

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 2017-18, Statement 2: Economic Outlook*, provides information on the forecasting approach used in the 2017-18 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
2016	7.783	6.129	4.874	2.629	1.713	0.520	0.399	0.245	24.292
2017	7.903	6.250	4.942	2.668	1.728	0.522	0.404	0.246	24.663
2018	8.027	6.377	5.012	2.707	1.743	0.524	0.410	0.248	25.047
2019	8.158	6.508	5.084	2.748	1.759	0.527	0.415	0.249	25.448
2020	8.294	6.644	5.158	2.789	1.776	0.529	0.421	0.251	25.863

The State populations for 2016 to 2020 are Treasury estimates as at 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 on fertility, mortality, net overseas migration and interstate migration.

Fertility

For the 2017-18 Budget, the Treasury fertility assumption is that the Total Fertility Rate will equal 1.830 babies per woman in 2016, and is assumed to rise to 1.900 babies by 2019 and remain stable for the remainder of the projection period. This assumption is consistent with that in the *2015 Intergenerational Report*.

Mortality

The mortality assumptions are based on the medium assumptions used in the ABS *Population Projections, 2012-2101* (cat. no. 3222.0). In these assumptions, a continuing decline in mortality rates across Australia, with State differentials persisting, is assumed. Overall, life expectancy is assumed to improve to the year 2019 at the rate observed over the period 1982 to 2011.

Net overseas migration

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

Table A.2: Net overseas migration

	2016	2017	2018	2019	2020
Net overseas migration, Australia	194,058	209,018	216,447	226,184	235,379

State shares of net overseas migration are estimated by using a weighted average of the three most recent observed years – 2012, 2013 and 2014 – with weights of one, two and four respectively.

Interstate migration

Table A.3 shows the net interstate migration assumptions used in this Budget Paper.

Table A.3: Net interstate migration

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total
2017	-8,200	11,200	7,300	-1,900	-4,200	-600	-800	-2,800	-
2018	-8,200	11,200	7,300	-1,900	-4,200	-600	-800	-2,800	-
2019	-8,200	11,200	7,300	-1,900	-4,200	-600	-800	-2,800	-
2020	-8,200	11,200	7,300	-1,900	-4,200	-600	-800	-2,800	-

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 – 2013, 2014 and 2015 – with weights of one, two and four respectively. Due to data lags, the 2016 observation includes an assumption for the December quarter based on weighted averages of arrivals and departures for December quarters 2013 to 2015.

WAGE COST INDICES

Table A.4 shows the wage cost indices used in this Budget Paper, rounded to the nearest quarter of a per cent.

Table A.4: Wage cost indices

per cent	2016-17	2017-18	2018-19	2019-20	2020-21
Wage cost index - 1	1 1/2	1 1/4	1 1/2	1 1/2	1 1/2
Wage cost index - 6	1 1/2	1 1/2	1 1/2	1 3/4	1 3/4

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 2017-18, Statement 11: Historical Australian Government Data*, for more information.

State data for 2016-17 onwards are from the most recent publicly available State financial reports. Estimates for Victoria and the Northern Territory are based on their 2017-18 budgets. Western Australia's estimates are from its 2016-17 Pre-election financial report. The remaining States' estimates are drawn from their 2016-17 mid-year financial reports. State data for years prior to 2016–17 are sourced from the ABS.

The 2017-18 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 2017-18, Statement 11: 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 data, including:

- *Australian Demographic Statistics* (cat. no. 3101.0);
- *Population Projections, 2012-2101* (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).

Commonwealth Grants Commission publications also provide information relevant to the analysis of federal financial relations relating to the distribution of GST revenue. In relation to the 2017-18 financial year, the relevant publication is the *Report on GST Revenue Sharing Relativities – 2017 Update*.