------|----------------------------|--------------------------------|--------------------------------|--------------------------------------|-------------------------------------|-----------------------------|---------------------|---------------|-----------|------------|
| | Cars and Station Wagons | Utilities, Vans, Trucks, Buses | Total (incl. Cycles, Scooters) | | | | Postal, Etc. (c) | Telegraph (c) | Telephone | |
| | '000 | | | Number | | | '000 | | | |
| 1851 | ... | ... | ... | ... | ... | ... | 14 | ... | ... | |
| 1856 | ... | ... | ... | ... | ... | ... | 18 | ... | ... | |
| 1861 | ... | ... | ... | ... | ... | ... | 33 | 15 | ... | |
| 1866 | ... | ... | ... | ... | ... | ... | 56 | 24 | ... | |
| 1871 | ... | ... | ... | ... | ... | ... | 58 | 22 | ... | |
| 1876 | ... | ... | ... | ... | ... | ... | 114 | 64 | ... | |
| 1881 | ... | ... | ... | ... | ... | ... | 166 | 123 | ... | |
| 1886 | ... | ... | ... | ... | ... | ... | 214 | 160 | ... | |
| 1891 | ... | ... | ... | ... | ... | ... | 227 | 201 | ... | |
| 1896 | ... | ... | ... | ... | ... | ... | 250 | 242 | ... | |
| 1901 | ... | ... | ... | ... | 1 831 | ... | 282 | 263 | ... | |
| 1906 | ... | ... | ... | ... | 2 510 | ... | 342 | 182 | 61 | |
| 1911 | ... | ... | ... | ... | 6 086 | ... | 490 | 233 | 93 | |
| 1916 | ... | ... | ... | ... | 10 184 | ... | 484 | 277 | 212 | |
| 1921 | ... | 13.2 | 21.4 | 79 659 | 15 984 | ... | 762 | 420 | 468 | |
| 1926 | ... | 42.5 | 8.2 | 62.5 | 33 547 | 12 105 | 867 | 402 | 903 | |
| 1931 | ... | (d) 45.1 | (d) 12.1 | (d) 67.3 | 106 053 | 39 552 | 879 | 282 | 1 168 | |
| 1936 | ... | 53.7 | 19.4 | 84.3 | 92 227 | 39 911 | 1 017 | 327 | 1 197 | |
| 1941 | ... | 54.5 | 24.4 | 86.2 | 122 280 | 47 962 | 1 252 | 458 | 1 522 | |
| 1946 | ... | 64.4 | 31.4 | 107.2 | 137 979 | 53 126 | 1 921 | 815 | 2 170 | |
| 1947 | ... | 67.4 | 34.7 | 115.2 | 149 304 | 56 449 | 1 989 | 875 | 2 345 | |
| 1948 | ... | 75.7 | 36.4 | 127.5 | 159 814 | 60 249 | 2 190 | 946 | 2 507 | |
| 1949 | ... | 84.3 | 40.7 | 143.5 | 172 063 | 64 008 | 2 345 | 848 | 2 761 | |
| 1950 | ... | 97.5 | 46.0 | 163.9 | 192 469 | 69 907 | 2 546 | 1 169 | 3 536 | |
| 1951 | ... | 108.9 | 51.2 | 183.6 | 215 157 | 74 457 | 2 938 | 1 550 | 4 271 | |
| 1952 | ... | 120.5 | 55.9 | 200.4 | 232 119 | 80 919(e) | 3 872 | 1 818 | 5 588 | |
| 1953 | ... | 129.7 | 61.2 | 214.3 | 252 216 | 86 977 | 4 086 | 1 191 | 6 070 | |
| 1954 | ... | 139.7 | 64.6 | 226.9 | 265 727 | 93 104 | 4 311 | 1 112 | 6 728 | |
| 1955 | ... | 150.5 | 70.2 | 244.4 | 281 091 | 100 171 | 4 670 | 1 028 | 7 266 | |
| 1956 | ... | 161.4 | 73.2 | 257.5 | 299 158 | 107 649 | 5 033 | 1 075 | 8 067 | |
| 1957 | ... | 171.9 | 75.7 | 269.3 | 315 044 | 114 390 | 5 579 | 1 358 | 8 993 | |
| 1958 | ... | 184.3 | 77.8 | 283.0 | 328 833 | 122 311 | 6 247 | 1 385 | 9 950 | |
| 1959 | ... | 200.3 | 81.0 | 301.5 | 340 973 | 131 060 | 6 247 | 1 421 | 10 524 | |
| 1960 | ... | 214.9 | 84.1 | 318.3 | 369 584 | 138 019 | 7 359 | 1 437 | 12 793 | |
| 1961 | ... | 224.5 | 82.5 | 325.2 | 393 869 | 144 502 | 7 729 | 1 643 | 14 544 | |
| 1962 | ... | 238.9 | 82.5 | 338.1 | 397 803 | 152 785 | 249 673 | 7 761 | 1 434 | 15 604 |
| 1963 | ... | 258.8 | 83.9 | 358.2 | 414 656 | 162 012 | 256 741 | 8 322 | 1 592 | 16 508 |
| 1964 | ... | 280.1 | 86.3 | 380.5 | 427 717 | 173 314 | 266 027 | 8 709 | 1 852 | 19 131 |
| 1965 | ... | 298.1 | 86.4 | 397.4 | 447 985 | 182 249(f) | 269 040 | 9 312 | 2 187 | 23 038 |
| 1966 | ... | 314.0 | 87.3 | 413.5 | 464 778 | 192 922 | 281 747 | 9 759 | 2 398 | 24 757 |
| 1967 | ... | 327.7 | 87.1 | 427.6 | 481 496 | 203 191 | 278 069 | 10 117 | 2 521 | 26 990 |
| 1968 | ... | 342.9 | 87.6 | 443.9 | 491 765 | 212 842 | 290 051 | 11 378 | 2 688 | 30 124 |
| 1969 | ... | 364.7 | 89.6 | 468.2 | 513 687 | 224 174 | 297 877 (g) | 13 211 | (g) 1 606 | (g) 34 523 |
| 1970 | ... | 384.0 | 90.7 | 490.1 | 535 184 | 239 452 | 302 519 | 13 885 | 1 918 | 38 465 |
| 1971 | ... | 400.8 | 91.5 | 510.3 | 550 745 | 251 330 | 310 485 | 15 847 | 1 988 | 43 333 |
| 1972 | ... | 420.4 | 92.8 | 536.0 | 570 562 | 261 608 | 315 612 | 18 309 | 2 342 | 50 820 |
| 1973 | ... | 445.4 | 97.9 | 572.4 | 592 481 | 278 687 | 332 411 | 19 227 | 2 569 | 58 306 |
| 1974 | ... | 468.6 | 100.6 | 601.3 | 612 693 | 298 300 | 339 516 | 21 298 | 2 963 | 68 208 |
| 1975 | ... | 491.5 | 104.0 | 628.9 | 637 248 | 311 804 | (h) | 25 128 | 3 581 | 83 406 |
| 1976 | ... | * | * | * | 658 671 | 334 948 | (h) | n.a. | n.a. | n.a. |

(a) At 30 June from 1916; at 31 December in earlier years. (b) At 31 December from 1931 to 1943; otherwise at 30 June in years shown. (c) Years ended 30 June from 1886; earlier years ended 31 December. Telegraph includes telephone to 1901 and radio to 1948, from which time radio etc., licence fees have been excluded from Post Office revenue. (d) Vehicles in actual use on roads from 1930. (e) All receivers at the one address covered by one licence from 1952. (f) Combined radio and television licences included since 1 April 1965. (g) From 1968-69 content not comparable with previous years. (h) Abolished from 17 September 1974.

PUBLIC FINANCE

| Year | State Government | | | | | Local Government Revenue | | | |
|---------------|------------------|--------------|-----------------|-------------|----------|--------------------------|------------|-------------------|--------|
| | Total Revenue | Expenditure | | Public Debt | | State Taxation (a) | From Rates | Government Grants | Total |
| | | From Revenue | From Loan (Net) | Total | Per Head | | | | |
| \$'000 | \$'000 | \$'000 | \$'000 | \$ | \$'000 | \$'000 | \$'000 | \$'000 | |
| 1840-41 . . . | 51 | 180 | | | | | | | |
| 1845-46 . . . | 95 | 77 | | | | | | | |
| 1850-51 . . . | 445 | 367 | | | | 202 | | | |
| 1855-56 . . . | 960 | 1 160 | | 590 | 5-50 | 326 | | 54 | 114 |
| 1860-61 . . . | 1 117 | 966 | | 1 733 | 13-30 | 282 | 46 | 40 | 114 |
| 1865-66 . . . | 1 900 | 2 130 | | 1 551 | 9-20 | 478 | 60 | 60 | 162 |
| 1870-71 . . . | 1 556 | 1 519 | | 4 335 | 23-00 | 498 | 80 | 74 | 194 |
| 1875-76 . . . | 2 640 | 2 647 | | 7 674 | 34-20 | 920 | 118 | 80 | 286 |
| 1880-81 . . . | 4 344 | 4 108 | | 22 394 | 78-30 | 1 168 | 188 | 136 | 488 |
| 1885-86 . . . | 4 558 | 4 767 | 2 800 | 36 680 | 118-60 | 1 603 | 208 | 108 | 502 |
| 1890-91 . . . | 5 464 | 5 207 | 968 | 43 315 | 135-80 | 1 655 | 276 | 254 | 702 |
| 1895-96 . . . | 5 043 | 5 019 | 886 | 48 433 | 137-60 | 1 600 | 264 | 194 | 652 |
| 1900-01 . . . | 5 648 | 5 693 | 845 | 52 129 | 146-40 | 1 203 | 302 | 222 | 738 |
| 1905-06 . . . | 5 612 | 5 437 | 900 | 60 165 | 165-80 | 735 | 348 | 198 | 740 |
| 1910-11 . . . | 8 363 | 7 929 | 3 752 | (b)56 065 | 136-50 | 1 092 | 481 | 336 | 1 004 |
| 1915-16 . . . | 8 714 | 9 483 | 4 371 | 79 049 | 179-40 | 1 403 | 652 | 302 | 1 150 |
| 1920-21 . . . | 14 303 | 15 087 | 9 351 | 104 725 | 210-70 | 3 244 | 986 | 580 | 1 936 |
| 1925-26 . . . | 20 948 | 20 922 | 12 860 | 160 521 | 290-10 | 5 428 | 1 640 | 942 | 3 441 |
| 1930-31 . . . | 21 452 | 25 079 | 6 581 | 199 055 | 345-70 | 6 800 | 1 672 | 397 | 2 612 |
| 1935-36 . . . | 22 819 | 22 521 | 2 502 | 211 397 | 359-70 | 6 409 | 1 665 | 509 | 2 824 |
| 1940-41 . . . | 25 849 | 26 015 | 2 548 | 219 599 | 365-30 | 8 683 | 1 851 | 577 | 3 170 |
| 1945-46 . . . | 32 687 | 32 687 | 3 419 | 221 498 | 348-80 | (c) 4 036 | 2 040 | 451 | 3 474 |
| 1946-47 . . . | 34 385 | 34 506 | 4 423 | 228 260 | 353-20 | 4 286 | 2 271 | 697 | 4 061 |
| 1947-48 . . . | 37 686 | 38 312 | 4 963 | 237 704 | 359-50 | 4 573 | 2 610 | 923 | 4 740 |
| 1948-49 . . . | 43 690 | 44 259 | 9 281 | 249 440 | 367-20 | 5 740 | 2 967 | 1 106 | 5 513 |
| 1949-50 . . . | 58 721 | 59 100 | 17 339 | 266 349 | 375-40 | 6 591 | 3 248 | 1 496 | 6 380 |
| 1950-51 . . . | 67 344 | 66 885 | 33 871 | 296 776 | 405-20 | 8 104 | 3 830 | 1 963 | 7 579 |
| 1951-52 . . . | 85 276 | 85 098 | 52 875 | 346 872 | 459-40 | 9 586 | 4 686 | 2 578 | 9 548 |
| 1952-53 . . . | 98 203 | 98 153 | 40 885 | 389 706 | 502-30 | 9 983 | 5 761 | 2 306 | 10 800 |
| 1953-54 . . . | 104 751 | 101 132 | 39 879 | 429 446 | 538-80 | 13 073 | 6 524 | 3 867 | 13 416 |
| 1954-55 . . . | 103 768 | 108 236 | 42 912 | 472 925 | 577-10 | 15 092 | 7 041 | 3 836 | 14 213 |
| 1955-56 . . . | 118 805 | 121 665 | 42 666 | 512 179 | 603-60 | 16 150 | 8 162 | 4 381 | 16 310 |
| 1956-57 . . . | 131 522 | 131 619 | 43 793 | 552 880 | 633-20 | 18 620 | 9 563 | 4 733 | 18 436 |
| 1957-58 . . . | 141 285 | 142 083 | 37 153 | 593 628 | 662-00 | 19 541 | 10 333 | 4 848 | 19 721 |
| 1958-59 . . . | 145 360 | 147 414 | 41 442 | 635 404 | 690-00 | 20 435 | 11 060 | 4 948 | 21 080 |
| 1959-60 . . . | 160 555 | 161 177 | 43 432 | 678 210 | 717-50 | 22 297 | 11 971 | 5 478 | 22 535 |
| 1960-61 . . . | 172 559 | 170 182 | 44 739 | 722 038 | 743-20 | 23 425 | 13 076 | (d)3 524 | 25 034 |
| 1961-62 . . . | 186 405 | 185 392 | 43 773 | 763 399 | 773-10 | 25 150 | 14 887 | 2 984 | 27 969 |
| 1962-63 . . . | 195 168 | 194 589 | 42 047 | 807 044 | 798-50 | 26 940 | 15 943 | 3 215 | 29 094 |
| 1963-64 . . . | 211 006 | 207 755 | 44 218 | 853 553 | 822-30 | 29 825 | 16 968 | 4 317 | 33 725 |
| 1964-65 . . . | 222 181 | 224 803 | 53 100 | 902 823 | 845-70 | 34 901 | 18 625 | 3 804 | 33 952 |
| 1965-66 . . . | 236 816 | 243 650 | 55 089 | 955 128 | 872-30 | 37 636 | 20 412 | 4 106 | 38 020 |
| 1966-67 . . . | 258 823 | 258 717 | 57 016 | 1 013 060 | 913-00 | 44 708 | 22 875 | 4 244 | 42 319 |
| 1967-68 . . . | 274 544 | 277 404 | 55 382 | 1 074 959 | 958-30 | 48 255 | 24 369 | 4 493 | 42 813 |
| 1968-69 . . . | 298 355 | 297 895 | 61 390 | 1 143 954 | 1 004-10 | 53 351 | 26 276 | 4 505 | 45 263 |
| 1969-70 . . . | 338 498 | 335 578 | 67 469 | 1 210 489 | 1 045-30 | 59 840 | 27 596 | 4 988 | 48 556 |
| 1970-71 . . . | 386 859 | 386 838 | 71 491 | 1 256 337 | 1 070-40 | 62 745 | 29 118 | 4 758 | 49 589 |
| 1971-72 . . . | 455 245 | 456 312 | 111 740 | 1 333 720 | 1 124-10 | 97 476 | 32 224 | 7 653 | 54 886 |
| 1972-73 . . . | 520 866 | 524 777 | 117 411 | 1 415 129 | 1 180-20 | 120 474 | 35 874 | 15 025 | 65 917 |
| 1973-74 . . . | 641 967 | 645 368 | 107 566 | 1 481 337 | 1 216-00 | 156 903 | 42 202 | 11 844 | 67 682 |
| 1974-75 . . . | 828 985 | 820 601 | 123 854 | 1 555 333 | 1 260-30 | 219 190 | 53 804 | 21 209 | 96 000 |
| 1975-76 . . . | 1 036 985 | 1 034 698 | 160 602 | 1 394 702 | 1 120-60 | 272 760 | * | * | * 000 |

(a) Excludes all taxation paid to Special Funds. From 1966-67 the coverage of this item does not completely coincide with SA Treasury classifications. (b) Debt of Northern Territory and Port Augusta-Oodnadatta railway transferred to Commonwealth Government. (c) Uniform taxation in force from 1941-42. (d) Excludes reimbursement for work done on behalf of Highways Department from 1961.

PRIVATE FINANCE

| Year | Banking | | Life Insurance | | General Insurance Revenue (b) | Co-operative Societies (b) | Friendly Societies | Building Societies (b) | |
|------|---------------|--------------|---------------------|--------------------|-------------------------------|----------------------------|--------------------|------------------------|-----------------------|
| | Trading Banks | | Savings Bank | New Policies | | | | | Policies in Existence |
| | Advances (a) | Deposits (a) | Deposits at 30 June | Issued Sum Assured | | | | | Sum Assured |
| | | | S*000 | | | | No. of Members | | |
| 1846 | | 183 | | | | | | | |
| 1851 | | 426 | | 29 | | | | | |
| 1856 | | 1 419 | | 106 | | | | | |
| 1861 | 2 864 | 1 480 | | 243 | | | | | |
| 1866 | 6 240 | 2 803 | | 499 | | | | | |
| 1871 | 5 715 | 3 043 | | 982 | | | | | |
| 1876 | 9 449 | 6 632 | | 1 703 | | | | | |
| 1881 | 13 483 | 9 885 | | 2 499 | | | | | |
| 1886 | 19 226 | 9 924 | | 3 306 | | | | | |
| 1891 | 16 297 | 15 550 | | 4 316 | | | | | |
| 1896 | 9 470 | 15 343 | | 5 673 | | | | | |
| 1901 | 8 546 | 13 437 | | 7 591 | | | | | |
| 1906 | 10 612 | 15 598 | | 9 534 | | | | | |
| 1911 | 16 970 | 22 257 | | 14 872 | | 10 248 | | 9 572 | |
| 1916 | 20 325 | 27 264 | | 20 070 | | 13 270 | 65 540 | 8 962 | |
| 1921 | 27 296 | 44 199 | 32 635 | 6 000 | 40 272 | 1 305 | 28 762 | 70 155 | |
| 1926 | 31 672 | 51 574 | 43 558 | 9 341 | 60 244 | 2 045 | 41 539 | 77 791 | |
| 1931 | 44 119 | 44 956 | 42 844 | 6 266 | 65 016 | 1 627 | 45 791 (c) | 14 081 | |
| 1936 | 43 760 | 52 399 | 50 617 | 10 791 | 75 984 | 1 859 | 45 592 | 71 658 | |
| 1941 | 39 547 | 64 182 | 55 019 | 11 416 | 101 825 | 2 643 | n.a. | 76 357 | |
| 1946 | 31 560 | 93 397 | 131 729 | 22 805 | 147 230 | 2 705 | 70 620 | 80 419 | |
| 1947 | 39 674 | 99 653 | 135 800 | 24 935 | 165 025 | 3 372 | 80 150 | 79 827 | |
| 1948 | 39 585 | 119 859 | 147 226 | 26 555 | 183 753 | 4 371 | 84 470 | 78 246 | |
| 1949 | 41 387 | 142 558 | 162 351 | 29 003 | 204 289 | 5 755 | 87 733 | 76 761 | |
| 1950 | 50 412 | 159 136 | 175 390 | 33 076 | 227 616 | 7 312 | 92 066 | 75 168 | |
| 1951 | 62 109 | 206 743 | 195 698 | 44 899 | 261 931 | 9 298 | 92 424 | 71 591 | |
| 1952 | 89 163 | 214 630 | 207 452 | 48 475 | 298 494 | 12 370 | 96 134 | 67 563 | |
| 1953 | 79 574 | 247 260 | 227 750 | 51 671 | 335 457 | 14 593 | 100 323 | 63 922 | |
| 1954 | 95 968 | 250 802 | 245 898 | 59 540 | 377 093 | 16 165 | 107 069 | 61 345 | |
| 1955 | 106 740 | 250 795 | 263 384 | 70 458 | 426 881 | 18 321 | 109 667 | 59 149 | |
| 1956 | 108 515 | 241 044 | 271 512 | 75 301 | 477 554 | 20 590 | 114 018 | 57 216 | |
| 1957 | 105 618 | 266 897 | 284 802 | 89 470 | 539 120 | 23 835 | 109 636 | 55 499 (d) | |
| 1958 | 125 971 | 262 700 | 297 716 | 94 137 | 599 723 | 24 656 | (d) | 54 181 | |
| 1959 | 124 924 | 272 599 | 314 304 | 111 440 | 676 406 | 26 223 | 112 844 | 53 114 | |
| 1960 | 149 172 | 265 498 | 331 996 | 131 951 | 756 581 | 27 975 | 116 645 | 52 239 | |
| 1961 | 147 348 | 269 848 | 333 485 | 143 628 | 841 563 | 32 363 | 111 031 | 51 551 | |
| 1962 | 152 545 | 277 431 | 361 980 | 157 636 | 955 426 | 33 740 | 116 405 | 51 198 | |
| 1963 | 175 753 | 285 418 | 416 155 | 165 183 | 1 056 390 | 37 499 | 108 283 | 50 765 | |
| 1964 | 193 251 | 311 208 | 475 803 | 197 790 | 1 161 986 | 41 695 | 113 224 | 50 946 | |
| 1965 | 223 573 | 347 045 | 519 268 | 215 946 | 1 294 450 | 45 433 | 115 828 | 51 258 | |
| 1966 | 258 447 | 362 905 | 558 857 | 239 250 | 1 439 083 | 50 121 (e) | 116 615 | 51 109 | |
| 1967 | 284 271 | 372 985 | 605 167 | 279 996 | 1 618 112 | 56 114 | 125 638 | 51 001 | |
| 1968 | 321 892 | 390 110 | 643 690 | 301 602 | 1 807 040 | 59 981 | 125 385 | 51 070 | |
| 1969 | 354 782 | 405 666 | 691 778 | 347 048 | 2 031 479 | 65 354 | 126 529 | 50 880 | |
| 1970 | 374 575 | 424 017 | 733 100 | 437 699 | 2 313 244 | 70 640 | 123 263 | 50 796 | |
| 1971 | 396 183 | 431 863 | 787 901 | 525 879 | 2 667 651 | 76 020 | 124 021 | 50 488 | |
| 1972 | 419 682 | 469 983 | 874 138 | 586 663 | 3 053 169 | 89 173 | 123 755 | 50 077 | |
| 1973 | 470 070 | 563 670 | 1 060 425 | 727 998 | 3 565 754 | 98 678 | 121 893 | 50 664 | |
| 1974 | 585 505 | 749 182 | 1 174 813 | 908 775 | 4 175 174 | 127 473 | 122 562 | 50 779 | |
| 1975 | 688 337 | 901 858 | 1 394 585 | 1 095 897 | 4 927 762 (f) | 182 857 | 122 701 | 49 888 | |
| 1976 | 814 384 | 1 175 629 | 1 617 336 | * | * | 225 595 | 124 506 | 48 057 | |

(a) Until 1961, average of balances at close of business on Wednesdays during the June quarter of the year stated. From 1962, average of balances at close of business on Wednesdays during the year ended 30 June of the year stated. (b) Year ended 30 June. (c) Membership at 30 June from 1932; previously 31 December. (d) Balance dates of societies do not coincide; from this year figures are aggregates of members at balance dates within the year ended 30 June. (e) Figures from 1966 have been revised because of a redefinition of Co-operative Societies, and details for years before 1966 are not comparable. (f) From 1974-75 premium income only; details of interest, dividends and rent no longer available.

APPENDIX B

PRINCIPAL EVENTS

CHRONOLOGICAL LIST OF IMPORTANT EVENTS IN
SOUTH AUSTRALIA SINCE 1836

- 1836**—First migrants landed at Kangaroo Island on 20 July. First South Australian newspaper published in London. Colony's first school opened on Kangaroo Island. The Surveyor-General, Col Light, arrived in November and commenced survey of Adelaide. Governor Hindmarsh arrived in HMS *Buffalo* and proclaimed South Australia a Province on 28 December.
- 1837**—Col Light completed survey of Adelaide and designed the city's present layout. First Adelaide land allotments made. First newspaper published in South Australia. South Australian Supreme Court established. First hospital opened in North Terrace, Adelaide.
- 1838**—First overland cattle and sheep drives from New South Wales. First export from South Australia, a small clip of wool, dispatched. First German settlers under the leadership of Pastor Kavel arrived in South Australia. Formation of first police force.
- 1839**—Col Light died at Thebarton and buried in Light Square. First road in South Australia built between Adelaide and Port Adelaide. Adelaide Chamber of Commerce founded.
- 1840**—Eyre started overland journey to Western Australia. The Municipality of Adelaide incorporated, the first in Australia. McLaren Wharf, Port Adelaide, opened by Governor Gawler.

- 1841—First South Australian mine (silver-lead) opened near Glen Osmond. Assisted migration suspended because of depression. Following financial crisis Governor Gawler recalled and succeeded by Governor Grey. Eyre arrived at Albany in Western Australia.
- 1842—Registration of births, deaths and marriages commenced. Portions of South Australia divided for first time into counties. Copper discovered at Kapunda. Legislative Council constituted. The South Australian Board of Colonisation Commissioners abolished by the British Government.
- 1843—Stripper invented by Ridley. A flour mill built at Hindmarsh.
- 1844—First Colonial Census held, and showed a population of 17 366.
- 1845—Copper discovered at Burra. Sturt explored the north-eastern part of the State. Gold found in South Australia, near Montacute. Assisted migration resumed.
- 1846—First pastoral leases granted.
- 1847—First winery in the Barossa Valley commenced operation. St Peters College established.
- 1848—Opening of The Savings Bank of South Australia. First ferry across the River Murray commenced operations at Wellington.
- 1849—The Central Board of Main Roads established.
- 1850—An Act granting representative government to South Australia passed by the British Parliament.
- 1851—The Central Board of Education established.
- 1852—First overland gold escort arrived in Adelaide.
- 1853—W. R. Randell's *Mary Ann* and Francis Cadell's *Lady Augusta* initiated the navigation of the Murray.
- 1854—State's first railway (horse-drawn) built from Goolwa to Port Elliot.
- 1855—First South Australian postage stamps issued.
- 1856—First telegraph line opened from Adelaide to Port Adelaide. The new Constitution Act embodying the principle of responsible government proclaimed; it provided for Parliament to consist of two Houses; a Legislative Council and a House of Assembly. First steam railway from Adelaide to Port Adelaide constructed. Population of the State passed 100 000.
- 1857—Railway to Smithfield and Gawler opened.
- 1858—The Real Property Act, which embodied the principles of conveyancing formulated by Torrens, came into operation. First telegraph line to Melbourne opened.

- 1859—A jetty over 350 metres in length constructed at Glenelg. Copper discovered at Wallaroo.
- 1860—Water supplied to the City of Adelaide by means of a main connected with the reservoir at Thorndon Park.
- 1861—Copper discovered at Moonta. Water laid on to houses in Adelaide. John McDouall Stuart set out to cross the continent from south to north. The South Australian boundary shifted west to coincide with the boundary of Western Australia.
- 1862—Stuart reached Chambers Bay on the coast of the Northern Territory.
- 1863—Administration of the Northern Territory taken over by South Australia. Shops of Adelaide lit for the first time with gas.
- 1865—Annual leases of pastoral lands sold by auction for first time. The Bank of Adelaide founded.
- 1866—Camels for the purpose of exploration introduced by Sir Thomas Elder. The Adelaide Town Hall opened.
- 1867—Visit of Alfred, Duke of Edinburgh, who laid the foundation stone of the General Post Office.
- 1869—Foundation stone of St Peters Cathedral laid. Prince Alfred College opened. Adelaide Chamber of Manufactures founded.
- 1870—Construction of the transcontinental telegraph from Port Darwin commenced. John Forrest and party made first of two journeys of exploration from Perth.
- 1872—Transcontinental telegraph from Port Darwin completed and first direct telegram from London received.
- 1873—Eight-hour working day adopted. First Health Act, establishing a Central Board of Health, passed.
- 1874—The University of Adelaide founded.
- 1875—The State Education Act passed. First Forestry Board established.
- 1876—Telegraph communication with New Zealand established. The Smith brothers invented the 'stump jump' plough. South Australia became first State to give legal recognition to trade unions.
- 1877—Overland telegraph line from Port Augusta to Eucla completed and first telegram from Perth transmitted. The Adelaide Bridge completed.
- 1878—Provisions of the Education Act relating to compulsory school attendance brought into force in the Adelaide school district. First tramway (horse-drawn) in any Australian city commenced carrying passengers to Kensington and North Adelaide. The State's population passed 250 000.

- 1879—Foundation stone of the Adelaide University laid. First bridge across River Murray in South Australia opened at Murray Bridge.
- 1881—First reclamation of swamp areas of River Murray. Art Gallery opened by His Royal Highness Prince Albert Victor. Construction of the weir which created the Torrens Lake completed.
- 1882—Fire Brigades Board established.
- 1883—The Telephone Exchange commenced operations. Roseworthy Agricultural College opened to students.
- 1884—Largs Bay Fort opened. Adelaide Trades and Labor Council, the first delegates society, inaugurated.
- 1885—Broken Hill silver mines opened. Column erected on Mount Lofty summit as a prominent landmark for mariners.
- 1887—Act authorising payment to members of Parliament passed. Renmark Irrigation Colony established. First express trains ran between Adelaide and Melbourne. The Jubilee Exhibition opened. Stock Exchange of Adelaide formed by amalgamation of Adelaide Stock Exchange and Stock Exchange of South Australia.
- 1888—Totalisator legally authorised by an Act of Parliament.
- 1889—The School of Mines and Industries opened. Smelting of silver-lead ore from Broken Hill commenced at Port Pirie.
- 1890—First South Australian built locomotive completed.
- 1892—Education made free to the compulsory age, and standard.
- 1894—Act granting the franchise to women passed. Inauguration of industrial arbitration by the establishment of Boards of Conciliation.
- 1896—State Bank of South Australia opened. Women voted for the first time at the general election. Happy Valley Reservoir opened. One of Adelaide's most severe droughts commenced, and continued for several years.
- 1899—Second referendum concerning the establishment of Federation held. In South Australia, 65 990 electors voted for Federation and 17 053 against. First military contingent left South Australia for the Boer War.
- 1900—Adelaide lit for the first time with electric light. The Commonwealth of Australia Constitution Act received Royal Assent and a Proclamation was issued uniting the States as the Commonwealth of Australia as from 1 January 1901. Conservatorium of Music opened. First Workmen's Compensation Act passed.
- 1901—Early closing of shops introduced. First Commonwealth Parliament elected. The Duke and Duchess of York arrived in the *Ophir*. The *Customs Act* came into force. The Electric Light Works was opened. Iron Knob connected to Whyalla by railway.

- 1902—Flinders column, at Mount Lofty, dedicated to the public by the Governor, Lord Tennyson.
- 1905—First kindergarten in South Australia opened.
- 1906—Military cadet system inaugurated.
- 1907—High schools were established in a number of country centres. Municipal Tramways Trust incorporated. First Federal basic wage judgement—the 'Harvester' award—made.
- 1908—Penny savings bank accounts for children established. The Outer Harbor opened. Adelaide High School established.
- 1909—Adelaide electric tramways commenced operations. Payment of age pensions by the Commonwealth Government commenced.
- 1910—Payment of invalid pensions by the Commonwealth Government commenced. First recorded monoplane flight in Australia made by F. C. Custance at Bolivar.
- 1911—'Penny Postage' to all parts of the British Empire introduced. The Federal Defence Act came into operation. Administration of the Northern Territory transferred to the Commonwealth Government.
- 1913—Medical inspection of school children introduced. Commonwealth Bank formally opened. Metropolitan Abattoirs established.
- 1914—First South Australian military expeditionary force embarked at Outer Harbor. South Australia experienced its most severe drought.
- 1915—Prices of commodities fixed by a commission. A referendum approved the closing of liquor bars at 6 p.m. Women appointed as justices of the peace for the first time. First shipment of iron ore made from Whyalla to steelworks in Newcastle. First women police appointed. Opal discovered at Coober Pedy.
- 1916—Referendum proposing compulsory military service abroad defeated. First Public Service Commissioner appointed. First State living wage with general application declared.
- 1917—German private schools in South Australia were closed. East-West trans-continental railway completed and the first train ran to Perth. Mr R. G. Carey, in a Bleriot 60, made the State's first airmail flight from Enfield to Gawler.
- 1919—Captain Butler flew from Adelaide across Gulf St Vincent carrying air mail to Minlaton. Soldier Settlement Bill passed by the South Australian Parliament. First Lord Mayor of Adelaide elected.
- 1920—Sir Ross Smith and party arrived at Adelaide by non-stop flight from Melbourne. Peace Exhibition held at the Jubilee Exhibition buildings. The Prince of Wales visited South Australia.

- 1921—The State's population passed 500 000.
- 1922—First lock on the River Murray completed and opened at Blanchetown.
- 1923—The Government approved an extensive re-organisation of the railway system.
- 1924—Public Debt Commissioners were appointed. Air mail between Adelaide and Sydney inaugurated. Waite Agricultural Research Institute established. First radio stations commenced broadcasting.
- 1925—Showgrounds at Wayville opened. The first Federal election at which voting was compulsory took place. Foundation stone of Adelaide Teachers Training College laid.
- 1926—The South Australian barley exhibit won all prizes at the Brewers Exhibition in London. The State Bank opened for general banking business. Construction of a narrow gauge railway from Oodnadatta to Alice Springs approved. State petrol tax declared invalid following a Commonwealth Government writ against the State.
- 1927—Extension of the North-South railway commenced. The first train arrived at Renmark following the opening of the Paringa Bridge. The Duke and Duchess of York arrived in South Australia.
- 1929—The first air mail left Adelaide for Perth. The first train to Alice Springs left Adelaide. Compulsory military training abolished and replaced by a voluntary system. Electric tram service to Glenelg commenced.
- 1930—All officers of the South Australian Public Service over the age of sixty-five years were compulsorily retired. The South Australian basic wage was reduced by 18c to \$1·25 a day. Transport Control Board, State Finance Committee and Unemployed Relief Council established.
- 1931—City Bridge opened. Financial Plan formulated at the Premiers' Conference adopted and Financial Emergency Act passed. Federal basic wage reduced by 10 per cent for twelve months but was to be adjusted in accordance with a retail price index. State basic wage reduced from \$1·25 to \$1·05 a day. Basic wage for females reduced, first from \$3·95 to \$3·50 and later to \$3·15 a week.
- 1932—Boundaries and names of a number of local government areas changed and others abolished following the report of a commission.
- 1933—The Farmers Assistance Board, the Betting Control Board and the Metropolitan and Export Abattoirs Board established.
- 1934—Water restrictions in force from May until the following January.
- 1935—The Nomenclature Act of 1935 restored the former German names to a number of towns, the names of which had been changed in 1917.
- 1936—Centenary year of the State's foundation celebrated. Contract signed for the completion of Parliament House and the foundation stone laid by the Governor, Sir Winston Dugan.

- 1937—South Australian Housing Trust established. New Federal basic wage of \$7·40 per week which incorporated a 'prosperity' loading declared. First trolley bus service inaugurated. Mount Bold Reservoir with a capacity of 30 000 megalitres filled, almost doubling Adelaide's water storage. Schools closed and other precautions taken as a result of an epidemic of poliomyelitis.
- 1938—First South Australian Housing Trust dwelling completed.
- 1939—State's worst heat wave and disastrous bush fires experienced during the first two months of the year. Record high temperature of 47·6°C recorded in Adelaide. New Parliament House opened by His Excellency the Governor-General, Lord Gowrie.
- 1940—Goolwa Barrage completed at a cost of \$1 400 000. Birkenhead Bridge opened. A rapid development of secondary industry took place as munition annexes were added to existing factories and new factories were opened.
- 1941—Scriptural instruction in State schools commenced. First naval vessel built in South Australia launched. First blast furnace to be built at Whyalla went into operation. Child endowment payments inaugurated. Payroll tax commenced.
- 1942—Daylight saving of one hour introduced for almost three months. Wages and prices pegged and profits and interest rates restricted. Racing and bookmaking prohibited. Rationing of tea and clothing commenced. Widows pension instituted. The uniform Income Tax Act came into force. First coal obtained from Leigh Creek.
- 1943—Price stabilisation legislation came into force. Butter rationing commenced. Wage and price subsidies were introduced and the prices of tea, potatoes and other commodities were reduced in order to bring price indexes and wages to a lower level. Racing resumed but betting shops remained closed.
- 1944—Rationing of meat began. Morgan-Whyalla pipeline officially opened. The first State election with compulsory voting took place. Severe water restrictions imposed. First output of Leigh Creek coal for electricity generation.
- 1945—Unemployment and sickness benefits came into operation. Restrictions imposed on the use of gas and electricity for domestic and industrial purposes.
- 1946—Commonwealth Government munition factories leased to various private firms. Payment of government subsidies to hospitals commenced. Restrictions on the use of gas and electricity again imposed. The Electricity Trust of South Australia took over the property and functions of the Adelaide Electric Supply Co.
- 1947—Fruit fly detected in metropolitan orchards and efforts made to eliminate it by stripping gardens and orchards. Sugar rationing abolished. Conciliation commissioners appointed following an amendment to the Federal Conciliation and Arbitration Act. Severe restrictions imposed on imports from North America.

- 1948**—Restrictions on the use of gas and electricity imposed on a number of occasions during the year because of the shortage of coal. Preparation of the Woomera rocket range commenced. Forty hour working week introduced by Arbitration Court award. Serious bush fires occurred in January. Severe storms during April resulted in widespread damage including the destruction of the Glenelg jetty. The free medicine scheme came into operation. Clothing and meat rationing abolished. Full-scale production of the 'Holden' car commenced.
- 1949**—Petrol rationing by the Commonwealth Government declared illegal but resumed later in the year under a State Act. An extended national coal strike occurred. Water pipeline to the Woomera rocket range completed. The Commonwealth and South Australian Governments ratified an agreement for the standardisation of railway gauges.
- 1950**—Petrol, butter and tea rationing discontinued. Federal free drugs scheme came into operation. Water restrictions imposed in December and remained in force until June 1951.
- 1951**—Serious bush fires occurred in January. Wool prices reached a record high level. Distribution of free milk to school children introduced.
- 1952**—The hospital benefits scheme came into operation. Price control on clothing removed in South Australia. Severe import restrictions gazetted. Installations for the bulk handling of grain opened at Ardrossan. Compulsory chest X-rays introduced.
- 1953**—Remaining controls on building removed. Port Pirie became the first country town to be proclaimed a city. The medical benefits scheme came into operation. Automatic quarterly cost-of-living adjustments to the basic wage discontinued. Size of the State Cabinet increased from six to eight Ministers.
- 1954**—A severe earthquake occurred in Adelaide on 1 March. Her Majesty Queen Elizabeth II visited South Australia. First unit of Port Augusta power station opened. Construction of dwellings in Elizabeth commenced. Water from the River Murray pumped into metropolitan reservoirs through the Mannum pipeline.
- 1955**—Adelaide Airport at West Beach opened. The new satellite town at Elizabeth officially opened.
- 1956**—River Murray flooded for several months and caused considerable damage in irrigation and reclaimed areas. Town Planning Committee established. Atomic device exploded at Maralinga. Salk poliomyelitis vaccination program commenced.
- 1957**—Centenary of responsible government in South Australia celebrated. Long service leave legislation passed by the South Australian Parliament.
- 1958**—Visit of Queen Elizabeth, the Queen Mother, to South Australia. Introduction of parking meters to Adelaide. South Para Reservoir opened and connected to Adelaide water supply. Final run by a street tram in Adelaide, following conversion to diesel bus transport.

- 1959—South Australia ceased to be a claimant State for special grants from Grants Commission. Full-scale television transmission commenced. Sir Thomas Playford created record term as Premier in a British country (26 years 125 days). Aborigines became eligible for age, invalid and widows pensions.
- 1960—First Adelaide Festival of Arts held (March 12-26). Completion of second unit and formal opening of Thomas Playford power station at Port Augusta.
- 1961—First United Kingdom Trade Commissioner appointed to South Australia. Compulsory driving tests introduced. The trailer ship *Troubridge* made its first run from Port Adelaide to Kingscote and Port Lincoln. Sturt's Desert Pea declared State's official floral emblem.
- 1962—Myponga Reservoir completed and linked to Happy Valley Reservoir. Duplication of Morgan-Whyalla pipeline commenced.
- 1963—Population of the State passed 1 000 000 mark. Port Stanvac oil refinery 'on stream'. School leaving age increased to fifteen years. Three weeks annual leave for employees governed by State awards and determinations introduced. First direct dialling for an overseas telephone call from South Australia. Major gas flow from Gidgealpa No. 2 well. Royal visit by Her Majesty, Queen Elizabeth II.
- 1964—Work commenced on conversion of Port Pirie-Broken Hill railway to standard gauge. First gas from Port Stanvac refinery piped for use in Adelaide's gas supply. Record wind gust (148 km/h) and all-time low barometric reading (985 mb) registered at Adelaide on 12 July. New world land speed record set by Donald Campbell on Lake Eyre.
- 1965—Election of first Labor State Government since 1933. First country television station opened at Port Pirie. Steel works including a basic oxygen steel making plant opened at Whyalla. First tenders let for Torrens Island power structure. First woman judge in Australia appointed to Supreme Court of South Australia. Size of the State Cabinet increased from eight to nine Ministers.
- 1966—Women sworn in for jury service for the first time. The Flinders University of South Australia at Bedford Park officially opened by Queen Elizabeth the Queen Mother. Second major natural gas strike in Gidgealpa area. New outlet tunnel 2 700 metres long from Happy Valley Reservoir completed. ELDO rocket Europa-1 launched at Woomera. Industrial Commission of SA replaced the SA Board of Industry.
- 1967—Totalizator Agency Board operated off-course in South Australia for the first time. First South Australian lottery drawn. Federal Basic Wage superseded by Total Wage concept. Liquor trading hours extended to 10 p.m. WRESAT-1, first Australian orbital satellite launched from Woomera. New record low annual rainfall for Adelaide (257 mm). Torrens Island power station commenced operations. First off-shore drilling rig—*Ocean Digger*—constructed and launched at Whyalla.

- 1968**—State elections held, Labor Government returned but subsequently defeated on the floor of the House at the first meeting of the new Parliament. New Liberal Premier, Mr R. S. Hall sworn in. Four weeks leave for State Government employees introduced. Construction commenced on State's first satellite communications station at Ceduna. Legal drinking age lowered from twenty-one to twenty. Sealed highway from Broken Hill to Adelaide opened. Sir James Harrison first Australian-born Governor of South Australia sworn in.
- 1969**—Work begun on second major pipeline to bring River Murray water to Adelaide. Forty-first Congress of the Australian and New Zealand Association for the Advancement of Science held in Adelaide. Electricity Trust signed \$120 million contract for supply of natural gas. Natural gas flowed through completed 832 kilometre pipeline from Moomba-Gidgealpa to Adelaide.
- 1970**—Abortion law reformed in South Australia. Standard gauge working on new line between Port Pirie and Broken Hill begun. First direct telecast from England to Australia *via* satellite. First contracts signed for construction of \$4.8 million Adelaide Festival Theatre. Hairy-nosed wombat adopted as State's Faunal Emblem. South Australian Government applied to Commonwealth Grants Commission for financial assistance and received an interim grant.
- 1971**—Fluoridation of Adelaide water supply commenced. Agreement for supply of natural gas to Sydney from South Australian gas fields finalised. Points demerit scheme for drivers who commit road traffic offences introduced. Age of Majority reduced from twenty-one to eighteen. Commonwealth Government transferred power to levy payroll tax to the States. Daylight saving introduced in South Australia for the first time since the 1939-45 War. Agreement to build Dartmouth Reservoir ratified by SA Parliament. Plans announced for development of Patchawarra oil field at estimated cost of \$200 million including pipelines to Adelaide and Sydney. Death of SA Governor Sir James Harrison in office and Sir Mark Oliphant, the first SA born Governor, sworn in. Wearing of seat belts in motor vehicles made compulsory. Plans announced by the South Australian National Football League for new headquarters at West Lakes.
- 1972**—Plans announced for creation of new city of more than 100 000 people near Murray Bridge. New Stirling to Verdun freeway opened. Plans announced for the sealing of the Eyre Highway from Penong to the WA border. New laws regulating door-to-door selling and used car dealing introduced. Plans to filter Adelaide's water supply at a cost of \$35 million announced. University of Adelaide's educational radio station VL5UV commenced broadcasting. Work begun on \$40 million Flinders Medical Centre. Weather temperature reports changed to

degrees Celsius. North Haven residential project to house 4 000 people at the northern end of Le Fevre Peninsula announced. Daylight saving re-introduced for 1972-73 and subsequent summers. South Australian Film Corporation commenced operation. South Australia's first ombudsman, Mr. G. D. Combe, appointed.

1973—New long service leave provision for three months leave after ten years service came into force. Plans announced for the building of a new \$40 million lubrication oil refinery at Port Stanvac. Work begun on \$62 million Dartmouth dam project. New \$11 million hospital opened at Modbury. Dunstan ALP Government returned at State election to become the first ALP Government to retain office after a general election in South Australia since 1910. Cross Lotto game introduced by State Lotteries Commission. Lake Eyre filled with water for the first time since 1950 because of floodwaters in the north of the State. \$6.6 million Adelaide Festival Theatre opened by the Prime Minister. Legislation enacted for adult franchise and proportional representation for the Legislative Council. Compulsory blood tests for road accident victims introduced. \$50 note issued for the first time. Bill passed in State Parliament for extensive improvement in workers' compensation benefits. Commonwealth Government took over responsibility for Aboriginal Affairs from South Australian Government.

1974—World Gliding Championships held at Waikerie. Prince Philip, the Duke of Edinburgh, visited South Australia. University of Adelaide celebrated its centenary. Prime Minister opened new \$4.8 million Australian Broadcasting Commission complex at Collinswood. Police dog patrols commenced. Plans announced for building of \$2.8 million boat harbour at Taperoo. First match held at the new South Australian National Football League headquarters at West Lakes. Commonwealth Government agreed to provide \$22 million for the sealing of a new two-lane highway between Port Augusta and Alice Springs. Conversion of road signs to metric measurements undertaken. New development plan for Adelaide released. Judgment handed down making four weeks annual leave standard for workers under State awards. State primary schools began a new program of continuous admission of children on their fifth birthday. New State taxes on petrol and tobacco announced. Playhouse, Space and Amphitheatre at the Adelaide Festival Centre opened. Legislation allowing hotel trading to 12 midnight on Fridays and Saturdays came into force.

1975—Phase I of \$54 million Flinders Medical Centre opened. Transmission of television in colour commenced. Work began on \$140 million Tarcoola-Alice Springs rail link. International Equestrian Exposition 1975 held in Adelaide and attended by Her Royal Highness, Princess Anne. Plans announced for the building of a new meteorological centre at Kent Town. State Election held on 12 July, after the Legislative

Council failed to pass the Railways (Transfer Agreement) Bill; the Dunstan ALP Government was returned with a reduced majority and the Bill was subsequently passed. Medibank commenced operations in South Australia. Legislation for the redistribution of House of Assembly electoral boundaries passed by the Legislative Council. Bankcard began operations in South Australia. The South Australian Industrial Commission adopted the National Wage indexation guide lines for State awards.

1976—FM radio broadcasting began in South Australia. Rail track to Christie Downs opened. \$6.25 million Regency Park centre for treatment and care of physically handicapped children opened. A new commercial radio station (5AA) went to air, Adelaide's first for forty-six years. A new political party, the New Liberal Movement formed. The State Government announced plans to establish a Youth Work Unit to help school leavers and other unemployed young people to find jobs. Sir Douglas Nicholls appointed as Governor of South Australia from 1 December 1976. Sections of the new coastal route of the Eyre Highway opened. Smoking banned on buses operated by the Bus and Tram Division of the State Transport Authority. The Australia Post began a full courier service in Adelaide. Plans announced for on-the-spot fines of \$20 for littering. Price control on petrol removed for a six-month trial period. Plans announced for abolition of South Australian succession duties on estates passing to husbands and wives. Thirty-three metropolitan and fourteen country seats formed in the redistribution of House of Assembly electorates by the Electoral Boundaries Commission. Date stamping regulations for all short-life perishable foods approved by Executive Council. Rundle Mall commissioned by the Premier on 1 September. A total eclipse of the Sun occurred in parts of South Australia on 23 October. Large deposits of copper ore discovered at Roxby Downs near Andamooka. Legislation passed making rape within marriage a criminal offence. Capital punishment abolished in South Australia.

1977—The State Government announced a \$40 million oil and gas search program in the north of the State. Her Majesty Queen Elizabeth II and the Duke of Edinburgh visited South Australia. \$5.8 million Southern Plaza at the Adelaide Festival Centre officially opened by Her Majesty Queen Elizabeth II. The German vessel *Visurgis* became the first container ship to use the new container terminal at Outer Harbor. South Australia's first million dollar lottery, the Celebration Lottery, drawn by the Lotteries Commission. Plans announced for a \$11 million gas turbine generating plant to be built at Snuggery in the South East. The State Government Insurance Commission entered the field of life insurance. A Royal Commission established to enquire into shopping hours. A major deposit of sub-bituminous coal discovered near Lock. The State's new beverage container deposit legislation came into operation. The State Government announced plans for a new hospital to be built at Christies Beach. The South Australian Health Commission came into operation.

RECENT INFORMATION

In this section details are given of some important developments which have occurred recently. More up-to-date statistics than those shown in this volume are regularly incorporated in various statistical publications as they become available. A list is included on pages 804-5.

PART 3—CONSTITUTION AND GOVERNMENT

House of Representatives (page 77)—Following an electoral redistribution of House of Representative's seats by Federal Electorate Redistribution Commissioners, the number of members of the House of Representatives has been reduced from 127 to 124. The number of South Australian seats in the House of Representatives has been reduced from 12 to 11 with the seat of Angus being abolished.

The number of members from other States are: New South Wales 43 (previously 45), Victoria 33 (34), Queensland 19 (18), Western Australia 10 (10), and Tasmania 5 (5). In addition, one member will be elected from the Northern Territory and two members will be elected from the Australian Capital Territory.

Referenda (page 81)—On 16 February 1977, four Bills were introduced into the House of Representatives to alter the Constitution.

1. The Constitution Alteration (Simultaneous Elections) Bill to ensure that future Senate elections would be held simultaneously with the House of Representatives elections.

2. The Constitution Alteration (Senate Casual Vacancies) Bill to write into the Constitution the principle that a casual Senate vacancy should be filled by a member of the same political party as the former member belonged to.

3. Constitution Alteration (Retirement of Judges) Bill to provide for a maximum retirement age for Justices of the High Court and of other Federal courts.

4. Constitution Alteration (Referendums) Bill to give electors in the Australian Capital Territory and the Northern Territory the right to vote in referendums for the alteration of the Constitution.

The proposed laws, after being passed by both Houses of Parliament, were submitted to the electors of the States at referenda held on 21 May 1977.

Alteration to the Constitution requires the approval of a majority of electors voting in a majority of the States as well as a majority of all the electors voting in Australia as a whole. Three of the four referendum proposals were approved, but the Constitution Alteration (Simultaneous Elections) Referendum was defeated because it recorded a majority of votes in only three States (although it was approved by the majority of electors in Australia).

Particulars of the voting at the referendum are shown in the following tables.

Constitution Alteration (Simultaneous Elections) Referendum

| State | Number of Votes | | | |
|-----------------------------|-------------------------------|-----------------------------------|----------|-----------|
| | In Favour of the Proposed Law | Not in Favour of the Proposed Law | Informal | Total |
| New South Wales | 1 931 775 | 800 331 | 42 282 | 2 774 388 |
| Victoria | 1 325 708 | 713 929 | 43 499 | 2 083 136 |
| Queensland | 534 968 | 590 942 | 12 932 | 1 138 842 |
| South Australia | 480 827 | 247 762 | 17 401 | 745 990 |
| Western Australia | 292 344 | 310 765 | 14 354 | 617 463 |
| Tasmania | 82 785 | 158 818 | 4 460 | 246 063 |
| Total | 4 648 407 | 2 822 547 | 134 928 | 7 605 882 |

Constitution Alteration (Retirement of Judges) Referendum

| State | Number of Votes | | | |
|-----------------------------|-------------------------------|-----------------------------------|----------|-----------|
| | In Favour of the Proposed Law | Not in Favour of the Proposed Law | Informal | Total |
| New South Wales | 2 316 999 | 414 070 | 43 319 | 2 774 388 |
| Victoria | 1 659 273 | 378 505 | 45 358 | 2 083 136 |
| Queensland | 734 183 | 391 227 | 13 432 | 1 138 842 |
| South Australia | 622 760 | 104 987 | 18 243 | 745 990 |
| Western Australia | 472 228 | 130 307 | 14 928 | 617 463 |
| Tasmania | 174 951 | 66 478 | 4 634 | 246 063 |
| Total | 5 980 394 | 1 485 574 | 139 914 | 7 605 882 |

Constitution Alteration (Senate Casual Vacancies) Referendum

| State | Number of Votes | | | |
|-----------------------------|-------------------------------|-----------------------------------|----------|-----------|
| | In Favour of the Proposed Law | Not in Favour of the Proposed Law | Informal | Total |
| New South Wales | 2 230 218 | 502 171 | 41 999 | 2 774 388 |
| Victoria | 1 552 558 | 486 798 | 43 780 | 2 083 136 |
| Queensland | 662 732 | 463 165 | 12 945 | 1 138 842 |
| South Australia | 557 950 | 170 536 | 17 504 | 745 990 |
| Western Australia | 344 389 | 258 655 | 14 419 | 617 463 |
| Tasmania | 129 924 | 111 638 | 4 501 | 246 063 |
| Total | 5 477 771 | 1 992 963 | 135 148 | 7 605 882 |

Constitution Alteration (Referendums) Referendum

| State | Number of Votes | | | |
|-----------------------------|-------------------------------|-----------------------------------|----------|-----------|
| | In Favour of the Proposed Law | Not in Favour of the Proposed Law | Informal | Total |
| New South Wales | 2 292 822 | 439 247 | 42 319 | 2 774 388 |
| Victoria | 1 647 187 | 391 855 | 44 094 | 2 083 136 |
| Queensland | 670 820 | 455 051 | 12 971 | 1 138 842 |
| South Australia | 606 743 | 121 770 | 17 477 | 745 990 |
| Western Australia | 437 751 | 165 049 | 14 663 | 617 463 |
| Tasmania | 150 346 | 91 184 | 4 533 | 246 063 |
| Total | 5 805 669 | 1 664 156 | 136 057 | 7 605 882 |

Vice-Regal Representation (page 81)—Keith D. Seaman became South Australia's new Governor from 1 September 1977. Mr Seaman succeeds Sir Douglas Nicholls who retired in April because of ill-health.

PART 6—SOCIAL ENVIRONMENT

General Hospital Services (page 296)—The Bright Committee of Inquiry into Health Services in South Australia reported to the State Government in January 1973 and recommended that there should be a single authority external to the Public Service to:

- (1) bring within a unified control all health services provided or subsidised by the Government;
- (2) bring the activities of voluntary bodies in the health field into a unified pattern of health care delivery; and
- (3) administer and control every service provided by Government agency at a point as close as possible to the place where that service is provided.

The State Government accepted the broad principles of the recommendations and has by the South Australian Health Commission Act, 1975-1976, part of which is proclaimed to operate from 1 July 1977, established the South Australian Health Commission 'to promote the health and well-being of the people of this State'.

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Flora: T. N. Lothian; 1967, 23-7.

Droughts in South Australia: Director and staff members of Bureau of Meteorology; 1967, 7-10.

Flinders University of South Australia: Vice-Chancellor and staff members of Flinders University; 1967, 163-8.

The Wine Industry of South Australia: J. C. M. Fornachon and E. W. Boehm; 1968, 376-95.

Soils of South Australia: K. C. Northcote and J. A. Beare; 1969, 21-31.

Weapons Research Establishment: Director and staff members of Weapons Research Establishment; 1969, 184-92.

Aboriginal Relics: Robert Edwards; 1969, 201-8.

Geology of South Australia: N. H. Ludbrook and R. K. Johns; 1970, 3-18.

Mammals of South Australia: P. F. Aitken; 1970, 42-9.

Freshwater Fish of South Australia: C. J. M. Glover and W. G. Inglis; 1971, 27-34.

Birds of South Australia: H. T. Condon; 1972, 28-40.

Reptiles of South Australia: T. F. Houston; 1973, 32-42.

Fossils of the Flinders and Mount Lofty Ranges: N. S. Pledge; 1974, 31-44.

The University of Adelaide 1874-1974: Vice-Chancellor and staff members of the University of Adelaide; 1974, 198-212.

Minerals of South Australia: J. E. Johnson and J. M. Scrymgour; 1975, 21-39.

The Adelaide Festival Centre: Publicity Department of the Adelaide Festival Centre; 1975, 245-9.

Whyalla: The Broken Hill Proprietary Company Limited; 1975, 679-701.

Insects of South Australian Homes and Gardens: G. F. Gross and E. G. Matthews; 1976, 32-42.

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