

APPENDIX A: PARAMETERS AND FURTHER INFORMATION

This appendix provides information on the parameters used in producing this Budget Paper.

Budget Paper No. 1: *Budget Strategy and Outlook 2012-13, Statement 2: Economic Outlook*, provides information on the forecasting approach used in the 2012-13 Budget.

POPULATION

Population data are used to distribute funding between the States and in the calculation of annual growth factors.

Estimates of State populations

Table A.1 sets out the State population series used in this Budget Paper.

Table A.1: Population by State, at 31 December

million	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total
2011	7.340	5.660	4.616	2.376	1.663	0.512	0.368	0.232	22.768
2012(a)	7.424	5.750	4.695	2.428	1.680	0.516	0.375	0.235	23.101
2013(a)	7.508	5.839	4.773	2.480	1.696	0.519	0.381	0.238	23.434
2014(a)	7.592	5.929	4.851	2.532	1.713	0.522	0.387	0.240	23.768
2015(a)	7.677	6.020	4.929	2.584	1.730	0.526	0.394	0.243	24.102

(a) Treasury estimates.

The State populations for 2011-12 to 2015-16 are estimates of the population of each State on 31 December in the respective year. They are constructed using the latest demographic data available from the Australian Bureau of Statistics (ABS) and Treasury assumptions. These assumptions are in respect of fertility, mortality, net overseas migration and interstate migration.

Fertility

In the *2010 Intergenerational Report*, it was assumed that the total fertility rate (TFR) would fall to exactly 1.9 by 2013 and stay at that level for the remainder of the projection period. As reported by the ABS in their publication *Births, Australia, 2010* (cat. no. 3301.0) the TFR fell to 1.89 babies per woman in 2010, slightly below the long-term TFR of 1.9 assumed in the *2010 Intergenerational Report*. Based on this evidence, the Treasury's assumption has been altered slightly and now assumes that the TFR will fall to 1.85 babies per woman by 2015 and then stay at that level for the remainder of the projection period.

Mortality

The mortality assumptions remain those used in the 2011-12 Budget. They are based on the medium assumptions used in the ABS *Population Projections, 2006-2101*

(cat. no. 3222.0). In these assumptions, a continuing decline in mortality rates across Australia, with state differentials persisting, is assumed. Overall, mortality is assumed to decline to the year 2013, at the rate observed over the period 1971-2005, from the level observed in the latest death registration data for 2010-11.

Net overseas migration

Net overseas migration is the difference between permanent and long-term arrivals, and permanent and long-term departures.

Increased volumes of international movements across Australia's borders, changes to the composition of international visitors and their duration of stay behaviour, and international travel patterns of Australian residents (including duration of absence and frequency of travel) make estimates of net overseas migration difficult.

In the *2010 Intergenerational Report*, net overseas migration was assumed to fall relatively sharply from an average of around 244,000 a year over the three years to June 2009 to 180,000 a year from 2012. As reported in the 2011-12 Budget, the decline in net overseas migration was larger than expected at the time the Intergenerational Report was released. Consequently, net overseas migration was expected to dip below the long-term Intergenerational Report assumption of 180,000 per annum in the years ending December 2010 and 2011, before returning to the long-term assumption. Net overseas migration was 168,800 in 2010 and based on three-quarters of published data, is expected to be 175,000 in 2011. A return to the long-term *2010 Intergenerational Report* assumption of 180,000 persons per annum in 2012 is assumed.

Table A.2 shows the net overseas migration assumptions used in this Budget Paper.

Table A.2: Net overseas migration

	2011	2012	2013	2014	2015
Net overseas migration, Australia	175,000	180,000	180,000	180,000	180,000

State shares of net overseas migration are estimated by using a weighted average of the three most recent observed years – 2009, 2010 and 2011 – with weights of 1, 2 and 4 respectively.

Interstate migration

Similar to State shares of net overseas migration, the Treasury's estimates of net interstate migration are based on a weighted average of the three most recent observed years – 2009, 2010 and 2011 – with weights of 1, 2 and 4 respectively.

Table A.3: Net interstate migration

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total
2012	-11,400	2,700	7,600	4,600	-2,400	-200	500	-1,400	0
2013	-11,400	2,700	7,600	4,600	-2,400	-200	500	-1,400	0
2014	-11,400	2,700	7,600	4,600	-2,400	-200	500	-1,400	0
2015	-11,400	2,700	7,600	4,600	-2,400	-200	500	-1,400	0

AGE/GENDER WEIGHTED POPULATIONS

The Treasury's estimates of State population have been used to calculate the population weighted for hospital utilisation for different age/gender cohorts. The weighted hospital utilisation forms part of the growth factor for the National Healthcare Specific Purpose Payment and from 1 July 2012, the base funding component of National Health Reform funding.

Table A.4: Age/gender weighted population

million	2011	2012	2013	2014	2015
Weighted population, Australia	23.095	23.575	24.051	24.538	25.037

SCHOOL ENROLMENTS

Student enrolment projections are based on a grade progression ratio model, which incorporates student movements between government and non-government sectors. These projections do not take into account future economic, migration or social policy changes, however, do take into account the proposal by Queensland to transfer the Year 7 primary program to their secondary program, starting from 2015.

Table A.5: School enrolments

million	2011	2012	2013	2014	2015
FTE enrolments, government schools	2.290	2.303	2.325	2.356	2.385

WAGE AND COST INDICES

Table A.6 shows the wage and cost indices used in this Budget Paper, rounded to the nearest quarter.

Table A.6: Wage and cost indices

per cent	2011-12	2012-13	2013-14	2014-15	2015-16
Average government schools					
recurrent costs	5 3/4	6	6	6	6
Health specific price index	3	3	3	3	3
Health technology index	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Wage cost index - 1	1 3/4	1 3/4	1 3/4	2	2
Wage cost index - 6	2 1/4	2 1/2	2 1/2	2 1/4	2 1/4

DATA SOURCES

The information in Part 4, Appendix C and Appendix D of this Budget Paper is consistent with the ABS Government Finance Statistics reporting framework for the public sector.

Budget Paper No. 3

Commonwealth data are sourced from the Commonwealth Government Final Budget Outcomes, ABS, and Commonwealth Government Consolidated Financial Statements. See Budget Paper No. 1: *Budget Strategy and Outlook 2012-13, Statement 10: Historical Australian Government Data*, for more information.

State data for 2011-12 onwards are sourced from States' 2011-12 mid-year financial reports, with the exception of Victoria and the Northern Territory which are sourced from 2012-13 Budgets.

Commonwealth Government budget aggregates have been backcast to 2000-2001 (where applicable) for recent accounting clarification changes that require revisions to the historic series, ensuring that data are consistent across the period.

The 2012-13 Budget also includes revisions to Commonwealth Government budget aggregates that improve the accuracy and comparability of the data through time. See Budget Paper No. 1: *Budget Strategy and Outlook 2012-13, Statement 10: Historical Australian Government Data*, for more information on these revisions.

FURTHER INFORMATION

Several publications of the ABS also provide information that is relevant to analysing federal financial relations, including:

- *Australian Demographic Statistics* (cat. no. 3101.0);
- *Population Projections, 2006-2101* (cat. no. 3222.0);
- *Taxation Revenue, Australia* (cat. no. 5506.0);
- *Government Finance Statistics, Australia* (cat. no. 5512. 0);
- *Australian System of Government Finance Statistics – Concepts, Sources and Methods* (cat. no. 5514.0);
- *Information Paper: Developments in Government Finance Statistics* (cat. no. 5516.0); and
- *Information Paper: Accruals Based Government Finance Statistics* (cat. no. 5517.0).

Several publications by the Commonwealth Grants Commission can also provide information relevant to the analysis of federal financial relations relating to the distribution of GST revenue. In relation to the 2012-13 financial year, the relevant publication is *Report on GST Revenue Sharing Relativities – 2012 Update*.