

Population Projections for South Australia and Statistical Divisions, 2011–41



September 2015



Government of South Australia

Department of Planning,
Transport and Infrastructure

Population Projections for South Australia and Statistical Divisions, 2011–41

This document is a summary of the Population Projections for South Australia and Statistical Divisions, 2011–41.

For further information

Please visit www.sa.gov.au/planning/population or contact the Information and Strategy Directorate, Development Division of the Department of Planning, Transport and Infrastructure on 1800 752 664.



Government of South Australia

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Contents

Summary	1
1. Introduction.....	7
1.1 Background.....	7
1.2 Methodology	7
1.3 Demographic and planning context.....	7
1.4 Projection series	8
1.5 Assumptions	10
1.5.1 Fertility assumptions.....	10
1.5.2 Mortality assumptions.....	11
1.5.3 Net overseas migration assumptions	13
1.5.4 Net interstate migration assumptions.....	15
1.5.5 Net intrastate migration assumptions.....	17
2. Projection Results – South Australia (All-Of-State), 2011-41	19
2.1 Population growth	19
2.2 Changes in age structure.....	21
2.2.1 Median age.....	21
2.2.2 Dependency ratio	21
2.2.3 Age-sex structure	22
2.2.4 Age groups	25
Young children, 0-4 years.....	25
School age, 5-17 years.....	25
Young working age, 18-34 years.....	26
Older working age, 35-64 years	27
Young elderly, 65-84 years.....	28
Old elderly, 85+ years.....	28
2.3 Components of population change.....	29
2.3.1 Natural increase	29
2.3.2 Net migration	29
3. Projection Results – By Region, 2011-41.....	33
3.1 Adelaide Statistical Division.....	33
3.2 Outer Adelaide Statistical Division.....	36
3.3 Yorke and Lower North Statistical Division	39
3.4 Murray Lands Statistical Division.....	42
3.5 South East Statistical Division	45
3.6 Eyre Statistical Division	48
3.7 Northern Statistical Division.....	51
Appendices	55
Appendix 1: Assumptions all-of-State population projection series, 2011-41	55
Appendix 2: Projected population by age groups for South Australia, 2011-41.....	56

List of Tables

Table 2.1:	Projected total population and growth rates, South Australia, 2011-41	20
Table 2.2:	Median age (years) of projected South Australia population by projection series, 2011-41	21
Table 3.1:	Projected total population and growth rates, Adelaide Statistical Division, 2011-41	34
Table 3.2:	Projected total population and growth rates, Outer Adelaide Statistical Division, 2011-41	37
Table 3.3:	Projected total population and growth rates, Yorke and Lower North Statistical Division, 2011-41	40
Table 3.4:	Projected total population and growth rates, Murray Lands Statistical Division, 2011-41	43
Table 3.5:	Projected total population and growth rates, South East Statistical Division, 2011-41	46
Table 3.6:	Projected total population and growth rates, Eyre Statistical Division, 2011-41	48
Table 3.7:	Projected total population and growth rates, Northern Statistical Division, 2011-41	52

List of Figures

Figure 1.1:	Statistical Divisions South Australia, 2011	9
Figure 1.3:	Estimated and Projected Life Expectancy at Birth, South Australia, 1988-2041	12
Figure 1.4:	Actual and Projected Net Overseas Migration Flows to South Australia, 1982-2041 (persons per annum)	15
Figure 1.5:	Actual and Projected Net Interstate Migration Flows, South Australia, 1982-2041 (persons per annum)	17
Figure 2.1:	Projected population by projection series, South Australia, 2011-41	20
Figure 2.2:	Projected size of major age groups and dependency ratio, South Australia, 2011-41 (medium series)	22
Figure 2.3:	South Australia projected age-sex structure, medium series	23
Figure 2.4:	South Australia projected age-sex structure in 2026 and 2041 (low series)	23
Figure 2.5:	South Australia projected age-sex structure in 2026 and 2041 (medium series)	24
Figure 2.6:	South Australia projected age-sex structure in 2026 and 2041 (high series)	24
Figure 2.7:	Projected population of young children aged 0-4, South Australia, 2011-41	25
Figure 2.8:	Projected school-age (5-17 years) population, South Australia, 2011-41	26
Figure 2.9:	Projected young working-age (18-34 years) population, South Australia, 2011-41	27
Figure 2.10:	Projected older working-age (35-64 years) population, South Australia, 2011-41	27
Figure 2.11:	Projected young elderly (65-84 years) population, South Australia, 2011-41	28
Figure 2.12:	Projected old elderly (85+ years) population, South Australia, 2011-41	28
Figure 2.13:	Components of projected population growth, South Australia, 2011-41 (high series)	31
Figure 2.14:	Components of projected population growth, South Australia, 2011-41 (medium series)	31
Figure 2.15:	Components of projected population growth, South Australia, 2011-41 (low series)	31
Figure 3.1:	Projected population by projection series, Adelaide Statistical Division, 2011-41	34
Figure 3.2:	Projected age-sex structure of Adelaide Statistical Division, 2011-26 and 2011-41 (medium series)	35
Figure 3.3:	Adelaide Statistical Division and Local Government Area Boundaries, 2011	35

Figure 3.4:	Projected population by projection series, Outer Adelaide Statistical Division, 2011-41	37
Figure 3.5:	Projected age-sex structure of Outer Adelaide Statistical Division, 2011-26 and 2011-41 (medium series)	38
Figure 3.6:	Outer Adelaide Statistical Division and Local Government Area Boundaries, 2011	38
Figure 3.7:	Projected population by projection series, Yorke and Lower North Statistical Division, 2011-41.....	40
Figure 3.8:	Projected age-sex structure of Yorke and Lower North Statistical Division, 2011-26 and 2011-41 (medium series)	41
Figure 3.9:	Yorke and Lower North Statistical Division and Local Government Area Boundaries, 2011.....	41
Figure 3.10:	Projected population by projection series, Murray Lands Statistical Division, 2011-41..	43
Figure 3.11:	Projected age-sex structure of Murray Lands Statistical Division, 2011-26 and 2011-41 (medium series)	44
Figure 3.12:	Murray Lands Statistical Division and Local Government Area Boundaries, 2011	44
Figure 3.13:	Projected population by projection series, South East Statistical Division, 2011-41	46
Figure 3.14:	Projected age-sex structure of South East Statistical Division, 2011-26 and 2011-41 (medium series).....	47
Figure 3.15:	South East Statistical Division and Local Government Area Boundaries, 2011	47
Figure 3.16:	Projected population by projection series, Eyre Statistical Division, 2011-41	49
Figure 3.17:	Projected age-sex structure of Eyre Statistical Division, 2011-26 and 2011-41 (medium series).....	49
Figure 3.18:	Eyre Statistical Division and Local Government Area Boundaries, 2011	50
Figure 3.19:	Projected population by projection series, Northern Statistical Division, 2011-41	52
Figure 3.20:	Projected age-sex structure of Northern Statistical Division, 2011-26 and 2011-41 (medium series).....	53
Figure 3.21:	Northern Statistical Division and Local Government Area Boundaries, 2011.....	53

Summary

This report summarises the results of the population projections for South Australia and for each of the State's seven statistical divisions for the 30 year period from 2011 to 2041. It is based on the final results from the 2011 Australian Bureau of Statistics (ABS) Census of Population and Housing and other demographic data.

As in the past, three population projection series (high, medium and low) were prepared for the State and its statistical divisions. For comparative purposes, selected results from the all-of-State population scenario from which *The 30-Year Plan for Greater Adelaide* (the 30-Year Plan) population target was developed, are also included in this report.

It should be noted that although population projections are not forecasts of the future, they are intended to illustrate possible and most likely population outcomes based on plausible assumptions of the size, age structure and geographic distribution of the population at the time of preparation.

These projections will form the basis of local area age-sex projections at the Statistical Local Area and Local Government Area level that will then be aggregated to form age-sex projections for South Australian Government Regions. This process will be undertaken following Cabinet approval of the State and statistical division projections.

Projection Assumptions

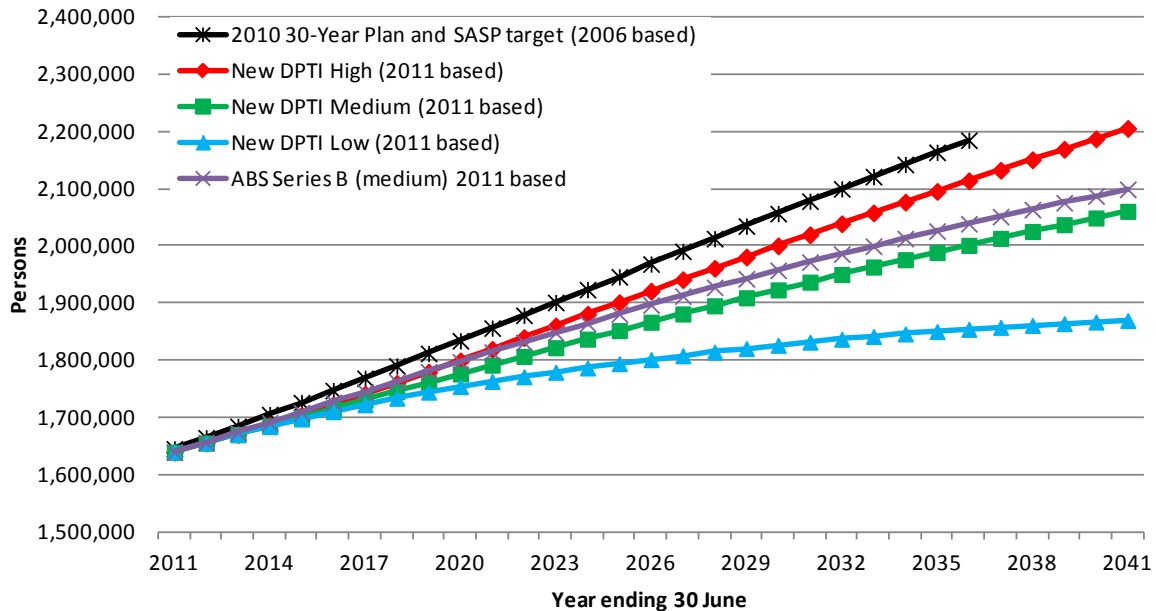
The assumptions adopted in these projection series were developed from an analysis of recent demographic trends and assessment of likely future changes informed by demographic research and ABS data. The key assumptions are:

- By 2021-22, fertility rates will transition from the relatively high current levels of 1.9 children per woman to 1.75 children in the medium series, remain at 1.9 in the high series and decrease to 1.6 in the low series. The reason for this reduction in fertility levels is the assumption that the process whereby recent relatively high fertility levels have been boosted by the birth of children to older mothers who had previously delayed their first birth to pursue educational and employment opportunities, was now coming to an end.
- Increases in life expectancy at birth evident over many decades are assumed to continue into the future with male life expectancies at birth assumed to increase from 79.7 years in 2011 to 83.9 in 2041, and female life expectancies assumed to increase from 84.0 years in 2011 to 87.2 in 2041.
- Annual levels of net overseas migration are assumed to remain at around the current level of 11,500 persons per annum in the medium series, but are assumed to increase to 13,500 in the high series and decrease to 8,000 per annum in the low series.
- The net loss of persons to interstate destinations is assumed to return to the long term average of -2,500 persons per annum in the medium series, but increase to -4,000 under the low series and decrease to -1,500 under the high series. The net loss of persons to interstate is long established as shown in Figure 1.5 and is largely driven by the appeal of the larger and more varied job market in these locations, especially to those of young working age. However, these losses are more than compensated by much larger assumed annual gains from overseas migration (Figure 1.4) and natural increase (births minus deaths).

Projection Results

The all-of-State projected population totals from the 2011-41 projection series are shown in Figure 0.1 where they are compared with the latest ABS Series B (medium) projection results and the all-of-State scenario used as the basis of the 30-Year Plan.

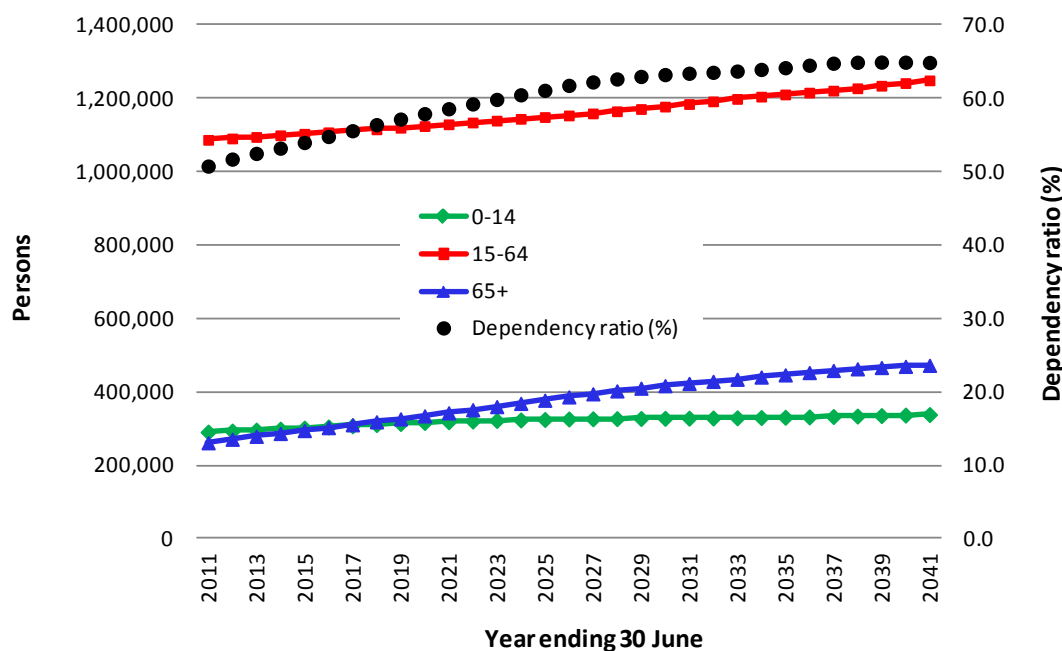
Figure 0.1: Projected Population South Australia, 2011-41 (medium series)



South Australia

- In the decade between the population censuses of 2001 and 2011 the State's population grew by 136,000 from 1.50 million to 1.64 million. In the next decade it is projected to grow by an additional 152,000 to total 1.79 million in 2021 under the medium series.
- Under the medium series the State's population will reach 2 million by 2036, nine years later than the target noted in *South Australia's Strategic Plan* of 2011. The projected populations of the medium series are only slightly lower than the total projected in the ABS Series B projections (Figure 0.1). The difference is due to the use of lower net overseas migration assumptions in the DPTI projections that were able to access more recent data. The high series projects that 2 million will be achieved by 2030.
- Under the medium series the annual rate of population growth will have peaked in 2011-12 at 0.98% and is projected to decrease thereafter to 0.57% by 2041 as the number of deaths increases (from 13,000 in 2011-12 to 19,000 in 2040-41) with continued ageing of the population.
- The rate of growth in the high series peaks at 1.1% per annum in 2021-22 and then decreases to 0.8% by 2040-41.
- The working age population (15-64) is projected to grow by 66,000 between 2011 and 2026 and by another 96,000 between 2026 and 2041 at average annual growth rates of 0.4% and 0.5%, respectively, under the medium series. This is a significant projected increase in the size of the working age population over the projection period (refer Figure 0.2).

Figure 0.2: Projected Size of Major Age Groups and Dependency Ratio, South Australia 2011-41 (medium series)



Note: The dependency ratio is the number of those not of working age (0-14 and 65+ years of age 'the dependents') expressed as a ratio or percentage of those of working age (15-64 years of age).

- The State's population will age significantly over the projection period under all projection series. The number of elderly aged 65+ years is projected to increase by 80% to over 470,000 by 2041 under the medium series (refer Figure 0.2). The increase will be most dramatic between 2011 and 2026 as the large baby-boomer cohort reaches these ages, but is not yet fully affected by high old age mortality.
- Largely because of this ageing of the numerous baby boomer cohort, the age dependency ratio (refer definition below Figure 0.2) is projected to increase rapidly between 2011 and 2026 (Figure 0.2).
- After 2026 the more dependent 85+ age group is projected to increase more rapidly in size than the 65-84 age group as the large baby-boomer cohort enters these ages. By 2041 the 85+ age group is projected to be 2½ times more numerous than in 2011, increasing from 38,000 in 2011 to 95,000 in 2041 under the medium series with significant impact on the demand for specialised age care services.

Statistical Divisions (medium series)

Future population growth rates are projected to vary significantly between regions:

- Adelaide and Outer Adelaide Statistical Divisions are projected to continue as the fastest growing regions of the State with projected average annual growth rates of 0.81% to 1.45% respectively over the 2011-41 projection period.
- Yorke and Lower North, the region with the oldest population in the State, is projected to continue to grow at a significant rate (0.4% to 0.5% per annum) mainly from retirement migration due to its accessibility to Adelaide and its desirable coastal environment.

- The population growth rates in the four remaining statistical divisions of Murray Lands, South East, Eyre and Northern are projected to remain significantly lower than the all-of-State rates over the projection period due to net outmigration to Greater Adelaide (Adelaide plus Outer Adelaide SDs) and increased ageing of the population.
- Both South East and Murray Lands SDs are projected to experience negative growth rates by the end of the projection period in 2036-41 as population ageing results in an excess of deaths over births and net out-migration of younger age cohorts to the Greater Adelaide region continues.
- A comparison of the projected age distributions of the Greater Adelaide statistical divisions (Adelaide and Outer Adelaide SD) in 2026 and 2041 with the projected age distributions of regional South Australia under the medium series reveals (refer Figures 0.3 and 0.4) major contrasts. Greater Adelaide is projected to witness significant growth in its working age population by 2026 and 2041 which will largely offset a major projected increase of the elderly, with some growth also projected in the number of 0-14 year olds. In contrast, regional South Australia is projected to experience a significant absolute decrease in the number of working age (15-64 year olds) particularly in Murray Lands, South East and Eyre statistical divisions. Concurrently with this projected decrease in the working ages, regional South Australia is projected to witness a substantial increase of the elderly population.

Figure 0.3: Projected Population Greater Adelaide by Age Group, 2011, 2016 and 2041 (medium series)

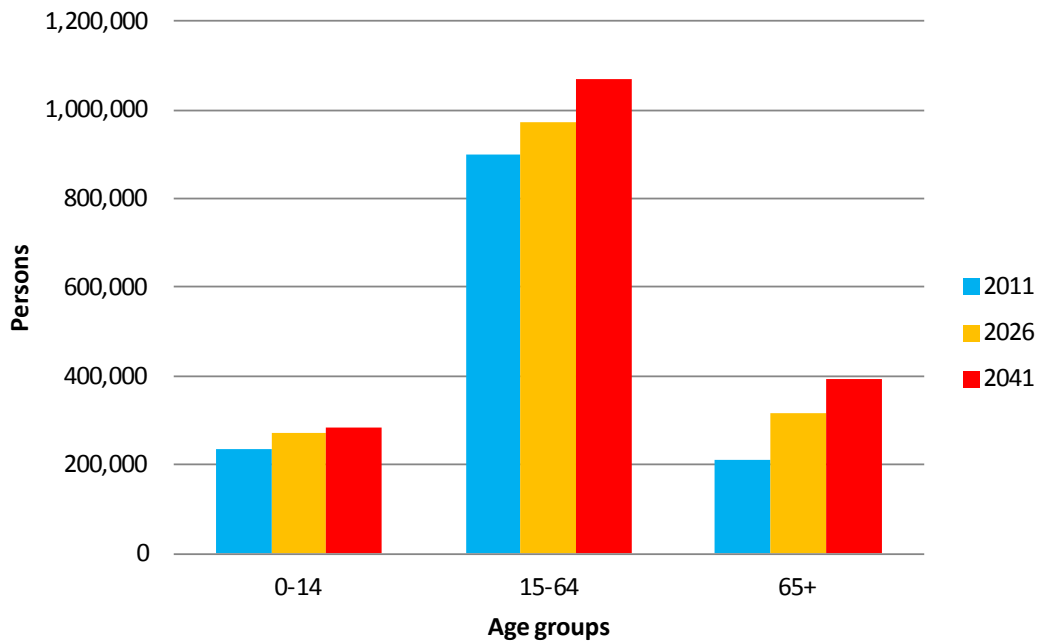
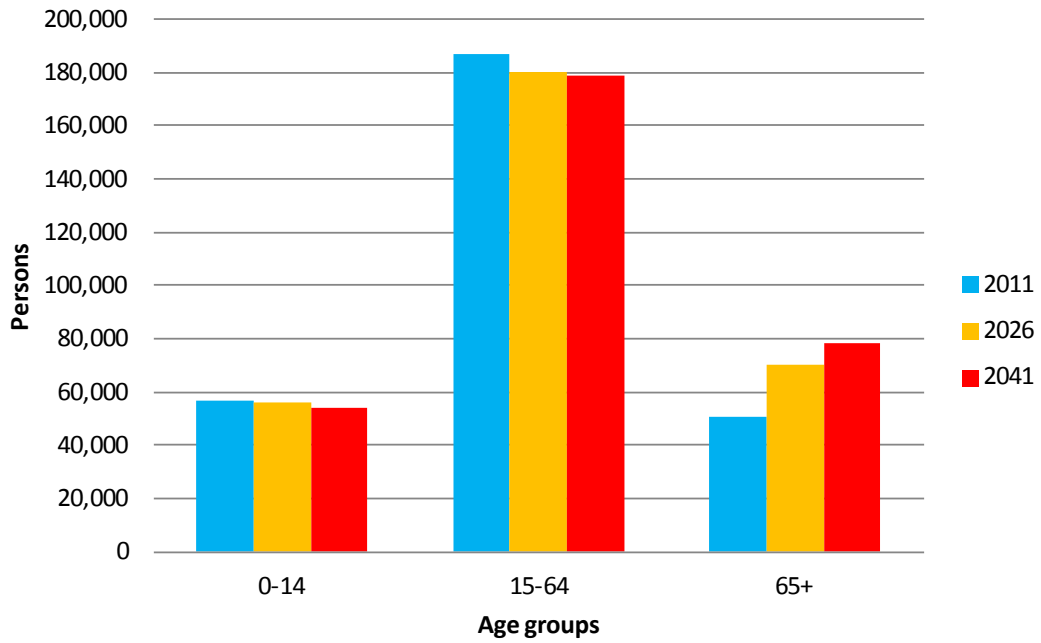


Figure 0.4: Projected Population Regional South Australia by Age Group, 2011, 2026 and 2041 (medium series)



1. Introduction

1.1 Background

This report summarises the results of population projections for South Australia and for each of the State's seven statistical divisions for the 30 years from 2011 to 2041 (the boundaries of the statistical divisions are shown in Figure 1.1).

Since 1978 the Department of Planning, Transport and Infrastructure (DPTI) and its predecessor agencies have produced population projections for South Australia at the all-of-State, statistical division and local area levels. As has been traditional practice, this report presents a high, medium and low series of projections for all of South Australia and its statistical divisions.

In February 2010 *The 30-Year Plan for Greater Adelaide* (30-Year Plan) identified the key strategic planning priorities for the development of the Greater Adelaide Region (GAR) during the next three decades. The Plan was based on an all-of-State projection specially prepared for that purpose in late 2007 that used preliminary 2006 Census results and projected that the population would reach 2 million by 2027. In December 2010 the official set of 2006 census based projections were released and the results summarised in *Population Projections for South Australia and Statistical Divisions, 2006-36*. The 2010 projections publication and this report of the 2011 Census based population projection series include selected results of the all-of-State projection upon which the 30 Year Plan for the Greater Adelaide Region is based.

1.2 Methodology

The projections summarised in this report are for the estimated resident population and were constructed using the cohort component method. In this method the populations at the time of the 2011 Census for each geographic area and for each single year of age by sex are projected forward year by year by applying assumptions about future trends in fertility, mortality and migration. These assumptions are summarised in Section 1.5.

1.3 Demographic and planning context

Between 2006 and 2010 South Australia's estimated resident population exhibited the highest annual absolute growth for more than 30 years, largely due to very high levels of net overseas migration reinforced by significant increases in fertility. This changed in 2010 when the level of annual population growth declined from 18,400 in 2009-10 to 12,300 in 2010-11 due to a 37% drop in net overseas migration. Since 2011 annual population growth has increased to between 14,500 to 16,400 persons per annum, equivalent to an annual growth rate of 0.9% to 1.0%.

This 2011 based series of projections assumes that these post 2011 levels of growth will continue for the next 15 years under the medium series, but will be significantly higher and lower under the high and low series respectively. This is due mainly to different assumptions about the magnitude of net overseas migration flows into the state, but also because of different assumptions about the magnitude of interstate net migration and future fertility levels.

Both the high and medium projection series indicate that from about 2019-21 onwards population growth rates are projected to decline with the beginnings of a long term decrease in levels of natural increase as the number of deaths increases in line with continued ageing of the population.

The low series projects an almost immediate decrease in the trajectory of population growth due to lower migration and fertility assumptions than in the medium and high series. The low series projects significant decreases in annual rates of projected population growth from 2012 to 2022, but from then onwards the growth rates decrease at a slower rate and by 2040-41 are projected to be 0.14% per annum.

Although population projections are conceptually different to population targets used for strategic planning purposes, this series of projections has been developed within the context of the spatial planning priorities of the 30-Year Plan for the Greater Adelaide Region.

Currently the South Australian Strategic Plan of 2012 details two specific population targets: a total State population target of 2 million by 2027 (Target 45) and a target to increase regional populations outside of Greater Adelaide by 20,000 to a total of 320,000 or more by 2020 (Target 46). On current trends SASP documents suggest that population growth in the regions is almost 24,000 below the target¹ of 320,000 by 2020; and the 2011 based medium projection series suggests that the State's population will not reach 2 million until 2036.

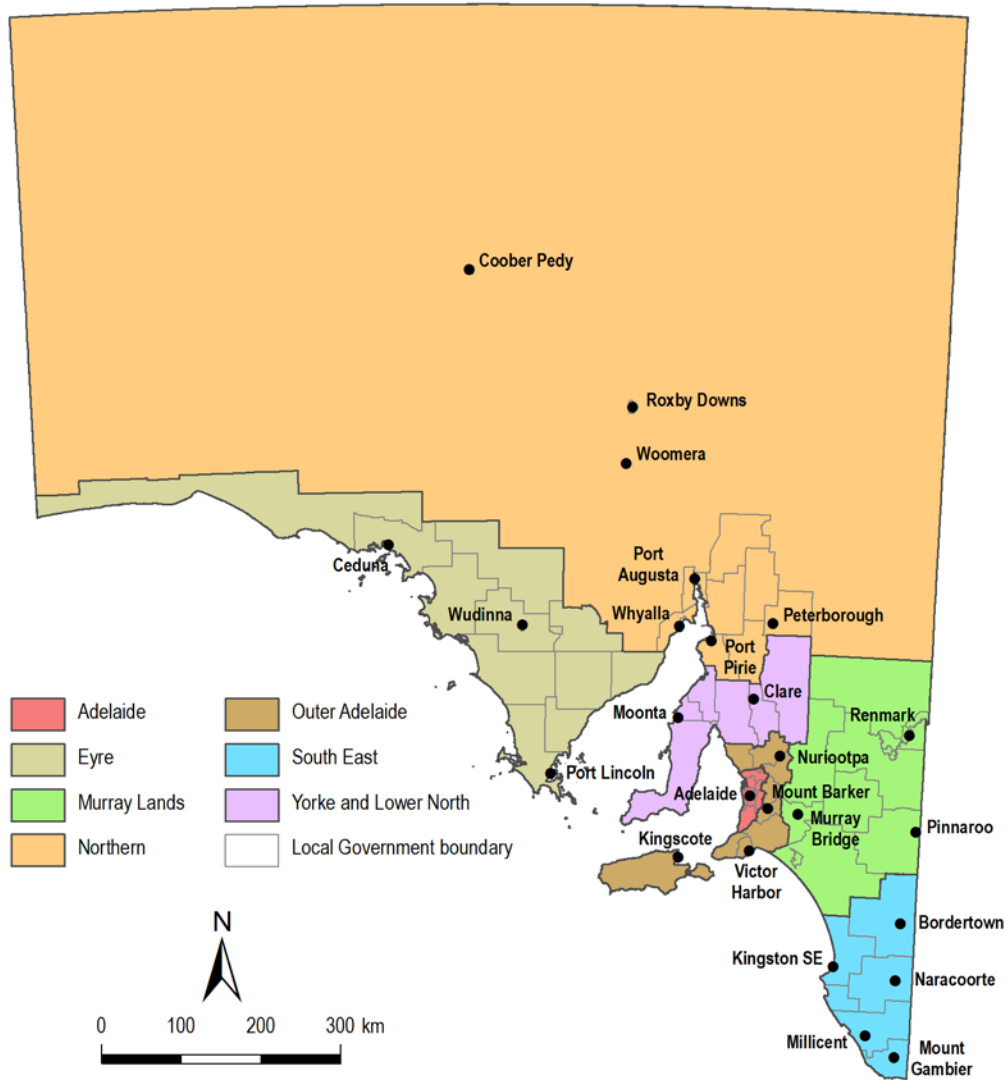
1.4 Projection series

In accordance with established practice, three projection series were developed using different assumptions that cover a range of future trends in the components of population change. Alternative projection series are required to cover future uncertainties and to enable sensitivity analysis by service providers. Three projection series – low, medium and high – were prepared for the State and each statistical division. Each series reflects alternative future trends in fertility, net overseas migration, net interstate migration, and in the case of the statistical division projections, net intrastate migration. Based on research into past demographic trends and likely future trends in the major components of population change, the three series represent the likely range of future population growth. The medium series is considered to be the most likely outcome based on past trends.

As was the case with the 2006 based projections, this 2011 based set is being released at the Statistical Division level of geography because this is the level most appropriate for the current planning needs of most government agencies. Once the projection set has been approved by Government, the medium series will then be distributed to the level of South Australian Government Regions, and to small area geographies such as Statistical Local Areas and Local Government Areas.

¹ www.saplan.org.au/targets/46-regional-population-levels

Figure 1.1: Statistical Divisions South Australia, 2011



Statistical divisions (2011) supplied by the Australian Bureau of Statistics.

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1.5 Assumptions

The assumptions about future fertility, mortality and migration that were applied to the base-year population (as at 30 June 2011) to construct the three all-of-State population projection series are based principally on analyses of births, deaths and migration data collected by the ABS. These all-of-State assumptions are summarised in Appendix 1.

The three population projection series of high, medium and low are presented at the statistical division level for the 30-year projection period, 2011-41. In each statistical division, fertility, mortality, net overseas migration, net interstate migration and net intrastate migration levels were assumed that reflected established differentials between individual statistical divisions and all-of-State levels. Recent convergence or divergence of demographic trends between individual statistical divisions and all-of-State trends were also considered.

These series were constructed with reference to the Australian wide assumptions adopted by the ABS in their latest series of projections² released in November 2013.

1.5.1 Fertility assumptions

The review of recent research on fertility trends in both Australia and South Australia provided in the 2010 population projections summary is still relevant and describes the underlying trends of fertility in this State.³ The fertility assumptions adopted by DPTI in the current 2011 based population projection series utilises ABS estimates of fertility and are shown in Figure 1.2.⁴ As a robust base estimate the medium projections series takes the average total fertility rate (TFR) for the financial years 2010-12 of 1.88 children per woman as the all-of-State TFR for the first projection year of 2011-12. The medium projection series assumes a gradual decline in the TFR from 1.88 to 1.75 children per woman in 2021-22, and from then until the end of the projection period in 2040-41, a constant TFR of 1.75 children per woman.

The rationale for this gradual decline to a level of 1.75 children per woman between 2011-12 and 2021-22 is that the State is currently experiencing the tail end of the recuperation effect whereby older women across Australia aged 30-39 years are having more births than 10-20 years ago in an attempt to make up for births that they postponed in their younger child bearing years.⁵ The TFR level of 1.75 by 2021-22 is broadly consistent with research by McDonald and Kippen (2008) who predicted that South Australian fertility will remain at a TFR of approximately 1.8 until at least 2018-19. The assumed TFR of 1.75 by 2021-22 is also similar to the assumption by the ABS in their latest medium projection series for South Australia⁶ of a TFR trending to 1.78 by 2026 that thereafter remains constant for the remainder of the projection period.

The high fertility assumption assumes that from a base TFR of 1.88 in 2011-12 the TFR increases slightly to peak at 1.90 in 2021-22 and from then until 2040-41 it remains constant at this level.

A low fertility assumption was adopted for the low projection series that assumed a significant decline in the TFR from 1.88 children per woman in 2011-12 to a low of 1.6 in 2021-22. From then until 2040-41 it is assumed that the TFR remains constant at this low level.

The total fertility rate assumptions at the statistical division level were developed by assuming that the differentials that applied between the all-of-State and specific statistical divisions over the period 2008 to 2012 were maintained during the projection period. The patterns of age-specific fertility rates and

² Australian Bureau of Statistics, *Population Projections, Australia, 2012 (base) to 2101*, cat. no. 3222.0

³ *Population Projections for South Australia and Statistical Divisions, 2006-36*, DPLG, Government of South Australia, 2010

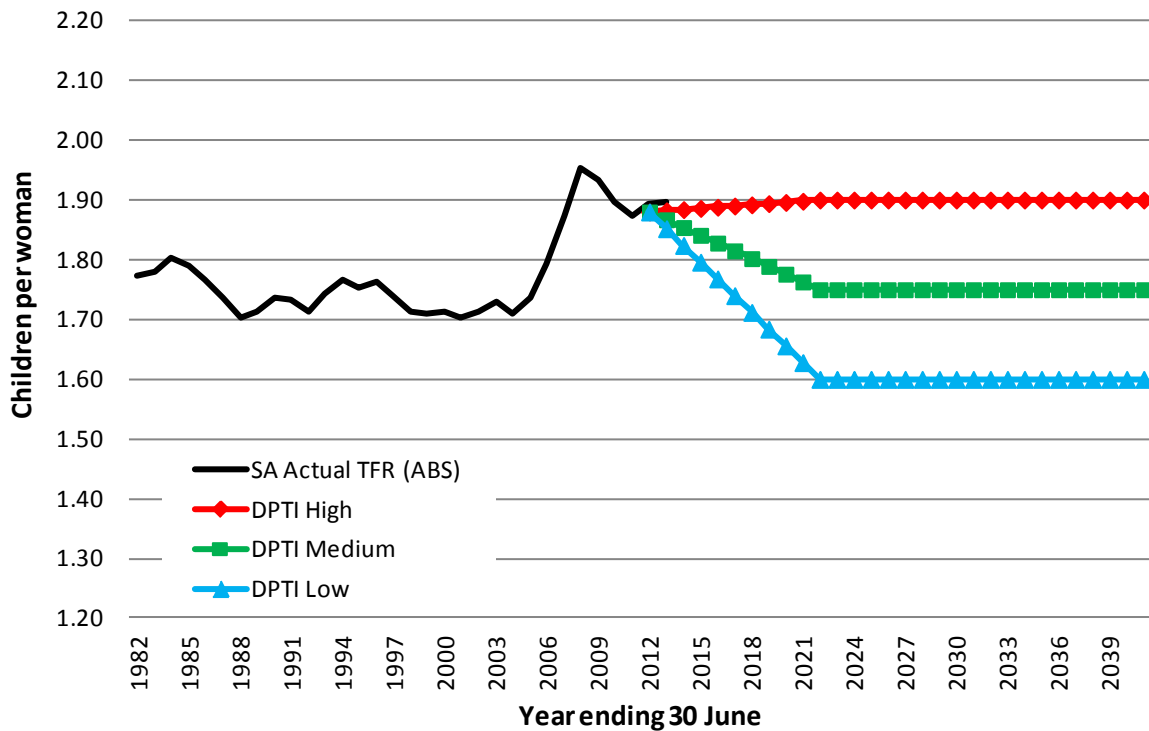
⁴ Australian Bureau of Statistics, *Births, Australia, 2012*, cat. no. 3301.0

⁵ Gray, Qu and Weston, 2008

⁶ Australian Bureau of Statistics, *Population Projections, Australia, 2012 (base) to 2101*, cat. no. 3222.0, released November 2013

their assumed changes over time were modelled from recent data at the all-of-State and statistical division level. The future patterns of age-specific fertility assume a continuation, but at a diminishing rate, of the historical trend toward older mothers at birth consistent with the assumptions adopted in the ABS national series of 2012-2101 projections.⁷

Figure 1.2: Actual and Projected Total Fertility Rates, South Australia 1981-82 to 2040-41



Source: DPTI and ABS, cat. no. 3101.0, time series and September Quarter 2014, released March 2015

1.5.2 Mortality assumptions

The mortality assumptions adopted in this projection series are based on the assumptions developed by the ABS for their latest series of population projections⁸ with some fine tuning so that the projected deaths conform to the number of deaths published by the ABS⁹. The actual male and female life expectancies of South Australians as estimated by the ABS¹⁰ from 1988 to 2012 and the future projected life expectancies developed for this DPTI projection series for 2013-41 are shown in Figure 1.3. Each of the three DPTI series (high, medium and low) uses the same mortality assumptions. Figure 1.3 shows that females in South Australia in 2012 enjoyed a higher life expectancy at birth than males (84.2 years compared to 79.8 years). However, this differential was smaller than in 1988. It is assumed to decrease further as the life expectancy of males is expected to improve at a slightly faster rate than the life expectancy at birth of females.

The mortality assumptions developed for the DPTI projections assume a continuous improvement in life expectancy for the length of the projection period, but at a slightly decreasing rate over time to arrive at life expectancy at birth assumptions for males of 83.00 years in 2030-31 and 83.95 years in 2040-41. The assumptions for females are 86.57 years in 2030-31 and 87.24 years in 2040-41. These life expectancy assumptions are almost identical but slightly less optimistic than the ABS medium

⁷ Australian Bureau of Statistics, *Population Projections, Australia, 2012 (base) to 2101*, cat. no. 3222.0

⁸ Ibid.

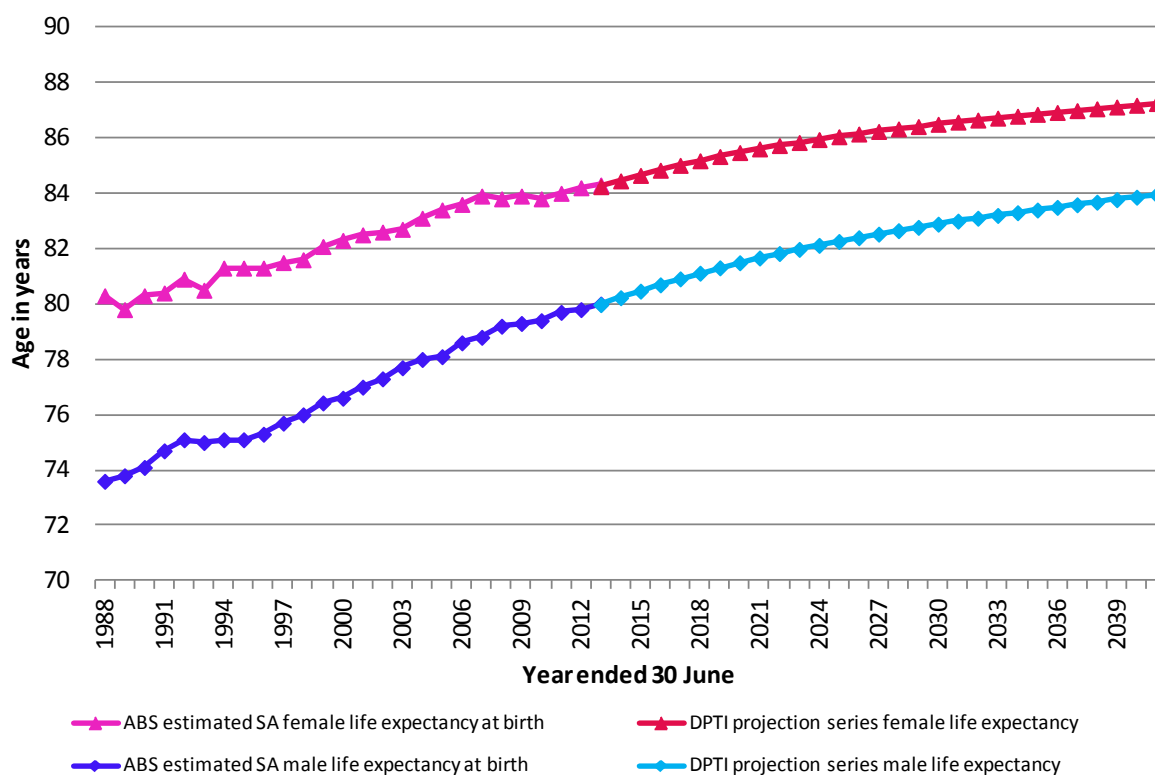
⁹ Australian Bureau of Statistics, *Deaths, Australia, 2012*, cat. no. 3302.0, Table 4.1

¹⁰ Ibid, Australian Bureau of Statistics, *Australian Historical Population Statistics, 2014*, cat. no. 3105.0.65.001

assumptions of a male life expectancy of 83.08 years in 2030-31 and an assumed female life expectancy of 86.76 years.

The slightly less optimistic medium mortality life expectancies adopted in the DPTI projections when compared to the ABS medium assumptions were developed in response to an analysis of the mortality assumptions used in the 2006 census based projections that were found to slightly overestimate the survival of older age cohorts. It was considered that there was not a strong case to adopt a separate life expectancy assumption for the DPLG high series. This is because the high longevity assumption adopted by the ABS (constant rate of life expectancy improvement through the projection period) may be over optimistic in the light of the emerging positive relationship between increased obesity and increased mortality in Australia¹¹ – although recent research shows a somewhat equivocal relationship in North America.¹² Both DPTI and the ABS use the same mortality assumptions (medium life expectancy) for their low and medium projection series.

Figure 1.3: Estimated and Projected Life Expectancy at Birth, South Australia, 1988-2041



Source: DPTI and ABS, cat. no. 3101.0, time series, and ABS cat. no. 3302.0, Deaths, Australia 2013, Table 1.4, released November 2014

¹¹ A recent study by A J Cameron, D W Dunstan, N Owen, P Z Zimmet, E L M Barr, A M Tonkin D J Magliano, S G Murray, T A Welborn and J Shaw, 'Health and mortality consequences of abdominal obesity: evidence from the AusDiab study', *The Medical Journal of Australia*, vol. 191, no 4, 2009, pp. 202-208 confirmed that abdominal obesity confers a heightened risk of morbidity and possible premature mortality among adult Australians.

¹² Although studies such as that by H M Orpana, J M Berthelot, M S Kaplan, D H Feeny, B McFarland and N A Ross, 'BMI and Mortality: Results from a National Longitudinal Study of Canadian Adults', *Obesity: A Research Journal*, vol.18, no.1, 2010, pp. 214-218 establish a clear risk of mortality associated with obesity in North America, the risk of mortality associated with overweight is equivocal. A study by N K Mehta and V W Chang, 'Mortality Attributable to Obesity among Middle-Aged Adults in the United States', vol. 46, no. 4, 2009, pp. 851-872 arrived at similar conclusions and went on to claim their "findings challenge the viewpoint that obesity will stem the long-term secular decline in U.S mortality".

1.5.3 Net overseas migration assumptions

One of the most difficult assumptions to develop when constructing population projections is the future level of net overseas migration (NOM), the net balance of overseas arrivals and overseas departures. This is particularly so for sub-national jurisdictions as the Commonwealth Government decides national immigration policies and targets. The process is further complicated by a break in the NOM series after June 2006, when the criteria for inclusion in the estimated resident population (ERP) was changed from 12 months continuous residence during the preceding 12 months, to 12 out of the previous 16 months. The result has been an increase in the estimated resident population and NOM estimates that now include more students and temporary residents than previously. Birrell and Healy (2010)¹³ have suggested that the improved NOM data that measures the number of travellers rather than the number of movements used in the earlier data sets has resulted in a 15% to 17% increase in NOM, due solely to the increased capacity of the new methodology to capture long-term students and visitors resident in Australia. As earlier estimates of the undercount do not exist, the ABS has made no attempt to adjust NOM estimates for the period up to June 2006.

ABS NOM estimates more than doubled nationally from 123,763 in 2004-05 to 277,338 in 2007-08 and increased further to 299,866 in 2008-09.¹⁴ Birrell and Healy (2010) show that an increase in overseas students accounted for almost half of this increase, but large increases in business long-stay visa holders (for example, 457 visa holders), working holiday makers and New Zealand citizens were also important, and when combined these four categories accounted for 84% of the increase. The major traditional category of permanent arrivals contributed just 11% of the increase in NOM. This change means that the effect on the housing market of changes in NOM levels is not as predictable as a decade ago.

The proportion of the new groups recently captured in the NOM estimates that will remain in Australia and contribute to the long-term stock of overseas immigrants resident in this country is uncertain. Successive Australian governments have liberalised the rules of eligibility for temporary visas and, although many temporary visa holders will eventually leave, the Australian Government has provided inducements for many to apply for other temporary entry visa subclasses or to change their status to permanent residence under the onshore skilled-migration categories and the graduate skills visa.

From the end of 2008 the Australian Government began decoupling immigration selection under the skilled migration program from the completion of courses in Australia. In this way it was intended to shift the focus of the permanent skilled migration flows “away from ‘supply-driven’ independent skilled migration towards ‘demand-driven’ outcomes, in the form of employer and government-sponsored skilled migration”.^{15,16} As a result, the national net overseas migration intake fell by over 100,000 in 2009-10 to 196,058 and further to 180,372 in 2010-11. Since 2010-11 there has been a recovery in the net intake to 235,656 persons in 2012-13 and a decrease to 212,695 in 2013-14.

South Australia's share of the national NOM intake has averaged 5.0% annually over the last 42 years (1971-72 to 2012-13) and in recent times it is only during the years 2005-06 to 2010-11 that the State's share has consistently exceeded these levels. The reason for the growth in the South Australian share of the intake was that the State was the major beneficiary of the State Specific Regional Migration (SSRM) scheme whereby all of the state (including metropolitan Adelaide) was designated as a region with a low population growth rate. This enabled employers, state and local governments, and families within the state to sponsor immigrants without the immigrants having to fully meet the usual assessment test. In return, the migrants must reside in the state or territory for the

¹³ B Birrell and E Healy, 'The February 2010 reforms and the international student industry', *People and Place*, vol. 18, no. 1, 2010, pp. 65–80.

¹⁴ ABS, *Australian Demographic Statistics*, cat. no. 3101.0, March quarter 2010, released September 2010. This revision of the 2008–09 NOM estimates was released after the Department of Planning and Local Government (DPLG) projection series had been completed.

¹⁵ C Evans (Minister for Immigration and Citizenship), *Migration program gives priority to those with skills most needed*, media release, 17 December 2008.

¹⁶ H Spinks 'Australia's Migration Program', *Parliamentary Library*, 29 October 2010, p.4.

duration of the visa (up to three years) and are eligible for Permanent Residency after 2 years if 12 months of work experience has been achieved.

Adelaide was the only mainland metropolitan centre designated as part of a low growth region and therefore entitled to access the full suite of SSRM programs. This provided a unique advantage to the State's ability to attract migrants under the SSRM scheme and the State's population policy announced in 2004 took quick advantage of this opportunity. In 2004-05 and 2005-06 the state gained more than 25% of the total SSRM intake,¹⁷ well above the 7.2% share of the nation's population resident in the state.

Since 2005-06 other jurisdictions such as Victoria and Western Australia have made greater use of the SSRM program. With the introduction of State Migration Plans in 2010, the competitive advantage afforded by SSRM has been somewhat diminished as all States and Territories can now offer Permanent Residency visas immediately, which have no legal requirement for the migrant to reside in the sponsoring jurisdiction.

The Gillard Government was in the process of developing a long-term immigration framework, which was to be based on a national NOM of between 150,000 and 230,000 a year, in order to supply Australia's workforce development requirements. Since the change of government in 2013 the Coalition Government has maintained its annual immigration target at 190,000 places for 2014-15, the same target as that announced by the previous government for 2013-14. There is still no indication of what, if any, changes will be made to these historically high targets by the new Coalition Government in future years.

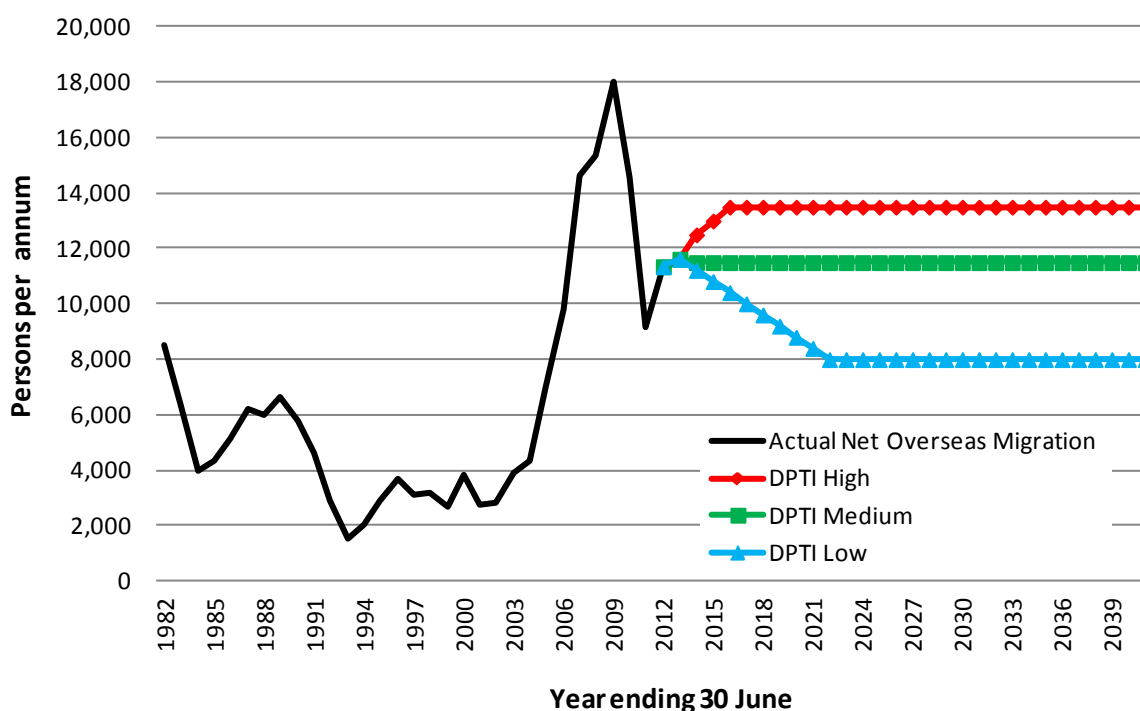
The NOM assumptions adopted for this series of population projections assume that South Australia will maintain its recent share of the national NOM intake (5.0% to 5.2%), as do the ABS projection series, although it is assumed that over the long term the national net intake will decline from its recent record levels of over 250,000 in 2007-08 and 2008-09 to a more realistic level of 220,000 per annum. The NOM assumptions adopted for the DPTI projections are shown in Figure 1.4.

In the case of the high and medium DPTI projection series the NOM assumptions adopted are slightly lower (approximately 9%) than the magnitude of the flows assumed by the ABS in their comparable South Australian projection series. Given the unusually large national NOM flow assumptions adopted by the ABS in their 2012 based projection series when compared to historical levels of migration to Australia, DPTI has taken the view that the risk of NOM flows occurring below the level assumed in the medium series is relatively larger than the risk of flows occurring above that level.

All of the ABS NOM assumptions for South Australia assume a slight rise in the flow of net overseas migration from the actual NOM estimate in 2012-13 of 11,196 to a peak several years later as the ABS assumes the national NOM intake increases, and then a long term constant annual net intake until the end of the projection period in 2041 of 14,840, 12,720 and 10,620 in the ABS high, medium and low projection series, respectively. The DPTI high, medium and low series assume a short term increase in the spread between the low and high NOM assumptions beginning in 2013-14 and continuing until 2021-22 for the low series (refer Figure 1.4) but thereafter constant annual net intakes of 13,500, 11,500 and 8,000 are assumed for the high, medium and low series, respectively.

¹⁷ G Hugo, 'Australia's state-specific and regional migration scheme: an assessment of its impacts in South Australia', *International Migration & Integration*, vol. 9, 2008, pp. 125-145.

Figure 1.4: Actual and Projected Net Overseas Migration Flows to South Australia, 1982-2041 (persons per annum)



Source: DPTI and ABS, *Australian Demographic Statistics*, cat. no. 3101.0, September Quarter, 2014, released March 2015 and time series

1.5.4 Net interstate migration assumptions

Like NOM, net interstate migration can exhibit sudden and dramatic changes in flows (Figure 1.5). This is particularly so in the case of net interstate migration as the net figure is the residual of much larger in and out flows of interstate migrants. For example, in 2013-14 South Australia had 22,824 arrivals and 25,792 departures interstate for a net interstate loss of 2,968 persons.¹⁸

There is evidence that the size of net interstate migration flows is a function of the job market and the relative economic performance of South Australia compared to other jurisdictions. For example, in 1995 net interstate losses from migration reached 7,000, but between 1995 and 2003 there was a steady decrease in net losses to 1,200 in 2003. However, the relatively small and limited nature of the local job market compared to that of many interstate destinations and the lifestyle attractions of cities larger than Adelaide means that even in times of relatively buoyant economic conditions there is a persistent net loss of South Australians interstate.

In 2013-14 the net interstate flow to all interstate locations was -2,968 persons, with the largest net losses to Victoria (1,931), Queensland (765) and New South Wales (632), but there were also smaller net losses to Western Australia (299) and the Australian Capital Territory (157). South Australia enjoyed a net gain of interstate migrants from the Northern Territory (730) and Tasmania (86).

¹⁸ ABS, *Australian Demographic Statistics*, cat. no. 3101.0, September quarter 2014, released March 2015, p.37.

Although the net losses interstate from South Australia in the previous 2012-13 financial year were larger than in 2013-14 at 3,973, the pattern and relative size of the net interstate migration flows were similar to 2013-14. The biggest net losses were also to Victoria (1,516) and Queensland (1,490), but losses to Western Australia (1,107) at the height of its resources boom were larger than to New South Wales (251), with smaller net losses to the Australian Capital Territory (178). In 2012-13 South Australia received net gains of interstate migrants from the Northern Territory (458) and Tasmania (111).

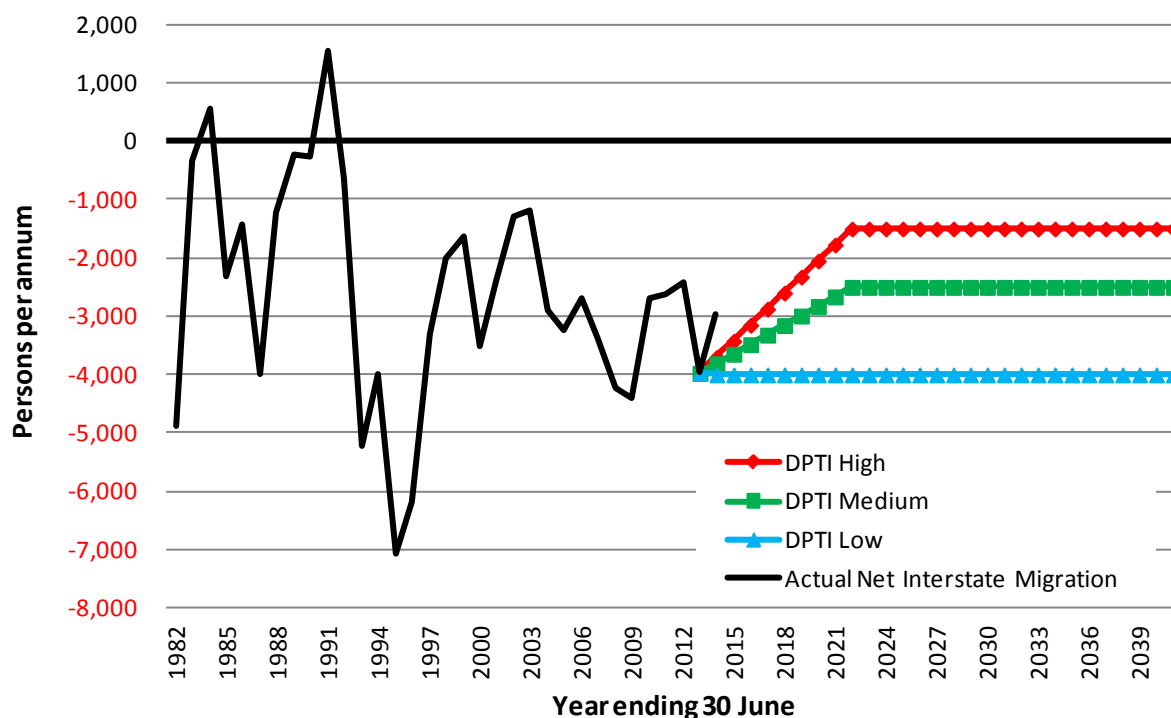
Since 2004 the conventional positive relationship between the size of net interstate migration flows and economic activity within the State has been complicated by the emergence of an apparent new inverse relationship between the size of NOM and net interstate migration flows. In 2004 NOM flows into South Australia began to increase significantly, largely due to the success of the SSRM scheme and an increase in migrants arriving with provisional visas. By 2007-08 and 2008-09 the scale of negative net flows of South Australians to interstate destinations had also increased suggesting that a proportion of short-term overseas migrants after arriving in South Australia are attracted to the larger labour markets interstate, particularly if they are unable to obtain suitable employment in South Australia after gaining permanent residency status. However, the scale of interstate migration flows is influenced by multiple factors including the location of host communities within Australia and the real and perceived wage and living cost differentials between the different jurisdictions. Therefore although positive economic conditions may encourage high levels of NOM into South Australia, the high proportion of provisional and temporary migrants among these recent inflows may boost the eventual leakage of these migrants to interstate destinations, if local opportunities do not match aspirations.

Similar leakages to interstate locations were observed in New South Wales in the past when NOM flows were high, but recent analyses show no clear relationship. Announcements in early 2014 of major redundancies in the manufacturing sector in 2016 and 2017 in both South Australia and Victoria, plus the scaling back of investment on the back of the mining boom in Western Australia and Queensland, suggest opportunities interstate for potential migrants seeking employment are limited. In times of limited employment opportunities in the past, South Australians have tended to be reluctant to move interstate and instead have preferred to remain in their home state with its cheaper living costs. However, it is almost impossible to predict the relative demand for labour and relative wage differentials in other parts of Australia that will ultimately determine the scale and direction of future interstate migration flows.

The net interstate migration assumptions adopted in the DPTI projections are shown in Figure 1.5. The long-term future net interstate migration assumptions adopted for this series of population projections range between net losses per annum to interstate of 1,500 persons under the high series, to 2,500 under the medium, to 4,000 under the low series. This is a realistic 'envelope' of assumptions that is large enough to include all but the most exceptional annual net interstate flows of the last 16 years. The high and medium sets of assumptions transition to their long term constant level over the first nine years of the projection period whereas the low set of assumptions continue current large net losses to interstate of 4,000 per annum until the end of the projection period. The medium assumption of long-term annual net losses of 2,500 is almost identical to the average annual net losses realised to interstate destinations of 2,612 over the period 1981-82 to 2012-13.

In summary, the medium series assumes a return to the long-term average net interstate migration flows, but with a slight adjustment for an assumed labour shortage in future years, partly driven by the more rapid ageing of this State's population than the population along Australia's eastern seaboard. The high series assumes a much greater demand for labour from within the State, with the result that annual long-term net interstate migration flows will equal -1,500 a year from 2021-22 onwards. Each of these assumptions assumes similar or identical long-term annual net losses interstate as adopted by the ABS states and territories 2012-61 projections that assume long-term losses of 2,000, 3,000 and 4,000 for the equivalent projection series.

Figure 1.5: Actual and Projected Net Interstate Migration Flows, South Australia, 1982-2041 (persons per annum)



Source: DPTI and ABS, *Australian Demographic Statistics*, cat. no. 3101.0, September Quarter, 2014, released March 2015 and time series

1.5.5 Net intrastate migration assumptions

An important context to the development of this 2011 Census-based revision of the population projections has been the spatial planning priorities for the Greater Adelaide Region identified in the 30-Year Plan. These priorities have a particular relevance to intrastate net migration assumptions, as migration at the interregional level is one of the components of population change that is most responsive to the timing, scale and spatial location of new releases of land that are developed for residential and employment development.

A key objective of the 30-Year Plan is to limit urban sprawl by increasing urban residential densities. A target of the Plan is that by 2036, 70% of all new housing in metropolitan Adelaide will be built in established areas.

The long-term annual net intrastate migration assumptions used in the medium projection series were developed with reference to the patterns of 2006-11 and 2010-11 net migration flows estimated from the 2011 Census with consideration given to current population trends and possible future economic developments. The salient features of these assumptions under the medium series are:

- Net migration losses from the Adelaide Statistical Division are assumed to increase gradually from 2011-12 levels of 1,400 per annum to 1,640 in 2040-41, resulting in increased flows to neighbouring statistical divisions.
- The net gains through migration experienced by the Outer Adelaide Statistical Division are assumed to remain constant at 1,600 per annum with most of this net positive flow originating from the Adelaide Statistical Division.

- In the Yorke and Lower North Statistical Division, net gains through migration evident in recent years are assumed to continue at a level of 300 per annum, due to a continuation of retirement migration from surrounding areas and associated growth in local service industries.
- The net outflow of people from the Murray Lands Statistical Division is assumed to moderate gradually from 100 persons per annum in 2011-12 to 60 per annum by 2040-41. It is assumed that at the statistical division level the net outflow of persons will persist despite an allowance for the assumed continued growth of Murray Bridge as a regional centre, as identified in the 30-Year Plan.
- The South East Statistical Division that in recent years has experienced net losses through outmigration is expected to benefit from a slight decrease in the size of these annual losses over the projection period, from an assumed annual net loss of 175 in 2011-12 to a net loss of 88 persons in 2040-41. Mount Gambier's status as South Australia's second most populous city has played a critical role in minimising the net flows of population out of the South East.
- The current net outflow of people from the Eyre Statistical Division is assumed to reverse as the population ages in situ, from an outflow of 50 in 2011-12 to an annual net gain of 66 persons in 2040-41. This reversal is due to its growing status as a retirement centre and an increased demand for working age people to service this population.
- The Northern Statistical Division is expected to continue to lose people to elsewhere in the state at a constant net outflow of 175 persons per annum until 2040-41.

2. Projection Results – South Australia (All-Of-State), 2011-41

2.1 Population growth

The 2016 population of South Australia is projected to be about 1.71 million, an increase of 76,000 over the 2011 Census population of 1.64 million (refer Table 2.1 and Figure 2.1) and an increase of 163,000 over the 2006 Census population of 1.55 million.

By 2021 the State's population is projected to have increased by between 124,000 (low series) and 180,000 (high series) over its 2011 total to tally between 1.76 million and 1.82 million.

By 2041 the projected population of the State will have grown to between 1.87 million (low series) and 2.21 million (high series).

Under the low and medium series, average annual growth rates will be higher in the initial five-year period, 2011-16, than during 2016-21 and later five-year periods. In these later years population growth is projected to slow due to a projected reduction in natural increase (births minus deaths) as the number of projected deaths increases much more rapidly than the number of births as the numerous post-war baby boomer cohort born in the years 1946-61 begins to reach advanced ages.

In the high and 30-Year Plan series growth rates will peak in 2016-21 and continue at higher levels than in the low and medium series due to the assumed continuation of higher levels of net migration. In the case of the 30-Year Plan projection scenario, it was assumed that net interstate migration flows would become positive from 2013-14 onwards; this boosted projected future growth rates to even higher levels.

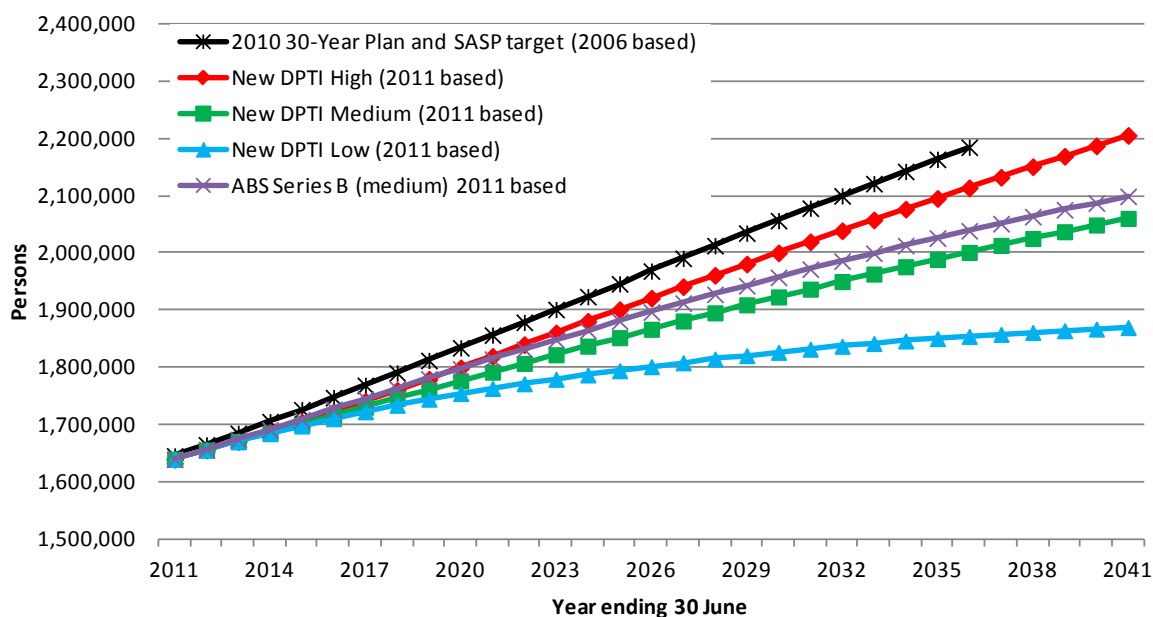
Because of larger losses to interstate locations than assumed in the 2006 based 30-Year Plan projection scenario (realised losses of 2,400 to 4,400 per annum compared to assumed interstate flows of 250 to -3,000), the projected State population in all of the 2011 based DPTI projection series is smaller than that projected in the 30-Year Plan scenario. By 2036, the last year of the 30-Year Plan scenario, the DPTI high series projects a total population of 2.1 million, 70,850 less than the 30-Year Plan scenario. The medium series, the most likely outcome, projects a population of 2.0 million by 2036, nine years later than the target date projected in the 30-Year Plan scenario.

Table 2.1: Projected total population and growth rates, South Australia, 2011-41

Year (30 June)	Projection series			
	Low	Medium	High	30-Year Plan (Adjusted)
Total population				
2011 (Base yr)	1,639,614	1,639,614	1,639,614	1,645,389
2016	1,710,440	1,715,299	1,722,267	1,747,259
2021	1,763,378	1,791,767	1,819,455	1,856,499
2026	1,801,344	1,866,715	1,921,120	1,968,391
2031	1,831,905	1,936,812	2,019,608	2,078,237
2036	1,854,301	2,001,047	2,113,921	2,184,769
2041	1,869,673	2,060,527	2,205,452	
Average annual change per five-year interval				
2011–16	14,165	15,137	16,531	20,374
2016–21	10,588	15,294	19,438	21,848
2021–26	7,593	14,990	20,333	22,378
2026–31	6,112	14,019	19,698	21,969
2031–36	4,479	12,847	18,863	21,306
2036–41	3,074	11,896	18,306	
Average annual growth rates per five-year interval (%)				
2011–16	0.85	0.91	0.99	1.21
2016–21	0.61	0.88	1.10	1.22
2021–26	0.43	0.82	1.09	1.18
2026–31	0.34	0.74	1.00	1.09
2031–36	0.24	0.65	0.92	1.00
2036–41	0.17	0.59	0.85	

Note: The 2006 based 30-Year Plan projection scenario was adjusted downwards to accord with ABS rebasing of ERP estimates after finalisation of 2011 census results.

Figure 2.1: Projected population by projection series, South Australia, 2011-41



2.2 Changes in age structure

Although the population of South Australia is projected to grow from 2011 to 2041 under all projection series, this growth will not be equally distributed throughout the age structure. Due to the ageing of the large post World War II baby-boomer cohort (born between 1946 and 1961 and aged 50-64 years in 2011), the fact that the fertility rates of this cohort were below replacement rates, and improvements in life expectancy, the State's population is projected to age significantly during the projection period under all series. Figure 2.2 illustrates the projected single year age structure of South Australia's population in 2026 and 2041 under the medium series in comparison with the age structure at the time of the 2011 Census. The impact of the large cohorts born in the years 1946-47 to 1960-61 and the early 1970s is evident in the 2011, 2026 and 2041 age pyramids.

2.2.1 Median age

The median age of the population is projected to increase under all projection series (Table 2.2). The median age will be slightly higher under the low projection series (that assumes lower fertility rates and smaller net gains from migration) than the high series.

Table 2.2: Median age (years) of projected South Australia population by projection series, 2011-41

Year ending 30 June	Low	Medium	High	30-Year Plan
2011	39.5	39.5	39.5	39.3
2016	39.8	39.8	39.6	39.3
2021	40.5	40.1	39.6	39.3
2026	41.7	40.8	40.0	39.6
2031	42.8	41.5	40.5	40.2
2036	43.8	42.0	40.8	40.8
2041	44.5	42.4	40.9	NA

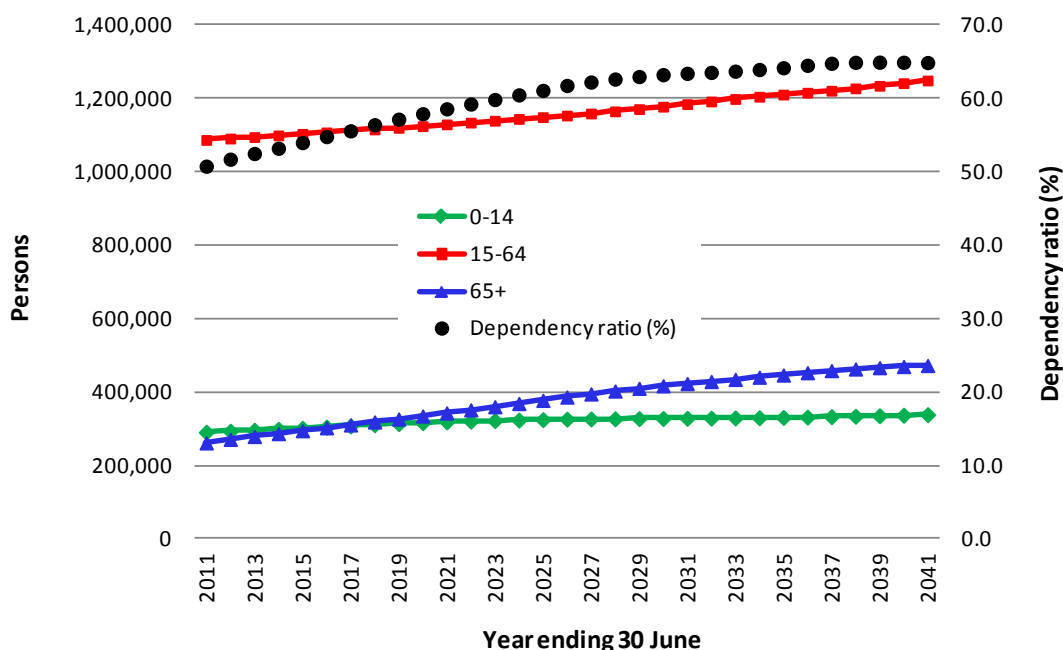
Sources: DPTI and ABS Australian Demographic Statistics, cat. no. 3101.0, Table 3

2.2.2 Dependency ratio

The dependency ratio is the number of those not of working age (0-14 and 65+ years of age 'the dependents') expressed as a ratio or percentage of those of working age (15-64 years of age). Figure 2.2 shows the dependency ratio increasing rapidly between 2011 and 2026, mainly as a result of the larger baby-boomer cohort retiring from the workforce.

Figure 2.2 also shows the projected increase in the 'dependent' age groupings of 0-14 and 65+, and the projected growth in the working age (15-64 years of age) population.

Figure 2.2: Projected size of major age groups and dependency ratio, South Australia, 2011-41 (medium series)



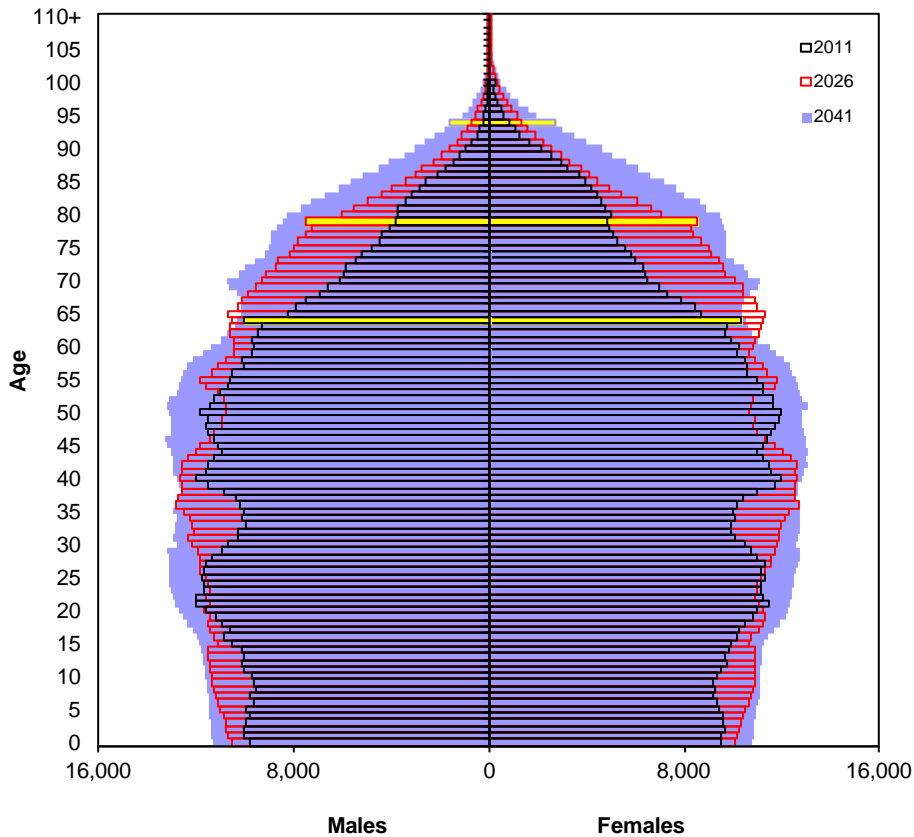
2.2.3 Age-sex structure

Figures 2.3 to 2.6 illustrate the projected age-sex composition of the South Australian population in 2026 and 2041 under each of the projection series and how the projected age structure in these years compares with the age structure of South Australia's population at the 2011 Census.

Under each of the three series the number of elderly will increase significantly from 2016 onwards with most of this increase due to the ageing of the large baby-boomer cohort, whose older members began turning 65 in 2011. The projected size of the elderly population will be almost identical under the low, medium and high series (Figures 2.11 and 2.12). However, a comparison of the projected age-sex structure of the State's population in 2026 and 2041 under the low series (Figure 2.4) shows that by 2026 some working-age groups will be less numerous than in 2011, although the impact of the lower migration and fertility assumptions of the low series on the 15-19 years and younger age groups is only beginning to show in a slight reduction of their numbers by 2041. The overall size of the working-age population in 2026 and 2041 is still greater than in 2011. The increases in size of the working age population between 2011 and 2041 are projected at 3.4%, 14.9% and 23.0% under the low, medium and high series, respectively.

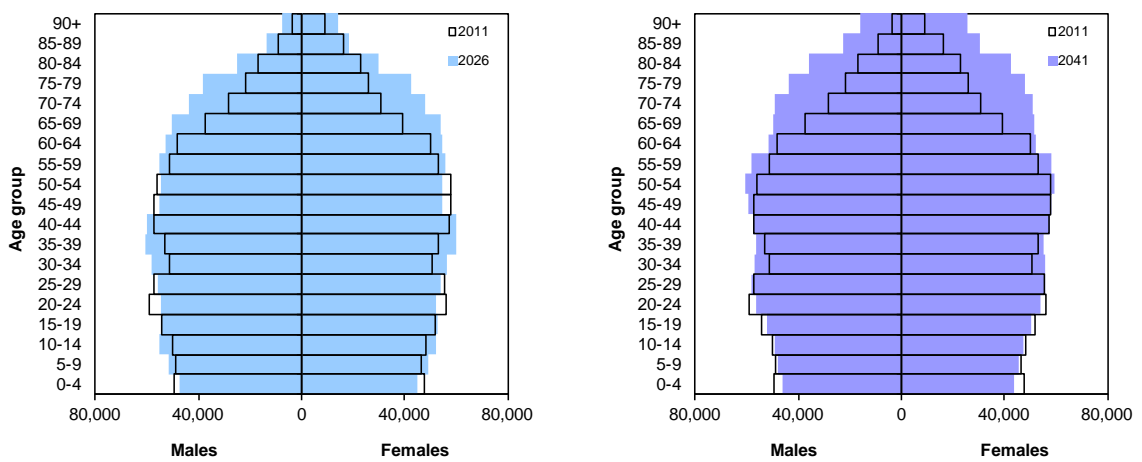
Under the medium series, the projected growth in the absolute number of elderly (aged 65+) will be almost identical to that under the low series. In the medium series, almost all of the major working-age groups are projected to be more numerous in 2026 than in 2011, particularly the 30-44 age groups, with even greater gains projected by 2041 (Figure 2.5). This contrasts with the minimal gains under the low series (Figure 2.4).

Figure 2.3: South Australia projected age-sex structure, medium series



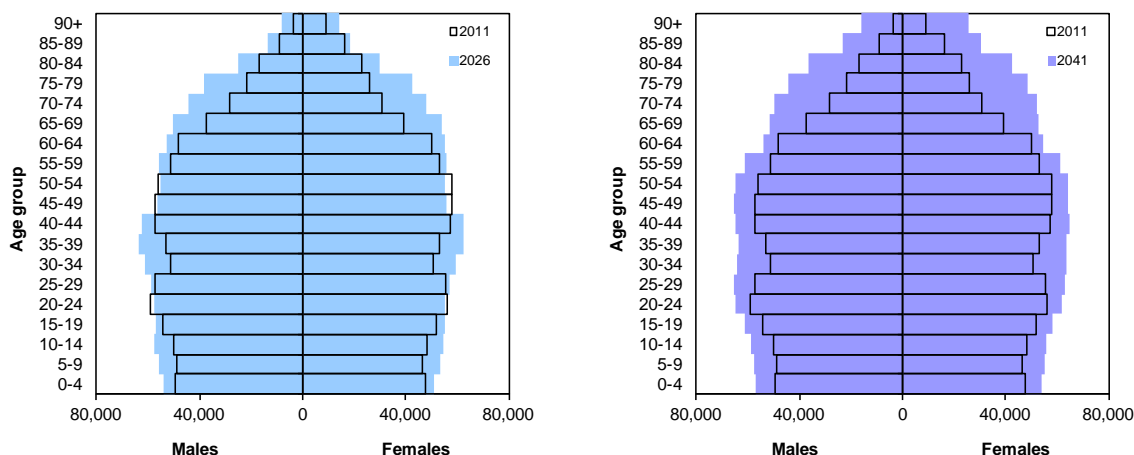
Notes: The yellow shading denotes the large post-war birth cohort of 1946-47 that was the beginning of the numerous baby-boom cohort, whose survivors were aged 50-64 years in 2011 and will be aged 65-79 in 2026 and 80-94 in 2041.

Figure 2.4: South Australia projected age-sex structure in 2026 and 2041 (low series)



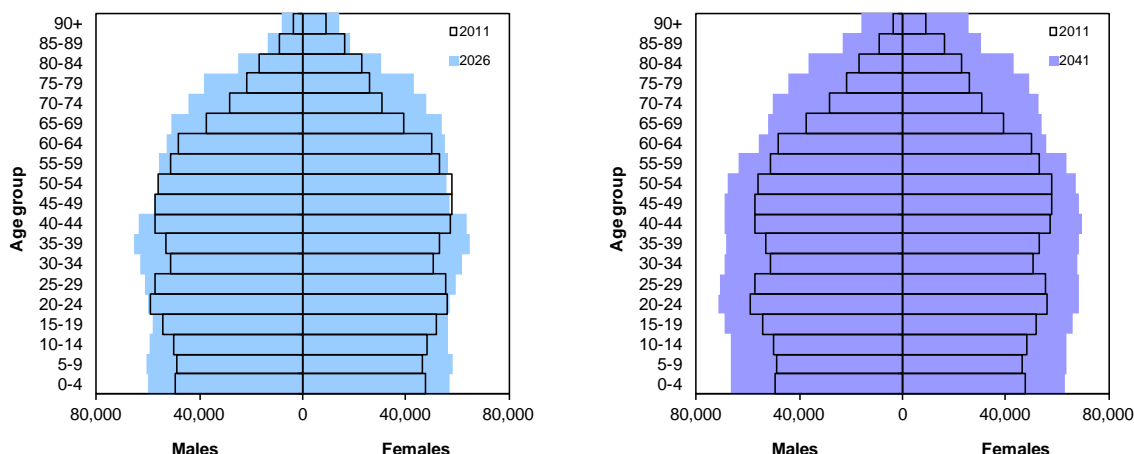
Notes: Baby-boomer birth cohort aged 50-64 years in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 2.5: South Australia projected age-sex structure in 2026 and 2041 (medium series)



Notes: Baby-boomer birth cohort aged 50-64 years in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 2.6: South Australia projected age-sex structure in 2026 and 2041 (high series)



Notes: Baby-boomer birth cohort aged 50-64 years in 2011, 65-79 in 2026 and 80-94 in 2041.

The high series (Figure 2.6), which assumes a continuation of large net migration gains until 2041 and higher levels of fertility than the medium series, projects an almost identical growth in the absolute number of elderly (aged 65+ years) as the medium and low series. However, the projected increase in the number of young and working-age persons is much larger than in the medium series, especially by 2041 when the cumulative impact of higher levels of fertility and net migration will have had a greater effect.

If the 2026 and 2041 pyramids are compared under the medium and high series (Figures 2.5 and 2.6) the ageing of the more numerous 30-44 age cohorts of 2026 by 2041 when they are aged 45-59 is apparent. As these cohorts continue to age it will be evident that a large intake of working-age immigrants over a relatively short time will eventually result in a large increase in the number of elderly.

2.2.4 Age groups

Examination of the projected population of selected age groups at five-year intervals under each of the projection series and the 30-Year Plan emphasises the size of the projected changes in the major age groups between 2011 and 2041, and the variation by projection series (Figures 2.7 to 2.12). It should be noted that the projection series adopted for the 30-Year Plan only projects population futures until 2036 from its base year of 2006. The projected totals in these selected age groups at five-year intervals are provided in Appendix 2.

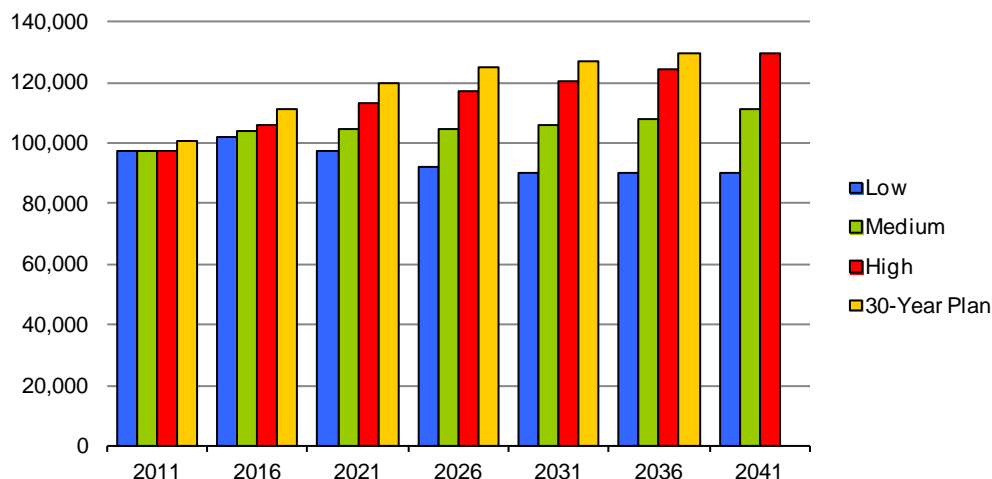
The population age groups examined are:

- Young children, 0-4 years
- School age, 5-17 years
- Young working age, 18-34 years
- Older working age, 35-64 years
- Young elderly, 65-84 years
- Old elderly, 85+ years

Young children, 0-4 years

The number of young children aged 0-4 years is projected to increase under all but the low projection series from 2011 to 2041 (Figure 2.7 and Appendix 2). Under the medium, 30-Year Plan and high series the total number of young children is projected to increase substantially, by between 14,000 and 32,300 children or 14% and 33% from 2011 to 2041. Under the low series, the number is projected to increase from 97,000 in 2011 to 102,000 by 2016, or by 5%, but then decrease to 7,000 below the 2011 number by 2041.

Figure 2.7: Projected population of young children aged 0-4, South Australia, 2011-41

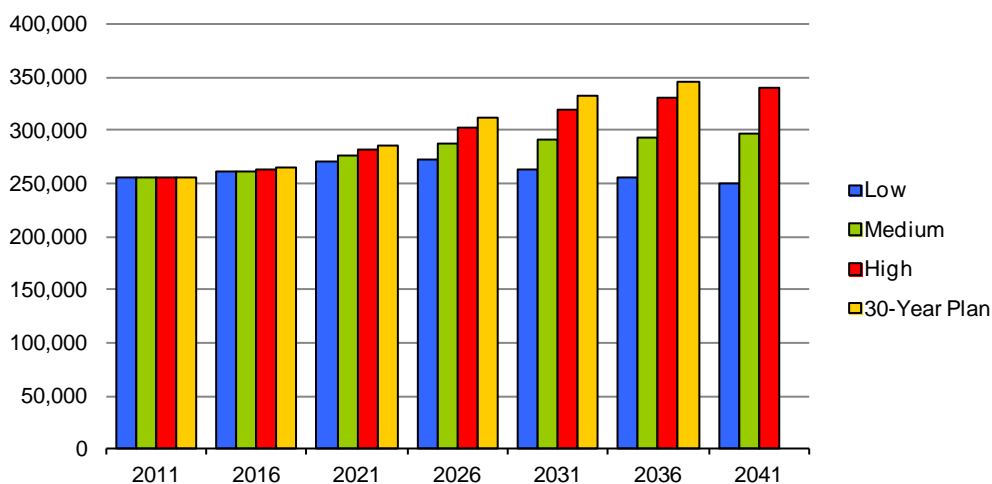


School age, 5-17 years

School-age (5-17 years) numbers in South Australia are projected to remain essentially stable under all DPTI projection series until 2016 (Figure 2.8 and Appendix 2). After 2016 every series projects an increase, with the medium, 30-Year Plan and high series all projecting increases in numbers for every five-year period until 2036 and 2041. The 30-Year Plan projects school-age numbers will reach

345,000 by 2036 and the high series projects a total of 340,000 by 2041, equal to increases of 35% and 33% respectively on 2011 numbers. The equivalent projected increase under the medium series between 2011 and 2041 is 16%, to reach a total of 298,000 school-age children in 2041, with the rate of increase projected to moderate after 2026 in accord with the lower levels of assumed net overseas migration under the medium series. In the low series the projected increase continues until 2026, when the number peaks at 272,000, an increase of just 6% on the 2011 total, and thereafter there is a projected decrease until in 2041 the number is 5,000 less than in 2011.

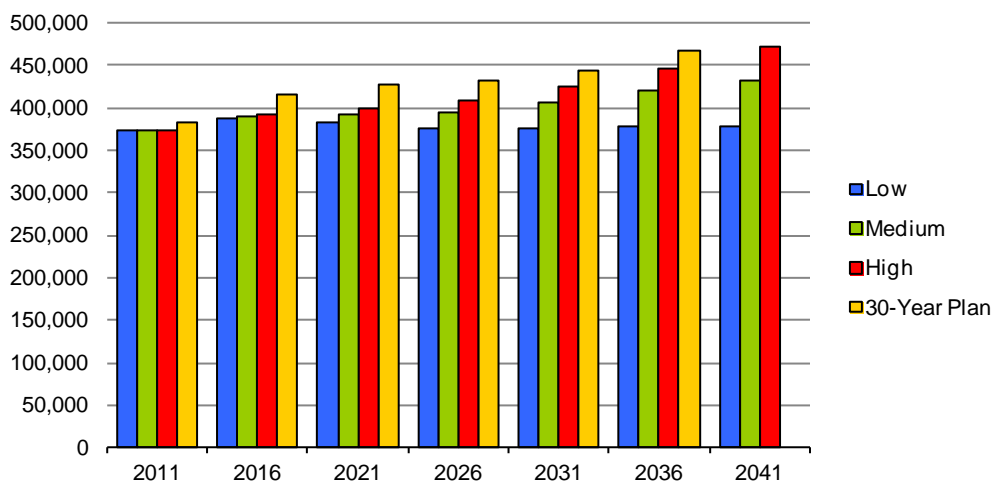
Figure 2.8: Projected school-age (5-17 years) population, South Australia, 2011-41



Young working age, 18-34 years

Because of the high rates of net overseas migration in recent years the size of the young working-age (18-34 years) population is projected to increase significantly under all projection series to at least 2016 (Figure 2.9 and Appendix 2). Thereafter it will continue to increase until the end of the projection period under all but the low projection series. Projected increases over the 2011-41 projection period are estimated at: 6,200, 59,000, and 98,000 under the low, medium and high series respectively, whereas the 30-Year Plan projects an increase of 84,200 in the number of 18-34 year olds by 2036. These increases equate to percentage changes of 2%, 16% and 26% under the low, medium and high series between 2011 and 2041, whereas the 30-Year Plan projects a growth of 22% over the 25 years between 2011 and 2036. The 18-34 age group is projected to total 471,000 and 432,000 by 2041 under the high and medium projection series, respectively. The projected total of 18-34 year olds at the end of the 30-Year Plan projection period in 2036 is 467,000. The low series projects a decrease in the young working-age population from a peak of 388,000 in 2016 to 379,000 in 2041, only 2% above the 2011 total.

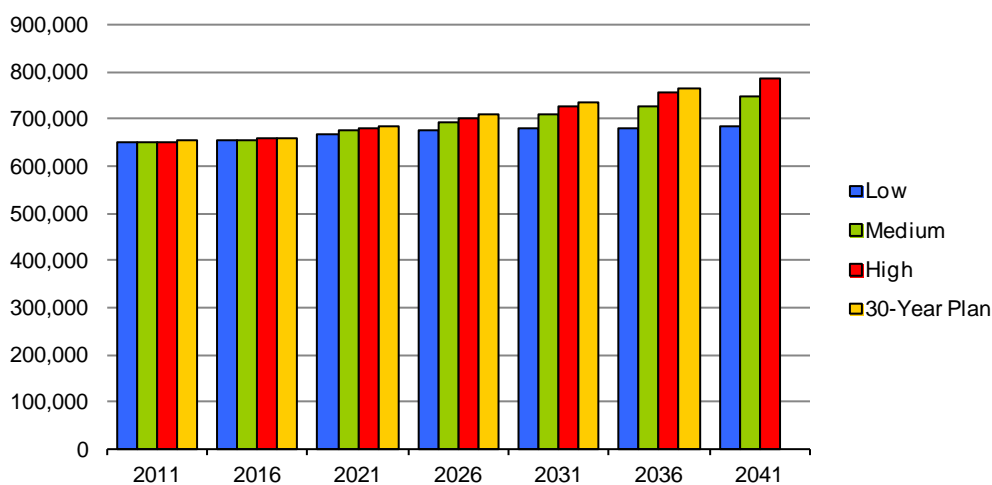
Figure 2.9: Projected young working-age (18-34 years) population, South Australia, 2011-41



Older working age, 35-64 years

This age group, that contains many of the baby-boomer cohort, is the most numerous under consideration (note the different vertical scales employed in Figures 2.9 and 2.10), and each of the projection series projects a substantial increase in absolute numbers between 2011 and 2041. The medium series projects a steady increase over the entire projection period until 2041 with the number projected to total 746,800 in 2041 an increase of 95,000 or 15% over the 652,000 in this age group at the 2011 Census. The 30-Year Plan projects a larger increase of 108,400, 16% above the 2011 total by just 2036, and the high series projects a higher total of 786,000 in 2041, an increase of 21% over 2011. This is due to the higher net overseas migration assumptions in the high series compared to the 30-Year Plan projection and the longer time period of 30 years compared to the remaining 25 years until the end of the 30-Year Plan projection period. The low series projects a slow increase in the size of the older working age population from 652,000 in 2011 to 684,000 in 2041, a total increase of just 5% over the next 30 years.

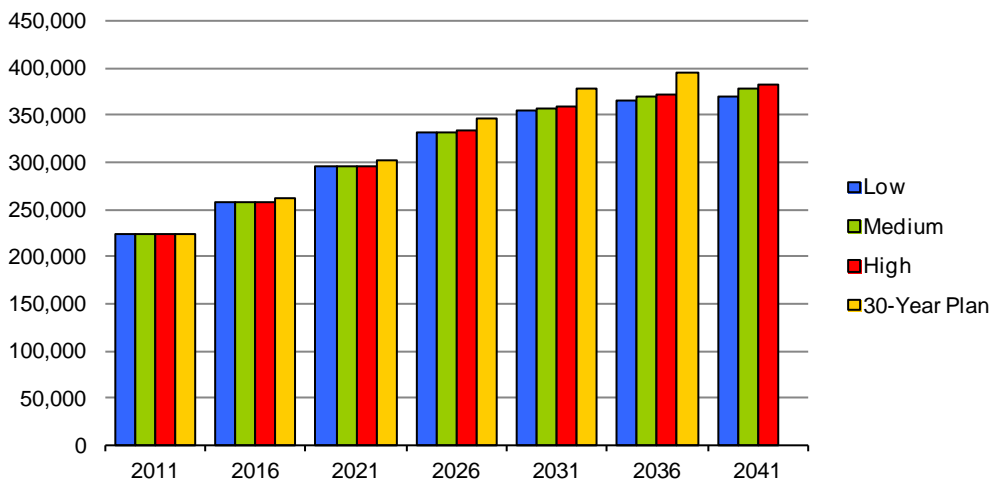
Figure 2.10: Projected older working-age (35-64 years) population, South Australia, 2011-41



Young elderly, 65-84 years

Figures 2.11 and 2.12 illustrate that because the vast majority of those who will be aged 65-84 and 85+ from 2011 to 2041 are already resident in South Australia, the various population projection series result in almost identical trends in future population numbers. Under all series the young elderly population will almost double in size from 224,000 in 2011 to at least 371,000 (low series) to 382,000 (high series) by mid 2041. The increase will be most dramatic between 2011 and 2026 as the large baby-boomer cohort reaches 65-84 years of age, but is not yet affected by the higher mortality rates of old age. (Also refer Appendix 2.)

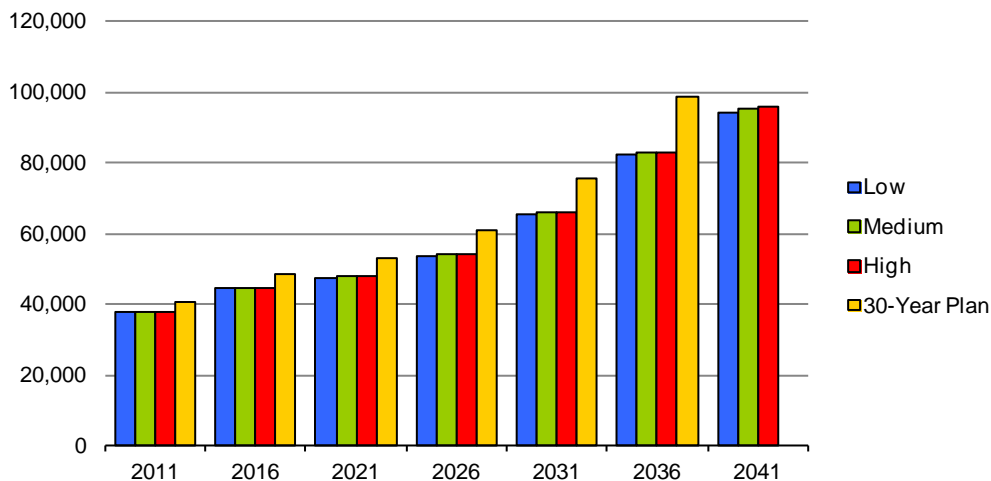
Figure 2.11: Projected young elderly (65-84 years) population, South Australia, 2011-41



Old elderly, 85+ years

After 2026 the more disability-prone 85+ age group is projected to increase more rapidly in size than the 65-84 age group (Figure 2.12 and Appendix 2). The size of this age cohort is essentially the same under all projections. By 2041 the 85+ age group is projected to be 2½ times more numerous than in 2011, increasing from 38,000 in 2011 to at least 94,000 in 2041. The 30-Year Plan consistently projects slightly larger numbers of elderly in the population because of the more optimistic longevity assumptions of that projection series.

Figure 2.12: Projected old elderly (85+ years) population, South Australia, 2011-41



2.3 Components of population change

South Australia is projected to gain people from natural increase (births minus deaths) throughout the projection period of 2011-41 under the high and medium series and for all but the last 6 years of the projection period under the low series. In all projection series the relative impact of natural increase on total population change will diminish as the State's population ages and deaths increase towards the end of the 30-year period, despite assumed gains in longevity among the elderly. Higher levels of net migration, as in the high and medium series, will delay the onset of population ageing and also decrease the impact of a diminished level of natural increase (births minus deaths), but they will not reverse these trends. This is evident in Figures 2.13, 2.14 and 2.15, which compare the components of projected population growth under the high, medium and low series.

2.3.1 Natural increase

The number of births is projected to remain relatively stable at between 20,000 and 22,000 per year over the projection period under the medium series, but to increase from 20,000 to 26,000 under the high series, with its higher fertility assumptions (essentially a constant total fertility rate of 1.9 children per woman) and higher net migration assumptions providing a larger population of women in key child-bearing age cohorts. The opposite is the case in the low series, which projects that the number of births will decline slightly from 20,000 in 2011-12 to 17,700 in 2040-41 due to the lower fertility assumption (a total fertility rate of 1.6 from 2021) and the smaller population of women at risk of child-bearing as a result of the lower net migration assumptions of this series.

The mortality assumptions are the same for each of the projection series, but variations in the number of people at a specific age plus variations in the projected age structure between the projection series will slightly affect the projected number of deaths a year. However, as most deaths occur at old age and the projected number of elderly is almost identical under each projection series, the number of deaths in 2041 is projected to be about 19,000 under all series. This is a significant increase compared to the 13,000 deaths projected for 2011, and is due to the ageing of the population.

Although the number of deaths each year is projected to increase by about 6,000 to reach 19,000 by 2041 under all projection series, this total is projected to be more than offset by 21,000 to 26,000 projected births in the medium and high series respectively. As a result both projection series indicate that a healthy level of natural increase will be maintained throughout the projection period, although in both series its role as a major driver of continued population growth is projected to decline as the number of deaths increases more rapidly than the number of births with increased population ageing (refer Figures 2.13 and 2.14). In contrast the low series projects that the number of deaths will exceed the projected number of births from 2035 onwards due to the lower fertility assumptions of this series (Figure 2.15).

2.3.2 Net migration

Net migration gains from overseas and net losses to interstate are also assumed to continue to have a major influence on the size and growth of the South Australian population. At the beginning of the projection period, 2011-12, net overseas migration to the State was estimated at 11,350 persons per year. Flows remained at similar levels in the years 2012-13 and 2013-14 with ABS estimates of 11,070 and 11,160, respectively. Under the high projection series this was assumed to increase to 13,500 by 2015-16 and then remain constant at this level until 2041. The medium projection series assumed that from 2013-14 onwards net overseas migration would remain constant at 11,500 per year, whereas the low series assumed a steady decrease to 8,000 in 2021-22 and then a constant intake at that level until the end of the projection period in 2041.

In contrast to the positive flow of migrants from overseas, net interstate migration flows between South Australia and other states have been consistently negative for the last three decades, with the number of arrivals being exceeded by the number of departures in every financial year since 1981-82 with the exception of 1983-84 and 1990-91. Over the last five financial years net flows to interstate destinations have averaged a net loss of 2,940 persons per year (Figure 1.5). This negative interstate flow has moderated the impact of positive gains from overseas migration on the size and growth of the State's population. The future volume of these interstate flows is extremely difficult to predict, but each of the new projection series assumes that the net flow will remain negative for South Australia. The high series assumes a major moderation of the interstate losses to 1,500 persons a year from 2021, the medium series a less dramatic moderation to 2,500 persons a year from 2021 onwards (close to the mean long-term net flow interstate of -2,620 a year), and the low series net losses of 4,000 a year from 2012.

Figures 2.13, 2.14 and 2.15 illustrate the critical role that net migration has in influencing future population growth in South Australia under the high, medium and low projection series particularly in the higher growth high and medium projection series, and especially towards the end of the projection horizon when population ageing begins to depress the level of natural increase. Each figure shows the projected population growth and level of net migration (all sources) and natural increase (births minus deaths) assumed under a particular projection series.

Under the high series (Figure 2.13) absolute population growth (shown with a trend line in Figures 2.13, 2.14 and 2.15) is projected to remain around 17,000 to 20,000 persons a year for every year from 2014. South Australia has not had continuing population growth at this scale since the very high growth of the post-war years from 1950 to 1966. Under this high series, net migration is projected to account for at least 57% of the population growth in each projection year after 2014-15.

In the medium series (Figure 2.14), annual population growth achieves a peak of just over 15,000 persons a year over the period 2015 to 2023 when high levels of natural increase coincide with high net migration assumptions, but from 2033 onwards decreases to 13,000 a year or less as the share of growth contributed by natural increase declines with population ageing. These levels of absolute growth are above average for South Australia that, over the period 1982-2013, averaged population growth of 11,500 a year. From 2023 onwards, net migration accounts for 60 to 78% of the annual population growth in the medium series, with its importance as a driver of population growth increasing as the level of natural increase decreases towards the end of the projection period in 2041.

With its lower net migration and fertility assumptions than the medium and high series, annual population growth under the low series is projected to continually decrease after a peak of 16,000 in 2011-12 to reach 2,600 in 2041 (Figure 2.15) as natural population change becomes negative (i.e. deaths exceed births). Although the projected level of annual population growth falls below 4,000 from 2035 onwards, similar levels of annual increase were recorded in the mid 1990s in South Australia.

Figure 2.13: Components of projected population growth, South Australia, 2011-41 (high series)

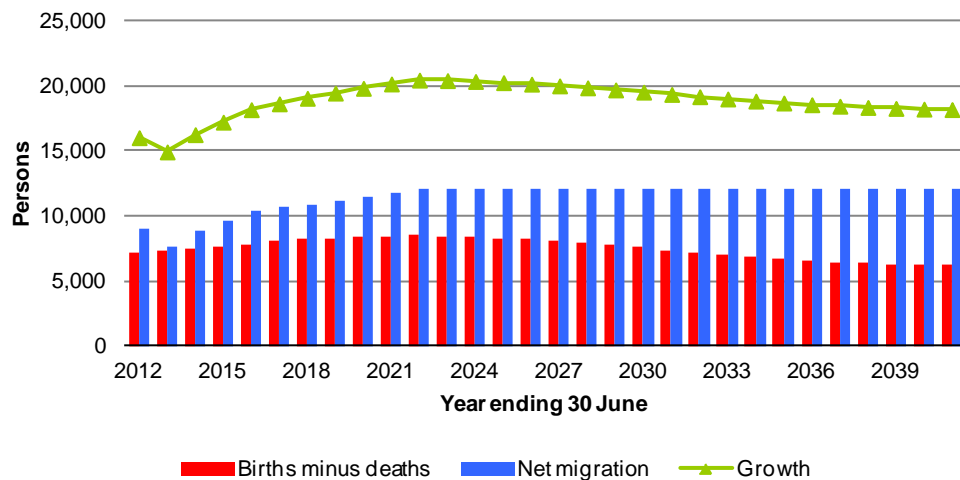


Figure 2.14: Components of projected population growth, South Australia, 2011-41 (medium series)

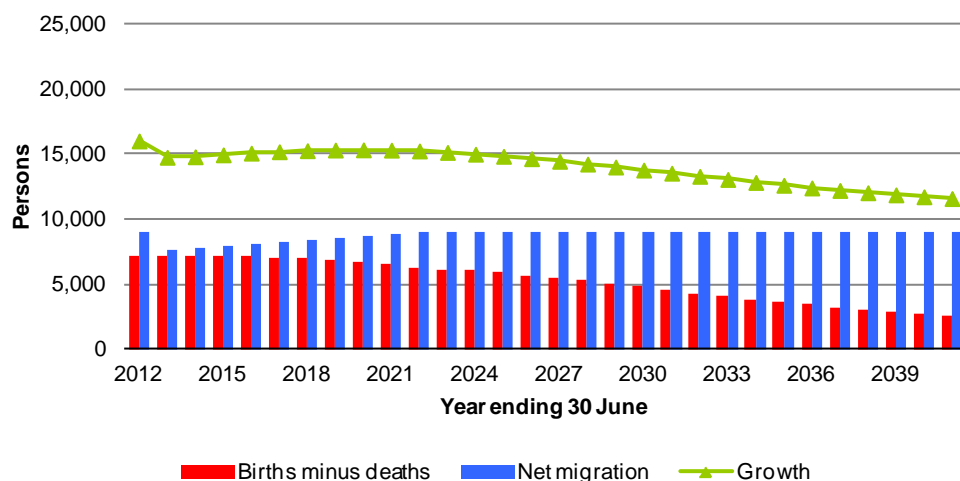
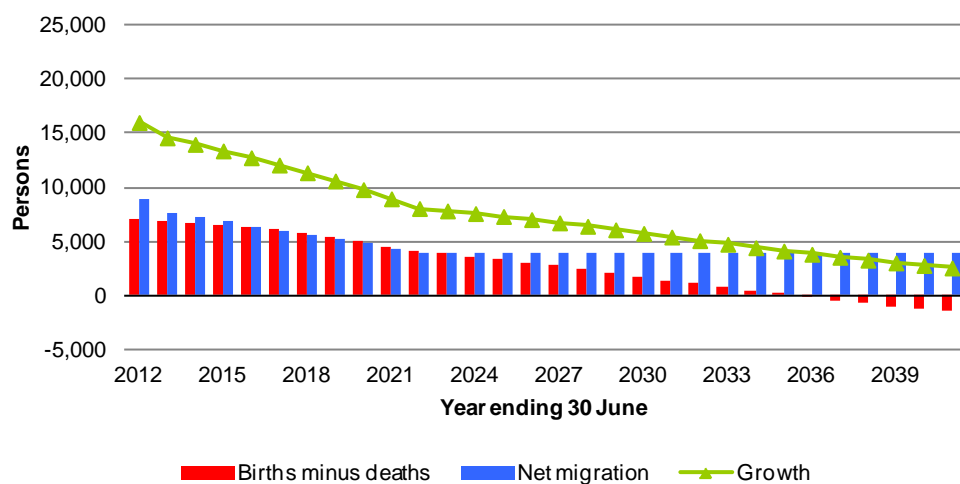


Figure 2.15: Components of projected population growth, South Australia, 2011-41 (low series)



3. Projection Results – By Region, 2011-41

3.1 Adelaide Statistical Division

- At the 2011 Census the population of the Adelaide Statistical Division (ASD) was 1.21 million, by 2016 it is projected to be in the range of 1.26 to 1.27 million and by 2041 between 1.40 million (low series) and 1.64 million (high series) (Table 3.1 and Figure 3.1).
- Between 2011 and 2041 the population of the Adelaide Statistical Division is projected to increase by at least 190,000 persons (low series) and by as much as 429,000 (high series).
- The population of the Adelaide Statistical Division will remain one of the youngest in the State (along with Northern Statistical Division), with the median age projected to increase from 38.6 years in 2011 to between 40 and 43 years in 2041 (Figure 3.2).
- The Adelaide Statistical Division currently attracts the dominant share of overseas migrants to South Australia (over 85%) and it is assumed that this will persist until 2041, but at a slightly reduced level as population growth accelerates in the Outer Adelaide Statistical Division.
- Net migration is the dominant component of population change for all the projection period under the high series and it accounts for most of the population gains of the projection period under the medium series; however, in the low series, natural increase (births minus deaths) accounts for more than 50% of the population gains from 2014-15 until 2025-26 after which population gains from natural increase are again exceeded by net migration intakes as the projected number of deaths increases with population ageing.
- Net outmigration from the Adelaide Statistical Division to the surrounding Outer Adelaide Statistical Division is an important characteristic of the population dynamics of this statistical division particularly in the high and medium projection series.

Table 3.1: Projected total population and growth rates, Adelaide Statistical Division, 2011-41

Year ending 30 June	Projection series		
	Low	Medium	High
	Total population		
2011 (Base year)	1,206,156	1,206,156	1,206,156
2016	1,261,208	1,265,052	1,270,829
2021	1,302,040	1,324,762	1,346,960
2026	1,332,093	1,383,596	1,425,676
2031	1,357,968	1,438,477	1,500,038
2036	1,379,125	1,488,675	1,569,405
2041	1,396,541	1,535,308	1,635,097
	Average annual change per five-year interval		
2011-16	11,010	11,779	12,935
2016-21	8,166	11,942	15,226
2021-26	6,011	11,767	15,743
2026-31	5,175	10,976	14,872
2031-36	4,231	10,040	13,873
2036-41	3,483	9,327	13,138
	Average annual growth rates per five-year interval (%)		
2011-16	0.90	0.96	1.05
2016-21	0.64	0.93	1.17
2021-26	0.46	0.87	1.14
2026-31	0.39	0.78	1.02
2031-36	0.31	0.69	0.91
2036-41	0.25	0.62	0.82

Figure 3.1: Projected population by projection series, Adelaide Statistical Division, 2011-41

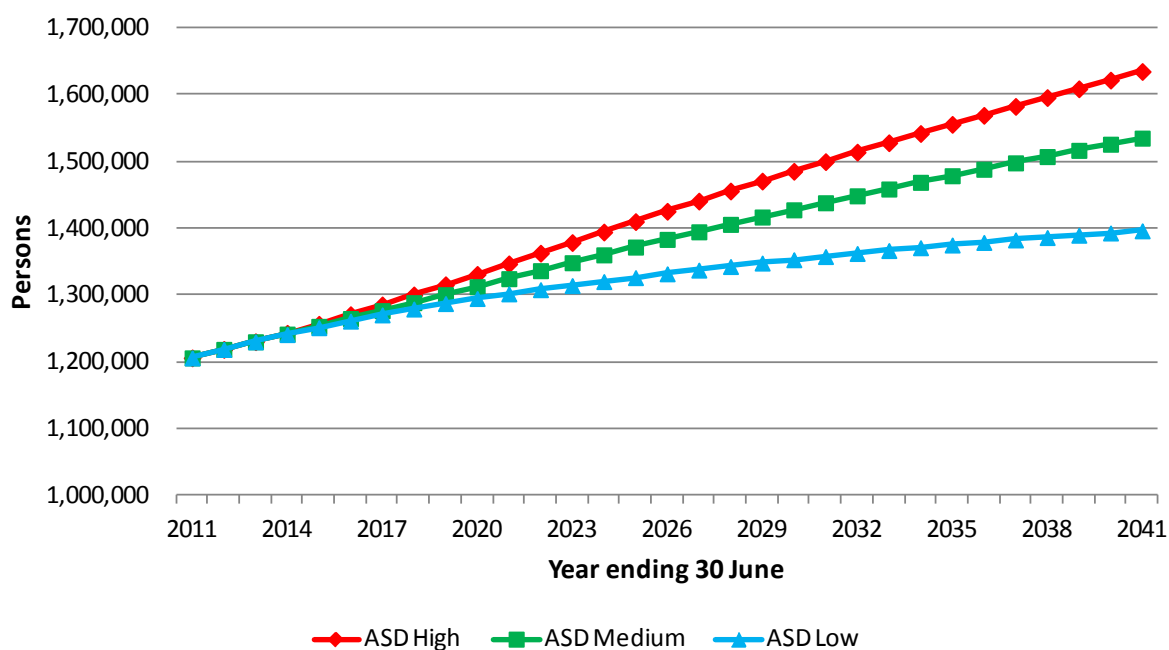
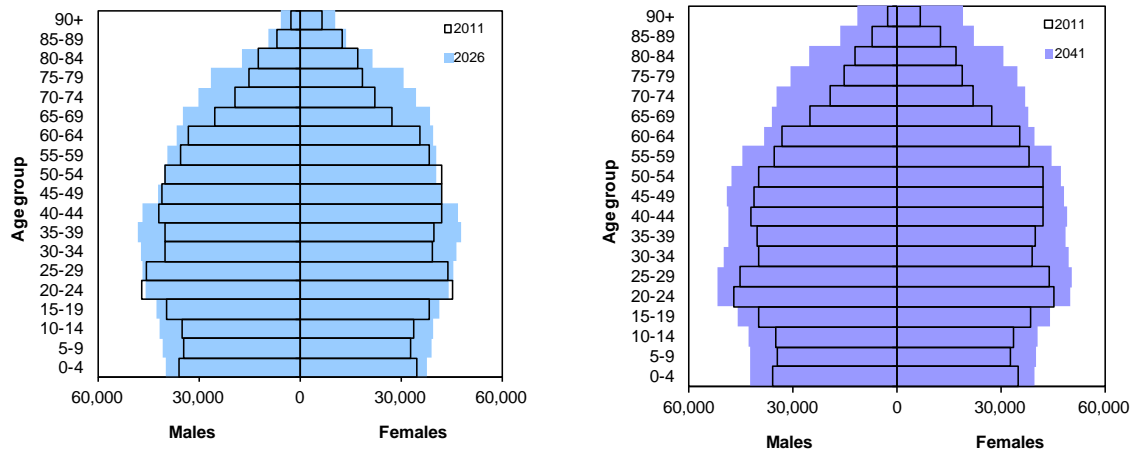
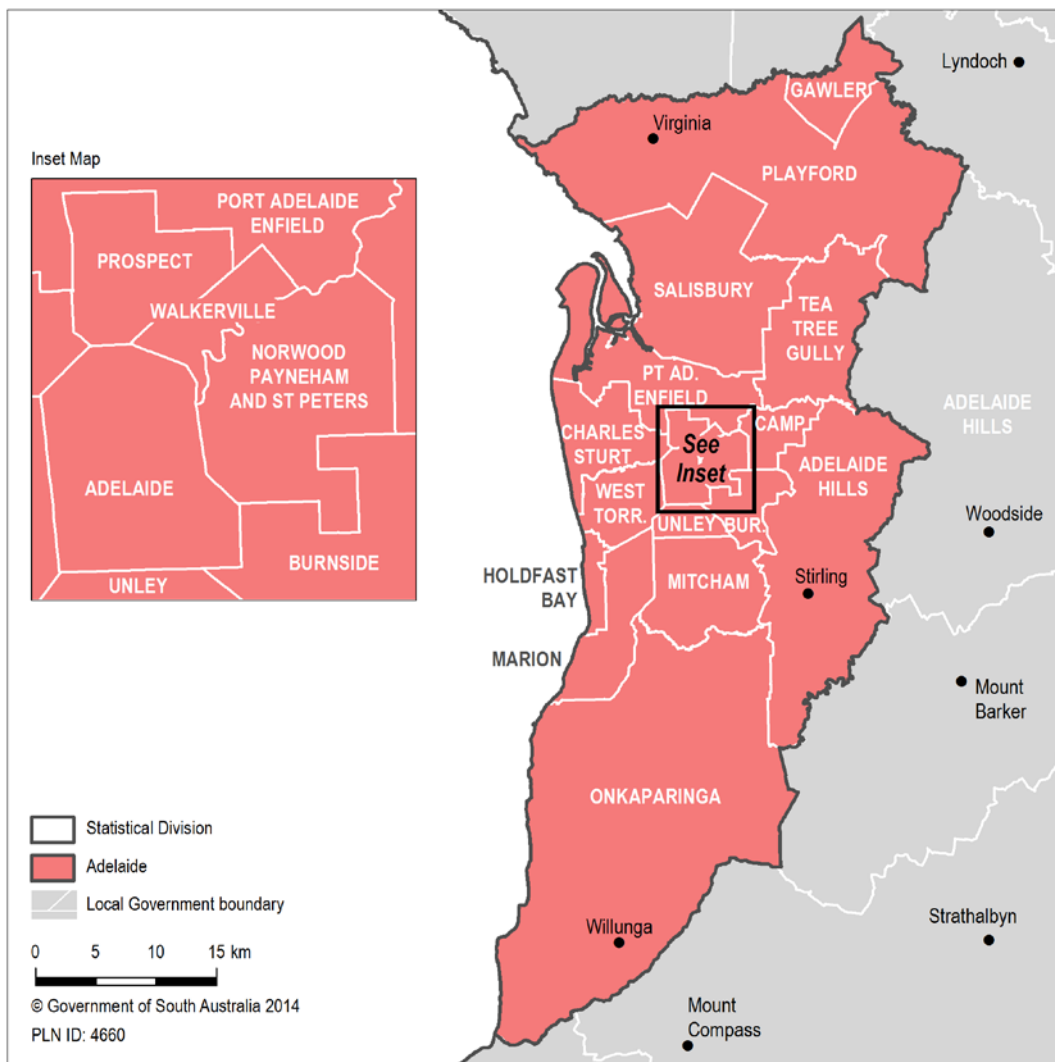


Figure 3.2: Projected age-sex structure of Adelaide Statistical Division, 2011-26 and 2011-41 (medium series)



Notes: Baby-boomer birth cohort aged 50-64 in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 3.3: Adelaide Statistical Division and Local Government Area Boundaries, 2011



3.2 Outer Adelaide Statistical Division

- At the 2011 Census the population of the Outer Adelaide Statistical Division (OASD) was 139,000, by 2016 it is projected to be in the range of 151,000 to 152,000, and by 2041 between 187,000 (low series) and 238,000 (high series) (Table 3.2. and Figure 3.4).
- During the 30-year projection period, 2011-41, the population of the Outer Adelaide Statistical Division is projected to grow by between 48,000 and 99,000 persons.
- The projected average annual rate of population growth between 2011 and 2041 is between 1.1% and 1.8% under the medium series, the highest rate of growth projected for any statistical division in the State, and almost twice the rate of growth projected in the Adelaide Statistical Division, the second fastest growing division.
- The median age of the Outer Adelaide Statistical Division population was 43 years in 2011 and this is projected to increase to between 44 and 48 years by 2041, with retirement migration accelerating the ageing of some coastal settlements such as Victor Harbor (Figure 3.5).
- Almost 44% of the population increase in the Outer Adelaide Statistical Division by 2041 will occur in the 65+ age group (medium series), but younger age groups are also projected to experience significant growth as new broadhectare development occurs in this region.
- Although both births and deaths are projected to become more numerous in the Outer Adelaide Statistical Division by 2041 under the medium series, the number of deaths is projected to increase much more rapidly than the number of births (103% increase compared to a 41% increase) and from 2037 onwards the number of deaths is projected to exceed the number of births.
- Net migration flows are projected to account for about 90% of future population growth in the Outer Adelaide Statistical Division (medium series) making that growth very dependent on the region being able to attract local and overseas migrants.

Table 3.2: Projected total population and growth rates, Outer Adelaide Statistical Division, 2011-41

Year ending 30 June	Projection series		
	Low	Medium	High
	Total population		
2011 (Base year)	138,924	138,924	138,924
2016	151,091	151,368	151,957
2021	161,936	164,059	166,701
2026	170,954	176,872	182,942
2031	178,219	189,606	200,468
2036	183,569	202,053	219,046
2041	186,949	213,934	238,388
	Average annual change per five-year interval		
2011-16	2,433	2,489	2,607
2016-21	2,169	2,538	2,949
2021-26	1,804	2,563	3,248
2026-31	1,453	2,547	3,505
2031-36	1,070	2,489	3,716
2036-41	676	2,376	3,868
	Average annual growth rates per five-year interval (%)		
2011-16	1.69	1.73	1.81
2016-21	1.40	1.62	1.87
2021-26	1.09	1.52	1.88
2026-31	0.84	1.40	1.85
2031-36	0.59	1.28	1.79
2036-41	0.37	1.15	1.71

Figure 3.4: Projected population by projection series, Outer Adelaide Statistical Division, 2011-41

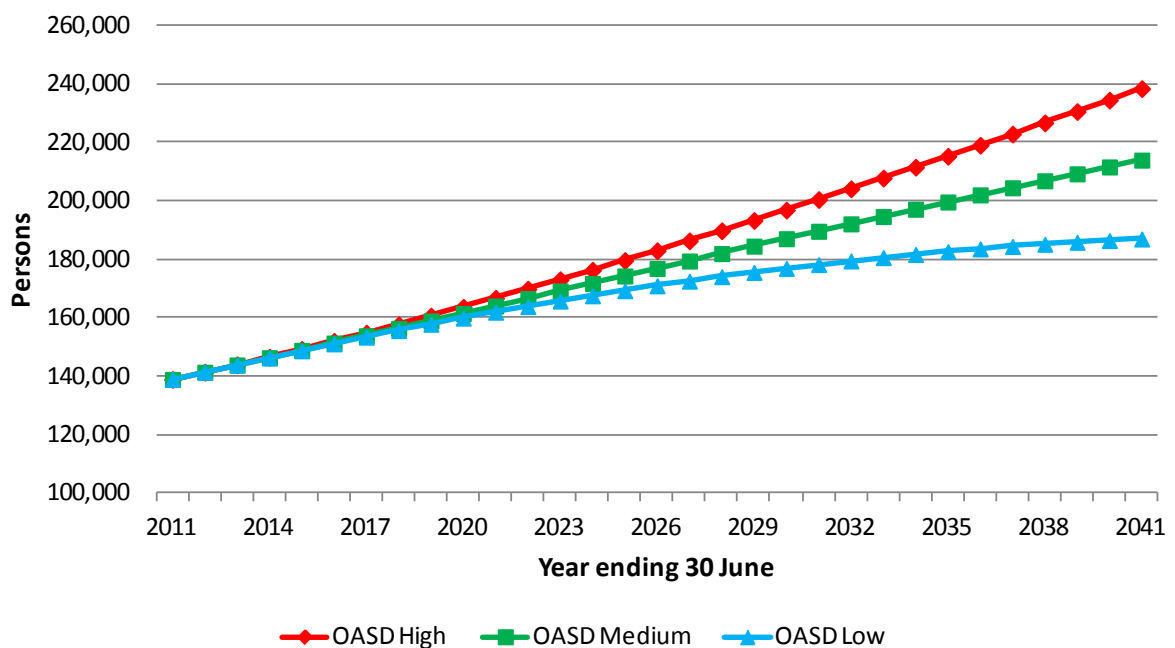
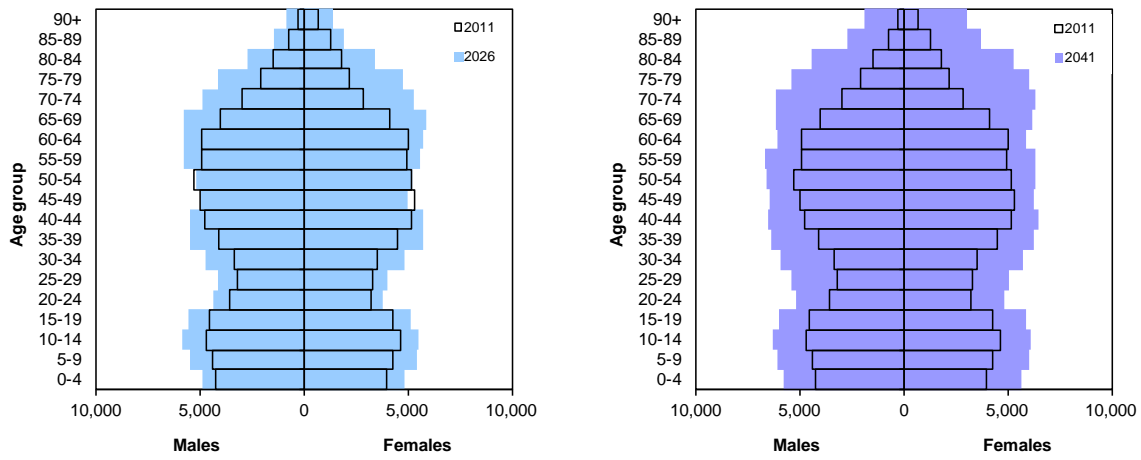
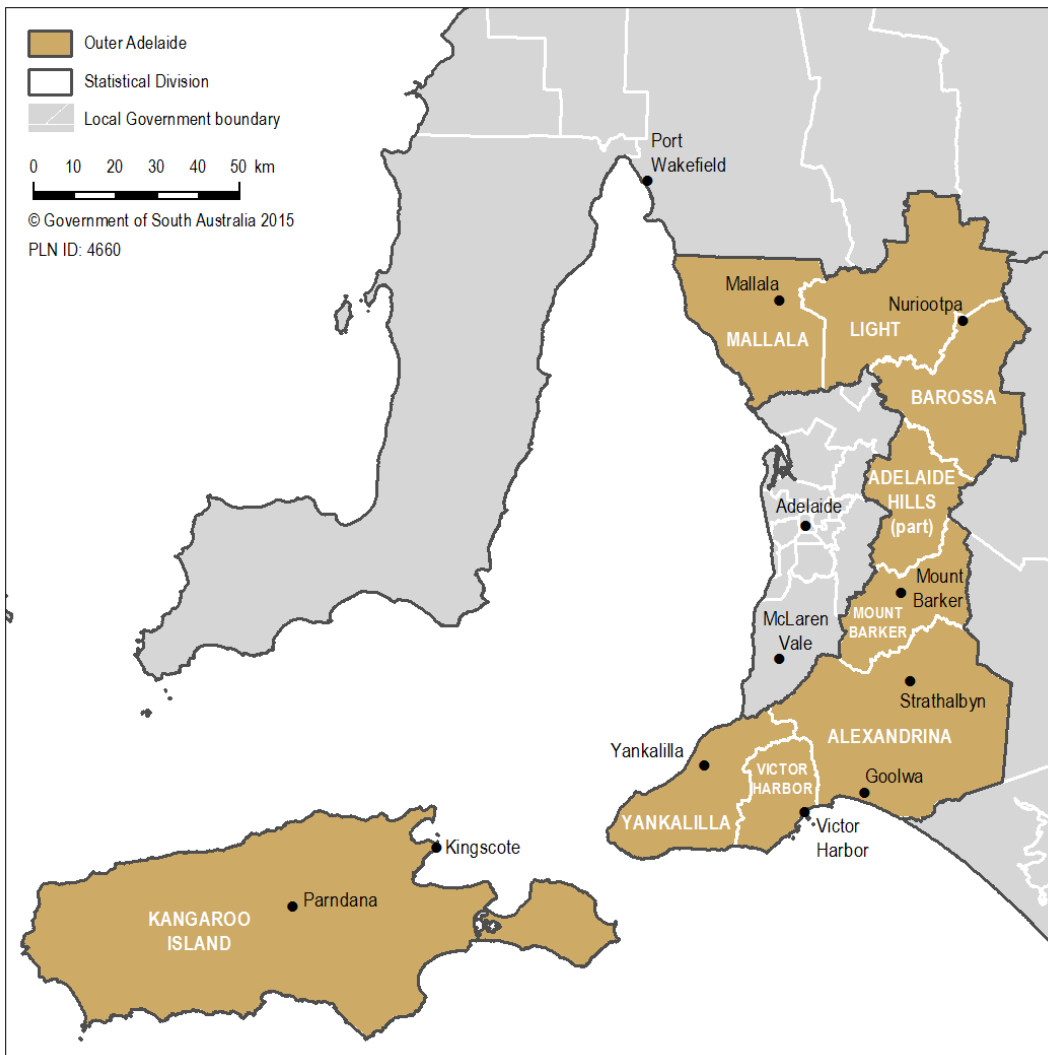


Figure 3.5: Projected age-sex structure of Outer Adelaide Statistical Division, 2011-26 and 2011-41 (medium series)



Notes: Baby-boomer birth cohort aged 50-64 in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 3.6: Outer Adelaide Statistical Division and Local Government Area Boundaries, 2011



3.3 Yorke and Lower North Statistical Division

- At the 2011 Census the population of the Yorke and Lower North Statistical Division (YLNSD) was 46,700, by 2016 it is projected to be around 47,800, and by 2041 between 47,500 (low series) and 59,200 (high series), indicating a growth of between 850 and 12,600 persons from 2011 to 2041 (Table 3.3 and Figure 3.7).
- The population of the Yorke and Lower North Statistical Division is projected to grow at a rate of 0.1% (low series), 0.5% (medium) and 0.8% (high) a year between 2011 and 2041, higher than all other divisions except Adelaide and Outer Adelaide.
- Yorke and Lower North had the oldest population in the State in 2011, with a median age of 47 years, four years older than the Outer Adelaide Statistical Division.
- With continued in situ ageing of its already elderly population and expected gains from retirement migration, it is projected that by 2036 the median age of the division's population will have increased further to between 48 and 51 years (Figure 3.8) under the medium and low series. Under the high series the median age is projected to decrease very marginally by 2041.
- Under the medium series, the 65-84 and 85+ age groups are projected to increase significantly from 2011 to 2041 (32% and 71%, respectively).
- The size of the younger and older working-age groups in 2041 is projected to be slightly larger than in 2011, although a small decrease of 40-44 year olds is projected as the less numerous cohorts from earlier years enter these ages.
- In the high series, the natural decrease (an excess of deaths over births) evident for almost all of the projection period is projected to change to a small natural increase at the very end of the projection period, but under the low series and medium series natural decrease is projected for all of the projection period with any population growth coming from net in-migration.
- The medium series assumes that positive net flows of immigrants will be sustained at about 300 persons a year until 2041 and despite a projected natural decrease in population of about 50 per year (i.e. the number of deaths exceeds the number of births), this will be sufficient to ensure that Yorke and Lower North maintains a significant rate of population growth until 2041 and beyond.

Table 3.3: Projected total population and growth rates, Yorke and Lower North Statistical Division, 2011-41

Year ending 30 June	Projection series		
	Low	Medium	High
	Total population		
2011 (Base year)	46,657	46,657	46,657
2016	47,755	47,843	47,909
2021	48,507	49,060	49,522
2026	48,801	50,238	51,444
2031	48,752	51,403	53,692
2036	48,315	52,542	56,292
2041	47,504	53,655	59,251
	Average annual change per five-year interval		
2011-16	220	237	250
2016-21	150	243	323
2021-26	59	236	384
2026-31	-10	233	450
2031-36	-87	228	520
2036-41	-162	223	592
	Average annual growth rates per five-year interval (%)		
2011-16	0.47	0.50	0.53
2016-21	0.31	0.50	0.66
2021-26	0.12	0.48	0.76
2026-31	-0.02	0.46	0.86
2031-36	-0.18	0.44	0.95
2036-41	-0.34	0.42	1.03

Figure 3.7: Projected population by projection series, Yorke and Lower North Statistical Division, 2011-41

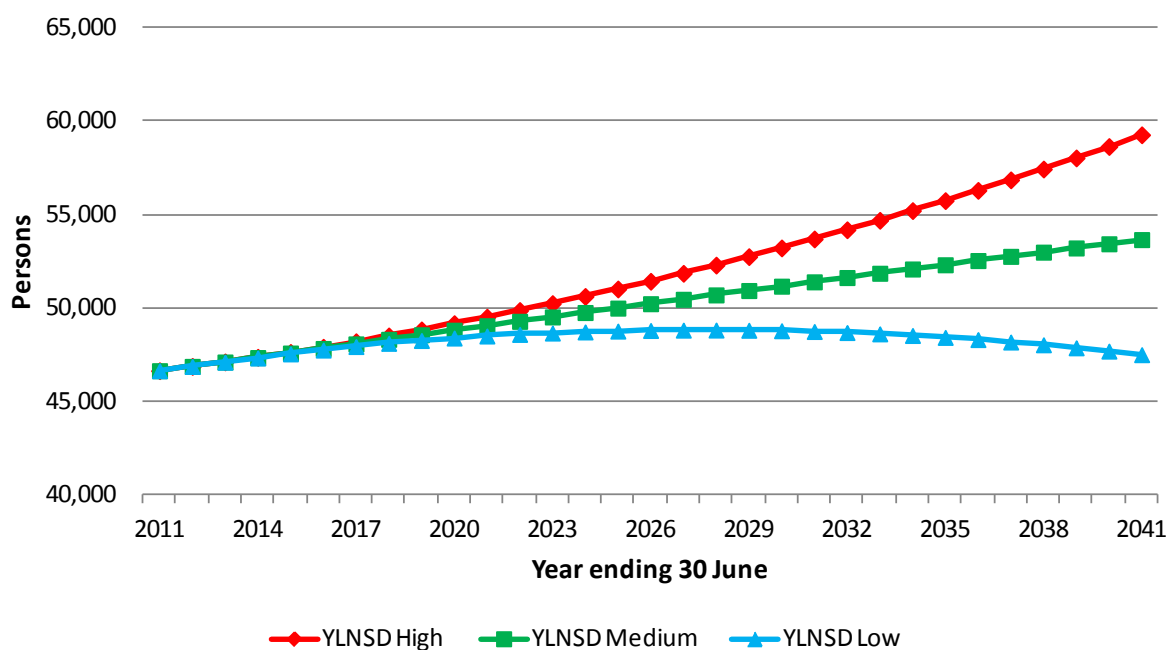
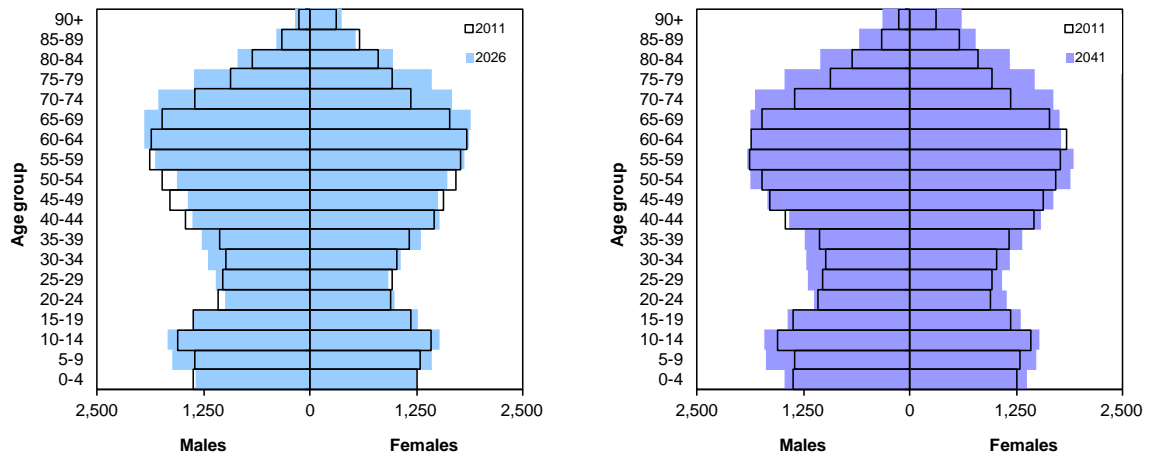
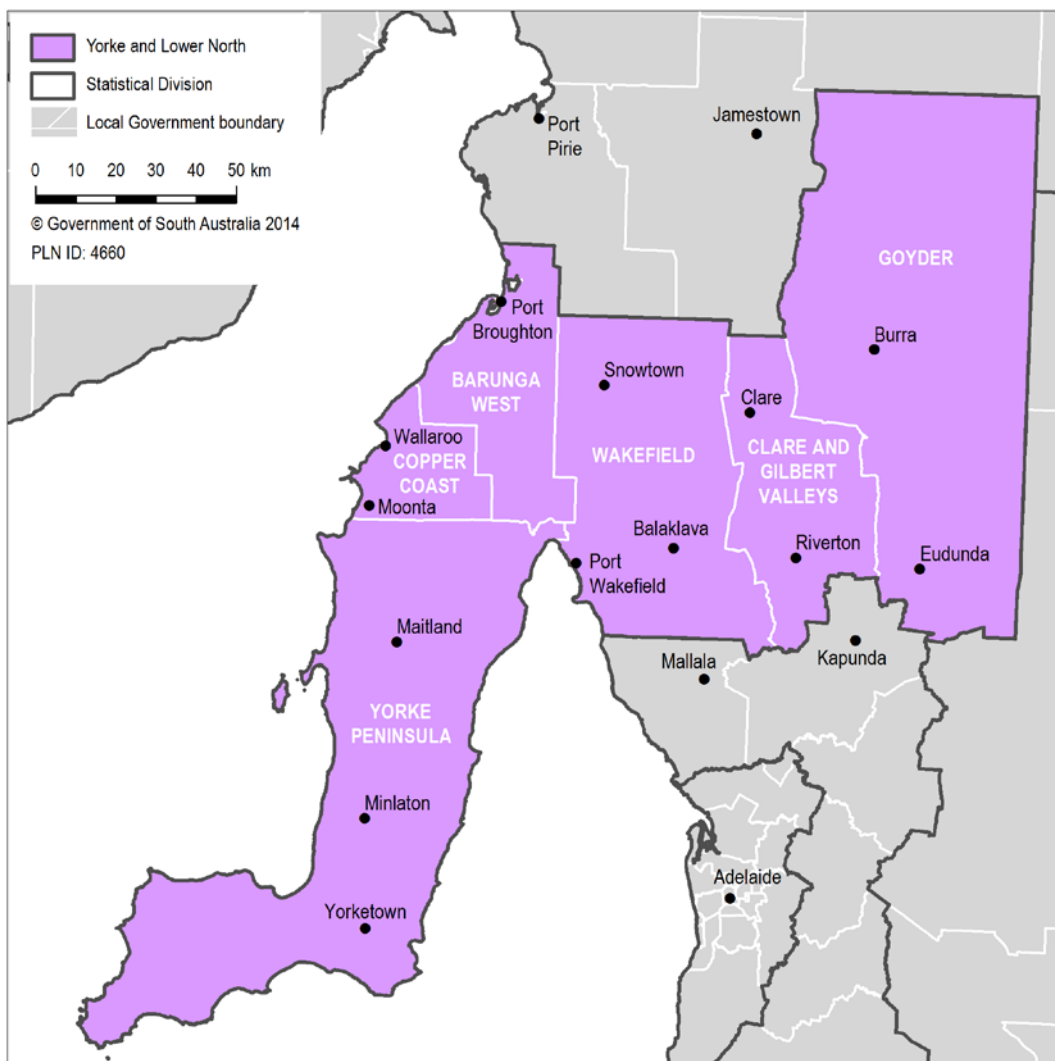


Figure 3.8: Projected age-sex structure of Yorke and Lower North Statistical Division, 2011-26 and 2011-41 (medium series)



Notes: Baby-boomer birth cohort aged 50-64 in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 3.9: Yorke and Lower North Statistical Division and Local Government Area Boundaries, 2011



3.4 Murray Lands Statistical Division

- At the 2011 Census the Murray Lands Statistical Division (MLSD) had a population of 68,900, by 2016 it is projected to reach around 69,600, and by 2041 between 66,000 (low series) and 75,600 (high series) (Table 3.4 and Figure 3.10).
- The high and medium series project growth of 6,600 and 2,300 respectively, but the low series, with its lower migration and fertility assumptions, projects a significant decrease of 2,900 by 2041 as natural increase diminishes and becomes strongly negative.
- The median age of the division is projected to increase from 42 years in 2011 to over 46 years in 2041 (medium series) as the number of elderly increases and most younger age groups decrease in size (Figure 3.11).
- The size of the working-age population (15-64 year olds) is projected to decrease by almost 4,000 persons or -8.8% between 2011 and 2041 under the medium series.
- As the population ages and the number of deaths increases, natural increase is projected to diminish and become negative under all three projection series, by 2034 and 2029 under the high and medium series respectively, and as early as 2022 under the low projection series. Under all projection series the Regional City of Murray Bridge is projected to be the focus of future population growth with rural populations and smaller centres likely to be faced with a continuation of longstanding population losses.
- Whether the future growth of the Murray Lands Statistical Division follows the trends described in the low, medium or high series depends on the future volume and direction of net migration. The low series assumes net migration losses and little development in the Regional City of Murray Bridge. The medium series assumes low levels of net migration, but some redistribution of people from dry-land farming areas to the City of Murray Bridge. The high series assumes major residential development in the Regional City of Murray Bridge.

Table 3.4: Projected total population and growth rates, Murray Lands Statistical Division, 2011-41

Year ending 30 June	Projection series		
	Low	Medium	High
	Total population		
2011 (Base year)	68,942	68,942	68,942
2016	69,402	69,602	69,709
2021	69,517	70,425	70,983
2026	69,175	71,050	72,434
2031	68,488	71,401	73,749
2036	67,420	71,437	74,769
2041	66,035	71,226	75,591
	Average annual change per five-year interval		
2011-16	92	132	153
2016-21	23	165	255
2021-26	-68	125	290
2026-31	-137	70	263
2031-36	-214	7	204
2036-41	-277	-42	164
	Average annual growth rates per five-year interval (%)		
2011-16	0.13	0.19	0.22
2016-21	0.03	0.24	0.36
2021-26	-0.10	0.18	0.41
2026-31	-0.20	0.10	0.36
2031-36	-0.31	0.01	0.28
2036-41	-0.41	-0.06	0.22

Figure 3.10: Projected population by projection series, Murray Lands Statistical Division, 2011-41

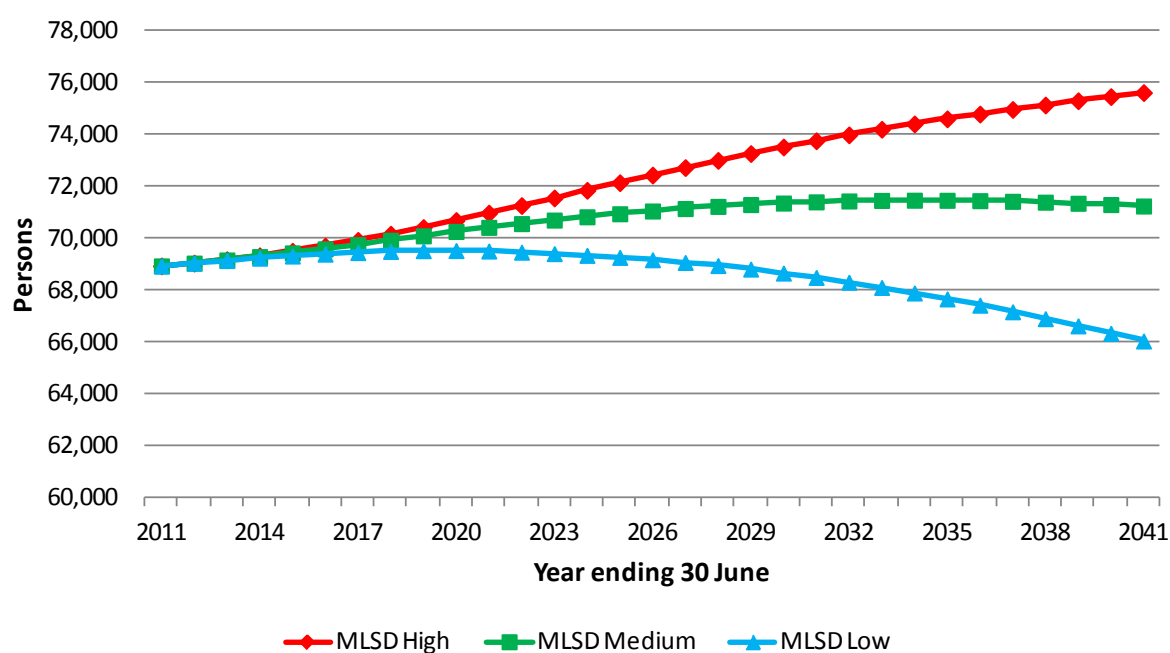
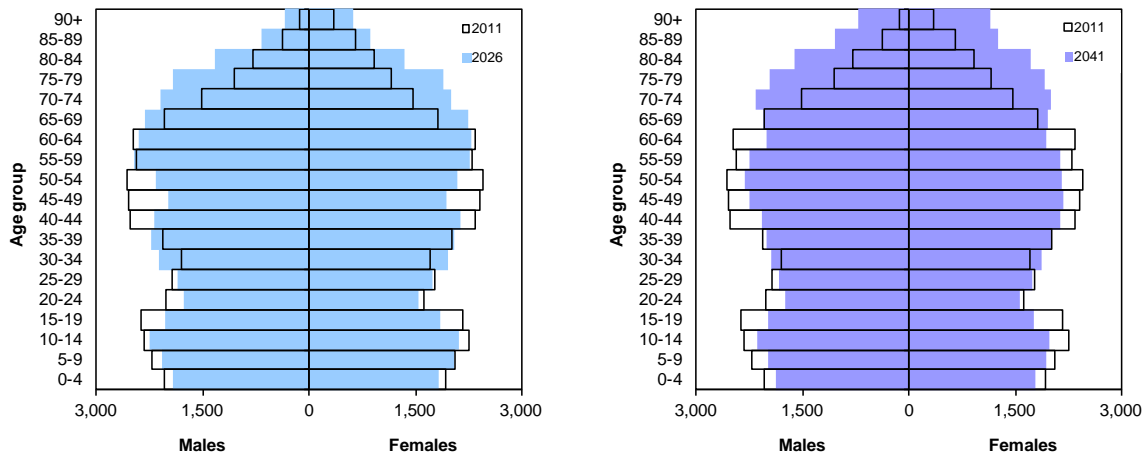
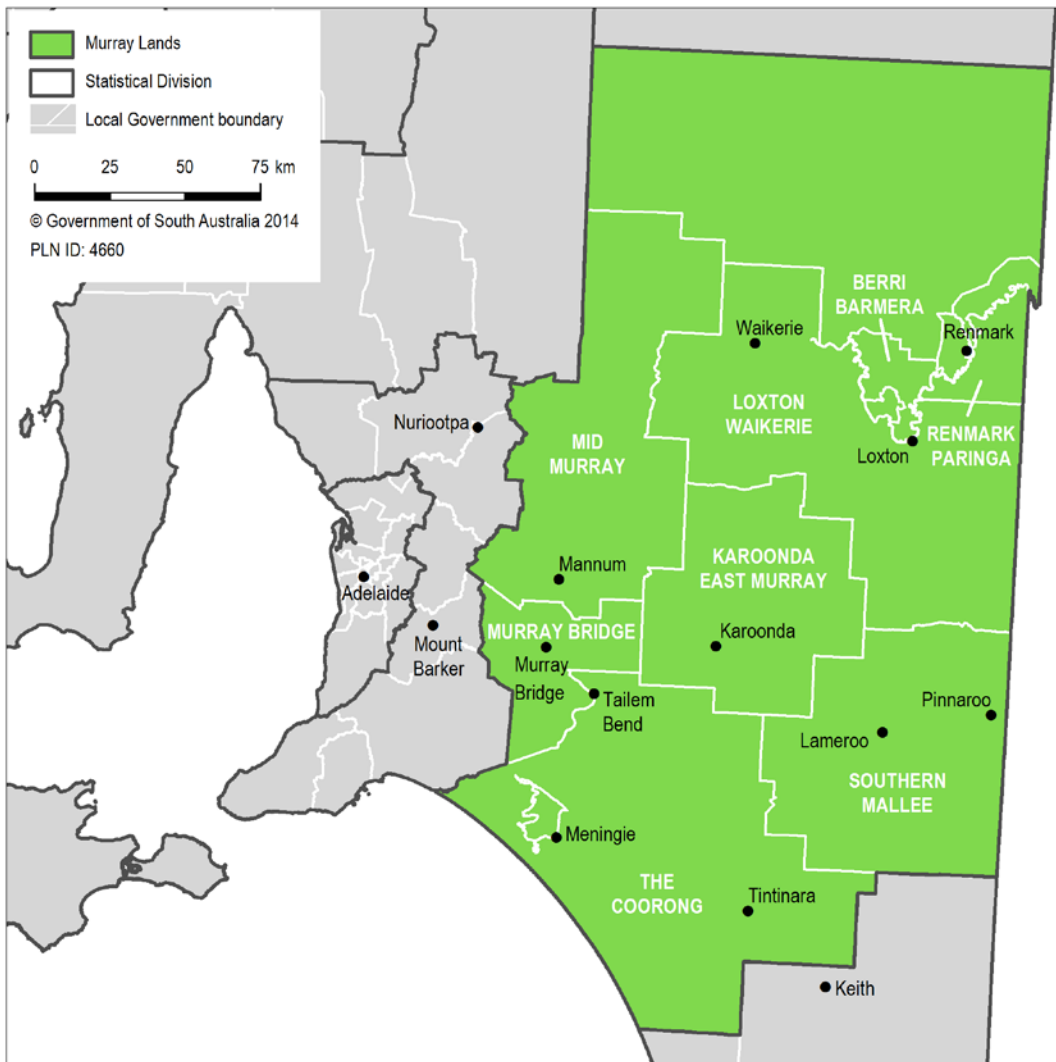


Figure 3.11: Projected age-sex structure of Murray Lands Statistical Division, 2011-26 and 2011-41 (medium series)



Notes: Baby-boomer birth cohort aged 50-64 in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 3.12: Murray Lands Statistical Division and Local Government Area Boundaries, 2011



3.5 South East Statistical Division

- The 2011 Census population of the South East Statistical Division (SESD) of 64,400 is projected to increase to approximately 65,400 by 2016, and to be between 62,000 (low series) and 69,700 (high series) by 2041 (Table 3.5 and Figure 3.13).
- These projections indicate that the medium and high series project population growth of 1,300 and 5,300 respectively between 2011 and 2041, whereas the low series projects a decrease in population of 2,300 between 2011 and 2041.
- Under the migration and fertility assumptions of the low series the population is projected to begin decreasing from 2021-22, but under the medium series projected population decrease is delayed until 2030-31. Under the high series population increase is projected to continue uninterrupted until 2041.
- As in other regions of the State, the median age of the population of the South East Statistical Division is projected to increase over the projection period, from 40 years in 2011 to between 45 and 48 years in 2041 (Figure 3.14).
- The size of the 65-84 and 85+ age groups is projected to grow significantly, by 61% and 190% respectively, between 2011 and 2041 under the medium series.
- The size of the working-age groups in 2041 is projected to be 11.7% less than in 2011, with the beginnings of a decline in numbers appearing as soon as 2026 (Figure 3.14).
- Natural increase (births minus deaths) is projected to decrease throughout the projection period and become negative from 2033 onwards (i.e. deaths are expected to exceed births) and this combined with continued net outmigration of young people to other destinations within the state and to interstate locations results in a gradual population decline under the medium series from 2030 onwards. This decline is projected despite an assumption of continuing gains from net overseas migration throughout the projection period.

Table 3.5: Projected total population and growth rates, South East Statistical Division, 2011-41

Year ending 30 June	Projection series		
	Low	Medium	High
	Total population		
2011 (Base year)	64,375	64,375	64,375
2016	65,245	65,362	65,520
2021	65,497	66,036	66,711
2026	65,215	66,413	67,782
2031	64,542	66,472	68,633
2036	63,485	66,198	69,235
2041	62,077	65,636	69,674
	Average annual change per five-year interval		
2011-16	174	197	229
2016-21	50	135	238
2021-26	-56	75	214
2026-31	-135	12	170
2031-36	-211	-55	120
2036-41	-282	-112	88
	Average annual growth rates per five-year interval (%)		
2011-16	0.27	0.30	0.35
2016-21	0.08	0.21	0.36
2021-26	-0.09	0.11	0.32
2026-31	-0.21	0.02	0.25
2031-36	-0.33	-0.08	0.17
2036-41	-0.45	-0.17	0.13

Figure 3.13: Projected population by projection series, South East Statistical Division, 2011-41

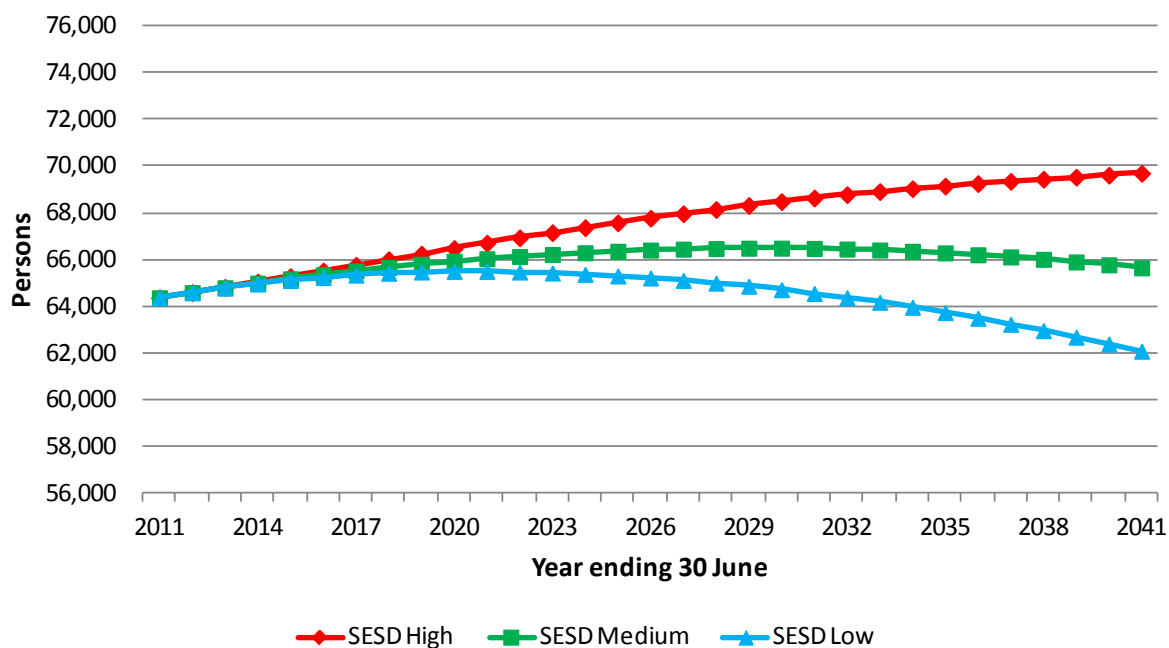
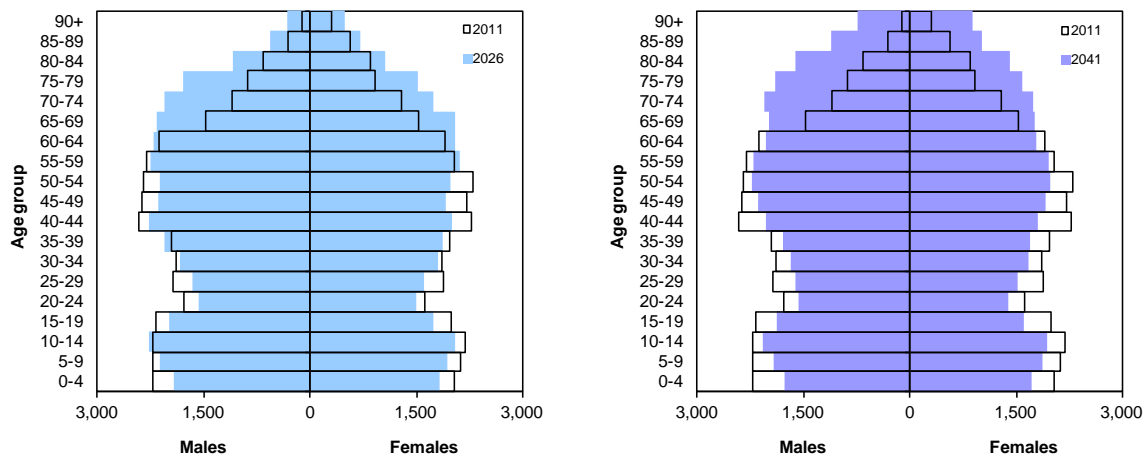
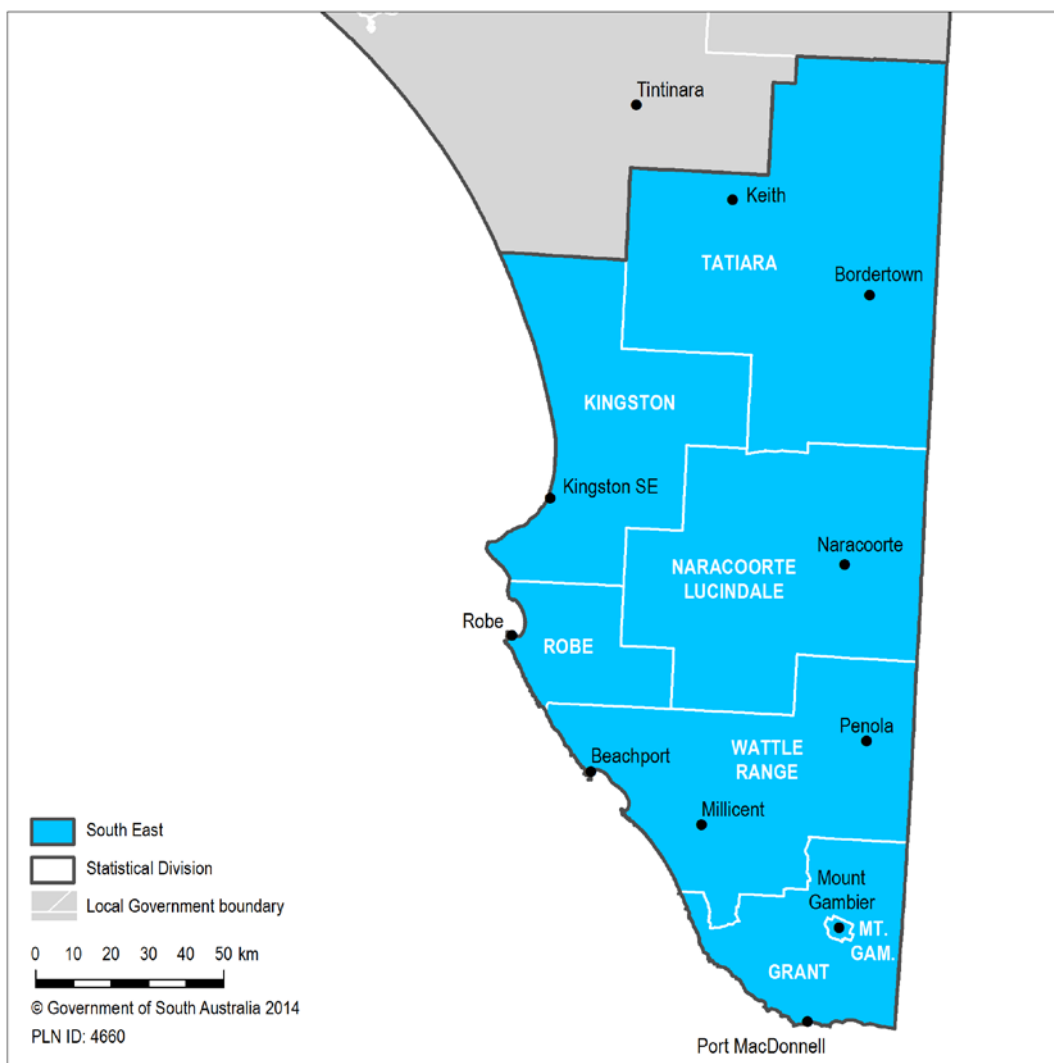


Figure 3.14: Projected age-sex structure of South East Statistical Division, 2011-26 and 2011-41 (medium series)



Notes: Baby-boomer birth cohort aged 50-64 in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 3.15: South East Statistical Division and Local Government Area Boundaries, 2011



3.6 Eyre Statistical Division

- At the 2011 Census the Eyre Statistical Division (ESD) had a population of 35,000 that by 2016 is projected to reach around 35,400, and by 2041 between 35,000 (low series) and 39,000 (high series) (Table 3.6 and Figure 3.16).
- The high and medium series project growth of 3,800 and 2,600 respectively between 2011 and 2041, but the low series, with its lower migration and fertility assumptions, projects a very minor decrease of less than 100 persons by 2041.
- Both the high and the medium series project a continuation of population growth until the end of the projection period, but the low series projects the onset of negative growth in 2021-22 that accelerates modestly until 2041.
- The median age of the division is projected to increase from 40 years in 2011 to between 45 and 49 years in 2041 as the numerous baby-boomer cohorts age (Figure 3.17).
- Under the medium series, the working-age (15-64 years) population is projected to decrease by 7% over the projection period.
- The relative position of the medium series projected population outcomes between the high and low series (Figure 3.16) indicates that the scope for significantly higher growth than projected in the medium series is relatively constrained. However, if there is a return to higher levels of net migration losses to interstate locations and a continuation of population ageing leading to natural decrease, then a return to the negative growth experienced in the 1986-96 decade is possible.

Table 3.6: Projected total population and growth rates, Eyre Statistical Division, 2011-41

Year ending 30 June	Projection series		
	Low	Medium	High
	Total population		
2011 (Base year)	35,039	35,039	35,039
2016	35,338	35,429	35,464
2021	35,444	35,851	35,982
2026	35,391	36,312	36,566
2031	35,294	36,771	37,222
2036	35,149	37,215	37,961
2041	34,960	37,667	38,812
	Average annual change per five-year interval		
2011-16	60	78	85
2016-21	20	84	104
2021-26	-11	92	117
2026-31	-19	92	131
2031-36	-29	89	148
2036-41	-38	90	170
	Average annual growth rates per five-year interval (%)		
2011-16	0.17	0.22	0.24
2016-21	0.06	0.24	0.29
2021-26	-0.03	0.26	0.32
2026-31	-0.05	0.25	0.36
2031-36	-0.08	0.24	0.39
2036-41	-0.11	0.24	0.44

Figure 3.16: Projected population by projection series, Eyre Statistical Division, 2011-41

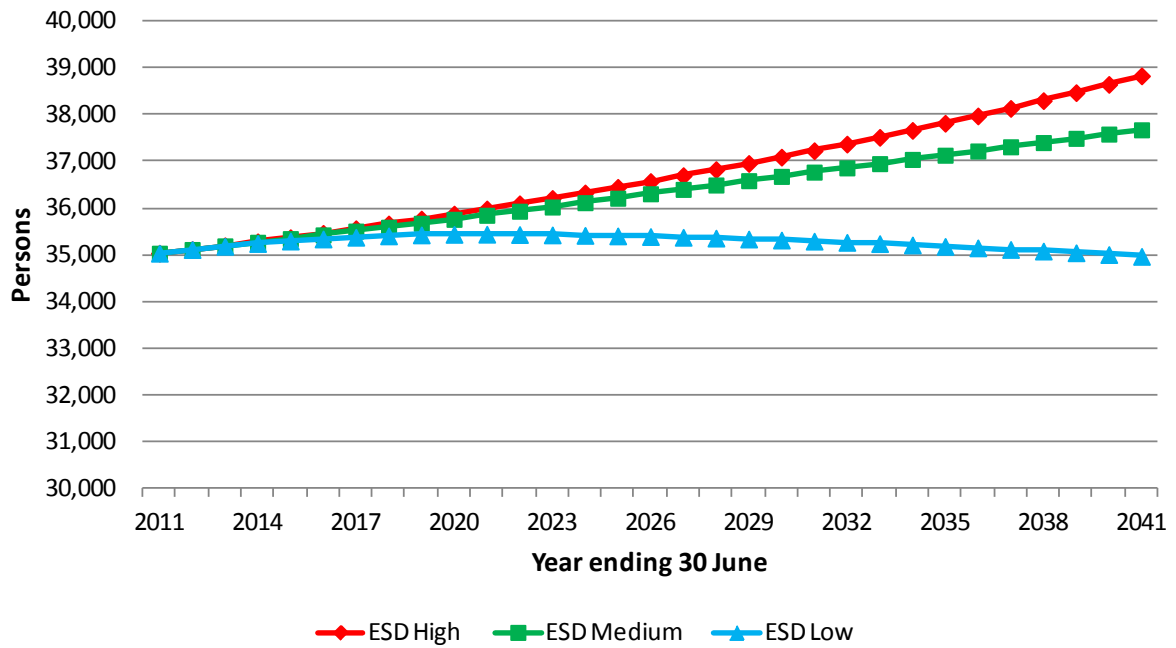
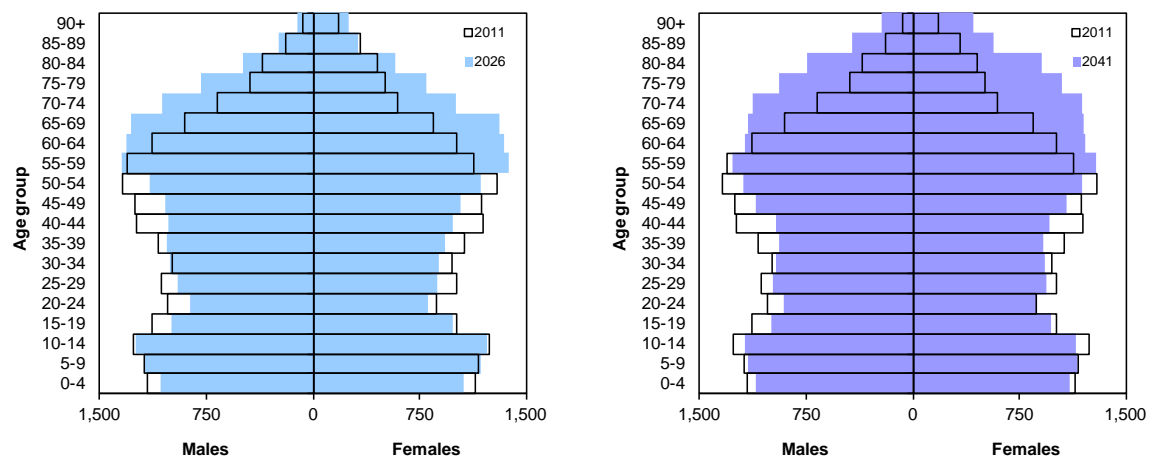
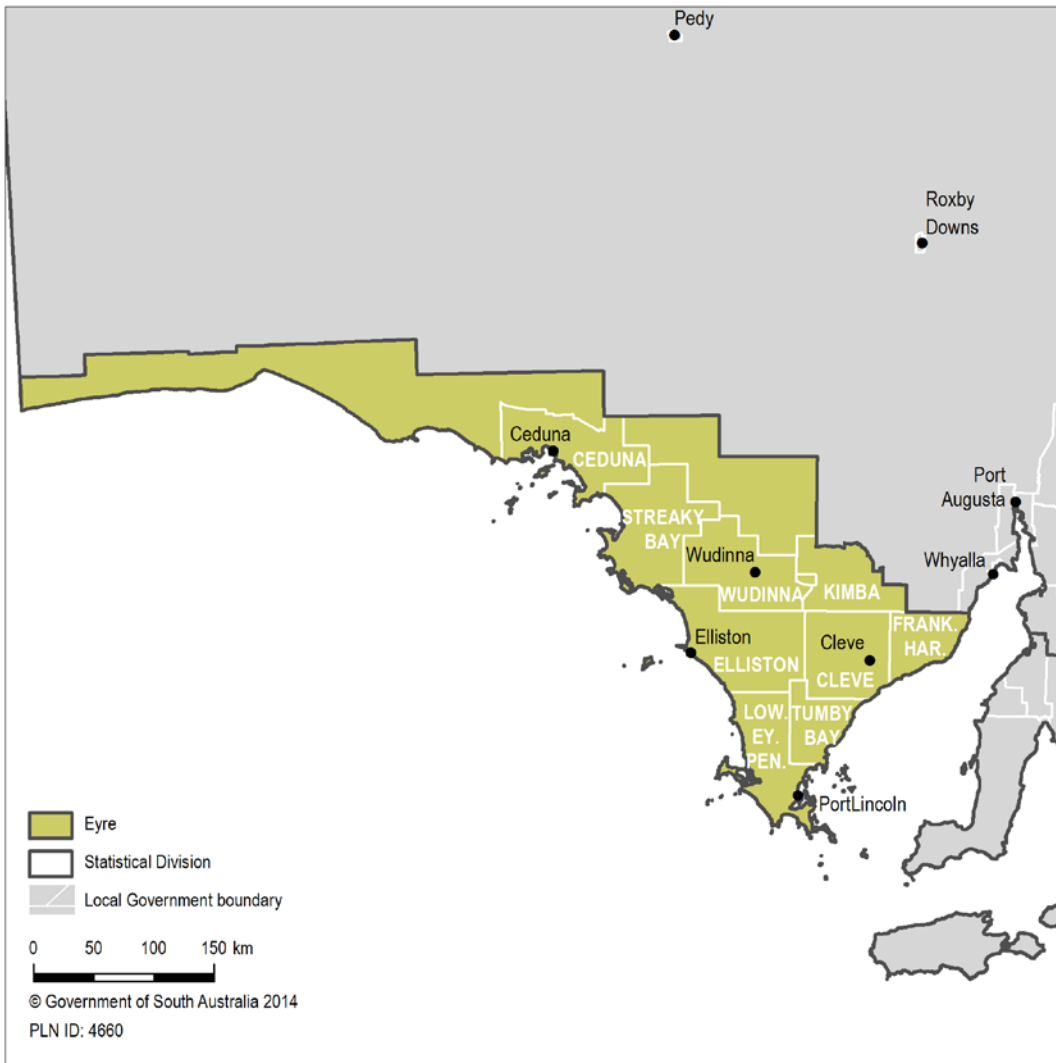


Figure 3.17: Projected age-sex structure of Eyre Statistical Division, 2011-26 and 2011-41 (medium series)



Notes: Baby-boomer birth cohort aged 50-64 in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 3.18: Eyre Statistical Division and Local Government Area Boundaries, 2011



3.7 Northern Statistical Division

- The 2011 Census population of the Northern Statistical Division (NSD) of 79,500 is projected to increase to around 80,600 by 2016 (Table 3.7 and Figure 3.19).
- Future population trends in the Northern Statistical Division are subject to a large degree of uncertainty depending on what happens in the volatile resources sector and for this reason the projected populations encompass a wide range by 2041. The medium series assumes steady growth over the next 30 years whereas the high series assumes major expansion of Olympic Dam and resulting population growth in Roxby Downs and significant gains in the major regional centres of Whyalla and Port Augusta. The low projection series indicates a significant downside risk of population decline if expansion at Olympic Dam is postponed further and other mining ventures are delayed.
- Under the high series population is projected to grow at between 0.29% and 0.43% a year between 2011 and 2041. Growth is projected to be slower under the medium series at between 0.30% and 0.03% a year between 2011 and 2041 as population ageing depresses natural increase and net migration flows are assumed to remain relatively constant.
- Under the low fertility and increasingly negative interstate net migration assumptions of the low series, population growth in the Northern Statistical Division is projected to become negative from 2020 with a projected growth rate of -0.45% a year in 2040-41.
- As in other regions of the State, the median age of the population of the Northern Statistical Division is projected to increase over the projection period, from 39 years in 2011 to between 40 and 43 years in 2041 (Figure 3.20).
- The number of working-age persons is projected to remain almost stable between 2011 and 2041 under the medium series declining from 51,834 in 2011 to 51,700 in 2041 (-0.3% decrease) as natural change decreases with population ageing.
- Under the high series, the working age population is projected to increase by 6.5% from 2011 to 2041, from 51,834 to 55,200 by 2041 as natural change declines more gradually than in the medium series and net migration losses to interstate and to other parts of South Australia moderate with increased local employment opportunities.
- Under the medium series the elderly (65+ age group) are projected to increase by 38% from 11,900 in 2011 to 16,400 in 2041 (Figure 3.20).
- Future migration flows are the critical drivers of projected population growth in the Northern Statistical Division but these flows are difficult to predict. Projections of the estimated resident population will be affected by the scale of temporary fly-in/fly-out movements that have the potential to reduce the need for long-term resident populations at mine sites. Another uncertain factor is the size of the multiplier effect of employment growth and wealth generation in the resources sector on demand for labour in other sectors of the local economy.
- All projection series assume that the region will continue to experience difficulty in retaining its young school leavers and that an aged agricultural workforce will continue to migrate to more desirable locations for retirement, but under the high series these losses will moderate with an increase in local employment opportunities.

Table 3.7: Projected total population and growth rates, Northern Statistical Division, 2011-41

Year ending 30 June	Projection series		
	Low	Medium	High
	Total population		
2011 (Base year)	79,521	79,521	79,521
2016	80,401	80,643	80,879
2021	80,437	81,574	82,596
2026	79,715	82,234	84,276
2031	78,642	82,682	85,806
2036	77,238	82,927	87,213
2041	75,607	83,101	88,639
	Average annual change per five-year interval		
2011-16	176	224	272
2016-21	7	186	343
2021-26	-144	132	336
2026-31	-215	90	306
2031-36	-281	49	281
2036-41	-326	35	285
	Average annual growth rates per five-year interval (%)		
2011-16	0.22	0.28	0.34
2016-21	0.01	0.23	0.42
2021-26	-0.18	0.16	0.40
2026-31	-0.27	0.11	0.36
2031-36	-0.36	0.06	0.33
2036-41	-0.43	0.04	0.32

Figure 3.19: Projected population by projection series, Northern Statistical Division, 2011-41

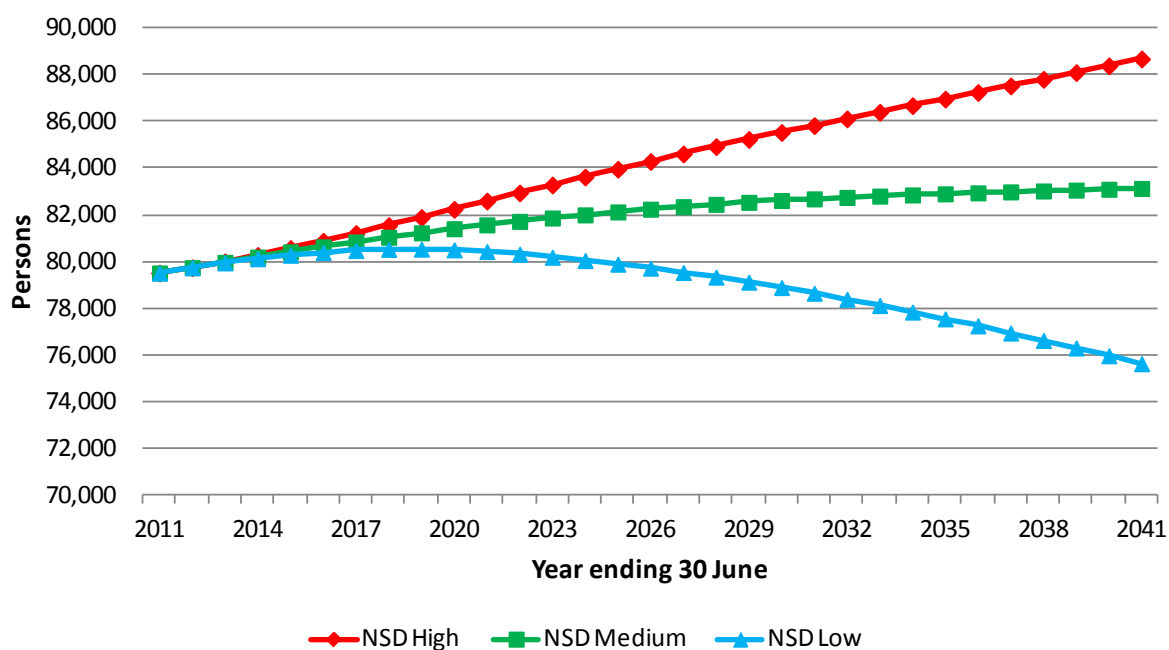
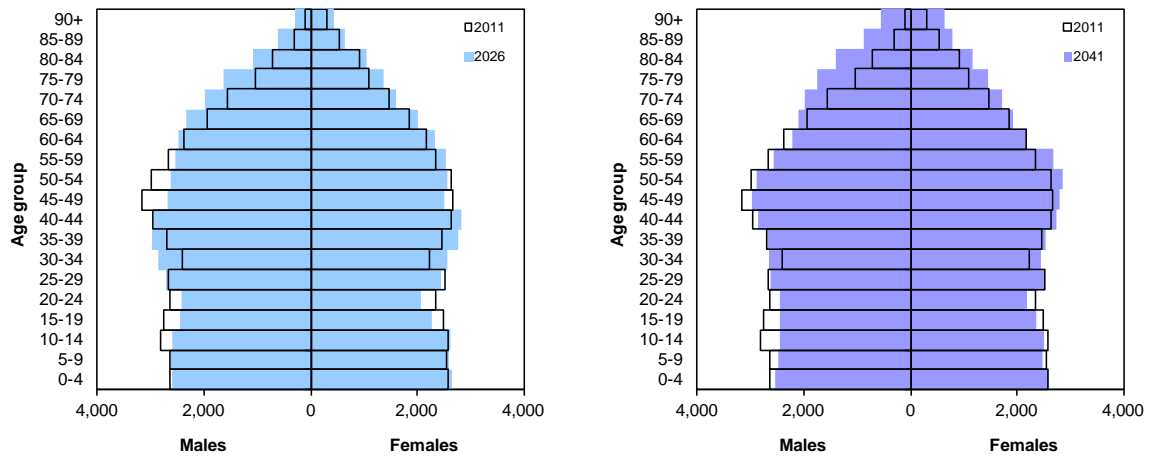
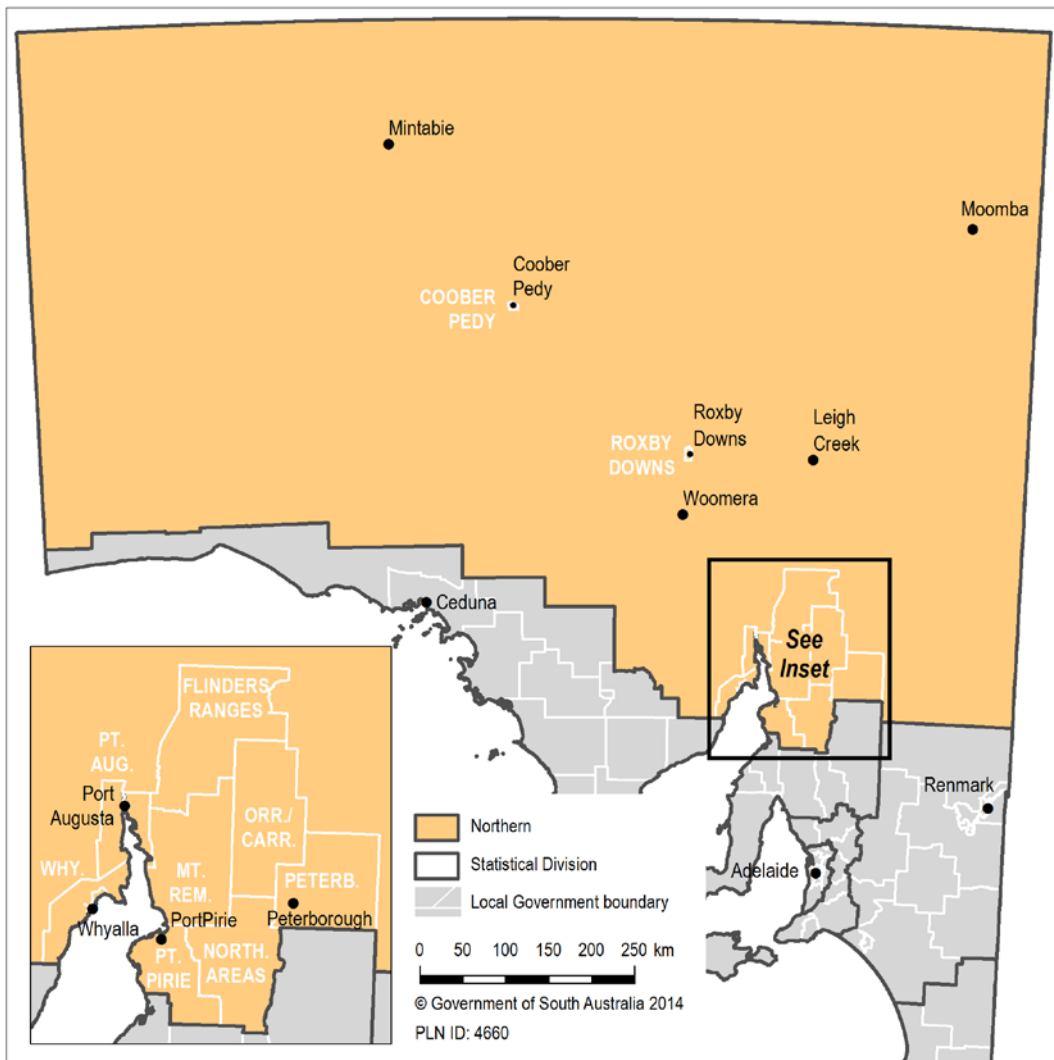


Figure 3.20: Projected age-sex structure of Northern Statistical Division, 2011-26 and 2011-41 (medium series)



Notes: Baby-boomer birth cohort aged 50-64 in 2011, 65-79 in 2026 and 80-94 in 2041.

Figure 3.21: Northern Statistical Division and Local Government Area Boundaries, 2011



Appendices

Appendix 1: Assumptions all-of-State population projection series, 2011-41

Input	Projection series	Details of future assumptions
Mortality	All series use same mortality assumption	Expectation of life at birth (e_0) assumed to increase from 79.8 yrs for males in 2011-12 to 83.9 yrs in 2040-41, and for females from 84.2 yrs in 2011-12 to 87.2 yrs in 2040-41.
Fertility	High	Total fertility rate (TFR) of 1.88 children per woman in 2011-12, rose slightly to 1.9 in 2021-22 and then held constant at that level until 2040-41.
	Medium	TFR of 1.88 children per woman in 2011-12 decreasing gradually to 1.75 by 2021-22, then held constant at that level until 2040-41.
	Low	TFR of 1.88 children per woman in 2011-12 decreasing significantly to 1.6 by 2021-22, then constant until 2040-41.
Overseas migration	High	Beginning with the actual net overseas migration estimate of 11,351 in 2011-12 increasing to a peak of 13,500 in 2015-16 then remaining constant at this level until 2040-41.
	Medium	From the actual net overseas migration estimate of 11,351 in 2011-12 increasing slightly to 11,500 in 2013-14 then remaining constant at this level until 2040-41.
	Low	Beginning with the actual annual net overseas migration estimate of 11,351 in 2011-12 the net overseas intake is assumed to decline significantly to 8,000 in 2021-22 and then remain constant at this level until the end of the projection period in 2040-41.
Interstate migration	High	An estimated annual net interstate migration loss of -3,973 in 2012-13 decreasing to -1,500 in 2021-22 and then remaining constant at that level until 2040-41.
	Medium	Annual net interstate migration loss of -3,973 in 2012-13 decreasing gradually to -2,500 in 2021-22 then remaining constant at that level until 2040-41.
	Low	Realised annual net interstate migration loss of -3,973 in 2012-13 is maintained constant at -4,000 per annum until the end of the projection period in 2040-41.

Appendix 2: Projected population by age groups for South Australia, 2011-41

Projected population of young children aged 0-4, South Australia, 2011-41

Year ending 30 June	Low	Medium	High	30-Year Plan
2011	97,426	97,426	97,426	100,889
2016	102,212	104,080	106,241	111,006
2021	97,318	104,881	112,911	119,827
2026	92,123	104,847	117,393	125,193
2031	90,473	106,037	120,421	127,281
2036	89,854	108,105	124,345	129,861
2041	90,323	111,248	129,763	n/a

Projected population of school-age children aged 5-17, South Australia, 2011-41

Year ending 30 June	Low	Medium	High	30-Year Plan
2011	255,575	255,575	255,575	256,336
2016	261,024	261,680	262,853	264,685
2021	270,871	276,388	282,002	285,960
2026	271,895	287,753	302,745	312,900
2031	263,828	292,290	319,588	332,840
2036	254,809	294,006	330,942	345,443
2041	250,417	297,643	340,460	n/a

Projected population of young working age, 18-34 years, South Australia, 2011-41

Year ending 30 June	Low	Medium	High	30-Year Plan
2011	373,169	373,169	373,169	382,874
2016	388,361	389,841	392,308	416,064
2021	382,772	392,082	400,516	427,408
2026	374,838	395,341	409,697	431,133
2031	375,463	405,786	425,478	443,181
2036	379,144	419,779	447,171	467,091
2041	379,372	432,205	471,197	n/a

Projected population of older working age, 35-64 years, South Australia, 2011-41

Year ending 30 June	Low	Medium	High	30-Year Plan
2011	651,851	651,851	651,851	656,574
2016	656,073	656,851	657,960	661,859
2021	669,676	675,196	680,461	683,814
2026	677,170	692,186	703,845	708,864
2031	681,348	709,405	729,141	737,538
2036	681,918	726,174	755,475	764,957
2041	684,488	746,822	786,302	n/a

Projected population of young elderly, 65-84 years, South Australia, 2011-41

Year ending 30 June	Low	Medium	High	30-Year Plan
2011	223,522	223,522	223,522	224,495
2016	258,251	258,315	258,347	261,732
2021	295,086	295,483	295,758	303,307
2026	331,447	332,538	333,275	346,271
2031	355,146	357,342	358,834	378,748
2036	366,235	370,123	372,807	395,477
2041	370,761	377,467	382,084	n/a

Projected population of old elderly, 85+ years, South Australia, 2011-41

Year ending 30 June	Low	Medium	High	30-Year Plan
2011	38,071	38,071	38,071	40,907
2016	44,519	44,532	44,558	48,598
2021	47,655	47,737	47,807	52,868
2026	53,871	54,050	54,165	60,714
2031	65,647	65,952	66,146	75,334
2036	82,341	82,860	83,181	98,625
2041	94,312	95,142	95,646	n/a

Note: The population projection that served as the basis of the 30-Year Plan only provided projections for the 30 year period 2006-36.