

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 2024–25, Statement 2: Economic Outlook* provides information on the forecasting approach used in the 2024–25 Budget.

Population

Population data are used to distribute funding between the state and territory governments (states) and in the calculation of annual growth factors.

Estimates of state populations

The Centre for Population in the Department of the Treasury (the Centre) constructs state population projections using the latest demographic data and incorporating assumptions regarding fertility, mortality, net overseas migration and net interstate migration.

The Centre estimates population and components of change on a financial year basis. Projected population for the mid-point of the financial year (31 December, Table A.1) is the simple average of the population at the beginning and end of the financial year (Table A.2).

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

million	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total(a)	Australia
2023	8.419	6.894	5.520	2.917	1.864	0.574	0.471	0.253	26.910	26.915
2024	8.554	7.035	5.624	2.975	1.883	0.575	0.478	0.254	27.379	27.384
2025	8.675	7.164	5.710	3.016	1.898	0.578	0.485	0.256	27.782	27.787
2026	8.796	7.291	5.790	3.050	1.912	0.581	0.493	0.258	28.172	28.177
2027	8.913	7.416	5.867	3.084	1.926	0.585	0.501	0.260	28.551	28.556

a) 'Total' is the sum of the states and territories shown, and excludes Jervis Bay Territory, Christmas Island, the Cocos (Keeling) Islands and Norfolk Island.

Table A.2: Population by state, at 30 June

million	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	Total(a)	Australia
2022-23(b)	8.342	6.815	5.460	2.881	1.852	0.573	0.467	0.253	26.644	26.649
2023-24	8.495	6.972	5.579	2.953	1.875	0.574	0.475	0.253	27.177	27.182
2024-25	8.613	7.098	5.669	2.998	1.891	0.576	0.481	0.255	27.581	27.586
2025-26	8.738	7.229	5.751	3.033	1.906	0.580	0.490	0.257	27.983	27.988
2026-27	8.855	7.354	5.829	3.067	1.919	0.583	0.497	0.259	28.362	28.367
2027-28	8.971	7.478	5.906	3.101	1.933	0.586	0.504	0.261	28.740	28.745

a) 'Total' is the sum of the states and territories shown, and excludes Jervis Bay Territory, Christmas Island, the Cocos (Keeling) Islands and Norfolk Island.

b) Estimate for 2022–23, from ABS National, state and territory population, September 2023.

Fertility

Assumptions about the fertility rate are based on analysis undertaken and commissioned by the Centre (Table A.3). The total fertility rate is assumed to be 1.64 babies per woman in 2023–24 before falling to 1.63 by 2027–28. Projected state fertility rates are assumed to move in line with the national fertility rate.

Table A.3: Total fertility rate, for years ending 30 June

	2022-23(a)	2023-24	2024-25	2025-26	2026-27	2027-28
Total fertility rate, Australia	1.58	1.64	1.64	1.64	1.63	1.63

a) Outcome for 2022–23, from ABS National, state and territory population, September 2023.

Mortality

Assumptions about life expectancy at birth are based on the Australian Government Actuary mortality improvement factors and the 2019–21 Australian Bureau of Statistics life tables (Table A.4). Life expectancies have been adjusted until 2025–26 to account for the impact of COVID-19. Life expectancies are then assumed to improve at the same average annual rate that has been observed over the past three decades. Projected state mortality rates are assumed to move in line with the national mortality rate.

Table A.4: Projected life expectancy at birth, for years ending 30 June

	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Male life expectancy at birth, Australia	81.1	81.6	82.0	82.3	82.5	82.7
Female life expectancy at birth, Australia	85.0	85.5	85.9	86.1	86.3	86.4

Net overseas migration

The Centre forecasts net overseas migration (Table A.5). The forecasts incorporate official statistics prepared by the Australian Bureau of Statistics, as well as information provided by the Department of Home Affairs, including data on international arrivals and departures, offshore visa grants, and the number of temporary visa holders in Australia.

Table A.5: Net overseas migration, for years ending 30 June

	2022-23(a)	2023-24	2024-25	2025-26	2026-27	2027-28
Net overseas migration, Australia	528,000	395,000	260,000	255,000	235,000	235,000

a) Outcome for 2022–23, from ABS National, state and territory population, September 2023.

Interstate migration

The Centre produces assumptions about future net interstate migration (Table A.6). Assumptions are modelled using historical interstate movements data supplied by the Australian Bureau of Statistics. They are also informed by recent population revisions to account for data from the 2021 Census.

Table A.6: Net interstate migration by state, for years ending 30 June

	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
2022-23(a)	-34,200	-1,900	32,300	11,600	-400	-2,600	-1,600	-3,300
2023-24	-28,200	1,500	28,500	7,000	-2,000	-2,200	-1,300	-3,200
2024-25	-23,100	3,100	23,000	3,000	-2,900	-700	-300	-2,100
2025-26	-20,000	4,000	19,700	500	-3,500	200	400	-1,400
2026-27	-20,100	3,800	19,800	600	-3,400	300	400	-1,300
2027-28	-20,300	3,500	19,900	700	-3,300	400	400	-1,300

a) Outcome for 2022–23, from ABS National, state and territory population, September 2023.

Wage cost indices

Table A.7 shows estimated growth in the wage cost indices used in this Budget Paper, rounded to the nearest quarter of a per cent.

Table A.7: Wage cost indices

Per cent	2023-24	2024-25	2025-26	2026-27	2027-28
Wage cost index – 1	3 1/2	3 1/4	2 1/4	2 1/4	2
Wage cost index – 3	4 1/2	3 1/2	2 1/2	2 1/4	2
Wage cost index – 6	5 1/2	3 1/2	2 1/2	2 1/2	2 1/4

Data sources

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

Australian Government data are sourced from the Australian Government Consolidated Financial Statements, Australian Government Final Budget Outcomes, and ABS Government Finance Statistics. See Budget Paper No. 1, *Budget Strategy and Outlook 2024–25 Statement 10: Australian Government Budget Financial Statements*, and *Statement 11: Historical Australian Government Data*, for more information.

Further information

A range of publications provide information that is relevant to analysing federal financial relations data, including:

- *National, state and territory population*
- *Overseas Arrivals and Departures, Australia*
- *Migration, Australia*
- *Births, Australia*
- *Life tables*
- *Deaths, Australia*
- *Taxation Revenue, Australia*
- *Government Finance Statistics, Australia*
- *Australian System of Government Finance Statistics – Concepts, Sources and Methods*
- Information Paper: *Developments in Government Finance Statistics*
- Information Paper: *Accruals Based Government Finance Statistics*
- McDonald, P (2020), *A Projection of Australia's Future Fertility Rates*, Centre for Population Research Paper, Australian Government, Canberra.

Commonwealth Grants Commission publications provide information about the distribution of GST revenue. In relation to the 2024–25 financial year, the most relevant publication is the report *GST Revenue Sharing Relativities – 2024 Update*.