



# Queensland Government population projections, 2023 edition

Sources: Queensland Government population projections, 2023 edition; ABS National, state and territory population, various editions

## 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 school age children. All year references in this publication are "at 30 June".

For a more detailed analysis of the projection results at the sub-state level, see the related <u>information briefs</u><sup>1</sup> for statistical areas level 4 as well as local government areas and statistical areas level 2. <u>Data tables</u><sup>2</sup> supporting the range of projection publications are available from the Queensland Government Statistician's Office website. The base population for these projections is the 2021 Australian Bureau of Statistics (ABS) <u>preliminary rebased</u> <u>estimated resident population (ERP)</u><sup>3</sup>. Data shown in this publication for 30 June 2021 are preliminary rebased ERP data.

## 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 the 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 2021, and where the assumptions for each series sit at 2071, are summarised in Table 1. However, there is uncertainty 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)
2021	Actual	1.73	14.5% (2019–20)	31,179	80.9–85.1
2071	Low	1.40	14.0%	13,000	82.7-85.9
	Medium	1.65	17.0%	20,000	88.1–91.7
	High	1.80	20.0%	27,000	97.2–98.9

The 2023 edition incorporates a paradigm shift to lower future growth rates than seen in the previous 2018 edition due to lower fertility rates (see <u>Background</u> <u>research paper<sup>4</sup></u>) and the demographic impacts associated with the COVID-19 pandemic (see below).

Under the medium series assumptions for the 2023 edition, Queensland's population is projected to grow by 0.86 million persons in the decade to 2031 to reach 6.08 million people. This compares with projected growth of 0.94 million persons over the same period, in the previous 2018 edition. The combined effect of lower fertility and pandemic impacts on overseas migration are expected to have a compounding impact on Queensland's population levels out to 2071.

For further information on the trends and methods used to compile the 2023 population projections, see the <u>Background research paper<sup>5</sup></u>, <u>Methodology and</u> <u>assumptions paper<sup>6</sup></u> and <u>Frequently asked questions</u><sup>7</sup>.

# COVID-19

On 20 March 2020, Australia closed its international borders to non-residents in response to the COVID-19 pandemic. This led, in 2020–21, to Australia's first net outflow of overseas migrants since 1946, and a moderation in national population growth.

Queensland also experienced a net outflow of overseas migrants, although overall population growth rebounded quickly due to strong interstate migration. While the pandemic has, so far, had little impact on births and deaths in Queensland, the COVID-19 related impacts on other demographic changes are likely to linger. The State's population is expected to be smaller and slightly older than what was anticipated prior to the COVID-19 pandemic.

## Queensland

Over the next 50 years, Queensland is projected to grow by almost **4** million to reach **9.2** million people (medium series)

#### **Total population**

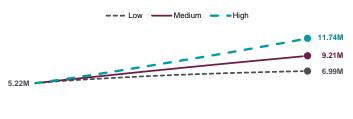
Based on the low, medium and high projection series, Queensland's population is projected to grow from 5.22 million persons in 2021 to between 6.40 million and 8.27 million persons by 2046. Continued growth is expected to result in a population of between 6.99 million (low series) and 11.74 million persons (high series) by 2071 (Figure 1 and Table 2).

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# Figure 1 Projected population (millions), by projection series, Queensland



2021 2026 2031 2036 2041 2046 2051 2056 2061 2066 2071

# Table 2 Projected population and growth, by projection series, Queensland

	Projected population			
Series	2021 ERP	2046	2071	
Low		6,397,133	6,991,895	
Medium	5,217,653	7,299,934	9,210,963	
High		8,272,908	11,735,141	
	Projected population growth from 2021			
Low		1,179,480	1,774,242	
Medium		2,082,281	3,993,310	
High		3,055,255	6,517,488	

While Queensland's population is projected to continue to grow, the rate of growth is anticipated to moderate over each of the projection series and over time:

- In the 10 years to 30 June 2021, the annual average population growth in Queensland was 1.5%.
- By 2031, 10–year annual average growth rates are projected to range between 1.1% and 2.0% over the low to high series, then moderating further to between 0.3% and 1.3% in the 10 years to 2071 (Table 3).

# Table 310-year average annual population growth (%),<br/>Queensland

Year	Actual —	Projection series		
rear	Actual	Low	Medium	High
2021	1.5%			
2031		1.1%	1.5%	2.0%
2041		0.7%	1.3%	1.8%
2051		0.5%	1.1%	1.6%
2061		0.4%	0.9%	1.4%
2071		0.3%	0.9%	1.3%

#### **Components of population change**

State-level population change comprises three components:

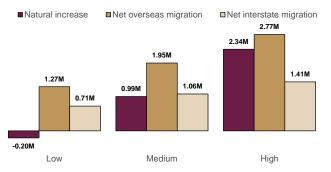
- natural increase (births minus deaths)
- net interstate migration (interstate arrivals minus interstate departures) and
- net overseas migration (overseas arrivals minus overseas departures).

In each of the projection series (low, medium and high), net overseas migration is projected to make the greatest contribution to Queensland's population, adding between 1.3 and 2.8 million persons over the 50 years to 2071.

This is followed by net interstate migration, which is expected to add a further 711,000 to 1.4 million persons by 2071. In contrast, under the low series, Queensland's deaths are expected to exceed births leading to a natural decrease of around 203,000 persons over the 50 years to 2071. However, under the medium and high series, natural increase is projected to add 987,000 and 2.3 million persons respectively by 2071 (Figure 2).

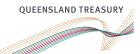
> Over the 50 years to 2071, Queensland is projected to gain almost **2** million overseas migrants (medium series)

# Figure 2 Components of population growth, by projection series, 2021 to 2071, Queensland



Over the 50 years to 2071, almost half of Queensland's growth is projected to be from overseas migration (medium series)

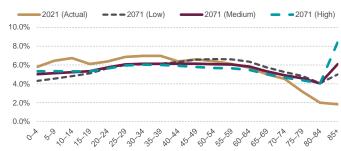
Over the 50 years to 2071, Queensland's growth under the medium series of 3.99 million persons is projected to be made up of 48.8% net overseas migrants, 26.5% net interstate migrants, and 24.7% natural increase.



## Age structure

The age structure of Queensland's population is expected to change significantly over the 50–year projection period (Figure 3). Overall, while there are likely to be more Queenslanders in all five–year age groups by 2071, a significant increase in both the number and proportion of people in older age groups is expected. By 2071, Queenslanders aged 65 years and older are projected to make up between 24.9% and 26.6% of the State's population compared with 16.6% in 2021.

# Figure 3 Population share by five-year age groups, Queensland



The increasing proportion of older persons projected is expected to result in an increase in the median age from 38.4 years in 2021 to between 44.2 and 45.8 years by 2071 (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 and net overseas migration in the high series contributing to higher proportions of young people over time.

#### Table 4 Median age (years), Queensland

Year	Actual	Projection series			
rear	Actual	Low	Medium	High	
2021	38.4				
2031		40.9	40.2	39.7	
2041		42.5	41.2	40.4	
2051		43.5	42.1	41.6	
2061		44.9	43.3	43.1	
2071		45.8	44.2	44.3	

#### Sex ratio

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

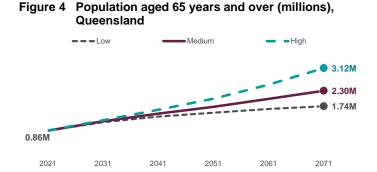
Not only is the age structure of Queensland's population changing, so is the sex ratio. In 2001, the numbers of males and females in the population were almost the same, resulting in a ratio of 99.1 males per 100 females. Over the 20 years to 2021, the sex ratio fell slightly to around 98.3 males per 100 females. Differences in assumptions in life expectancy and migration rates may see this change further to between 94.5 and 97.9 males per 100 females by 2071.

The sex ratio for persons aged 85 years and older was significantly lower, reflecting males experiencing shorter life expectancy than females. In 2001, there were 47.7 males per 100 females, rising to 65.1 in 2021 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 69.9 and 82.7 males per 100 females by 2071.

## **Older Queenslanders**

By 2071, **1** in **4** Queenslanders are projected to be aged 65 years or older

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 864,000 in 2021. By 2071, between 1.7 and 3.1 million persons aged 65 years and over are expected to be living in Queensland (Figure 4).

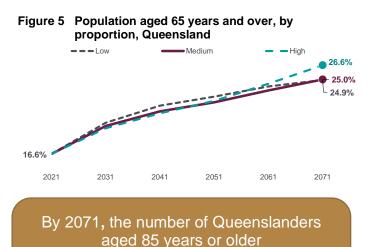


In 2001, 11.6% of the Queensland population was aged 65 years and over. This proportion increased to 13.0% by 2011, rising further to 16.6% by 2021. As noted earlier, older persons are projected to comprise an increasingly greater proportion of the State's population in the future, making up around one quarter of all Queenslanders. The proportion of Queenslanders aged 65 years and over is expected to range between 24.9% and 26.6% by 2071 (Figure 5).

Over the 50 years to 2071, the anticipated rise in the proportion of Queenslanders aged 65 years and over is projected to be driven by lower fertility and continuing increases in life expectancy.





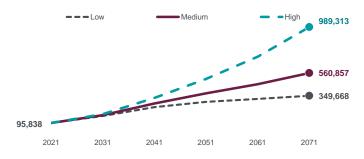


is projected to reach over **0.5 million** people (medium series)

The 85 years and over cohort, while small, is growing rapidly. Queensland's population aged 85 years and over more than doubled in size in the 20 years to 2021, increasing from around 44,000 persons in 2001 to almost 96,000 in 2021.

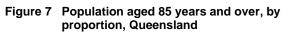
This population is projected to slowly increase to between 161,000 and 179,000 persons by 2031, with faster growth projected beyond this point. By 2071, Queensland's population of persons aged 85 years and over is projected to increase to between 350,000 and 989,000 (Figure 6).

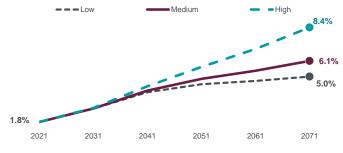
#### Figure 6 Population aged 85 years and over, Queensland



The estimated 44,000 Queenslanders aged 85 years and over in 2001 accounted for only 1.2% of the state's population. By 2021, this proportion had increased to 1.8% and is projected to be around 4.0% by 2041, and between 5.0% and 8.4% by 2071 (Figure 7).

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

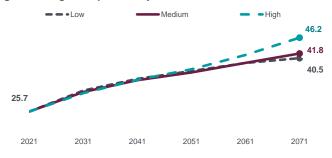




By 2071, there are projected to be at least **40 aged** Queenslanders for every **100** of working age (15 to 64 years)

In 2001, there were 17.4 persons aged 65 years or older for every 100 persons of working age. This had increased to 25.7 by 2021, and is projected to almost double by 2071, ranging from 40.5 in the low series to 46.2 in the high series (Figure 8).

#### Figure 8 Aged dependency ratio, Queensland



## Children

The *number* of 0–17 year olds is projected to grow over time...

...although as a *proportion* of the population, expected to decrease from **22.7%** in 2021 to **18.6%** in 2071 (medium series)

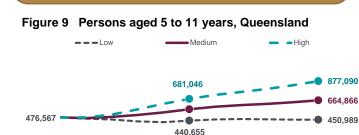
There have been significant increases in the numbers of early childhood (0 to 4 years) and school-aged (5 to 17 years) children in Queensland in recent years. On average, over the 20 years to 2021, the number of children aged:

- 0 to 4 years increased by 1.1% per year, from 244,000 to 302,000
- 5 to 11 years (primary-school aged) increased by 1.4% per year, from 364,000 to 477,000
- 12 to 17 years (secondary-school aged) increased by 1.4% per year, from 307,000 to 406,000.

While numbers of children are expected to increase, the proportion of the population they represent is expected to decline over time. In 2001, all children (aged 0 to 17 years) accounted for over 1 in 4 Queenslanders (25.6%). By 2021, this proportion had declined to slightly more than 1 in 5 (22.7%).

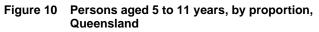
The number of primary school–aged children in Queensland is projected to increase further to between 441,000 and 681,000 persons by 2046, and between 451,000 and 877,000 by 2071 (Figure 9).

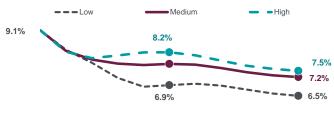
By 2071, there are projected to be 664,866 primary school–aged children (5–11 years, medium series)



2021 2026 2031 2036 2041 2046 2051 2056 2061 2066 2071

Primary school–aged children accounted for 9.1% of Queensland's population in 2021, however this is projected to decline over time as the population ages. In 2046, this cohort is projected to account for between 6.9% and 8.2% of the population, then declining further to between 6.5% and 7.5% by 2071 (Figure 10).





2021 2026 2031 2036 2041 2046 2051 2056 2061 2066 2071

The population of secondary school–aged children in Queensland is projected to be between 390,000 and 566,000 persons by 2046, from 406,000 in 2021. This cohort is projected to increase to reach between 416,000 and 748,000 persons by 2071 (Figure 11).





As a proportion of the population, secondary school-aged young people are expected to account for between 5.9% and 6.4% of the population by 2071, down from 7.8% in 2021 (Figure 12).

#### Figure 12 Persons aged 12 to 17 years, by proportion, Queensland



<sup>1</sup> www.qgso.qld.gov.au/statistics/theme/population/populationprojections/regions#current-release-qld-population-projections-regionreports-2023-edn

<sup>2</sup> <u>www.qgso.qld.gov.au/statistics/theme/population/population-projections/regions#current-release-qld-population-projections-regions-tables</u>

<sup>3</sup> <u>www.qgso.qld.gov.au/statistics/theme/population/population-estimates/regions#current-release-rebased-estimated-resident-population-regional-qld</u>

<sup>4</sup> www.qgso.qld.gov.au/statistics/theme/population/populationprojections/overview#current-release-qld-government-populationprojections-background-research <sup>5</sup> www.qgso.qld.gov.au/statistics/theme/population/populationprojections/overview#current-release-qld-government-populationprojections-background-research

<sup>6</sup> www.qgso.qld.gov.au/statistics/theme/population/populationprojections/overview#current-release-qld-government-populationprojections-methodology-assumptions

<sup>7</sup> www.qgso.qld.gov.au/statistics/theme/population/populationprojections/overview/qld-government-population-projections-frequentlyasked-questions