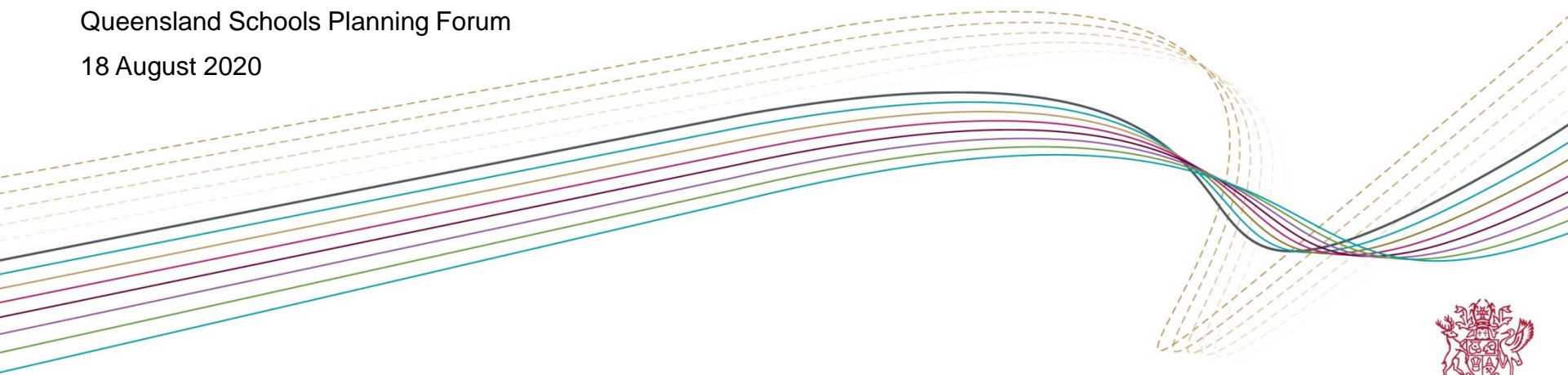


# Population projections, trends and COVID

Queensland Schools Planning Forum

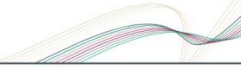
18 August 2020



- Queensland Government population projections, state of play
- Pre COVID-19 trends in fertility and migration, and projected school aged children
- Lack of current data, potential COVID-19 impacts on fertility and migration
- Implications for future numbers of school aged children
- Recent research

# Queensland Government population projections

- Released twice every 5 years, census cycle
- Qld - single year of age, single projection year period  
3 series (low, medium, high)
- Cohort-component model
  - Each year, every person becomes one year older
  - Assumptions are made for births, deaths, and inward and outward migration



- 2018 edition
  - Latest available
  - Released late 2018
  - Replaced 2015 edition

# Queensland Government population projections

- 2018 edition
  - Latest available
  - Released late 2018
  - Replaced 2015 edition
- Future editions
  - Work on 2021 edition currently put on hold
  - Due to extreme uncertainty stemming from the impact of COVID-19 restrictions on key drivers of population growth, in particular migration, and a range of possible recovery trajectories

# Demographic features

## Baby boomers



### Queensland

#### Age Structure in 2020

#### Projected Resident Population

Please note for State and Territory data, to ensure a consistent graph scale over the projection period, ages 85 and over are not displayed, but are used in the calculation of the total population.

#### Toggle Male/ Female Surplus

View Surplus

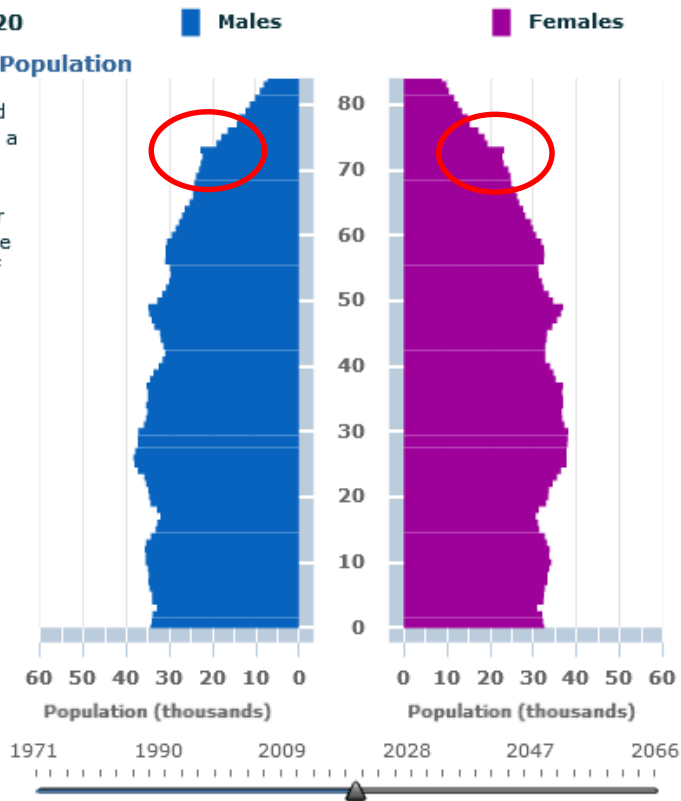
Surplus demonstrates where there are more Males or Females in a particular age group by overlaying the age structure of one gender over the other.

#### Toggle Outline

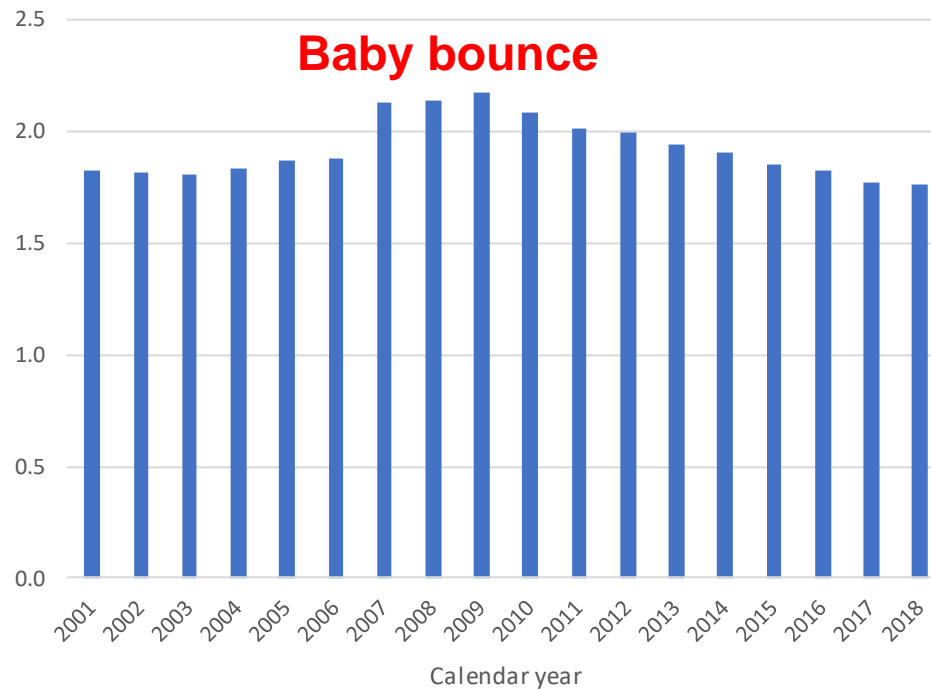
View Outline

#### Toggle Data Tips

View Data Tips

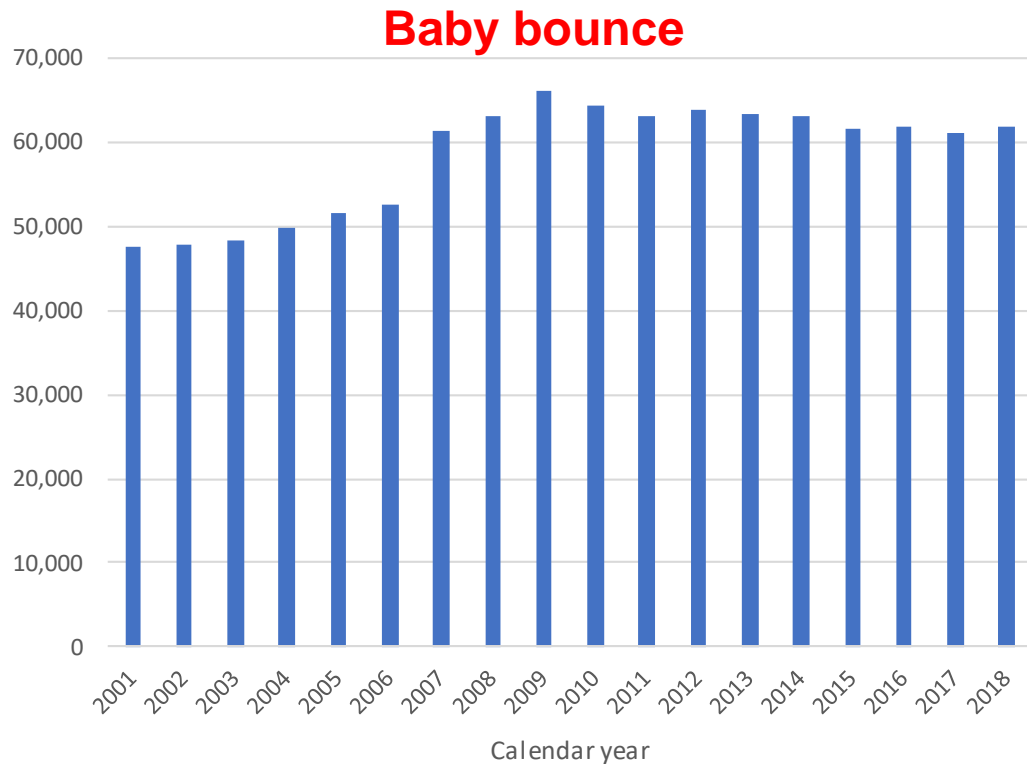


# Total fertility rates, Queensland



Source: ABS, Births, Australia (Cat. No. 3301.0)

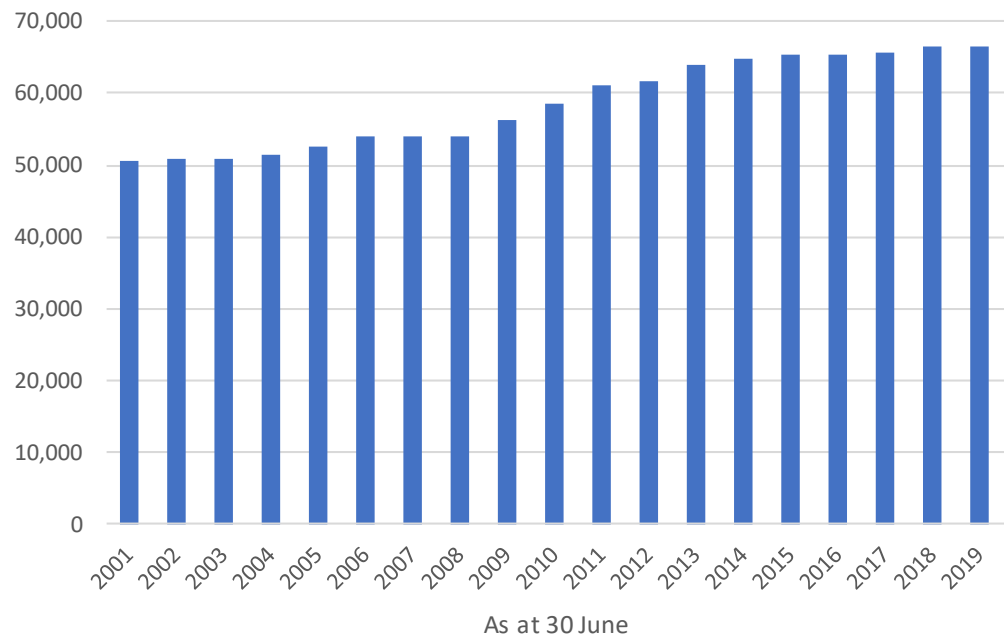
# Births registered, Queensland



Source: ABS, Births, Australia (Cat. No. 3301.0)

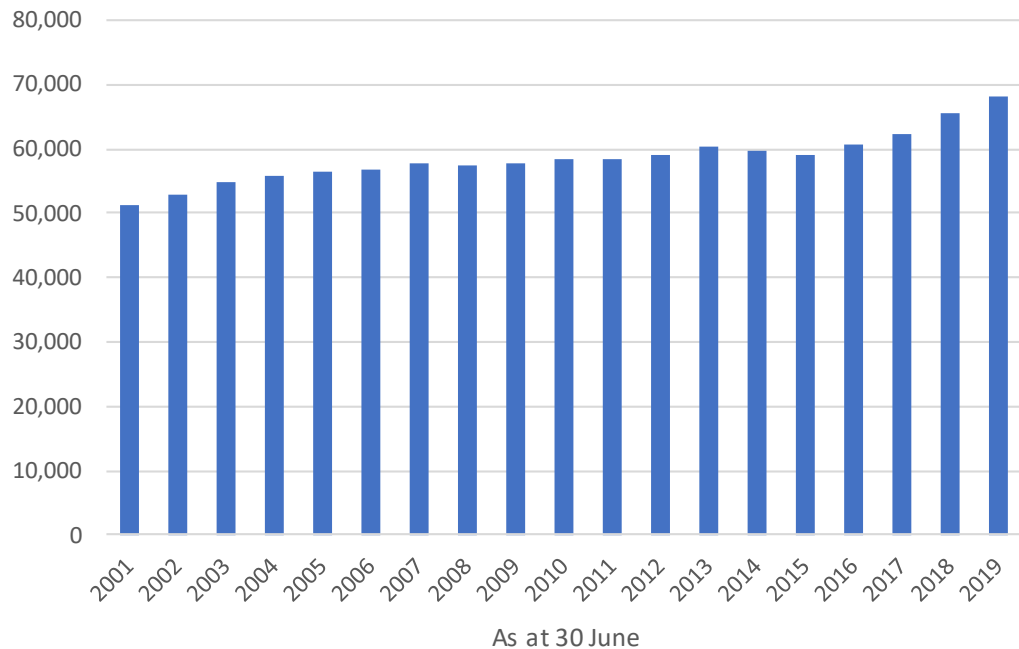


# 5 year olds, Queensland



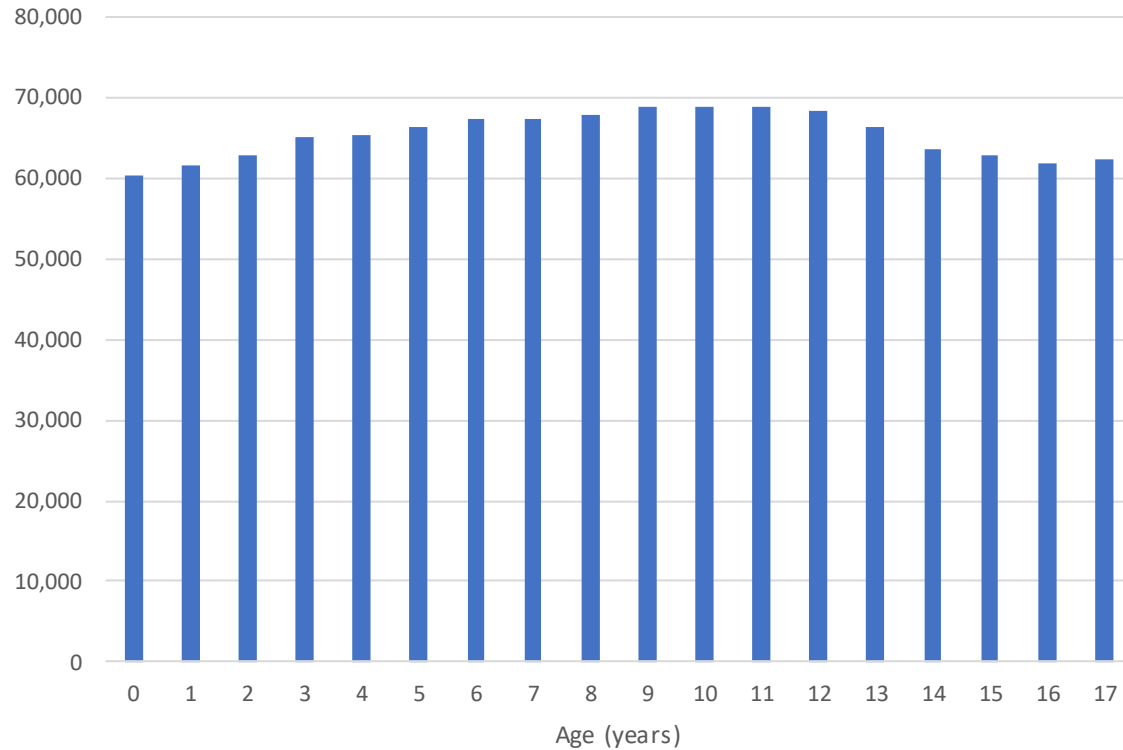
Source: ABS, Australian Demographic Statistics (Cat. No. 3101.0)

# 12 year olds, Queensland



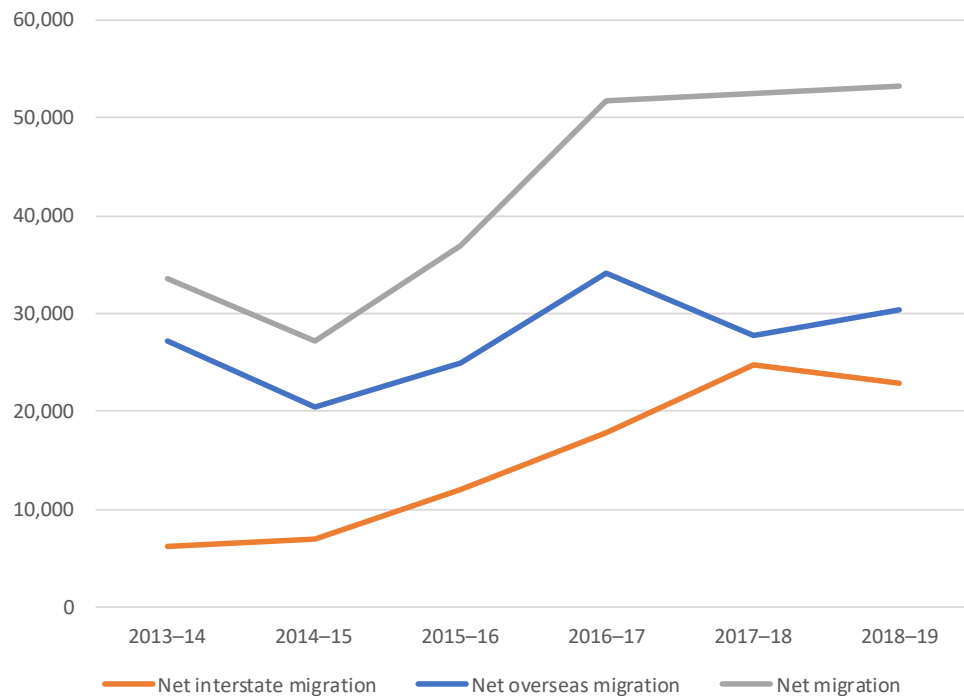
Source: ABS, Australian Demographic Statistics (Cat. No. 3101.0)

# 0 to 17 year olds, Queensland, 30 June 2019



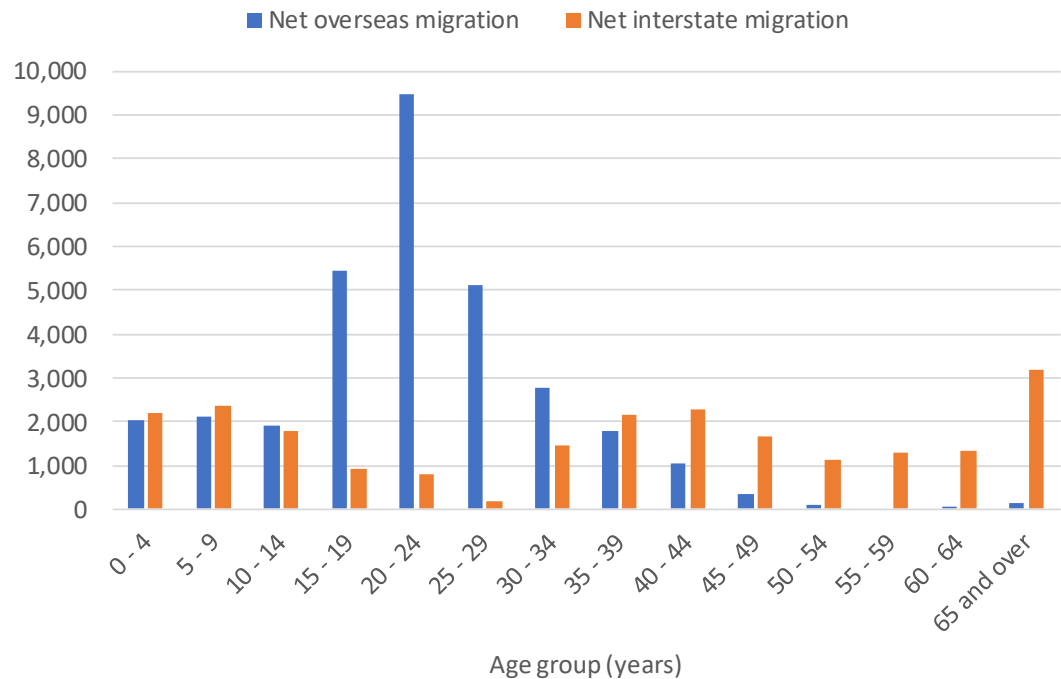
Source: ABS, Australian Demographic Statistics (Cat. No. 3101.0)

# Net migration, Queensland



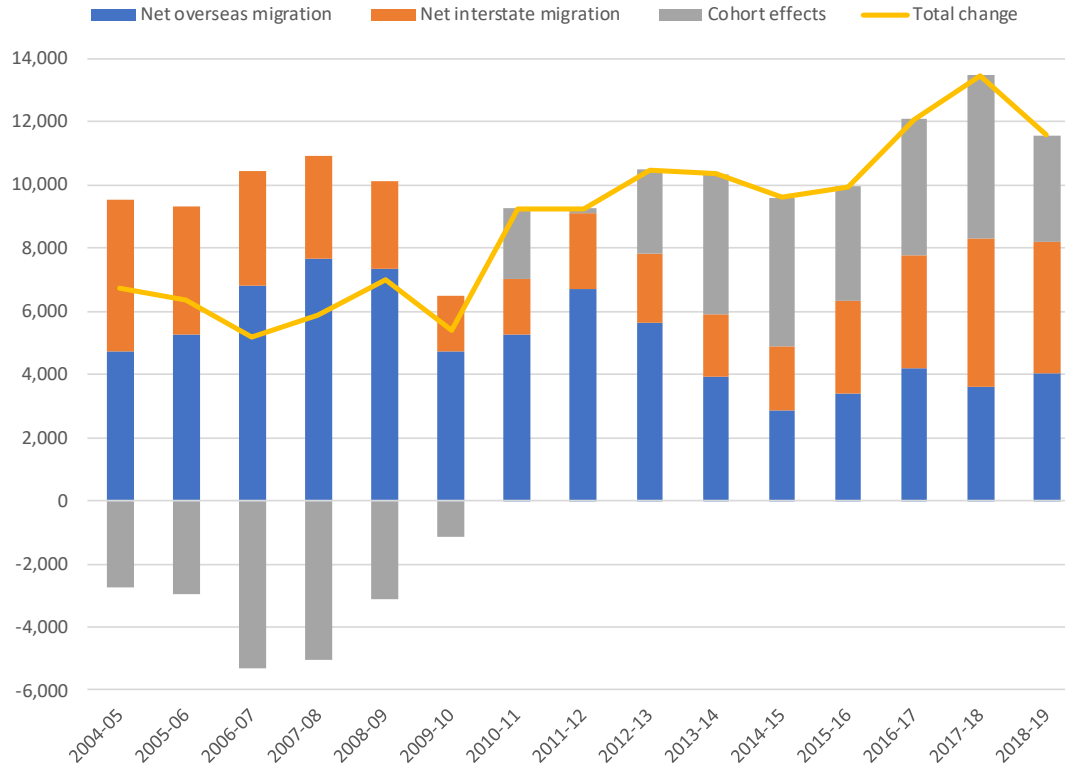
Source: ABS, Australian Demographic Statistics (Cat. No. 3101.0)

# Net migration by age group, 2018-19, Queensland



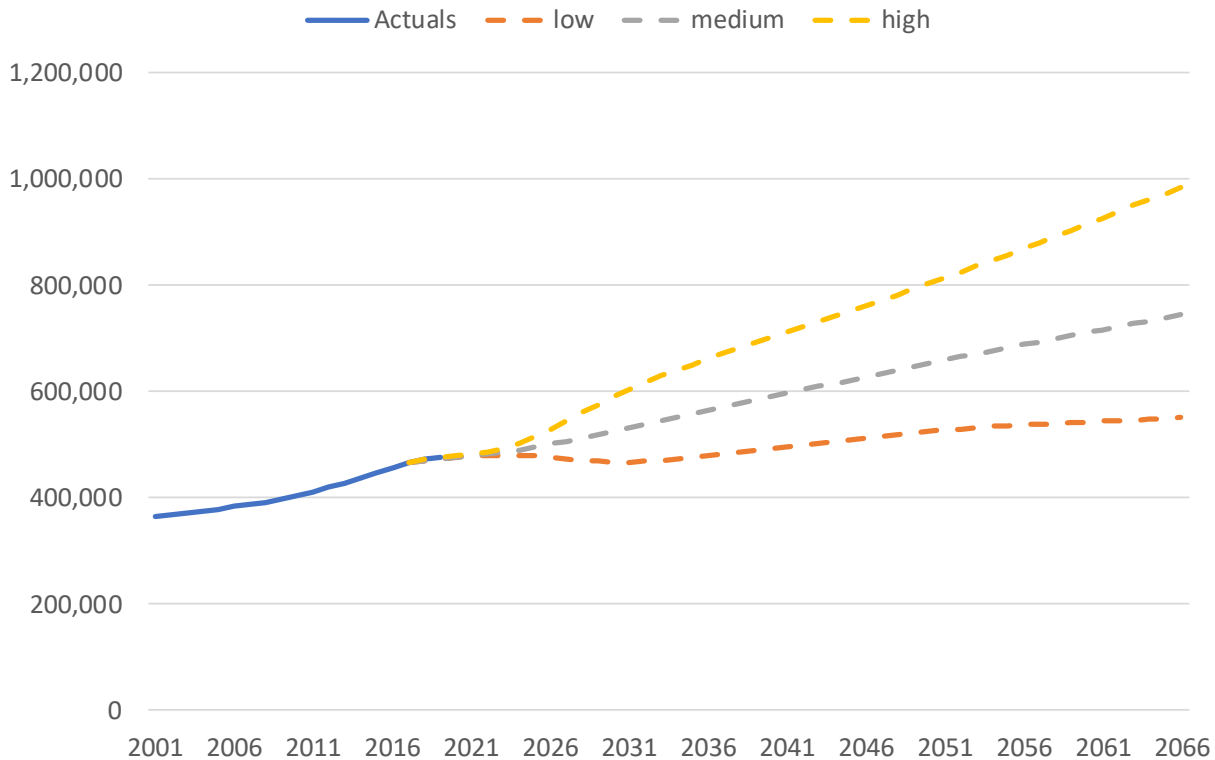
Source: ABS, Migration, Australia (Cat. No. 3412.0)

# Components of change, 5 to 14 year olds, Queensland



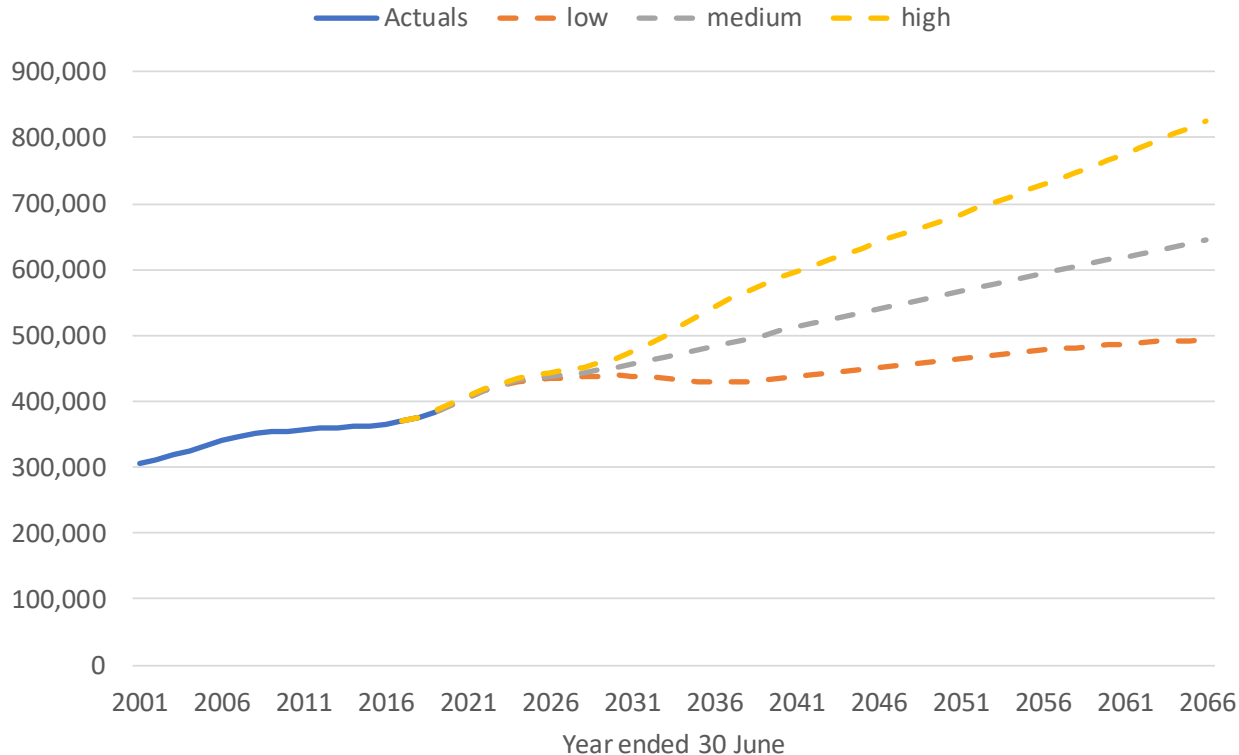
Source: ABS, Australian Demographic Statistics (Cat. No. 3101.0), Migration, Australia (Cat. No. 3412.0)

# 5 to 11 year olds (primary), Queensland



Source: ABS, Australian Demographic Statistics (Cat. No. 3101.0); Queensland Government population projections 2018 edition

# 12 to 17 year olds (secondary), Queensland



Source: ABS, Australian Demographic Statistics (Cat. No. 3101.0); Queensland Government population projections 2018 edition



- Uncertainty
  - Massive and unprecedented economic, social and demographic disruption
  - Significant uncertainty as to the duration and scale of impacts

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  - Scenarios which model a range of plausible population futures are best option

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  - Standard population projections are not feasible
  - Scenarios which model a range of plausible population futures are best option
- Lack of current data ...

# Lack of current ABS data

- Total Qld population, overseas and interstate migration
  - Released quarterly (6 month lag)
  - Latest available: Dec quarter 2019 data (published June 2020)
  - Upcoming: **March quarter 2020 data (scheduled Sep 2020)**
  - International border closures, China (Feb 1), Iran (Mar 1), South Korea (Mar 5), Italy (Mar 11), full ban (Mar 20)
  - Queensland State border, with exemptions (Mar 26)
  - Partial COVID impacts on overseas and interstate migration figures
  - Upcoming: **June quarter 2020 data (scheduled Dec 2020)**
  - Will include COVID impacted overseas and interstate migration

# Lack of current ABS data

- Births data
  - Released quarterly (6 month lag)
  - Latest available: Dec quarter 2019 data (published June 2020)
  - Upcoming: **March quarter 2020 data (scheduled Sep 2020)**
  - Upcoming: **June quarter 2020 data (scheduled Dec 2020)**
  - Upcoming: **Sep quarter 2020 data (scheduled Mar 2021)**
  - Upcoming: **Dec quarter 2020 data (scheduled Jun 2021), maybe**
  - Births + 9 months (from Mar quarter 2021 data, **scheduled Sep 2021**)

# Lack of current ABS data

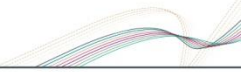
- Qld population by age
  - Released annually, 30 June estimates (6 month lag), published in December
  - Latest available: June 2019 (published December 2019)
  - Upcoming: **June 2020 (scheduled Dec 2020)**, COVID effects from Mar-June 2020
  - Upcoming: **June 2021 (scheduled Dec 2021)**, full year of COVID effects

# Lack of current ABS data

- Total population, small areas (SA2s, LGAs)
  - Released annually (9 month lag)
  - Latest available: 30 June 2019 (published March 2020)
  - Upcoming: **30 June 2020 (scheduled March 2021)**
  - Upcoming: **30 June 2021 (scheduled March 2022)**
  
- Population by age, small areas (SA2s, LGAs)
  - Released annually (15 month lag)
  - Latest available: 30 June 2018 (published Sep 2019)
  - Upcoming: **30 June 2019 (scheduled Sep 2020)**
  - Upcoming: **30 June 2020 (scheduled Sep 2021)**
  - Upcoming: **30 June 2021 (scheduled Sep 2022)**

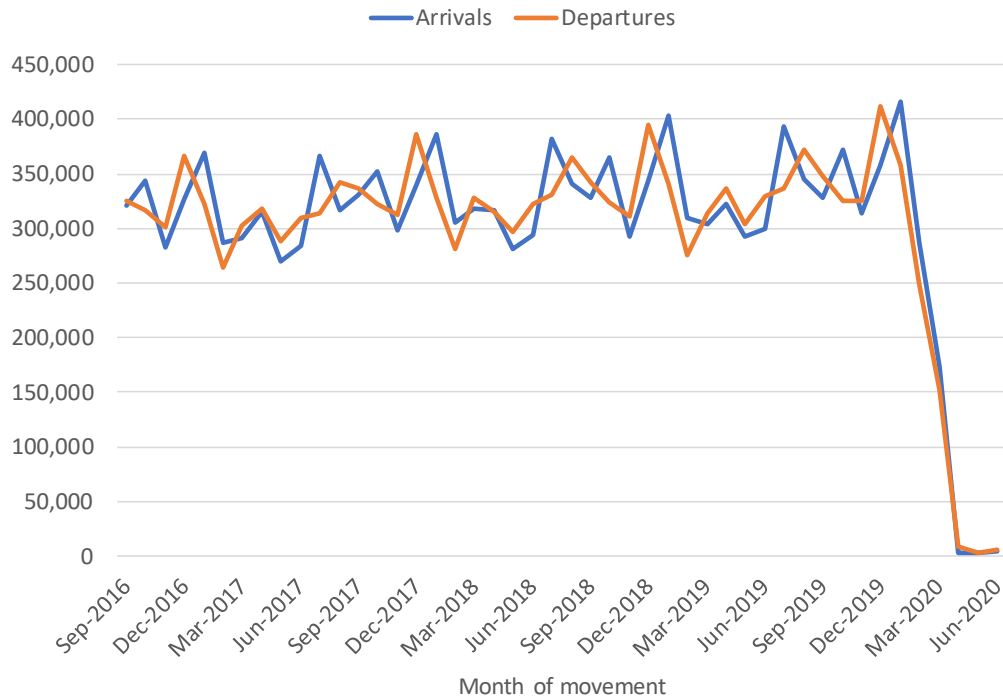
- Currently unknown
- Will not be evident until late 2021 at the earliest
- Fertility rates have been declining since 2009, births are steady (Qld)
- Fertility rates have historically declined during times of economic uncertainty
  - E.g. 1930's Great Depression
- Recent expert academic opinion suggests that the COVID-19 pandemic will have a similar impact on fertility
- ANU Newsroom “Coronavirus crisis likely to reduce birth rate”
- <https://www.anu.edu.au/news/all-news/coronavirus-crisis-%E2%80%98likely-to-reduce-birth-rate%E2%80%99>





- 20 March - Australian Government closed national borders to everyone except Australian citizens, permanent residents and their immediate families
- NOM will have probably declined substantially
- Total overseas arrivals to Australia has decreased to 25,770 in June 2020 compared with 1.56 million in June 2019
- Most of the June 2020 arrivals were returning residents
- There were only 40,080 overseas departures from Australia in June 2020, down from more than 1.8 million in June 2019

# Total international movements, Qld state of clearance(a)



(a) Where a traveller is cleared for international travel by the Australian Border Force.  
 Source: ABS, Overseas Travel Statistics, Provisional, June 2020 (Cat. No. 3401.0.55.004)

# Jacinda Ardern cancels travel between New Zealand and Australia

Lauren Ferri and Charlotte Karp For Daily Mail Australia 5 hrs ago

Monday 3 August

Jacinda Ardern has called off plans for a trans-Tasman travel bubble between New Zealand and Australia.

The New Zealand Prime Minister said flights between the two nations was out of the question as Victoria struggles to contain a coronavirus outbreak.

Victorian Premier Daniel Andrews announced a stage four lockdown on Sunday as his state recorded 671 new COVID-19 cases and seven deaths.

The amount of community transmission has delayed the possibility of travel between New Zealand and Australia by several months.

New Zealand has not seen a single case of community transmission in 93 days compared to Melbourne's 760 active coronavirus cases with no known source.

< 1 2 3 4 >

## MORE IN NEWS



Ban SUV adverts to  
meet UN climate

Wednesday 12 August

**9NEWS**

## 'A real shockwave': New Zealand's coronavirus bubble pops



Coronavirus: NZ records 14 new cases

Wednesday 12 August



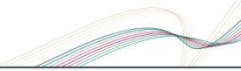
## 'A real shockwave': New Zealand's coronavirus bubble pops

By midday, Auckland had moved into stage three lockdown.

"I was saying to someone just yesterday how amazing New Zealand is, living in this bubble," Mr Guise said.

"For the last hundred-odd days, we've been getting on with life as normal, while the world was capitulating around us.

"It's kind of sent a real shockwave among everyone."



- Queensland's state border closed to interstate arrivals on 26 March
- Limited exemptions, variations since then
- ABS NIM estimates for June quarter 2020 to be released late December 2020
- Unknown future - full range of likely outcomes are possible, from a rapid recovery through to extended severe scenarios

# Current research

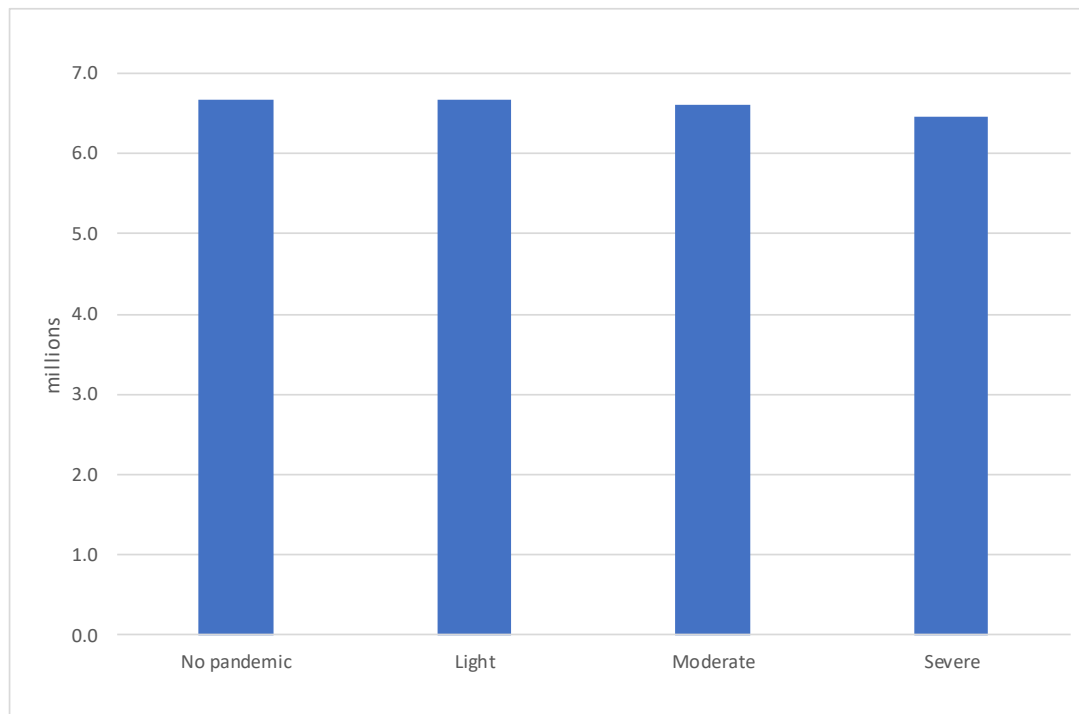
- Queensland Centre for Population Research, UQ
- Population projection scenarios
- <https://www.researchgate.net/publication/343305025> HOW WILL COVID-19 IMPACT AUSTRALIA'S FUTURE POPULATION A SCENARIO APPROACH
- <https://theconversation.com/1-4-million-less-than-projected-how-coronavirus-could-hit-australias-population-in-the-next-20-years-143544>
  - National and State/Territory results
  - 4 scenarios
    - No COVID
    - Light
    - Moderate
    - Severe

# Summary of projection assumptions for each of the scenarios

	Scenario				
	Light	Moderate	Severe	Reference: Pandemic	No
Fertility	TFR dips to 1.65 in 2020-21 before recuperation to 1.75 in mid-2020s before settling at long-run value of 1.70	TFR falls to 1.55 in 2020-21 before recuperation to 1.75 in late 2020s and long-run value of 1.70	TFR drops to 1.45 in 2020-21 and takes a decade to recover to long-run value of 1.70	Same as for Light Impact scenario	
Overseas migration	NOM drops to 150,000 for 2020-21, recovering quickly to long-run value of 210,000 per annum	NOM falls to 75,000 for 2020-21, increasing to a long-run value of 210,000 per annum by 2024-25	NOM falls to zero for 2020-21 and recovers over many years reaching the long-run value of 210,000 per annum by 2028-29	NOM is 210,000 per annum from 2020-21 onwards	
Mortality	Life expectancy at birth continues long-run increases, reaching 88.8 years for females and 86.3 years for males by 2040-41. Same assumptions used for all scenarios				

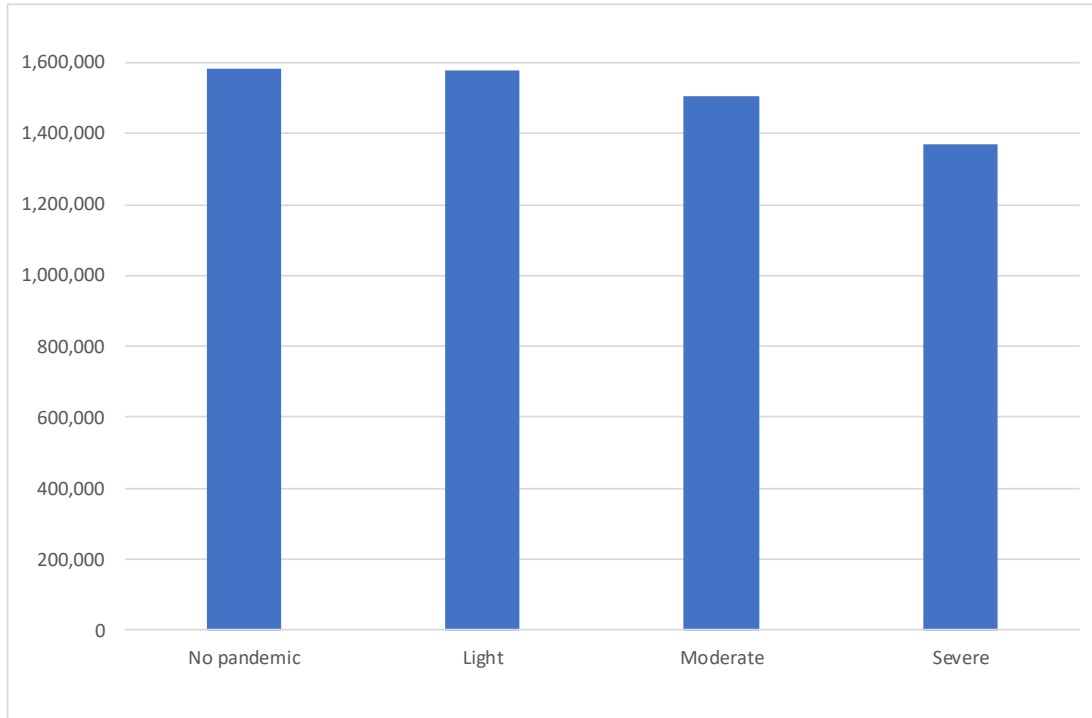


# Projected 2040 population, Qld



Source: Queensland Centre for Population research, How will COVID-19 impact Australia's future population? A scenario approach

# Projected population change, 2019-2040, Qld



Source: Queensland Centre for Population research, How will COVID-19 impact Australia's future population? A scenario approach

- Demographic features
  - Baby bounce moving through secondary school ages NOW
  - COVID-19 may well produce features, a period of lower births and migration

# Some key points

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# Some key points

- Demographic features
  - Baby bounce moving through secondary school ages NOW
  - COVID-19 may well produce features, a period of lower births and migration
- COVID-19 impacts are still largely unknown, depth and length
- Some research becoming available, but...
  - Real time data still to be released
  - Population projection scenarios are possible, but not trend based population projections

