

# POPULATION PROJECTIONS FACT SHEET

### WHAT ARE POPULATION PROJECTIONS?

Population projections illustrate how the Australian population would change in the future if specific patterns of fertility (births), mortality (deaths) and migration were to occur. These potential scenarios are based on assumptions regarding what could happen, according to recent and long-term demographic trends. As we do not know what will happen in the future, a number of different assumptions are used to illustrate a range of possible outcomes. These outcomes include demographic characteristics such as population level, growth, distribution and composition.

### WHAT ARE POPULATION PROJECTIONS USED FOR?

Population projections are used by governments, policymakers, planners, the private sector and others for a range of purposes including planning. They are commonly used to estimate future demand for products, services, infrastructure, energy, water and funding. For example, a high growth area with a young population may require investment in public transport, day care centres and schools. Currently, population projections are important for considering the possible outcomes of an ageing Australian population.

### WHAT IS THE DIFFERENCE BETWEEN A PROJECTION AND A FORECAST?

The ABS' population projections do not predict or forecast how the population of Australia will look in the future. They do not incorporate any non-demographic factors which influence population change, such as government migration policy, improvements in health treatment or the occurrence of natural disasters. Projections only show how the population of Australia would change if the demographic assumptions made were to eventuate over the projection period. This may or may not happen, so projections illustrate possibilities.

### WHAT METHOD DOES THE ABS USE TO PRODUCE POPULATION PROJECTIONS?

The ABS uses a method that involves making assumptions about future levels of fertility, mortality, net overseas migration and net interstate migration. These are applied to a starting (or base) population (in this case, Australia's population as at 30 June 2012), split by sex and single year of age, to obtain a projected population for the following year. The assumptions are then applied to this new (projected) population to obtain a projected population for the next year and so on, through to the end of the projection period.

# WHAT PERIOD IS COVERED?

The population of Australia as at 30 June 2012 is used as the base for the projection series. The population is then projected for the period 30 June 2013 to 30 June 2101 for Australia, and 30 June 2013 to 30 June 2061 for the states, territories, capital cities and rest of state/territory regions.

# WHAT COMPONENTS OF POPULATION CHANGE ARE CONSIDERED IN ABS POPULATION PROJECTIONS?

Various population growth and demographic information is taken into account in the creation of population projections.

#### These include:

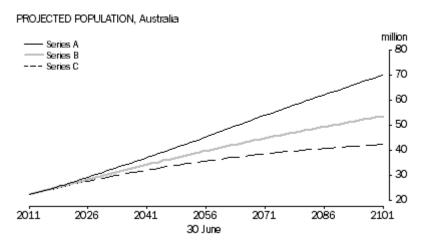
- Total and age-specific fertility rates
- The ratio of males to females
- · Life expectancy at birth
- Total and age-specific death rates
- Migration flows internationally and interstate, and
- Differences in these trends between states, territories, capital cities and rest of state/territory regions.

### WHAT ASSUMPTIONS ARE USED AND HOW ARE THEY DETERMINED?

Assumptions are formulated based on demographic trends over the past decades in Australia and overseas. The ABS also consults various individuals and government department representatives at the national and state/territory level. Three assumptions (high, medium and low) are used for fertility, net interstate migration and net overseas migration. Two assumptions (high and medium life expectancy) are used to indicate mortality. Net overseas migration also has a zero assumption which illustrates the contribution of migration to the Australian population. Observed differences between states, territories, capital cities and rest of state/territory regions are also incorporated. There are 24 possible combinations of assumptions at a national level and 72 at a state and sub-state level. All of these yield different potential populations.

## WHAT ARE SERIES A, B AND C?

Future uncertainty, along with the subjective nature of assessing recent trends, means that using a range of possible outcomes rather than a single series gives a more useful view of the possible future size, distribution, growth and age and sex structure of Australia's population. Three projection series (Series A, B and C) are often used to provide a useful and accessible range of projections for analysis and discussion.



### **FURTHER INFORMATION**

For more information, please see the release *Population Projections, Australia, 2012 (base) to 2101* (cat. no. 3222.0) or visit the ABS website at <a href="www.abs.gov.au">www.abs.gov.au</a>. The National Information and Referral Service can also be contacted on 1300 135 070.