

SLA POPULATION PROJECTIONS 2002-2022

Method

The cohort-component method is used for these projections. In this method, the base population is projected forward annually by calculating the effect of births, deaths and migration within each age-sex group according to the specified fertility, mortality and migration assumptions.

Projected resident population by single year of age and sex is produced in successive four stages - national, State/Territory, capital city/balance and finally SLA. Assumptions are made for each level and the resulting projected components and population are constrained to the geographic level above for each year.

Assumptions for Australia, NSW, Sydney and Balance of NSW Projections

These projections are from the medium scenario (Series B) in *Population Projections 2002-2101* (ABS Cat. 3222.0), published in September 2003. They incorporate the following general assumptions:

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| Fertility: | Total fertility rate from 2011 - Australia=1.60, NSW=1.63. |
| Mortality: | Slowing rate of mortality decline, 2051 life expectancy at birth of 84 and 88 years for males and females respectively. |
| Overseas Migration: | Net 100,000 p.a. for Australia, 38,900 of which goes to NSW (from 2006). |
| Interstate Migration: | Net -17,000 p.a. for NSW (from 2005) |

The Sydney/Balance of NSW assumptions are constrained to the NSW assumptions and reflect historical differentials (eg. TFR in 2011: Sydney =1.57, Balance NSW =1.79.)

The latest available base populations were used for the projections, for Australia and States/Territories preliminary 30 June 2002 Estimated Resident Population while for Sydney/Balance of NSW it was final 30 June 2001 ERP.

Assumptions for SLA Projections

The SLA projections have a preliminary 30 June 2002 ERP base and assumptions constrained to sum to their respective ones at Sydney/Balance of NSW level. SLA fertility and mortality assumptions are derived by combining the State assumptions with historical patterns observed in each SLA. For example, Bega Valley has 6% fewer deaths historically than it would have had NSW mortality rates applied, so NSW mortality assumptions discounted by 6% are used for that SLA. Net migration assumptions are based on historical trends for each SLA and constrained to the relevant Sydney/Balance of NSW (internal + overseas) migration assumptions.

Nature of Projections

The nature of the projection method and inherent fluctuations in population dynamics mean that care should be taken when using and interpreting the projection

results. The projections are not exact forecasts but simply illustrate future changes which would occur if the stated assumptions were to apply over the projection period. While the projections take account of land planning and other decisions by governments known at the time the projections were derived, the ABS does not always have access to the policies or decisions of Commonwealth, State and Local Governments and businesses that assist in accurately forecasting small area populations. The projections do not attempt to allow for non-demographic factors (eg. major government policy decisions, economic factors, catastrophes, wars) which may affect future demographic behaviour.

The unpredictability of migration trends, especially in the short-term, can have a significant effect on projection results. Special care should be taken with small SLAs (populations under 1,000 people) and small age-sex cells (populations under 100 people). Accordingly, SLAs with a base population of less than 500 have generally been kept constant as the age-sex cells are too small for reliable projection.

Alternative Series

The ABS produces many alternative State/Territory projection series using different combinations of assumptions on fertility, mortality, overseas migration and interstate migration to illustrate a range of possible outcomes. While a similar broad range of future SLA scenarios is desirable, the problem of capturing true SLA variability while maintaining Sydney/Balance constraints is acute, as are resourcing limitations for such work.

Important

It is important to recognise that the projection results given in this report simply reflect the assumptions made about future fertility, mortality and migration trends. While the assumptions are formulated on the basis of an objective assessment of demographic trends over the past decade and their likely future dynamics, there can be no certainty that they will be realised.

While ABS takes responsibility for the method employed, the assumptions used are the final responsibility of the client, and the projections are not official ABS population statistics. They were originally produced for the Commonwealth Department of Health and Ageing.

No liability will be accepted by the Australian Bureau of Statistics for any damages arising from decisions or actions based upon these population projections.

Reference

The projections should be referred to as "...projections prepared by the ABS according to assumptions agreed to by [client name]"