

2019 NSW Population Projections



Assumptions

The Department prepares the population projections making assumptions about births, deaths and migration. These are applied to each five year age group over the projection period. The assumptions are what drives the projected population size, rate of growth and age profile.

Setting the assumptions is the most difficult part of developing the projections. They are based on the best available data from the Australian Bureau of Statistics, NSW Health, the Department of Home Affairs and Commonwealth Treasury. Different assumptions are set for NSW, regions and each LGA. This means an area with overseas students, for example, has a different assumption to a place where few people go when moving to Australia. Setting the assumptions is mostly informed by historical trends and the Department looks at the data to assess if those trends are likely to continue or if a different trend should be assumed. The assumptions for NSW are shown in the table at the end of this document.

Births

Two main things tell us how many babies are likely to be born in the future, the number of women who are the right age to have children, and how many babies they will have. Our assumptions set a total fertility rate for NSW, each region and LGA that shows the average number of babies that will be born to women. Our assumptions also include the age profile of mothers. In some areas, women have babies at younger ages than elsewhere. When this information is applied to the number of women in each age group, we can project how many babies will be born.

Deaths

Population projections have to take away those people who will die during the projection period. To do this, the NSW projections make assumptions about life expectancy at birth, or the average age that people will die. Sitting behind life expectancy birth assumptions is life expectancy for each age and a measure of the likelihood of surviving from one age group to the next. This means even if life expectancy at birth is 80 years, at 20 life expectancy will not be 60 years but a higher number. These assumptions let us project how many people will die at what ages. In areas with more older people, we are likely to see more deaths.

Migration

Three types of assumptions are made for migration, or the movement of people in and out of a place:

- Moves within NSW, called intrastate migration
- Interstate migration, where people move to and from other states in Australia
- Overseas migration, where people move in and out of NSW from other countries.

For intrastate and interstate movements, people are considered to have moved when they've lived in a place for six months or more.

For overseas migration, people are counted as an out migrant or in migrant once they have left Australia or been in the country for 12 out of 16 months. This includes Australian-born and overseas-born people, so

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those people who leave for work overseas and are gone for more than a year are counted as out migrants. If they return after that time they become part of the in-migration flows.

We know that people are not likely to live in the same place that they were born for their whole life so we make assumptions on the numbers of people moving in and out.

An important part of the migration assumptions is the age profile of those people moving. For each migration type there is an assumption about the number of people moving, and assumptions about the age that they move. For example, overseas arrivals are concentrated among people in their 20s. This means the projections assume more people in those age groups for particular areas. This then has flow on effects as they are aged forward in the projection model.

Distribution of urban populations

For the Greater Sydney Region, Illawarra and Lower Hunter the information about the potential supply of housing is used to distribute the projected population over time. The assumption for housing completions is informed by the Department's Housing Supply Forecast. This Forecast is a basis for predicting where future housing development will occur.

Why is net os migration assumption in the Projections different to the assumption used by NSW Treasury?

The current net overseas migration (NOM) assumption used in the projections is the NOM forecast in the 2019-20 Australian Government Budget and then falling to the permanent visa cap set by the Australian Government (currently 160,000 a year nationally, 69,000 a year assumed for NSW).

The NSW Treasury uses the NOM forecast in the 2019-20 Australian Government Budget, but rather than immediately falling to the permanent visa cap, the NSW Treasury assumes a gradual return to the permanent visa cap.

Over the long-term (25+ years) the total population of NSW is the same under both assumptions. The main difference is that the NSW Treasury assumption creates higher growth in the early years of the projections and less in the out years, compared to the assumption in the 2019 NSW Population Projections which spreads the growth evenly throughout the projection period.

The Department is currently working with the NSW Treasury to align our projections to create a single NOM assumption across the NSW Government.

2016 to 2041

Population projection assumptions

Fertility rate	Trending from 1.81 births per woman to 1.85
Life expectancy at birth (Males)	Trending from 81.8 to 86.0 years
Life expectancy at birth (Females)	Trending from 85.8 to 88.9 years
Net interstate migration	Annual net losses going from -20,200 to -17,000
Net overseas migration	Annual net gains trending from 105,020 to 68,800

Summary of assumptions used in the 2019 NSW Population Projections