

Queensland Government population projections, 2018 edition: Queensland

Sources: Queensland Government population projections, 2018 edition data and ABS 3101.0, *Australian demographic statistics*, Jun 2017

Introduction

This publication provides an overview of Queensland's projected population change at the state level. An examination of the age structure of the future population is included, with a focus on the older population and children of school age.

For a more detailed analysis of the projection results at the sub-state level see the related information briefs for [statistical areas level 4¹](#), as well as [local government areas and statistical areas level 2²](#). Data tables supporting the [range of projection publications³](#) are available from the Queensland Government Statistician's Office website. The base population for these projections is the 2016 Australian Bureau of Statistics (ABS) [preliminary rebased estimated resident population \(ERP\)⁴](#).

Uncertainty

The projections described in this paper are based on trends and assumptions around fertility, mortality and migration. Future levels of fertility, mortality and migration can be unpredictable, and this introduces uncertainty into projections of the future population.

To account for uncertainty in these components of population change, three projection series (low, medium and high) have been developed to illustrate a range of possible future outcomes. The actual observations for 2016, and where the assumptions for each series sit at 2066, are summarised in Table 1. However, there can be no certainty that any particular outcome will be realised.

Table 1 Projection assumptions, Queensland

Year	Series	Total fertility rate	Net overseas migration	Net interstate migration	Life expectancy
		Babies per woman	Share of Australia	Number	Years (M–F)
2016	Actual	1.84	12.7%	17,426	80.2–84.5
2066	Low	1.6	16.0%	14,000	85.9–88.7
	Medium	1.8	18.0%	19,000	89.1–91.6
	High	2.0	20.0%	24,000	92.2–94.5

¹ <http://www.qgso.qld.gov.au/subjects/demography/population-projections/reports/qld-govt-pop-proj-qld-sa4/index.php>

² <http://www.qgso.qld.gov.au/products/reports/qld-govt-pop-proj-lga-sa2/index.php>

³ <http://www.qgso.qld.gov.au/subjects/demography/population-projections/index.php>

⁴ <http://www.qgso.qld.gov.au/subjects/demography/population-estimates/reports/rebased-erp-reg-qld/index.php>

For further information on the trends and methods used to compile the 2018 population projections, see the [Background research paper⁵](#), [Methodology and assumptions paper⁶](#) and [Frequently asked questions⁷](#).

Queensland

Total population

Data shown in this publication for 30 June 2016 are sourced from estimated resident population data.

Based on the low, medium and high projection series, Queensland's population is projected to grow from 4.8 million persons in 2016 to between 6.5 million and 7.9 million persons by 2041. Continued growth is expected to result in a population of between 7.8 million (low series) and 11.5 million persons (high series) by 2066 (Figure 1 and Table 2).

Figure 1 Projected population (millions), by projection series, at 30 June, Queensland

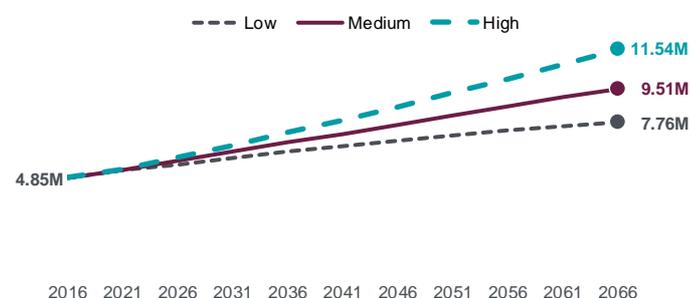


Table 2 Projected population, by projections series, at 30 June, Queensland

Series	2016 ERP	2041	2066
Low	4,848,877	6,514,049	7,763,394
Medium	4,848,877	7,161,661	9,513,227
High	4,848,877	7,887,893	11,541,040

⁵ <http://www.qgso.qld.gov.au/subjects/demography/population-projections/reports/qld-govt-pop-proj-reference-info/index.php>

⁶ <http://www.qgso.qld.gov.au/subjects/demography/population-projections/reports/qld-govt-pop-proj-reference-info/index.php>

⁷ <http://www.qgso.qld.gov.au/subjects/demography/population-projections/reports/qld-govt-pop-proj/qld-govt-pop-proj-faq.php>

While Queensland's population is projected to continue to grow, the rate of growth is anticipated to moderate over each of the projection series. In the 10 years to 30 June 2016, the annual average population growth in Queensland was 1.9%. By 2026, 10-year annual average growth rates are projected to range between 1.4% and 2.0% over the low to high series, moderating to between 0.6% and 1.4% in the 10 years to 2066 (Table 3).

Table 3 Average annual population growth (%), 10 years ending 30 June, Queensland

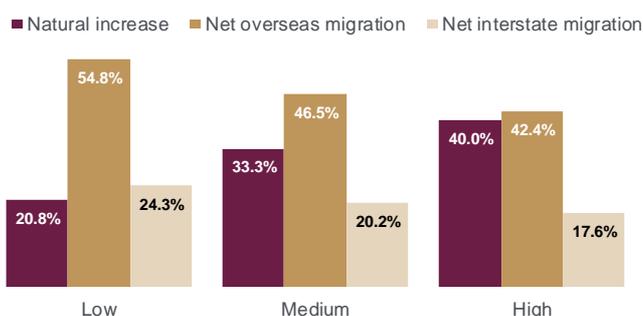
Year	Actual	Projection series		
		Low	Medium	High
2016	1.9			
2026		1.4	1.7	2.0
2036		1.1	1.6	2.0
2046		0.9	1.3	1.7
2056		0.7	1.2	1.6
2066		0.6	1.0	1.4

Components of population change

State-level population change comprises **three components**: natural increase (births less deaths); net interstate migration (interstate arrivals less interstate departures); and net overseas migration (overseas arrivals less overseas departures).

In each of the low, medium and high projection series, net overseas migration is projected to make the greatest contribution to Queensland's population, adding between 1.6 and 2.8 million persons over the 50 years to 2066. Natural increase is projected to add between 608,000 and 2.7 million persons by 30 June 2066, with net interstate migration expected to add a further 710,000 to 1.2 million persons (Figure 2).

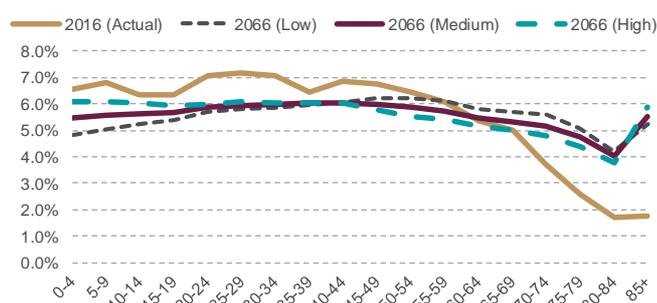
Figure 2 Components of population growth, by projection series, 30 June 2016 to 2066, Queensland



Age structure

The age structure of the Queensland population is projected to change significantly in the 50-year period to 2066 (Figure 3). While there will be increasing numbers of persons in all age groups including school-aged children, a significant increase in both the number and proportion of people in older age groups is projected. Queenslanders aged 65 years and older accounted for 14.7% of the population in 2016—this is projected to increase to 23.8% under the high series, and 25.8% under the low series by 2066.

Figure 3 Population by age group, at 30 June, Queensland



The increasing proportion of older persons projected will result in an increase in the median age from 37.0 years in 2016 to between 41.4 and 45.1 years by 2066 (Table 4).

The projected median age under the high series is somewhat younger than under the low series, due to the assumed higher levels of fertility in this series contributing to higher proportions of young people over time.

Table 4 Median age (years), at 30 June, Queensland

Year	Actual	Projection series		
		Low	Medium	High
2016	37.0			
2026		39.2	38.6	38.0
2036		41.4	40.1	38.9
2046		42.7	41.1	39.6
2056		44.0	42.2	40.4
2066		45.1	43.2	41.4

Sex ratio

The **sex ratio** is defined as the number of males per 100 females.

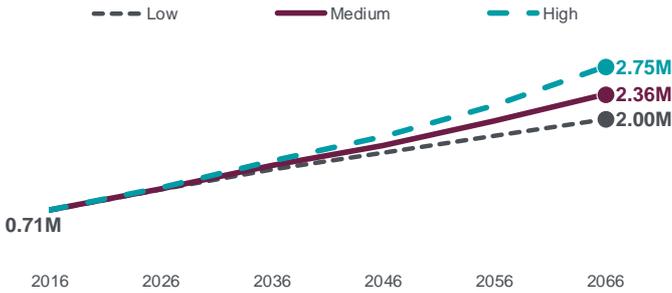
Not only is the age structure of Queensland's population changing, the sex ratio is as well. In 1996, the numbers of males and females in the population were almost the same, resulting in a ratio of 100 males per 100 females. By 2016, this had changed to around 98 males per 100 females. Differences in assumptions in life expectancy and migration rates may see this change further to between 93 and 95 males per 100 females by 2066.

The sex ratio for persons aged 85 years and older was significantly lower, reflecting men experiencing shorter lifespans than women. In 1996 there were 47 males per 100 females, rising to 59 in 2016 as recent increases in life expectancy for men have outpaced those for women. Looking ahead, the sex ratio for persons aged over 85 years is projected to increase further under each projection series, to between 74 and 78 males per 100 females by 2066.

Older Queenslanders

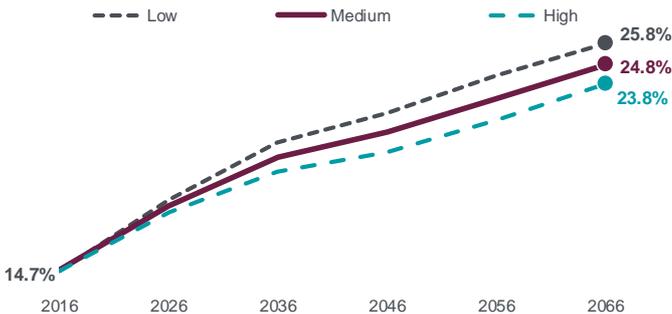
The number of older Queenslanders, that is the Queensland population aged 65 years and over, is projected to increase to 1.0 million during 2025 or 2026 under the range of series, up from almost 714,000 in 2016. By 2066, it is projected that there will be between 2.0 and 2.7 million persons aged 65 years and over living in Queensland (Figure 4).

Figure 4 Population aged 65 years and over (millions), at 30 June, Queensland



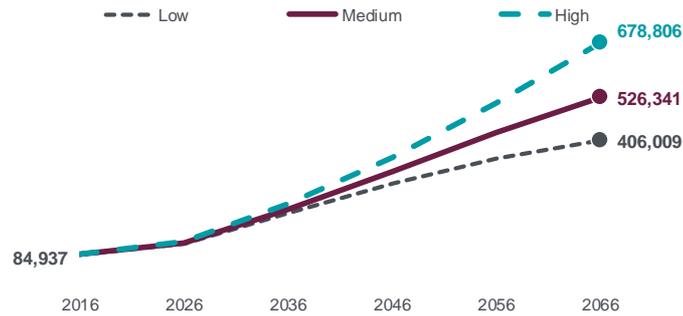
In 1996, 11.2% of the Queensland population was aged 65 years and over. This proportion reached 13.0% in 2011, increasing to 14.7% in 2016, and is projected to further increase to between 19.5% and 20.9% by 2036 (Figure 5). As noted earlier, older persons will comprise an increasingly greater proportion of Queensland's population in the future. The increase over the 20 years to 2036 will be driven in part by the ageing of people born during the baby boom in the post-World War II years, along with continuing increases in life expectancy.

Figure 5 Population aged 65 years and over, by proportion, at 30 June, Queensland



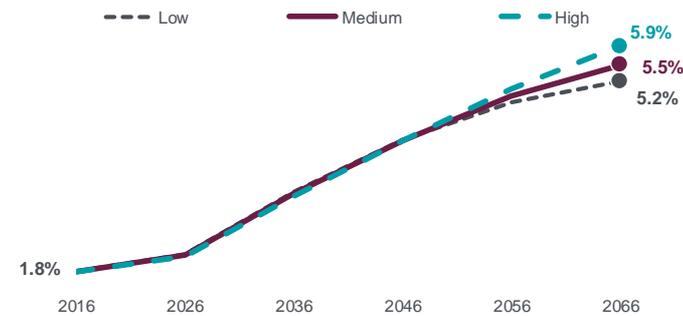
The 85-years and over cohort, while small, is growing rapidly. The Queensland population aged 85 years and over more than doubled in size in the 20 years to 2016, increasing from around 33,000 persons in 1996 to almost 85,000 in 2016. This population is projected to slowly increase to between 115,000 and 120,000 persons by 2026, with faster growth projected beyond this point. By 2066, Queensland's population of persons 85 years and older is projected to increase to between 406,000 and 679,000 (Figure 6).

Figure 6 Population aged 85 years and over, at 30 June, Queensland



The estimated 33,000 older Queenslanders in 1996 accounted for only 1.0% of the Queensland population. By 2016, this proportion had increased to 1.8% and is projected to be between 2.0% and 2.1% by 2026, and between 5.2% and 5.9% by 2066 (Figure 7).

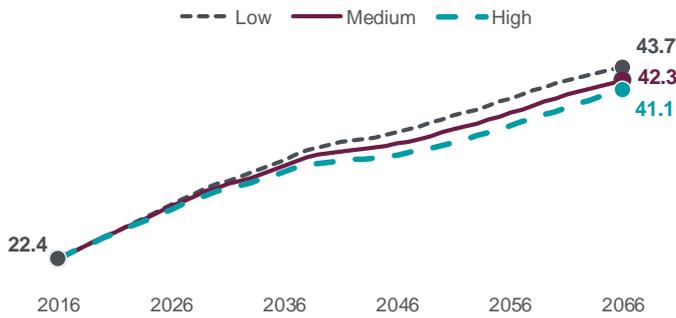
Figure 7 Population aged 85 years and over, by proportion, at 30 June, Queensland



The **aged dependency ratio** is defined as the number of persons aged 65 years and over per 100 persons aged 15–64 years.

In 1996 there were 16.7 persons aged 65 years or older for every 100 persons of working age. This had increased to 22.4 by 2016, and is projected to almost double by 2066, ranging from 41.1 in the high series to 43.7 in the low series (Figure 8).

Figure 8 Aged dependency ratio, at 30 June, Queensland



Children

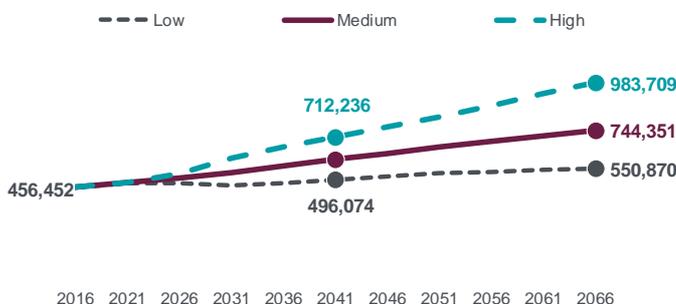
There have been significant increases in the numbers of early childhood (0 to 4 years) and school-aged children (5 to 17 years) in Queensland in recent years. On average, over the 20 years to 2016, the number of children aged:

- 0 to 4 years increased by 1.4% per year, from 241,000 to 317,000
- 5 to 11 years (primary-school aged) increased by 1.5% per year, from 338,000 to 456,000
- 12 to 17 years (secondary-school aged) increased by 1.1% per year, from 291,000 to 364,000.

While numbers of children are expected to increase, the proportion of the population they represent is expected to decline over time. In 1996, children aged 5 to 17 years accounted for almost 1 in 5 Queenslanders (19.1%). By 2016, this had declined to 1 in 6 (16.9%).

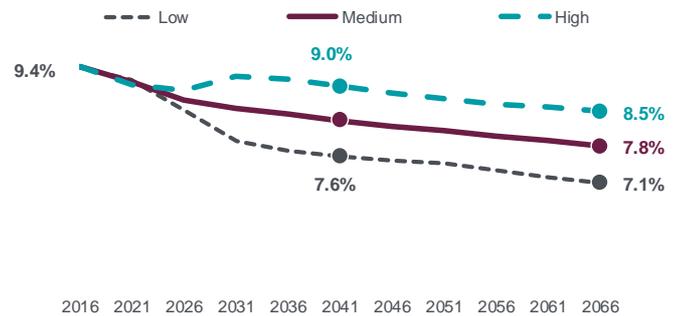
The number of primary school-aged children in Queensland is projected to increase further to between 496,000 and 712,000 persons by 2041, and between 551,000 and 984,000 by 2066 (Figure 9).

Figure 9 Persons aged 5 to 11 years, at 30 June, Queensland



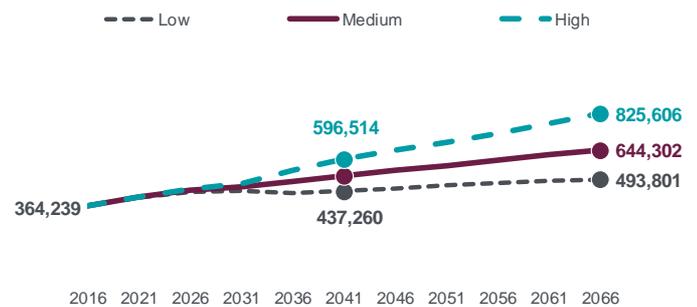
Primary school-aged children accounted for 9.4% of Queensland's population in 2016, however this is projected to decline over time as the population ages. In 2041, this cohort is projected to account for between 7.6% and 9.0% of the population, declining to between 7.1% and 8.5% by 2066 (Figure 10).

Figure 10 Persons aged 5 to 11 years, by proportion, at 30 June, Queensland



The population of secondary school-aged children in Queensland is projected to increase from 364,000 in 2016 to between 437,000 and 597,000 persons by 2041, and between 494,000 and 826,000 by 2066 (Figure 11).

Figure 11 Persons aged 12 to 17 years, at 30 June, Queensland



By 2066, secondary school-aged young people are projected to account for between 6.4% and 7.2% of the population, down from 7.5% in 2016 (Figure 12).

Figure 12 Persons aged 12 to 17 years, by proportion, at 30 June, Queensland

