

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 2013-14*, Statement 2: *Economic Outlook*, provides information on the forecasting approach used in the 2013-14 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
2012	7.332	5.670	4.602	2.468	1.661	0.512	0.378	0.236	22.860
2013	7.426	5.773	4.688	2.541	1.679	0.514	0.386	0.239	23.246
2014	7.523	5.878	4.776	2.617	1.697	0.516	0.394	0.242	23.643
2015	7.622	5.986	4.865	2.695	1.716	0.517	0.402	0.244	24.048
2016	7.722	6.095	4.955	2.773	1.735	0.519	0.410	0.247	24.457

The State populations for 2012-13 to 2016-17 are Treasury 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. Consistent with the latest published births data, a TFR of 1.87 is assumed for 2013. This is slightly below the long term TFR of 1.9 assumed in the *2010 Intergenerational Report*. The Treasury fertility assumption for the 2013-14 Budget is 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. This is consistent with the fertility assumption in the 2012-13 Budget.

Mortality

These 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 2015, at the rate observed over the period 1971-2005, from the level observed in the latest death registration data for 2011.

Net overseas migration

Net overseas migration decreased significantly from its peak of 316,000 in the year ending December 2008 to its trough of 167,000 in the year ending March 2011. Since then, net overseas migration has been increasing reaching 208,000 in the year ended June 2012, and is expected to be 220,000 in the year ending December 2012. The Department of Immigration and Citizenship (DIAC) in their publication, *The Outlook for Net Overseas Migration, September 2012*, is forecasting net overseas migration to increase to 244,400 in the year ending December 2015. The DIAC forecasts take into consideration current government policy. Currently, the migration program is 214,000 places, 194,000 places under the permanent migration program and 20,000 places under the humanitarian migration program.

As a consequence of the Knight Review of the Student Visa Program, DIAC is forecasting a short term increase in net overseas migration due to an increase in the number of higher education students coming to Australia. In addition, DIAC is also forecasting an increase in net overseas migration from Australian and New Zealand citizens who do not need a visa to enter or leave Australia.

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

Table A.2: Net overseas migration

	2012	2013	2014	2015	2016
Net overseas migration, Australia	220,000	228,600	237,900	244,400	244,400

State shares of net overseas migration are estimated by using a weighted average of the three most recent observed years – 2010, 2011 and 2012 – with weights of 1, 2 and 4 respectively.

The 2013-14 Budget population projections and related estimates include a correction made to the distribution of State shares of net overseas migration used at the *Mid-Year Economic and Fiscal Outlook 2012-13* (MYEFO) which contained an error in ABS data. The error resulted from a minor methodological inconsistency, where instead of using recent net overseas migration history (as per the agreed method), recent total migration history (the net total of interstate and overseas migration) was inadvertently used to calculate each State's share of net overseas migration. This error influenced the State shares of population-based estimates. The 2013-14 Budget estimates correct for the error.

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 – 2010, 2011 and 2012 – with weights of 1, 2 and 4 respectively. Due to data lags, the 2012 observation includes an assumption for the December quarter based on weighted averages of arrivals and departures for December quarters 2009 to 2011.

Table A.3: Net interstate migration

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total
2013	-16,350	2,200	10,400	8,900	-2,600	-1,700	900	-1,750	0
2014	-16,350	2,200	10,400	8,900	-2,600	-1,700	900	-1,750	0
2015	-16,350	2,200	10,400	8,900	-2,600	-1,700	900	-1,750	0
2016	-16,350	2,200	10,400	8,900	-2,600	-1,700	900	-1,750	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.

Table A.4: Age/gender weighted population

million	2012	2013	2014	2015	2016
Weighted population, Australia	23.338	23.839	24.357	24.894	25.449

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 proposals by Queensland and Western Australia to transfer the Year 7 primary program to their secondary program, starting from 2015. These figures only include students funded by the Australian Government.

Table A.5: School enrolments

million	2012	2013	2014	2015	2016
FTE enrolments, government schools(a)	2.317	2.349	na	na	na

(a) These figures are relevant for the National Schools SPP until 31 December 2013. It is proposed that from 1 January 2014, National Education Reform funding will replace the National Schools SPP.

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	2012-13	2013-14	2014-15	2015-16	2016-17
Average government schools					
recurrent costs(a)	3 3/4	5 1/2	na	na	na
Health specific price index	2 1/4	2 1/4	2 1/4	2 1/4	2 1/4
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 1/2	2	1 3/4	1 3/4
Wage cost index - 6	2 1/4	1 3/4	2	2	2

(a) These figures are relevant for the National Schools SPP until 31 December 2013. It is proposed that from 1 January 2014, National Education Reform funding will replace the National Schools SPP. AGSRC for 2013 has yet to be finalised.

DATA SOURCES

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

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 2013-14, Statement 10: Historical Australian Government Data*, for more information.

State data for 2012-13 onwards are sourced from States' 2012-13 mid-year financial reports, with the exception of Victoria which is sourced from the 2013-14 Victorian Budget.

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 2013-14 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 2013-14, 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 2013-14 financial year, the relevant publication is *Report on GST Revenue Sharing Relativities – 2013 Update*.

