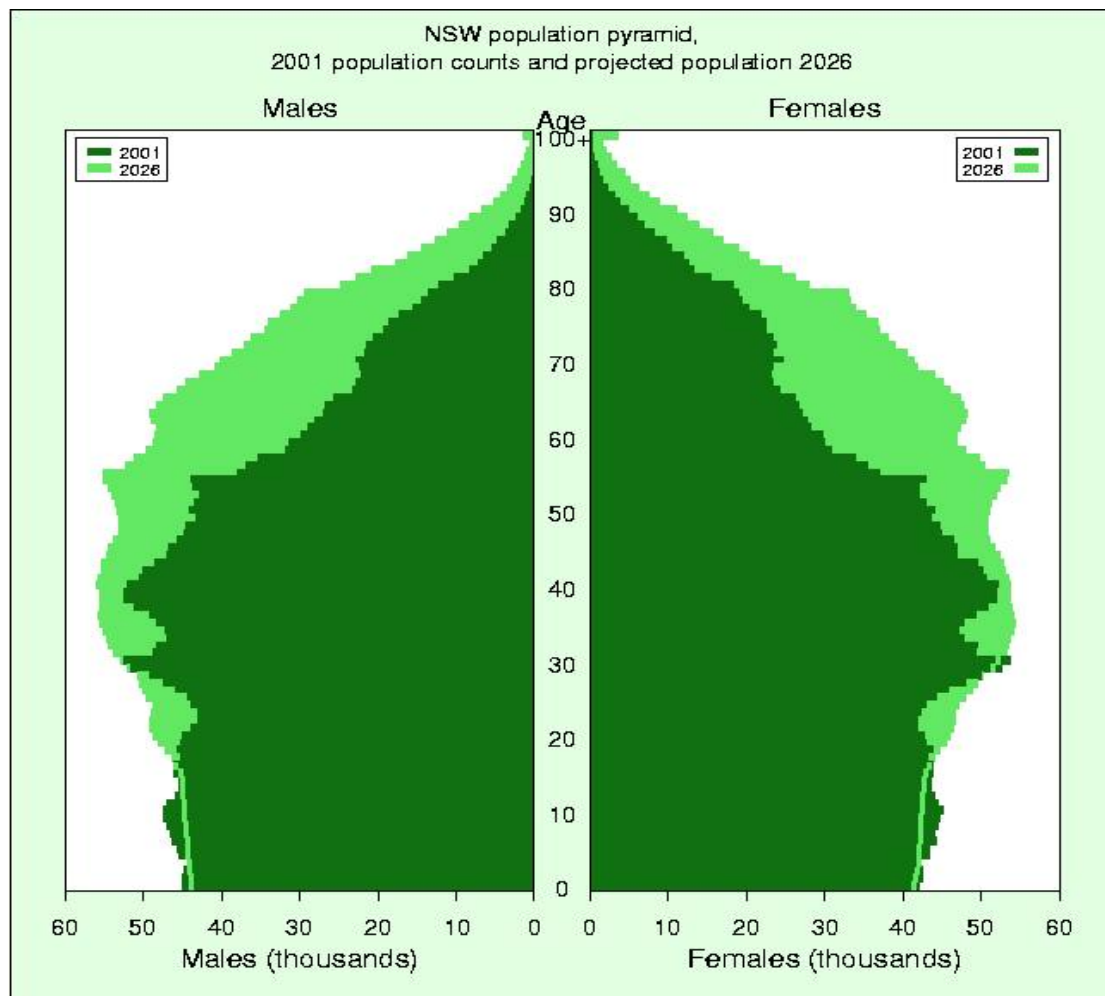


Section 2: Population projections, 2001 to 2026

The population projection figures presented in this report were obtained from the Transport and Population Data Centre of the NSW Department of Infrastructure, Planning and Natural Resources. The projections were produced using current and historical input data applied to a multi-regional cohort component model. The projected populations are based on a series of assumptions that accord with past trends, current patterns, and demographic judgement as to future patterns. At the state level it was assumed that:

- Fertility will drop from 1.79 children per female in 2001–02 to 1.66 children per female by 2010–11 then remain constant;
- Life expectancy for males will increase from 77.3 years to 83.4 years between 2002 and 2026. Life expectancy for females will increase from 82.7 years to 87.7 years in the same period;
- Overseas migration will be held constant at 42,000 from 2005–06;
- New South Wales will lose fewer people to interstate migration (from -24,450 in 2001 to -16,600 in 2026).



Source: Population data from Transport and Population Data Centre, NSW Department of Infrastructure, Planning and Natural Resources available online at www.planning.nsw.gov.au/tpdc/pop-projections.html. Figure from Centre for Epidemiology and Research, NSW Department of Health.

Trends in population size and age structure

The population will increase by 1.4 million

By 2026, the population will be approximately 8,012,650, an increase of 1.4 million (or 21.9 per cent) since 2001.

The median age of the state population will increase to 41 years

By 2026, the median age of residents will be 41 years (41 years for males; 42 years for females), compared to 35 years in 2001 (35 years for males; 36 years for females).

There will be fewer children aged less than 15 years

By 2026, 16.2 per cent of the population will be aged less than 15 years, compared with 20.4 per cent in 2001.

People of working age will make up less of the population.

By 2026, people aged 15–64 years will comprise 63.7 per cent of the population, compared with 66.5 per cent in 2001.

People aged 65 years and over will make up more of the population

By 2026, the population aged 65 years or more will be approximately 1,606,870, an increase of 748,750 (or 87.3 per cent) since 2001. By 2026, one-fifth (20.1 per cent) of the population will be aged 65 years or more, compared with 13.1 per cent in 2001.

There will be more than twice as many people aged 80 years and over

By 2026, the population aged 80 years or more will total approximately 447,240, an increase of 237,140 (or 112.9 per cent) since 2001. By 2026, 5.6 per cent of the NSW population will be aged 80 years or more, compared with 3.2 per cent in 2001.

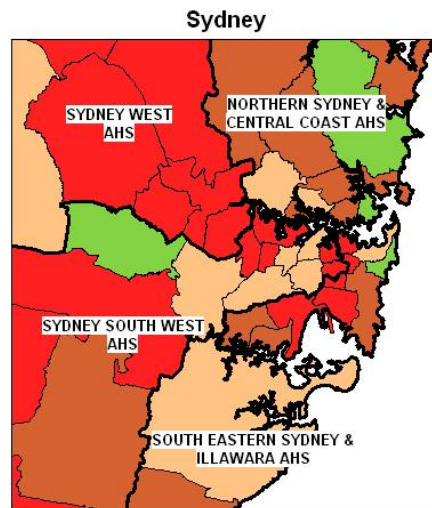
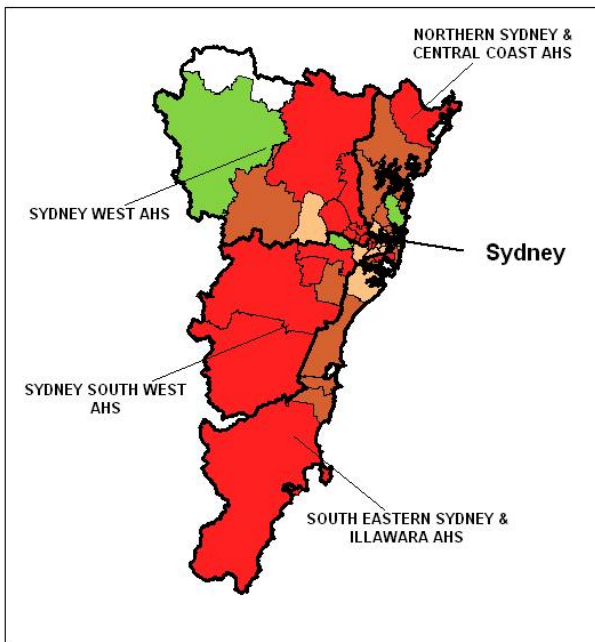
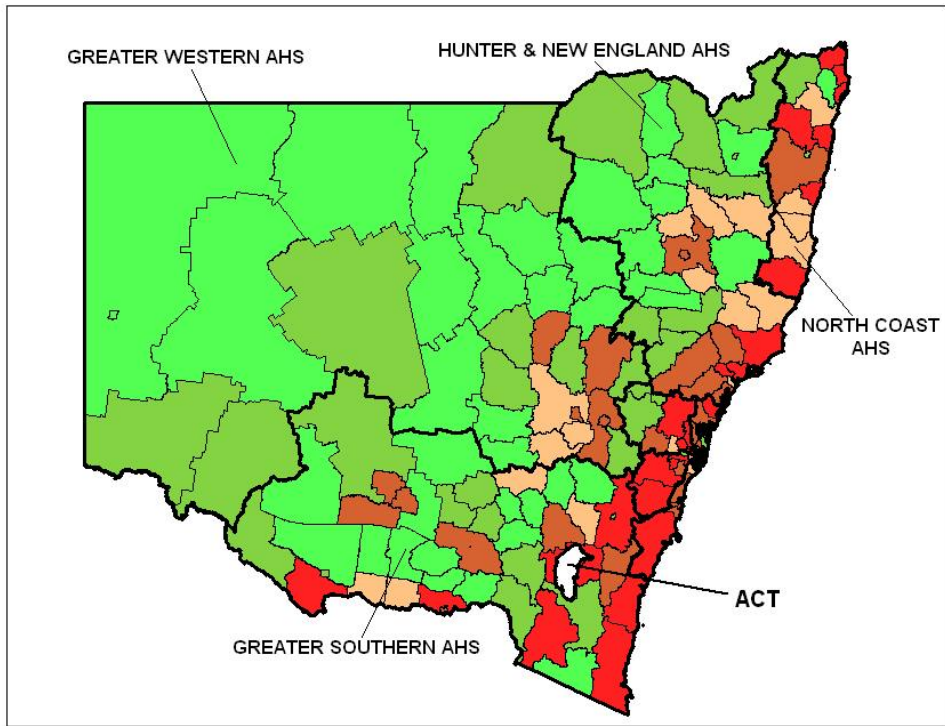
Females will be less dominant among the older population

By 2026, females will make up 52.9 per cent of the NSW population aged 65 years or more, and 57.5 per cent of the population aged 80 years, or more, compared with 56.0 per cent and 65.0 per cent respectively in 2001.

There will be fewer people in the workforce to support a larger ageing population

By 2026, New South Wales will experience the full effects of the post-war ‘baby boom’, declining fertility rates after 1971, and increasing life expectancy. There will be record high proportions of the population at post-retirement and old age and record low proportions of children and people of working age. There will be fewer people in the workforce to support a larger ageing population.

Total Population: change between 2001 and 2026 (%)



Local Government Areas (2003)
by % population change 2001 - 2026

27 to 165	(37)
11 to 27	(35)
1 to 11	(28)
-12 to 1	(34)
-39 to -12	(39)

Source: Population data from Transport and Population Data Centre, NSW Department of Infrastructure, Planning and Natural Resources available online at www.planning.nsw.gov.au/tpdc/pop-projections.html. Figure from Centre for Epidemiology and Research, NSW Department of Health.

Trends in population growth by region

The Sydney South West, Sydney West, and North Coast Area Health Services will experience the greatest population growth

Growth rates of more than 25 per cent will be recorded in the Sydney South West (30.2 per cent), Sydney West (29.9 per cent), and North Coast (28.6 per cent) Area Health Services.

Lower rates of growth will occur in the South Eastern Sydney & Illawarra (21.3 per cent), Northern Sydney & Central Coast (17.7 per cent), Greater Southern (14.9 per cent), and Hunter & New England (12.2 per cent) Area Health Services.

The population of the Greater Western Area Health Service will increase by only 2.5 per cent.

The populations of most local government areas in Sydney, particularly those to the west and south west of the city, will increase

The population of Camden Local Government Area will more than double (164 per cent increase).

The populations of South Sydney, Liverpool and Sydney Local Government Areas will increase by more than 75 per cent.

The populations of Strathfield, Baulkham Hills and Auburn Local Government Areas will increase by more than 50 per cent.

But not all local government areas in Sydney will experience population growth

The population of Warringah, Fairfield, Mosman, Waverley, Sutherland and Woollahra Local Government Areas will remain relatively static.

The population of most local government areas along the coast will increase

The populations of Wyong and Tweed Local Government Areas will increase by more than 50 per cent.

The populations of Byron, Hastings, Great Lakes, Eurobodalla, Shoalhaven, and Coffs Harbour Local Government Areas will increase by 40–50 per cent.

The population of most inland local government areas will decrease

The populations of Urana and Unincorporated NSW Local Government Areas will decline by more than 30 per cent.

The populations of Warren, Coonamble, Bombala, Conargo, Central Darling, Broken Hill, Brewarrina, Bogan, Yallaroi, Murrurundi, Barraba, Jerilderie, Culcairn and Hay Local Government Areas will decline by 20–30 per cent.

But some inland regional centres will grow

Despite the decline in the populations of many inland local government areas, growth will occur in and around some inland regional centres, which will increase the population of the Queanbeyan (46.6 per cent), Bathurst (25.5 per cent), Dubbo (20.5 per cent), Maitland (30 per cent), and Griffith (18.5 per cent) Local Government Areas.

Changing regional distributions, particularly population declines in inland areas, will create challenges in maintaining levels of health and other services.

The population of New South Wales will continue to increase, with Sydney remaining the dominant population centre. Most growth in Sydney will occur to the west and south west of the city. The north coast will be the biggest growth area outside of Sydney. By contrast, the population of most inland areas, with the exception of some regional centres, will decline. Population growth will result in increased needs for health and community services, as well as other basic infrastructure.

Trends in population ageing by region

The population aged 65 years and over will increase in all state area health services

The population aged 65 years and over will more than double in the North Coast (124 per cent increase), Greater Southern (110 per cent), and Sydney West (112 per cent) Area Health Services.

The population aged 65 years and over will almost double in the Sydney South West (92 per cent increase), Hunter & New England (95 per cent), and Greater Western (85.3) Area Health Services.

Smaller increases will be recorded in the South Eastern Sydney & Illawarra (68.5 per cent increase) and Northern Sydney & Central Coast (53.9 per cent increase) Area Health Services.

Rural areas will have the greatest population proportions of people aged 65 years and over

Approaching one-third (30.7 per cent) of the population of the North Coast Area Health Service will be aged 65 years or more.

Around one-quarter of the population of the Hunter & New England (25.8 per cent), Greater Southern (26.0 per cent), and Greater Western (24.3 per cent) Area Health Services will be aged 65 years or over.

The proportion of the population aged 65 years or over will be smaller in Sydney South West (15.7 per cent), South Eastern Sydney & Illawarra (19.2 per cent), Sydney West (15.0 per cent), and Northern Sydney & Central Coast (19.4 per cent) Area Health Services.

People aged 65 years and over will comprise one-third or more of the population of some predominantly coastal local government areas

Predominantly coastal local government areas with one-third or more of the population aged 65 years and over will include the Barraba, Bingarra, Great Lakes, Greater Taree, Bellingen, Hastings, Maclean, Nambucca, Tweed, Bombala and Eurobodalla Local Government Areas.

Population ageing will affect all areas of the state, but most dramatically the coastal and inland rural areas

Changes in the age structure of populations will affect the need for health and community services, as well as the availability of a skilled workforce to provide these services. A particular challenge will be encountered in the areas health services of the north and south coasts, where there will be in-migration of older age groups accompanied by loss of young adults. This may equate to a major shortfall of people of working age.

Section 3: Disease and injury projections, 2001 to 2026

Estimating the future incidence (new cases) and prevalence (existing cases = new + surviving cases) of disease and injury is useful for planning services for treatment, ongoing management, rehabilitation, and palliative care. They give an indication of the overall future burden; and reflect the affect of population increases and ageing. Age-adjusted incidence and prevalence rates control for the differences in the age structure of the population over time—that is, the effects of population ageing are removed—giving an indication of the effect that health programs and services have on disease and injury.

The disease projections in this section were calculated by applying projected incidence and prevalence rates for each specific disease to population projections obtained from the Transport and Population Data Centre of the NSW Department of Infrastructure, Planning and Natural Resources for the years 2001, 2006, 2011, 2016, 2121, and 2026 (*New South Wales State and Regional Population Projections 2001–2051, 2004 Release*). Projected incidence and prevalence rates were obtained from the Centre for Burden of Disease and Cost-effectiveness, University of Queensland.¹ These rates were developed using disease models based on data from 2001 and disease-specific assumptions regarding trends in incidence and case fatality rates.

For the most part, the advantage of using the projection data from one source is that there is a better comparability among the specific disease groups, because consistent models and assumptions about risk factors were made for the different diseases. However, the resulting figures provide an estimate of the relative burden of each disease in the future and may differ from results based on methods for projections of individual diseases in isolation which do not account for the future effects of other diseases on the disease in question. For the purposes of the NSW Health Futures Planning process, the projections data from Centre for Burden of Disease and Cost-effectiveness provided an overall picture of the future burden of the major causes of disease, as well as the relative future burden and trends among the major diseases.

Projections of disease incidence or prevalence have also been published by other authorities in NSW for individual diseases in isolation. These include disease projections for cardiovascular diseases (Access Economics Pty Ltd and National Heart Foundation. *The shifting burden of cardiovascular disease in Australia*. Canberra: Access Economics, 2005.) and for cancers (Tracey EA, Roder D, Bishop J, Chen S and Chen W. *Cancer in New South Wales. Incidence and mortality, 2003*. Sydney: Cancer Institute NSW, 2005). The projected numbers of cases and rates differ from those in these reports due to differences in the methods used including: differences in the sources of baseline data used; differences in the statistical modelling methods used; and differences in methods used to adjust for future changes in the risk factors that cause disease and the future impact of screening programs.

The methods used in this report were undertaken by the Centre for Burden of Disease and Cost-effectiveness, University of Queensland. These methods incorporate an all-disease cause approach which adjusts future estimates of disease incidence and prevalence by the trend in disease-specific mortality as well as other causes of mortality. Where the disease-specific mortality trend is declining, the resulting incidence may be less than expected compared with methods involving a linear projection of past incidence into the future. This may explain in part the lower projections of numbers of cases of cancer using the University of Queensland model compared with other studies.

Projections for injury and poisoning were calculated differently, because projected incidence and prevalence rates for these were not available from the Centre for Burden of Disease and Cost-effectiveness. Data for hospital separations between 1989–90 and 2003–04 from the NSW Inpatient Statistics Collection was used to develop a model that was then applied to population projections to obtain estimates of the number of injury hospitalisations for 2001, 2006, 2011, 2016, 2021 and 2026.