

GST Revenue Sharing Relativities

2022 Update

GST Relativities for 2022-23

March 2022

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A copy of this report can be obtained from the <u>Commission's website</u> (<u>https://www.cgc.gov.au</u>).

Letter of transmittal



Chairperson

Second Floor, Phoenix House 86-88 Northbourne Avenue BRADDON ACT 2612

Telephone: 02 6218 5716 <u>Mike.Callaghan@cgc.gov.au</u> https://www.cgc.gov.au

17 March 2022

The Hon Josh Frydenberg Treasurer Parliament House CANBERRA ACT 2600

Dear Treasurer

As members of the Commonwealth Grants Commission appointed under the *Commonwealth Grants Commission Act 1973*, and in response to the terms of reference from you, we have updated GST relativities for use in distributing GST revenue among the states and territories in 2022-23.

In accordance with those terms of reference, we are also providing the update to the states and territories on 17 March 2022, under embargo.

Yours sincerely

Mike Callaghan AM PSM

1. V. Callela.

Chairperson

J D Petchey

L S Williams AM

The Hon P W Hendy

Member Member

Member

Acknowledgements

The Commission appreciates the co-operation extended to the Commission and its staff during this update by staff of Commonwealth and state Treasuries and other agencies.

The Commission also acknowledges the commitment and excellent contribution of its staff.

Terms of reference



THE HON JOSH FRYDENBERG MP TREASURER

Ref: MS22-000498

Mr Michael Callaghan AM PSM Chairperson Commonwealth Grants Commission Second Floor, Phoenix House 86-88 Northbourne Ave BRADDON ACT 2612

Dear Mr Callaghan

Please find attached the terms of reference for the Commonwealth Grants Commission's 2022 Update of GST Revenue Sharing Relativities.

The Commission should provide its report to the Government and the states and territories by 17 March 2022. The terms of reference also direct that the report be released publicly on 25 March 2022.

Yours sincerely

THE HON JOSH FRYDENBERG MP

/2022

Enc: Terms of reference for the 2022 Update of GST Revenue Sharing Relativities

Terms of Reference for the 2022 Update of GST Revenue Sharing Relativities COMMONWEALTH GRANTS COMMISSION ACT 1973

 I, Josh Frydenberg, Treasurer, pursuant to sections 16, 16A, 16AA and 16AB of the Commonwealth Grants Commission Act 1973 (the Act) refer to the Commission for inquiry into and report upon the recommended GST revenue sharing relativities to be used to distribute GST revenue among the states, the Northern Territory and the Australian Capital Territory (the states) in 2022-23.

GST Relativities for 2022-23

- 2) The Commission should undertake an assessment of the GST revenue sharing relativities recommended to be used to distribute GST revenue among the states in 2022-23, consistent with the objective in subsection 16AB(2) of the Act, the transitional proportions in subsection 16AB(3) of the Act, the GST revenue sharing relativity factor in subsection 8(2A) of the Federal Financial Relations Act 2009 and the pool top-ups for a payment year as outlined in section 8A of the Federal Financial Relations Act 2009.
 - (a) The Commission's assessment should be based on the assessment years 2018-19 to 2020-21 inclusive.
 - (b) To assist in ensuring that each state and territory will get the better of the current or the former GST distribution, the Commission should also provide relativities that would have applied if the *Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of the GST) Act 2018* had not been enacted.
- 3) The Commission's assessment should take into account the Intergovernmental Agreement as defined under the Federal Financial Relations Act 2009, which provides that GST revenue will be distributed among the states in accordance with the principle of horizontal fiscal equalisation (HFE).
- 4) Subject to paragraphs 5 6, the Commission's assessment should be based on the application of the same principles, categories and methods of assessment that the Commission used to calculate the GST revenue sharing relativities in its Report on GST Revenue Sharing Relativities 2021 Update.
- 5) The Commission's assessment should treat Commonwealth payments to the states as follows:
 - (a) National Specific Purpose Payments (NSPPs), National Health Reform (NHR) funding, Quality Schools funding (for government schools) and National Partnership project payments should affect the relativities, recognising that these payments provide the states with budget support for providing standard state services.
 - NHR funding and corresponding expenditure relating to the provision of cross-border services to the residents of other states should be allocated to states on the basis of residence.

- (b) National Partnership facilitation and reward payments should not affect the relativities, so that any benefit to a state from achieving specified outputs sought by the Commonwealth, or through implementing reforms, will not be redistributed to other states through the horizontal fiscal equalisation process.
- (c) General revenue assistance, excluding GST payments, will affect the relativities, recognising that these payments are available to provide untied general budget support to a state.
- (d) Notwithstanding subparagraphs 5(a) (c), the Commission may determine that it is appropriate for particular payments to be treated differently, reflecting the nature of the particular payment and the role of state governments in providing particular services.
- (e) Those payments which the Commission has previously been directed to treat as having no direct influence on the relativities, including payments for which the Commission has been directed to apply a 50 per cent discount, should continue to be treated in that way. Where those payments are replaced, the treatment of the new payment should be guided by subparagraphs 5(a) – (d), unless otherwise directed.

GST Relativities for 2022-23 - Consultation and Data

- 6) Where possible, the Commission should:
 - (a) aim to have assessments that are simple and consistent with the quality and fitness for purpose of the available data;
 - (b) use the latest available data consistent with this; and
 - (c) ensure robust quality assurance processes.
- 7) If data problems arise, subject to consultation with the states, the Commission should proceed on the basis that:
 - (a) new, more reliable data that was not previously considered would be used in the first possible update, if method changes were not required; or
 - (b) if overcoming the data problems necessitated method changes, revised methods would be used in the first possible update, subject to consultation with the states during that update.

GST Relativities for 2022-23 - The Report

- 8) The Commission should provide a copy of its report on GST Relativities for 2022-23, under embargo, to the Commonwealth and the states on or before 17 March 2022. The Commission should release the report publicly on 25 March 2022.
- 9) The Commission should consult the Commonwealth and the states before deciding on any changes in methods that arise as a result of a significant change in arrangements which govern Commonwealth-state relations and which are considered appropriate for the Commission to fulfil its obligations in respect of these terms of reference.

10) To the extent possible, the Commission should, upon reporting, provide all parties with details underpinning its calculations and assessments, and endeavour to meet requests for supplementary calculations.

JOSH FRYDENBERG

16/ 3 /2022

List of acronyms

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
CoE	Compensation of Employees
GST	Goods and Services Tax
SDC	Socio-demographic composition

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Executive Summary

The 2022 Update presents the recommended GST relativities for 2022-23.

Recommended GST relativities

The table below sets out the distribution of the estimated GST pool in 2022–23 based on the Commission's recommendations. Comparing this update with last year, it shows each state's GST relativity and share of the GST pool, and its estimated amount of GST. The table does not include no worse off payments by the Commonwealth.

Change in distribution of GST from 2021-22 to 2022-23, excluding no worse off payments

	GST rela	tivities	GST s	hares	GST dist	ribution	
	2021-22	2022-23	2021-22	2021–22 2022–23		2022-23	
			%	%	\$m	\$m	
New South Wales	0.95617	0.95065	30.3	30.0	22,107	23,218	
Victoria	0.92335	0.85861	23.8	22.2	17,411	17,167	
Queensland	1.05918	1.03377	21.5	21.2	15,739	16,384	
Western Australia	0.41967	0.70000	4.4	7.3	3,199	5,682	
South Australia	1.34719	1.28411	9.3	8.9	6,785	6,865	
Tasmania	1.96067	1.85360	4.1	3.9	3,024	3,035	
Australian Capital Territory	1.16266	1.09250	2.0	1.8	1,426	1,421	
Northern Territory	4.79985	4.86988	4.6	4.7	3,379	3,644	
Total	1.00000	1.00000	100.0	100.0	73,070	77,416	

Overview

COVID-19, and Commonwealth and state government responses, continue to affect Australia's economy and society. The 2022 Update assesses state circumstances for the 36 months from July 2018 to June 2021, of which 16 months were affected by the pandemic. The Omicron variant emerged in 2021–22, so its impacts are not reflected in this update.

The Treasurer's terms of reference required the Commission to use the same methods it used in its 2021 Update. The 2021 Update used the methods from the Commission's 2020 Review. Therefore, while the pandemic has influenced data used in the calculations, methods for assessing state fiscal capacities have not changed.

To smooth the effects of volatility, the Commission averages three years of data in its assessments, so changes in state circumstances take three years to flow fully through calculations. Hence while the pandemic affected state data, the consequential impact will flow into GST distribution over time.

While the pandemic had an impact, other changes were the main influence on GST distribution. Blending of relativities as part of the transition to the GST distribution arrangements legislated in 2018 continued, and, for the first time, the GST relativity floor of 0.7 operated within the GST pool. These combined impacts increased the relativity of Western Australia and reduced the relativities of the other seven states. The impact on the other states would be ameliorated by the Commonwealth's top-up to the GST pool and no worse off guarantee.

Other important drivers of change over the assessment period include: an increase in the value of iron ore production; shifting patterns of population growth; wage growth and the value of properties transferred; and changes in states' shares of Commonwealth payments.

The GST pool (which includes top-ups but excludes no worse off payments) is estimated to grow by more than \$4 billion. Consequently, most states would receive more GST in 2022–23, despite having a smaller relativity. Victoria is expected to receive less revenue from the GST pool than it received in 2021–22 and the ACT around the same. However, like the other states, they would receive higher overall payments because the 2018 legislated arrangements include no worse off payments by the Commonwealth during the transition period.

COVID-19

The Commission explored whether its methods capture the impact of the pandemic on state revenue raising capacity and drivers of spending. It also considered whether states' responses to the pandemic resulted from different policy choices. States had differing views on these issues.

On balance, the Commission concluded that state responses to the pandemic largely reflected circumstances rather than state-specific policy choices. Consistent with the 2021 Update, it also concluded that the Commission's revenue assessments largely capture the effects of the pandemic on states' revenue raising capacities.

The potential implications for expense assessments were more complex, although the terms of reference for the update required the application of the 2020 Review assessment methods. The Commission focused on health spending, which was directly affected. Consistent with the approach in the 2021 Update, and the terms of reference, it excluded Commonwealth payments under the *National Partnership on COVID-19 Response* on the basis that needs for expenditure supported by these payments had not been specifically assessed. This means these payments did not affect relativities. Consistent with the terms of

reference, the Commission applied the 2020 Review health assessment methods to the state funded spending under the *National Partnership on COVID-19 Response*.

The economic impact of the pandemic resulted in higher spending on business support. This included significant Commonwealth spending (such as JobKeeper Payments), which did not impact the Commission's assessment of GST relativities. While the nature of state spending on business support changed as a result of the pandemic, consistent with the terms of reference, 2020 Review assessment methods have been applied.

The Commission, in consultation with the states, gave detailed consideration to the implications of the pandemic for this update. Further analysis is in <u>New issues in the 2022 Update</u>. The Commission will continue to monitor potential impacts of the pandemic and its ongoing consequences as part of its work for future updates.

Drivers of changes in GST distribution

As well as the GST floor and blended relativities, several other developments affected states' GST distribution.

Strong growth in the value of iron ore production in Western Australia increased its revenue raising capacity. In turn, the GST needs of the other states increased because their relative capacities to raise mining revenue declined.

A high share of national population growth increases a state's relative need to invest in infrastructure, and therefore increases its need for GST. In this update, significant shifts in population growth patterns over the assessment years changed states' relative needs for investment. This change reduced the GST needs of Victoria and increased the needs of most other states, especially Western Australia, the Northern Territory and South Australia.

Lower growth in private sector wages results in less pressure on public sector wage costs and associated delivery of services. This reduced GST needs for Victoria, Queensland, the ACT and the Northern Territory. Higher wage growth increased the GST needs of New South Wales, Western Australia and South Australia.

Victoria's relative capacity to raise stamp duty on conveyances declined, increasing its GST needs, while decreasing the needs of the other states.

Nationally, spending on urban transport infrastructure increased. This increased the relative needs of New South Wales and Victoria, which have higher than average needs in this area. It reduced the relative GST needs of other states, particularly Tasmania and the Northern Territory.

Victoria and Queensland's shares of Commonwealth payments increased, reducing their need for GST compared with 2021–22.

Major drivers of change in GST distribution, 2021–22 to 2022–23, excluding no worse off payments

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Changes in fiscal capacities									
Changes in Mining production	644	253	956	-1,941	35	21	16	16	1,941
Changes in Population growth	-29	-672	250	289	123	8	14	17	701
Changes in Wage costs	103	-88	-322	321	32	-2	-18	-27	456
Changes in Property sales	-72	429	-139	-130	-51	-17	-13	-8	429
Changes in Capital improvements	173	122	-112	-58	-71	-32	-7	-15	295
Changes in Commonwealth payments	68	-40	-140	-12	89	10	10	14	192
Other revenue effects (a)	131	-151	88	8	-111	-13	2	45	275
Other expense effects (a)	176	-59	-121	137	-92	-63	-25	49	361
Total change in fiscal capacities	1,195	-206	459	-1,387	-47	-87	-21	92	1,747
Effect of GST floor and blended relativities	-1,298	-1,063	-839	3,667	-280	-84	-69	-35	3,667
Change in population	-95	-10	83	12	3	2	-1	6	106
Change in pool (b)	1,309	1,035	941	191	404	180	85	201	4,346
Total change in GST	1,111	-244	645	2,483	80	11	-5	265	4,346

⁽a) Includes other changes in state circumstances and revisions to data.

⁽b) Total increase in GST and top-up payment pool.

Introduction

The Commission has been asked to advise how Goods and Services Tax (GST) revenue should be distributed among the states and territories (states) in 2022–23, in accordance with terms of reference provided by the Treasurer.

The distribution of GST revenue seeks to reduce disparities in the fiscal capacities of states. It takes account of states' different abilities to raise revenue and their different costs in providing services.

Drivers of differences in revenue capacity include the value of mining production, land values and the value of property transactions, and taxable payrolls. States also receive different levels of Commonwealth payments. Costs can vary by state for a range of reasons, including socio-demographic characteristics, wage pressures, population dispersion or density, and rates of population growth.

Changes in states' relative GST needs can be driven by changes in their circumstances (such as increased value of iron ore production, increased value of property transfers, and growth in a state's share of Commonwealth payments), or data revisions (such as updated data on the value of taxable payrolls).

Under the 2018 legislated changes to GST distribution arrangements, 2022-23 is the second year in a 6-year transition away from distributing the GST pool based solely on the Commission's assessment of states' relative fiscal capacities. At the end of these six years, the Commission's assessment will be adjusted so that no state will have a per capita GST share lower than the fiscally stronger of New South Wales or Victoria (the standard state). In the 2022 Update, Victoria is the standard state. For 2022–23, the GST relativities are a weighted average of the previous approach (two-thirds) and the new approach (one-third). The transition will be completed in 2026–27.

The 2018 legislated arrangements also formalised a GST relativity floor of 0.70, rising to 0.75 in 2024–25. For the first time, in 2022–23 this floor is drawn from the GST pool. However, the impact on the payments distributed to the states in 2022–23 will be ameliorated by the annual top-up to the GST pool by the Commonwealth and the no worse off guarantee.

The transition to the legislated arrangements includes a guarantee that no state will be worse off compared to the previous arrangements, which did not include GST pool top-up payments. The guarantee, legislated to apply from 2021–22, will continue until 2026–27. Any no worse off amounts are calculated in accordance with the legislation and provided directly by the Commonwealth.

Chapter 1 sets out the Commission's recommended GST revenue distribution for 2022–23. Chapter 2 explains how the Commission's assessment of each state's GST needs has changed since the 2021 Update. Chapter 3 provides a snapshot of each state's circumstances. Attachment A provides relativities for the Commonwealth Treasurer to use in calculating payments under the no worse off guarantee, and explains how these are calculated. Attachment B explains the Commission's quality assurance process. The Commission consulted with states on new issues arising in this update. State views and Commission responses are outlined in New issues in the 2022 Update.

1. Recommended GST relativities

Key points

- The GST relativity floor of 0.7 under the 2018 legislated arrangements is operating within the GST pool in 2022–23 for the first time. This has a significant effect on the relativities and shares of the GST pool for all states in 2022–23. However, this effect on payments to the states is ameliorated by the annual top-up to the GST pool by the Commonwealth and the no worse off guarantee that applies from 2021–22 under the 2018 legislated GST arrangements.
- Western Australia and the Northern Territory would receive an increased share of the GST pool in 2022–23 compared to 2021–22.
- The GST pool (which includes pool top-up payments but excludes no worse off payments) is estimated to grow by more than \$4 billion. Consequently, several states would receive more GST in 2022–23, despite having a smaller GST relativity. Victoria is expected to receive less revenue from the GST pool in 2022–23 than it received in 2021–22 and the ACT around the same. However, like the other states, they will receive higher overall payments under the 2018 legislated arrangements, which include no worse off payments by the Commonwealth during the transition period.

Recommended GST relativities and estimated GST pool distribution

The Commission's recommended GST relativities for 2022–23 are presented in Table 1-1. The table also includes the state shares of the GST pool and the estimated GST pool distribution implied by those relativities, and comparisons with 2021–22. It does not include no worse off payments.

Western Australia would have the largest increase in GST relativities and increased share of the GST pool in 2022–23 compared to 2021–22. The Northern Territory's GST relativity and share of the pool would also increase. All other states would receive a smaller share of the GST pool in 2022–23 compared to 2021–22 (excluding no worse off payments).

¹ The GST pool distribution is only an estimate because the final distribution is dependent on actual state populations and GST revenue. These are not known until the Treasurer makes a final determination. Usually there is not a large difference between estimated and actual GST pool distribution. However, large revisions to the estimate for the amount of GST revenue raised in 2021-22 mean that the GST pool distribution for 2021-22 shown in Table 1-1 varies significantly from what was presented in the 2021 Report on GST Revenue Sharing Relativities.

Table 1-1 GST relativities, shares and estimated GST distribution, 2021–22 and 2022–23 (excludes no worse off payments(a))

	GST rela	tivities	GST sl	hares	GST distr	ibution	
	2021–22	2022-23	2021–22	2022-23	2021-22	2022-23	
			%	%	\$m	\$m	
New South Wales	0.95617	0.95065	30.3	30.0	22,107	23,218	
Victoria	0.92335	0.85861	23.8	22.2	17,411	17,167	
Queensland	1.05918	1.03377	21.5	21.2	15,739	16,384	
Western Australia	0.41967	0.70000	4.4	7.3	3,199	5,682	
South Australia	1.34719	1.28411	9.3	8.9	6,785	6,865	
Tasmania	1.96067	1.85360	4.1	3.9	3,024	3,035	
Australian Capital Territory	1.16266	1.09250	2.0	1.8	1,426	1,421	
Northern Territory	4.79985	4.86988	4.6	4.7	3,379	3,644	
Total	1.00000	1.00000	100.0	100.0	73,070	77,416	

Note: The estimated GST pool distribution for 2022–23 was calculated by applying 2022 Update relativities to estimated state populations (at December 2022) and the estimated GST pool for 2022–23.

Source: Commission calculation.

The Commonwealth is anticipating an increase in the GST pool from around \$73 billion in 2021–22 to more than \$77 billion in 2022–23². Therefore, most states would receive a larger payment from the GST pool in 2022–23 than in the previous year. The exceptions are Victoria and, to a lesser extent, the ACT. For these states, the decline in their GST relativities would more than offset their share of the increase in the GST pool. However, like the other states, they would receive higher overall payments under the 2018 legislated arrangements, which include the no worse off payments during the transition period.

The Commonwealth has supplemented the GST revenue that is distributed to the states with other forms of general revenue assistance.

- Since 2019–20, the Commonwealth has made supplementary payments to Western Australia so that it achieves an outcome at least equivalent to a GST relativity of 0.7³. This no longer applies in 2022–23 and the impact of the 0.7 relativity floor is drawn from the GST pool.
- Since 2021–22, the Commonwealth has provided a no worse off guarantee to ensure that, over the transition period, no state receives a lower cumulative amount of financial assistance under the GST arrangements than it would have received prior to the 2018 legislated arrangements taking effect. Details of how no worse off payments are calculated are in Attachment A.

⁽a) Since 2019–20, the Commonwealth has also made supplementary payments to deliver an outcome at least equivalent to a relativity of 0.7 to Western Australia. This no longer applies in 2022–23.

² The GST pool consists of revenue from the GST plus a top-up payment from the Commonwealth. See Mid-Year Economic and Fiscal Outlook (Budget 2021–22), Appendix C, Table C.7.

³ In 2019-20 a payment was also made to the Northern Territory to deliver an outcome equivalent to a relativity of 4.66.

• Since 2021–22, the Commonwealth has topped-up the pool of GST revenue available for distribution to the states. The top-up payment was \$600 million in 2021–22 and is estimated, after indexation, to be \$636 million in 2022–23.

Assessed state budgets

Figure 1-1 illustrates the assessed state budgets per capita for 2022–23. The blue bar on the left shows the total assessed expenditure (expenses and investment) for each state. The bar on the right shows the sum of: assessed own-source revenue; assessed net borrowing; Commonwealth payments; and revenue from the GST pool.⁴



Figure 1-1 Assessed budgets per capita (excludes no worse off payments(a))

(b) Includes expenses and investment.

Source: Commission calculation.

Under the previous GST distribution arrangements, each state's GST share was calculated so that its assessed revenue (including GST) equalled its assessed expenditure.

After blending assessed and standard state relativities and applying the GST relativity floor of 0.7, Western Australia is now assessed to have revenue per capita greater than its assessed expenditure per capita. This can be seen by noting that, for Western Australia, the revenue bar on the right is taller than the expenditure bar on the left. All other states are assessed to have slightly less assessed revenue than assessed expenditure.

⁽a) Since 2019–20, the Commonwealth has also made supplementary payments to deliver an outcome at least equivalent to a relativity of 0.7 to Western Australia. This no longer applies in 2022–23.

⁴ The terms used in the paragraph are defined in the glossary.

Assessed, standard state, blended and GST relativities

Table 1-2 shows how GST relativities were derived from assessed relativities⁵ and Table 1-3 shows the estimated distribution of the GST pool for each stage of the process. See box below for an explanation.

Table 1-2 Assessed relativities to GST relativities, 2022-23

	Assessed relativities	Standard state relativities	Blended relativities	GST relativities
New South Wales	1.01373	0.93448	0.98742	0.95065
Victoria	0.92170	0.84245	0.89538	0.85861
Queensland	1.09684	1.01758	1.07053	1.03377
Western Australia	0.15784	0.84245	0.38608	0.70000
South Australia	1.34715	1.26790	1.32087	1.28411
Tasmania	1.91658	1.83733	1.89037	1.85360
Australian Capital Territory	1.15556	1.07631	1.12927	1.09250
Northern Territory	4.93255	4.85329	4.90665	4.86988
Total	1.00000	1.00000	1.00000	1.00000

Source: Commission calculation.

Table 1-3 Contribution of new GST relativities to change in GST distribution 2021–22 to 2022–23 (excludes no worse off payments(a))

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Assessed relativities (b)	1,195	-206	459	-1,387	-47	-87	-21	92	1,747
Blended relativities (c)	-400	-328	-256	1,119	-84	-24	-21	-7	1,119
Implement GST floor (d)	-898	-735	-583	2,548	-197	-60	-48	-28	2,548
Change due to new GST relativities (e)	-102	-1,269	-379	2,280	-327	-171	-89	57	2,337

⁽a) Since 2019–20, the Commonwealth has also made supplementary payments to deliver an outcome at least equivalent to a relativity of 0.7 to Western Australia. This no longer applies in 2022–23.

Source: Commission calculation.

Assessed relativities

Changes in assessed capacity to raise revenue, driven mainly by a large increase in iron ore prices, had a significant impact on assessed relativities for all states. The increase in Western Australia's revenue raising capacity from mining reduced its assessed relativity and increased the assessed relativities of the other states.

⁽b) Effects on the distribution of the 2022–23 GST pool of using 2022 Update assessed relativities instead of 2021 Update assessed relativities.

⁽c) Effects on the distribution of the 2022–23 GST pool of using 2022 Update blended relativities in place of 2021 Update assessed relativities.

⁽d) In this update, the floor of 0.7 is drawn from the GST pool.

⁽e) Sum of (b), (c) and (d).

⁵ These were referred to as relative fiscal capacities in the 2021 Update.

An uneven property boom also changed states' relative capacities to raise stamp duty. Victoria was assessed to have a reduced capacity, increasing its assessed relativity. All other states were assessed to have an increased capacity, reducing their assessed relativities.

Differences between states in relative wage growth were another important influence on assessed relativities for some states. Relatively high wage growth in New South Wales, Western Australia and South Australia increased their assessed relativities. Relatively slow growth in Victoria, Queensland, the ACT and the Northern Territory reduced their assessed relativities.

Victoria's assessed relativity was significantly impacted by changes in relative state population growth. Victoria's population growth in 2017–18 (2.28%) was much higher than the national average (1.57%). Therefore, Victoria was assessed to have well above average investment needs and was allocated a greater share of the GST pool when 2017–18 was included in the assessment years. For the 2022 Update, 2017–18 dropped out of the assessment period and was replaced by 2020–21. For 2020–21, Victoria's population declined (-0.04%) and was below the national average (growth of 0.49%). The reduction in Victoria's population growth over the assessment period reduced its assessed need to invest in infrastructure, and in turn reduced its share of the GST pool.

Chapter 2 explains the key drivers of changes in assessed relativities in more detail. Chapter 3 explains the implications for each state.

Standard state relativities

The equalisation arrangements legislated in 2018 ensure that, from 2026-27, each state's GST relativity will be at least as high as the relativity of the fiscally stronger of New South Wales or Victoria (referred to as the 'standard state'). This means no state will receive less GST per capita than the standard state. Should any state be fiscally stronger than the standard state, its GST relativity will be increased to the relativity of the standard state. Given the GST is distributed from a fixed funding pool, other states' relativities will fall to accommodate this increase.

Victoria has been assessed as the standard state in each of the three assessment years used for the 2022 Update. Western Australia is the only state with an assessed relativity below the standard state. Hence, Western Australia's standard state relativity has been brought up to Victoria's standard state relativity of 0.84245 (see box below). The 2018 legislated arrangements are being introduced over a 6-year period, by blending standard state relativities with assessed relativities.

Blended relativities and the GST relativity floor

The blending of assessed relativities with standard state relativities results in an increased distribution in the GST pool to Western Australia and a reduced distribution to all other states.

Western Australia's blended relativity (0.38608) is below the GST relativity floor of 0.7. Consequently, the blended relativities of all other states are further reduced to give Western Australia a GST relativity of 0.7. The GST pool impact associated with this step is undertaken on a state population basis, so the per capita impact is the same for each state.

Calculation of GST relativities

The Commission's recommendations on GST relativities are consistent with Commonwealth legislation⁶ and the terms of reference issued by the Commonwealth Treasurer. The Commission undertakes several steps to produce GST relativities.

Assessed relativities

Assessed relativities are calculated by comparing each state's relative ability to raise revenue with its relative cost of providing services.

Drivers of differences in revenue capacity include mineral endowments, land values, property transactions, and taxable payrolls. States also receive different levels of Commonwealth payments.

Service costs can vary by state for a range of reasons, including socio-demographic characteristics of the population, wage pressures, population dispersion or density, and rates of population growth.

Standard state relativities

Standard state relativities are calculated in each assessment year by adjusting the assessed relativities so that no state has a relativity that is below the lower of New South Wales or Victoria (the standard state).

Blended relativities

Over the transition period defined in the 2018 legislated GST distribution arrangements, assessed relativities are blended with standard state relativities. The weighting that each receives is specified in the legislation. In the 2022 Update, assessed relativities have a weighting of two-thirds and standard state relativities one-third.

GST relativity floor

The GST floor sets a relativity below which a state's per capita share of the GST pool cannot fall. In 2022–23, the floor is 0.70. If a state's blended relativity is below the floor, its GST relativity is adjusted up to the floor. To accommodate this, the relativities of other states are adjusted down on a population-share basis.

GST relativities

The final numbers are called GST relativities and are used to calculate the share of revenue that each state receives from the GST pool.

⁶ The Commonwealth Grants Commission Act 1973 and the Federal Financial Relations Act 2009.

Movements in the GST distribution

Table 1-4 sets out the estimated change in distribution of the GST pool for each state from 2021–22 to 2022–23. It identifies how changes in population shares, the GST pool and GST relativities contribute to the estimated change in GST distribution.

Table 1-4 Change in GST distribution from 2021–22 to 2022–23 (excluding no worse off payments(a))

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Estimated 2021–22 distribution	22,107	17,411	15,739	3,199	6,785	3,024	1,426	3,379	73,070
Estimated 2022–23 distribution	23,218	17,167	16,384	5,682	6,865	3,035	1,421	3,644	77,416
Change	1,111	-244	645	2,483	80	11	-5	265	4,346
Change caused by new:									
Population (b)	-95	-10	83	12	3	2	-1	6	0
Pool (c)	1,309	1,035	941	191	404	180	85	201	4,346
GST relativities (d)	-102	-1,269	-379	2,280	-327	-171	-89	57	0
Change (\$m) (e)	1,111	-244	645	2,483	80	11	-5	265	4,346
Change (\$pc)	136	-36	121	912	45	20	-12	1,055	167

⁽a) Since 2019–20, the Commonwealth has also made supplementary payments to deliver an outcome at least equivalent to a relativity of 0.7 to Western Australia. This no longer applies in 2022–23.

Sources: 2021–22 and 2022–23 GST pool estimates were taken from the Commonwealth Budget, Mid-Year Economic and Fiscal Outlook 2021–22. December 2021 and 2022 population estimates were provided by the Australian Treasury from the same source.

The distributions in 2022–23 differ from 2021–22 for the following reasons.

- State populations differ. The estimated 2022-23 distribution is based on the 2021-22 Mid-Year Economic and Fiscal Outlook estimates of state populations for 2022-23. The 2021-22 distribution is based on the 2021-22 Mid-Year Economic and Fiscal Outlook estimate of populations for 2021-22.
 - Slower population growth between these dates in New South Wales, Victoria and the ACT means they are estimated to receive less revenue from the GST pool than states with faster population growth, such as Queensland, Western Australia and the Northern Territory.
- The size of the GST pool available for distribution is different.
 Any growth in the pool is distributed to each state using its population share weighted by its GST relativity.

⁽b) Effects on the distribution of 2021–22 GST pool of using estimated state populations as at December 2022 instead of December 2021, with 2021 Update relativities.

⁽c) Effects of applying the 2021 Update relativities to the estimated 2022–23 GST pool.

⁽d) Effects on the distribution of the 2022–23 GST pool of using the 2022 Update relativities instead of 2021 Update relativities.

⁽e) Sum of (b), (c) and (d).

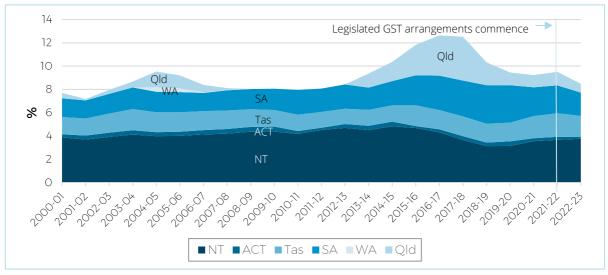
- All states benefit from the anticipated growth in the GST pool in 2022–23. States with a higher relativity, in particular the Northern Territory, but also Tasmania and South Australia, benefit more (on a per capita basis) than states with a lower relativity.
- The relativities used to distribute the GST are different.
 The estimated 2022–23 distribution is based on the relativities recommended in the 2022 Update, whereas the 2021–22 distribution is based on the 2021 Update relativities.
 - The contribution from updating GST relativities increases the amount of the GST pool distributed to Western Australia and the Northern Territory in 2022–23 compared to 2021–22.

Overall, Western Australia would receive the largest increase in revenue from the GST pool in dollar terms and the Northern Territory the largest in per capita terms. In the absence of no worse off payments, Victoria would receive the largest decline in revenue from the GST pool, in dollar and per capita terms.

Size of the equalisation task

Since the introduction of the GST in 2000–01, South Australia, Tasmania, the ACT and the Northern Territory have had relatively stable GST pool distribution (see Figure 1-2). Queensland has had above-average GST pool distribution in 18 out of 23 years. Its high needs in the mid-2010s were mainly due to significant natural disaster relief expenses. Western Australia had above average needs for a 3-year period in the mid-2000s.

Figure 1-2 Proportion of the GST pool in excess of a state's population share, 2000–01 to 2022–23 (excludes no worse off payments(a))

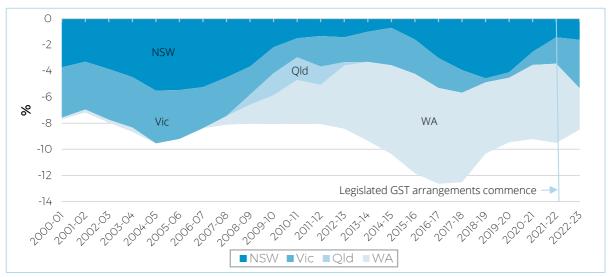


(a) Since 2019–20, the Commonwealth has also made supplementary payments to deliver an outcome at least equivalent to a relativity of 0.7 to Western Australia. This no longer applies in 2022–23.

Source: Commission calculation.

The GST needs of New South Wales, Victoria and Western Australia have varied since the introduction of the GST (see Figure 1-3).

Figure 1-3 Proportion of the GST pool less than a state's population share, 2000–01 to 2022–23 (excludes no worse off payments(a))



(a) Since 2019–20, the Commonwealth has also made supplementary payments to deliver an outcome at least equivalent to a relativity of 0.7 to Western Australia. This no longer applies in 2022–23.

Source: Commission calculation.

Growing royalties from iron ore have resulted in Western Australia needing significantly less revenue from the GST pool. The high concentration of iron ore in Western Australia has meant that changes in its GST needs largely follow changes in its iron ore royalties. While iron ore royalties have increased rapidly over the past two decades, they have fluctuated due to the combined effect of price volatility and an expansion in the volumes produced. Iron ore prices peaked at around A\$186 per metric tonne in 2010-11, before falling to A\$58 in 2015–16, and then rising to reach record levels of A\$234 in 2020–21.

The growing fiscal strength of Western Australia has meant that New South Wales and Victoria have become fiscally weaker in relative terms. Taken together, the proportion of the GST pool received by these states has increased since 2004–05.

2. Drivers of GST distribution

Key points

- The largest factor influencing change in the distribution of GST in the 2022 Update came from the phased implementation of the 2018 legislated arrangements. The GST relativity floor of 0.7 under the legislated arrangements is operating within the GST pool for the first time. In 2021–22, the Commonwealth made payments outside the GST pool to Western Australia to give it an outcome equivalent to a 0.7 relativity. Independent of changes in state circumstances and data revisions, the impact of the relativity floor, along with blended relativities, is estimated to increase Western Australia's GST distribution by \$3.7 billion more than it did in the 2021 Update. In turn, this reduces the GST distribution of all other states. The impact on the other states would be ameliorated by the Commonwealth's transitional no worse off guarantee payments under the 2018 legislated arrangements.
- Changes in states' relative abilities to raise revenue also changed the GST distribution from 2021–22. Higher iron ore prices decreased the assessed needs for Western Australia and increased them for all other states. The fall in the value of coal production increased assessed needs for Queensland and decreased them for all other states. An uneven property boom changed states' relative capacities to raise stamp duty.
- States' relative spending needs also changed. Slower population growth in Victoria over the assessment period reduced its assessed capital needs by \$672 million (reduced GST needs for investment and a smaller increase in needs for net borrowing). Differences between states in relative wage growth were also important. This, along with its growing share of Commonwealth payments, reduced the ACT's GST needs.
- Newly available data also led to a small change in the distribution of GST.

Why GST shares differ

States' economic, social and demographic characteristics affect their expenditures and revenues. The Commission takes these into account when assessing how much GST each state needs.

Table 2-1 shows how these characteristics have contributed to differences between the recommended GST pool distribution and an equal per person allocation. This comparison is useful as it shows whether a state has been assessed by the Commission to have above-average or below-average needs for GST revenue.

Assessed relativities reflect the Commission's assessment of how much GST each state needs to have the same fiscal capacity to provide services and associated infrastructure, after allowing for advantages and disadvantages affecting revenues and expenditures. The 2022 Update's assessed relativities include two 'firsts'.

- For the first time since the introduction of the GST, New South Wales has an assessed relativity above one (1.01373, see Table 1-2 in the previous chapter). This means that it would need \$345 million more GST than an equal per capita distribution in order to have the same capacity to provide services as the other states.
- Also for the first time, the Commission assessed that
 Western Australia had the capacity to raise more in revenue in
 2020-21 than it required to meet its assessed expenditure needs (by
 \$663 million). This is reflected in its negative annual assessed
 relativity of 0.08724 in that assessment year. Its average assessed
 relativity, based on the average of three years (2018-19, 2019-20,
 2020-21), remains positive. As discussed in New issues in the 2022
 Update, no adjustments were considered necessary to deal with a
 negative annual relativity.

Table 2-1 shows that New South Wales and Victoria had above-average capacities to raise revenue from property sales and taxable land values, yet lower mining revenue raising capacities. When combined with below-average expenditure needs, and the effect of blended relativities and the GST floor, these states required less than an equal per capita share of GST. While high mining revenue raising capacity in Western Australia lowered its GST needs, this was offset by the effect of blended relativities, the GST floor and relatively high expense needs.

In contrast to Western Australia, the overall revenue raising capacity of the other states was below-average, which increased their GST needs. Queensland, Tasmania and the Northern Territory have above-average expense needs, mainly arising from their higher cost socio-demographic composition. This increases their GST distributions. The ACT's below-average spending needs lower its GST needs. South Australia has a socio-demographic composition that leads to above-average expense needs, but its high expense needs are more than offset by its low investment needs. The GST needs of these states are reduced by the effect of blended relativities and the GST floor; although across the transition period, this impact would be ameliorated by the Commonwealth's no worse off payments.

Table 2-1 Drivers of difference from an equal per capita distribution of GST, 2022-23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
REVENUE RAISING CAPACITY									
Mining	3,963	4,738	-757	-9,419	910	316	326	-76	10,252
Property sales	-1,826	-638	768	837	589	172	-4	102	2,468
Taxable land values	-1,316	-721	1,002	251	469	172	114	28	2,037
Taxable payrolls	-400	54	634	-939	403	216	48	-16	1,356
Other revenue effects	143	137	-64	-113	-138	-16	40	11	331
TOTAL REVENUE	563	3,570	1,583	-9,383	2,233	861	523	49	9,383
COMMONWEALTH PAYMENTS	601	1,342	-1,264	-88	-144	-91	104	-460	2,047
EXPENSE NEEDS									
Socio-demographic composition	n (SDC)								
Population dispersion	-1,815	-1,591	1,005	593	104	588	-256	1,373	3,663
Indigenous status	92	-2,296	986	277	-202	164	-91	1,070	2,589
Socio-economic status	66	-276	258	-176	499	92	-306	-156	915
Age	198	-98	-158	-61	197	-8	-20	-50	395
Other SDC	-99	-246	180	41	25	29	-21	90	366
Total SDC	-1,559	-4,508	2,271	674	623	866	-694	2,328	6,761
Urban centre characteristics	1,385	575	-887	-343	-320	-235	-72	-103	1,960
Wage costs	632	-345	-583	712	-422	-193	118	81	1,543
Administrative scale	-663	-463	-268	75	194	361	362	403	1,395
Student populations	-237	-425	439	170	-29	11	25	45	691
Non-state health sector	-190	172	-213	181	-4	18	98	-62	469
Other expenses	-495	-808	407	640	111	89	-98	153	1,401
TOTAL EXPENSES	-1,128	-5,803	1,166	2,111	153	917	-261	2,845	7,192
INVESTMENT									
Capital improvements	319	-403	-75	142	-131	-88	-161	398	858
Cost of construction	238	-625	-128	413	-25	-50	16	161	827
Population growth	-371	399	420	-23	-278	-57	-18	-72	819
TOTAL INVESTMENT	186	-628	218	531	-435	-194	-164	486	1,421
NET BORROWING	123	-39	-163	-5	52	8	0	24	207
Total effect of assessed relativities (a)	345	-1,558	1,541	-6,835	1,859	1,502	203	2,944	8,393
Blended relativities & GST floor	-1,550	-1,269	-1,006	4,400	-340	-104	-83	-48	4,400
	-1,205	-2,827	535	-2,435	1,519	1,397	120	2,895	6,467

Note: This table shows the drivers that lead to each state receiving more or less than an equal per capita share of GST in 2022–23.

Source Commission calculation.

⁽a) Assessed relativities reflect the GST each state needs to have the same capacity to provide services as the other states. Legislation specifies how these are adjusted to derive GST relativities, which determine GST distribution.

Why GST shares have changed

In this update, the Commission has used the latest available data to reflect the latest circumstances of states. It has applied the methods developed in the 2020 Review and continued the phased implementation of the 2018 legislated arrangements. Changes in assessed needs mainly relate to changes in revenue raising capacity, which tends to be more volatile than expenditure needs.

Table 2-2 Composition of estimated changes in GST distribution, 2021–22 to 2022–23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Expense needs	169	-231	-301	422	-15	-39	-37	32	624
Investment needs	259	-707	99	343	43	-43	3	2	750
Net borrowing	-6	241	-103	-77	-36	-7	-2	-10	241
Revenue raising capacity	704	530	906	-2,064	-127	-8	6	54	2,199
Commonwealth payments	68	-38	-141	-12	89	10	10	14	191
Change in assessed relativities	1,195	-206	459	-1,387	-47	-87	-21	92	1,747
Blended relativities and GST floor	-1,298	-1,063	-839	3,667	-280	-84	-69	-35	3,667
Change in GST relativities	-102	-1,269	-379	2,280	-327	-171	-89	57	2,337

Source: Commission calculation.

Changes in states' GST shares occurred for three reasons.

- Some data used in the 2021 Update were revised when more recent data became available.⁷
- States' economic and socio-demographic circumstances change over time. The 2022 Update assessed states' needs using an average of data for the three years 2018–19 to 2020–21. The 2021 Update used data for 2017–18 to 2019–20. Differences between the year brought into the 3-year average (2020–21) and the year removed (2017–18) changed states' relative needs.
- Legislated arrangements for GST distribution are also being phased in. For the 2022 Update, each state's GST relativity must be at least 0.7.8 This, along with blended relativities, affects each state's GST share.

Table 2-3 shows the impacts of data revisions and changes in state circumstances. The main drivers are discussed below.

⁷ Revisions can also occur because data providers identify errors in their data, or because of errors made by the Commission in previous inquiries.

⁸ In 2021—22, the Commonwealth provided a payment to Western Australia equivalent to a relativity floor of 0.7. In this inquiry, the floor is calculated within the GST distribution system and drawn from the GST pool.

Table 2-3 Change in the estimated GST distribution by source of change, 2021–22 to 2022–23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Data revisions	135	46	-73	-11	-74	-54	-18	50	230
Changes in state circumstances (a)	1,061	-251	533	-1,376	27	-33	-3	42	1,663
Total	1,195	-206	459	-1,387	-47	-87	-21	92	1,747

(a) Includes both the changes in relative state circumstances and changes in how much states collectively spend or raise. Source Commission calculation.

Data revisions

This section describes the impact of replacing data used in the 2021 Update with the latest available data. Since the 2021 Update, data providers have released updated data about circumstances in 2017–18, 2018–19 and 2019-20. The Commission has revised some of its assessments using the latest available data.

Table 2-4 Major effects of data revisions, 2021-22 to 2022-23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m								
Investment	45	43	-49	28	-39	-24	-5	1	117
Payroll tax	76	0	-21	-26	-22	-5	-6	4	80
Net borrowing	-35	49	15	-4	-14	-2	-2	-7	64
Health	29	-18	-6	-4	-7	-13	1	18	48
Other revisions	19	-29	-13	-3	7	-9	-5	33	60
Total	135	46	-73	-11	-74	-54	-18	50	230

Source Commission calculation.

Revisions to investment data

Data provided by states for the 2021 Update estimated investment in urban transport for 2019–20 at \$7.5 billion. In this update, these state data were replaced with an ABS estimate of \$8.9 billion. These revisions increased the assessed need for urban transport investment in New South Wales and Victoria, reducing it in other states.

The latest data from the Survey of Motor Vehicle Use on the mix of urban and rural traffic and heavy vehicle use have been incorporated into the assessments of investment in urban and rural roads, increasing the assessed investment needs of Victoria, Queensland and Western Australia.

Revisions to payroll tax

The ABS revised its Compensation of Employees (CoE) data, which are used by the Commission to estimate states' payroll tax capacities.

The largest revisions were to the data for New South Wales. Revisions reduced the revenue raising capacities of New South Wales and the Northern Territory, increasing their GST shares. Revisions increased the revenue raising capacities of all other states except Victoria, and reduced their GST shares.

Revisions affecting net borrowing

The net financial liabilities that states collectively held at 30 June 2020 were revised down from \$306 billion to \$230 billion. When it assesses needs for net borrowing, the Commission reduces the needs of states with faster growing populations because they have more people to service their liabilities. Victoria and Queensland had above-average population growth in 2019–20, the year affected by net financial assets held at 30 June 2020. This revision increased their GST needs.

Health

In health, there were two important data revisions. Because of an ongoing lag in the release of hospital activity data, 2018–19 data were used in the 2021 Update to represent 2018–19 and 2019–20. For this update, 2019–20 data have been released. The data for the 2019–20 assessment year have been revised for the 2022 Update to reflect the new data. The newly available 2019–20 data are now used to reflect 2019–20 and 2020–21 assessment year circumstances. Also, as foreshadowed in the 2020 Review and discussed in *New issues in the 2022 Update*, hospital separations data were replaced with national weighted activity unit data as the measure of activity in the non-admitted patient component assessment. These revisions increased the GST needs of New South Wales, the ACT and the Northern Territory.

Changes in state circumstances

This section describes the main changes in state circumstances since the 2021 Update — that is, the changes that occurred when revised 2017–18 data were replaced with 2020–21 data. Table 2-5 shows the impacts across assessment areas.

Table 2-5 Composition of changes in state circumstances 2021-22 to 2022-23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Expense needs	123	-185	-274	418	-18	-19	-35	-9	540
Investment needs	215	-750	148	315	82	-18	8	1	769
Net borrowing	29	192	-118	-72	-22	-4	0	-3	221
Revenue raising capacity	626	532	917	-2,024	-104	-1	14	40	2,129
Commonwealth payments	68	-40	-140	-12	89	10	10	14	192
Total	1,061	-251	533	-1,376	27	-33	-3	42	1,663

Source Commission calculation.

Table 2-6 shows the drivers that made the largest contributions to changes in state circumstances.

Table 2-6 Change to GST distribution due to changes in state circumstances, 2021–22 to 2022–23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Mining	644	253	956	-1,941	35	21	16	16	1,941
Population growth	-29	-672	250	289	123	8	14	17	701
Wage costs	103	-88	-322	321	32	-2	-18	-27	456
Property sales	-72	429	-139	-130	-51	-17	-13	-8	429
Capital improvements	173	122	-112	-58	-71	-32	-7	-15	295
Commonwealth payments	68	-40	-140	-12	89	10	10	14	192
Taxable payrolls	64	-36	36	-35	-70	0	11	30	141
Other changes in circumstances	108	-220	4	191	-60	-22	-17	15	319
Total	1,061	-251	533	-1,376	27	-33	-3	42	1,663

Source Commission calculation.

Mining

In recent years, changes in mining production and commodity prices have had large impacts on the value of mining activity. When coupled with the uneven state distribution of resource endowments, this has resulted in the mining revenue assessment having a significant impact on GST pool distribution. Changes in the value of iron ore and coal production continued to drive large changes in GST distribution in the 2022 Update.

Figure 2-1 shows the royalties raised from iron ore, coal and other minerals between 2017–18 and 2020–21. Sustained by high commodity prices, iron ore royalties increased over this period, while coal royalties declined. Royalties for other minerals remained largely unchanged.

In this update, the largest change in state circumstances came from iron ore royalties more than doubling between 2017–18 and 2020–21, which reduced Western Australia's assessed needs by \$1,937 million. Almost all iron ore royalties are raised in Western Australia, so this change increased its assessed capacity to raise mining revenue and reduced the capacities of the other states.

The 45% decrease in coal royalties between 2017–18 and 2020–21 increased Queensland's GST needs by \$588 million relative to the 2021 Update, and decreased the GST needs of all other states. Together, iron ore and coal account for almost all of the impact of the mining assessment on GST distributions.

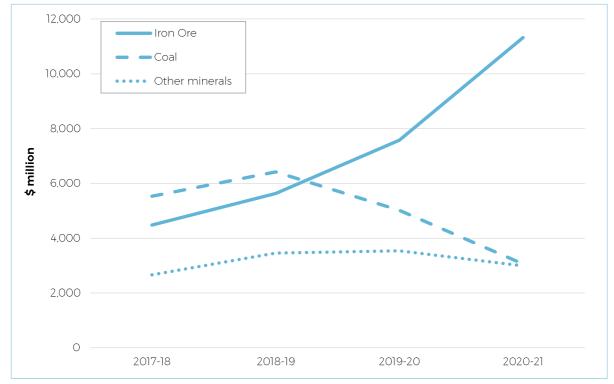


Figure 2-1 Assessed mining royalties by mineral

Source: Commission calculation based on state data.

Population growth

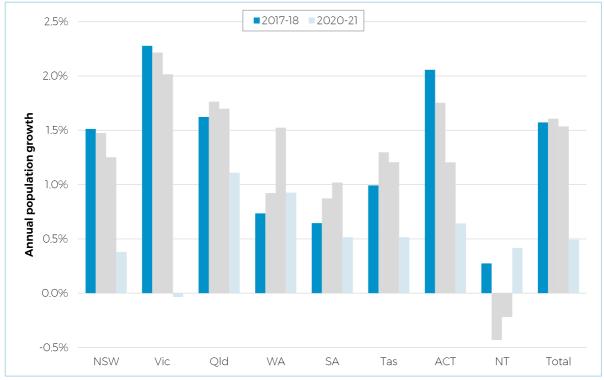
In 2017, 37% of national population growth occurred in Victoria. In 2020, its population declined for the first time since 1916, when troop departures for Europe led to a declining population. The recent decline in Victoria's population is primarily associated with lower overseas arrivals because of the pandemic. Significantly fewer interstate arrivals to Victoria also contributed, along with a very slight rise in interstate departures.

Victoria's population growth in 2017–18 (2.28%) was much higher than the national average (1.57%) (Figure 2-2). This growing population required new schools, hospitals and other infrastructure, and so Victoria was assessed to have above-average investment needs. The year 2017–18 is being replaced by 2020–21, when Victoria's negative population growth (-0.04%) was below the national average (0.49%). This has reduced Victoria's assessed need to invest in infrastructure, relative to other states.

Similarly, New South Wales experienced a sharper than average decline in population growth from 2017–18 to 2020–21. Despite a significant fall in national population growth, Western Australia and the Northern Territory had faster population growth in 2020–21 than in 2017–18, increasing their investment needs.

 During 2022, the Commission intends to publish a research paper that explores the investment assessment and how it is influenced by population growth. A high-level overview is provided in the box following Figure 2-2.

Figure 2-2 Population growth rates



Note: The Commission uses populations at the midpoint of each financial year (30 December). The population growth relevant to a particular assessment year is the growth in the preceding calendar year. That is, growth for the 2020–21 assessment year is the growth from 30 December 2019 to 30 December 2020.

Source Commission calculation based on ABS data.

How population growth affects GST needs of states

In 2020–21, states held \$737 billion of physical assets, or \$29,000 per capita.⁹ As state populations grow, states acquire more infrastructure to deliver services. The Commission therefore assesses states with faster growing populations to require *more* GST to fund these acquisitions.

While population growth is a significant determinant of state investment, most state investment reflects improvements to the quantity of infrastructure per capita and replacement of depreciated infrastructure. The investment assessment captures both these 'capital improvements' and investment in response to population growth. Capital improvements drive most investment needs, but state shares of the need for capital improvements are much less volatile between years than population growth. Capital improvements tend not to be as large a driver of change in GST need as changes in population growth.

States also held \$328 billion in net financial liabilities¹⁰, or \$13,000 per capita. As state populations grow, they have more people to service these liabilities. This means that faster than average population growth increases assessed capacity for net borrowing, and decreases the GST needs of a state.

Many state assets are not used by all residents of a state. For example, demand for new school infrastructure is assessed by growth in the number of government school students, not the growth in the total population. However, states with faster growing populations tend to have faster growing requirements for most types of state assets. The \$672 million decline in Victoria's GST needs due to population growth, takes account of the different growth rates of different groups within the population, and the extent to which they use state assets.

Victoria's slow population growth in 2020–21 meant that it was assessed as requiring less infrastructure spending in 2022–23. The slowing in Victoria's population growth may be a short-term phenomenon, and not represent a change in the longer-term investment needs of the state. If Victoria's population growth reverts to its medium-term trend, or if there is high 'catch-up' growth, the Commission's future assessments would capture this. The Commission's assessment method is designed so that all states have the capacity to invest in, and hold, the national average level of infrastructure for their population, noting this involves a lag, as with other assessments.

⁹ This refers to General Government, public housing and urban transport assets, i.e. those in scope for the Commission's

¹⁰ Net financial assets is the difference between total financial assets and total liabilities that are in scope for the Commission's assessments. Net financial liabilities is the reverse of this concept.

Wage costs

Differences between states' relative wage costs in 2017–18 and 2020–21 changed assessed needs. Total wage expenditure also grew faster than the GST pool, which increased the impact of the wage assessment on GST relativities.

In 2017–18, for the first time since 2005–06, Western Australia was assessed to have below-average wage costs. In 2020–21, it was assessed to have wage costs 5% above the national average. Replacing 2017–18 data with 2020–21 data increased Western Australia's GST needs by \$321 million. Relative wage costs also increased in New South Wales and South Australia. Relative wage costs in Queensland, the ACT and the Northern Territory fell by almost 3 percentage points between 2017–18 and 2020–21, and by nearly 1 percentage point in Victoria (see Figure 2-3). This resulted in lower GST needs for these states in 2022–23.¹¹



Figure 2-3 Estimated wage costs relative to national average

Source Commission calculation.

Property sales

Stamp duties raised from the transfer of property are potentially volatile. Property market cycles can lead to large changes across years and states, affecting their relative revenue raising capacities.

¹¹ Relative wage costs of the states are assessed using an econometric model based on the ABS Characteristics of Employment survey. Data for the 2020-21 assessment included some employees on JobKeeper Payments. All those in the survey earning exactly \$750 per week (the minimum JobKeeper Payment) were removed from the sample for consistency. Further information can be found in New issues in the 2022 Update.

Figure 2-4 shows the change in states' per capita value of property transferred between 2017–18 and 2020–21. Between 2017–18 and 2020–21, the per capita value of property transferred increased nationally by 10%. All states except Victoria experienced above-average increases over that period, strengthening their revenue raising capacities. Victoria was the only state where the per capita value of property transfers was lower in 2020–21 than in 2017–18. It declined by 7.4% and weakened Victoria's revenue raising capacity. This increased Victoria's assessed GST needs by \$429 million.

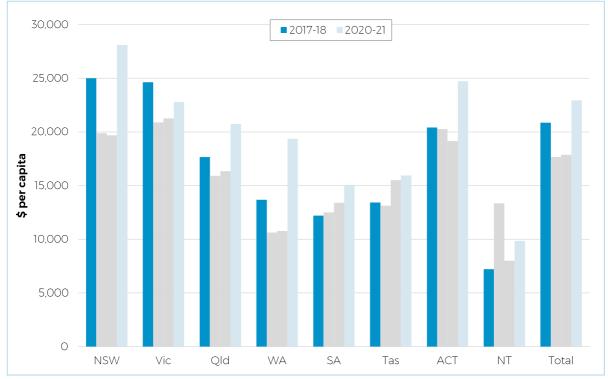


Figure 2-4 Value of property transfers per capita

Source: State data.

Capital improvements

There have been significant changes to the GST distribution from capital improvements due to a 69% (\$4.7 billion) growth in the national level of investment in urban transport between 2017–18 and 2020–21. Victoria and Queensland contributed most of the increased investment.

Investment in urban transport has grown faster than the GST pool, thus increasing the relative importance of the assessment. This has increased the GST share of New South Wales and Victoria, which have above-average needs in this area of spending, and decreased the shares of the other states, which have below-average needs.

Changes due to capital improvements are distinct from changes related to population growth, where a growing population increases the infrastructure needs of states to maintain their current level of infrastructure per person. Both drivers affect the level of investment each state is assessed as requiring. Population growth is the second largest driver of change in assessed relativities in this update and is discussed earlier in this section.

Commonwealth payments

The Commonwealth makes payments to states for specific purposes. If a payment is for a state-type service for which the Commission assesses needs, then it considers this revenue when assessing how much GST a state requires.

To the extent that a state receives above-average per capita amounts of these payments, it is assessed to require less GST per capita. Conversely, if a state receives below-average amounts, it is assessed to require more GST per capita. In some circumstances, the Commonwealth Treasurer directs the Commission to exclude specific payments from its assessment.

Between 2017–18 and 2020–21, there were changes in the interstate distribution of some payments for specific purposes, particularly for national health reform, road infrastructure and remote Indigenous housing. This had flow-on effects for GST pool distribution. New and ceased payments in 2020–21 also affected GST distribution.

Victoria, Queensland and Western Australia received greater shares of assessed Commonwealth payments in 2020–21 than in 2017–18. The other states received smaller shares of Commonwealth payments in 2020–21 than in 2017–18, increasing their GST needs. The main payments causing changes in this update are shown in Table 2-7.

Table 2-7 Changes in the estimated GST distribution due to changes in Commonwealth payments, 2021–22 to 2022–23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
National health reform funding	113	3	-131	11	5	1	1	-2	133
Infrastructure investment - National network roads	55	0	-115	25	42	-1	-2	-4	122
Remote Indigenous housing	-51	-42	25	38	-6	-3	-3	41	105
Infrastructure investment program - Other roads	66	-50	11	19	-31	1	7	-23	104
Building Australia Fund - Rail	-67	-23	20	5	69	-5	1	1	96
Infrastructure growth package - road investment	-26	-19	35	-9	21	-1	-1	0	56
Urban Congestion Fund	29	8	14	-29	-27	2	2	1	56
Water for the Future	-29	30	-15	-10	5	7	13	-1	55
Infrastructure Growth Package - Western Sydney Infrastructure Plan	-39	15	12	6	4	1	1	1	39
Quality schools (government schools)	24	4	2	-27	-7	4	-2	3	36
Other	-5	35	2	-41	13	6	-7	-3	56
Total	68	-40	-140	-12	89	10	10	14	192

Source: Commission calculation.

Taxable payrolls

States experienced different rates of growth in taxable payrolls between 2017-18 and 2020-21. These changes reduced the GST needs of Victoria, Western Australia and South Australia by a total of \$141 million and increased the GST needs of other states except Tasmania.

The Commission measures states' payroll tax bases using ABS Compensation of Employees (CoE) data, adjusted for the average policy to exempt small employers. National average 'taxable' CoE per capita declined by 1.6% between 2017–18 and 2020–21. Taxable CoE grew in Western Australia and South Australia over the period and declined by less than the average in Victoria. This increased the relative capacities of these states to raise payroll tax, reducing their GST shares.

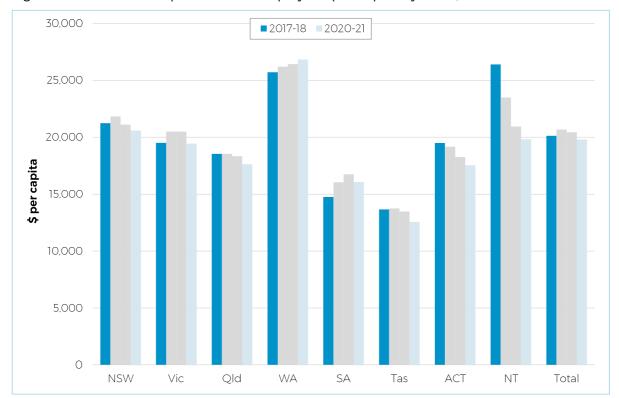


Figure 2-5 Taxable compensation of employees per capita by state, 2017-18 and 2020-21

Source: Commission calculation based on ABS data.

COVID-19 in the 2022 Update

COVID-19, and the Commonwealth and state government responses to it, continues to affect the Australian economy and society. The 2022 Update assesses state circumstances for the 36 months from July 2018 to June 2021, of which 16 months were affected by the pandemic. The Omicron variant emerged in 2021–22, so its impacts are not reflected in this update.

Pending receipt of terms of reference for the 2022 Update, the Commission asked states for their views on how the pandemic and government responses have influenced states' relative fiscal capacities and whether these impacts are appropriately captured in the Commission's assessments. This consultation, and the Commission's response, is published in New issues in the 2022 update. In line with the terms of reference, no changes have been made to Commission assessment methods in this update.

The Commission will continue to explore the implications of state spending in response to COVID-19 as the pandemic further unfolds.

The box below identifies some of the ways in which COVID-19 has affected the GST distribution in this update.

How did COVID-19 change states' GST shares?

In 2019–20 and 2020–21, COVID-19 had a large effect on Australia's economy and society. State budgets were also significantly affected. Where these changes affected all states similarly, this would have minimal implications for states' GST shares. Changes in the distribution of GST would only come into play where there were differences in the fiscal impact of the pandemic that were beyond states' control.

It is not possible to reliably isolate COVID-19 from all other sources of change in state budgets. However, it is possible to identify some of its impacts. For example, in 2020–21, it increased the net cost of urban transport and decreased payroll tax and stamp duty on conveyances revenue for the most affected states. Other impacts reduced expenditure needs in some states (such as investment via lower population growth).

Consistent with the terms of reference, the Commission has not changed its assessment methods in response to the pandemic.

The Commission's existing revenue assessments largely capture the pandemic's effect on state tax bases.

- The value of properties transferred increased nationally by 29% between 2019–20 and 2020–21. This could arise from increases in prices, the number of transactions or both. The value of properties transferred in Victoria grew by only 7%, while in Western Australia it increased by 81%. The Victorian lockdowns during 2020–21 likely contributed to Victoria's slow growth. In this update, differences in the value of transferred properties increased Victoria's GST share by \$429 million.
- Taxable payrolls decreased nationally by 3% between 2019–20 and 2020–21, driven largely by the COVID-19 induced recession. The decline was slightly larger in Victoria (5%). However, other changes in taxable payrolls since 2017–18 had a greater effect. Victoria's payroll tax base was stronger in relative terms in 2020–21 than in 2017–18, despite the effects of COVID-19. This meant that it required less GST.

The Commission's methods for assessing expense needs capture some, but not all, COVID-19 related pressures on state spending.

¹² It is not possible to directly measure the effects of COVID-19 without knowing how circumstances would have evolved in the absence of a global pandemic. However, comparing circumstances in 2019–20 and 2020–21 can illustrate the types of effects that COVID-19 may have had. Analysis in this box is illustrative only.

- The drivers of COVID-19 state health spending likely differ from the Commission's usual approach for assessing health expenditure. States spent \$10.7 billion on health effects of COVID-19 under the National Partnership on COVID-19 Response. The Commission excluded the Commonwealth funded share of this expenditure from its GST calculations on the basis that the specific needs for this expenditure had not been assessed. This meant that this expenditure was assessed to have no impact on GST shares. However, the Commission applied the methods developed for the health assessment in the 2020 Review to the state funded spending under the National Partnership on COVID-19 Response. Any other approach would involve a method change and would be outside the terms of reference for the 2022 Update. The Commission's consideration of this issue is discussed in more detail in New issues in the 2022 Update.
- The economic impact of the pandemic resulted in higher spending on business support. The Commonwealth provided \$89 billion directly to businesses through JobKeeper Payments in 2020–21; this had no direct effect on state finances, and so did not affect GST distributions. Some states increased business support spending in 2020–21 although this increase cannot yet be reliably measured. The Commission is monitoring this issue but has not assessed COVID-19 specific drivers. A change in assessment method would be beyond the terms of reference for this update.
- Net recurrent spending on urban transport increased by 39% between 2017–18 and 2020–21. Part of this increase reflected a decrease in public transport use and hence in fare revenues collected during the pandemic. The national increase in net spending on urban transport increased the relative needs of New South Wales (\$84 million) and Victoria (\$29 million), which have above-average needs in this area.
- Associated with COVID-19, Victoria experienced a significant decline in migrants from overseas and, to a lesser extent, interstate. Its population growth rate fell from 2.3% in 2017–18 to a declining population in 2020–21. Lower population growth reduced its capital (investment less net borrowing) requirements, reducing its assessed needs by \$672 million.

Impact of the 2018 legislated GST distribution arrangements

Table 2-8 compares each state's estimated distribution from the GST pool (including the pool top-ups) in 2022–23 with the Commission's estimate of what each state would have received in 2022–23 if the 2018 legislated arrangements had not been introduced. Seven states are estimated to be 'worse off' in 2022–23, while Western Australia is estimated to be better off due to the 2018 legislated arrangements.

These estimates of the impact of the 2018 legislated arrangements are not the same as a state's no worse off payment for 2022–23, which is calculated by the Commonwealth. They differ for two reasons.

- First, a final value of each state's actual no worse off payment will be calculated based on the actual GST pool, pool top-ups and population for 2022–23, which will not be determined until after the end of that year.
- Second, a state's potential no worse off payment in 2022–23 will be reduced to the extent it was better off in 2021–22.

Subject to changes in the GST pool and population, a state that was worse off in 2021–22 could expect a no worse off payment in 2022–23 similar to the final line in Table 2-8.

Table 2-8 Impact of 2018 legislated arrangements on the distribution of the GST pool, 2022–23 (excludes no worse off payments)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Estimated GST pool distribution	23,218	17,167	16,384	5,682	6,865	3,035	1,421	3,644	77,416
Distribution under previous									
arrangements	24,565	18,285	17,248	1,271	7,145	3,113	1,492	3,662	76,780
Difference	-1,347	-1,117	-863	4,410	-281	-79	-70	-18	636

Source: Commission calculation.

In determining whether a state is worse off in the absence of the 2018 legislated changes, allowance has to be made for the extent a state has gained from the top-up of the GST pool, since this is part of the 2018 legislated changes. For example, in 2022–23, New South Wales is estimated to receive \$23,218 million from the topped-up GST pool. If the 2018 legislated arrangements had not been introduced, it would receive an estimated \$24,565 million. Therefore, New South Wales is estimated to be \$1,347 million worse off under the 2018 legislated changes (comprising the effect of blended relativities and the GST floor, offset by its share of the \$636 million pool top-up for 2022–23).

3. State by state changes¹³

Key Points

- The GST pool (which does not include no worse off payments) is estimated to grow by more than \$4 billion. Consequently, several states would receive more GST in 2022–23, despite having a smaller relativity. Victoria is expected to receive less revenue from the GST pool than it received in 2021–22 and the ACT around the same. However, like the other states, they would receive higher overall payments under the GST distribution arrangements, which include no worse off payments during the transition period.
- In per capita terms, and excluding no worse off payments, the Northern Territory's distribution is estimated to increase by \$1,055, Western Australia's by \$912, New South Wales' by \$136, Queensland's by \$121, South Australia's by \$45 and Tasmania's by \$20. Victoria's per capita distribution would decrease by \$36 and the ACT's by \$12.
- Excluding no worse off payments, the estimated increases in state GST distribution in 2022–23 are: Western Australia \$2,483 million; New South Wales \$1,111 million; Queensland \$645 million; the Northern Territory \$265 million; South Australia \$80 million; and Tasmania \$11 million. Victoria's GST distribution is estimated to decrease by \$244 million and the ACT's by \$5 million (excluding no worse off payments).
- This update is the first in which the relativity floor of 0.7 is drawn from the GST pool. Compared with 2021–22, the combined effect of blended relativities and the GST floor would increase Western Australia's estimated GST revenue by \$3,667 million. As a result, other states' GST distribution would be reduced on a population share basis: New South Wales by \$1,298 million; Victoria by \$1,063 million; Queensland by \$839 million; South Australia by \$280 million; Tasmania by \$84 million; the ACT by \$69 million; and the Northern Territory by \$35 million.

¹³ Excludes no worse off payments and other Commonwealth general revenue assistance.

• States that receive less from the GST pool during the transition period as a result of the legislated arrangements receive no worse off payments from the Commonwealth. Each year over the transition period, the total amount of financial assistance a state has received since 2021–22 (including GST distributions from the topped-up pool and previous no worse off payments) is compared to the total amount of GST it would have received based on no worse off relativities applied to a GST revenue only pool (that is, excluding top-ups). The Commonwealth makes a no worse off payment equal to any cumulative shortfall. In 2022–23, all states are expected to receive higher overall payments under the GST distribution arrangements (which include the no worse off payments) than in 2021–22.

This chapter sets out the major drivers of change in each state's GST revenue since the 2021 Update. In addition to changes in assessed needs and the combined impact of blended relativities and the GST floor, states' estimated GST distributions will be affected by changes in state populations in the year of distribution, and changes in the size of the GST pool (including Commonwealth top-up payments as part of the legislated arrangements).

Figure 3-1 shows changes in states' GST relativities since 2010–11. Chapter 2 explains why states' GST needs differ from each other, and the changes from 2021–22.



Figure 3-1 GST relativities, 2010-11 to 2022-23

Note: The GST relativities in 2010–11, 2015–16 and 2020–21 included the impacts of method reviews. Source: Commission calculation.

Australia's GST arrangements are transitioning from relativities based on assessed relativities¹⁴ to relativities based on a benchmark of the fiscally stronger of New South Wales or Victoria. In the 2022 Update, Victoria was assessed as fiscally stronger. From 2022–23, the fiscal impact of the relativity floor of 0.7 is drawn from the GST pool.

Section 5(3) of the amended *Federal Financial Relations Act 2009* allows for additional financial assistance to be made to a state should the GST that it receives be less than it would have received prior to the transition. The no worse off payments apply until the end of the transition period in 2026-27. More information about these payments is in Attachment A.

¹⁴ These were referred to as relative fiscal capacities in the 2021 Update.

New South Wales

New South Wales' share of the GST pool is estimated to fall slightly from 30.3% to 30.0%. Including pool growth, but excluding no worse off payments, its estimated GST distribution in 2022–23 would increase by \$1,111 million, or 5.0%.

New South Wales' assessed needs are higher than average for the first time. Major changes increasing its GST needs included an increase in the value of iron ore production in Western Australia, a national increase in investment in urban transport and a relative increase in its wage costs. The combined effect of blended relativities and the GST floor reduced New South Wales' distribution by \$1,298 million. Across the transition period, this impact would be ameliorated by no worse off payments.

Table 3-1 Change in estimated GST distribution from 2021–22 to 2022–23, New South Wales (excludes no worse off payments)

	\$m	\$pc
Change in population	-95	-12
Growth in GST pool	1,309	160
Changes in assessed needs		
Data revisions	135	16
State circumstances	1,061	129
Total	1,195	146
Blended relativities and GST floor (a)	-1,298	-158
Total change	1,111	136

Note: Table may not add due to rounding.

(a) This represents the difference between applying the GST relativities and assessed relativities to the GST pool. It is not the basis of the no worse off payments calculation, which is explained in Attachment A.

Source: Commission calculation.

Figure 3-2 New South Wales: Main changes in assessed GST distribution, 2022 Update

Changes in state circumstances between 2017-18 and 2020-21

\$644m	Mining production. Growing value of mining production in other states has reduced New South Wales' relative revenue raising capacity and increased its GST share.
\$173m	Capital improvements. Total urban transport investment increased faster than growth in the GST pool. This increased the GST share of states with above average urban transport investment needs, including New South Wales.
\$103m	Wage costs. Wage growth in New South Wales was higher than the national average between 2017-18 and 2020-21, increasing its GST share.
\$99m	Cost of construction. The cost of construction grew more than the national average for New South Wales between 2017-18 and 2020-21, increasing its GST share.
-\$72m	Property sales. Above average growth in property sales increased New South Wales' relative revenue raising capacity and reduced its GST share.
\$68m	Commonwealth payments. New South Wales' share of payments, particularly for road and health infrastructure, was lower in 2020-21 compared to 2017-18. This increased its GST share.

Data revisions

Taxable payrolls. Downward revisions to ABS Compensation of Employees data reduced New South Wales' relative revenue raising capacity and increased its GST share.

Victoria

In the 2022 Update, Victoria was assessed as the standard state under the 2018 legislated arrangements. Victoria's share of the GST pool is estimated to decrease from 23.8% to 22.2%. With pool growth, but excluding no worse off payments, its estimated GST distribution in 2022–23 would decrease by \$244 million, or 1.4%. It is expected that no worse off payments will result in Victoria receiving more revenue overall from the GST distribution arrangements in 2022–23 than it received in 2021–22.

From 2019–20 to 2020–21, Victoria's population grew at a much slower rate (-0.04%) than from 2016–17 to 2017–18 (2.28%). With 2020–21 replacing 2017–18 in this update, the relative decline in Victoria's population growth reduced its assessed need for new infrastructure, relative to other states, while increasing its net borrowing needs. This was partly offset by below-average growth in the value of property sales and a fall in its relative capacity to raise mining revenue. The combined effect of blended relativities and the GST floor would reduce Victoria's distribution by \$1,063 million. Across the transition period, this impact would be ameliorated by no worse off payments.

Table 3-2 Change in estimated GST distribution from 2021–22 to 2022–23, Victoria (excludes no worse off payments)

	\$m	\$pc
Change in population	-10	-2
Growth in GST pool	1,035	154
Changes in assessed needs		
Data revisions	46	7
State circumstances	-251	-37
Total	-206	-31
Blended relativities and GST floor (a)	-1,063	-159
Total change	-244	-36

Note: Table may not add due to rounding.

(a) This represents the difference between applying the GST relativities and assessed relativities to the GST pool. It is not the basis of the no worse off payments calculation, which is explained in Attachment A.

Source: Commission calculation.

Figure 3-3 Victoria: Main changes in assessed GST distribution, 2022 Update

Changes in state circumstances between 2017-18 and 2020-21

-\$672m	Population growth. A decline in population growth, reflecting the impact of COVID-19, reduced Victoria's assessed need for new infrastructure.
\$429m	Property sales. Below average growth in property sales decreased Victoria's relative revenue raising capacity and increased its GST share.
\$253m	Mining production. Growing value of mining production in other states reduced Victoria's relative revenue raising capacity and increased its GST share.
\$122m	Capital improvements. Total urban transport investment increased faster than growth in the GST pool. This increased the GST share of states with
	above average urban transport investment needs, including Victoria.
-\$110m	above average urban transport investment needs, including Victoria. Taxable land values. Above average growth in taxable land values increased Victoria's relative revenue raising capacity and reduced its GST share.

Data Revisions

\$93m Capital assessments. An upwards revision of total urban transport investment increased the GST shares of states with high urban transport investment needs, such as Victoria. This was compounded by a downward revision of the net financial liabilities held by states, which increased the GST needs of states with above average population growth in the revised year, including Victoria.

Queensland

Queensland's share of the GST pool is estimated to decrease from 21.5% to 21.2%. Combined with pool growth, but excluding no worse off payments, its estimated GST distribution in 2022–23 would increase by \$645 million, or 4.1%.

Queensland's estimated GST distribution would increase, largely due to growth in the GST pool. A decrease in the value of coal production, combined with an increase in the value of iron ore production in Western Australia, reduced Queensland's relative capacity to raise mining revenue. These factors, which increased Queensland's assessed needs, were partly offset by its falling relative wage costs. The combined effect of blended relativities and the GST floor would reduce Queensland's distribution by \$839 million. Across the transition period, this impact would be ameliorated by no worse off payments.

Table 3-3 Change in estimated GST distribution from 2021–22 to 2022–23, Queensland (excludes no worse off payments)

	\$m	\$pc
Change in population	83	16
Growth in GST pool	941	177
Changes in assessed needs		
Data revisions	-73	-14
State circumstances	533	100
Total	459	86
Blended relativities and GST floor (a)	-839	-158
Total change	645	121

Note: Table may not add due to rounding.

(a) This represents the difference between applying the GST relativities and assessed relativities to the GST pool. It is not the basis of the no worse off payments calculation, which is explained in Attachment A.

Source: Commission calculation.

Figure 3-4 Queensland: Main changes in assessed GST distribution, 2022 Update

Changes in state circumstances between 2017-18 and 2020-21



Western Australia

Western Australia's share of the GST pool is estimated to increase from 4.4% to 7.3%. Combined with pool growth, its estimated GST distribution in 2022–23 would increase by \$2,483 million, or 77.6%.

Western Australia's assessed GST needs decreased due to significant growth in the value of its iron ore production. The decrease was partly offset by increases in relative wage costs and population growth. Nonetheless, its estimated GST distribution increased by \$3,667 million due to the combined effects of blended relativities and the GST floor. This has replaced Commonwealth general revenue assistance for Western Australia previously provided outside the GST pool.

Table 3-4 Change in estimated GST distribution from 2021–22 to 2022–23, Western Australia

	\$m	\$pc
Change in population	12	4
Growth in GST pool	191	70
Changes in assessed needs		
Data revisions	-11	-4
State circumstances	-1,376	-505
Total	-1,387	-509
Blended relativities and GST floor (a)	3,667	1,347
Total change	2,483	912

Note: Table may not add due to rounding.

This represents the difference between applying the GST relativities and assessed relativities to the GST pool.

Source: Commission calculation.

Figure 3-5 Western Australia: Main changes in assessed GST distribution, 2022 Update

Changes in state circumstances between 2017-18 and 2020-21

-\$1941m	Mining production. Western Australia experienced the fastest growth in the value of mining production, increasing its relative revenue raising capacity and reducing its GST share.
\$321m	Wage costs. Wage growth in Western Australia was higher than the national average between 2017-18 and 2020-21, increasing its GST share.
\$289m	Population growth. Western Australia's population growth rate was faster in 2020-21 than in 2017-18, despite a significant slowing of national population growth. This increased Western Australia's assessed need for new infrastructure.
-\$130m	Property sales. Above average growth in property sales increased Western Australia's relative revenue raising capacity and reduced its GST share.
\$123m	Economic Environment. Growth in the national level of spending on mining regulation increased the GST shares of states with high needs associated with enforcing these regulations, particularly Western Australia.
\$73m	Taxable land values . Below average growth in taxable land values decreased Western Australia's relative revenue raising capacity and increased its GST share.
-\$58m	Capital improvements. Total urban transport investment increased faster than growth in the GST pool. This decreased the GST share of states with below average urban transport investment needs, including Western Australia.

South Australia

South Australia's share of the GST pool is estimated to decrease from 9.3% to 8.9%. Combined with pool growth, but excluding no worse off payments, its estimated GST distribution in 2022-23 would increase by \$80 million, or

South Australia's estimated GST distribution increased due to growth in the GST pool. Pool growth was sufficient to more than offset a reduction in South Australia's assessed needs and the combined effect of blended relativities and the GST floor. Population growth, which was above the national average, increased South Australia's relative need for new infrastructure, and this, along with a lower share of Commonwealth Payments, increased its GST share. These increases were partly offset by above-average growth in taxable payrolls and property sales. The combined effect of blended relativities and the GST floor would reduce South Australia's distribution by \$280 million. Across the transition period, this impact would be ameliorated by no worse off payments.

Table 3-5 Change in estimated GST distribution from 2021-22 to 2022-23, South Australia (excludes no worse off payments)

	\$m	\$pc
Change in population	3	2
Growth in GST pool	404	225
Changes in assessed needs		
Data revisions	-74	-41
State circumstances	27	15
Total	-47	-26
Blended relativities and GST floor (a)	-280	-156
Total change	80	45

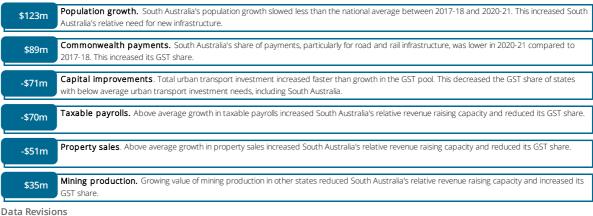
Note: Table may not add due to rounding.

This represents the difference between applying the GST relativities and assessed relativities to the GST pool. It is not (a) the basis of the no worse off payments calculation, which is explained in Attachment A.

Source: Commission calculation.

Figure 3-6 South Australia: Main changes in assessed GST distribution, 2022 Update

Changes in state circumstances between 2017-18 and 2020-21



Capital assessments. An upwards revision of total urban transport investment reduced the GST shares of states with low urban transport investment needs, such as South Australia. This was compounded by a downward revision of the net financial liabilities held by states, which decreased the GST needs of states with below average population growth in the revised year, including South Australia

Tasmania

Tasmania's share of the GST pool is estimated to decrease from 4.1% to 3.9%. Combined with pool growth, but excluding no worse off payments, its estimated GST distribution in 2022–23 would increase by \$11 million, or 0.4%.

Tasmania's estimated GST distribution increased, largely due to growth in the GST pool. Its estimated GST distribution also increased due to an increase in the value of iron ore production in Western Australia, which reduced Tasmania's relative capacity to generate mining revenue. This increase was partly offset by decreased relative needs for urban transport investment and above-average growth in property sales, which reduced Tasmania's estimated GST distribution. The combined effect of blended relativities and the GST floor would reduce Tasmania's distribution by \$84 million. Across the transition period, this impact would be ameliorated by no worse off payments.

Table 3-6 Change in estimated GST distribution from 2021–2022 to 2022–23, Tasmania (excludes no worse off payments)

	\$m	\$pc
Change in population	2	3
Growth in GST pool	180	328
Changes in assessed needs		
Data revisions	-54	-98
State circumstances	-33	-60
Total	-87	-158
Blended relativities and GST floor (a)	-84	-153
Total change	11	20

Note: Table may not add due to rounding.

Changes in state circumstances between 2017-18 and 2020-21

(a) This represents the difference between applying the GST relativities and assessed relativities to the GST pool. It is not the basis of the no worse off payments calculation, which is explained in Attachment A.

Source: Commission calculation.

Figure 3-7 Tasmania: Main changes in assessed GST distribution, 2022 Update

-\$32m Capital improvements. Total urban transport investment increased faster than growth in the GST pool. This decreased the GST share of states with below average urban transport investment needs, including Tasmania.

S21m Mining production. Growing value of mining production in other states reduced Tasmania's relative revenue raising capacity and increased its GST

share.

-\$17m Property sales. Above average growth in property sales increased Tasmania's relative revenue raising capacity and reduced its GST share.

\$16m Population dispersion. National spending on health services per capita increased faster in regional areas than in major cities. This increased the GST share of states with relatively large populations in regional areas, including Tasmania.

-\$13m Urban centre characteristics. Total urban transport net expenses increased faster than growth in the GST pool. This reduced the GST share of states with below average recurrent urban transport needs, including Tasmania.

\$10m Commonwealth payments. Tasmania's share of payments was lower in 2020-21 compared to 2017-18. This increased its GST share.

Data Revisions

Capital assessments. An upwards revision of total urban transport investment reduced the GST shares of states with low assessed urban transport investment needs, such as Tasmania.

Australian Capital Territory

The ACT's share of the GST pool is estimated to decrease from 2.0% to 1.8%. Even with pool growth, but excluding no worse off payments, its estimated GST distribution in 2022–23 would decrease by \$5 million, or 0.4%. It is expected that the no worse off payments would result in the ACT receiving more revenue overall from the GST distribution arrangements in 2022–23 than it received in 2021–22.

The ACT's relative wage costs decreased and this, along with above-average growth in property sales, reduced its GST share. These changes were partly offset by increased value of mining production, mainly in Western Australia, along with population growth slowing by less than the national average, increasing its relative need for new infrastructure. The combined effect of blended relativities and the GST floor would reduce the ACT's distribution by \$69 million. Across the transition period, this impact would be ameliorated by no worse off payments.

Table 3-7 Change in estimated GST distribution from 2021–22 to 2022–23, the ACT (excludes no worse off payments)

	\$m	\$pc
Change in population	-1	-2
Growth in GST pool	85	194
Changes in assessed needs		
Data revisions	-18	-41
State circumstances	-3	-7
Total	-21	-47
Blended relativities and GST floor (a)	-69	-157
Total change	-5	-12

Note: Table may not add due to rounding.

(a) This represents the difference between applying the GST relativities and assessed relativities to the GST pool. It is not the basis of the no worse off payments calculation, which is explained in Attachment A.

Source: Commission calculation.

Figure 3-8 ACT: Main changes in assessed GST distribution, 2022 Update

Changes in state circumstances between 2017-18 and 2020-21



Northern Territory

The Northern Territory's share of the GST pool is estimated to increase from 4.6% to 4.7%. Combined with pool growth, but excluding no worse off payments, its estimated GST distribution would increase by \$265 million, or

The Northern Territory's estimated GST distribution increased due to growth in the GST pool, increased national spending on services used by Aboriginal and Torres Strait Islander people, and below-average growth in taxable payrolls. The increase was partly offset by a decrease in relative wage costs and slower growth in national spending for remote areas relative to regional areas or major cities. The combined effect of blended relativities and the GST floor would reduce the Northern Territory's distribution by \$35 million. Across the transition period, this impact would be ameliorated by no worse off payments.

Table 3-8 Change in estimated GST distribution from 2021-22 to 2022-23, Northern Territory (excludes no worse off payments)

	\$m	\$pc
Change in population	6	24
Growth in GST pool	201	802
Changes in assessed needs		
Data revisions	50	198
State circumstances	42	168
Total	92	366
Blended relativities and GST floor (a)	-35	-138
Total change	265	1,055

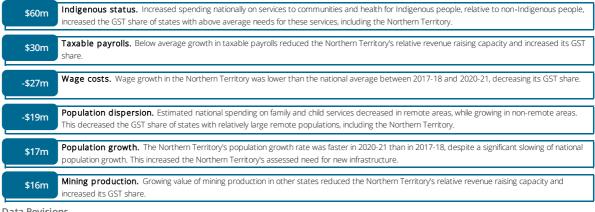
Note: Table may not add due to rounding.

This represents the difference between applying the GST relativities and assessed relativities to the GST pool. It is not (a) the basis of the no worse off payments calculation, which is explained in Attachment A.

Source: Commission calculation.

Figure 3-9 Northern Territory: Main changes in assessed GST distribution, 2022 Update

Changes in state circumstances between 2017-18 and 2020-21



Data Revisions

Indigenous status. An upward revision of national spending on health services for Indigenous people, relative to non-Indigenous people, increased the Northern Territory's GST share

Attachment A: Relativities to determine no worse off payments

The terms of reference for the 2022 Update ask the Commission to provide the relativities that would have applied had the *Treasury Laws Amendment* (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018 not been enacted. These are the states' assessed relativities, shown in the first column of Table 1-2 in Chapter 1. These relativities are used by the Commonwealth to determine whether there is a requirement for it to make no worse off payments to the states under the transitional arrangements in the 2018 legislative changes.

The no worse off relativities are shown in Table A-1.

Table A-1 No worse off relativities, 2022-23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total	
2022-23	1.01373	0.92170	1.09684	0.15784	1.34715	1.91658	1.15556	4.93255	1.00000	
Source: Commission calculation										

Each year over the transition period, the total amount of financial assistance a state has received since 2021–22 (including GST distributions from the topped-up pool and previous no worse off payments) is compared to the total amount of GST it would have received based on no worse off relativities applied to a GST revenue-only pool. The Commonwealth will make a no worse off payment equal to any cumulative shortfall. Where a state is better off in a year, this is taken into account in calculating a no worse off payment in a subsequent year if it is worse off. This arrangement will remain in place until 2026–27.

The 2018 legislation provides that by the end of 2026, the Productivity Commission will inquire into whether the change in the GST arrangements is operating efficiently, effectively and as intended. The inquiry will also examine the fiscal implications of the GST arrangements for the states.

Attachment B: Quality assurance

This attachment reports on the quality assurance procedures applied in this update. These procedures aim to ensure:

- data used in the Commission's assessments are fit for purpose and of the best possible quality
- analysis is accurate
- reporting of the Commission's findings and reasons for decisions leading to them are accurate and transparent.

The procedures are consistent with the 2020 Review Quality Assurance Strategic Plan, which is available on the Commission's website (https://www.cgc.gov.au).

Checking calculations

The Commission completed a rigorous internal audit of all calculations. For each assessment, internal checks were performed and formally signed off by the assessment officer, the assessment team leader and another officer not involved in the original calculation.

The Commission also engaged officers from the Australian Treasury with relevant technical expertise to check the calculations. These checks were done after internal checks were completed.

Reporting of methods, decisions and results

Transparency and accuracy in reporting the assessment methods, decisions and results are important in ensuring high quality outputs.

The Commission undertook a comprehensive program of proofreading and checking of tables and results to ensure they aligned with the original calculations.

The Commission has posted this update and its consultation paper: <u>New issues for the 2022 Update</u>, state submissions on that paper, and a range of supporting documents on the Commission website (https://www.cgc.gov.au).

Glossary

This glossary includes terms used in this report that have a meaning specific to the Commission.

2018 legislated arrangements

The Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018 includes the following key changes to the GST arrangements:

- additional funding in the GST pool through pool top-ups (see GST pool top-up payments defined below)
- changes to the distribution system so that no state has a relativity lower than the lower of New South Wales or Victoria (see standard state relativity defined below)
- changes to the distribution system to introduce a floor below which a state's GST relativity cannot fall (see relativity floor defined below)
- transition arrangements over a 6-year period. Transition arrangements include a no worse off guarantee, blending of assessed and standard state relativities to move gradually to standard state relativities, and moving to a GST relativity floor of 0.75.

For a general explanation of how this is being implemented, see New arrangements for distributing GST, Occasional Paper, September 2021 and Report on GST Revenue Sharing Relativities, 2020 Review, Volume 2, Chapter 4.

actual per capita assessment (APC) method

A method used by the Commission where the assessed expense or revenue for each state is set equal to its *actual* expense or revenue. It is used when, in the Commission's judgement, the policies of all states are sufficiently similar, meaning differences in expenses or revenue per person are due to differences in state circumstances, rather than policy choices.

administrative scale

A measure of the differences in costs that states incur in providing the minimum level of administration and policy development required to deliver services. It relates to core head office functions and specialised state-wide services provided centrally. More populous states can spread these costs across a larger service population, which reduces the cost per person. It differs from the concept of economies of scale, which measures cost advantages in unit price due to a larger volume of output.

application year

The year in which the recommended relativities are used to distribute the GST pool. For example, for the 2022 Update, the application year is 2022-23.

assessed expenses

The expenses a state would incur based on its relative advantages and disadvantages if it were to follow average policies and operate at average efficiency.

assessed investment

The expenditure on new and replacement infrastructure a state would incur based on its relative advantages and disadvantages if it were to follow average policies and operate at average efficiency.

assessed net borrowing

The net borrowing that a state would undertake in a year if it followed the average policy of all states and operated at average efficiency. This is assessed to give states the capacity to maintain the national average net financial liabilities per person. States with slower growing populations have greater GST needs for this assessment.

assessed relativity

A measure used to inform the distribution of the GST pool. Assessed relativities are determined for each state such that, after allowing for advantages and disadvantages affecting revenues and expenditures, each would have the fiscal capacity to provide services and associated infrastructure at the same standard, if each made the same effort to raise revenue from its own sources and operated at the same level of efficiency. In addition to own-source revenue the measure takes account of access to Commonwealth payments treated as impact (defined below). The assessed relativities are blended with the standard state relativities (defined below) to obtain the GST relativities (defined below).

assessed revenue

The revenue a state would raise if it were to apply average policies to its revenue base and raise revenue at the average level of efficiency. Assessed revenue excludes differences from the average due to policy choices, for example a higher or lower tax rate compared to the average.

assessment years

The Commission uses lagged data for 3 assessment years to calculate the recommended GST distribution in a given application year. For the 2022 Update, the assessment years are 2018–19, 2019–20 and 2020–21.

average expense / revenue

A per person measure derived as the total spending, or revenue collected by states, divided by the total population across Australia. It represents the average amount spent by states on each person or the average revenue collected from each person. As a 'per person' calculation, the more populous states generally have a greater effect on the average than the less populous states.

blended relativities

The transition to full application of the 2018 legislated arrangements involves the blending of assessed relativities and standard state relativities (defined below). The blending proportions are specified in the *Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018.* For the 2022 Update, the blend is weighted two-thirds to assessed relativities and one-third to standard state relativities. The weight given to standard state relativities increases each year until the transition is complete in 2026–27. It is an input to the calculation of a state's GST relativity.

Commonwealth payments

Payments to states made by the Commonwealth. These include general revenue grants (other than distribution of the GST pool), payments for specific purposes and some payments for Commonwealth own-purpose expenses. The Commission determines the treatment of each payment as impact or no impact using established guidelines.

Commonwealth payment treated as 'impact'

In treating a Commonwealth payment as 'impact' the Commission considers that it funds state services for which expense needs are assessed. These payments reduce the fiscal pressure on the state and therefore should have an impact on relativities.

Commonwealth payment treated as 'no impact'

In treating a Commonwealth payment as 'no impact' the Commission considers that it does not fund a state service for which needs are assessed. This means, in the Commission's judgement, these payments do not have a fiscal impact on the state and therefore should have no impact on relativities.

discount

Where a Commission assessment is affected by uncertainty in data or methods, it may decide to apply a discount. The discount reflects the Commission's judgement of the degree of uncertainty; 12.5% for low, 25% for medium and 50% for high levels of uncertainty.

driver

A factor outside a state's control that means:

- with average effort it can raise above (or below) average revenue per capita, or
- it needs to spend more (or less) per person than the average to provide the average level of service.

Drivers of differences in revenue raising capacity include mining production, land values and property transactions. Drivers of differences in the costs of services include socio-demographic characteristics, wage pressures, population dispersion or density, and rates of population growth.

equal per capita (EPC) assessment method

Where each state's assessed expense or assessed revenue in a category is set equal to the Australian average per capita amount. The Commission typically uses this when it judges that there are no material differences in advantages and disadvantages between the states, or where it cannot develop reliable assessments due to data or other limitations. This type of assessment means that no needs are assessed for any state and that there is no impact on the GST pool distribution.

GST needs

The distribution of the GST pool that would reduce disparities in the fiscal capacities of the states.

GST pool

The funds available for distribution to the states as untied financial assistance. From 2021–22 the pool comprises GST revenue plus pool top-up payments made by the Commonwealth.

GST pool top-up payments

Additional funds provided by the Commonwealth to top-up the GST revenue pool as specified in section 8A(1) of the *Treasury Laws Amendment* (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018. Under the 2018 legislated arrangements there is annual indexation of the GST pool top-up amount.

GST relativity

The per person weight used to calculate a state's share of the GST pool. A state with a GST relativity higher than one (the average) will receive an above-average amount of GST per person. Under the 2018 legislated arrangements, a state's GST relativity is derived by blending its assessed relativity with its standard state relativity (defined below), and then ensuring no state receives less than the GST relativity floor (defined below).

horizontal fiscal equalisation (HFE)

A central government policy that seeks to reduce fiscal disparities between sub-central governments. Australia gives effect to HFE by distributing the GST pool to states to ensure that each has a similar fiscal capacity, under average policies and efficiency, to provide services and associated infrastructure to its citizens.

infrastructure

The stock of physical assets belonging to a state's general government sector and its urban public transport and housing public non-financial corporations.

investment

The acquisition of physical assets for new infrastructure or to replace depreciated infrastructure, less any disposals of assets. This concept differs from that used by the Australian Bureau of Statistics for gross fixed capital formation. Gross fixed capital formation does not include non-produced asset transfers, such as land, which is included in the investment assessment.

materiality

A test the Commission uses in deciding whether to undertake separate assessments of needs, or to make data adjustments. An assessment is material if it changes the GST any state receives by at least \$35 per person. A data adjustment is material if it changes the GST any state receives by at least \$10 per person.

method reviews and updates

During a method review the Commission reconsiders the methods it uses to calculate the recommended GST distribution, according to terms of reference given to it. From 1988 onwards, method reviews have usually occurred every five years. In contrast, an update of GST relativities is conducted every year other than a review year. In an update, the Commission applies the methods it determined in the last review to incorporate new budgetary developments and the most recent available data. From the 2021 Update, the recommended relativities also reflect the transition to the 2018 legislated arrangements.

natural disaster relief

Expenses incurred by states under the Disaster Recovery Funding Arrangements 2018. These are assessed on an actual per capita basis.

net financial worth

The sum of financial assets minus the sum of liabilities.

no worse off payments

Payments made by the Commonwealth under section 5(3) of the *Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018.* The payments are part of a guarantee that no state will be worse off over the 6-year transition period (2021–22 to 2026–27). Each year over the transition period the total amount of financial assistance a state has received since 2021–22 (including GST distributions from the topped-up pool and previous no worse off payments) is compared to the total amount of GST it would have received based on no worse off relativities applied to a GST revenue-only pool. The Commonwealth will make a no worse off payment equal to any cumulative shortfall. Where a state is better off in a year, this is taken into account in calculating a no worse off payment in a subsequent year when it is worse off. This additional financial assistance is funded by the Commonwealth outside the GST pool.

relativity floor

A minimum GST pool sharing relativity, with an initial value of 0.7, then 0.75 from 2024–25.

revenue base

A measure of transactions, activities, or assets that are taxed by states. Differences between the revenue bases of each state are used by the Commission to determine the relative capacity of each state to raise revenue.

revenue effort

The intensity of use of a revenue base (the implied tax rate) measured as actual revenue divided by assessed revenue. Revenue effort is influenced by the rate of tax or charge, exemptions, and concessions provided, actual scope of the revenue base in a state, and the effort it puts into ensuring compliance.

socio-demographic composition

A measure of differences in the average use and cost of providing services for different population groups. This includes age, socio-economic status, Indigenous status and remoteness.

standard state relativity

An input under the 2018 legislated arrangements in calculating the GST relativities. Assessed relativities are adjusted to ensure that no state has a relativity below the standard state. The standard state is the fiscally stronger of New South Wales or Victoria. In the 2022 Update it is Victoria.

state(s)

Unless the context indicates otherwise, the term 'state(s)' includes the Australian Capital Territory and the Northern Territory.

transition period

The transition of GST distribution to the 2018 legislated arrangements. It does not include Commonwealth payments to Western Australia and the Northern Territory outside the GST system before 2021–22, which foreshadowed some changes under the 2018 legislated arrangements. The transition period is 2021–22 to 2026–27. These are the payment (or application) years, not the assessment years.