Australian Government
Commonwealth Grants Commission

2025 Methodology Review

Draft Report

July 2024

Acknowledgement of Country

The Commonwealth Grants Commission acknowledges the Traditional Owners of Country throughout Australia, and their continuing connection to land, water and community. We pay our respects to them and their cultures and to Elders both past and present.

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

Glossary

A glossary is available from the Commission's website https://www.cgc.gov.au/publications/glossary.

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Commonwealth Grants Commission

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24 June 2024

The Hon Dr Jim Chalmers MP
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 provided by you, we are pleased to submit to you the Commission's Draft Report for the 2025 Methodology Review of GST Revenue Sharing Relativities.

States and territories will be provided with a copy of the Draft Report on Wednesday 26 June 2024 as part of ongoing consultation for the review. States and territories will be asked to keep the Draft Report under embargo until it is published on the Commission's website (www.cgc.gov.au) on Friday 5 July 2024.

In accordance with the terms of reference, the Final Report and recommended relativities for 2025-26 will be provided to the you and the states and territories by 28 February 2025.

Yours sincerely

M. J. Callaghan

Mike Callaghan AM PSM
Chairperson

Dr L S Williams AM	Dr A Jackson	Prof A Tiernan
Member	Member	Member

Acknowledgements

The Commission appreciates the co-operation extended to the Commission and its staff during this review by staff of the Commonwealth Treasury, state and territory treasuries and other agencies.

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

Terms of reference

On 9 February 2023, the Commission received terms of reference requiring it to review the methods used to calculate the relativities for distributing the pool of Goods and Services Tax (GST) among the states and territories, to apply from 2025-26.

List of acronyms

AASB	Australian Accounting Standard Board
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AIHW	Australian Institute of Health Welfare
COFOG	Classification of Function of Governments
COFOG-A	Classification of Function of Governments - Australia
COPEs	Commonwealth own-purpose expenses
GFS	Government Finance Statistics
GST	Goods and Services Tax
IHACPA	Independent Health and Aged Care Pricing Authority
IMF	International Monetary Fund
NWAU	National Weighted Activity Unit
pc	Per capita
PLIDA	Person Level Integrated Data Asset
R2020	2020 Methodology Review
R2025	2025 Methodology Review
SEIFA	Socio-Economic Indexes for Areas
U2024	2024 Update

Notes

State(s): Unless the context indicates otherwise, the term ‘state(s)’ includes the ACT and the Northern Territory.

PART 1

Purpose of the Draft Report

On 9 February 2023, the Commission received terms of reference for a review of the methodologies it will use to inform the goods and services tax (GST) distribution from 2025–26. This report responds to the requirement that the Commission provide a draft report in 2024, in advance of the final report by 28 February 2025.

This Draft Report is the Commission's preliminary response to the terms of reference. It includes the Commission's draft positions on the methods and related data sources it proposes to adopt in the Final Report and provides the basis for further consultation with the states and territories (states). The Commission's draft positions have been informed by thorough consultation with the states, including in-person visits to each state. The Draft Report provides the Commission's proposed approach to each of the assessments and a detailed response to the issues raised by the states in the consultation process.

Introduction to the 2025 Methodology Review

In a methodology review, the Commission reconsiders the methods and supporting principles it uses to determine its advice to the Commonwealth Treasurer on distributing GST revenue between the states.

A methodology review provides an opportunity for the Commission to ensure that its methods for assessing relative state fiscal capacities, which underpin the GST distribution, are appropriate and use the latest fit for purpose data.

Since the introduction of the GST in 2000, the Commission has completed 4 methodology reviews – 2004, 2010, 2015 and 2020. The review process generally takes 2 to 3 years. The 2025 Review is to be completed within 2 years.

As the first steps in the 2025 Review, the Commission consulted states on the review approach, work program, the concept of fiscal equalisation and the Commission's supporting principles and assessment guidelines.

Approach and work program

The Commission consulted with the Commonwealth and states on the development of the approach and work program for the 2025 Methodology Review (2025 Review), issuing a discussion paper on the proposed approach and work program on 14 February 2023 and inviting state submissions. Following consideration of state views, the Commission released its position on the approach and work program on 21 April 2023.

The 2025 Review takes the 2020 Review methodology as its starting point and considers the appropriateness of all the Commission's assessment methods in the context of experience in applying those methods, changes to state fiscal circumstances and the availability of new data. This approach does not preclude considering the appropriateness of any of the assessment methods in the 2020 Review.

The Commission committed to ensuring all states have sufficient opportunity to engage with the review. This was to enable them to convey their views comprehensively and to understand the basis for the Commission's decisions.

The main consultation with states on assessment methods and data sources occurred in 2 tranches, with the Commission releasing consultation papers and inviting submissions from states.

The Commission visited each state between late 2023 and early 2024 and held online bilateral and multilateral meetings with states during the development of the Draft Report. Detailed discussions were held between states and Commission staff on a broad range of issues.

The Commission has identified several areas of further work to be undertaken after the conclusion of the review, which have been included in the proposed forward work program. As per the 2025 Review terms of reference, the Commission will consult on any substantive changes to the revised methodology following the Draft Report later in 2024.

Fiscal equalisation, supporting principles and guidelines

On 21 April 2023, the Commission issued a consultation paper on fiscal equalisation, supporting principles and assessment guidelines for the 2025 Review and invited state submissions.

On 9 June 2023, the Commission released its position on fiscal equalisation, supporting principles and guidelines.

Horizontal fiscal equalisation

The Commission decided to retain the approach to horizontal fiscal equalisation articulated in the 2020 Review as the first step in determining GST distributions in accordance with the 2018 legislated changes.[1]

In determining the GST distribution among the states, the Commission's primary task is to identify influences, referred to as 'drivers', beyond the direct control of states that cause their relative fiscal capacities to diverge. By assessing these influences, the Commission seeks to estimate the GST share each state requires to have the fiscal capacity to provide a comparable level of services (if it makes the average effort to raise revenue).

Recognising the practical aspects of assessing state spending needs and revenue capacities, the Commission's approach involves minimising, as far as possible, differences in the fiscal capacities of the states to provide services.

Supporting principles

While the Commission's primary task is fiscal equalisation, it has developed a set of 4 supporting principles that guide the Commission in designing and evaluating assessment methods. The supporting principles, that are subsidiary to the objective of horizontal fiscal equalisation, are:

- 'what states do' - the Commission's methods should, as far as possible, reflect what states collectively do, not what they could or should do
- policy neutrality - a state's policy choices (in relation to the revenue it raises or the services it provides) should not directly influence its GST share. Also, the

[1] *Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of the GST) Act 2018 (Cwlth)*

Commission's assessments should not create incentives or disincentives for states to choose one policy over another

- practicality - assessments should be based on sound and reliable data and methods, and should be as simple as possible, while also capturing the major influences on state expenses and revenues
- contemporaneity - to the extent reliable data will allow, the distribution of GST in a year should reflect state circumstances in that year.

The Commission concluded that this set of supporting principles remained appropriate. Recognising that trade-offs between principles may be necessary, judgements are often required in their application.

Assessment guidelines

The Commission uses assessment guidelines to support a consistent approach to developing assessment methods, and to ensure that those methods are conceptually sound, reliable, and as transparent and simple as possible. The guidelines are also a key part of the Commission's quality assurance process. They ensure all relevant steps in the decision-making process are followed and that this process is transparent.

Flexibility to consider method changes between reviews

The terms of reference for the 2025 Review included a direction for the Commission to:

> Consider if there is a case for the Commission to be given the flexibility to consider alternative methods in cases where there is a significant unanticipated shock (such as pandemic) or where major policy reforms are enacted in between reviews.

In August and September 2023, the Commission held a bilateral meeting with each state, seeking views on relevant issues to be included in the consultation paper on this topic. On 19 October 2023, the Commission issued the consultation paper on changes in methods between reviews and invited state submissions.

The Commission's response to the issues raised by the states and its draft position are outlined in the flexibility chapter.

Next steps

Further consultation

Submissions from states on the Draft Report are due by 7 August 2024.

After considering submissions, the Commission will issue a paper outlining any significant changes to the Commission's positions in the Draft Report.

To inform the Commission's advice on GST distribution for 2025–26, and consistent with its usual process, a new issues discussion paper will be issued later in 2024.

Final Report

The Commission will release its Final Report to the Commonwealth and states by 28 February 2025.

The Commission's Final Report will provide information on:

- the recommended GST revenue sharing relativities for 2025–26, why they have changed from 2024–25 and why they differ between states
- the Commission's response to state submissions on the Draft Report and the paper on significant issues since the Draft Report, and the Commission's final position on its assessment methods
- a standalone section providing a description of each of the Commission's final assessment methods from the 2025 Review.

The Final Report will not duplicate information from consultation earlier in the review but will provide links to state submissions and Commission responses.

Forward work program

A number of issues were identified during consultations with states where it was considered further work should be undertaken post-review. These are outlined in the forward work program chapter of the Draft Report. Some of the issues involve emerging topics whilst in other cases the additional work and analysis that has been identified could not be completed for inclusion in the 2025 Review. The outcome of this work, which will be undertaken in consultation with the states, will inform the next methodology review.

The Commonwealth Grants Commission's role

The Commission's role is to provide independent advice to the Australian Government on how Goods and Services Tax (GST) revenue should be distributed among the states. The distribution of GST revenue is governed by legislation and terms of reference issued by the Commonwealth Treasurer. Both the legislation and terms of reference require the Commission's advice to be based on the objective of horizontal fiscal equalisation.

Under this objective, which has been a feature of Australia's federal financial arrangements for many decades, as well as that of other federations, Commonwealth financial assistance to the states seeks to ensure that each state has the financial capacity to provide services and associated infrastructure at a comparable standard if each made the same effort to raise revenue.

Within the Australian federation, the Commonwealth has a greater capacity to raise revenue, while states remain responsible for providing many services (vertical fiscal imbalance). States' fiscal capacities also differ from each other (horizontal fiscal imbalance). Providing GST revenue to the states, and allocating it in a way that brings their fiscal capacities closer together, mitigates both imbalances, while retaining the benefits of decentralised service delivery by the states.

Changes to the GST distribution arrangements legislated in 2018 include a new equalisation benchmark linked to the fiscally stronger of New South Wales or Victoria, a GST relativity floor, and transitional arrangements to phase in the new benchmark and give states a no-worse-off guarantee. Under these changes, the concept of horizontal fiscal equalisation remains relevant to the first step in determining states' GST distributions — calculating states' relative fiscal capacities. This first step is also necessary to identify the fiscally stronger of New South Wales and Victoria.

The Commission has consistently stated that pursuing horizontal fiscal equalisation is not an exact science — it depends on the availability of appropriate data and requires the Commission to undertake estimates, make trade-offs and apply judgements in its assessments. The Commission seeks to make its judgements as consistent, transparent and understandable as possible.

The work of the Commission depends heavily on reliable and fit-for-purpose data. Around every 5 years, the Commission is asked to undertake a methodology review to ensure its assessment methods are appropriate and utilising the best available data. In between reviews, the Commission retains the same assessment methods, but provides an update each year to incorporate the most recent state financial and other data (such as from the ABS).

To provide certainty and support the reliability of its assessments, the Commission bases its recommendations on historical data. Since the 2010 Review, the Commission has used a 3-year lagged moving average of data. This balances the objectives of contemporaneity, predictability and smoothing the impacts of annual changes in states' fiscal circumstances. States have supported this approach through recent methodology reviews including the current review.

The Commission recognises that in many, but not all, instances, its assessment methods are complex. Complexity is often a result of ensuring the methods are policy neutral — that is, that they do not reward or penalise states for their individual policy choices. Further, in pursuing the primary objective of fiscal equalisation, complexity can arise from adopting methods that seek to best reflect states' particular fiscal circumstances. The Commission adopts a materiality threshold as a guardrail against undue complexity and, again, states have generally supported this approach.

Since the 2020 Review, the Commission has introduced an Occasional and Research Paper series. The purpose of these papers is to help improve understanding of the Commission's role and its approach to its work by explaining in non-technical terms how it conducts its assessments of states' relative fiscal positions. These papers are available on the Commission's website.

Close consultation with the states is a priority for the Commission. States are involved in reviewing assessment methods and in working though new issues in annual updates. States have a good understanding of the Commission's assessment methods, and the Commission regularly supports the states through the provision of training. All the Commission's calculations are made available to the states, except in some limited circumstances where states have imposed confidentiality restrictions on underlying data. The Commission is always open to assisting states to improve their understanding of its assessments and the implications for the distribution of GST revenue.

The Commission's 'practicality' supporting principle incorporates an objective to determine GST shares in a way that supports the stability and predictability of state budget processes. The 3-year lagged moving average approach to data is consistent with this objective. While forecasting future year GST shares has been suggested, this would increase, rather than reduce uncertainty, given forecasts would necessarily involve uncertain state forecasts on revenues and expenses, and would not include contemporaneous data from other sources such as the ABS. The relative nature of the GST distribution arrangements, with distributions coming from a fixed pool, also means that forecasts would depend on assumptions about relative movements in state financial circumstances across all 8 states and territories. As the Commission only receives the most recent state financial data around 2 months prior to an annual update, it is not possible to provide some form of mid-year update to GST shares at an earlier time.

PART 2

Review of methodology

Consultation on assessment methods and data sources

The main consultation with states on assessment methods and data sources occurred in 2 tranches. The Commission released Tranche 1 consultation papers in June 2023 and Tranche 2 consultation papers in October 2023. Submissions from state treasuries on the Tranche 1 and Tranche 2 consultation papers were received in October 2023 and March 2024, respectively.

The Commission conducted in-person state visits in late 2023 and early 2024, which provided opportunities for states to present further information to the Commission. In addition, some states provided supplementary submissions responding to other states' views.

This Draft Report includes indicative GST impacts for assessments where a change to 2020 Review methods is proposed or if there is an impact on methods due to the inclusion of revised or new data.

Indicative GST impacts are calculated using the 3 assessment years of the 2024 Update and applying proposed method changes.

Indicative GST impacts are provided for illustrative purposes only and should not be used to predict the GST distribution for 2025–26. The GST impacts in the Commission's Final Report will include updated data and will differ from the illustrative impacts in this report.

Revenue assessments	Expense assessments	Capital assessments	Other
Payroll tax	Schools	Investment	Commonwealth payments
Land tax	Post-secondary education	Net borrowing	Adjusted budget
Stamp duty on conveyances	Health		Flexibility to consider method changes between reviews
Insurance tax	Housing		Forward work program
Motor taxes	Welfare		
Mining revenue	Services to communities		
Other revenue	Justice		
	Roads		
	Transport		
	Services to industry		
	Natural disaster relief		
	Native Title and land rights		
	Administrative scale		
	Wage costs		
	Geography		
	Socio-economic status		
	National Capital		
	Other expenses		

Payroll tax

Overview

1 On 6 October 2023, the Commission issued a consultation paper on the draft payroll tax assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support assessing revenue from payroll tax surcharges on the same basis as payroll tax?

State views

5 All states said they supported assessing revenue from payroll tax surcharges on the same basis as payroll tax.[1] New South Wales said a separate assessment of the levies would be difficult to implement and was not warranted. Queensland said a separate assessment would require state data, placing an additional reporting burden on states. South Australia said the Commission should consider additional thresholds to capture the surcharges as part of future investigations into an alternative assessment approach.

Commission response

6 The Commission considers the current payroll tax method adequately captures states' capacities to raise revenue from the additional payroll tax surcharges. The surcharges are collected on the same revenue base as payroll tax (albeit with higher thresholds). Including revenue from the surcharges in the assessment increases the average tax rate that is applied to each state's revenue base. This is consistent with the treatment of foreign owner surcharges in the land tax and stamp duty on

[1] Victoria introduced a mental health and wellbeing surcharge from 1 January 2022 and a COVID-19 debt temporary payroll tax surcharge from 1 July 2023. Queensland introduced a mental health levy on taxable payrolls from 1 January 2023.

conveyances assessments. A separate assessment of the surcharges would require state data to further disaggregate payrolls and would add unwarranted complexity.

Commission draft position

7 The Commission proposes to assess revenue from payroll tax surcharges on the same basis as payroll tax.

Q2. Do states support retaining the 2020 Review assessment method and data sources, noting that the Commission will continue to explore the feasibility of an assessment based on data from BLADE and/or PLIDA?

State views

8 States supported retaining the current assessment. Most states also supported the Commission continuing to investigate the feasibility of an assessment using linked data from the Australian Bureau of Statistics (ABS) Business Longitudinal Analysis Data Environment (BLADE) and/or the Person Level Integrated Data Asset (PLIDA).[2] However, states disagreed on when to introduce an alternative assessment (discussed in the next section).

9 New South Wales and Queensland supported the Commission continuing to explore the potential of BLADE and PLIDA but said the Commission would have to weigh the drawbacks of those datasets against any improvement in the stability of the assessment. New South Wales said those datasets, as they currently stand, were likely to increase the complexity and decrease the transparency of the assessment. Queensland said the Commission would need to ensure those datasets do not significantly reduce the contemporaneity of the assessment. It said incompleteness in the existing PLIDA data may reduce its reliability and fitness for purpose.

10 Victoria did not consider further exploration of BLADE and PLIDA data to be necessary until the underlying limitations of those datasets have been addressed. It said those limitations included unavailability of business activity statement data disaggregated by state and lack of contemporaneity of business income tax data. Victoria said the resolution of those limitations required further development of the data by the ABS, rather than adjustments made by the Commission.

11 Several states noted the volatility in the existing revenue base arising from revisions to, and sampling variability in, the underlying ABS data. South Australia said while the current assessment is robust, there is potential for improvement. It said the survey data used to disaggregate private sector wages and salaries above and below the average threshold were subject to high degrees of sampling error and other

[2] BLADE integrates Australian Taxation Office business tax data with data from ABS surveys and other administrative data. PLIDA combines information on income, taxation, employment, population demographics and other variables over time.

non-sampling variability. It said the Commission should continue to investigate alternative data sources that may improve the reliability of the assessment and better reflect the use of diminishing thresholds by some states.

12 New South Wales compared differences in state shares of the revenue base with their 5-year average shares. It said to the extent there were differences they were reflective of trends in states' revenue raising capacities. It considered the volatility was at a reasonable level. It said the Commission's 3-year averaging managed volatility in the assessment.

Commission response

13 The Commission considers that the 2020 Review assessment method (with the changes introduced in the 2024 Update[3]) captures states' relative capacities to raise payroll tax. It broadly reflects what states do in collecting payroll tax from businesses with payrolls above a threshold.[4]

14 The Commission considers the data used in the assessment are fit for purpose and the best available at this time.[5] Nevertheless, the Commission acknowledges the concerns of some states about the level of volatility arising from revisions to the compensation of employees data and sampling variability in the ABS survey data on wages and salaries, especially for small states.

15 The Commission notes that neither the Commission (nor states) identified any other suitable alternative data. For the 2025 Review, the Commission engaged the ABS to examine the feasibility of replicating the current approach using various BLADE datasets. Based on those investigations, the Commission has concluded that data from BLADE or PLIDA are currently not able to support a timely and reliable assessment with reduced volatility. While these data sources may have future potential, there are currently barriers to their use in the payroll assessment. These barriers include lags in the availability of data and difficulties apportioning across states remuneration paid by multi-state businesses.

16 The Commission proposes to continue to monitor the development of the BLADE and PLIDA datasets. This is to explore the potential of using linked data from those datasets in the assessment to reduce data volatility, especially that caused by data revisions and small sample sizes. The Commission notes the concerns raised by states that the use of BLADE or PLIDA data may increase complexity and reduce

[3] In the 2024 Update, the Commission discontinued a separate assessment to remove from the revenue base the remuneration of Australian Defence Force personnel and Australian embassy employees overseas. Changes to the scope of the ABS public sector wages and salaries data meant the separate assessment was no longer necessary. More information on these changes can be found in the Commission's paper New Issues in the 2024 Update.

[4] Four states apply diminishing thresholds, where the threshold (deduction) is reduced as payroll size increases. The ABS has previously advised that confidentiality concerns mean it cannot provide more disaggregated data that would be necessary to fully reflect diminishing thresholds in the assessment. Instead, the assessment uses a single weighted average threshold.

[5] The assessment uses ABS compensation of employees data as its broad measure of remuneration paid in each state. The ABS places its aggregate compensation of employees estimates in its highest category of accuracy ratings. Compensation of employees are disaggregated using ABS survey data on wages and salaries above a weighted average threshold.

transparency and will take this in account in its future assessment of whether the data is fit for purpose. This work will continue beyond the timeframe for finalising the 2025 Review.

17 The Commission will also continue to monitor developments in the ABS' use of the Single Touch Payroll data from the Australian Taxation Office. From 2022–23, the ABS replaced its Survey of Employment and Earnings with Single Touch Payroll as its method of collecting the public sector wages and salaries data used by the Commission. The ABS says, with access to this rich data source, it is actively pursuing opportunities to augment and/or replace direct collection from employers. If the ABS were to seek to move to Single Touch Payroll as its data source for the private sector wages and salaries data used in the assessment, the Commission would consult states on any implications.[6]

Commission draft position

18 The Commission proposes to retain the 2020 Review assessment method for the 2025 Review, including the ABS data sources. The Commission will continue to monitor developments in ABS data sources including BLADE/PLIDA and Single Touch Payroll.

Q3. Do states support the assessment method including scope for the Commission to move to BLADE and/or PLIDA data in a future update, in consultation with states, if those data would improve the assessment?

State views

19 Five states supported the assessment method including scope for the Commission to move to BLADE or PLIDA data in a future update, if those data improve sufficiently to support a superior assessment. They said states would need adequate opportunity to review the alternative approach. New South Wales said the data would have to evolve to meet the Commission's needs. Tasmania said it would need to be demonstrated that the data improve the reliability, accuracy, comparability or contemporaneity of the assessment. The ACT said the Commission should further explore the potential of Single Touch Payroll data for the assessment.

20 Victoria, Queensland and the Northern Territory did not support the assessment method including scope for change in an update. They said a move to BLADE or PLIDA data would represent a significant change to the assessment and require more thorough consultation than could occur in an annual update. Victoria said an

[6] Single Touch Payroll data is included among the BLADE datasets. Several states have advised that consideration of a transition to Single Touch Payroll for collecting some state taxes has not progressed. If this were to progress, it may improve the potential for Single Touch Payroll data to be used in the payroll tax assessment.

assessment using BLADE or PLIDA data should be considered in a future methodology review, if the limitations of those datasets were resolved.

21 The Northern Territory said payroll tax was one of the more stable and consistent assessments and there were no major concerns with the current data. It said the number of issues for discussion in annual updates should be kept to a minimum.

Commission response

22 While the Commission proposes to continue to investigate the potential of linked data from BLADE and PLIDA, this work will continue beyond the timeframe for finalising the 2025 Review. Work to identify, develop and consult on a new assessment method is likely to take a number of years. Given the need to rigorously test the reliability of an alternative method and fully consult with states, the Commission proposes that implementation of any new method occur in a future review.

23 Such a change to the assessment method is a discrete project separate to changes the ABS may make to the way it collects the data currently used in the assessment (for example, using Single Touch Payroll mentioned above).

Commission draft position

24 The Commission proposes to continue to investigate the potential for an assessment based on linked data from BLADE and/or PLIDA but not to implement an alternative assessment method using those data sources before the next review.

Other issues raised by states

Change in Commonwealth Government employment practices

25 The ACT noted that the Commonwealth Government's policy to directly employ Australian Public Servants in preference to labour hire and contracted employees. It said this had lowered the ACT's capacity to raise payroll tax.

Commission response

26 The Commission notes this change and considers it should be captured in the ABS data that are updated annually.

Draft 2025 Review assessment method

27 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method.

28 Table 1 shows the proposed structure of the 2025 Review payroll tax assessment.

Table 1 Proposed structure of the payroll tax assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Payroll tax	Value of taxable renumeration	Recognises the additional revenue capacity of states with greater private sector and non-general government public sector remuneration above an average threshold.	No

Indicative distribution impacts

29 No method changes are proposed for this assessment.

Land tax

Overview

1 On 13 June 2023, the Commission issued a consultation paper on the draft land tax assessment. The paper considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support the continuation of the land tax assessment in its current form?

5 All states broadly supported retaining the current land tax assessment method.

6 Victoria, Queensland and Western Australia had no further comments. The other 5 states raised concerns on the discount applied, the number of value ranges, elasticity adjustments, the adjustment made to the ACT's revenue base to account for its policy choice to not aggregate properties,[1] and the method of estimating the Northern Territory's distribution of land values. Each issue is addressed below.

Discount of 12.5% to data on the taxable value of land

State views

7 New South Wales, Victoria, South Australia and Tasmania commented on the Commission's preliminary proposal to retain the 12.5% discount in the land tax assessment. The Commission applied a discount because of concerns about the reliability and comparability of the taxable land value data provided by State Revenue Offices. The size of the discount was reduced from 25% to 12.5% in the 2020 Review because it was considered that the quality of the data had improved.

[1] In assessing land tax liability, most states aggregate a landowner's value of land holdings and deduct the value of land that is not taxable (such their principal place of residence).

8 New South Wales said the Commission should increase the discount to 25%. It expressed concerns about the ability of Victoria, Queensland and itself to adjust their taxable land values to ensure a comparable treatment of joint owners of land. It analysed states' taxable land values and hypothesised that states with low overall land values should have an above average share of land values in low value ranges, and a below average share of land values in high value ranges. It said the opposite should be true for states with high overall land values. New South Wales said its analysis showed the taxable land values for states not making the joint owners adjustment (Western Australia, South Australia, and Tasmania) were broadly consistent with its expectations. However, the taxable land values for states making the adjustment (New South Wales, Victoria, and Queensland) were not.

9 New South Wales also analysed the growth in states' taxable land values. It noted Queensland's taxable land values grew 1.1% between 2020–21 and 2021–22 compared to revenue growth of 7.7%. It said the 1.1% growth was also inconsistent with Queensland's 2021–22 budget, which acknowledged a strong growth in land values. New South Wales also compared the growth in state taxable land values with the growth in land values reported by the Australian Bureau of Statistics (ABS) in its National Accounts data. It said the growth rates for state taxable land values were lower than those for ABS land values for all states except New South Wales.

10 Victoria said it supported retaining the 12.5% discount, describing it as necessary due to concerns about the reliability and comparability of state data.

11 Tasmania said the discount should be removed when there was evidence that the data from states were comparable. If the data were not yet comparable, it asked the Commission to increase its efforts to improve their reliability. South Australia also supported removing the discount.

Commission response

12 The Commission has undertaken its own an analysis of the data and considers that the quality of the data used in the land tax assessment has not deteriorated since the 2020 Review.

13 The Commission's revenue assessments aim to measure the revenue each state would raise if it applied the Australian average tax rate to its revenue bases. For the land tax assessment, the revenue base is the value of land holdings that would be taxed under average policy. The Commission considers that data from State Revenue Offices best reflect how states impose land tax. In particular, these data capture the average policy to impose tax on the combined value of a landowner's taxable land holdings (aggregation) and the common exemption for principal place of residence.

14 However, the Commission recognises that State Revenue Office data can be affected by state policies that differ from the average. It asks state data providers to make several adjustments to their data to make them more comparable, including a common date of valuation, consistent treatment of land holdings of joint owners

(and of related companies) and exclusion of commonly exempt types of land. The Commission also assesses revenue raised from taxable land holdings below $300,000 equal per capita, since data on the value of land holdings below a state's tax-free threshold can be less reliable.

15 The Commission applies a 12.5% discount to the assessment, reflecting a degree of uncertainty about the accuracy of the adjustments made by state data providers (particularly for joint owners).

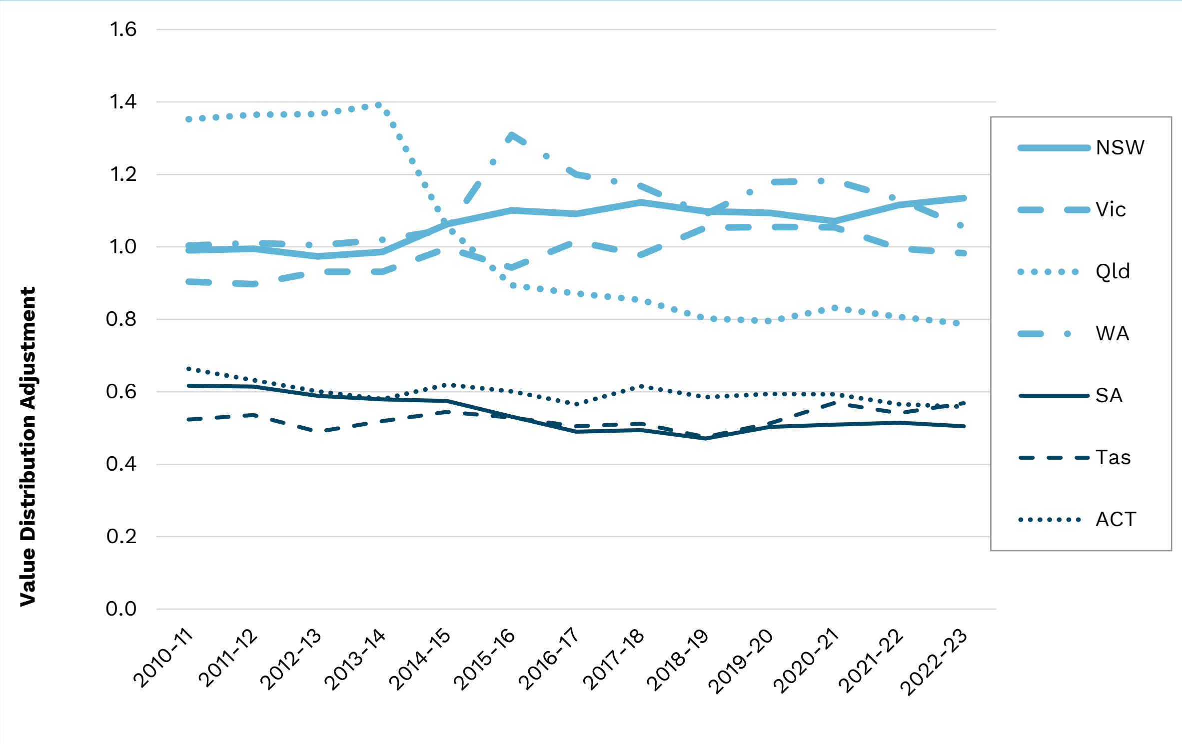
16 In support of its case for an increase in the discount, New South Wales examined the extent to which states' shares of taxable land holdings in each value range varied from the average. It concluded that the adjustments to ensure comparable treatment of joint owners were unreliable since the data for the 3 states that made the adjustment did not conform to its expectation that states with high overall values would have higher proportions in higher value ranges.

17 As New South Wales said in its submission, an analysis of this nature is not definitive. Its analysis was based on data for a single year (2021–22). The Commission uses relatively narrow value ranges to ensure the assessment continues to capture the progressivity of land tax when land values and state tax rate scales change. This means individual states' proportions in each value range will vary over time, particularly relative to the average proportion.

18 Further, the states that make the joint owners adjustment were not all high overall land value states as the New South Wales analysis implied. While the Commission does not collect data on the number of individual land holdings, Queensland had lower taxable values per capita than New South Wales and Victoria. Similarly, South Australia had lower per capita taxable land values. Since 2020–21 South Australia has treated the land holdings of joint owners in the same way as New South Wales and Victoria and made a similar adjustment to its data.

19 The Commission observes that its value distribution adjustment has been relatively stable for all states since the 2020 Review. This provides a level of confidence that the quality of the data has not significantly changed in that time (Figure 1).

Figure 1 Value distribution adjustment, 2010–11 to 2022–23



Source: Commission calculation based on State Revenue Office data.

20 New South Wales said state provided revenue data did not always rise in tandem with land values, despite all states having a progressive rate structure. However, the Commission observes that, aside from the ACT which imposes a fixed charge, states' effective rates over the past 5 years were consistent with a progressive rate structure.[2]

21 New South Wales said Queensland's data provided another example of data reliability issues. It said Queensland's total taxable land values grew by only 1% between 2020–21 and 2021–22, compared to 7.2% growth in land tax revenue. The Commission observes that growth in land tax revenue does not precisely track growth in taxable land values for any state and that caution is needed when comparing year-on-year growth.[3] For example, total taxable values in New South Wales grew by 22% in the year to 2021–22, whereas its revenue declined slightly. Queensland's total taxable values grew by 21% in the year to 2022–23 compared to growth in its land tax revenue of 10%. The New South Wales analysis used years that were impacted by the COVID-19 pandemic and associated state responses to the pandemic.[4]

[2] Land tax in the ACT includes both a variable component, similar to the other states, and a fixed charge per taxable property.

[3] The Commission asks states to reconcile their data on revenue by value range to their total audited land tax revenue. Where they do not match, the Commission scales the revenue by value range to match total audited revenue.

[4] Some states offered tax rebates or deferrals in 2021–22. Payment of deferred liabilities (or the cessation of rebates) may have inflated the revenue growth in 2022–23.

22 New South Wales also compared data provided to the Commission with ABS data on total land values (weighted to reflect the greater share of residential land in state provided data). It said growth in the ABS data between 2020–21 and 2021–22 bore little relationship to growth in the data provided to the Commission. The Commission notes that the 2 data sources are not directly comparable. The ABS data include principal places of residence (which are not taxable), but do not include aggregation and are not available by value range. For these reasons, the Commission uses State Revenue Office data in its assessment.

23 While caution needs to be exercised in comparing year-on-year growth, the Commission has replicated New South Wales' analysis with 2 key differences. The Commission adjusted the ABS land values to exclude principal places of residence (rather than differentially weighting residential and commercial/industrial data) and it excluded the value of 'other properties'.[5] State provided data on taxable land values were closer to the adjusted ABS land values for all states except New South Wales (Table 1).

Table 1 Growth in land values, ABS national accounts and State Revenue Office, 2020–21 to 2021–22

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Growth between 2020-21 and 2021-22	**%**	**%**	**%**	**%**	**%**	**%**	**%**	**%**
State taxable land values	22	14	1	4	11	7	14	N/A
ABS land values (a)	23	22	28	20	21	31	32	12
Difference between the 2 sources of land values (b)	**-1**	**-8**	**-26**	**-16**	**-10**	**-24**	**-18**	**N/A**
Adjusted ABS land values (c)	18	18	24	12	17	25	27	4
Difference between the 2 sources of land values (b)	**4**	**-3**	**-23**	**-8**	**-6**	**-18**	**-13**	**N/A**

(a) Comprises residential, commercial and industrial land values (excludes rural and other land).
(b) Comprises residential investment, commercial and industrial land values (excludes rural and other land, and principal places of residence).
Source: Commission calculation based on ABS data and State Revenue Office data.

24 Repeating the analysis for the 5 years to 2022–23 showed the differences in growth rates were significantly higher for several states in the year to 2021–22 (used by New South Wales) than in other years (Table 2). Notably, the difference in growth rates for Queensland (23%) was inconsistent with other years.

[5] The Commission used data from the 2022–23 release of ABS 5204.0 *Australian System of National Accounts* which included some revisions compared to the 2021–22 release used by New South Wales.

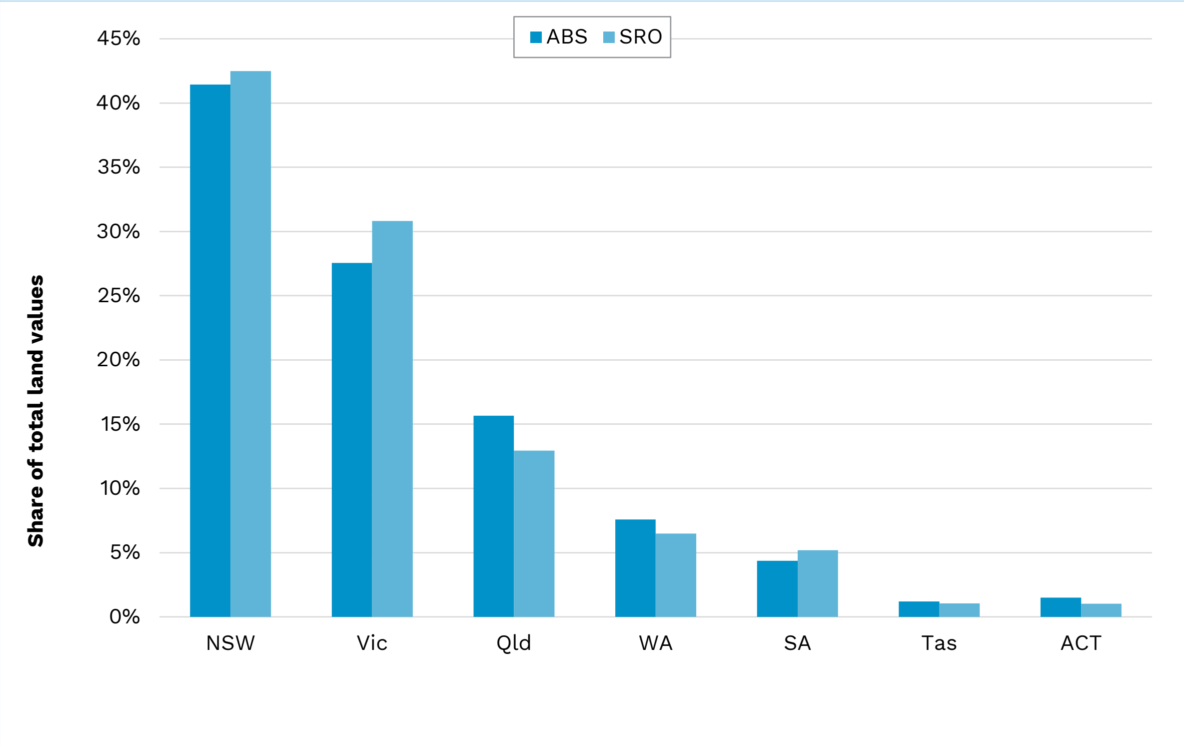
Table 2 Difference between growth in adjusted ABS land values and growth in State Revenue Office land values, 2017–18 to 2022–23

	2017–18 to 2018–19	2018–19 to 2019–20	2019–20 to 2020–21	2020–21 to 2021–22	2021–22 to 2022–23
	%	%	%	%	%
NSW	9.1	-0.7	-0.9	3.9	10.7
Vic	15.0	0.7	-2.6	-3.3	-0.9
Qld	0.4	5.0	-3.6	-23.1	-0.6
WA	-0.3	-3.5	-2.0	-8.5	-3.7
SA	7.5	5.8	-0.9	-6.0	1.1
Tas	-4.6	0.8	-0.6	-18.0	11.1
ACT	6.4	27.7	-7.5	-13.1	3.2
NT	N/A	N/A	N/A	N/A	N/A

Source: Commission calculation based on ABS data and State Revenue Office data.

25 The Commission also observes that, on average over the 5 years to 2022–23, states' shares of taxable land values in the 2 data sources are broadly consistent (Figure 2). The differences between the 2 are consistent with the value distribution adjustment. This gives the Commission a degree of confidence in the direction and magnitude of its assessment based on state provided data.

Figure 2 States' share of total land value by different data sources, average from 2018–19 to 2022–23



Source: Commission calculation based on ABS data and State Revenue Office data.

26 In summary, the Commission does not consider there is evidence to support a change to the discount. While the quality of the data used in the land tax assessment has not deteriorated since the 2020 Review, a degree of uncertainty as to the accuracy of the adjustments made by states remains. Therefore, the

Commission proposes to continue to apply the 12.5% discount to the assessment. The Commission would consider removing the discount if it had information showing the adjustments made by states and policy differences were not having a material effect on the state provided data.

Commission draft position

27 The Commission proposes to retain the 12.5% discount to recognise a low level of comparability concerns with the state provided data used in the assessment.

Value ranges

State views

28 South Australia said that there has been significant growth in the total value of taxable land since the 2020 Review. It said to reflect this change, the Commission should consider increasing the number of value ranges by further splitting the value ranges above $1 million. South Australia said it is able to provide data for any new value ranges.

Commission response

29 The Commission captures the average state policy to apply progressive rates of land tax by assessing revenue capacity by value range. The choice and number of value ranges was not based on an analysis of the materiality of each range. Rather, the Commission decided on an extended number of value ranges to ensure the assessment continued to capture the progressivity of land tax in future updates without the need to change those ranges if states changed their tax scales. Frequent changes of value ranges would make data extraction more difficult for state data providers.

30 Currently, the land tax assessment has 17 value ranges with 7 value ranges above $1 million. In the 2020 Review, the Commission split the highest value range ($3 million plus) into 3 separate value ranges. While average land values have increased over that period, the split did not make a material difference to the assessment in the 2024 Update. The Commission considers further splitting the value ranges above $1 million is not warranted at this time. Similarly, collapsing the lower value ranges would reduce the progressivity of the assessment for only a marginal gain in simplicity.

Commission draft position

31 The Commission proposes to retain the existing value ranges. It considers this provides the best balance between appropriately capturing the progressivity of state tax rates and avoiding the need for frequent changes to those ranges in response to state changes to their tax scales.

Elasticity adjustments

State views

32 New South Wales said that the Commission should incorporate an elasticity adjustment into the land tax assessment, as well as more broadly. New South Wales said that the introduction of elasticity adjustments would be material and their introduction was critical if Commission assessments were to be fit for purpose.

33 New South Wales said it agreed with the conclusion reached by the Commission's consultant during the 2020 Review, that state land taxes impacted their unimproved land values. However, it said the consultant's conclusion did not reflect that land tax is imposed progressively and only on a subset of properties. It provided analysis of the impact of its land tax on its high value properties. It said its analysis demonstrated that differences in states' land tax rates have a material impact on their unimproved land values, ranging from 24.8% in Western Australia to 41.5% in South Australia. New South Wales said while an elasticity adjustment would add complexity, an allowance should be made because elasticity effects were significantly material.

34 As land tax is applied to only a subset of properties, New South Wales said an elasticity adjustment should only be applied to properties valued at $5 million and above.

Commission response

35 The Commission has retested the materiality of applying the consultant's elasticity adjustment to taxable land values. The adjustment was not material at the $12 per capita data adjustment threshold for the 2024 Update. The Commission notes the issues raised by New South Wales regarding the subset of properties liable for land tax. However, given the significant complexities and uncertainties involved in implementing an elasticity adjustment, the Commission proposes not to introduce an elasticity adjustment in any revenue assessment for the 2025 Review. Further discussion of the issues involved in implementing elasticity adjustments can be found in the chapter on stamp duty and conveyances.

Commission draft position

36 The Commission proposes not to introduce an elasticity adjustment in the land tax assessment for the 2025 Review.

Adjusting the ACT's land value to account for its policy choice to not aggregate properties

37 The ACT does not aggregate the taxable land holdings of landowners. In the 2020 Review the Commission applied a 6% upward adjustment to the ACT's land values because of its policy.

State views

38 New South Wales said it had concerns about the size of the adjustment and its implementation. It provided analysis which showed aggregation increased its revenues by 33%. It said this analysis suggests the 6% adjustment for the ACT was too low. New South Wales acknowledged the effect of aggregation differed between states and it would not be appropriate to base the ACT's adjustment on its 33% figure.

39 New South Wales said it would be preferable for the ACT to update its analysis annually. If that was not possible, it said the ACT should provide its analysis to the Commission to support an appropriate adjustment. New South Wales also said the effects of aggregation likely differed across value ranges. It said the ACT analysis would allow the Commission to consider whether different adjustments were appropriate for different value ranges.

40 South Australia also said the Commission should test that the size of the ACT adjustment was still appropriate.

41 The ACT provided updated analysis which suggested the adjustment should be reduced from 6.0% to 5.2%.

Commission response

42 In the 2020 Review, the Commission accepted the ACT's analysis and increased the adjustment to the ACT's taxable land values from 2% to 6%. The Commission agrees it is appropriate to retest the effect of aggregation on ACT land values.

43 The ACT's estimate of 5.2% is lower than New South Wales' own estimate based on New South Wales data of 33%. The Commission notes that the effect of aggregation in each state depends on its individual circumstances, including the number of land holders with multiple investment properties, the values of those properties, and the state's land tax rates and thresholds.

44 Land tax in the ACT includes both a variable component, similar to the other states, and a fixed charge. The fixed charge is applied to each taxable property and is $1,535 from 1 July 2023. If properties were aggregated in the ACT, the revenue from the variable component would increase, as aggregated properties would be moved into higher tax brackets. If the fixed charge continued to be applied to each property, the total revenue from the fixed charge would not change. Relative to the other states, the revenue from the fixed charge represents a large portion of the ACT's land tax revenue. Given this, aggregation is likely to have a smaller effect on land tax revenues in the ACT than in other states.

45 Additionally, the ACT's land tax rates are above the national average for lower land values but below the national average for higher land values. This is likely to reduce the effect of aggregation in the ACT compared with other states.

46 The ACT's highest land tax threshold is also lower than most other states (Table 3). Therefore, more properties are likely to already be in the highest tax bracket, and aggregating joint holdings would have a smaller effect on its revenue than other states.

Table 3 Highest marginal land tax rate and threshold for each state, 2023–24

	NSW	Vic	Qld	WA	SA	Tas	ACT
Highest rate	2.00%	2.65%	2.25%	2.67%	2.40%	1.50%	1.14%
Highest threshold	$6,571,000	$3,000,000	$10,000,000	$11,000,000	$2,500,000	$500,000	$2,000,000

Note: These are land tax rates and thresholds for residential properties held by individuals.
Source: State Revenue Office websites.

47 The Commission has tested the materiality of a 5.2% adjustment. Using the 2025 Review materiality data adjustment threshold ($12 per capita), the adjustment would not have been material in the 2024 Update. Across all updates since the 2020 Review, a 5.2% adjustment would have reduced the assessed GST needs of the ACT by no more than $8 per capita. It is unlikely an adjustment of that size will become material in the short to medium term.

Commission draft position

48 The Commission proposes to remove its adjustment to the ACT's taxable land values on materiality grounds.

Estimating the Northern Territory's tax base

49 The Northern Territory does not impose land tax and is unable to provide taxable land values. The Commission estimates the Territory's missing taxable land values using adjusted ABS land values. The Commission estimates the adjustment annually.

50 For the 2024 Update, the Commission estimated the Northern Territory's share of taxable land values as 0.6% of the total land values provided by the other 7 states. It applies its estimate to states' taxable land values after adjusting for the progressivity of their tax rates. This approach implies the Northern Territory has the national average distribution of land values by value range.

State views

51 The Northern Territory said the Commission's 2020 Review approach overstates its revenue capacity.

52 The Northern Territory provided analysis that it said implied its distribution of land values was closer to the average of the smaller states than the national average. It said the Commission should distribute its land values using the average distribution of South Australia, Tasmania, and the ACT.

53 The Northern Territory included 3 pieces of supporting evidence.

- Darwin has the lowest median house price of any capital city and should not be expected to have a similar land value distribution to the major metropolitan centres.
- The Northern Territory's assessed stamp duty base is, on average, the lowest per capita, of all states.
- According to Valuer-General data, the Northern Territory has only 7% of its overall property values above $10 million, compared to 14% nationally and 5% in the smaller states. It also has 42% of its land values in properties below $300,000, compared to 15% nationally and 30% in the smaller states.

Commission response

54 The Commission agrees that the Northern Territory's distribution of land values is more likely to reflect the average distribution of the smaller states than the national average distribution.

Commission draft position

55 The Commission proposes to distribute the Northern Territory's estimated land values across the value ranges using the average distribution of South Australia, Tasmania and the ACT.

Foreign Owner Land Tax Surcharge and Victoria's COVID-19 Debt Recovery Surcharge

State views

56 South Australia said states had increased their Foreign Owner Land Tax Surcharges since the 2020 Review and Victoria had introduced a COVID-19 Debt Recovery Surcharge. South Australia said the current assessment method treats these changes as changes in the revenue collected and reflects them as an increase in the average rate of tax. It considered this treatment was appropriate and concluded no change in the assessment method was required.

Commission draft position

57 The Commission agrees the existing assessment method appropriately captures the changes identified by South Australia.

Commission response

58 The Commission proposes not to change to the assessment method for recent changes in states' Foreign Owner Land Tax Surcharges and the introduction of a COVID-19 Debt Recovery Surcharge in Victoria.

Draft 2025 Review assessment method

59 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method with 2 changes. Firstly, the Northern Territory's

estimate of land values will be calculated using the average distribution of South Australia, Tasmania and the ACT. Secondly, the adjustment to the ACT's land values to recognise its policy choice to not aggregate land holdings will be removed.

60 No new annual data requests will be required.

61 Table 4 shows the proposed structure of the 2025 Review land tax assessment.

Table 4 Proposed structure of the land tax assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Land tax	Value of taxable land holdings	Recognises that states with greater total value of taxable land holdings have greater revenue capacity.	Yes
	Value distribution adjustment	Recognises that states with proportionally more high value taxable land holdings, which attract higher rates of tax, have greater revenue capacity.	No

Indicative distribution impacts

62 The impact on the GST distribution in 2024–25 from the proposed method changes is shown in Table 5.

63 Allocating the Northern Territory's estimated tax base across the value ranges based on the average distribution of South Australia, Tasmania and the ACT increased the Northern Territory's assessed GST need.

64 Removing the adjustment to the ACT's land values to recognise its policy choice to not aggregate land holdings increased the ACT's assessed GST need.

Table 5 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	-2,160	-677	1,370	533	550	196	144	44	2,837
U2024 using draft R2025 methods	-2,181	-689	1,366	531	549	195	148	81	2,870
Effect of draft method change	-21	-13	-4	-3	-1	0	4	37	41
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	-253	-96	244	180	291	336	301	172	104
U2024 using draft R2025 methods	-256	-98	244	179	291	336	310	314	105
Effect of draft method change	-2	-2	-1	-1	0	0	9	142	1

Note: The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025–26.

Stamp duty on conveyances

Overview

1 On 27 June 2023, the Commission issued a consultation paper on the draft stamp duty on conveyances assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that the overall approach to assessing revenue from stamp duty on conveyances remains appropriate?

State views

5 All states broadly supported retaining the current stamp duty assessment method.

6 While the 2020 Review method has broad support, some states asked the Commission to consider elasticity adjustments, the treatment of non-real property, and the number of value ranges used in the assessment.

Commission response

7 The Commission acknowledges the issues raised by states. They are considered in the sections below.

Commission draft position

8 The Commission proposes to continue the stamp duty on conveyances assessment in its current form, taking into consideration the adjustments outlined below.

Q2. Do states agree that revenue from the New South Wales property tax be assessed with land tax for as long as it exists?

State views

9 All states agreed that the revenue from the New South Wales property tax should be assessed with land tax.

Commission response

10 New South Wales closed the First Home Buyer Choice scheme to new applicants from 1 July 2023. First home buyers who signed contracts before 1 July 2023 and opted-in to the scheme have been 'grandfathered' and will continue to pay the annual property tax until they sell their property. New South Wales estimates that property tax raised $2 million in revenue in 2022–23. It estimates the property tax will raise $58 million over the four years to 2026–27.[1] A separate assessment of this revenue is not material.

Commission draft position

11 The Commission proposes that revenue from the New South Wales property tax be assessed with land tax.

Q3. Do states support the Commission not adjusting states' value of property transferred for the elasticity effects of recent reforms on materiality grounds?

State views

12 Most states said the Commission should not adjust states' value of property transferred for the elasticity effects of recent tax reforms because those reforms did not materially affect the assessment.

13 Victoria said state property tax reform is a current issue. It said states could benefit from clearer guidelines on the types of reform that would require a separate assessment and those that could fit within existing assessment methods. It said the Commission could commence work on the treatment of potential future reforms in advance of those reforms, instead of waiting for them to become material. This would allow for a robust and effective methodology to be developed in consultation with states. Victoria suggested that the stamp duty assessment method include the capacity for adjustments if state policy reforms became material. Queensland said the Commission should continue to monitor policy developments and respond, in consultation with states, where it is material to do so.

14 States also commented on the merits of the Commission implementing elasticity adjustments more broadly than in instances of tax reform. New South Wales and the ACT said elasticity adjustments should be introduced. Queensland, Western Australia, South Australia, and the Northern Territory said they do not support the use of elasticity adjustments. The broader case for elasticity adjustments is considered separately below.

[1] New South Wales Government 'Table 4.4 General government sector – summary of taxation revenue' 2023–24 Budget Paper No. 01 NSW Government, 2023

Commission response

15 The consultation paper cited 3 recent state reforms to stamp duty on conveyances:

- New South Wales' First Home Buyer Choice
- Victoria's announcement that it would replace stamp duty on commercial and industrial property with an annual property tax
- the ACT continuing its phased replacement of stamp duty on conveyances with general rates revenue.

16 As mentioned above, New South Wales has closed the First Home Buyer Choice to new applicants. It said the scheme would not have a material effect on its taxable property values in the short to medium term.

17 Victoria has released further details on its reform, which has two key parts. The first key part is a government-facilitated transition loan. The first time a property is transacted from 1 July 2024, the property will be subject to stamp duty for one final time. The purchaser will have the choice to pay the stamp duty through self-financing or a government-facilitated loan. If they choose the government-facilitated loan, they will be required to make annual principal and interest repayments over 10 years.

18 The transitional loan will be issued by the Treasury Corporation of Victoria. The Treasury Corporation of Victoria will pay an amount equivalent to the deferred stamp duty to the purchaser. The purchaser will then pay the stamp duty liability to the State Revenue Office.[2] Repayments of the loan will be outside the scope of the Commission's adjusted budget, which excludes public financial corporations. This will ensure the stamp duty revenue will be counted only once in the adjusted budget. Victoria will experience a gradual decline in stamp duty revenue from commercial and industrial properties as stamp duty is phased out. All else being equal, this will decrease the total revenue from stamp duty on conveyances. Victoria's revenue raising capacity will continue to be assessed using its value of property transferred.

19 The Commission expects it will take time before any elasticity effect from the Victorian reform becomes material, given commercial and industrial properties are a subset of the revenue base and the full effect of the replacement of stamp duty will occur gradually.[3] The Commission will continue to monitor for any potential elasticity effects.

20 The second key part of Victoria's reform is the introduction of a new commercial and industrial property tax. A commercial or industrial property will become liable for the

[2] This state budget impact of the transitional loan reflects the accounting treatment. In practice, transactions between the Treasury Corporation, the purchaser and the Victorian State Revenue Office are likely to occur simultaneously at settlement of the property transfer.

[3] Under the Victorian reforms, commercial and industrial properties will only be exempt from stamp duty from the second time they are sold (after 1 July 2024). The optional loan for stamp duty payable on the first sale represents a deferred liability and would not be expected to result in a significant elasticity effect.

new property tax 10 years after it is first sold (after 1 July 2024). This means Victoria will not receive revenue from the new property tax until 2034–35.

21 Victoria's property tax differs from New South Wales' First Home Buyer Choice scheme, which was an opt in scheme. Victoria's property tax will automatically apply to all commercial and industrial properties 10 years after they are first sold. Victoria's property tax will be similar to land tax because it is imposed on the unimproved value of land and includes the same exemptions and concessions as land tax in Victoria. However, unlike land tax, it will be imposed as a single flat rate of 1%.[4]

22 The Commission has not adjusted the ACT's value of property transferred as the Commission has not identified a significant elasticity effect flowing from its reform. The reform is being implemented over an extended period and the impacts are gradual.

23 The Commission notes Victoria's request for clear guidance on the implications for its assessments of different types of state tax reforms and on the possible timing of consultation. While it is difficult to specify the treatment of potential future tax reforms other than in general terms, some of the relevant issues are discussed in the chapter on flexibility to change methods between reviews.

Commission draft position

24 The Commission proposes not to adjust New South Wales' value of property transferred for the effects of its First Home Buyer Choice scheme because an adjustment would not be material.

25 The Commission proposes not to make an elasticity adjustment for the Victorian property tax reform. It will, however, continue to monitor for any potential elasticity effects after the tax is introduced. The Commission will not introduce a new assessment of Victoria's commercial and industrial property tax since Victoria will not receive revenue from the tax until 2034-35.

26 The Commission proposes not to adjust the ACT's value of property transferred for the effects of its stamp duty on conveyances reform.

27 The Commission proposes not to introduce an elasticity adjustment in the stamp duty on conveyances assessment in the 2025 Review. The broader issue of elasticity adjustments will be examined following the 2025 Review. The issue of the elasticity impact of state tax reform is considered in the chapter on flexibility to change methods between reviews.

[4] Department of Treasury and Finance Victoria, Commercial and Industrial Property Tax Reform - Information Sheet, DTF Victoria, 2024

Other issues raised by states

Elasticity adjustments – the broader case

28 In responding to question 3 in the Commission's consultation paper, states discussed the merits of the Commission implementing elasticity adjustments more broadly, not just for tax reform. New South Wales and the ACT said that elasticity adjustments should be introduced. Queensland, Western Australia, South Australia, and the Northern Territory said that they do not support the use of elasticity adjustments.

29 Queensland said elasticity adjustments would introduce complexities and measurement issues to the assessment. South Australia and the Northern Territory said elasticity effects were difficult to reliably quantify. South Australia said it had not sought an elasticity adjustment following its abolition of non-residential real property duty as a reliable adjustment had not been identified. It said there is no robust way of differentiating the impacts of behavioural changes and market conditions. The Northern Territory said elasticity adjustments could be policy influenced if they were more responsive to policy changes that have large immediate impacts than more gradual reforms. It said, if an elasticity adjustment were introduced, the adjustment should account for the impact of the absence of land tax on the Northern Territory's stamp duty base.

30 Western Australia and South Australia said they did not support the introduction of elasticity adjustments more broadly. Western Australia said that elasticity estimates involve uncertainties and the Commission's revenue bases were affected by a range of policy influences other than tax rates. South Australia said numerous policy changes had occurred over time and only considering future reforms may disadvantage states that had undertaken reforms in the past.

31 New South Wales and the ACT said they support an elasticity adjustment. New South Wales said stamp duty elasticity affects both the volume of transactions and the price of properties transferred. It suggested a 100 basis point (one percentage point) increase in stamp duty would reduce transaction volumes by about 10%. This was an estimate based on a literature review conducted as part of recent efforts to reform stamp duty in New South Wales.[5] It said this represented a superior estimate to the estimate derived by the Commission's consultants in the 2020 Review.

32 New South Wales modelled the reduction in the effective rate of duty on non-residential properties due to the deductibility of stamp duty in the calculation of capital gains tax liabilities. Based on that modelling, it reduced its proposed

[5] New South Wales' elasticity estimate was based on international and Australian research.

elasticity to 9.75%.[6] It said this was a conservative estimate since it captured only the effect of changes in transaction volumes, not price effects. It said an adjustment based on its proposed elasticity would be material at the $12 per capita data adjustment threshold.

33 New South Wales said one of the reasons given by the Commission for not adopting elasticity adjustments in its 2020 Review draft report was unsatisfactory. It said that given the materiality of the proposed elasticity adjustment it did not support the Commission's 2020 Review conclusion that it was not clear that equalisation was improved by making an adjustment to one assessment and not others. It said this ignored the fact that different tax bases have different elasticity effects.
New South Wales said the Commission should introduce elasticity adjustments in all revenue assessments where they are material. The ACT agreed. It said elasticity adjustments were a practical way to address the policy neutrality concerns of tax reforms. It said the issue was becoming increasingly important given its continuing tax reform program. The ACT said if the elasticity adjustments were not introduced in the 2025 Review, they should be included in the consideration of method changes between reviews.

Commission response

34 In deciding whether to make an elasticity adjustment the Commission considered the conceptual case, practicality, complexity and materiality.

Conceptual case

35 The Commission accepts there is a conceptual case for elasticity adjustments. If the differences in state tax rates have material effects on their observed revenue bases, incorporating elasticity adjustments (providing they can be measured reliably) would improve the policy neutrality of the assessment.

Identifying robust elasticity effects

36 In the 2020 Review, the Commission engaged consultants to test the feasibility of developing elasticity estimates for each revenue assessment. The consultants produced estimates for 5 revenue categories (see Table 1),[7] 4 of which were statistically significant at the time of the report (land tax, stamp duty on conveyances, insurance tax and motor taxes). The consultants found no measurable behavioural effect of changes in payroll tax rates on labour market outcomes (wages and employment). Due to data limitations and methodological difficulties, the consultants were unable to estimate elasticities for mining revenue.

[6] New South Wales' modelling suggested that tax deductibility for non-residential business transactions reduced the headline stamp duty rate by about 10%. It estimated that tax deductible non-residential transactions represented about 25% of transfer duty revenue.

[7] Due to the national scheme for heavy vehicles, the consultants concluded an elasticity adjustment was not warranted for heavy vehicles.

Table 1 Estimated elasticity effects

Category	Elasticity Estimate	Interpretation
Payroll tax	Statistically insignificant	Not applicable
Land tax	-0.054 to -0.062 (CGC)	A 10 percent increase in the tax rate will reduce the overall unimproved value of taxable properties by about 0.6 percent.
Stamp duty on conveyances	-0.29 to -0.43 (CGC)	A 10 percent increase in the tax rate reduces the overall value of sold properties by 3-4 percent.
	-0.01 to -0.37 (Corelogic)	A 10 percent increase in the tax rate reduces the value of sold properties by 0.1 to 3.7 percent, depending on the specification chosen.
Insurance tax	-0.057 (CGC)	A 1 percentage point increase in the tax rate (equivalent to about a 10 percent increase) reduces expenditure on total premiums by 0.6 percent.
Motor taxes (light vehicles)	-0.056 (CGC)	A 10 percent increase in license fees reduces vehicle ownership by 0.6 percent.
	-0.035 (HILDA)	A 10 percent increase in license fees reduces car ownership by 0.35 percent.
Mining revenue	Could not be estimated	Not applicable

Note: The table above includes estimates based on CGC data, data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, and data from Corelogic.

Source: R Steinhauser, M Sinning and K Sobeck, State tax elasticities of revenue bases, Tax and Transfer Policy Institute, The Australian National University.

37 The consultants compared their estimates with those reported in other Australian and international studies. They concluded their estimates were conservative and within the bounds of those other studies. The consultants have been contacted as part of the 2025 Review and have confirmed that their estimates could be applied in the 2025 Review and subsequent updates.

38 The consultants constructed their estimates using data from Commission assessments and, for stamp duty on conveyances and motor taxes, data from other sources. The estimates based on external data were broadly similar with those based on Commission datasets. The consultants considered the estimates based on the Commission's datasets were more appropriate for making elasticity adjustments because the data used to develop them were consistent with the data the Commission used in its assessments.

39 Although New South Wales' estimate fits within the upper limit of the consultants' estimate range,[8] New South Wales have said the elasticity effect should be larger because its estimate only captures changes in the transaction volumes, not price effects.

[8] The average effective rate of tax in 2022–23 was 4.3%. One percentage point change (to 5.3%) would be a 23% increase. This would attract a 9.75% effect using New South Wales' estimate, and an effect between 6.67% and 9.89% using the consultants' estimates.

40 The Commission considers the elasticity estimates produced by the consultants from the 2020 Review are preferable to those provided by New South Wales for 3 reasons.

- While the New South Wales' estimate was derived from both Australian and international studies, it primarily reflects international studies. International studies may not be applicable to the economic environment in Australia. The Commission does not consider it appropriate to base elasticity estimates on the economic circumstances of international jurisdictions when Australian estimates are available.
- New South Wales' estimate accounts for only part of the elasticity effect (changes in transaction volumes only) whereas the consultants' estimates account for both price and volume effects.
- New South Wales has provided an estimate for stamp duties only, not for other revenue assessments.

Complexity and practicality

41 The Commission agrees with Queensland, Western Australia, South Australia and the Northern Territory that there are a number of practical concerns with introducing elasticity adjustments. They include:

- incomplete coverage of assessments
- uncertainty over the overall direction of elasticity adjustments
- uncertainty over the magnitude of the adjustments, particularly when the consultants provided an elasticity range rather than an estimate
- different elasticities can apply to different parts of a tax base
- sensitivity to the classification of revenues, including the potential for introducing volatility between updates
- sensitivity to the tax base used, particularly whether applied before or after other adjustments imposed by the Commission
- whether the estimates are appropriate when there are large tax rate differences
- the inability to capture cross-elasticities
- the added complexity and an increased reliance on Commission judgement.

42 The consultants provided an elasticity range for both land tax and stamp duty on conveyances. As noted above, an elasticity range implies some uncertainty over the magnitude of the elasticity effect on these tax bases. While the elasticity impact remains material for stamp duty on conveyances, regardless of whether the bottom or the top of the range is used, the impact is uncertain. The Commission would need to exercise its judgement in choosing which elasticity estimate to apply.
New South Wales noted that even if the bottom of the range of elasticity estimates was used for an elasticity adjustment, this would still constitute an improvement over the current approach of making no allowance for elasticity impacts. However, the appropriateness of any estimated range is uncertain.

43 As noted above, different elasticity effects can apply to different parts of a revenue base. The consultants said there could be different elasticity effects for different

insurance products. While they estimated an elasticity effect of 0.6% for the entire category, it was likely the elasticity effects of different products varied significantly. Compulsory insurances, such as compulsory third-party motor vehicle insurance or mortgage insurance were likely to be more inelastic, with elasticities around 0.3-0.4%. However non-compulsory motor vehicle insurances were likely to be more elastic with an elasticity as high as 9.4%. The larger elasticity implies higher premiums could influence consumers to either stop insuring their car or reduce the level of coverage. This is consistent with the submission by New South Wales.

44 In its submission on land tax, New South Wales said an elasticity adjustment should only be applied to properties valued at $5 million and above because different value ranges experience different levels of elasticity. New South Wales' proposal assumes that most of the properties in this range would be subject to land tax, and that a smaller proportion of properties in the lower ranges are subject to land tax. This may be true for commercial properties but is unlikely to be true for residential properties. Choosing to apply an elasticity adjustment to only a subset of value ranges, or different elasticity estimates to different value ranges, would introduce more complexity and require more judgements by the Commission. It is not clear whether the additional judgements required would result in a better equalisation outcome.

45 Another concern is the sensitivity of elasticity adjustments to the classification of revenues. Elasticity adjustments would be dependent on states' effective rates of tax. In its submission on insurance tax, New South Wales said the revenue from fire and emergency service levies should be included in the application of the elasticity adjustment, even though this revenue is excluded from the insurance tax assessment and assessed equal per capita in the other revenue category.

46 The following equation shows how the Commission would apply its elasticity adjustments in the land tax, stamp duty on conveyances and motor taxes assessments. It shows their dependence on states' effective rates of tax and, therefore, on the revenues included in the category.

$$V_{i,n}^{*} = V_{i,n}\left(1 + \varepsilon_s\left(\frac{t_{i,n}}{t_{s,n}} - 1\right)\right)$$

Where: $V_{i,n}^{*}$ = state i's adjusted revenue base in year n

$V_{i,n}$ = state i's unadjusted revenue base in year n

ε_s = the consultants' elasticity estimate

$t_{i,n}$ = state i's effective tax rate in year n

$t_{s,n}$ = the average rate of tax in year n.

47 For the insurance tax assessment, because the consultants' estimate is based on a percentage point change, not a percentage change, the following equation would be applied. It is as equally dependent on states' effective rates of tax. The inclusion of

revenue from fire and emergency services levies would increase the tax rate of the states that apply those levies (New South Wales and Tasmania).

$$V_{i,n}^{*} = V_{i,n}\left(1 + \varepsilon_s\left(t_{i,n} - t_{s,n}\right)\right)$$

48 The effective rates for some states can also jump between being above and below average in successive updates. For example, Tasmania's effective rate of land tax was above the national average in 2021–22 and below in 2022–23. This means the elasticity adjustment would jump between increasing and decreasing a state's revenue base in successive updates.

49 Revenue assessments are based on applying the average effective rate of tax to each state's revenue base. If a state changes its effective rate of tax, its impact on the assessment is currently limited to its impact on the average rate of tax. If elasticity adjustments are introduced, its impact on the assessment would extend to include its impact on the elasticity adjustment.

50 A further concern is the appropriateness of the consultants' elasticity estimates for extreme tax rate differences (such as when a state applies a zero tax rate). The consultants had doubts that their estimates could be extrapolated for properties that had a zero tax rate because there is a supply constraint at low tax rates. However, Table 2 shows the elasticity effects on a state's tax base if it were to abolish a tax entirely and the Commission did not change its assessment method. In the case of stamp duty on conveyances, the tax base could be reduced by between 29% (if the bottom of the range is used) to 43% (if the top of the range is used).

Table 2 Proportional change to a state's revenue base if it applied a zero tax rate

	Stamp duty on conveyances	Land tax	Insurance Tax (a)	Motor taxes (light vehicles)
	%	%	%	%
Bottom of range (b)	-29	-5.4	-8.9	-5.6
Midpoint	-36	-5.8		
Top of range	-43	-6.2		

(a) The effect of the insurance tax estimate will change between updates, as the average tax rate changes, because it is based on percentage point change, not percentage change.

(b) The consultants provided an elasticity range for land tax and stamp duty, but a single elasticity estimate for insurance tax and motor taxes (light vehicles).

Source: Commission calculation.

51 The consultants considered the issue of cross elasticities — the elasticity effects of a change in one tax on the revenue base for another tax. The consultants expected cross-tax elasticates to be small, with the possible exception of property taxes (land tax and stamp duty on conveyances). Considering the material GST impact of elasticities on the stamp duty on conveyances assessment, the Commission notes that by excluding cross-elasticities it might not fully capture all the material elasticity effects.

52 Whether an elasticity adjustment uses the revenue base before or after existing adjustments can also have significant impacts on states' assessed revenue

capacities. This is specifically relevant for the land tax and stamp duty on conveyances assessments, which apply a value distribution adjustment to the states' revenue bases that significantly affects their tax rates. The Commission considers it would be more appropriate to apply the elasticity adjustment before the value distribution adjustment, as this more closely reflects the states' actual revenue base, and therefore the actual experiences of the state. However, this is an additional judgement made by the Commission that would have significant impacts on the states' assessed GST need. For example, applying it before the value distribution adjustment would reduce New South Wales' assessed GST needs, and applying it after would increase its assessed GST needs. The benefits of an elasticity adjustment may not outweigh the additional complexity and reliance on Commission judgement it would introduce.

Parameters for implementation

53 Introducing elasticity adjustments as part of the 2025 Review could account for the effects on assessments of some types of state tax reform post review. However, this may not always be the case. Alternative adjustments may be more appropriate depending on the nature and impact of the reform. Therefore, the Commission would still need to consider the details of each individual reform and consult with states on the appropriate response. If a reform was to occur between reviews, the Commission would follow the consultation process outlined in the chapter on flexibility to change methods between reviews. Otherwise, the Commission would follow its usual process of consultation as part of a review.

Commission draft position

54 Given the significant complexities and uncertainties involved in implementing an elasticity adjustment, the Commission proposes not to introduce an elasticity adjustment in any revenue assessment for the 2025 Review.

55 Following the 2025 Review, the Commission will continue to consider how the complexities and uncertainties associated with an elasticity adjustment might potentially be addressed. This would be in preparation for the next methodology review as well as being consistent with Victoria's proposal that the Commission provide guidance on how stamp duty assessments could include elasticity adjustments if state policy reforms became material.

Treatment of non-real property

56 States agreed to abolish stamp duty on non-real property as part of the *Intergovernmental Agreement on the Reform of Commonwealth-State Financial Relations 1999* (the IGA). The Northern Territory abolished duty on non-real property from 9 May 2023. Queensland and Western Australia remain the only states imposing non-real property duty.

57 Currently, revenue from the transfer of non-real property is assessed equal per capita in the other revenue category. Queensland said it supported retaining this approach. Victoria and South Australia did not.

58 Victoria said the equal per capita treatment was not policy neutral. It said states that ignored their obligations to abolish these duties should not benefit, and states that fulfilled their obligations should not be punished. It said revenue from these transactions should be assessed actual per capita. South Australia said the Commission should develop a capacity measure for these transactions even if there are difficulties in measuring capacity for those states that do not impose the tax.

Commission response

59 Two states impose duties on non-real property. The interstate distribution of non-real property transactions is very different from the interstate distribution of real property transactions.

60 The Commission has no reliable way to estimate the value of non-real property in the 6 states that do not impose duties on non-real property. It is more practical and simpler to not assess capacity for the states that do not impose these duties.

Commission draft position

61 The Commission proposes to continue assessing duties on non-real property transfers equal per capita in the other revenue category.

Value ranges

62 South Australia said there has been significant growth in the total value of property transferred since the 2020 Review. To reflect this change, it said the Commission should increase the number of value ranges by further splitting the value ranges above $1.5 million. South Australia said it would be able to provide data for any new value ranges.

Commission response

63 The Commission captures the average state policy to apply progressive rates of stamp duty by assessing revenue capacity by value range. The Commission keeps its value ranges consistent between reviews to ensure state data providers can efficiently extract the data from their systems. The Commission uses an extended number of value ranges to ensure the assessment captures the progressivity of states' tax rates, regardless of changes to states' legislated rates and property cycles.

64 Currently, the stamp duty on conveyances assessment has 18 value ranges. In the 2020 Review, the Commission split the top value range ($1.5 million plus) into 3 value ranges. In this review, South Australia has suggested the Commission further split these 3 value ranges.

65 The Commission has not chosen the number of value ranges based on the materiality of those ranges. Rather, the choice of value ranges aims to capture the progressivity of stamp duty, while avoiding the need to vary those ranges in updates following changes to states' tax policies. Nevertheless, the 2020 Review split of the top value range (over $1.5 million) into 3 value ranges was not material in the 2024 Update.[9] This suggests there is no need to further split these upper ranges in the 2025 Review.

66 The Commission considered the case for reducing the number of lower value ranges. However, fewer value ranges would reduce the progressivity of the assessment for only a marginal gain in simplicity. In addition, the existing split of value ranges up to $1.5 million was material in the 2024 Update. Therefore, the Commission proposes to retain its existing value ranges.

Commission draft position

67 The Commission proposes to retain the existing value ranges. It considers this provides the best balance between appropriately capturing the progressivity of state tax rates and avoiding the need for frequent changes to those ranges following changes to states' rates and thresholds (which would be impractical for state data providers).

Draft 2025 Review assessment method

68 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method.

69 Table 3 shows the proposed structure of the 2025 Review stamp duty on conveyances assessment.

Table 3 Proposed structure of the stamp duty on conveyances assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Conveyance duty	Value of property transferred	Recognises that states with a greater total value of property transferred have a greater revenue capacity.	No
	Value distribution adjustment	Recognises that states with proportionally more high value property transferred, which attract higher rates of tax, have greater revenue capacity.	No

[9] It would not have been material at the $40 per capita driver materiality threshold for the 2025 Review.

Indicative distribution impacts

70 No method changes are proposed for this assessment.

Insurance tax

Overview

1 On 13 June 2023, the Commission issued a consultation paper on the insurance tax assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support the continuation of the insurance tax assessment in its current form?

State views

5 Most states supported the continuation of insurance tax assessment in its current form. Victoria did not comment on this assessment.

Commission response

6 The Commission considers there have been no developments since the 2020 Review that warrant changing the method for the insurance tax assessment.

Commission draft position

7 The Commission proposes to continue to assess states' capacities to raise insurance tax using the value of general insurance premiums paid in each state, excluding workers' compensation premiums, compulsory third-party insurance premiums and insurance-based fire and emergency services levies.[1]

[1] New South Wales and Tasmania collect insurance-based fire and emergency services levies (although New South Wales has announced an intention to abolish these levies). Revenue from these levies is included in the total premiums data for those states and is removed by the Commission.

Other issues raised by states

An elasticity adjustment

8 New South Wales said the Commission should consider an elasticity adjustment in the category. It noted that an elasticity adjustment based on the estimate produced by the Commission's consultants was not material at the $10 per capita data materiality threshold in the 2020 Review. However, it said an adjustment would be material (at the $12 per capita data adjustment threshold for the 2025 Review) if revenue from insurance-based fire and emergency levies was included with insurance tax revenue for the purposes of calculating an elasticity adjustment. It said including fire and emergency services levies for this purpose was appropriate since those levies reduce the total insurance premiums paid in the state.

Commission response

9 Given the significant complexities and uncertainties involved in implementing an elasticity adjustment, the Commission proposes not to introduce an elasticity adjustment in any revenue assessment for the 2025 Review. Further discussion of the issues involved in implementing elasticity adjustments can be found in the chapter on stamp duty on conveyances.

10 The Commission does not consider there is a strong case for including revenue from the insurance-based fire and emergency services levies in the calculation of an elasticity adjustment for insurance tax. This is because this revenue is assessed elsewhere and states have announced that the levies are being abolished.[2] The insurance-based fire and emergency services levies collected by New South Wales and Tasmania are not assessed in this category. Instead, those levies are treated as user charges and the revenue raised is offset against emergency services in the other expenses category. New South Wales has announced an intention to cease collecting insurance-based levies, although the timing of the abolition is not yet clear.[3]

Commission draft position

11 The Commission proposes not to introduce an elasticity adjustment in the category for the 2025 Review.

[2] Tasmania has paused the reform of its Fire Services Levy. See Minister for Police, Fire and Emergency services press release, 14 February 2024, https://www.premier.tas.gov.au/site_resources_2015/additional_releases/no-new-fire-levy.

[3] Consultation begins on reforming Emergency Services Levy | NSW Government

Duty on workers’ compensation premiums and compulsory third-party insurance premiums

12 South Australia said that it does not support including duty on workers’ compensation premiums and compulsory third-party insurance in the category. It said, for consistency purposes, if workers’ compensation premiums and compulsory third-party premiums are removed from general insurance premiums, then the associated duty should also be removed.

Commission response

13 The Commission removes workers’ compensation premiums from the assessed revenue base as they are only taxed by one state (at a concessional rate) but represent a large proportion of total premiums across all states. Including them would misrepresent states’ relative capacities to raise insurance tax.[4]

14 The Commission removes compulsory third-party premiums as they are significantly policy influenced. For example, they reflect whether the scheme is privately or publicly underwritten, the levels of coverage and benefits, and differences in the quality of claims management.

15 While it excludes workers’ compensation and compulsory third-party premiums from its measure of the revenue base, the Commission does not remove the revenue raised from duty on these forms of insurance from the category. The revenue raised from the duties on these 2 forms of insurance cannot be reliably separated from other insurance duties in ABS Government Finance Statistics.[5] However, available data suggest that these revenues are likely to be small relative to total insurance tax revenue.[6] The Commission does not consider a separate state data request would be warranted for 2 relatively small data adjustments.

Commission draft position

16 On practicality grounds, the Commission proposes to leave these revenues in the insurance tax category.

[4] Only Queensland imposes duty on workers’ compensation premiums.

[5] Revenue from workers’ compensation duty is not separately reported in Government Finance Statistics. Revenue from compulsory third-party insurance duty is not reported consistently across states in Government Finance Statistics.

[6] Four states impose duty on compulsory third-party insurance.

Draft 2025 Review assessment method

17 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method.

18 Table 1 shows the proposed structure of the 2025 Review insurance tax assessment.

Table 1 Proposed structure of the insurance tax assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Insurance tax	Value of premiums	Recognises states with greater value of insurance premiums have a greater revenue capacity	No

Indicative distribution impacts

19 No method changes are proposed for this assessment.

Motor Taxes

Overview

1 On 13 June 2023, the Commission issued a consultation paper on the motor taxes assessment for the 2025 Review. The paper considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method with one additional element: the introduction of a separate assessment of distance-based electric vehicle charges, if such an assessment became material in a future update.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. If an assessment of revenue from electric vehicle charges becomes material in future updates, do states support the revenues being assessed as a separate component of the motor taxes category?

State views

5 All states said they supported a separate assessment of revenue from electric vehicle charges should they become material in future updates. All states supported the assessment method proposed in the consultation paper. New South Wales referred to the High Court challenge to Victoria's Zero and Low Emission Vehicle (ZLEV) road user charge.[1] It said if the High Court found states were unable to impose distance-based electric vehicles charges, electric vehicles could be included in the light vehicle component.

6 South Australia said until a separate assessment becomes material, the revenue raised from distance-based electric vehicle charges may be more appropriately assessed equal per capita.

[1] State submissions were provided before the High Court decision in *Vanderstock & Anor. v State of Victoria* [2023], hca-30-2023-10-18.pdf (hcourt.gov.au)

Commission response

7 On 18 October 2023, the High Court found that Victoria's distance-based Zero and Low Emission Vehicle road user charge was an excise and, therefore, was constitutionally invalid.[2] The decision will prevent other states from imposing similar charges, including those that had already announced an intention to do so (New South Wales and Western Australia). Victoria is refunding the revenue previously collected from this charge. In light of this development, it is not relevant for the Commission to introduce a separate assessment of these charges.

8 Electric vehicles will continue to be included in data on the number of registered vehicles (light and heavy) used in the assessment (see next section). The Commission considers this is appropriate since electric vehicle owners will continue to be liable for registration fees, albeit with concessions or time-limited exemptions in some states (see other issues raised by states below).

Commission draft position

9 The High Court decision means states are unable to impose electric vehicle road user charges. Therefore, it is not relevant for the Commission to include a separate assessment for electric vehicle charges as part of the motor taxes category.

Q2. Do states agree that the number of light vehicles remains an appropriate measure of revenue capacity for revenue raised from emissions-based registration fees?

State views

10 All states said they supported the proposal. Several states said there are differences in the basis on which light vehicle registration fees are imposed (vehicle weight or engine capacity). New South Wales said the number of vehicles was a simpler and more consistent capacity measure than one that attempts to capture those differences. Queensland said the average policy was to impose registration fees per vehicle and this did not change regardless of the characteristics of the vehicle or its use. Western Australia said a state's capacity to raise revenue from registration fees depends on the number of registered vehicles, not on the method of calculating these fees. The Northern Territory said the current assessment measures the overall taxation intensity on vehicles, rather than how that burden was distributed between vehicle types.

11 The ACT said other factors outside the control of governments, such as new vehicle products and changing consumer preferences, could have an impact on the revenue raised and may need to be considered in future.

[2] Section 90 of the Constitution of Australia gives the Commonwealth Parliament exclusive power to impose duties of customs and excise. See *Vanderstock & Anor. v State of Victoria* [2023], hca-30-2023-10-18.pdf (hcourt.gov.au)

Commission response

12 The Commission notes that the basis on which light vehicle registration fees are collected varies across the states – vehicle weight or engine capacity, private or business use. The assessment does not attempt to adjust for those differences. Instead, it uses the number of registered light vehicles as its proxy measure of states' capacity to raise light vehicle registration fees.

13 The Commission considers emissions-based registration fees are sufficiently similar to those based on vehicle weight or engine capacity for the revenue from those fees to be assessed using its proxy measure.

Commission draft position

14 The Commission proposes to assess revenue from emissions-based registration fees using the number of light vehicles.

Other issues raised by states

Assessment of electric vehicle incentives

15 Western Australia said electric vehicle incentives offered by states, in the form of rebates, grants or concessions, could become material in future updates. It said the Commission should consider assessing these in a single place, either as a separate expense assessment or in motor taxes, so as to be policy neutral to the type of incentive offered. Its preference was for incentives to be netted off motor tax revenue.

Commission response

16 States provide a range of incentives to encourage the purchase of electric vehicles.[3]

- Three states currently offer rebates to purchasers of new electric vehicles. The rebates range from $2,000 to $6,000 per vehicle and, in all but one case, are available for a limited time period or are capped at a certain number of vehicle sales.
- Four states currently offer concessional registration fees or a time-limited exemption for newly registered vehicles. In most cases, these incentives are available for a limited period of time.
- Two states (ACT and Northern Territory) currently offer concessional rates of stamp duty on transfers of electric vehicles. For the ACT, this concession is part of a transition to an emission-based registration system, while Northern Territory intends to provide a stamp duty concession until June 2027.

[3] These incentives apply to electric vehicles and in some cases to other low emissions vehicles, such as plug-in hybrid and hydrogen vehicles.

17 Tax concessions are currently captured as reduced revenue in the relevant revenue category (motor taxes for vehicle registrations, other revenue for stamp duty on motor vehicle transfers). States' tax expenditure data indicate that the 'foregone revenue' from the 2 types of concessions is small relative to motor taxes revenue.

18 The Australian Bureau of Statistic (ABS) is unable to separately identify electric vehicle rebates in its Government Finance Statistics data. However, data published by states suggest rebate expenses are small. A separate expense assessment of these rebates is unlikely to be material.

19 Given the small size and temporary nature of most electric vehicle incentives, the Commission is not inclined to make a separate assessment of these incentives.

Commission draft position

20 The Commission proposes to assess electric vehicle incentives where they are classified in Government Finance Statistics data (rebates as expenses and tax concessions as reduced revenue). The Commission will continue to monitor the concessions provided by states.

Materiality of stamp duty on motor vehicle transfers

21 South Australia said the Commission should retest the materiality of a differential assessment of stamp duty on motor vehicle transfers.

22 In the 2020 Review, the Commission discontinued its differential assessment of stamp duty on motor vehicle transfers because it was no longer material. The Commission noted that for the assessment to become material, states would need to significantly increase the revenue they collect, or the per capita value of motor vehicles transferred would need to materially diverge from the average. This would have been inconsistent with the trends observed between 2015 and 2020.

23 As supporting evidence for retesting materiality, South Australia cited ABS data which show growth in state revenue from stamp duty on motor vehicle transfers between 2017–18 (the last year it was differentially assessed) and 2021–22. These data show increases in revenue range from 9% in Tasmania to 63% in Western Australia.

Commission response

24 The Commission has retested the materiality of a separate assessment of stamp duty on motor vehicle transfers, using ABS revenue data and state data on the value of motor vehicle transfers from the 2019 Update (the last data provided to the Commission). The assessment was not material at the driver materiality threshold ($40 per capita). Therefore, the Commission does not propose to reintroduce a differential assessment of stamp duty on motor vehicle transfers.

Commission draft position

25 The Commission does not propose to reintroduce a differential assessment of stamp duty on motor vehicle transfers. However, the Commission will continue to monitor the materiality of these duties for the purpose of future reviews.

Draft 2025 Review assessment method

26 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method with 2 components: light vehicles and heavy vehicles. Each component is assessed using the number of registered vehicles in each state (including electric vehicles), sourced from the Bureau of Infrastructure and Transport Research Economics' *Motor Vehicles Australia* publication.

27 Table 1 shows the proposed structure of the 2025 Review motor taxes assessment.

Table 1 Proposed structure of the motor taxes assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Light vehicle registration fees and charges	Number of light vehicles	Recognises states with greater numbers of light vehicles have greater capacity.	No
Heavy vehicle registration fees and charges	Number of heavy vehicles	Recognises states with greater numbers of heavy vehicles have greater capacity.	No

Indicative distribution impacts

28 No method changes are proposed for this assessment.

Mining revenue

Overview

1 On 29 June 2023, the Commission issued a consultation paper on the mining revenue assessment. The Commission proposed retaining the 2020 Review assessment method with 2 additional elements.

2 On 12 April 2024, the Commission issued a supplementary consultation paper on splitting the coal assessment by price band.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here: Tranche 1 state submissions. State submissions on the supplementary consultation paper can be viewed here: Tranche 2 state submissions and here: assessing coal capacity.

Consultation questions

5 In its consultation paper, the Commission proposed assessing mining revenue capacity using a mineral-by-mineral approach. Under this approach, separate assessments are made for individual minerals where it is material to do so. The remaining minerals are combined and assessed together. Revenue from revenue-sharing agreements with the Commonwealth are assessed using the revenue received by the relevant states.

6 The Commission proposed 2 adjustments to address issues relating to the assessment of individual minerals. The first arises when there is an extreme distribution of a mineral, such that one state has a dominant share of production. In this situation, the change in revenue the dominant state would experience from changing its royalty rate on that mineral would be substantially offset by a change in its GST distribution. This could act as a disincentive to increasing royalty rates. The proposed adjustment would assess part of the changed revenue equal per capita, limiting the GST effects of the rate change.

7 The second arises when state bans or restrictions are so extensive they materially affect mining production. In this situation, states that allow production are assessed to have revenue capacity, but states that prohibit production are not. The proposed adjustment would assess relevant royalties raised by any state equal per capita, meaning those royalties would not affect GST distribution. The consultation paper suggested this treatment may be appropriate for coal seam gas and uranium.

Do states agree the Commission should continue to assess mining revenue capacity using a mineral-by-mineral approach?

State views

8 Victoria, South Australia, Tasmania, the ACT and the Northern Territory supported the mineral-by-mineral approach. Victoria and South Australia said it best captured states' mining revenue capacity.

9 The major mining states (New South Wales, Queensland and Western Australia) disagreed. They said the mineral-by-mineral assessment gave rise to policy neutrality issues and they proposed different assessment approaches to address those issues.

10 New South Wales and Queensland favoured assessing all minerals together. New South Wales said the mineral-by-mineral approach favours what states do at the expense of policy neutrality. Queensland said assessing all minerals together would provide a superior equalisation outcome and strike a better balance between what states do and policy neutrality. It said this option should be reconsidered as a priority as any move to a more granular assessment was moving the assessment away from policy neutrality.

11 Western Australia said observed revenue bases were policy influenced and their use by the Commission created policy neutrality concerns. In addition, assessing minerals individually can give rise to large GST effects when a state with a dominant share of production changes its royalty rate. It suggested a global revenue approach as an alternative to using observed tax bases.

12 States commented on 2 other approaches to measuring mining revenue capacity outlined but not proposed by the Commission in its consultation paper – a profitability approach and an external standard approach. There was no support for either.

13 New South Wales and South Australia said a profitability approach did not reflect what states do and would likely increase the volatility of the mining assessment. New South Wales also said the lack of available data meant a profitability approach was impractical.

14 New South Wales and Victoria said implementing an external standard would be impractical because of the difficulty of choosing an appropriate and comparable external rate.

Commission response

15 Assessing all minerals together means mining revenue capacity would be assessed by applying the average (all mineral) royalty rate to each state's total mining production. Compared with the mineral-by-mineral approach, this would increase the assessed capacity of states producing minerals that attract low royalty rates and reduce the assessed capacity of states producing minerals that attract high royalty

rates. It would materially shift GST revenue from the iron ore producing state to the coal producing states (see Table 1). The Commission does not consider this a superior equalisation outcome because it would require states producing low value minerals to apply above-average royalty rates to raise the average revenue. Therefore, the Commission does not support assessing all minerals together.

Table 1 Annual change in GST effects of alternative assessment approaches, average of 2020 Review to 2024 Update ($m)

Assessment	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total effect
One mineral group	384	-75	951	-971	-134	-44	0	-110	1,335
Two mineral groups (a)	301	9	649	-1,022	29	4	0	29	1,022
Adjusted Gross State Product (b)	960	-285	26	1,152	-870	-340	-361	-283	2,138

(a) The first group in the 2 group assessment comprised royalties imposed on iron ore, coal, bauxite and onshore oil and gas production and the second group comprised royalties imposed on the remaining minerals.

(b) This is the average annual change in GST from assessing state royalty and tax revenue using the adjusted gross state product measure rather than the 2020 Review assessment methods.

Source: Commission calculation.

16 An advantage of the Commission's current approach of assessing capacity using observed revenue bases is it is a direct assessment, which links revenue capacity to the activity states are taxing. Importantly, because states apply different royalty rates to different minerals, it produces a different measure of capacity for different minerals. A global revenue approach is an indirect assessment, and the chosen indicator may be unrelated to the activities states tax. Under this approach, the same capacity measure would be used for each tax and mineral.

17 The Commission accepts observed revenue bases can be influenced by policy. Where these influences can be quantified and reliably removed, adjustments are made.[1] In the Commission's judgement, the remaining influences are not so large as to require it to move away from using observed revenue bases. It considers that observed revenue bases provide a better measure of revenue capacity than a global revenue approach.

Commission draft position

18 The Commission proposes to continue to assess mining revenue capacity using a mineral-by-mineral approach.

[1] Examples include the adjustments for the ACT's policy of not aggregating the taxable land holdings of individual landowners and the Northern Territory's policy of not imposing land tax.

Do states agree that where a dominant state changes its relevant royalty rate, assessing 50% of that state's revenue arising from the royalty rate change equal per capita would represent an appropriate balance between assessing relative state fiscal capacities and policy neutrality concerns?

State views

19 Queensland did not initially support the adjustment but said the adjustment would be appropriate if the coal assessment was split.

20 Western Australia said the adjustment did not go far enough in addressing the disincentive to increase royalty rates. It suggested 2 alternatives:

- assess equal per capita 100% of revenue from rate changes since the introduction of the GST
- assess equal per capita 100% of revenue from future rate changes for the first 5 years and 50% thereafter.

21 The remaining states did not support the adjustment for a variety of reasons. They said the adjustment reduced the extent of equalisation achieved, was arbitrary, and lacked clarity. The choice of the current royalty rates as the benchmark rates to implement the adjustment was noted as an example of this. New South Wales and Tasmania were concerned the approach would exempt some state revenue from equalisation. Western Australia and South Australia queried the arbitrariness of the 50% figure.

22 A number of states were unclear how the Commission would implement the adjustment. Their concerns included whether it would apply to royalty rate increases or royalty rate changes including decreases, whether it would be calculated in perpetuity, whether it would disadvantage states that fall short of being dominant, whether and when the adjustment would be reset and how it would deal with multiple rate changes by a dominant state.

23 New South Wales, South Australia and the Northern Territory said there was no need for an adjustment because the *Treasury Laws Amendment (Making Sure Every State and Territory Gets Their Fair Share of GST) Act 2018* (the 2018 legislated arrangements) effectively insulated a dominant state from the GST effects of changing its royalty rates so long as its relativity remained below the relativity floor. Western Australia disagreed. It said the 2018 legislated arrangements should not factor into the Commission's design of its assessment method.

Commission response

24 The Commission accepts a state can face a disincentive when increasing royalty rates on a mineral where it has a dominant share of production. It considers there is merit in an adjustment to mitigate the disincentive. The Commission's proposal to

split the coal assessment (see paragraphs 63 to 111) increases the importance of addressing this issue as it increases the potential for there to be dominant states.

25 In the consultation paper, the Commission proposed addressing any disincentive by treating part of the changed revenue from a dominant state's rate change equal per capita. It saw merit in limiting any GST effects to 50% of the additional revenue raised. However, given the complex implementation issues raised by states, the Commission considers it would be too difficult to design and introduce an adjustment in this review. It proposes to continue to examine how the disincentive associated with a dominant state could be best addressed and consult further with states, in preparation for the next review.

26 Some states queried whether an adjustment was required given the 2018 legislated arrangements insulated the existing dominant state from any GST consequences of increases in its royalty rates. However, this protection is not extended to a dominant state whose relativity remains above the relativity floor. In its position paper on its approach to fiscal equalisation,[2] the Commission said the concept of horizontal fiscal equalisation articulated in the 2020 Review remains appropriate for the first step in determining states' GST distributions in keeping with the 2018 legislated arrangements. As such, the Commission considers its methods for estimating relative state fiscal capacities should be developed independently of any consideration of the 2018 legislated arrangements.

Commission draft position

27 While it accepts some states face a disincentive to increasing royalty rates, the Commission does not propose to introduce an adjustment in this review. It will continue to examine the dominant state issue and consult with states on how it could be addressed in preparation for the next review.

Do states support the dominant state for a mineral being identified having regard to a state's share of the revenue base, its population share, and the extent to which its GST distribution would be impacted by a change in the royalty rate for that mineral?

State views

28 Western Australia said this was the correct way to identify a dominant state.

[2] Commonwealth Grants Commission (CGC), Proposed approach and work program for the 2025 Methodology Review, CGC, Australian Government, 2023.

29 New South Wales and Tasmania said the definition was arbitrary. Victoria, South Australia, Tasmania and the Northern Territory said the Commission did not need to identify a dominant state as the proposed adjustment was not appropriate.

Commission response

30 The Commission has decided not to introduce an adjustment in this review. In preparation for the next review, the Commission will engage with states on the appropriate definition of a dominant state as part of further work on how the issue could be addressed.

Commission draft position

31 The Commission will engage with states on the appropriate definition of a dominant state.

Do states agree that uranium and coal seam gas royalty revenue should be assessed equal per capita?

State views

32 The consultation paper proposed assessing equal per capita royalties for minerals where state bans or restrictions are so extensive as to materially affect production. Western Australia noted that, in its principles paper, the Commission said it would not discount because of policy neutrality. Western Australia said an equal per capita assessment was not consistent with the principles paper because it discounted for policy neutrality.

33 Queensland, Western Australia and the Northern Territory supported the adjustment. The remaining states either did not support the adjustment or offered qualified support. They said the crucial issue was the extent to which production was affected by the restriction. States opposing the adjustment said equal per capita should only be considered if the extent of restrictions was such that they meant the observed revenue base was not a reliable measure of revenue capacity.

34 Queensland said the distribution of the onshore oil and gas revenue base was policy influenced. It compared the rapid development of its gas industry with the lack of development by other states, despite other states holding substantial proven and probable gas resources and reserves. It cited state moratoriums on gas fracking. Queensland also noted differences in collection and reporting methods. It said the lack of rigour and transparency in collection methods meant state data were unreliable. It also said that it was a dominant state in terms of gas extraction and based its royalty regime on volumes and, as such, a value of production assessment was not consistent with what states do.

35 Western Australia supported the adjustment because it did not consider observed revenue bases were a reliable measure of revenue capacity. It said environmental

restrictions were functionally similar to New South Wales' exclusion zones. Western Australia proposed a tiered system:

- full equal per capita for minerals that were banned or restricted by a majority of states
- partial equal per capita for minerals restricted by some states
- a smaller partial equal per capita for minerals that were not restricted by policy but were rejected systematically on a case-by-case basis.

36 Alternatively, Western Australia suggested the Commission could blend the observed revenue base with land area.

37 The Northern Territory said the adjustment implied revenue capacity should be assessed in states without production if:

- an economically viable resource was reasonably likely to be present in most or all states and
- policies materially restricted the value of production of the resource in those states.

38 New South Wales said an equal per capita assessment should not be used if a clear driver could be determined. It did not support equal per capita where the value of production closely aligned with the distribution of resources. It said using known economic resources would be better than equal per capita. Victoria said the Commission should assess capacity for states that extracted resources because equal per capita did not recognise the inherent differences in endowments. It also said banning did not mean a mineral would be economically viable were it not banned. It said the Commission's adjustment effectively estimated a potential revenue base (that is, what states should do) and would mean the Commission would have to estimate production for any mining proposals rejected by states.

39 South Australia and Tasmania agreed there were inherent difficulties in determining state capacity in relation to minerals subject to state restrictions. They said an equal per capita assessment might be appropriate if bans and restrictions were widespread. However, South Australia said not all endowments were economically viable and it doubted whether equalisation would be achieved by applying an equal per capita assessment. Tasmania said if the states allowing production were the biggest producers, then the Commission should continue to make an assessment. It suggested examining the effect of state restrictions on a case-by-case basis.

Minerals affected by restrictions

40 The consultation paper proposed assessing revenue from coal seam gas and uranium equal per capita.

41 Queensland supported assessing coal seam gas royalties equal per capita because it contrasted states' lack of production with their substantial proven and probable gas resources and reserves.

42 New South Wales, Victoria, Tasmania and the Northern Territory did not support an equal per capita assessment. New South Wales, Victoria and the Northern Territory said the only economically viable coal seam gas resources were in New South Wales and Queensland. New South Wales said state value of production closely aligned with the distribution of resources. Tasmania did not consider coal seam gas activity was materially affected by state restrictions and it favoured continuing the existing assessment.

43 Western Australia and the Northern Territory said only unconventional gas produced by hydraulic fracturing (or fracking) should be assessed equal per capita as the policy ban was on fracking. The Northern Territory said there were unconventional gas (other than coal seam gas) endowments in most states.

44 The Northern Territory supported an equal per capita assessment for uranium royalties. It noted uranium production was low relative to potential production. New South Wales, Victoria and Tasmania disagreed. New South Wales said value of production closely aligned with the distribution of resources. Victoria said states do not have the same capacity to raise revenue from uranium as they have different endowments. Mining companies make decisions to extract uranium based on a range of factors including economic, environmental, legal and regulatory. Tasmania said uranium activity was not materially affected by restrictions and it favoured continuing the existing assessment.

Commission response

45 The mineral-by-mineral approach assesses a state with no mineral production to have no capacity to raise revenue. This is appropriate if its lack of production is due to a factor beyond its control (such as a lack of endowments, a lack of economically viable endowments or a lack of commercial interest in developing economically viable endowments). It may not be appropriate if the lack of production is due to a decision not to allow economically viable endowments to be developed.

46 Applying an equal per capita assessment means any royalties raised would not affect states' GST shares. In deciding whether to apply an equal per capita assessment, the Commission would have to exercise its judgement as to whether:

- the lack of production in a state is due to a state ban or restriction
- the bans or restrictions are so extensive as to materially affect production.

47 In respect of the second question, Geoscience Australia data on economic demonstrated resources will inform any judgement as to the potential impact of a ban or restriction.

48 Western Australia's tiered proposal would link the proportion of revenue assessed equal per capita (the size of an adjustment) to the degree to the which mineral production was affected by state restrictions. The greater the effect of the restrictions, the greater the proportion of revenue assessed equal per capita. If an adjustment were introduced, this proposal would be a practical way of linking the

size of the adjustment to the size of the effect of state restrictions. Although it introduces complexity and requires the use of judgement, the Commission considers the tiered system suggested by Western Australia provides a useful guide to implementing the judgements required in this area.

49 Western Australia's alternative proposal would blend the current assessment with land area. The Commission does not consider land area to be a reliable capacity measure. It locks states' shares of capacity to shares of land area, regardless of how their shares of national mining activity vary over time.

Assessment of unconventional gas

50 State submissions focussed on restrictions due to prohibitions on fracking, including New South Wales' exclusion zones.[3] New South Wales' exclusion zones are designed to protect residential areas and its equine and viticulture industries. Western Australia said environmental restrictions were functionally similar to New South Wales' exclusion zones. It is likely other states would limit mining in similar areas.

51 Unconventional gas comprises coal seam gas, shale gas and tight gas. Fracking is always required for shale gas and tight gas, but it is not always required for coal seam gas.

52 Geoscience Australia economic demonstrated resources data for coal seam gas indicate almost all coal seam gas production and commercially viable reserves are located in Queensland. Currently, less than 10% of Queensland coal seam gas production involves fracking.[4] It is unclear the extent to which fracking bans have affected production. It is likely states other than New South Wales would limit mining near residential areas and major industries. Given that almost all coal seam gas resources are located in Queensland, there appears little evidence to support a conclusion that fracking bans materially affect production. The Commission is not convinced it should assess all coal seam gas royalties equal per capita.

53 Geoscience Australia's economic demonstrated resources data indicate no current shale gas or tight gas production in Australia. The Northern Territory suggested it would become a producer of shale gas before the next review.

54 The Commission considers that fracking bans currently have a limited effect on state production of unconventional gas (including coal seam gas). Given their limited effect

[3] In October 2013, the New South Wales Government prohibited coal seam gas activity in existing residential zones in all 152 local government areas in New South Wales and future residential growth areas in the North West and South West Growth Centres of Sydney. Coal seam gas exploration and extraction were also banned in 2 kilometre buffers around these zones. The zones included 2 critical industry clusters (CICs) in the Upper Hunter – for the equine and viticulture critical industries. Additional areas were added in 2021. They cover 7 additional village areas and future residential growth areas across New South Wales and the CICs in the Upper Hunter.

[4] Queensland's Gasfields Commission said typically only a small fraction of the wells drilled in Queensland are fracked. Queensland's Department of Environment and Science said just over 8% conventional and domestic gas wells have been fracked. Although it estimated this could rise to between 10 to 40 as the industry expands. Energy Information Australia said 8.8% of the coal seam gas wells drilled in Queensland's Surat and Bowen Basins have been fractured.

on coal seam gas and the lack of production of other unconventional gas, the Commission has decided not to assess unconventional gas (including coal seam gas) equal per capita.

Assessment of uranium

55 The Commission accepts state capacity to raise revenue from uranium mining is uneven and there are a range of factors outside of state control that limit production. For example, the Northern Territory is required to give effect to the advice of the Commonwealth Government before approving uranium mines.

56 Uranium mining is a prescribed nuclear action under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*. Before any uranium mine can be developed in Australia, it must be assessed and approved by Commonwealth and state governments. There are long lead times for that approval. Given all uranium deposits are known, the most economically viable are already being mined and the long lead times in gaining Commonwealth Government approval, there are unlikely to be any new uranium mines before 2030.

57 Geoscience Australia data indicate there are uranium deposits in Queensland, Western Australia, South Australia and the Northern Territory, but the major endowments are located in South Australia. Currently, South Australia is the only state producing uranium, raising around $18 per capita in royalties.

58 Queensland and Western Australia do not allow uranium mining.[5] Their restrictions prohibit production in those states, and this provides a justification for assessing some of South Australia's uranium royalties equal per capita. It is unclear how large production would be in those states if they allowed uranium mining. Geoscience Australia data suggest Queensland and Western Australia account for almost 13% of uranium economic demonstrated resources.[6] Given the small size of uranium endowments in Queensland and Western Australia, there appears little evidence to support a conclusion that uranium bans materially affect production. The Commission is not convinced it should assess all uranium royalties equal per capita.

Commission draft position

59 The Commission proposes to continue its current approach to state bans and restrictions. It will not introduce an adjustment but will continue to monitor the situation.

60 The Commission proposes not to assess uranium royalties equal per capita.

[5] While uranium mining is not allowed in Western Australia, if a project received approval before 2017 and demonstrated substantial development it is allowed. One mine (Mulga Rock) demonstrated substantial development.

[6] Geoscience Australia (GA), Australia's Identified Mineral Resources 2023, GA website, 2024, Figure 2, accessed 19 June 2024.

Other issues raised by states

61 Some states raised additional assessment issues in their submissions. They were:

- whether the coal assessment should be split to better capture differences in states' coal revenue capacities
- how the Commission should estimate Victoria's brown coal value of production
- whether the choice of capacity measure for onshore oil and gas production should be volume or value of production.

62 These issues are discussed below.

Splitting the coal assessment

63 New South Wales said the Commission should undertake separate assessments of metallurgical and thermal coal to better reflect states' capacity to raise coal revenue.

64 The Commission issued a supplementary consultation paper proposing to split the coal assessment by price band.

Consultation questions

Does the 2020 Review method adequately capture all material differences in state capacities to raise coal revenue?

State views

65 New South Wales, Victoria, South Australia, Tasmania, the ACT and the Northern Territory said an aggregated coal assessment did not capture all material differences in state capacities to raise coal revenue.

66 New South Wales said the assessment captured the higher price of coal sold in a state, but it did not capture the impact of progressive royalty rates. Victoria said it overstated its brown coal capacity.

67 Queensland opposed splitting the coal assessment. It was concerned the Commission's mineral-by-mineral approach was already too disaggregated. Additional disaggregation of coal would accentuate its concerns. It favoured a move to a more aggregated assessment because this would strike a better balance with the supporting principles, particularly policy neutrality. In its view, the more granular

the mining assessment, the greater the departure from policy neutrality.[7] It said this risks a state's policy becoming average policy, which is contrary to policy neutrality.

68 Queensland suggested the Commission consider developing the mining assessment in a way that achieves objectives in addition to equalisation, such as providing an incentive to states to:

- implement and maintain revenue reform that is in the national interest
- expand their revenue raising, reducing their reliance on Commonwealth grants and reducing vertical fiscal imbalance
- support the transition to a low carbon environment.

69 Queensland was also concerned a retrospective change to the coal assessment would penalise it for an enacted policy decision. If the Commission decides to split the coal assessment, Queensland suggests the change not be introduced until the 2025–26 assessment year.

70 While South Australia said not all differences in capacity were reflected in an aggregated coal assessment, it noted detailed revenue and value of production data would be required to determine the materiality of any revenue capacity not being captured by the assessment. It doubted these data were available on a consistent basis.

71 The Northern Territory acknowledged that the mining assessment seeks to find an appropriate balance between equalisation and policy neutrality. It said favouring equalisation over policy neutrality was difficult to justify in the coal context. It preferred an aggregate assessment to an assessment split by price band or type of coal. It noted an aggregate assessment was consistent with what New South Wales did and was the least policy influenced method.

Commission response

72 The Commission's primary task is to estimate states' relative fiscal capacities for the purpose of equalisation. The Commission is not asked, nor given discretion, to decide when other policy objectives should moderate the achievement of equalisation. The Commission's supporting principles, such as policy neutrality, are subsidiary to the equalisation task.

73 The aggregated coal assessment applies the average (all coal) royalty rate to each state's coal production. Queensland produces most of the high value coking coal. By combining all coal, the aggregate assessment is likely to understate Queensland's revenue capacity and overstate the capacities of other coal producing states (particularly those producing brown coal). States would not be able to apply the

[7] A more granular assessment increases the risk of a portion of a state's royalty revenue being assessed actual per capita, which would give rise to substantial impacts on GST distribution. An aggregate assessment would reduce the influence of any individual state's production on the assessment.

average rate to low value coal and, therefore, those with an above-average proportion of low value coal would be unable to raise the average revenue. When coal prices are high, the overstatement/understatement of capacities could be large.

74 The Commission proposes to split the coal assessment, provided it can be done reliably and is material.

75 The general practice of reviews has been for assessment changes to be introduced fully in a review. The Commission proposes to retain this approach in respect of any change to the coal assessment.

Commission draft position

76 The Commission proposes to split the coal assessment, provided it can be done reliably and is material.

77 As is its normal practice, it proposes to implement any change in all assessment years of the 2025 Review.

Do states support a differential coal assessment based on price bands?

State views

78 New South Wales, Victoria, Tasmania and the ACT supported splitting the coal assessment by price band. Tasmania's support was conditional on an assessment being material. The ACT's support was conditional on states being able to provide reliable data.

79 New South Wales said the coal assessment must recognise that coal sold at a higher price is, on average, subject to higher rates of royalty. It said an assessment by type of coal or by price band would capture that additional capacity. However, an assessment by price band was more practical and more closely reflected what states do.

80 Queensland, South Australia and the Northern Territory did not support an assessment by price band. They were concerned a price band approach would give rise to policy neutrality concerns (particularly, the dominant state issue).

81 Queensland said its tiered royalty regime was designed to collect additional material revenue only in exceptional circumstances, when coal prices were at high levels. Splitting the coal assessment would redistribute that revenue and would severely and unfairly penalise Queensland for undertaking its revenue reform. It was concerned that splitting the coal assessment is being considered because of its policy choice to introduce additional tiers to its progressive regime. The inference is that it is being penalised for its reform. It was also concerned there appears to be a judgement-based application of supporting principles.

82 South Australia said aligning the price bands with Queensland's royalty tiers also meant Queensland's policy could directly influence its assessed revenue capacity. The Northern Territory agreed, saying the proposed top price band would be heavily influenced by Queensland's policies.

83 The Northern Territory said only one state imposed progressive rates, so progressive rates were not average policy.

Commission response

84 The purpose of revenue equalisation is to measure the revenue states can raise from their own sources. For example, when a state experiences a mining or property boom, the revenue assessments capture the subsequent increase in its revenue capacity. In its position paper on its approach to fiscal equalisation, the Commission acknowledged that equalisation was not an exact science. It said alternative assessment methods often involve trade-offs between principles. It has not established a relative weighting or hierarchy of supporting principles. Instead, it uses its judgement in each case to determine the most appropriate measure of states' relative fiscal capacities.

85 The average policy is determined as a weighted average of each state's individual policy. As Queensland accounts for a majority of coal value of production, its policy has the majority weight in determining average policy. As it has a price-based royalty regime, splitting the coal assessment by price band is consistent with what states do. It is also consistent with Queensland's actual capacity to raise coal royalties flowing from the state's endowments of higher value coking coal.

86 A price band approach would require states to provide relevant and reliable data. New South Wales said it can provide data. Queensland said providing data by price band was likely to give rise to confidentiality concerns. Tasmania also said a price band approach would raise confidentiality issues because of the small size of its mining sector. It advised it had no reliable data to support an assessment by price band.

87 Without reliable data, an assessment by price band may not be practical. This issue is discussed further in the following sections.

Commission draft position

88 Provided reliable data are available, the Commission's proposes to split the coal assessment by price band because it provides a better measure of state coal capacities.

Are the proposed three price bands sufficient to appropriately capture differences in state capacities to raise coal revenue?

State views

89 New South Wales said 3 bands were too few. It noted the volatility of coal prices could create difficulties for a 3-band approach because of the likelihood of metallurgical and thermal coal falling into the same price band even if there were significant differences in their respective prices. In these circumstances, the 3-band approach would default to an aggregate assessment and would fail to measure differences in underlying taxable capacities under a progressive royalty rate framework. A second concern was that small coal price movements around a price band could result in significant changes in the assessment. New South Wales proposed price bands in $50 increments up to at least $500 as a way of overcoming both issues.

90 New South Wales also proposed a second option – a 2-band approach. Under this option, the value of coal sold above the average price for the assessment year would be in one band and the value of coal sold below the average price in the other.

91 Victoria was concerned the proposed price bands could overstate the value of brown coal. It said further work was required to ensure brown coal was appropriately accounted for. It also said a price band approach should adequately respond to changes in the market and 'band creep'.

92 Queensland opposed splitting the coal assessment by price band on policy neutrality grounds. It also said splitting the coal assessment was likely to give rise to data confidentiality issues. However, if the Commission was disposed to split the coal assessment by price band, it proposed different price bands for the 2-band and 3-band approaches. It suggested setting the bands with respect to states' effective royalty rates rather than their headline legislated rates (which in its case are marginal rates).

93 South Australia expressed concerns about aligning price bands with Queensland's royalty tiers. It suggested basing the bands on price parameters not directly related to one state's regime.

94 Tasmania said the proposed price bands appeared reasonable but may need to be reviewed if other states introduced tiered royalty regimes. The ACT said the Commission should analyse the appropriate number of price bands.

Commission response

95 While a price band approach can capture differences in states' capacity to raise revenue from high and low value coal, it is reliant on state-provided data and is likely to give rise to a dominant state issue for Queensland and, potentially, New South Wales.

96 The Commission reviewed the various price band approaches:

- the multi-band approach proposed by New South Wales
- the 3-band approach proposed by the Commission
- the 2-band approach proposed by New South Wales.

97 A multi-band approach will capture differences in metallurgical and thermal coal because it is unlikely they will fall into the same band due to their different prices. Compared with the existing aggregate assessment, this could produce materially different GST distributions for New South Wales and Queensland. The advantages of a multi-band approach are that small changes in coal prices around a price band are unlikely to materially affect the assessment, the approach is responsive to changes in market conditions and the price bands are not related to Queensland's royalty tiers. The disadvantages of a multi-band approach are that it is more data intensive and more susceptible to data confidentiality issues.

98 In its supplementary consultation paper, the Commission proposed a 3-band approach. Queensland suggested a variation using price bands based on state effective royalty rates. The Commission agrees that if fixed rates are chosen, state effective rates would be preferable to state legislated rates. The 3-band approach will produce the same outcomes as an aggregate assessment when metallurgical and thermal coal fall within the same band. This may be appropriate if their coal prices are similar. However, it might not be appropriate if their prices are materially different, but they fall within the same band because the price band is too wide. Having fewer bands makes the approach less susceptible to data confidentiality issues but using fixed price bands can mean it is less responsive to changes in market conditions. In addition, small changes in prices around a fixed price band can have material effects on the assessment. Queensland suggested setting the bands around effective royalty rates rather than its royalty tiers. Other states agreed with not aligning the bands with Queensland's royalty tiers because they were concerned it could mean Queensland's policy would directly influence its assessed revenue.

99 New South Wales proposed a 2-band approach. Queensland suggested a variation using price bands based on state effective royalty rates. A 2-band approach is the least data intensive and the least likely to be susceptible to data confidentiality issues. Queensland favoured fixed price bands, while New South Wales favoured bands determined by an average annual price. The latter approach would be more responsive to market conditions because the average annual price would move in response to changes in coal prices. The derived average price would be unrelated to Queensland's royalty tiers. A disadvantage of the average annual price approach is it involves a 2-step process for collecting state data.[8] This raises the possibility of

[8] States would initially provide annual volume and value of production data, which the Commission would use to derive an annual average price. States would then split their annual royalty and value of production data into that above and below the average annual price.

state-provided data becoming available late in an update. Another disadvantage is the approach will always deliver a split coal assessment, even when there is not much divergence in coal prices.

100 The Commission proposes to split the coal assessment. It considers a 2-band model is a simple way of capturing the impact of progressive royalty rates on differently priced coal, is the least data intensive, and mitigates confidentiality concerns. Its preliminary view is to have price bands above and below $200 per tonne but proposes to collect state revenue and value of production data by price band to finalise its position.

Commission draft position

101 The Commission proposes to collect state data to determine the most appropriate price to split the coal assessment. The position in the Draft Report may change based on these data. As soon as possible, the results of the split assessment and quantitative impacts will be provided in an addendum to the Draft Report.

If a price band approach is not feasible, do states support an assessment based on the type of coal?

State views

102 New South Wales, Victoria and Tasmania supported an assessment based on type of coal. Tasmania's support was conditional on an assessment being material. Victoria said the approach would need to distinguish between black and brown coal and appropriately price brown coal.

103 Queensland, South Australia, the ACT and the Northern Territory did not support an assessment by type of coal. Queensland, South Australia and the Northern Territory said it did not reflect what states do.

104 Queensland said an assessment by type of coal was not feasible or appropriate. It was inconsistent with the mineral-by-mineral approach, and the 'what states do' and policy neutrality supporting principles.

105 South Australia said there was a broader issue about how and when a mineral could be split into 'types'. A defined set of criteria was required. It queried whether reliable revenue and production data were available to support an assessment by coal type. In the absence of these data, the Commission would need to apply judgement to develop an assessment. It queried whether the subsequent increase in data uncertainty (due to the use of estimates) would improve equalisation or justify the change to GST distribution.

106 The ACT said the assessment may not reflect the value of production reported by states.

107 The Northern Territory noted that moving away from an aggregated coal assessment could cause Queensland to become fiscally stronger than New South Wales, which

would mean its relativity could fall below the relativity floor prescribed by the 2018 legislated arrangements. In these circumstances, other states would finance the cost of lifting Queensland's relativity to the floor. The Northern Territory concluded this would lead to a less accurate assessment, because it would lower the GST shares of non-coal producing states.

Commission response

108 An assessment by type of coal will capture differences in state capacities to raise revenue from metallurgical and thermal coal. However, because it requires the Commission to estimate missing data, the measured capacities may not be reliable.

109 If states are unable to provide value of production data by type of coal, the Commission would have to estimate the missing data from states' coal volumes. This would require the Commission to obtain estimates of average prices. In addition, the Commission would have to estimate the split of royalty revenue by type of coal for states with progressive royalty regimes. Queensland said approaches based on estimates (such as for average annual prices) were likely to produce an unreliable assessment.

110 Some states suggested splitting the coal assessment could result in implications for the 2018 legislated arrangements. In its position paper on fiscal equalisation, the Commission said its view was to retain the approach to horizontal fiscal equalisation articulated in the 2020 Review as the first step in determining GST distributions in accordance with the 2018 legislated arrangements. As such, the Commission considers its methods for estimating relative state fiscal capacities should be developed independently of any consideration of the 2018 legislated arrangements.

Commission draft position

111 The Commission's preference is to split the coal assessment by price band. However, if states are unable to provide the data to support a price band approach, splitting the coal assessment by type of coal remains an option. The Commission acknowledges the concerns some states have over the reliability of the estimates used to support this approach.

Estimating Victoria's brown coal capacity

112 Victoria is the only state producing brown coal. Its coal is not sold on the market but is almost entirely used for electricity production.

113 Brown coal does not have a price as it is largely an internal transfer within mining/generation entities. Consequently, Victoria is not able to provide a value of

production for its coal. The Commission estimates a value using Victoria's royalty revenue and an estimated effective royalty rate.[9]

State views

114 Victoria said its brown coal capacity was overstated because of this estimation approach and because the Commission assesses brown coal with black coal.

Commission response

115 In the absence of a price for brown coal, there is no reliable way to derive Victoria's value of coal production. The Commission agrees assessing brown coal with black coal will overstate Victoria's coal capacity. As it is the only state with brown coal production, any separate assessment of brown coal would assess Victoria's capacity equal to the revenue it raises.

116 The Commission's intention is to use Victoria's revenue as the measure of its coal capacity.

Commission draft position

117 The Commission proposes to assess Victoria's coal capacity equal to the revenue it raises.

The capacity measure for onshore oil and gas

State views

118 Queensland said it was the major producer of onshore oil and gas and it levied its royalty on a volume basis. Therefore, the Commission's current approach of assessing revenue raising capacity using value of production did not reflect what states do.

119 Queensland was also concerned about differences in collection and reporting methods. It said the lack of rigour and transparency in collection methods meant state value of production data for onshore oil and gas were unreliable.

Commission response

120 The Commission agrees assessing onshore oil and gas royalties on a volume basis would be consistent with what states do.

Commission draft position

121 Providing states can provide the required data, the Commission proposes to assess onshore oil and gas royalties on a volume of production basis.

[9] The estimate was based on royalty and value of production data that Victoria previously provided.

122 As the Commission has yet to collect these data from states, it has not been able to quantify the effect of this change.

Draft 2025 Review assessment method

123 Following consideration of state views, the Commission proposes to retain the 2020 Review mineral-by-mineral assessment method.

124 The Commission proposes to make one change to the mineral-by-mineral approach. It proposes to assess onshore oil and gas royalties using volume of production.

125 The Commission proposes not to introduce an equal per capita assessment for either coal seam gas or uranium royalty revenue.

126 A decision on whether and, if so, how to split the coal assessment is outstanding. The quantitative impacts of a Commission proposal to split the coal assessment by price band will be included in an addendum to the Draft Report.

127 Table 2 shows the proposed structure of the 2025 Review mining revenue assessment.

Table 2 Proposed structure of the mining revenue assessment

Category	Driver	Influence measured by driver	Change since 2020 Review?
Iron ore	Value of production	Recognises states with greater value of production have greater revenue capacity.	No
Coal	Value of production by price band for black coal	Recognises states with proportionally more of high value black coal have greater revenue capacity.	Yes
	Actual per capita for brown coal.	Recognises states with brown coal revenues have greater revenue capacity.	Yes
Gold	Value of production	Recognises states with greater value of production have greater revenue capacity.	No
Copper	Value of production	Recognises states with greater value of production have greater revenue capacity.	No
Lithium	Value of production	Recognises states with greater value of production have greater revenue capacity.	No
Nickel	Value of production	Recognises states with greater value of production have greater revenue capacity.	No
Other minerals (a)	Volume/value of production	Recognises states with greater volume/value of production have greater revenue capacity.	Yes (b)
Grants in lieu of royalties	Revenue received	Recognises states that receive a greater share of these payments have greater revenue capacity	No

(a) Includes assessed royalties for bauxite and onshore oil and gas. These royalties are assessed separately and, for confidentiality reasons, the results are reported with the other minerals assessment.

(b) Onshore oil and gas were previously assessed on a value of production basis.

Indicative distribution impacts

128 While the assessment method has changed, the Commission does not yet have data to quantify the effects of splitting the coal assessment and assessing oil and gas royalties on a volume basis.

129 The impact on the GST distribution in 2024–25 from the proposed change to the coal assessment will be presented in an addendum to the Draft Report.

Other revenue

Overview

1 On 6 October 2023, the Commission issued a consultation paper on the other revenue assessment. On 19 October 2023, it issued a consultation paper on the gambling taxation assessment. In both papers the Commission proposed retaining the 2020 Review assessment method.

2 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

3 State submissions can be viewed here.

Consultation questions

Q1. Do states agree with the revenues classified to the other revenue category?

State views

4 States noted the other revenue category comprises revenues for which needs are not assessed. All states agreed this treatment was appropriate for a revenue if:

- states are assessed to have the same per capita capacity to raise the revenue
- either an assessment method or sufficiently reliable data are not available to support an assessment
- a differential assessment would not be material.

5 States supported using these 3 criteria to determine the revenues classified to the category.

Commission response

6 As there have been no substantial developments since the last review that warrant a change in the criteria, the Commission will continue to apply those criteria.

Commission draft position

7 The Commission proposes to retain the composition of the revenues (including gambling) classified to this category.

Q2. Do states agree that other revenue should be assessed equal per capita?

State views

8 All states supported assessing other revenue equal per capita.

Commission response

9 As there have been no substantial developments since the last review that warrant a change in the assessment method, the Commission proposes to continue to assess other revenues equal per capita.

Commission draft position

10 The Commission proposes to assess the revenues in this category using an equal per capita assessment method.

Gambling taxation

Consultation questions

Q1. Do states agree there is no reliable method of differentially assessing gambling taxes? If not, what do states consider to be a reliable method of assessing gambling taxes?

State views

11 States said none of the approaches outlined in the consultation paper would provide a reliable way of assessing gambling taxes. Those approaches were:

- an activity-based approach for each gambling tax, based on gambling turnover or gambling expenditure[1]
- a population-based approach for each gambling tax, based on the propensity of different population groups to participate in that form of gambling
- a broad revenue approach for all gambling taxes, such as household disposable income.

12 States cited the pervasiveness of state policy differences and the limited evidence of the socio-demographic characteristics that drive gambling activity. They also noted the regression analysis of gambling expenditure and state household income undertaken by the Commission found no statistical relationship between the

[1] Gambling turnover is the amount wagered. Gambling expenditure is the net amount lost by gamblers (the amount wagered less the amount won). By definition, gambling expenditure is the gross profit of the gambling operator.

2 variables at either the national or state level. They said the regression analysis did not provide support for a broad revenue assessment using household income.

13 While states agreed none of the approaches provided a reliable way of assessing gambling taxes, 2 states suggested other possible assessment options.

- While supporting an equal per capita assessment, Western Australia suggested assessing its capacity equal per capita and assessing the capacity of other states using an activity-based approach.
- South Australia suggested assessing wagering and lottery taxes using an activity-based approach. It supported an equal per capita assessment if this option was not material.

14 The Northern Territory said wagering activity data are not reliable. The introduction of point of consumption taxes in states other than the Northern Territory had a large impact on state shares of national wagering activity. The impact of COVID-19 also affected their shares. The latest 2 years of Australian Gambling Statistics has the Northern Territory's share of national wagering activity falling from 42% to 1%, with large increases in the shares of New South Wales, Queensland and Western Australia. The Northern Territory suggested wagering activity data may not become reliable before the 2030 Review.

Commission response

15 The option proposed by Western Australia would imply Western Australia's gambling taxes were materially affected by policy influences, but those of other states are not. State policy influences may not be limited to one state and can be widespread. For example, Victoria noted the difference in gaming machine caps between New South Wales and itself.

16 An activity-based assessment of lottery tax revenue, as proposed by South Australia, would be material. However, this approach would differentially assess lottery taxes but not differentially assess other forms of gambling and therefore not account for any substitutability between different forms of gambling. An activity-based assessment of lottery taxes would have the biggest negative impact on Western Australia. This might suggest the propensity of Western Australians to participate in lotteries may be influenced by the state's prohibition on community gaming machines.

17 The Commission does not propose to assess gambling taxes using either of the state proposed assessment options. The Commission accepts the state policy differences that affect gambling taxes impact all states. It does not consider wagering activity-based data are sufficiently reliable to support an assessment and it does not favour differentially assessing one form of gambling but not others because of the potential for substitutability between the different forms of gambling.

Commission draft position

18 The Commission proposes to assess gambling taxes equal per capita.

Q2. Do states agree that gambling taxes should be assessed equal per capita in the other revenue category?

State views

19 All states, apart from South Australia, supported assessing gambling taxes equal per capita in the other revenue category.

Commission response

20 As there as there has been no substantial developments since the last review that warrant a change in the assessment method, the Commission proposes retaining an equal per capita assessment for gambling taxes.

Commission draft position

21 The Commission proposes to assess gambling taxes equal per capita in the other revenue category.

Draft 2025 Review assessment method

22 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method.

Table 1 Proposed structure of the other revenue assessment

Category	Driver	Influence measured by driver	Change since 2020 Review?
Other revenue	Population	Revenues in this category are assessed equal per capita. They do not differentially affect states' relative fiscal capacities.	No

Indicative distribution impacts

23 No method changes are proposed for this assessment.

Schools

Overview

1 On 21 June 2023, the Commission issued a consultation paper on the draft schools assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed a minor change to the 2020 Review assessment method.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support a differential assessment of primary and secondary school students and, if so, support including in the regression model variables to account for differences in the fixed cost of secondary schools and the additional costs of secondary school students?

State views

5 Most states agreed that the fixed costs of secondary schools and the additional per student cost of secondary students should be differentially incorporated into the assessment.

6 Victoria considered that the regression results for secondary schools were implausibly large given its experience, and that school size is affected by state policy choice.

7 South Australia raised a concern around the classification of year 7 students, being the final state to complete the transition towards a nationally consistent classification of primary and secondary. It recommended the Commission backcast this classification to the entire 2025 Review assessment period for consistency.

8 Tasmania supported the conceptual case. However, it said that retention rates and age structures may not be sufficiently different between states to materially impact GST relativities. It highlighted that the Commission should maintain simplicity where possible.

Commission response

School size: primary vs secondary

9 The inclusion of the secondary school size variable significantly improves the regression's explanatory power. The school size coefficient and standard error remain similar with and without secondary school size. This indicates that school size alone does not capture the additional fixed costs associated with secondary schools, highlighting the need for the inclusion of secondary school size.

10 The Commission acknowledges the concerns raised by Victoria given that its operational funding model produces a substantially lower fixed cost for secondary schools and higher cost per secondary student than the national average. The Commission found that a regression run on Victorian schools estimated fixed costs for government secondary schools to be approximately $1.3 million. This is well above the fixed costs in Victoria's operational funding model and marginally below the national model's $1.6 million. This suggests that Victoria's policy is to have slightly lower fixed costs than the national average, and that Victoria's school funding model includes additional adjustments that tend to direct funding towards smaller schools. The Commission's simpler model attributes these additional costs to the fixed costs of all schools. Consequently, while Victoria may observe that it has lower fixed costs of secondary schools than reflected by the Commission's model, this is not evidence that the Commission's model does not reflect average policy. While school size is influenced by individual state policies, the national average school size in different remoteness areas reflects average policy.

School students: primary vs secondary classification

11 The Commission recognises that historically there have been differences across states regarding the classification of year 7 students. The Commission ensures consistency by directly defining year 7 students or above as secondary students, ensuring consistency in all assessment years. In the 2020 Review, this was not an issue, because there was no differential treatment between primary and secondary schools or students.

12 Secondary schools (and students) are more expensive than primary schools. Disadvantaged groups, especially First Nations students, have lower retention rates to high school. As such, the introduction of this variable improves the explanatory power of the model. As this change has a valid conceptual case and materially improves the regression model, the Commission considers the added complexity is justifiable.

Commission draft position

13 The Commission proposes to include variables in the schools regression reflecting the differential cost of:

- primary and secondary schools
- primary and secondary school students.

Q2. Do states agree that, if relevant school level data are available and determined fit for purpose, an assessment of needs for educating students with a disability should be included in the schools assessment?

State views

14 All states expressed in-principle support for assessing needs for students with a disability. Several noted the need for comparable data.

15 States had conflicting views on whether the data from the Nationally Consistent Collection of Data on School Students with Disability are of sufficient maturity and quality.

16 Noting the Commonwealth uses these data within the Schooling Resource Standard, New South Wales considered the data fit for purpose. Victoria said that the data for its schools are accurate.

17 Queensland expected the data would not be comparable until the next review period as the Commonwealth is still working towards improving quality. Tasmania did not consider the data fit for purpose and added that the lack of comparability is supported by the Productivity Commission's *Report on Government Services*.

18 Victoria said that, if students with a disability and special schools are excluded from the Commission's regression, then spending on students with disability (in special and mainstream schools) should be assessed equal per capita.

Commission response

19 The Commission recognises the strong conceptual case for assessing needs for students with a disability and has explored whether there are fit for purpose data with which to develop a robust assessment. Such data would need to provide:

- the national average of the higher costs faced by schools
- the number of students in each state requiring different levels of support.

20 Since both measures are required for the Commission to assess needs, the only potential dataset is the Nationally Consistent Collection of Data on School Students with Disability. There is no alternative data source that would enable the Commission to quantify both the higher per student costs of supporting students with disability and each state's need to do so. It is important that data are comparable between states.

21 The Commission's testing of publicly available data from the Nationally Consistent Collection of Data on School Students with Disability indicated that states' data are not yet sufficiently comparable for the objective of horizontal fiscal equalisation. The Commission was unable to establish that the current data would robustly capture states' different needs. Of particular concern were the difficulties in a comparable measure of the number of students in each state requiring different levels of

support. The publicly available data strongly suggest that students with similar levels of need are being identified differently in different states in the Nationally Consistent Collection of Data on School Students with Disability.

22 Experiences and perceptions of disability can vary. Differences in the way states identify the needs of students may reflect a range of factors. The Australian Institute of Health and Welfare has noted that:

> People experience different degrees of impairment, activity limitation and participation restriction. Disability can be related to genetic disorders, illnesses, accidents, ageing, injuries or a combination of these factors. Importantly, how people experience disability is affected by environmental factors – including community attitudes and the opportunities, services and assistance they can access – as well as by personal factors.[1]

23 The Commission tested the comparability of the data by posing the following questions:

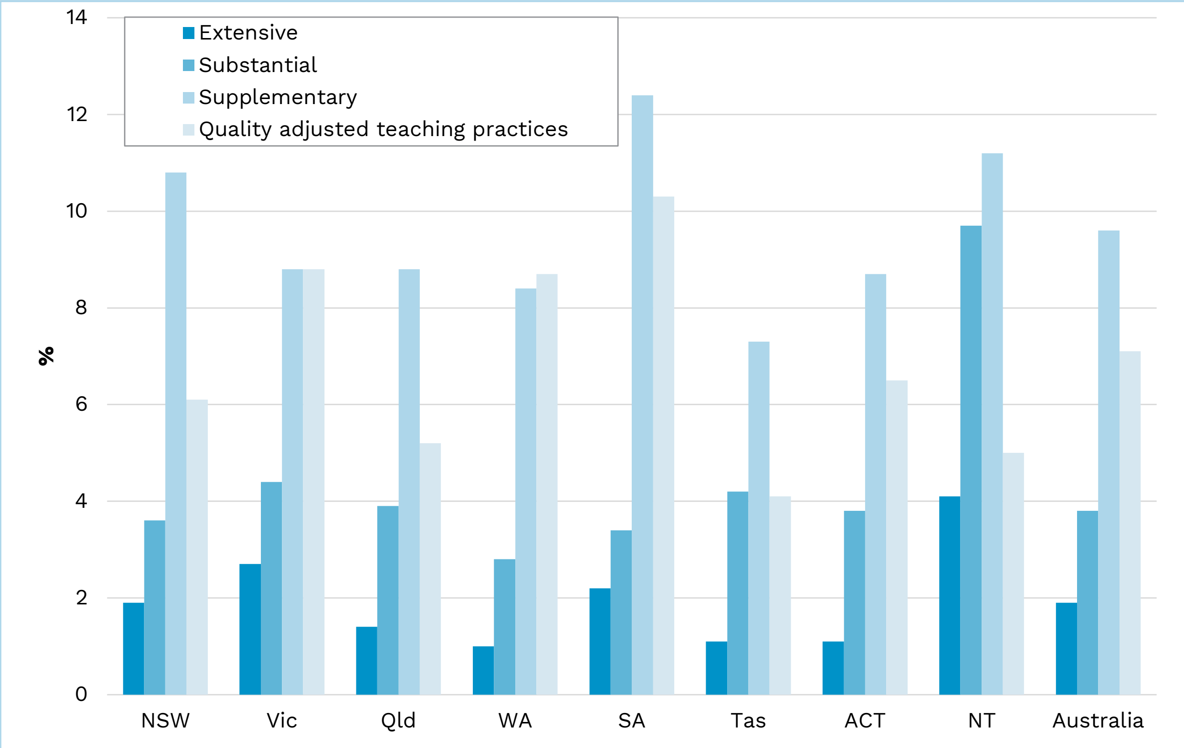
- Are relationships between different levels of disability consistent between states?
- Are data consistent with other indicators of students with disability?

Are relationships between different levels of disability consistent between states?

24 If data are nationally consistent, the relationships between different levels of disability should also be broadly consistent across states. In decreasing order of severity, the levels are extensive, substantial, supplementary, and quality adjusted teaching practices. Figure 1 shows that South Australia has about half as many students requiring substantial support as extensive support, while Tasmania has nearly 4 times as many. Victoria has 40% more students requiring extensive support than the national average but is much closer to the national average for other levels of support. Western Australia has only 7% fewer students with disability than the national average, but around half the proportion of students requiring extensive support. These discrepancies imply a lack on national consistency in the data.

[1] Australian Institute of Health and Welfare, *People with disability in Australia: Defining disability*, Australian Institute of Health and Welfare, 23 April 2024, accessed 12 June 2024.

Figure 1 Proportion of students with a disability by level of support required

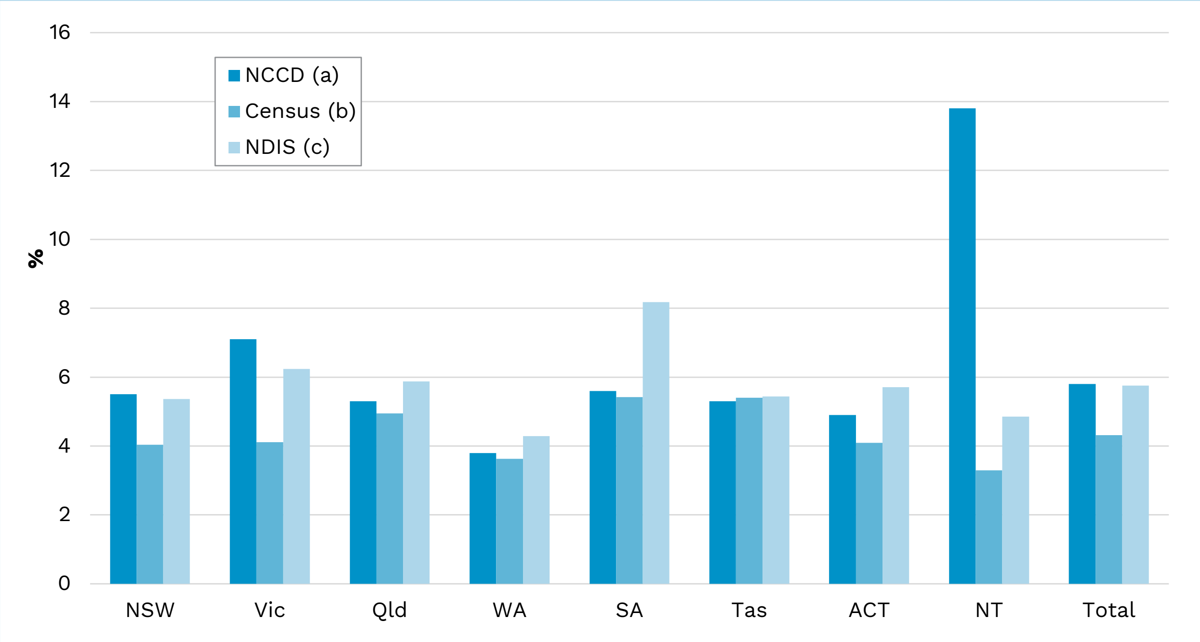


Source: Australian Curriculum Assessment and Reporting Authority data on Nationally Consistent Collection of Data on School Students with Disability.

Are data consistent with other sources?

25 While the Nationally Consistent Collection of Data on School Students with Disability is the only dataset with the necessary information to assess the cost to states of providing such services, there are other data sources that can be used to validate interstate shares of students with a disability. Both the Census and the National Disability Insurance Scheme provide such estimates (Figure 2). On the simplest measure of whether a state has an above-average or below-average share of students with a disability, only 3 of the 8 states show consistency between the Nationally Consistent Collection of Data on School Students with Disability and the other 2 measures.

Figure 2 Proportion of students with a disability, various data sources



(a) Nationally Consistent Collection of Data on School Students with Disability is the only available source collected in a manner which could be used in this assessment.

(b) 2021 Census of Population and Housing measure of the proportion of people who attend school who have a need for assistance with self-care, mobility or communication due to a long-term health condition or disability.

(c) Proportion of 7–14-year-olds who receive support from the National Disability Insurance Scheme.

Source: Australian Curriculum Assessment and Reporting Authority, Australian Bureau of Statistics and National Disability Insurance Agency.

26 Neither of these tests support a conclusion that the data would provide a sound basis on which to quantify the cost impacts of supporting students with disability or the different incidence of disabilities between states.

27 These tests also highlight, for 2 reasons, the difficulty of combining different data sources to impute a nationally comparable population of students with a disability. The first is that it is not possible to determine which of the different data sources is the most appropriate. The second is that each data source measures a different concept of childhood disability, making it difficult to reconcile or map each source's concept of disability to another without significant arbitrary judgement.

28 The Commission has been unable to identify data that would enable it to assess the additional needs of students with disability. However, there is ongoing work in this area, including the Australian Government investing $20 million over 4 years (2021–22 to 2024–25) to improve the quality and consistency of data under the Nationally Consistent Collection of Data on School Students with Disability Continuous Quality Improvement Measure.[2]

[2] Department of Education, *What is the Australian Government doing to support students with disability in schools?* Australian Government, 12 July 2017, accessed 12/06/2024.

29 The National Disability Data Asset will link the de-identified data on individuals from various sources across state and Australian governments, including data on school students. Once established, this should be able to provide an additional approach to validating data from the Nationally Consistent Collection of Data on School Students with Disability.

30 The Commission also notes that the costs and incidence of disability are partially considered by the current methodology. In all states, First Nations students are considerably more likely than non-Indigenous students to have a disability. Socio-educationally disadvantaged students are also substantially more likely to have a disability than socio-educationally advantaged students. This means that the Commission's regression model already attributes some of the spending on students with a disability to these groups of students, and thus partially allocates GST between states to reflect this cost driver.

31 The Commission recognises that policy on students with a disability in schools is evolving rapidly. In September 2023, the Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability released its final report.[3] The report addressed the need for more consistent and detailed data on students with a disability and recommended that states have a uniform minimum data standard that they require from schools around students with disability. The Royal Commission further proposed a national project to develop specific data definitions and define improved, specified collection methods for students with a disability.

Consideration of treatment of funding of students with a disability

32 Special schools are not included in the Commission's regression. Including these schools, without incorporating a variable for students with a disability, would introduce very high levels of omitted variable bias and would reduce the reliability of the model.

33 Victoria suggested that funding for students with disability, in both mainstream and special schools, be assessed equal per capita.

34 As noted above, First Nations students and socio-educationally disadvantaged students have much higher rates of disability than other students. As such, states with more First Nations and socio-educationally disadvantaged students would likely have greater enrolments in special schools if all states followed a consistent policy for special schools. Influences such as service delivery scale and remoteness are likely to affect the cost of delivering education in special schools. Given these factors, an assessment using patterns in mainstream schools would be a more reliable reflection of state needs for special school funding than an equal per capita assessment.

[3] Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability, *Final Report*, Royal Commission, Australian Government, 2023.

35 The Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability highlighted that this is an area that is continuing to develop and change. Its final report noted that the number of students with a disability in schools was increasing and in response, schools are requiring higher adjustment levels.[4]

Commission draft position

36 The Commission considers that the Nationally Consistent Collection of Data on School Students with Disability is not yet sufficiently consistent across states to use in the Commission's regression model. The Commission will monitor this dataset, with a view to incorporating it into the regression in a future review if it becomes comparable.

37 In the meantime, the Commission considers the regression-based model is likely to better reflect actual needs of states for special schools than an equal per capita assessment. It proposes to apply the model, calculated only on mainstream schools, to state spending on both mainstream and special schools.

Q3. Do states agree that the average state funding of schools is not sufficiently based on the Schooling Resource Standard funding model to be adopted in place of the Commission's funding model?

State views

38 New South Wales, Queensland, ACT, South Australia and Tasmania agreed with the Commission's draft position that the Schooling Resource Standard funding model does not adequately reflect what states do and should not be used to determine assessed spending for either government or non-government schools.

39 The Northern Territory said that most other states' actual funding comes reasonably close to the Schooling Resource Standard's funding levels. It said it is working towards this benchmark. It said the Schooling Resource Standard model should replace the current assessment because it includes additional drivers of need.

40 Victoria said the Schooling Resource Standard model better reflects the range of drivers of state spending needs. It proposed that the Commission adopt characteristics from the Schooling Resource Standard model, such as the inclusion of a variable for additional costs to educate students from non-English speaking backgrounds.

[4] Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability, *Final Report*, Royal Commission, Australian Government, 2023.

41 Western Australia supported the implementation of Schooling Resource Standard cost weights to assess state spending on government and non-government schools. It said that this is a more accurate representation of what states do as it is built on school data and ensures consistency across the different assessment components.

Commission response

Non-government schools

42 The Commission has considered whether the Schooling Resource Standard is the appropriate driver for state funding of non-government schools.

43 According to Government Finance Statistics data, it is not yet the average policy of states to implement their commitment to fund non-government schools at 20% of the Schooling Resource Standard. Similarly, states do not typically fund each non-government school according to the Schooling Resource Standard.

44 The Commission uses a regression approach to reflect what states do. This ensures that states have the capacity to provide students in comparable circumstances with comparable levels of support, at levels reflecting the average of what states do. The Commission notes that the regression includes socio-economic status and Indigenous status. However, unlike the Schooling Resource Standard, it does not include disability, concentration of First Nations students in schools, or language background other than English. As discussed elsewhere in this chapter, the disability data are not consistently defined between states. The Commission has not been able to develop a regression model with significant positive coefficients for the other groups of students.

Government schools

45 The Commission notes that states are negotiating with the Commonwealth to increase their funding shares to reflect a higher proportion of the Schooling Resource Standard.

46 For example, Western Australia announced in January 2024 that all its government schools will be funded at 100% of Schooling Resource Standard needs by 2026,[5] including 77.5% from Western Australia and 22.5% from the Commonwealth. The Northern Territory also signed a statement of intent in March 2024 with the Commonwealth, ensuring its public schools will be funded at 100% of Schooling Resource Standard needs by 2029. This includes an increase from 20% to 40% contribution from the Commonwealth between 2025–29, contingent on the Northern Territory increasing its share to 60% of the Schooling Resource Standard.

[5] Ministers of the Education Portfolio, *Australian and WA Governments agree to fully and fairly fund all Western Australian public schools*, Ministers of the Education Portfolio, 31 January 2024, accessed 12 June 2024.

47 Not all states fund the same share of the Schooling Resource Standard. The proportion of the Schooling Resource Standard that states have committed to fund currently varies from less than 60% in the Northern Territory, to around 70% in Queensland and Victoria, and 80% in the ACT. The actual level of funding may differ from this. The Schooling Resource Standard does not reflect ‘what states do’, either in aggregate or at the individual school level. As such, the Commission considers that the Schooling Resource Standard currently does not provide a relevant benchmark for assessing GST needs.

48 The Schooling Resource Standard funding model includes additional drivers of need beyond those included in the Commission’s regression. Each state has a different needs-based funding model with similar drivers to those in the Schooling Resource Standard, but with unique loadings and definitions for those drivers. The potential inclusion of those drivers in the Commission’s assessment is considered in the following section.

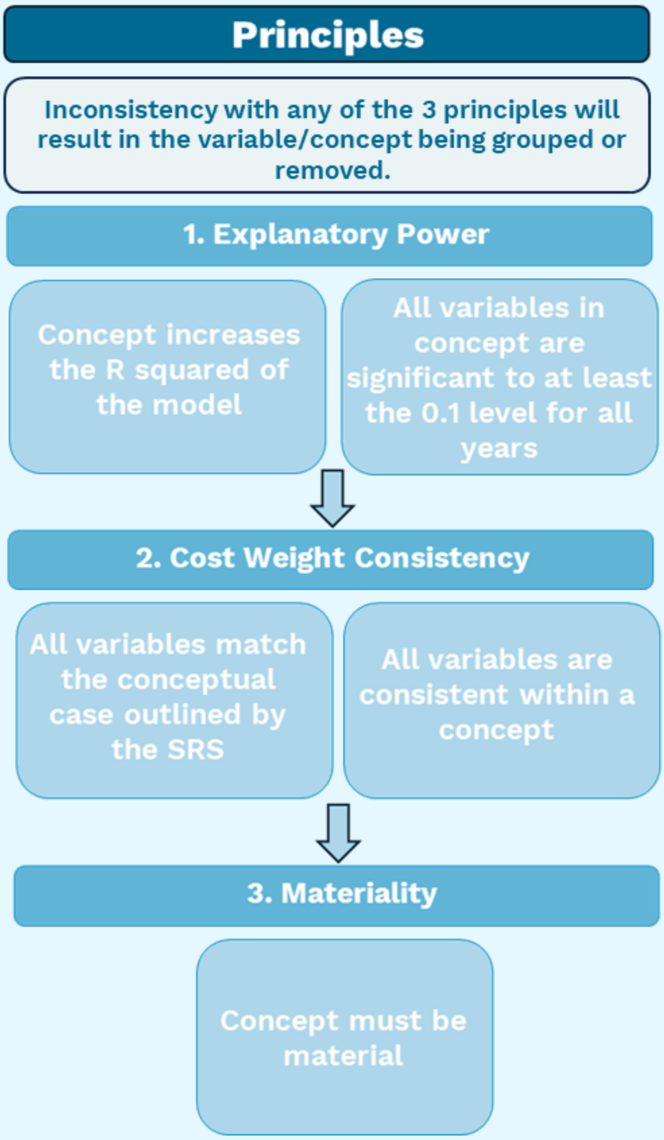
Commission draft position

49 States do not use the Schooling Resource Standard for their total funding level, or their allocation to schools. As such, the Commission proposes to continue to use a regression to reflect what states do in their funding of schools.

Other issues raised by states

50 States have suggested the inclusion of various concepts in the Commission’s assessment. The Commission has developed a set of criteria to determine whether each concept is, or could be, reflected in its government and non-government school regressions. These principles are outlined in Box 1. These principles provide a framework for the discussion below on the treatment of the states’ proposals involving socio-educational advantage, First Nations students, cultural and linguistically diverse students, and schools in different remoteness regions. The principles also relate to the earlier discussion on primary and secondary school students.

Box 1 Model selection principles



Each potential variable is considered within the broader context of the concept to which it belongs. For example, the inner regional, outer regional, remote and very remote variables all belong to the concept of remoteness. To be included in the model, a concept must add to the explanatory power of the model by increasing the R squared and all variables within a concept must be statistically significant for all assessment years. All variables must match their conceptual case as outlined in the Schooling Resource Standard. In addition, the coefficient of each variable must be consistent with others within that concept. For example, if one variable within a driver is expected to have a higher cost weight than another, then this should be reflected within the model. Finally, the effect of the variable needs to be material.

If principles are not met, variables within that concept are aggregated or removed until all principles are satisfied.

Socio-educational disadvantage

51 The Northern Territory said the current model, which uses the proportion of student enrolments in a school within the lowest socio-educational disadvantage quartile, understates the disadvantage experienced by its students. It proposed a more granular consideration of socio-educational disadvantage.

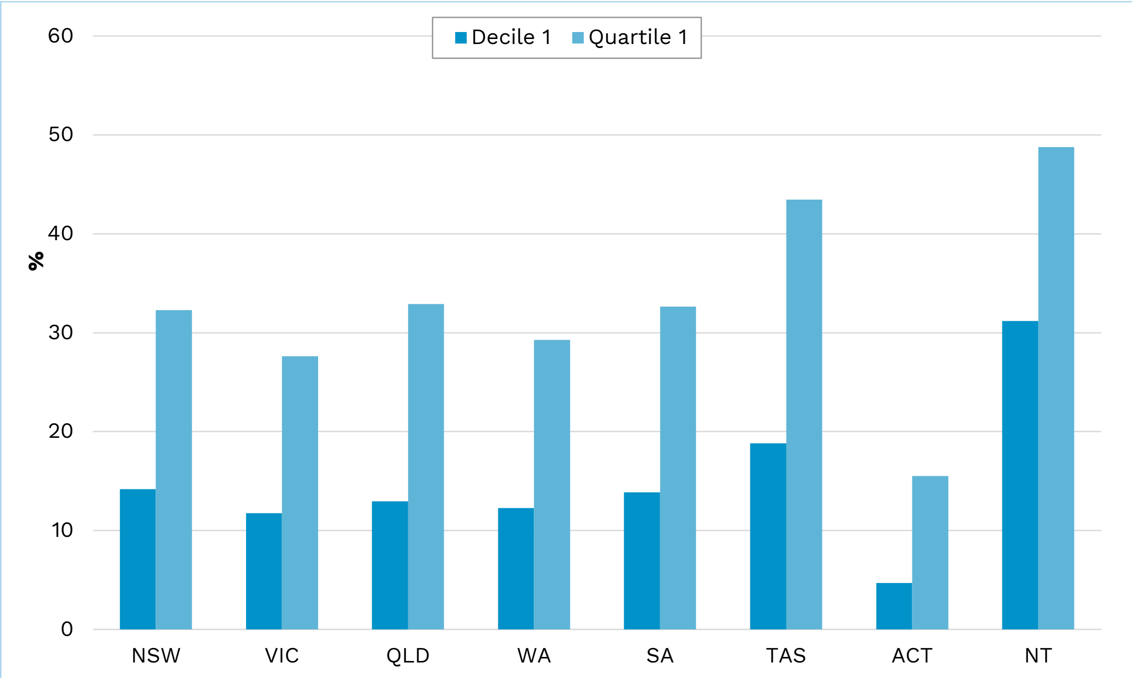
52 Western Australia was concerned that the Commission’s model does not include the second most disadvantaged quartile, unlike the Schooling Resource Standard.

Commission response

53 Socio-educational disadvantage informs the Schooling Resource Standard funding model. It also informs the Commission's model, albeit using different specifications. The 2020 Review method uses the bottom quartile of socio-educational advantage.

54 The Commission has found that in government schools, the most disadvantaged 10% of students attract considerably higher funding than the 11th to 25th percentiles of students. This supports the Northern Territory's contention that the current method underestimates the needs of the most disadvantaged students. Adopting a more granular measure of socio-educational disadvantage would better reflect the needs of states due to substantial differences in state shares of these students (Figure 3).

Figure 3 Proportion of students in the most disadvantaged socio-educational decile and quartile, government schools, 2021



Source: ACARA schools data.

55 In examining the impact of socio-educational disadvantage, the Commission investigated 2 approaches.

- Using the bottom 2 quartiles of socio-educational advantage. In this case, the second most disadvantaged quartile has an unexpected negative cost weight in government schools.
- Including the bottom 3 deciles. In this case, the third decile has an unexpected negative cost weight and the second decile is insignificant in government schools.

56 Both these approaches have findings inconsistent with the funding outlined in the Schooling Resource Standard's formula (which has positive cost weights for the bottom 2 quartiles). Hence, neither approach to measuring moderate levels of disadvantage aligns with the Commission's model selection principles (as described

in Box 1). The Commission agrees with Western Australia that if states consistently followed the Schooling Resource Standard, this coefficient could be expected to be positive.

57 For non-government schools, the second most disadvantaged quartile has a positive and significant coefficient. It is also larger than the most disadvantaged quartile. Following its model selection principles, the Commission considers it appropriate to aggregate the 2 most disadvantaged quartiles into a lower half in the non-government model.

58 Because non-government schools receive a substantial proportion of funding from tuition fees, state funding formulas and the Schooling Resource Standard take into account the capacity of parents to contribute to the cost of their child's education. Capacity to contribute is not directly measured in the Commission's regression but is partially captured with socio-educational advantage.

59 In the government sector, only the most disadvantaged students appear to drive state spending. However, in the non-government sector the bottom half of socio-educational disadvantage appears to drive spending. This likely reflects that, in the government sector, it is the educational need of the most disadvantaged that is most important, while in the non-government sector, the capacity of parents to contribute to the cost of education is also important.

60 The Commission accepts that funding needs in government schools arising from socio-educational disadvantage may not be limited to the most disadvantaged decile. However, spending on the 11th to 25th percentile of disadvantaged students cannot be reliably measured.

Commission draft position

61 The Commission proposes to use the lowest decile of socio-educational advantage for government schools. For non-government schools, the Commission proposes to use the most disadvantaged half of students.

First Nations students

62 Western Australia suggested applying the First Nations cost weight from the government schools regression to the non-government schools regression. It said there is a conceptual case that First Nations students require more support, regardless of school sector.

63 The Northern Territory said the higher cost of delivering education in schools with high proportions of First Nations students should be accounted for in the regression. Conversely, Victoria said it has the most dispersed First Nation populations and the assessment should recognise the additional costs in providing culturally appropriate education to highly dispersed First Nations students.

Commission response

Non-government schools

64 The Commission investigated the inclusion of First Nations cost weights in the non-government model. Models with either regional cost variables or First Nations variables have significant and positive coefficients. However, models with both do not. The Commission selected the model with First Nations variables as it had a higher explanatory power.

Government schools

65 The Commission's 2020 Review method includes higher costs associated with First Nations students, but not the concentration in a school of First Nations students. The Schooling Resource Standard does both.

66 School data for New South Wales, Victoria and Western Australia showed evidence of increasing per student costs as First Nations proportions increase. In Queensland, differences in the concentration of First Nations students have a very small effect on state funding. For the Northern Territory, the Commission observed decreasing per student costs as the First Nations proportion increased.

67 Each state has its own approach to funding First Nations students. The regression indicates that the average of what states collectively do does not incorporate an increase in funding per student with increasing concentration of First Nations students.

68 Reflecting the approach outlined in the Commission's model selection principles to use variables that are consistent with their conceptual case reflected in the Schooling Resource Standard, the Commission does not use negative coefficients for Indigenous concentration in government schools. The Commission will continue to monitor this variable.

69 Under the current model, between calendar years 2019 and 2021, the coefficient for First Nations students fell from a 46% cost weight to a 24% cost weight, with coefficients for disadvantaged and remote students increasing. First Nations student numbers grew by 8%, compared with 2% for total student numbers over this period. It appears that newly identified First Nations students, on average, may attract less additional funding from correlated attributes. For example, the high cost that states actually spend on students with a disability is attributed to the variables within the Commission's model. With the data suggesting a changing profile of First Nations students, these costs may be attributed more to disadvantaged students and less to First Nations students. While a 24% cost weight is broadly consistent with the cost weight for First Nations students in the Schooling Resource Standard, the Commission is alert to the possibility that changes in Indigenous status identification by students may have unexpected implications for the schools assessment. This is an area the Commission will continue to monitor.

70 Victoria noted that schools face costs associated with First Nations students regardless of the number of such students. To the extent that states provide a fixed amount to schools for such expenses, the Commission's regression would capture these expenses associated with establishing support for First Nations students as part of its fixed costs coefficients.

Commission draft position

71 The Commission proposes applying the First Nations cost weight to the non-government schools regression.

72 The Commission considers the proposed 2025 Review methods incorporate the additional costs of First Nations students. The precise specification of this in its regression model may adapt to changes in state funding and changes in Indigenous status identification. The Commission proposes to run regressions each year that will include variables reflecting First Nations concentrations and interaction between First Nations students and remoteness or other variables. Any changes in the specification of the regression model will be made in consultation with states.

Students from non-English speaking backgrounds

73 Victoria said the Commission should update the assessment to account for students with English as an additional language as a driver of need.

74 The Northern Territory also supported including this driver of need, adding that it has a larger share of First Nations students who do not speak English as a first language.

Commission response

75 The Commission has tested whether what states do is to spend more on students who speak a language other than English. The group of students who have a language background other than English is not homogenous and may not attract the same funding levels.

76 Some students who come from a language background other than English are First Nations students. These students tend to live in remote or very remote communities and attend schools with a high proportion of First Nations students. These associated attributes also have the potential to attract significant cost weights. The Commission's regression model may assign some of the funding this group receives to the associated attributes of these students.

77 Another group of students who come from a language background other than English are socio-educationally advantaged children of migrants. These students can have a high proficiency in English but speak a second language at home. These students may not attract the same funding as more disadvantaged students who speak a language other than English at home. The Schooling Resource Standard incorporates this potential difference and provides a loading for students who speak a language

other than English at home and who have at least one parent who did not complete schooling to year 9.

78 The Commission has therefore divided the population of students who speak a language other than English at home into 4 groups. Students have been separated by Indigenous status and by whether or not at least one of the student's parents completed year 9 (students where at least one parent did not complete year 9 are classified as disadvantaged). This derives the following distinct groups: disadvantaged First Nations students, non-disadvantaged First Nations students, disadvantaged non-Indigenous students, and non-disadvantaged non-Indigenous students.

79 Of these 4 groups, only disadvantaged non-Indigenous students who speak a language other than English at home had a positive coefficient.

80 Following the Commission's model selection principles (see Box 1 above), negative coefficients for funding students with languages other than English were not included in the regression model.

81 Although non-Indigenous, disadvantaged students who come from a language background other than English produced a positive coefficient, the variable became insignificant in 2021 and so, following the model selection principles, was removed from the regression. In addition, given the small numbers of affected students, and that state shares are broadly similar, the cost weight for these students was not material.

Commission draft position

82 The Commission proposes not to include a variable for students who speak a language other than English. The Commission proposes to consider how cultural and linguistic diversity affects state service costs as part of its proposed forward work program.

Early childhood education

83 Victoria suggested that the Commission create a separate component in the schools category for early childhood education and assess it equal per capita. Victoria saw this as warranted because early childhood education would likely grow considerably during the 2025 Review period, with Victoria, New South Wales and Queensland announcing substantial commitments to kindergartens and early education centres. Victoria stated that it does not fund socio-demographic groups differently in preschools but does in schools. Thus, the differential cost identified in schools should not be applied to preschools.

Commission response

84 The Commission notes that this is a rapidly evolving area where policy changes are being implemented and spending is growing. Under the preschool reform agreement,

the Australian Government and all states committed to further funding for early childhood education.[6] More broadly, the Australian Government is consulting on an overarching Early Years Strategy that will focus on providing a framework to improve outcomes for young children.[7]

85 States are expanding access and increasing quality of early childhood education, with some states introducing an additional year of free universal preschool.[8] While there is a conceptual case for isolating these costs and assessing needs, there is an absence of national data on costs for key groups. The diversity of service delivery models between states would make it difficult to produce comparable data.

86 Victoria stated that it does not fund socio-demographic groups differentially. However, the fact that the Northern Territory spends 50% more per student than the national average provides evidence that having a large number of remote and/or First Nations students increases the cost of providing early childhood services. This suggests that the schools assessment is likely to be a more reliable proxy for pressures on the early childhood sector than an equal per capita assessment.

87 There is no readily available data upon which to determine the state spending needs for preschools. With only $86 per capita spent on preschools in 2021–22, developing such an assessment is unlikely to be material.

Commission draft position

88 The Commission proposes to continue to include spending on early childhood education with school spending. It will continue to monitor state spending in this area.

Regional costs

89 Western Australia said that the current assessment structure does not sufficiently account for the impact of distance from capital cities in its classification of remoteness.

Commission response

90 The choice of classification for measuring remoteness is considered in the geography chapter.

[6] Department of Education, *Preschool Reform Agreement*, Australian Government, 8 May 2024, accessed 12 June 2024.

[7] Department of Social Services, *The Early Years Strategy 2024-2034*, DSS, Australian Government, 2024.

[8] For example, Victorian Government, *Best start best life reform*, Victorian Government, 28 May 2024, accessed 12 June 2024; ACT Education Directorate, *Set up for Success: An Early Childhood Strategy for the ACT*, ACT Government, 2020; NSW Government, *Start Strong program for preschool children*, NSW Government, 12 March 2024, accessed 12 June 2024.

Commission draft position

91 The Commission proposes to retain the ABS' classification of remoteness as the basis for its assessment of the impact of remoteness on state expenses. As in the 2020 Review, the Commission has grouped remote and very remote schools into a single remote grouping and has a cost weight for outer regional schools.

Draft 2025 Review assessment method

92 Following consideration of state views, the Commission proposes to:

- change the threshold for socio-educational disadvantage in both the government and non-government schools components
- include cost weights for secondary students and fixed costs for secondary schools
- monitor and, if necessary, amend the measures associated with First Nations students.
  - In the proposed 2025 Review method, a First Nations students variable is included. Future updates using the proposed 2025 Review method would allow for a change to reflect potential changes in the funding of First Nations students and the interaction with funding of other groups. For example, if appropriate, the Commission could include a variable for concentration of First Nations students in a school or a variable for First Nations students in remote schools.

93 No new data are required from states to support this change.

94 Table 1 shows the proposed structure of the 2025 Review schools assessment.

Table 1 Proposed structure of the schools assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
State spending on government schools	Socio-demographic composition	Recognises that student numbers, adjusted for Indigenous status, low socio-economic status, remoteness, and primary or secondary school, affect the use and cost of providing services.	Yes
	Service delivery scale	Recognises the diseconomies of smaller schools with increasing remoteness and differences between primary or secondary school.	Yes
	Wage costs	Recognises differences in wage costs between states.	No
State spending on non-government schools	Socio-demographic composition	Recognises that the number of students in non-government schools, adjusted for low socio-economic status, Indigenous status, and primary or secondary school, affect the use and cost of providing services.	Yes
	Service delivery scale	Recognises the diseconomies of smaller schools with increasing remoteness and differences between primary or secondary school.	Yes
	Wage costs	Recognises differences in wage costs between states.	No
Commonwealth funding of government schools	Schooling Resource Standard	Recognises the educational disadvantage inherent in the Department of Education's needs-based funding. This includes additional funding for students with disability, First Nations students, socio-educationally disadvantaged students, students with low English proficiency, students that attend more remote schools and students that attend smaller schools.[9]	No
	Wage costs	Recognises the differences in wage costs between states.	No

Indicative distribution impacts

95 The impact on the GST distribution in 2024–25 from the proposed method changes is shown in Table 2.

[9] Department of Education, *Schooling Resource Standard*, Australian Government, 15 May 2024, accessed 12 June 2024.

Table 2 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	-354	-1,058	933	358	-209	19	-77	388	1,699
U2024 using draft R2025 methods	-332	-1,051	895	353	-234	18	-64	415	1,681
Effect of draft method changes	23	7	-38	-5	-25	-2	13	27	70
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	-41	-150	167	121	-111	33	-161	1,510	62
U2024 using draft R2025 methods	-39	-149	160	119	-124	30	-134	1,615	61
Effect of draft method changes	3	1	-7	-2	-13	-3	28	105	3

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapters.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and, as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

96 The most significant aspect of the change in methods was in the state funded government schools component, where the Commission proposes using the most disadvantaged 10% of students. The Northern Territory has a greater share of the most disadvantaged students, increasing its assessed GST needs. South Australia has a greater share of moderately disadvantaged students, reducing its assessed GST needs.

97 The total spending allocated to disadvantaged students is less under the new approach. This increases the assessed GST needs of the ACT, which has a below-average proportion of disadvantaged students.

Table 3 Indicative impact on GST distribution of proposed method changes (disaggregated), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
State funded Government Schools	36	35	-68	-20	-26	-3	17	29	117
Non-government schools	-14	-27	30	14	1	1	-4	-2	47
Total	**23**	**7**	**-38**	**-5**	**-25**	**-2**	**13**	**27**	**70**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
State funded Government Schools	4	5	-12	-7	-14	-5	36	112	4
Non-government schools	-2	-4	5	5	0	2	-8	-7	2
Total	**3**	**1**	**-7**	**-2**	**-13**	**-3**	**28**	**105**	**3**

Note: The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and, as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

Attachment A: Model underpinning schools assessment

98 The Commission considers the optimal model is the one with the greatest explanatory power where all variables are significant and have a sign consistent with that expected if states followed the Schooling Resource Standard. The model selection principles outlined provide a framework that describe how the final model was selected to meet these requirements. Each variable must satisfy each of the 3 principles to be included in the regression.

99 Although each variable is described in isolation in this attachment, the nature of regressions means that changing one variable will impact others and, therefore, the analysis throughout this attachment relates to analysis on the whole model.

100 The Commission started with a detailed model and removed or aggregated variables until all variables satisfied the Commission's principles. Each variable that remained in the regression had to be statistically significant for all assessment years to the 0.1 level and increase the explanatory power of the model. If these conditions were met, the consistency of the cost weight was considered. The variable's cost weight had to align with the conceptual case outlined in the Schooling Resource Standard and be consistent with the other variables within the same concept. If these conditions were also satisfied, the materiality of the variable was considered.

101 The Commission then tested the re-inclusion of each variable separately to see if it became a significant addition to the model. If the addition of the variable led to a higher explanatory power and all variables still met the model selection principles, it was included in the regression.

102 The Commission acknowledges that the order in which these changes are made may have an impact on the final model specification, and the order in which the Commission has removed or aggregated variables does not necessarily lead to the optimal model. Due to confidentiality constraints made by the Australian Curriculum and Assessment and Reporting Agency, the Commission is unable to share the raw data. However, Commission staff are available to any state to test alternative model specifications.

Model selection

103 The Commission began the model selection process by starting with a highly specified model comprised of all variables that had a conceptual case as a potential policy-neutral driver of cost for a school. The results from this model can be seen in Table A-1. Details on each of the variables included in the full model are outlined below.

- Cost per student: The dependant variable in each regression. This variable represents the total annual cost faced by states for a particular school divided by its number of full-time equivalent enrolments.

- Intercept: The intercept term represents the annual base cost to provide education to a student.
- Secondary: This represents the additional cost for students attending secondary schools.
- Inverse school size and inverse secondary: Inverse school size represents the fixed annual cost of running a school. Inverse secondary represents the additional quantum for secondary schools.
  - In a model predicting total costs per school, this concept would be captured by the intercept. In a model predicting total costs per student, all variables (including this) are divided by student numbers. The average size of schools is largely a policy choice by states. These coefficients are assessed by assuming that all states have the same national average school size in each remoteness area (service delivery scale assessment).
- Remoteness dummy variables: For all remoteness categories, the Commission tested the additional cost per student attending schools in each category, relative to the base costs of major city schools. These categories include:
  - Inner Regional
  - Outer Regional
  - Remote
  - Very Remote.
- Socio-educational advantage reflects a range of attributes of a student's parents. It is individual-based rather than area-based like other socio-economic indicators used by the Commission. Students are ranked from most educationally advantaged to least educationally advantaged, then grouped into deciles or quartiles.
- Indigenous status: This represents the additional per student cost of providing education to First Nations students.
  - The Schooling Resource Standard includes a sliding scale, where the cost per First Nations student increases linearly with an increase in the proportion of First Nations students in the school. Each First Nation student in a school with 90% Indigenous students would attract a higher cost weight than each First Nations student in a school with 10% Indigenous students. In the regression model, this is captured by including 'proportion of First Nations students', and 'proportion of First Nations students squared' variables.
- Cultural and linguistic diversity (CALD): The Commission tests the implications and significance of students from culturally and linguistically diverse backgrounds as a driver of cost. The school-level variables tested are as follows:
  - CALD: This is the proportion of students in a school that have a language background other than English.
  - CALD disaggregated by Indigenous status and disadvantage: The proportion of all students who speak a language other than English at home and have at least one parent who did not complete year 10 in school. This concept is divided by First Nations and non-Indigenous students.

Government schools

Table A-1 Full (starting) model specifications for government schools, 2022

	2019			2020			2021		
	Est.	Std Error	Sig.	Est.	Std Error	Sig.	Est.	Std Error	Sig.
(Intercept)	8,156	122	***	8,549	125	***	9,055	130	***
Secondary	981	77	***	957	76	***	865	79	***
Inverse school size	307,293	5,940	***	317,752	5,951	***	316,711	6,011	***
Inverse secondary	1,235,910	45,095	***	1,261,872	45,248	***	1,347,979	46,651	***
Inner regional	-103	76		-7	77		-18	79	
Outer regional	391	103	***	509	104	***	651	107	***
Remote	3,028	229	***	3,267	231	***	3,662	238	***
Very remote	4,419	343	***	4,580	348	***	5,457	359	***
Decile1	10,442	1,221	***	13,085	1,225	***	13,873	1,206	***
Bottom SEA Q1	-2,420	714	***	-3,051	705	***	-2,829	694	***
Lower-middle SEA Q1	592	529		1,362	528	**	867	529	
Indigenous	9,811	723	***	6,712	730	***	4,202	746	***
Indigenous squared	-5,519	900	***	-3,155	928	***	-1,790	951	
Indigenous disadvantaged CALD	-14,701	1,151	***	-15,834	1,177	***	-13,815	1,224	***
Non-Indigenous disadvantaged CALD	1,248	712		997	716		1,163	751	
CALD	-55	160		-361	158	*	-537	160	***
Adjusted R squared	0.66			0.67			0.675		
Sample size	6,221			6,244			6,275		

104 The Commission began with the government sector and started aggregating or removing variables step by step until each concept met the criteria identified in Box 1.

105 Having developed a model which only contains variables which meet the Commission's principles, there is a risk that the order in which variables were removed could influence the outcome. The Commission then tested the re-inclusion of each concept that had been removed in previous steps to see if they would now add meaningful explanatory power. No concept being added met the Commission's principles. The final model specification is shown in Table A-2.

Table A-2 Final model specifications for government schools, 2022

	2019			2020			2021		
	Estimate	Std Error	Sig.	Estimate	Std Error	Sig.	Estimate	Std Error	Sig.
(Intercept)	8,223	43	***	8,617	43	***	8,887	44	***
Secondary	915	78	***	910	78	***	863	80	***
Inverse school size	304,357	5,582	***	314,059	5,511	***	322,502	5,609	***
Inverse secondary	1,260,613	46,201	***	1,279,506	46,511	***	1,349,181	47,913	***
Outer regional	633	97	***	679	98	***	717	102	***
All remote	2,914	204	***	3,084	205	***	3,661	211	***
Decile 1	7,523	277	***	8,717	276	***	9,719	283	***
Indigenous	4,512	359	***	3,502	361	***	2,391	371	***
Adjusted R squared	0.654			0.667			0.672		
Sample size	6,287			6,317			6,342		

Non-government schools

106 In selecting the non-government model, the Commission began with the final government model and followed a similar process of eliminating and aggregating variables until a final model was selected. The output of the government model on the non-government sector can be seen in Table A-3.

Table A-3 Full (starting) model specifications for non-government schools, 2022

	2019			2020			2021		
	Estimate	Std Error	Sig.	Estimate	Std Error	Sig.	Estimate	Std Error	Sig.
(Intercept)	1,693	34	***	1758	33	***	1825	34	***
Secondary	348	45	***	279	44	***	303	44	***
Inverse school size	56,541	6.016	***	62,751	5,657	***	54,416	5,801	***
Inverse secondary	114,373	19,495	***	137,243	19,251	***	82,701	15,987	***
Outer regional	157	58	**	70	57		39	60	
All remote	315	154	*	285	154		345	160	
Indigenous	783	285	**	617	281	*	858	285	**
Decile1	-4488	471	***	-4592	488	***	-5640	509	***
Bottom SEA Q1	5565	236	***	5704	243	***	6635	246	***
Adjusted R squared	0.412			0.428			0.456		
Sample size	2,616			2,641			2,702		

107 Both outer regional and remote areas were excluded as they were not significant to at least the 0.1 level for all assessment years. The coefficient for decile 1 remained negative and, thus, is the next variable to be removed as it does not align with the conceptual case outlined by the Schooling Resource Standard. In this simpler model, the proportion of First Nation students becomes insignificant and so it is excluded.

108 Next, the Commission investigated the possibility of adding variables back into the model in an aim to increase explanatory power. Each variable that was included in the original full model in Table 1 was individually tested. Only the inclusion of the lower-middle quartile of socio-educational advantage significantly improved the adjusted R squared of the model whilst satisfying the model selection principles. The cost weights were similar to that of the bottom quartile and, therefore, the bottom and lower-middle quartiles were combined, creating the bottom half of socio-economic advantage (SEA) as a new variable. The results of this aggregation lead to highly significant, positive cost weights and is therefore included in the non-government model.

109 After the addition of this variable to the model, each variable was again tested to see if its inclusion would add value. The only variable that produced significant positive cost weight was the proportion of First Nations students and therefore it was reincorporated into the model. The final model for non-government schools is outlined in Table A-4.

Table A-4 Final model specifications for non-government schools, 2022

	2019			2020			2021		
	Estimate	Std Error	Sig.	Estimate	Std Error	Sig.	Estimate	Std Error	Sig.
(Intercept)	1,383	37	***	1,424	36	***	1,454	37	***
Secondary	422	43	***	353	42	***	373	42	***
Inverse school size	62,720	5,774	***	67,441	5,375	***	62,188	5,528	***
Inverse secondary	79,633	19,014	***	95,770	18,577	***	52,078	15,420	***
Bottom half SEA	2,330	69	***	2,414	67	***	2,712	68	***
Indigenous	962	210	***	755	208	***	869	209	***
Adjusted R squared	0.448			0.475			0.499		
Sample size	2,617			2,641			2,702		

Post-secondary education

Overview

1 On 21 June 2023, the Commission issued a consultation paper on the draft post-secondary education assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission did not propose changes to the 2020 Review assessment method.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that a course mix driver should not be introduced?

State views

5 Most states agreed that course mix is unlikely to be material and should not be introduced as a driver.

6 Western Australia disagreed, arguing that course mix could be considered part of the 'industry mix' driver in services to industry and mining revenue. In this context, 'industry mix' refers to value of production, which is the measure for the economic environment driver in the services to industry assessment and the value of production driver in the mining assessment. Western Australia argued that this could also be a driver in the post-secondary education assessment, and that materiality would not need to be separately tested.

Commission response

7 The Commission explored Western Australia's suggestion.

8 It found evidence that a state's industrial profile can influence the courses it provides. For example, Tasmania provides an above-average amount of fisheries and forestry courses, and the ACT provides an above-average amount of political science and information technology courses.

9 There are also differences in course mix that are unrelated to industry mix. For example, Victoria provides nearly twice as many nursing courses as New South Wales, and South Australia provides twice as many human welfare

courses as Queensland. These could reflect student preferences and/or state policy influence.

10 Table 1 shows the courses with the greatest difference from equal shares per state. For example, New South Wales, Victoria and Tasmania provide 72% of all building courses in Australia. However, these states have 61% of construction employment and 61% of population.

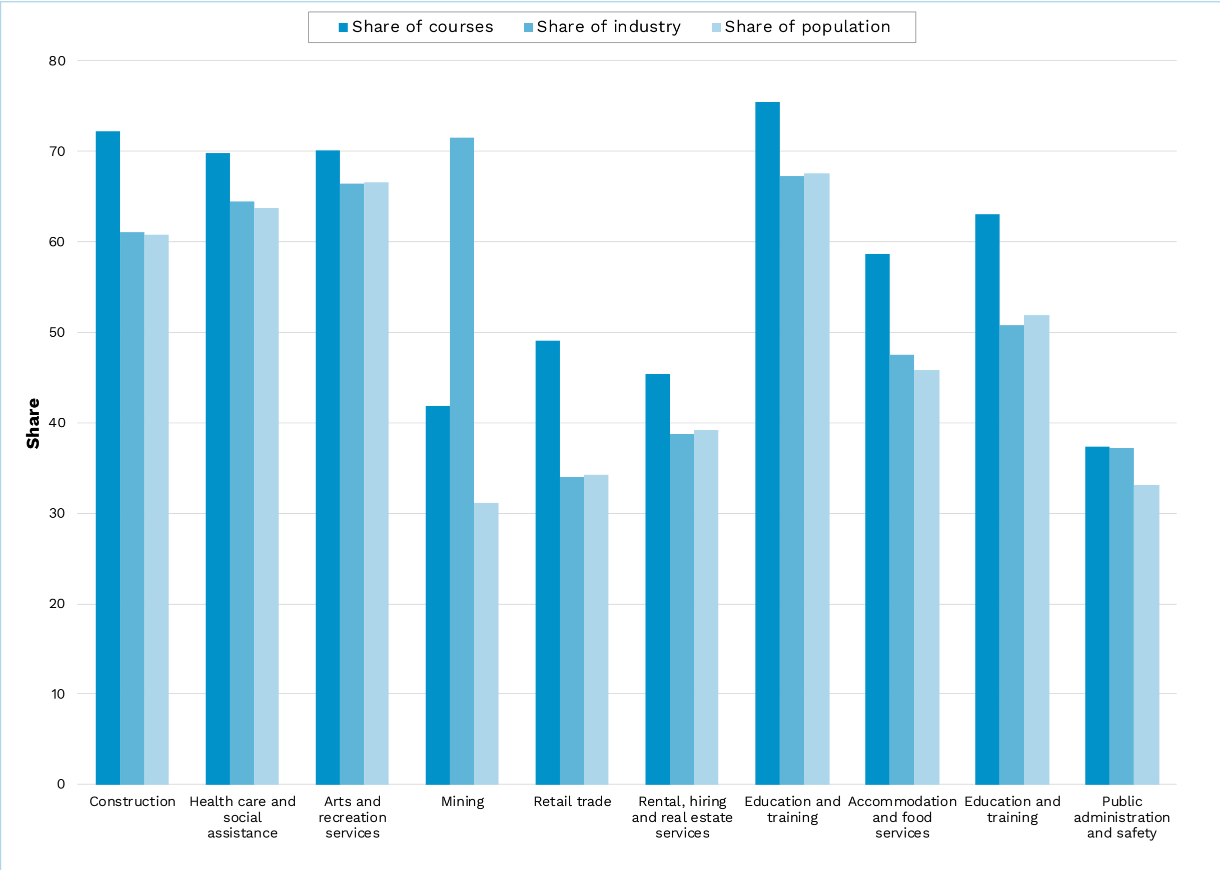
11 Of the 10 course groups with the greatest difference from population share, only one (mechanical and industrial engineering and technology) has a state distribution that could be explained by the associated industry mix. This is a course most used in the mining industry and is provided predominantly in Queensland and Western Australia.

Table 1 Courses provided by states, 2022

				Over-represented states' shares		
Course group	Difference from equal share	States with greater than equal share of courses	Industry with greatest concentration of graduates	Share of courses	Share of industry	Share of population
	'000 courses			%	%	%
Construction	201	NSW, Vic, Tas	Construction	72	61	61
Health care and social assistance	152	NSW, Vic, SA, Tas, NT, ACT	Health care and social assistance	70	64	64
Arts and recreation services	151	Vic, Qld	Arts and recreation services	70	66	67
Mining	127	Qld, WA, Tas	Mining	42	72	31
Retail trade	115	Qld, WA	Retail trade	49	34	34
Rental, hiring and real estate services	85	NSW, Qld, WA, SA	Rental, hiring and real estate services	45	39	39
Education and training	66	Vic, WA, SA, ACT	Education and training	75	67	68
Accommodation and food services	63	NSW, WA, SA, Tas, ACT, NT	Accommodation and food services	59	47	46
Education and training	62	NSW, Qld, ACT	Education and training	63	51	52
Public administration and safety	50	NSW, WA, SA, ACT, NT	Public administration and safety	37	37	33

Source: Commission calculation based on NCVER data.

Figure 1 Share of courses provided by states with above-average provision, 2022



Source: Commission calculation based on NCVER data.

12 After considering the evidence, the Commission considers that a state's course mix is primarily driven by factors not related to the industrial profile. These are likely to include student preferences, as well as state and Commonwealth policy choices. The different influences would need to be untangled, which is not yet possible.

13 A further consideration is the differing employment intensity of different industries. An industry might account for a large proportion of value-add or number of businesses, but not employment. Any driver would relate to a state's industrial employment profile, not business counts or chain volume measures.

14 The evidence suggests that any course mix driver would be different from economic environment drivers in services to industry. A separate course mix driver is both potentially not policy neutral and, as noted in the consultation paper, not material.

Commission draft position

15 The Commission proposes not to introduce a course mix driver in the 2025 Review.

Q2. Do states agree that the variables used in the socio-demographic assessment need to be retained?

State views

16 All states agreed that the socio-demographic assessment be retained.

17 Victoria had concerns that the socio-demographic assessment (both current and proposed) involves measuring the interrelated drivers of First Nations, low socio-economic status, and remote populations, which could lead to double counting. Victoria did not provide further analysis as evidence for its position.

18 Western Australia argued that the current regional cost gradient does not adequately assess the service delivery scale needs associated with its remote post-secondary education training. Western Australia also highlighted the possibility of better and more mature data being available to measure these drivers.

Commission response

19 The Commission does not share Victoria's concern that double counting could be a problem. The assessment is based on disaggregated socio-demographic profiles. For example, the use of post-secondary education by remote, low SES, First Nations people (and every other detailed population group) is separately measured. The GST distribution is based on the fully disaggregated profile of users of post-secondary education, and so there is no potential for double counting individual attributes.

20 The regional costs adjustment in the post-secondary education assessment is based on state funding formulas, which include allowances for higher costs in more remote areas. Because states do not have a separate additional allowance for small institutes, the Commission has not adjusted for this effect. The regional cost adjustment will be updated with current data following a data request. The aim of this data request is to capture any available and relevant data improvements to measure these drivers.

Commission draft position

21 The Commission proposes that the variables used in the socio-demographic assessment be retained.

Other issues raised by states

Cross-border adjustment

22 New South Wales noted that it is negotiating to reimburse the Canberra Institute of Technology, in the ACT, directly, and that this will require the cross-border adjustment to be updated.

Commission response

23 For its post-secondary education assessment, the Commission purchases data from the National Centre for Vocational Education Research on the amount of training provided by ACT institutes for New South Wales residents and vice versa. Once details of the agreement are settled, the Commission proposes to adapt this data request to only reflect cross border provision of training that is not covered by the agreement.

Commission draft position

24 In each assessment year, the Commission proposes to use data that reflect the amount of cross-border training not covered by alternative funding arrangements. This means that adjustments can be made between reviews to account for changing cross-border arrangements.

Draft 2025 Review assessment method

25 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method.

26 Table 2 shows the proposed structure of the 2025 Review post-secondary education assessment.

Table 2 Proposed structure of the post-secondary education assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Post-secondary education	Socio-demographic composition	Recognises that for the working age population certain characteristics affect the use and cost of services, namely Indigenous status, remoteness, and socio-economic status.	No
	Cross-border	Recognises the cost to the ACT of providing services to residents of New South Wales.	No (a)
	Wage costs	Recognises differences in wage costs between states.	No

(a) A slight change in the data request may be required, but the general approach will remain unchanged.

Indicative distribution impacts

27 No method changes are proposed for this assessment. The indicative impact of the re-estimation, with new data, of the socio-demographic cost weights is shown in Table 3.

Table 3 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	-47	-73	44	24	-14	16	1	48	134
U2024 using draft R2025 methods	-65	-72	43	32	-11	18	0	54	148
Effect of draft method change	-17	1	-1	8	3	1	-1	6	19
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	-6	-10	8	8	-7	28	3	187	5
U2024 using draft R2025 methods	-8	-10	8	11	-6	31	1	211	5
Effect of draft method change	-2	0	0	3	2	2	-2	24	1

Note: The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

Health

Overview

1 On 27 June 2023, the Commission issued a consultation paper on the draft health assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method with changes to the assessment of community and public health expenses.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that in a post-pandemic environment, the hospital and patient transport assessments remain fit for purpose?

State views

5 States said that there were no ongoing implications for the health assessment from the COVID-19 pandemic. Queensland, Western Australia and the ACT said that the impacts of the pandemic were only temporary. The Northern Territory said that the impacts of COVID-19 were significant, but do not warrant a long-term departure from existing methods.

6 New South Wales said that, without a clear alternative data source being both available and reliable, National Weighted Activity Unit data remain the appropriate data source for the assessment. Tasmania said that the assessments use data based on national weighted activity units from different health service settings and continue to be reliable measures of the use and cost of services by socio-demographic group.

Commission draft position

7 On the basis of feedback provided by the states, the Commission considers there are no ongoing implications from the COVID-19 pandemic for the health assessment.

Q2. Do states agree that the proposed changes to the community and public health assessment in this paper will contribute to making the assessment more responsive to developments affecting this part of the health system?

State views

8 States said they were generally supportive of efforts to improve the responsiveness of the health assessment, although some states said they have significant concerns with the specific proposal put forward by the Commission. The Northern Territory said the assessment should be built assuming medium to long-term stability in the health system rather than to maximise resilience to exceptional shocks.

9 New South Wales and the ACT said that the proposed changes to the community and public health assessment would contribute to making the assessment more responsive to changes in this part of the health system. Victoria said these changes will improve the accuracy of the assessment, at least in part. Queensland said it supported the Commission's efforts to make the assessment more responsive.

10 Western Australia said it did not see any benefit in making an assessment more responsive to poor measures of need. To improve responsiveness, Western Australia and the ACT said they supported the Commission's proposal to use state-provided health component expense data for the latest data year rather than assuming all components grow at the same rate as the overall health category.

11 South Australia said any indicator that is based on proxy data will not completely capture what is actually occurring. It said the robustness of a proxy will depend on how well it tracks what is trying to be measured in a policy neutral way. It said there is merit in investigating alternative measures that better capture changes in community health, provided this is based on robust, consistent and reliable data; and it is not policy influenced.

12 Tasmania said it agreed that during the COVID-19 pandemic there was a significant public health response by the Australian and state governments. It said the current community and public health assessment did not capture the COVID-19 shock because it uses a proxy indicator: emergency department triage categories 4 and 5 national weighted activity unit data. It said that during the pandemic, emergency department presentations were restricted, while community and public health expenditure increased significantly.

13 While Tasmania supported changes to the assessment to make it more reflective of actual service use, and therefore better able to respond to developments affecting community and public health, it said it did not agree that the proposed changes are more reliable than the current proxy.

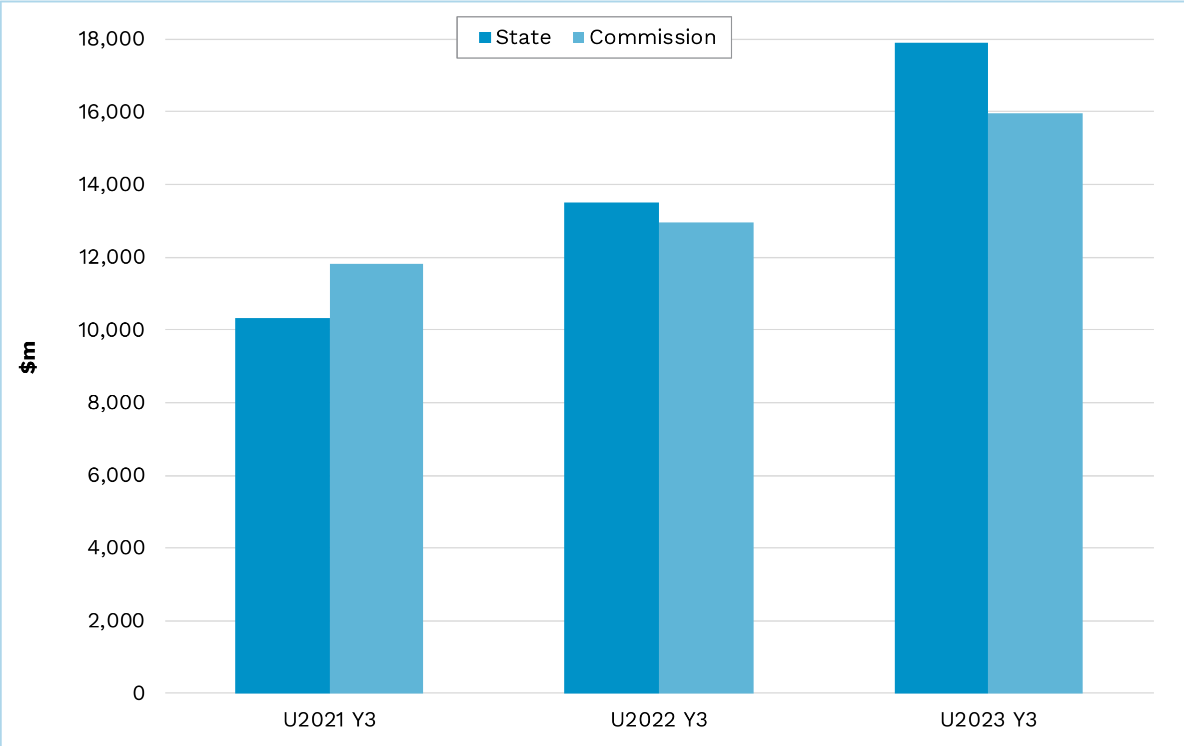
Commission response

14 The Commission assesses GST relativities over 3 assessment years. In expense assessments, for the third assessment year, the Commission usually aggregates state data to the category level and increases component level expenses for the second assessment year by the growth in category level expenses. This is done to limit the size of data revisions in the subsequent update due to changes made to state data by the ABS. However, if there are significant differences in spending growth between components, a better outcome may be to allow the assessments to try to capture this effect.

15 In the health assessment, spending on community and public health and hospital services are aggregated to the category level. During the COVID-19 pandemic, spending on community and public health did not always move in line with spending on hospital services. This resulted in differences between the expenses used by the Commission in year 3 compared with if it had used the community health data provided by states. For example, in 2019–20 (year 3 for the 2021 Update), state-provided spending data were lower than the Commission's estimate. In 2021–22 (year 3 for the 2023 Update), state-provided data were higher (Figure 1).

16 In addition to considering changes in the method for calculating component weights, the Commission has also considered other changes to make the assessment more responsive to changed circumstances. The Commission's response to state views on other proposed changes to the community and public health assessment are discussed subsequently.

Figure 1 Community and public health expenses (gross)



Source: Commission calculations using state-provided expense data on a Government Finance Statistics basis.

Commission draft position

17 Events that may lead to significant variation in the growth of the components in the health assessment are likely to be rare. For the 2025 Review, the Commission considers it better to maintain the existing approach, which minimises data revisions between updates. The Commission could switch to using state-provided year 3 data when a relevant shock has occurred. This has been done for the past 3 updates in the services to industry assessment in response to the large increase in state spending on COVID-19 business support.

18 The Commission will continue to explore other options to improve the responsiveness of the health assessment, including by reducing reliance on proxy indicators of activity.

Q3. Do states consider the experiences with the COVID-19 pandemic have implications for the health assessment?

State views

19 New South Wales and Victoria said that state spending associated with COVID-19 should be assessed on an actual per capita basis.

20 New South Wales said that state responses to COVID-19 were jointly agreed and aligned to the National Partnership on COVID-19 Response. During the acute stage of the pandemic in 2019–20 and 2020–21, prior to widespread vaccination, all states

pursued a zero-COVID-19 policy. Differences in responses between states therefore reflected differences in circumstances rather than policy.

21 New South Wales said that certain areas of Australia were more impacted by COVID-19 due to their status as major domestic and/or international transport hubs, higher population density, and other factors which may have promoted the spread of COVID-19 further.

22 New South Wales said that drivers of state expenditure on COVID-19 mitigation and response were epidemiological. It said spending patterns across Australian health systems reflected the presence of viral outbreaks. It said spending did not reflect standard cost drivers, such as remoteness, Indigeneity, or the presence of non-state services.

23 Victoria said that, in responding to COVID-19, state expenses were driven by uncontrollable and random impacts of the virus, following nationally agreed frameworks. It said expenses did not follow the Commission's drivers for health expenditure in the 2020 Review methods, being more concentrated in major cities and younger, non-Indigenous residents.

24 New South Wales said that COVID-19 related costs should include quarantine expenses incurred by New South Wales on behalf of other states that have not been reimbursed.

25 Victoria said that, to take account of the Commission's inability to change its methods between reviews, a retrospective adjustment should be made to fully take account of the differential impact of COVID-19 on state health expenses. It said, unless this was done, COVID-19 spending from 2019–20 and 2020–21 would never be assessed accurately and 2021–22 would only be assessed accurately once out of 3 assessment years.

26 The ACT said that the COVID-19 pandemic revealed the need for flexibility in assessment methods in response to major shocks in the health assessment. The ACT supported the Commission investigating alternative data sources to identify drivers of the use and cost of services, including due to a public health threat.

Commission response

27 The terms of reference for the 2021, 2022, 2023 and 2024 updates did not provide for a change in assessment method in response to COVID-19. Consequently, Commonwealth payments associated with the National Partnership on COVID-19 Response were treated as no impact since the COVID-19 spending was not specifically assessed. The 2020 Review health assessment was applied to state funded spending under the National Partnership on COVID-19 Response.

28 With the flexibility to change the health assessment in response to COVID-19 following the 2025 Review, the Commission is able to use an alternative assessment for assessing state spending related to COVID-19.

29 The Commission has stated previously how it would assess COVID-19 related spending if permitted under the terms of reference for an update. For example, in the 2023 Update New Issues discussion paper, it stated:

‘If terms of reference allow for a change in method to respond to COVID-19:

- treat the Commonwealth payments under the National Partnership on COVID-19 Response as impact; and
- assess state spending associated with the national partnerships on an actual per capita basis.’[1]

30 The basis of this position was that:

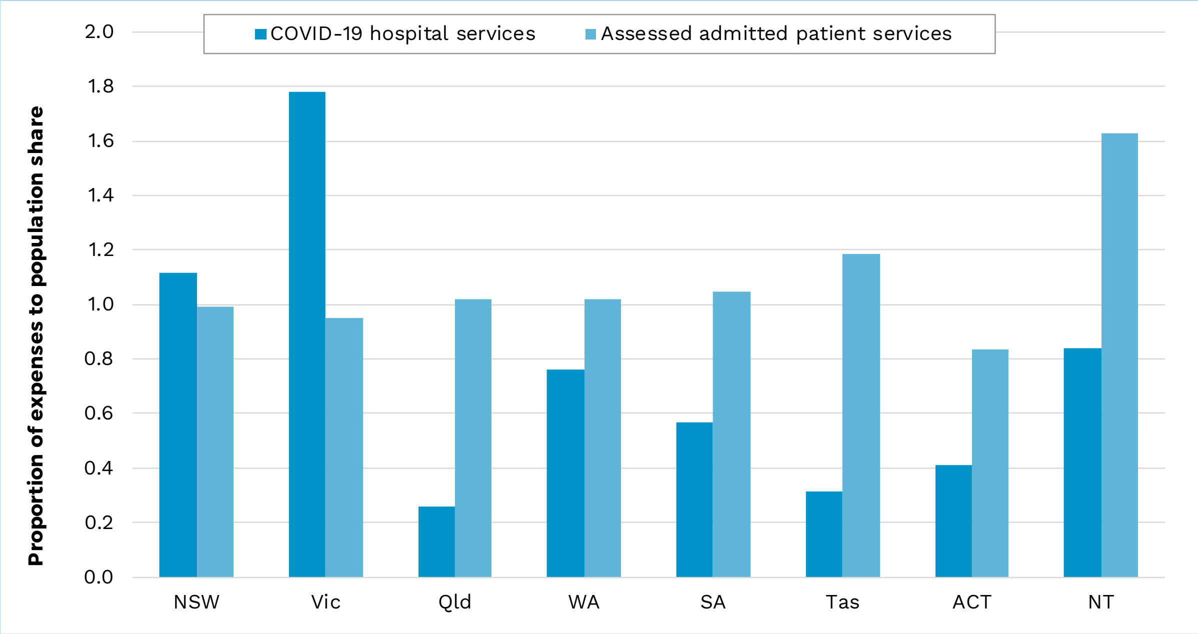
- the differences in spending between states on COVID-19 cannot be fully explained by the Commission’s health assessment of state spending needs on health services more broadly
- the Commission considered state responses to the COVID-19 pandemic largely reflected circumstances outside of state control rather than policy choices.

31 For the 3 assessment years for the 2024 Update, Figure 2 and Figure 3 compare the distribution of state spending associated with the National Partnership on COVID-19 Response with the distribution of spending needs under the health assessment, for hospital and public health services respectively. Significant differences exist between the distribution of state spending on COVID-19 and the distribution of spending needs resulting from the Commission’s health assessment methods.

32 Introducing flexibility to change assessment methods in response to shocks such as the COVID-19 pandemic is covered in the chapter on flexibility to consider method changes between reviews.

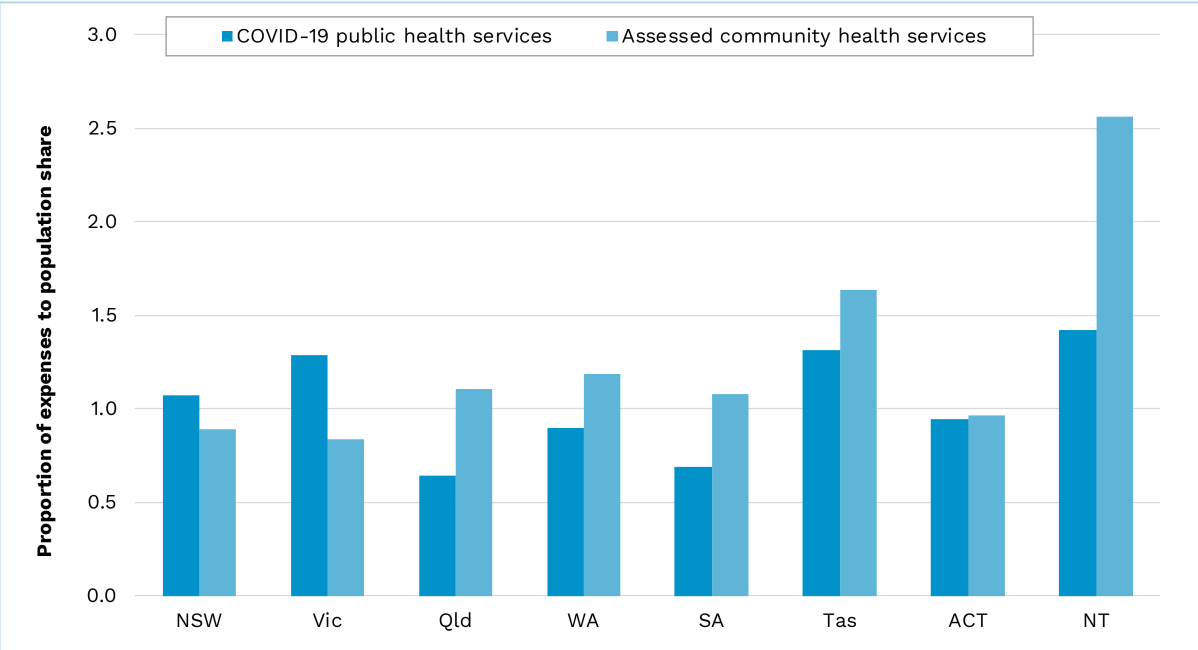
[1] Commonwealth Grants Commission (CGC), Discussion Paper - 2023 Update New Issues.pdf (cgc.gov.au), CGC, Australian Government, 2023, accessed 14 June 2024, p13.

Figure 2 **COVID-19 public hospital services spending (2020–21, 2021–22 and 2022–23) versus Commission's assessment of needs for admitted patient services**



Source: Commission calculation using reconciled National Health Funding Body National Partnership on COVID-19 Response expenses, assessed admitted patient expenses and ABS population data.

Figure 3 **COVID-19 public health spending (2020–21, 2021–22 and 2022–23) versus Commission's assessment of needs for community and public health spending**



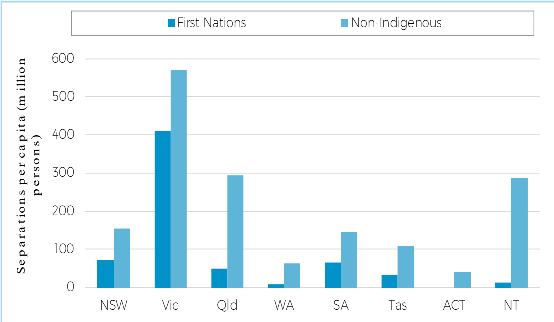
Source: Commission calculation using reconciled National Health Funding Body National Partnership on COVID-19 Response expenses, assessed community health expenses and ABS population data.

Box 1 Changing impact of COVID-19

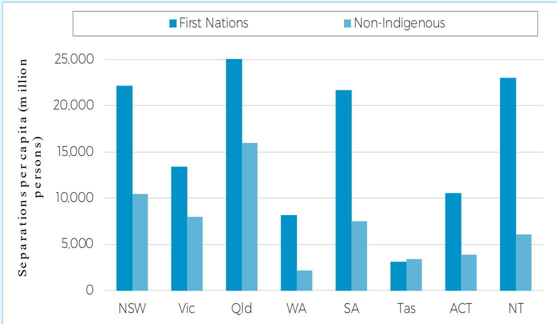
The charts show the changing impact of COVID-19 by select socio-demographic composition groups, by state, as measured by admitted patient separations. Total COVID-19 admitted patient separations in 2021–22 were 263,425, far in excess of the separations during 2019–20 (2,628) and for 2020–21 (4,718). More recent data on deaths covering 4 years to 30 September 2023 show a similar pattern with the impact by location and socio-demographic driver evolving over time. This fluidity and the magnitude of the change between years means there was a mismatch between needs assessed in the assessment period and those in the application period.

Admitted patient separations with a COVID-19 diagnosis by Indigenous status

First 2 years (2019–20 to 2020–21)

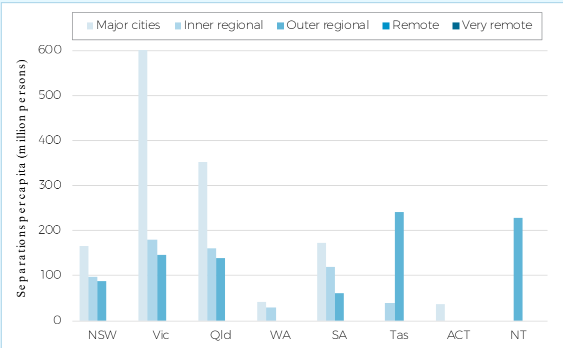


First 3 years (2019–20 to 2021–22)

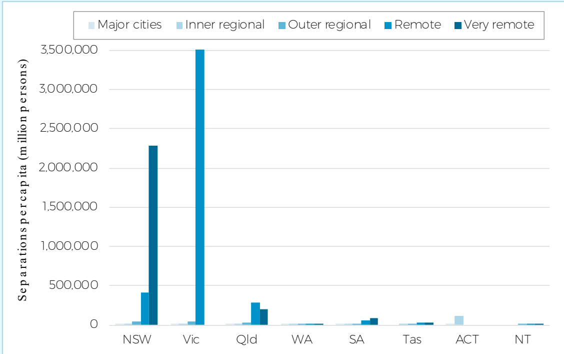


Admitted patient separations with a COVID-19 diagnosis by remoteness

First 2 years (2019–20 to 2020–21)

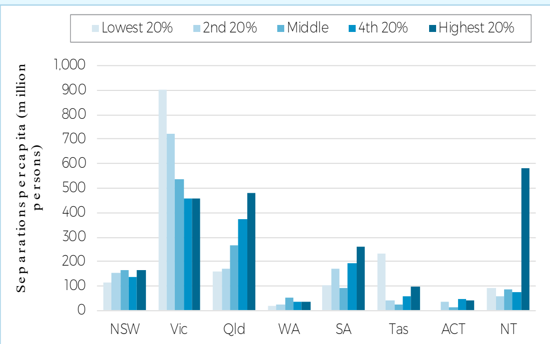


First 3 years (2019–20 to 2021–22)

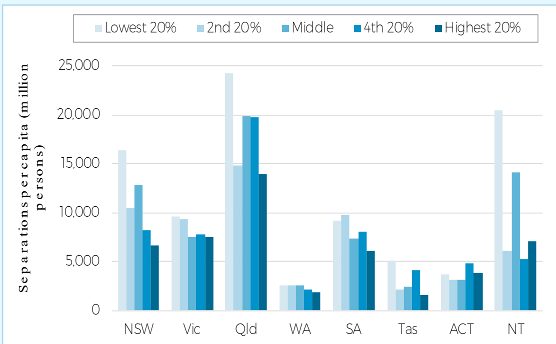


Admitted patient separations with a COVID-19 diagnosis by socio-economic status

First 2 years (2019–20 to 2020–21)



First 3 years (2019–20 to 2021–22)



Source: Australian Institute of Health and Welfare, National Hospital Morbidity Database, 2019–20 to 2021–22.

Commission draft position

33 The Commission considers that, for the 2025 Review, a separate assessment of state spending on COVID-19 related public hospital and public health services would result in a better assessment of state expense needs.

34 The Commission proposes to treat the Commonwealth payments for public hospital and public health services under the National Partnership on COVID-19 Response as impact and assess state spending associated with the national partnership on an actual per capita basis. Commonwealth payments to maintain private hospital viability will continue to be treated as out of scope because they are not related to a usual state responsibility for which needs are assessed.

35 The reconciled value of the payments would be used rather than the estimates published in the Commonwealth's Final Budget Outcome, as they are a more accurate reflection of state spending. Ideally, national weighted activity units with a COVID-19 diagnosis should be removed from the data used in other components of the health assessment for the assessments years in which there is a separate COVID-19 assessment. However, given this adds complexity and that the number of national weighted activity units with a COVID-19 diagnosis is likely to be small, this adjustment would not be made.[2]

36 The National Partnership on COVID-19 Response ceased in 2022–23. The separate assessment of state spending under the national partnership will continue until the 2027 Update when 2022–23 drops out of the Commission's assessment year period. The 2025 Review includes the 3 assessment years 2021–22 to 2023–24, and there will be a separate assessment of state spending on COVID-19 related hospital and public health services in 2021–22 and 2022–23. In the 2026 Update, there will be a separate assessment on COVID-19 spending only for 2022–23 because 2021–22 will drop out of the assessment period. For the 2027 Update, 2022–23, the last year for the National Partnership on COVID-19 Response, will have dropped out of the assessment period.

37 Victoria is seeking a retrospective adjustment to the GST distribution in the 2021–22 to 2024–25 application years, with this adjustment reflected in the GST distribution for the 2025–26 application year. The Commission does not consider it has the mandate to apply the assessment retrospectively. The assessment of state expenses related to COVID-19 was considered by the Commonwealth Treasurer in consultation with states on the terms of reference for the 2021 Update and subsequent updates. The terms of reference for these updates did not allow for method changes to assess COVID-19 related expenses differently.

[2] Australian Institute of Health and Welfare, Admitted patient care: 2019-20 separations with a COVID-19 diagnosis; Admitted patient care: 2020-21 separations with a COVID-19 diagnosis; Admitted patient care: 2021-22 separations with a COVID-19 diagnosis, Australian Institute of Health and Welfare, accessed 14 June 2024.

38 The Commission does not propose to include unpaid quarantine expenses in the assessment. The Commission does not have the mandate to adjudicate disagreements between states on issues beyond its terms of reference.

Q4. Do states agree to:

- **use the Australian Institute of Health and Welfare data on community mental health activity, adjusted to compensate for lack of cost weights, to determine per capita use rates for mental health services?**
- **for the balance of the component, expand the current proxy to include non-admitted patient services?**
- **continue to apply a discount of 12.5% to the community health socio-demographic assessment?**

Direct measure of specialised community mental health activity

State views

39 New South Wales, Victoria, South Australia and the ACT said they supported the use of a direct measure of community health activity in the community and public health assessment.

40 New South Wales and the ACT said they supported adjustments to the data to account for a lack of cost weights. New South Wales said it was specifically seeking to account for the different costs associated with the age of patients.

41 Victoria said that the current proxy for activity (emergency department triage categories 4 and 5) is not based on sufficient evidence.

42 South Australia said its support was subject to the Commission being able to develop a robust adjustment to compensate for the lack of cost weights, particularly for services in remote areas.

43 Queensland, Western Australia, Tasmania and the Northern Territory said they did not support the proposal.

44 Queensland said that the activity data are not fit for purpose because these reflect the service availability of public specialised mental health care rather than actual need for community mental health services. It said it expected that the unmet need would be higher in regional, rural and remote areas. This is because there are significant shortages in the allied health workforce in regional and remote Australia. It said emergency department activity data are likely to be more reflective of actual community mental health services need.

45 Western Australia said it was concerned with the exclusion of services delivered through non-government organisations.

46 Tasmania said that the collection is not complete or comparable between and across jurisdictions. Tasmania also referred to recent analysis of community mental health services data by the Independent Health and Aged Care Pricing Authority's Technical Advisory Committee, which found that there is considerable variability and data reliability issues with states' reporting.

47 The Northern Territory said it had concerns with the consistency of reporting between states and the sensitivity of the proposed approach to the choice of number of service contacts or number of patients using state services. The Northern Territory said that if contacts are used, the database is likely to undercount remote service costs. This is because remote service provision often requires specialists to travel considerable distances at high cost, which results in a service model based on less frequent, but higher intensity, contacts. A simple count of contacts would likely under-represent both costs and the intensity of services. Patients would be a superior measure, though would still require service delivery scale adjustments and remoteness loadings.

48 Lack of cost weights was a common concern for the states that did not support the Commission's proposal.

Commission response

49 The Commission looks at the services states provide on average and identifies the factors outside a state's control such that the state needs to spend more (or less) to provide the average level of services. The Commission does not assess what states require to meet unmet demand for services. As such, Queensland's comment that specialised community mental health services do not capture the unmet need for community mental health services is not relevant to the decision on whether to adopt the Australian Institute of Health and Welfare data to measure average service levels. What is relevant is if gaps or inconsistencies in the data mean that these are not representative of service use by location and socio-demographic characteristics.

50 As regards Tasmania's reference to recent analysis of community mental health data, the dataset being critiqued by the Independent Health and Aged Care Pricing Authority's Technical Advisory Committee is not the one that the Commission proposes to use. The Independent Health and Aged Care Pricing Authority's data on community mental health care include information on episodes of patients receiving mental health care that are associated with Australian public hospital services. Community mental health is currently block funded although some specialised community mental health care services are transitioning from a block funding to an activity-based funding model.[3] The Independent Health and Aged Care Pricing Authority's dataset may eventually be fit for purpose for the Commission to use in

[3] Independent Health and Aged Care Pricing Authority, Pricing Framework for Australian Public Hospital Services 2023–24, Pricing framework 2023-24, Independent Health and Aged Care Pricing Authority, 2022, accessed 14 June 2024, p.19.

the health assessment, but additional time is required to improve the quality and quantity of activity and cost data.

51 Further information on the issues with consistency in reporting between states, raised by Tasmania and the Northern Territory, can be found in the Community Mental Health Care Database 2020–21 data quality statement.[4] In summary:

- There is some variation in the types of service contacts included in the data. For example, some states may include written correspondence as service contacts while others do not.
- The Indigenous status data should be interpreted with caution due to the varying quality of Indigenous identification across jurisdictions reporting to the database. While all states consider the quality of Indigenous status data to be acceptable, most acknowledge that further improvement is required. Indigenous status is missing for 4.9% of contacts in the 2020–21 National Community Mental Health Care Database.
- Data are reported by the jurisdiction that delivered the service and therefore may include people receiving services in one jurisdiction who reside in another. These cross-border flows are particularly relevant when interpreting ACT data.
- There is variation across jurisdictions in the coverage of services providing contact data and the estimated service contact data coverage.

52 In the Community Mental Health Care Database 2020–21 data quality statement, all states estimate that 85–100% of in-scope community mental health care services provided contact data to the collection, and overall service contact data coverage for jurisdictions was estimated to be between 86–100%. During discussions, the Australian Institute of Health and Welfare indicated that service contacts are likely to be more related to expenses than number of patients.

53 Of significant concern to the Commission, as pointed out by Western Australia, Tasmania and the Northern Territory, is that the services covered by the Australian Institute of Health and Welfare data do not represent the full range of specialised community mental health services provided by states.

- State-provided specialised community mental health services include ambulatory services, residential services, grants to non-government organisations and other indirect expenditure such as for suicide prevention programs.
- The activity data available from the Australian Institute of Health and Welfare covers ‘ambulatory services’, that is those services delivered in non-residential and non-admitted patient care settings. Examples include counselling, psychological/psychosocial therapies, mental or behavioural assessment, and group psychotherapy.

54 The Productivity Commission’s *Report on Government Services* data on services for mental health show that these services represent about 66% of state spending on all

[4] Australian Institute of Health and Welfare, Community mental health care NMDS 2020–21: National Community Mental Health Care Database, 2022; Quality Statement (aihw.gov.au) , Australian Institute of Health and Welfare, 2023, accessed 14 June 2024.

specialised community mental health care in 2021–22.[5] If the share of ambulatory services in total specialised community mental health services was reasonably consistent across remoteness areas (and across other socio-demographic groups), it would represent a reasonable indicator of total specialised community mental health care activity. However, ambulatory services are predominantly provided in major cities and inner regional areas and are much less common in outer regional and remote areas.

55 Specialised community mental health services in outer regional and remote areas are often delivered by non-government organisations. The Productivity Commission's *Report on Government Services* community mental health data show that state spending on these services represents 11% of total state spending on community mental health. The Commission explored the feasibility of using the Australian Institute of Health and Welfare's National Mental Health Establishments expenditure data as the indicator of activity for the services provided by non-government organisations. However, the expense data cannot be disaggregated by socio-demographic variables such as socio-economic status, Indigenous status, or remoteness, and hence cannot be used in the assessment.

56 The remaining share of specialised community mental health services are made up of residential services (11% of state spending) and other indirect spending (also 11% of spending). There are no suitable activity data available for these services.

57 The concerns raised by states about the lack of costs weights for episode length and complexity to better account for the different costs of patient contacts, as well as costs associated with patient socio-demographic composition, are also relevant.

58 The Commission has explored the potential to use the Australian Institute of Health and Welfare's National Mental Health Establishments expenditure dataset. However, this cannot be used to add cost weights due to differing scope between the activity and expenditure datasets.

59 In the absence of a service-specific cost gradient to take account of higher costs of providing services as remoteness increases, the Commission could apply the general regional cost gradient or a combination of the emergency department regional cost gradient and the non-admitted patient regional cost gradient (to be consistent with the proposed proxy indicator for the balance of community and public health expenses – see discussion below).

60 The Commission applies the general gradient to categories where a conceptual case exists that costs increase with remoteness, but reliable regional costs are not

[5] The *Report on Government Services* and Australian Institute of Health and Welfare have expenditure data on state specialised community mental health services, more disaggregated than expenditure data from the Government Finance Statistics. See Report on Government Services, 13 Services for mental health data tables 2021-22, Table 13A.3, Report on Government Services, Productivity Commission, 2024, accessed 14 June 2024. Australian Institute of Health and Welfare, Data tables: Expenditure on mental health-related tables 2020-21, Table Exp.1, Australian Institute of Health and Welfare, 2024, accessed 14 of June 2024.

available.[6] A discount would be applied (25%), as is done in other assessments where the general gradient is used, in recognition that the cost components used in the general gradient are only a proxy for actual service costs.

61 The service delivery scale adjustment would also be applied to the activity data.

Commission draft position

62 The Commission proposes to introduce a direct measure of the use and cost of specialised community mental health activity for ambulatory services only. It will become a sub-component of the community and public health assessment.

63 The Commission considers the Australian Institute of Health and Welfare activity data on specialised community mental health ambulatory services are not representative of activity on all specialised community mental health services. Although in aggregate ambulatory services represent a sizeable share of total state spending on specialised community mental health services (66%), they account for a larger share of total services in major cities and inner regional areas and a much lower share of total services in outer regional and remote areas. Therefore, using this as an indicator of activity for all spending on specialised community mental health services would overestimate spending in major cities and inner regional areas and underestimate spending in other areas.

64 The activity data on the other specialised community mental health services are not fit for purpose. The residential mental health care collection has far fewer people and episodes, with one state providing around half of all episodes.

65 As such, the Commission proposes that only state spending needs on ambulatory specialised community mental health services would be assessed using the ambulatory services activity data from the Australian Institute of Health and Welfare. These expenses represent around 66% of state spending on specialised community mental health services. The remainder of state spending on specialised community mental health services would be assessed using a proxy indicator of activity (discussed below).

66 The Commission considers that service costs are likely to increase with remoteness. In the absence of service specific cost weights, the choice of cost gradient comes down to either using the general regional cost gradient or a combination of the emergency department and non-admitted patient regional cost gradients. In the absence of any information on how ambulatory community mental health service costs vary with remoteness, the Commission will take a conservative approach and apply the general regional cost gradient and service delivery scale adjustments to the activity data on specialised community mental health services.

67 Box 2 provides a summary of the Commission's position on the assessment method.

[6] For details on proposed changes to the general regional cost gradient refer to the geography chapter.

Box 2 Proposed steps to implement the community mental health assessment

Spending on ambulatory community mental health services. Government Finance Statistics on community mental health are not disaggregated by type of service. However, a breakdown is available from the Productivity Commission's *Report on Government Services*: *mental health services.* The data on the share of ambulatory community mental health services, for each state and year, would be applied to Government Finance Statistics expenses on community mental health.

The balance of expenses would be calculated as community and public health expenses less the Commission's estimates of ambulatory community mental health service expenses.

Adjustments for regional costs and service delivery scale. Adjustments would be applied to the Australian Institute of Health and Welfare ambulatory activity data, with regional costs based on the general gradient.

Socio-demographic composition assessment. National use rates on ambulatory community mental health service expenses (disaggregated by Indigenous status, remoteness, socio-economic status and age) would be multiplied with state populations to get assessed expenses for each assessment year.

Combined assessed expenses. Assessed expenses on ambulatory community mental health services would be combined with assessed expenses for the balance of the assessment for community and public health based on proxy activity data.

Discount. A low discount of 12.5% would continue to be applied to the proxy activity data. The activity data on ambulatory community mental health services would not be discounted.

Wage adjustments. Adjustments for differences in state wages would be applied to the combined assessed expenses.

Proxy for the balance of the assessment

Refer to Commission draft position in the next section.

Expanding the current proxy for activity to include non-admitted patient services

State views

68 New South Wales, Victoria, Queensland and the ACT said they supported an expansion of the current proxy of activity for community and public health to include non-admitted patient services, in addition to emergency department services.

69 New South Wales said that the sole use of emergency department triage categories 4 and 5 does not reflect an appropriate socio-demographic composition profile of community health usage.

70 Victoria said the current proxy is not based on sufficient evidence and supports the Commission exploring alternative approaches and data sources.

71 Although Queensland said it supported the expansion of the proxy indicator, it said that there was a lack of evidence supporting the change (that is, data demonstrating the similarities in usage and cost profiles for community and public health services and non-admitted patient services). As such, and to avoid overcorrecting, emergency department activity should have a larger weighting than non-admitted patient services (75:25).

72 South Australia said it had in-principle support for the proposal but had concerns with the quality of non-admitted patient data. It said the data should be used at the aggregate rather than patient level.

73 Western Australia said there is much more consistency between service delivery for emergency departments and community and public health. It said in remote regions, many non-admitted patient services are provided virtually, whereas both emergency department and community and public health services are almost always provided by practitioners on location.

74 Tasmania said it did not support the proposal because of the likely differences in the socio-demographic composition of patients using community and public health services and non-admitted patient services.

75 The Northern Territory said it did not support the proposal because non-admitted patient activity is likely to under-represent use of community and public health services in remote and very remote areas and because the services of the 2 settings are vastly different. Community health services are the most geographically accessible service for remote persons. Remote clinics are also able to be accessed on a 'walk in' basis without need for prior appointments or referrals.

Commission response

Socio-demographic use rates

76 In the absence of an actual measure of community and public health activity, the Commission is seeking a proxy indicator that has health service use rates for each socio-demographic group that are broadly in line with actual use rates of community and public health services.

77 There is some information on the use of community and public health services by socio-demographic group (see Table 1 and Box 3). This shows that there is no consistent pattern of usage of community and public health services, or common target population groups for public health activity. There is no way of aggregating the usage information and therefore no way of determining an overall pattern of socio-demographic use.

Table 1 Higher use or targeting of community and public health services by socio-demographic group

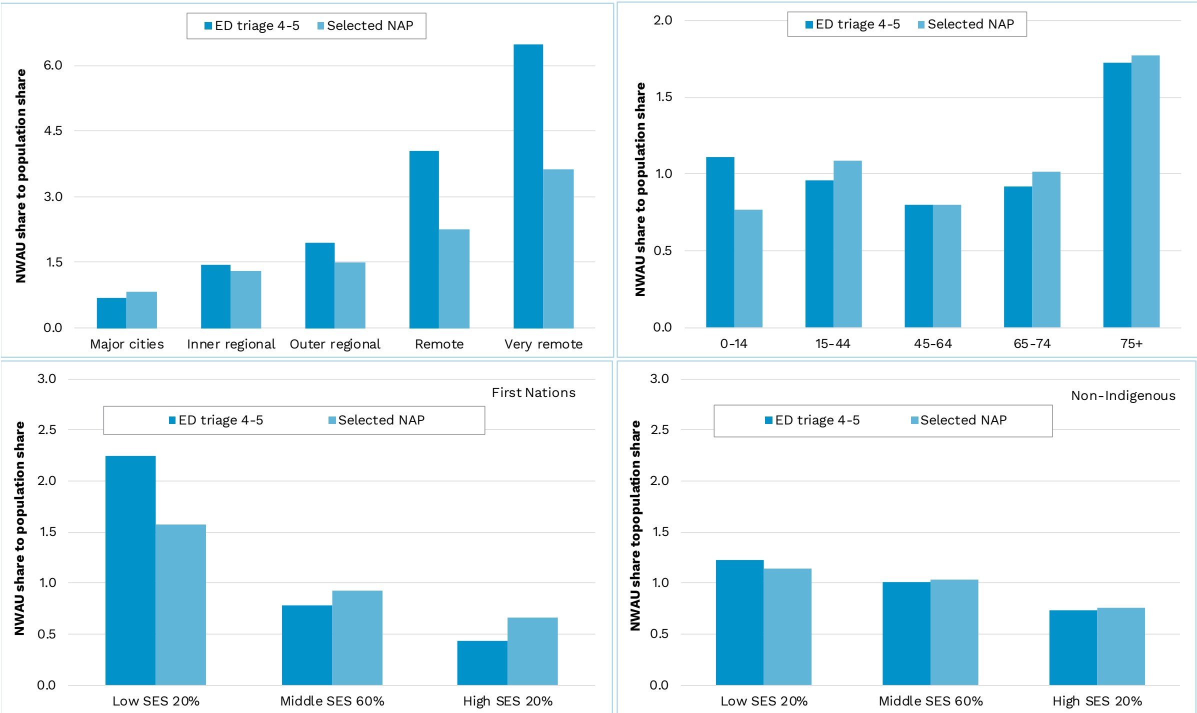
Group of services	Usage (or targeting) of services by socio-demographic groups			
	Age	**Remoteness**	**SES**	**Indigenous status**
Community health services				
Public dental services	Younger	Urban	Lower SES	First Nations
Alcohol and other drug services	Younger	Remote	-	First Nations
Public podiatry	Older	Urban	Lower SES	-
Child and maternal health clinics	Younger	Urban	Lower SES	Non-Indigenous
Public health services				
Cancer screening	20+	Urban/regional	Higher SES	Non-Indigenous
Organised immunisation (targeting)	Younger	-	-	First Nations
Selected health promotion (targeting)	-	Regional /remote	Lower SES	First Nations
Communicable disease control (targeting)	Older	-	Lower SES	First Nations
Environmental health (targeting)	-	-	-	First Nations

Note: Selected health promotion, communicable disease control and environmental health use indirect measurements of the usage of services. Blank rows indicate either that there was no bias for any population group or that there was conflicting information on the usage of the service.

78 The alternative proxy indicators being considered are emergency department triage category 4 and 5 national weighted activity units (the existing proxy) or a combined emergency department/non-admitted patient measure.

79 The socio-demographic use rates for the current indicator and proposed additional measure based on selected non-admitted patient services are shown in Figure 4. The patterns of usage are broadly similar. Compared with selected non-admitted patient services, usage of emergency department triage category 4 and 5 services increases more with remoteness, is higher among low socio-economic status First Nations people, and is higher for the youngest age group.

Figure 4 Socio-demographic use rates for alternative proxy indicators, 2021–22



Note: Selected non-admitted patient services include Tier 2 groups identified as similar to community health services.

Source: Unpublished Independent Health and Aged Care Pricing Authority, National Weighted Activity on emergency department triage category 4 and 5 and non-admitted patients; ABS population data.

80 The diversity of community and public health programs and limited existing information on the socio-demographic usage of the programs make it difficult to determine whether a hospital-based indicator of activity would be a reasonable proxy for community and public health activity (outside of ambulatory community mental health care). However, the only options available to the Commission at this stage are hospital-based activity measures.

81 For the 2020 Review, data provided by some states indicated that emergency department activity data would provide a reasonable proxy for community and public health activity. At that time, the National Weighted Activity Unit data for non-admitted patient services were not considered sufficiently reliable to be used in the health assessment. As such National Weighted Activity Unit data for non-admitted patient activity were not in scope as a proxy indicator of community and public health activity at the start of the 2020 Review.

82 In the 2021 Update the Commission decided that National Weighted Activity Unit data for non-admitted patient activity were sufficiently reliable to use in the health assessment. Therefore, this measure of hospital activity can now be considered as a potential proxy for community and public health activity.

Service types and accessibility

83 The merits of broadening the proxy indicator to include all, or a subset of, non-admitted patient services have been assessed on the basis of similarity of service types and level of access to non-admitted patient services compared with

community and public health services. This is on the assumption that if service types and access levels are similar then socio-demographic usage patterns would be similar.

84 The types of non-admitted patient services identified as having some similarity to community health services are listed in Table 2. These services include medical consultations (series 20) and allied health services (series 40). The full list of non-admitted patient services is provided in Table A-1.

Table 2 Non-admitted patient services similar to community health services, 2021–22

Tier 2	Non-admitted patient service	Community health service	% weighted separations
Medical consultations			
20.13	Palliative care	Community/home nursing services	1.9
20.32	Breast	Cancer screening (bundled with main svc)	1.6
20.40	Obstetrics – pregnancy w/o complications	Family and child health services	3.5
20.44	Infectious diseases	Communicable disease control	4.2
20.49	Geriatric evaluation and management	Community/home nursing services	1.2
20.50	Psychogeriatric	Community mental health services	0.0
20.52	Addiction medicine	Alcohol and other drug services	1.7
20.57	COVID-19 response	Communicable disease control	5.3
Allied health			
40.02	Aged care assessment	Community/home nursing services	(a)
40.09	Physiotherapy	Allied health services	5.5
40.10	Sexual health	Sexual health services	1.0
40.13	Wound management	Community/home nursing services	4.1
40.23	Nutrition/dietetics	Allied health services	2.2
40.24	Orthotics	Allied health services	0.6
40.25	Podiatry	Allied health services	1.4
40.27	Family planning	Family and child health services	(b)
40.28	Midwifery and maternity	Family and child health services	13.9
40.29	Psychology	Community mental health services	1.7
40.30	Alcohol and other drugs	Alcohol and other drug services	4.4
40.31	Burns	Community/home nursing services	0.1
40.32	Continence	Continence services	0.6
40.33	General counselling	Community mental health services	(b)
40.34	Specialist mental health	Community mental health services	(c)
40.35	Palliative care	Community/home nursing services	5.2
40.36	Geriatric evaluation and management	Community/home nursing services	1.1
40.37	Psychogeriatric	Community/home nursing services	0.0
40.38	Infectious diseases	Communicable disease control	0.9
40.51	Breast	Cancer screening (bundled with main svc)	0.5
40.55	Paediatrics	Family and child health services	2.1
40.56	Falls prevention	Community/home nursing services	0.1
40.57	Cognition and memory	Community/home nursing services	0.4
40.58	Hospital avoidance programs	Chronic disease management	8.5
40.60	Pulmonary rehabilitation	Chronic disease management	0.4

Tier 2	Non-admitted patient service	Community health service	% weighted separations
40.63	COVID-19 response	Communicable disease control	25.3
40.64	Chronic pain management	Chronic disease management	0.5
Total			**100.0**

Note: a)-not priced, b)-out of scope, c)-block funded.
For a complete list of Tier 2 non-admitted patient services see Table A-1.
The list Includes community mental health services. Although the proposal has a separate sub-component on community mental health, this only accounts for 80% of state spending on community and public health, leaving the remainder on residential mental health services, grants to non-government organisations and other indirect expenditure unaccounted.
Community health services include breast screening which is a diagnostic service, but diagnostic services are not measured separately in the hospital activity data, being bundled with the requesting specialist service. Hence breast medical consultations and allied health services (20.32 and 40.51) were included to represent breast screening.
Source: Commission calculation using IHACPA price weights and separations from AIHW Non-admitted patient care tables.

85 Based on the relative cost of the different types of non-admitted patient services, it is likely that allied health non-admitted patient services would be more closely related to community health services than medical consultations. The price weight for medical consultation services relative to comparable allied health services ranges from 1.2 to 1.9, indicating the higher complexity of medical consultation services (Table 3).

Table 3 Price weights for selected medical consultations and allied health services, 2021–22

Medical consultations	Price weight	Allied health	Price weight
20.40 Obstetrics – pregnancy without complications	0.0414	40.28 Midwifery and maternity	0.0339
20.52 Addiction medicine	0.0382	40.3 Alcohol and other drugs	0.0275
20.13 Palliative care	0.0701	40.35 Palliative care	0.0430
20.49 Geriatric evaluation and management	0.0864	40.36 Geriatric evaluation	0.0464
20.44 Infectious diseases	0.0903	40.38 Infectious diseases	0.0506
20.29 Orthopaedics	0.0413	40.44 Orthopaedics	0.0293
40.51 Breast	0.0746	40.51 Breast	0.0406
20.11 Paediatric medicine	0.0682	40.55 Paediatrics	0.0439
20.57 COVID-19 response	0.0903	40.63 COVID-19 response	0.0506

Source: Independent Health and Aged Care Pricing Authority, National Weighted Activity Unit data calculator for non-admitted activity (2021–22).

86 On the information available, there appears to be a closer relationship in service types between community health services and non-admitted patient services provided by allied health professionals and clinical nurse specialists.

87 In terms of accessibility, information on wait times for some community and public health services is shown in Table 4. All services require bookings or referrals, which involve some waiting time. The wait times vary according to the type of service. The majority of services involve medium length wait times (1 to 3 months), waiting for booking dates or waiting to reach the age eligibility for the service.

Table 4 Estimated wait times for community health services

Group of services	Wait time	Explanation
Public dental	Very long	AIHW provides data for the medium wait times of all states, the national average being 630 days.[7]
Alcohol and drug services	Medium	Phone counselling is instant, in-person counselling and assessments have weeks of wait times on average, whilst rehab has very long wait times. However, counselling and assessments are the most common services.
Cancer screening	Medium	The wait between a positive screen and diagnostic assessment for bowel cancer is 58 days based on the national median. Breast cancer has a quicker screening process but only for the targeted age bracket of 50-74.[8]
Organised immunisations	Medium	Organised immunisations are mainly scheduled for children and apply to specific age brackets. Bookings and catch-up immunisations are available as well, however normally immunisations apply to specific age brackets.
Public podiatry	Medium	Limited information. Allied health and other community health providers suggest medium weight times.
Maternal child and family health	Medium	Scheduled visits for maternal child health, where bookings are made according to the age bracket of the child.

Note: Very long: 6+ months, long: 3-6 months, medium: 1-3 months, short: 1–4 week(s), instant 1–7 days.

88 Non-admitted patient services also require referrals and bookings. In contrast, emergency departments are staffed 24 hours a day and do not require referrals. In 2022–23 50% of patients were seen within 20 minutes and 90% of patients were seen within 2 hours and 4 minutes.[9]

89 Access times across community health services are therefore likely to be generally more in line with wait times for non-admitted patient services than emergency department services.

90 Queensland considered there was limited evidence to support the inclusion of non-admitted patient services in the proxy. To not overcorrect, Queensland suggested a 75:25 weighting for the emergency department and non-admitted patient combined proxy. This would compare to a weighting of 26:74 if all non-admitted patient services were included.

91 However, the Commission is not proposing to include all non-admitted patient activity in the proxy indicator, only those services that are similar to community and public health, as discussed earlier. The ratio would be based on the relative amount of activity in emergency department triage category 4 and 5 and the subset of non-admitted patient services in each year. On the basis of the analysis presented

7 Australian Institute of Health and Welfare, Oral health and dental care in Australia, Dental care - Australian Institute of Health and Welfare (aihw.gov.au), Australian Institute of Health and Welfare, 2023, accessed 14 June 2024.

8 Australian Institute of Health and Welfare, National Bowel Cancer Screening Program monitoring report 2023, Data - Australian Institute of Health and Welfare (aihw.gov.au), Australian Institute of Health and Welfare, 2023, accessed 14 June 2024, p4.

9 Australian Institute of Health and Welfare, Emergency department care - Australian Institute of Health and Welfare (aihw.gov.au), Australian Institute of Health and Welfare, 2023, accessed 14 June 2024.

earlier, the Commission does not consider the proposed approach is overstating the weight given to non-admitted patient service activity.

92 South Australia proposed that the data on non-admitted patient activity be used at the aggregate level. This option cannot be implemented because patient-level data are needed to allow activity to be cross-classified by socio-demographic composition group.

Commission draft position

93 The Commission proposes to broaden the proxy indicator of community and public health activity (outside of ambulatory community mental health) to include a combination of emergency department triage category 4 and 5 plus a subset of non-admitted patient allied health services similar to community health services, as outlined in Table 2. Based on the share of activity on these services, the proxy would be around 55% emergency department triage category 4 and 5 and 45% non-admitted patient services.[10]

Separate assessment of public health

State views

94 New South Wales, Victoria and Tasmania said that public health expenses should be assessed separately to community health expenses. New South Wales and Victoria said that public health expenses should be assessed equal per capita.

95 New South Wales said public health services are relatively standardised, with only minor variations for targeted groups. It said there is little evidence that different groups require materially different expenditure or involve varying degrees of complexity. It said that communicable disease control and environmental health are standardised services, provided in a near-equivalent manner for all citizens. It said that while cancer screening, organised immunisation, and health promotion have some targeted expenditure for socio-demographic cohorts, these drivers would be significantly less than for other elements of community and public health services.

96 Victoria said that, conceptually, community health and public health are different services, with different drivers. It said community health services are often delivered through local health clinics that provide primary care and related services for local communities. It said, in contrast, public health generally relates to state-wide services and functions, aimed at improving the wellbeing of all residents of a state generally. These public health programs may be targeted to specific groups, however, predominantly are whole-of-state activities. It said public health services are not the same as hospital services, which is the current proxy data used in the assessment.

[10] Based on unpublished Independent Health and Aged Care Pricing Authority national weighted activity units for 2021–22.

Commission response

97 In considering the views of New South Wales, Victoria and Tasmania the Commission considered the conceptual case, materiality and practicality by investigating what states do in terms of their spending on public health services, and data availability.

98 A key question for the Commission is whether an equal per capita approach (as proposed by New South Wales and Victoria), or a proxy measure based on hospital activity, is a better measure of drivers of differences between states in spending on public health. In examining this question, the Commission considered key public health services and whether they were population based or targeted.

99 The Commission found that state-delivered public health programs generally have some degree of national coordination and are often jointly funded with the Commonwealth. As such, priorities for the programs are largely policy neutral. However, there is not a consistent pattern of socio-demographic use or targeting across different programs. This makes it challenging to decide whether a hospital-based measure of activity, which would reflect higher use of services by First Nations people, people living in remote and low socio-economic status areas and older people, is a better proxy for activity in public health programs than state populations.

100 A range of factors determine the targets for, and use of, public health programs and services. Some programs are not necessarily targeted at particular socio-demographic population groups. The priorities for some programs change over time as health priorities change. In some cases, the socio-demographic groups making the most use of public health services do not necessarily align with the target groups for the programs.

Box 3 Public health services

Cancer screening. The population-based screening programs for breast, cervical and bowel cancers are run through partnerships between Commonwealth and state governments. The programs target certain groups where evidence shows that screening helps to reduce ill health and deaths from cancer.

- The breast and bowel cancer screening programs target an older cohort (40+) than the cervical cancer screening (20+).
- After adjusting for age, participation in bowel and breast cancer screening was highest in regional areas and lowest in very remote areas. For cervical cancer screening, participation was highest in major cities and declined with remoteness.
- Participation in bowel and cervical cancer screening was highest for people living in the highest socio-economic areas. Participation in breast cancer screening did not vary much by socio-economic status.

- Participation in each of the programs was higher among non-Indigenous people than First Nations people.[11]

Organised immunisation. State governments are responsible for the coordination and oversight of organised immunisation programs, some of which are jointly funded by the Commonwealth. The performance benchmarks for the Essential Vaccines Schedule of the Federation include targets for children and First Nations people.[12]

Communicable disease control. Commonwealth and state governments fund communicable disease control activities, but states have primary responsibility for detecting and controlling communicable diseases. The national strategy for communicable disease control identifies target population groups. High priority areas include populations that suffer a disproportionately high burden of communicable diseases including First Nations people, the elderly, people of lower socio-economic means, and immunocompromised people, such as refugees and immigrants.[13]

Selected health promotion. Health promotion encompasses a combination of actions to enable individuals and communities to increase control over and improve their health.[14] State governments have their own public health laws, which aim to protect, promote and improve the health and wellbeing of the public, which are usually enforced by local government. State governments are also responsible for delivering preventive health services such as cancer screening, school-based immunisation programs and implementing settings-based measures for example, smoke-free laws.[15] Priority populations for the National Preventative Health Strategy are:

- First Nations people
- culturally and linguistically diverse people
- lesbian, gay, bisexual, transgender, queer or questioning, intersex and/or other sexuality and gender diverse people
- people with mental illness
- people of low socio-economic status
- people with disability
- rural, regional and remote.[16]

[11] Australian Institute of Health and Welfare, National Cervical Screening Program monitoring report 2023 (aihw.gov.au), Australian Institute of Health and Welfare, 2023, accessed 14 of June 2024. Australian Institute of Health and Welfare, BreastScreen Australia monitoring report 2023 (aihw.gov.au), Australian Institute of Health and Welfare, 2023, accessed 14 June 2024. Australian Institute of Health and Welfare, National Bowel Cancer Screening Program monitoring report 2023, Data - Australian Institute of Health and Welfare (aihw.gov.au), Australian Institute of Health and Welfare, 2023, accessed 14 June 2024.

[12] Australian Institute of Health and Welfare, Essential vaccines: performance report 2021-22 (aihw.gov.au), Australian Institute of Health and Welfare, 2023, accessed 14 June 2024.

[13] Department of Health, National-framework-for-communicable-disease-control.pdf (health.gov.au), Department of Health, The Australian Government, 2014, accessed 14 June 2024, p18.

[14] Australian Institute of Health and Welfare, Health promotion and health protection - Australian Institute of Health and Welfare (aihw.gov.au), Australian Institute of Health and Welfare, 2022, accessed 14 June 2024.

[15] Ibid.

[16] Department of Health, National Preventive Health Strategy 2021-2030, Department of Health, The Australian Government, 2021, accessed 14 June 2024.

Environmental health. Environmental health encompasses the assessment and control of those environmental factors (physical, chemical, biological) that can potentially affect health. Environmental health risks are largely managed by an array of complementary Commonwealth and state and agencies. One of the principles of the Environmental Health Standing Committee's *Strategic Plan 2020-2023* is improving the health of First Nations people. The strategic plan also states a commitment to safeguarding the health of populations that are particularly vulnerable to certain environmental hazards, such as children, the elderly, and people with disabilities.[17]

101 Table 5 provides information on the targets for, and use of, public health programs and services by the socio-demographic groups used in the health assessment. Data limitations mean there is no way of aggregating data on service usage to determine an overall pattern of socio-demographic use for public health services.

Table 5 Higher use or targeting of public health services by socio-demographic group

Group of services	Usage (or targeting) of services by socio-demographic groups			
	Age	Remoteness	SES	Indigenous status
Cancer screening	20+	Urban/regional	Higher SES	Non-Indigenous
Organised immunisation (targeting)	Younger	-	-	First Nations
Selected health promotion (targeting)	-	Regional /remote	Lower SES	First Nations
Communicable disease control (targeting)	Older	-	Lower SES	First Nations
Environmental health (targeting)	-	-	-	First Nations

Note: Selected health promotion, communicable disease control and environmental health use the indirect measurement of targeted population groups as an indicator of the usage of services. No target indicates that there was no bias to any population group in state and/or national strategies.

102 Public health spending has increased in recent years, from 1.4% of total spending in 2014–15 to 6.6% in 2021–22. Spending priorities also changed significantly during the COVID-19 pandemic (Table 6). A large increase in spending on communicable disease control meant it accounted for around half of state spending on public health in recent years compared with less than 20% at the time of the 2020 Review (Table 13). Spending on organised immunisation and selected health promotion was also much higher in 2021–22 than earlier years. The socio-demographic targets for these programs are also likely to have changed as priorities shifted to responding to the pandemic.

[17] Environmental Health Standing Committee (enHealth) of the Australian Health Protection Principal Committee, Environmental health standing committee (enHealth) – Strategic plan, Environmental Health Standing Committee (enHealth) of the Australian Health Protection Principal Committee, 2020, accessed 14 of June 2024, p7.

Table 6 Public health expense weights, various years

	2014–15, 2015–16	2019–20	2020–21	2021–22
	%	%	%	%
Cancer screening	16	12	6	4
Organised immunisation	22	16	12	16
Selected health promotion	26	19	15	17
Communicable disease control	17	30	50	51
Environmental health	7	6	5	2
Other public health services	12	17	13	11
Total	**100**	**100**	**100**	**100**
Proportion of total health spending	**2**	**2**	**4**	**7**

Source: Unpublished data, Australian Institute of Health and Welfare; Data cube: Health Expenditure in Australia.

Commission draft position

103 For the 2025 Review the Commission proposes to use a hospital-based proxy (see previous section for details) for public health activity rather than an equal per capita assessment. The Commission considers that, on balance, using the same proxy indicator as for community health (outside of ambulatory community mental health) is simpler and produces a reasonable estimate of state spending needs, given the information available on use or targeting of public health programs. The application of the 12.5% discount to the community and public health assessment (outside of ambulatory community mental health) would be appropriate given the offsetting socio-demographic use and targeting across public health programs (see below for the Commission decision on the discount).

12.5% discount for the community and public health assessment

State views

104 Most states supported the continuation of a 12.5% discount for the community and public health assessment. New South Wales said the prior reduction in this discount from 25% was not clearly evidenced at the time of the 2020 Review and it would not be appropriate to reduce the discount further.

105 Western Australia said the Commission should not discount the portion of the assessment that uses Australian Institute of Health and Welfare community mental health activity data, as the lack of cost weights means the assessment would already be understated.

106 The Northern Territory said that an equal per capita assessment is not supported by either the current proxy or the alternative data, making a discount problematic. It acknowledged that the Commission’s reason for continuing the discount is consistent with its discounting guidelines.

Commission draft position

107 The reliance on a proxy measure of activity for a significant share of community and public health expenses justifies a continuation of the 12.5% discount. It would be applied only to the share of the assessment that relies on proxy data (covering around 80% of total community and public health expenses). The expenses assessed using the direct measure of activity (ambulatory community mental health) would not be discounted.

Q5. Do states support the use of Australian Institute for Health and Welfare data to update the non-state services substitutability level for the emergency departments component, while retaining the 2020 Review method for other components?

State views

108 States presented mixed views on the specific proposal for updating the non-state substitutability level for the emergency departments component. In addition, most states raised concerns with the general approach, or elements of the approach, that the Commission uses to assess the impact of non-state health services on state health expense needs.

Alternative conceptual framework

109 New South Wales, in a supplementary submission, said that there is an absence of robust and reliable data supporting the conceptual case for a non-state sector adjustment for health services. However, the data used for the analysis covered a few years only and so cannot be considered a comprehensive assessment.

110 New South Wales presented data on the relationship between state hospital services (admitted patient, emergency department and non-admitted patient services) and similar services provided by the non-state sector. Given the absence of evidence that increased non-state sector provision of health services reduced the need for the state sector to provide services, New South Wales said the Commission should reconsider its application of the adjustment. It said the adjustment should be removed or heavily discounted.

111 Western Australia said the Commission's approach to recognise the influence of non-state sector health services provision on state health spending needs was fundamentally wrong and presented an alternative conceptual framework.

112 Western Australia said that states respond to the existing level of non-state services. The Commission should therefore be trying to estimate the proportion of non-state services that are substitutable rather than the proportion of state expenses that are substitutable. One implication of Western Australia's model is that, unlike the

Commission's approach, the cost to patients of services in the non-state sector is not a relevant consideration in determining substitutable services.

113 In Western Australia's model, calculating the size of the non-state sector adjustment requires:

- an estimate of the share of non-state services that are also provided by the state (substitutability level)
- an estimate of the unit cost of substitutable state services (to calculate the public cost equivalent of these non-state services) – New South Wales also said this in its supplementary submission
- an estimate of the deficit/surplus of non-state service provision (assessed compared with actual services).

114 Queensland said that the relationship between state and non-state sector health provision is more nuanced than Western Australia's analysis would suggest and that any non-state sector service provision is likely to be at the margin. Thus, the current proportions used by the Commission already likely reflect a ceiling for this activity.

115 Queensland said the changes proposed to the substitutable expenses formula by Western Australia are based around the assumption that the majority of non-state sector activity could be absorbed by the state sector. However, capacity constraints would indicate that only part of existing public sector activity would be displaced.

Other overall concerns with the non-state sector adjustment

116 New South Wales said that state and non-state services being comparable is not the same as these services being perfect substitutes. Instead, the level of actual substitution in practice is lower than the level of potential substitution, citing the use of public health services by people with private health insurance. In a supplementary submission, New South Wales went further and said that the available data do not support the conceptual case that a relationship exists between the provision of state and non-state service provision.

117 New South Wales said the potential substitutability does not fully account for factors that impact the use of comparable services. These include:

- non-state services encourage additional demand for substitutable state health services rather than offsetting existing state demand
- the timely availability of non-state services
- non-state services not always having sufficient capacity to fully replace all state substitutable services
- patient decision-making being outside of state sector control, with patient preferences for state services stemming from both perception and health literacy.

118 New South Wales said that to recognise that comparable services are not 100% substitutable, the Commission should apply a general discount to its calculation of the proportion of substitutable expenses in each component.

119 New South Wales said that there should also be a reduction to non-state substitutability levels to account for the impact of patient perception on substitutability and that there is a conceptual case for integrating patient health literacy into the non-state sector adjustment.

120 New South Wales proposed that the lower of non-state or state sector expenditure for each component should represent the upper limit on potential substitutable expenditure rather than using state sector expenditure as the upper limit. It said that this would reflect that the state sector does not benefit from substitution beyond the non-state sector's capacity to supply services.

Commission response

121 In the 2015 Review, as part of the move to a direct assessment approach for all state health services, the Commission introduced an adjustment to take account of different levels of non-state provision of health services between states. This was on the assumption that states with below-average non-state service provision faced additional costs.

122 Since then, the influence of the non-state health sector has been taken into account in 2 ways.

- The socio-demographic composition assessment reflects the higher use and cost of providing public health services to some population groups, some of which is due to differences in access to non-state services. For example, one reason why state expenses per capita are higher in more remote areas is because of lower provision of services by the non-state sector in these areas.
- Differences in non-state provision between states are picked up through the non-state sector adjustment. Assessed health expenses resulting from the socio-demographic composition assessment are either decreased or increased depending on whether the use of actual non-state health services exceeds, or falls short of, the assessed use of non-state health services.

123 A key challenge in determining the appropriate size of the non-state sector adjustment is that it is not possible to quantify how many health services need to be provided. Not all health procedures that are performed need to be performed by the state sector. As such, the provision of a service by the non-state sector does not necessarily mean that fewer state services are needed.[18] This is taken into account in the approach the Commission has used since the 2015 Review as well the approach advocated by Western Australia.

124 Western Australia has taken a different approach to the relationship between the substitutability level and indicator of non-state sector activity.

125 In the Commission's approach, the substitutability level is the share of state expenses that are influenced by the non-state sector. In Western Australia's

[18] For relevant recent research see, Melbourne Institute Applied Economic & Social Research, *Effects of private health insurance on waiting time in public hospitals*: wp2023n09.pdf (unimelb.edu.au), MELBOURNE INSTITUTE Applied Economic & Social Research, University of Melbourne, 2023, accessed 14 June 2024.

approach it is the share of non-state sector expenses that can be undertaken by the state sector.

126 In the Commission's approach, the indicator of non-state sector activity is intended to provide a broad measure of the differences in the availability of non-state services between states. It is not intended to be a precise measure of the volume or value of substitutable services. In Western Australia's approach, the volume and value of substitutable services are intended to be precise measures of the saving to states from the presence of non-state services.

127 Given the different conceptual approach by the Commission and Western Australia for estimating the differing levels of non-state sector provision between states, the Commission does not consider it valid to say that one or the other of the approaches is fundamentally flawed or incorrect.

128 The Commission acknowledges that Western Australia presented a conceptually valid alternative method for determining the extent to which the non-state sector reduces the need for state health spending.

129 The Commission and Western Australia agree that not all services provided by non-state health services influence the level of service provision of the state sector. Both the Commission's current and Western Australia's proposed methods assess the difference between an actual and assessed measure of substitutable services provided by the non-state sector.

130 The method proposed by Western Australia is a more direct approach than the Commission's. As a result, it is highly reliant on accurate activity and public cost data being available. To identify substitutable services, information is needed on the specific types of services provided in the state and non-state sectors. In addition, data on service costs are required to estimate the public cost equivalent of substitutable non-state services. The availability of the data needed to implement Western Australia's approach varies across the components in the health assessment, with good data on admitted patient services and poor data on community health services.

131 The 2 approaches may produce similar outcomes if analogous assumptions are applied.

132 Separate to the submission made by Western Australia, the Commission agrees that the factors identified by New South Wales are likely to impact the extent to which non-state services reduce demand for state health services. These factors are not quantifiable, although in a supplementary submission New South Wales presented data that supported an argument that no substitutability existed between state and non-state service provision. This will be considered in the judgements the Commission makes on the substitutability levels in each component of the health assessment in the 2025 Review.

133 In regard to New South Wales' point that the non-state sector adjustment should not exceed actual non-state provision, it is relevant that the indicators of non-state sector activity used by the Commission do not represent the full scope of non-state sector services. The non-state sector indicator is intended to provide a broad indication of the amount of non-state sector health service provision across socio-demographic drivers, not a precise measure of the volume or value of substitutable services.

Commission draft position

134 The Commission considers that the current approach underpinning the non-state sector adjustment, while pragmatic, remains appropriate for the 2025 Review. Given the available data and the uncertainty about the relationship between state and non-state health provision, the current approach is likely to produce a more reliable adjustment than the approach advocated by Western Australia. The Commission will, however, seek to improve on its current approach based on the feedback from states, as discussed below.

135 The broad range of comments by states on the factors influencing the non-state sector adjustment, along with the evidence presented by New South Wales in its supplementary submission of no relationship between state and non-state health service provision, problems with the data used by the Commission, and the significance of the non-state sector adjustment on GST distribution, suggest that more detailed consideration of this element of the health assessment is warranted between reviews.

Updating the non-state services substitutability level for emergency departments

State views

136 All states except Western Australia and the Northern Territory broadly supported the Commission's proposed approach for updating the emergency department non-state sector substitutability level.

137 In a supplementary submission, New South Wales said the decision to go to a general practitioner (GP) or an emergency department is influenced by a wide range of price and non-price factors. For example, it said that data indicate that the lack of availability of GPs in rural areas results in higher numbers of emergency department presentations. It also said that the provision by the non-state sector of specialist services (such as pathology and imaging services) should be taken into account in estimating the non-state sector substitutability level for the emergency department services assessment.

138 Victoria said it would prefer that the Commission contract an expert to review this approach for the 2025 Review, potentially recommending a way to update the

Australasian College for Emergency Medicine's method or another similar method in the absence of the data required to make a straightforward update.[19]

139 Western Australia said that the Australian Institute of Health and Welfare's method for measuring substitutable services could not be assumed to move consistently with the Australasian College for Emergency Medicine's (existing) method.[20] The Northern Territory said that the substitution rate should remain at 30%.

140 Further, Western Australia said that separate substitutability levels should be used for each remoteness region. Both the Australian Institute of Health and Welfare's and Australian College of Emergency Medicine's methods show increasing substitutability levels as remoteness increases.

Commission response

141 The Australasian College for Emergency Medicine's and Australian Institute of Health and Welfare's methods calculate the proportion of emergency department presentations that are potentially treatable by GPs. The Australasian College for Emergency Medicine's method is based on self-referred, non-ambulance presentations with a medical consultation time less than one hour. The Australian Institute of Health and Welfare's method is based on self-referred, non-ambulance, police or community service emergency department presentations classified as triage 4 and 5 (less urgent). Given the similarity in the methods, it is reasonable to expect that there would be similarities in movement in the Australasian College for Emergency Medicine's and Australian Institute of Health and Welfare's indicators. Updating the substitutability level using the Australian Institute of Health and Welfare's indicator is preferable to not updating it.

142 Separate substitutability levels for each remoteness area would add further complexity to an already complex adjustment to take account of differences in non-state sector service provision between states. It would also require actual non-state sector service provision disaggregated by remoteness area. The proposal should form part of the more detailed consideration of this element of the health assessment between reviews.

143 Both the Australasian College for Emergency Medicine's and Australian Institute of Health and Welfare's methods focus on the proportion of emergency department presentations that are potentially treatable by GPs. Broadening the analysis to include non-state sector specialist services in addition to GP services, as proposed by New South Wales, should also form part of the more detailed consideration of the non-state sector adjustment between reviews.

[19] The method developed by the Australasian College for Emergency Medicine defined a GP-type presentation at an emergency department to be any self-referred, non-ambulance patient with a medical consultation time less than one hour.

[20] The method developed by the Australian Institute of Health and Welfare defined a GP-type presentation to an emergency department as any self-referred, non-ambulance, police or community service presentations classified as triage 4 and 5 (less urgent).

144 The Commission explored the possibility of engaging an external expert to review the approach, but this did not prove feasible within the timeline of the 2025 Review.

Commission draft position

145 For the emergency departments component, the Commission proposes to update the substitutability level using the Australian Institute of Health and Welfare's method for measuring substitutable services. This method produces an estimate of 13%, similar to the level from the 2020 Review (15%). The Commission proposes to maintain the substitutability level at 15%.

Admitted patients

State views

146 New South Wales said that the indicator of non-state sector activity used in the admitted patient assessment (private patient separations funded by private health insurance) is likely to be policy influenced. This was based on a comparison of state shares of separations funded by private health insurance with state shares of the population with private health insurance. This analysis showed that some states had much lower shares of separations funded by private health insurance than would be suggested by their private health insurance coverage.

147 New South Wales also said that the Commission should not use separate sources of data to measure actual and assessed non-state sector activity. It said use of Australian Prudential Regulation Authority data on actual service provision, rather than Australian Institute of Health and Welfare data, had a material effect on the non-state sector adjustment.

148 Victoria said it was concerned with the use of judgement in deciding the substitutability level.

149 Victoria said it agrees that there may be a conceptual case that the calculated rate is too high, as not all who have private insurance use it when they go to a public hospital for admitted patient services, for example, due to potential out-of-pocket fees.

150 Victoria said that without further evidence, it considered that discretionary judgement cannot be applied to the substitutability level. It said if the Commission concludes an adjustment is warranted on conceptual grounds, then the standard discounting approach should be applied. Victoria said the low discount of 12.5% should be applied to the non-state sector adjustment overall.

151 Queensland proposed using private patient bed days rather than separations as the indicator of non-state sector activity for admitted patient services. It said hospital separations provide no indication of the different costs of treating patients for different types of ailments. Queensland said that bed days provide more information on the relative costs of service provision and therefore provide a better indicator of non-state sector activity than separations.

152 Western Australia suggested broadening the indicator of non-state sector activity to include self-insured private patients, in addition to private health insurance-funded patients. As these patients would have the choice of being public patients (just like patients with private health insurance), they also substitute for public patient separations. Western Australia also said the Commission should include both people with private health insurance and those that self-insure in the group of people that could use non-state health services, when estimating the substitutability level.

153 Queensland did not support the inclusion of self-insured patients in the substitutability level as this group is not considered to be comparable with patients covered by private health insurance.

154 Western Australia said it was not appropriate for the Commission to reduce the calculated substitutability rate (23–27%) to 15%, a reduction of 33–44% based on judgement. Western Australia suggested a 12.5% discount (for low unreliability) or a 25% discount (for medium unreliability) was more reasonable.

155 Queensland said it agrees with the Commission's view that the 23–27% range is likely overstated.

156 Tasmania and the Northern Territory supported retaining the 2020 Review methodology to update the substitutability levels for admitted patients.

Commission response

157 The estimated share of comparable services (the proportion of admitted patient services that are also undertaken in the non-state sector) remains at between 50% and 60%, using the latest available data.[21]

158 Several other factors need to be taken into account to determine the extent to which these services are substitutable and therefore reduce demand for state admitted patient services.

159 The cost of hospital services is one factor. The Commission previously stated that a person without private health insurance would rarely attend a private hospital, regardless of the availability of private health services in their state. The national rate of private health insurance hospital cover (currently 45%) was applied to the share of comparable state and non-state services to determine a potential substitutability level.

160 However, there are also some patients that are prepared to pay the full cost of private services (self-funded patients). The private activity funded by self-funded patients (around 3.6% of total public and private hospital activity) should also be

[21] Australian Institute Health and Welfare, Admitted patient care 2022-23, why do people receive care?, Admitted patients - ...~https://www.aihw.gov.au/reports-data/myhospitals/sectors/admitted-patients, 2022-23, Australian Institute Health and Welfare, 2023, accessed 14 June 2024.

taken into account in estimating the substitutability level.[22] The proportion of people with private health insurance cover or who self-funded their admitted patient treatment is estimated at 49%.

161 For the 2025 Review, the Commission proposes to reduce the share of comparable services from 50–60% to 25–29%, after taking account of the private health insurance coverage rate and self-funded hospital activity.

162 This range would be an upper bound. Not all privately insured patients choose to utilise their private health insurance due to policy excesses and gap payments charged by specialists. The range of factors identified by New South Wales (listed in paragraph 117) also suggest the substitutability level should be lower.

163 Given the significant uncertainties associated with determining the extent to which non-state funded services reduce demand for state services, an alternative approach would be to limit the concept of substitutability to circumstances where there is a clearer relationship between non-state and state funded services.

164 One option is to limit the concept of substitutability to just the private patients that are treated in public hospitals. In 2020–21, around 12% of public hospital separations were privately funded.[23] Non-state sources of funding for these patients accounted for around 8% of public hospital funding, excluding Commonwealth payments under the National Health Reform Agreement and relevant national partnership agreements.[24]

165 The Commission considers that the substitutability level resulting from this approach (8%) should be seen as a lower bound rather than the best estimate for the admitted patient non-state sector substitutability level. Activity in private hospitals would relieve some pressure on public hospitals, even though the extent is uncertain.

166 Determining the best estimate for the substitutability level between the upper bound of 25–29% and the lower bound of 8% is a judgement call. The Commission has not been able to identify a reason to change from a substitutability level of 15%.

167 In terms of the indicator of non-state sector activity, the Commission agrees with Queensland that an indicator of activity that takes account of factors that contribute to per-person service costs would be better than hospital separations. Queensland suggested bed days, however expenses (as measured by medical benefits paid by private health insurance funds) may provide additional information on the level of

[22] Australian Institute Health and Welfare, Admitted patient care 2022-23: Costs and funding, Admitted patients - …~https://www.aihw.gov.au/reports-data/myhospitals/sectors/admitted-patients, Table S7.2:patient days by funding source, public and private hospitals, states and territories, Australian Institute Health and Welfare, 2023, accessed 14 June 2024.

[23] Ibid.

[24] Australian Institute Health and Welfare, Health expenditure Australia, 2020-21, Health expenditure Australia 2020-21, Summary - Australian Institute of Health and Welfare (aihw.gov.au), Australian Institute Health and Welfare, 2022, accessed 14 June 2024.

complexity associated with the cost of treating patients and other factors that affect costs.

168 Table 7 provides information on the consistency of average expenses per separation across states. Using data on medical benefits paid per separation by diagnosis-related group for 5 states, the ratio of state benefits paid to the Australian average was calculated. The proportion of separations close to 1.0 indicates how close expenses in each state are to the Australian average. For example, for New South Wales and Queensland, a large proportion of separations (80% for New South Wales and 86% for Queensland) have average benefits between 90%–110% of the national average. Based on the 80–120% threshold, the proportions for all 5 states are 84% or higher.

169 The implication for the Commission of using expenses as a proxy indicator of activity when there are differences in average expenses per separation across states is that a state with above-average per separation expenses will appear to have a higher level of activity than a state with below-average expenses per separation, for an equivalent level of activity (standardised casemix).

Table 7 Private hospital benefits paid per separation by state: ratio to national average, 2022–23

Ratio to Australian average benefits per separation	Proportion of separations (%)				
	NSW	Vic	Qld	WA	SA
0.3	0.0	0.2			0.2
0.4	0.0	0.0	0.0	0.0	0.4
0.5	0.0	1.1	0.2	0.1	1.0
0.6	0.4	0.6	0.1	1.2	1.5
0.7	2.3	2.3	0.3	0.5	10.3
0.8	8.0	28.8	4.2	2.0	34.1
0.9	23.4	29.6	37.2	23.0	19.0
1.0	48.2	15.4	44.1	12.7	9.6
1.1	8.0	2.8	5.0	16.9	12.6
1.2	7.3	12.9	4.0	29.4	9.1
1.5	2.2	6.1	4.6	10.3	1.7
2.0	0.1	0.1	0.2	3.1	0.2
2.5	0.0	0.1	0.0	0.4	
3.0		0.0	0.0	0.2	0.0
3.5				0.1	
within 90 - 110%	**80**	**48**	**86**	**53**	**41**
within 80-120%	**95**	**89**	**95**	**84**	**84**
within 70-150%	**99**	**98**	**99**	**95**	**97**

Note: Statistics for the ACT, Northern Territory and Tasmania are not reported due to confidentiality reasons.
Source: Department of Health Hospital Casemix Protocol Annual Report (Preliminary) 2022-23, Table 10.

170 Table 8 compares 4 potential measures of admitted private patient activity – separations, bed days, and 2 measures of expenses. Private patient expenses include both privately insured and self-insured patients, as it would be appropriate to align the indicator of activity with the factors considered in calculating the substitutability level.

Table 8 State share of private patient assessed need: alternative indicators, 2021–22

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	%	%	%	%	%	%	%	%	%
Separations (a)	32.4	26.1	19.4	10.7	7.1	1.9	2.1	0.4	100.0
Bed days (a)	32.5	26.1	19.2	10.6	7.3	1.9	2.0	0.3	100.0
Expenses (a)	32.3	25.9	19.5	10.6	7.2	2.1	2.0	0.4	100.0
PHI and self-funded expenses	32.3	25.9	19.5	10.6	7.2	2.1	1.9	0.4	100.0

(a) Privately insured or PHI-funded.
Source: Commission calculation using AIHW data on private separations, bed days and expenses.

171 Table 9 shows the distribution of actual activity by state based on separations and expenses. State breakdowns of actual activity are only available for separations and expenses, not bed days or self-insured patients.

Table 9 State share of private patient actual activity: alternative indicators, 2021–22

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	%	%	%	%	%	%	%	%	%
Separations	31.3	23.8	22.7	10.4	7.6	2.4	1.3	0.4	100.0
Expenses	30.6	23.3	21.4	12.7	7.9	2.3	1.4	0.5	100.0

Source: Commission calculation using APRA data on privately insured patient separations and expenses.

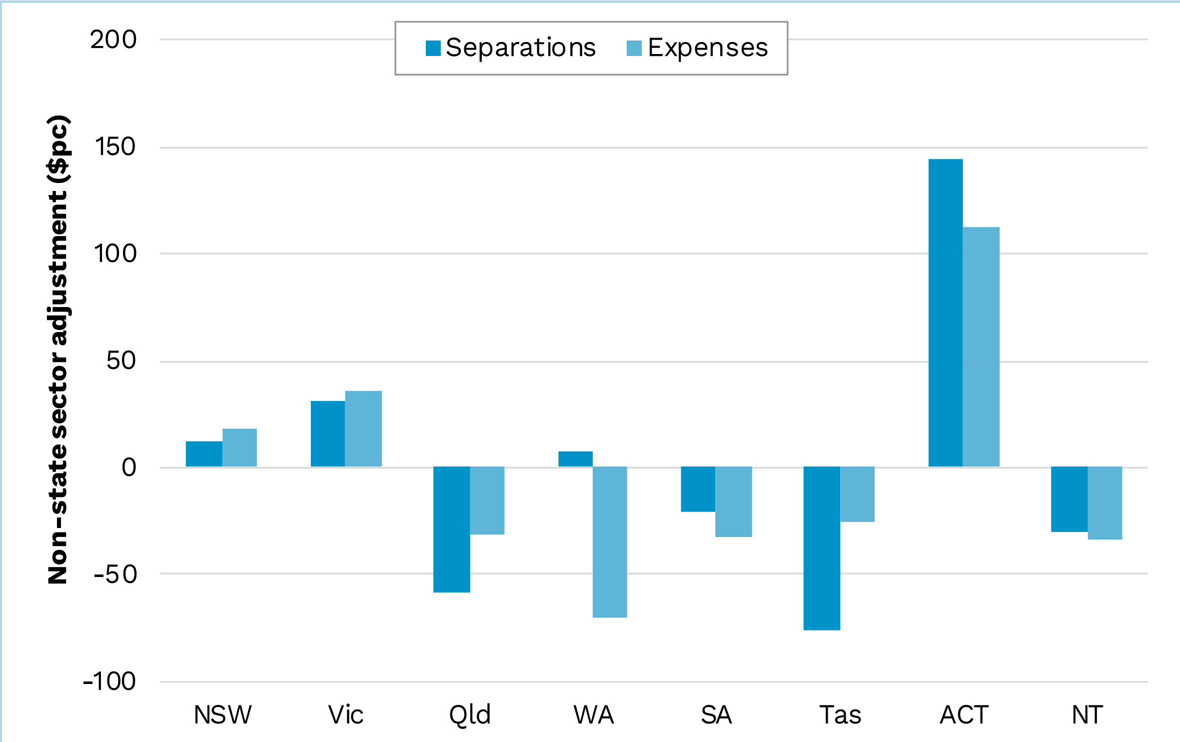
172 Table 10 and Figure 5 show the difference between assessed and actual activity for the alternative measures (the non-state sector adjustment). The choice of indicator would likely result in a material change ($12 per capita) to the distribution of GST for Queensland, Western Australia, Tasmania and the ACT.

Table 10 Admitted patient non-state sector adjustment: alternative indicators, 2021–22

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Separations	99	207	-305	22	-38	-44	65	-7	0
Expenses	152	239	-166	-194	-58	-15	51	-8	0
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Separations	12	32	-58	8	-21	-76	144	-30	0
Expenses	19	36	-31	-70	-32	-26	112	-34	0
Difference	7	5	26	-78	-11	51	-32	-4	0

Source: Commission calculation using Australian Institute of Health and Welfare and Australian Prudential Regulation Authority data on privately insured patient separations and expenses.

Figure 5 Admitted patient non-state sector adjustment: alternative indicators



Source: Commission calculation using Australian Institute of Health and Welfare and Australian Prudential Regulation Authority on privately insured patient separations and expenses.

173 Further work is needed to understand why the relationship between hospital activity funded by private health insurance and private health insurance coverage differs across states. This work could form part of the more detailed consideration of the non-state sector adjustment between reviews.

174 The Commission uses data from the Australian Prudential Regulation Authority on actual hospital activity funded by private health insurance because the data available from the Australian Institute of Health and Welfare are not disaggregated for the 3 smallest states (Tasmania, the ACT and the Northern Territory). Australian Institute of Health and Welfare data are required to calculate assessed activity funded by private health insurance because disaggregated data cross-classified by socio-demographic group are required. The 2 data series were broadly aligned prior to COVID-19 and then started to deviate. As part of the work between reviews on the non-state sector adjustment, the Commission will monitor the exiting data series to see if they realign once the COVID-19 affected activity has passed, as well as explore alternative indicators of non-state sector activity.

Commission draft position

175 After updating these data to calculate the share of admitted patient services that are also undertaken in the non-state sector and reducing this share by the proportion of people that have private health insurance or self-fund their private hospital treatment, the Commission estimated that the upper bound for the non-state sector substitutability level was 25–29%. The Commission also estimated that the lower bound was around 8%, based on private patient funding of public

hospital activity. In the absence of information to determine a precise figure, the Commission used judgement to propose that 15% remains the appropriate estimate for the substitutability level.

176 An ideal measure of private patient activity does not exist (there is not an equivalent to the national weighted activity unit used to measure public patient activity). Hospital separations take no account of complexity and other factors that contribute to the cost of a hospital service. Patient bed days would be an improvement on separations, but data on actual private patient bed days by state are not available.

177 The Commission proposes to use expenses measured by benefits paid by private health insurance funds as the proxy indicator of private patient activity. This measure is not ideal due to differences across states in average benefits paid for equivalent hospital services, as shown in Table 7. However, given the relatively small differences in benefits paid for equivalent hospital services across states, expenses are considered to provide a better measure of activity than separations.

Non-admitted patients

State views

178 Queensland supported the reduction in the non-admitted patient substitutability rate from 30% to 25%. It said the Commission's approach in the 2020 Review to determine the substitutability rate for non-admitted patients was comprehensive and rigorous. Queensland agrees that this method can be relied upon again and used with updated data for the 2025 Review.

179 Western Australia said the Commission is mixing up the proportion of state services that are comparable with the proportion of non-state services that are substitutable. It said multiplying these by each other is meaningless.

180 Western Australia and South Australia said that the assumption that half of non-admitted patient services are linked to a previous hospital attendance is overstated, while the ACT said the assumption could be reviewed.

181 The Western Australian Health Department's best estimate of outpatient activity that is linked/related to an inpatient episode is in the range of 10–15%, depending on the number of days from the inpatient episode. High level analysis of 2022–23 administrative data by the South Australian Department for Health and Wellbeing indicates that the proportion of non-admitted patients with a previous admitted patient episode in South Australia is likely to be around 25%.

182 In addition, South Australia said the 50% assumption does not take into account that not all non-admitted patients with a prior hospital admission are accessing a non-admitted service because of that admission. As some previously admitted patients access non-admitted patient services for conditions not related to their admission, simply applying a proportion based on total non-admitted and admitted

patient episodes does not accurately capture the concept the Commission is seeking to reflect through the 50% discount.

183 On this basis, South Australia said the Commission should investigate the appropriateness of the 50% discount. This could be based on administrative data from the states, with an appropriate adjustment if required, to recognise that not all outpatients with a previous hospital admission seek non-admitted patient services because of the admission.

184 Tasmania supported retaining the 2020 Review methodology to update the substitutability levels for non-admitted patients.

185 The Northern Territory said there is a weak conceptual case for an assumption that a service with a nominal out-of-pocket cost ceases to be substitutable with state services.

186 The Northern Territory said that there is a significant degree of discretion required in determining substitutability ratios and submits that the substitutability ratio of 30% should continue for non-admitted patients.

Commission response

187 For non-admitted patients, the Commission uses the mid-point of 2 methods to determine the non-state sector substitutability level.

Method 1: comparable state services

188 This method first estimates ‘comparable’ services based on the similarity of services undertaken in public hospitals and the non-state sector. The amount of comparable services that are likely to be ‘substitutable’ are then estimated based on the likelihood of patients choosing to use non-state services rather than state services.

189 In the 2020 Review the Commission considered that the proportion of state services that were also undertaken in the non-state sector (that is, comparable services) was around 70%. Using the latest available data, the equivalent figure has reduced to 65%, mainly due to the lower expenditure share of consultation clinics, where comparable non-state services are available (Table 11).

Table 11 Estimating comparable services (method 1)

Group of services	Share of activity	Average expense per service	Share of expenses	Substitutable service available (a)	NAP substitutability (b)
	%	$	%		%
Procedure clinics	12	592	21	Yes	21
Consultation clinics	38	406	44	Yes	44
Allied health clinics	50	248	35	No	0
Potential substitutability (%)					**65**
Proportion of related AP and NAP episodes to total NAP episodes					**43**
Actual substitutability (%)					**36**

(a) Although all state-provided allied health services are also available in the private sector, most are linked to an earlier admitted patient episode. In addition, only a very limited number of patients who meet specific eligibility requirements (for example, those with a chronic medical condition or with an assessed mental disorder) are eligible for Medicare allied health items. State provided allied health services are generally not substitutable.

(b) Actual substitutability = potential substitutability * (1–proportion of related non-admitted and admitted patient episodes).

Source: Commission calculation using Australian Institute of Health and Welfare and non-admitted patient care tables, 2019–20 to 2022–23; Independent Health and Aged Care Pricing Authority National Hospital Cost Data Collection Public sector infographic, 2018–19 to 2020–21.

190 However, the share of services that are comparable is likely to be greater than the share that is substitutable. Patients requiring more complex treatment, or procedures associated with rare diseases, may have no option but to be treated in public hospitals. Also, patients who had commenced treatment in a public hospital may prefer to access follow-up non-admitted patient services in the public system.

191 In the 2020 Review, to estimate substitutable services, the Commission decided to halve the share of services considered comparable on the basis of survey data that showed about 50% of non-admitted patient services were for people that also received admitted patient services.

192 However, as South Australia pointed out, the survey data the Commission used as the basis for this estimate do not accurately capture the concept the Commission is seeking. Not all non-admitted patients with a hospital admission would be accessing the non-admitted service because of that admission, as these may be unrelated.

193 The Commission asked states for data on the share of related non-admitted and admitted patient episodes. Data provided by 6 states indicate that the relevant proportion is 43% — that is, 43% of patients that accessed non-admitted services had a prior related hospital admission. This implies that of the comparable non-admitted patient services (65% of total services), 37% may be substitutable.

194 The Commission liaised with states to achieve consistency in how the estimates were made, but perfect alignment in approaches was not possible. The Commission tested the sensitivity of results by varying state inputs where data caveats indicated possible inconsistency but ended up with substitutability levels that rounded up to 30%.

Method 2: affordable services

195 The Commission considers that the cost of services in the non-state sector is a relevant factor in determining the level of substitutable services. To get a sense of

the extent that non-state services are affordable, the proportion of similar non-state services (private operations and specialist services) that are bulk billed is calculated.

196 Western Australia said it was not appropriate to use the proportion of non-state services that are bulk billed to determine the proportion of state services that are substitutable. If the Commission intended to use this to determine the exact value of state services that are substitutable, Western Australia's criticism would be valid. However, private operations and specialist services are only intended to provide a broad indication of the amount of non-state sector health provision, not a precise measure of the volume of substitutable services. The rate of bulk billing for these services provides an indication of the extent to which patients may use these services rather than state services if cost is a factor for them.

197 In the 2020 Review the alternative substitutability level based on affordable non-state services was 22%. The equivalent figure now is slightly lower at 20% (Table 12).

Table 12 Estimating affordable services (method 2)

Group of services	Share of activity	Average expense per service	Share of expenses	Substitutable service available	NAP substitutability
	%	$	%	%	%
Procedure clinics	12	592	21	22	4.6
Consultation clinics	38	406	44	34	15.1
Allied health clinics	50	248	35	0	0
Total					**20**

Source: Commission calculation Australian Institute of Health and Welfare non-admitted patient care tables, 2019–20 to 2022–23; Independent Health and Aged Care Pricing Authority National Hospital Cost Data Collection Public sector infographic, 2018–19 to 2020–21; Medicare annual statistics state and territory, 2019–20 to 2022–23.

Commission draft position

198 As in the 2020 Review, the Commission proposes that the final estimate for the substitutability level be the midpoint between the 2 methods.

199 Based on the latest available data from 5 states, method 1 produces a substitutability rate of 37% and method 2 a rate of 20%, with a midpoint of 28%. The midpoint is close to the 2020 Review value of 30%. The Commission proposes to maintain the substitutability level at 30% for the 2025 Review.

Community and public health

State views

200 The Northern Territory said that the health services provided by Commonwealth funded First Nations community health organisations should not be taken into account in the non-state sector adjustment for community and public health.

201 The Northern Territory said that the assessment of non-state health services is overly simplistic. It said the quality of the primary health network differs significantly

between states and Commonwealth funding of First Nations community health organisations are partly intended to address these differences by increasing the availability of health services. It also said by assuming each First Nations person in a remote area requires the same number of non-state community health practitioners, the Commission is implicitly assuming there are no differences in primary health care between states other than remoteness.

202 The Northern Territory said that the predominant purpose of Commonwealth spending in the Northern Territory is to offset the much lower non-government sector spending compared with other states. It said the Northern Territory receives around 30% less Medicare Benefits Scheme funds than the national average.

Commission response

203 The non-state sector adjustment for community and public health consists of 2 elements. One element assesses differences between states in the provision of services funded by the Commonwealth's Medicare Benefits Scheme. The second element assesses differences between states in the provision of services funded by the Commonwealth's Indigenous Australians' Health Program and delivered by Aboriginal Community Controlled Health Services.

204 To the extent that the Northern Territory receives less Medicare Benefits Scheme funds than the national average, this will be taken into account in the first element of the non-state sector adjustment.

205 Commonwealth-funded health services alleviate pressure on state services in the same way as privately-funded services.

206 In regard to the indicator to measure how activity differs between states, data exist on the number of clients using services by these organisations as well as the number of episodes. Employment levels are used by the Commission because it considers they take better account of the resource intensity of different types of services.

207 Since the release of the health consultation paper, expense data for 2019–20 to 2021–22 have become available, allowing the non-state sector substitutability level for the community and public component to be updated. Expense weights for several years are provided in Table 13. The values for the later years show that expenses on some elements of community health are heavily COVID-19 affected. The last row of the table shows the substitutability level corresponding to the expense weights for each year.

Table 13 Community and public health expense weights

Group of services	2014–15, 2015–16	2019–20	2020–21	2021–22
	%	%	%	%
Community health services				
Public dental services	5	3	2	2
Alcohol and other drug services	4	3	2	2
Community mental health services	19	18	16	13
Other community health services	54	55	47	40
Public health services				
Cancer screening	3	3	2	2
Organised immunisation	4	3	4	7
Selected health promotion	5	4	5	7
Communicable disease control	3	6	16	22
Environmental health	1	1	2	1
Other public health services	2	4	4	5
Total	**100**	**100**	**100**	**100**
Substitutability level	**63**	**62**	**53**	**49**

Source: Unpublished data, Australian Institute of Health and Welfare.

208 The Commission proposes to maintain the substitutability ranges for the individual health services that make up the community and public health component (see Table 14).

209 The calculation of the substitutability level using 2019–20 expense weights are provided in Table 14. Using the mid-point of substitutability ranges for each individual health service, the calculated value for the community and public health non-state sector substitutability level is 61.9%. This is largely unchanged from the 2020 Review (62.5%). The Commission proposes to again round down the value to 60%.

Table 14 Estimated substitutability level, Community and public health, 2025 Review

Group of services	Substitutability range	Share of expenses 2019–20	Expense weighted substitutability
	%	%	%
Community health services			
Public dental services	Low (21–40)	3	0.9
Alcohol and other drug services	Medium (41–60)	3	1.5
Community mental health services	Low (21–40)	18	5.4
Other community health services	Very high (81–100)	55	49.8
Public health services			
Cancer screening	Medium (41–60)	3	1.3
Organised immunisation	High (61–80)	3	2.3
Selected health promotion	Very low (0–20)	4	0.4
Communicable disease control	Nil	6	0.0
Environmental health	Nil	1	0.0
Other public health services	Very low (0–20)	4	0.4
Total		**100**	**61.9**

Source: Commission calculation using unpublished 2019–20 Australian Institute of Health and Welfare expense data.

Commission draft position

210 The Commission proposes to continue to include the Commonwealth-funded services provided by First Nations community health organisations in the separate adjustment for Community Controlled Health Services. The use of these services is not included in the broader non-state services adjustment.

211 The COVID-19 pandemic has distorted state spending on community and public health. As such, the Commission proposes to use 2019–20 data to update the calculation of the substitutability level rather than data for more recent years. The non-state sector substitutability level for the community and public health component for the 2025 Review is proposed to remain at 60%.

212 The substitutability levels and indicators proposed for the 2025 Review are summarised in Table 15.

Table 15 Proposed substitutability levels and indicators, 2025 Review

	Substitutability	Indicator	Change since 2020 Review?
Admitted patients	15%	Private patient expenses	Yes - to indicator
Emergency departments	15%	Bulk billed GP benefits paid	No
Non-admitted patients	30%	Bulk billed operations and specialists benefits paid	No
Community health	60%	Bulk billed GP benefits paid	No

Other issues raised by states

Socio-demographic composition assessment

Greater reliance on actual state health activity

213 The Northern Territory said that the health assessment should rely less on socio-demographic cohort-averaged national weighted activity units and more on actual state national weighted activity unit shares.

214 The Northern Territory said that the primary reason for differences between the state and the national average national weighted activity units by cohort is uncaptured variation in the underlying health of the population within each cohort. The Northern Territory said that it had substantially poorer baseline health than in equivalent remote, First Nations and aged populations in other states. For example, the Northern Territory has the highest age-standardised rates of admission for kidney-related disease, bone, joint and muscular diseases, and injury, poisoning and other external causes. The Northern Territory said that the reasons for these outcomes include lack of aged care services, overcrowded housing and high rates of homelessness, unique geographic circumstances, and patient behaviour.

215 The Northern Territory said the design of national weighted activity units already alleviates policy neutrality concerns through national price averaging and accounting for the complexity of activity. It said that the result of averaging is that the Northern Territory's assessed national weighted activity units are around 20% lower than its actual national weighted activity units.

216 The Northern Territory said that assessed needs should be apportioned in line with actual national weighted activity unit shares, with consideration given to developing appropriate adjustments to recognise under-servicing.

217 Alternatively, if adjustments to actual national weighted activity units are considered necessary but cannot be developed in time for the 2025 Review, the Northern Territory suggested that approaches to mitigate the limitations of the current methodology include:

- blending average and actual national weighted activity unit shares (for example, 50% actual and 50% assessed), or
- discounting by limiting the impact of national weighted activity unit averaging (for example, so that averaging does not redistribute more than a set proportion of actual national weighted activity units).

218 Queensland supported the Northern Territory's analysis and proposed solution. It said that the current averaging process masks meaningful variations among states and that actual national weighted activity units are a more genuine reflection of underlying health needs.

219 Queensland said that its population had a disproportionally higher underlying health need compared with the average of other states. It said that despite the

disproportionate and challenging health need in Queensland, the current averaging process assesses the state as having a healthier population than it actually does, and attributes higher health activity to a policy choice that implies an 'overservicing' of Queensland's health needs. It said the current assessment fails to rationalise why, despite this implied overservicing, Queenslanders continue to have poorer health outcomes than the national average.

Commission response

220 The health assessment uses national weighted activity units, disaggregated by socio-demographic groups, at a national level to estimate a policy neutral average level of state health spending. Underpinning this approach is an assumption that people in similar circumstances are likely to use health services at a similar rate.

221 The Northern Territory presented evidence that this is not the case for its remote, First Nations population, based on age standardised death rates and hospital admissions for 3 disease groups. It also presented information on the difference between assessed and actual national weighted activity units, which showed the Northern Territory's assessed national weighted activity units being around 20% lower than the actual national weighted activity units, implying that it overservices its population.

222 The Commission does not currently have access to actual state national weighted activity units. However, state hospital expenses are related to actual national weighted activity units. Most hospitals are funded based on the national efficient price of hospital services and the volume of services performed in hospitals, measured by national weighted activity units.[25] However, if a hospital is providing services below the national efficient price, states have reduced costs, and vice versa. A comparison of state actual and assessed expenses is shown in Table 16.

223 Based on the 2020 Review method there are reasonably large differences between actual and assessed expenses for multiple states in addition to Queensland and the Northern Territory. This may suggest that the 2020 Review approach was missing drivers of need for socio-demographic groups in addition to those identified by Queensland and the Northern Territory.

Table 16 Ratio actual to assessed hospital expenses, 2021–22

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Admitted patients	0.86	1.16	1.04	0.96	1.07	0.75	1.19	1.06	1.00
Emergency departments	1.10	0.91	0.85	1.47	0.52	1.03	1.55	0.82	1.00
Non-admitted patients	1.12	0.87	0.88	1.35	0.50	1.21	1.30	1.16	1.00

Source: Commission calculation, 2024 Update using the 2020 Review method.

[25] Some hospitals are block funded.

224 The Commission agrees that using national averaging for expense assessments could miss state-specific differences in service needs. This is more likely to be the case for smaller states because they have less influence on the national average. Further work to understand the extent of these issues is needed.

225 One problem with the solution proposed by Queensland and the Northern Territory is that actual state national weighted activity units can be influenced by state policy decisions.

226 The National Weighted Activity Unit was developed by the Independent Health and Aged Care Pricing Authority to allow different hospital activities to be expressed as a common unit of activity and to set the pricing of public hospital services. The national weighted activity unit accounts for differences in the complexity of patients' conditions or procedures and individual patient characteristics that lead to increased costs.[26]

227 Differences between states' hospital activity, as measured by actual national weighted activity units, can occur due to differences in the complexity of procedures performed, differences in the share of higher cost patients treated, and/or differences in the number of procedures performed. The actual number of procedures performed can potentially be influenced by policy choices, for example the resourcing decisions of states. As such, actual state national weighted activity units are not a policy neutral measure of assessed GST needs.

Commission draft position

228 The issues raised by Queensland and the Northern Territory are fundamental to the reliability of the health assessment. If people in similar circumstances are likely to use health services at significantly different rates, there is a conceptual case for developing an alternative method for assessing state health expense needs. Exploring this issue could form part of the Commission's proposed work program between reviews.

229 The solution proposed by Queensland and the Northern Territory is problematic because of the potential for actual national weighted activity units to be influenced by state policies.

230 The Commission will continue to use socio-demographic cohort-averaged national weighted activity units in the health assessment for the 2025 Review and work with states between reviews on the issues identified by Queensland and the Northern Territory, and potential solutions.

[26] Australian Institute of Health and Welfare, Glossary - Australian Institute of Health and Welfare (aihw.gov.au), Australian Institute of Health and Welfare, 2024, accessed 14 June 2024.

Culturally and linguistically diverse (CALD) populations

231 Victoria said that culturally and linguistically diverse populations use health services more than other population groups and therefore the Commission should work with states to establish a method for taking account of this in the health system.

232 Victoria presented evidence that culturally and linguistically diverse residents have a greater burden of disease and place more demand on mainstream health services than the rest of the population.

233 Victoria acknowledged the difficulty in quantifying the impact of diverse residents on state services due to the challenges in identifying and defining culturally and linguistically diverse populations. For assessing health expenses needs, Victoria suggested focusing on refugees and people seeking asylum, temporary residents and people with low English proficiency.

234 Separately, Victoria presented evidence that culturally and linguistically diverse residents have difficulty accessing a range of government services due to cultural and language barriers. It argued the expenses states incur in supporting culturally and linguistically diverse populations should be assessed separately based on the culturally and linguistically diverse populations of states.

235 In 2021–22, the Victorian Government committed $103.3 million in funding for programs that support its multicultural communities. Victoria spent $30 million on interpretation and translation services, of which 67% ($21.3 million) was provided by the Department of Health primarily for translation services.

Commission response

236 In the 2015 and 2020 reviews the Commission considered whether cultural and linguistic diversity should be included as a driver of state spending.

237 In 2015, the Commission accepted the contention by Victoria and New South Wales that people with poor English have a higher cost of using services than people proficient in English. However, in attempting to find strong evidence for a culturally and linguistically diverse driver, the Commission identified that while costs are often higher for culturally and linguistically diverse populations, use rates are generally lower.

238 For health services, using Victorian data on all admitted patient separations, the Commission found in the 2015 Review that use and cost varied considerably for people born in different countries. The net effect of this is that disaggregating non-Indigenous hospital use by country of birth has a virtually negligible effect on New South Wales (+$3 per capita) and Victoria (-$4 per capita).

239 Across a range of services, the Commission determined that there was variability in usage between birthplace groups. There was evidence that while some birthplace groups have higher-than-average use and/or cost for at least some services, other birthplace groups have lower use and/or costs. However, there was no strong

evidence about which states' mix of birthplace groups would lead to above-average cost profiles, and which would lead to below-average cost profiles.

240 The Commission concluded in the 2015 Review that it no longer accepted the conceptual case that states with large culturally and linguistically diverse population have universally higher costs, and as such no longer made any assessment of culturally and linguistically diverse populations. The Commission discontinued using language spoken at home in the post-secondary education category and the general assessment of culturally and linguistically diverse in the other expenses category.

241 In the 2020 Review, the Commission considered the influence of cultural and linguistic diversity in several assessments.

- In the welfare assessment, the Commission accepted the conceptual case that services to culturally and linguistically diverse people impose an additional cost on states. However, the absence of comprehensive and reliable cost data along with culturally and linguistically diverse use data limited the Commission's ability to develop a culturally and linguistically diverse assessment.
- In the housing assessment, the Commission found that using culturally and linguistically diverse people as a driver did not have a material impact on GST distribution.
- In justice there were difficulties in collecting information that both define a culturally and linguistically diverse prisoner and a relative cost weight. The only known culturally and linguistically diverse information on prisoners was country of birth. The Commission considered being born overseas is not an adequate way to define the culturally and linguistically diverse population, as many people born overseas have good English and do not require an interpreter. Likewise, there are many people born in Australia, particularly among the First Nations population in the Northern Territory, who require additional resources due to cultural and linguistic differences.

242 The analysis presented by Victoria justifies retesting the materiality of cultural and linguistic diversity as a driver of need. A more comprehensive analysis can now be undertaken of the impact of a culturally and linguistically diverse population driver on the health assessment, using country of birth as the indicator of culturally and linguistically diverse status.

243 However, it is a significant and sensitive issue that would require consultation with states, including on the choice of countries of birth to include in the different use groups (high cost/low cost or high/medium/low cost). For example, Victoria suggests the Commission focus on refugees and people seeking asylum, temporary residents and people with low English proficiency. However, this information is not collected from people that use state hospital services, so judgement would be needed to relate these factors back the information available on country of birth. Once appropriate specifications were determined, there would then likely be a considerable lag in obtaining the relevant data.

244 If a driver has a material impact on GST distribution for any state across all categories, it is included in all assessments where there is a conceptual case for its

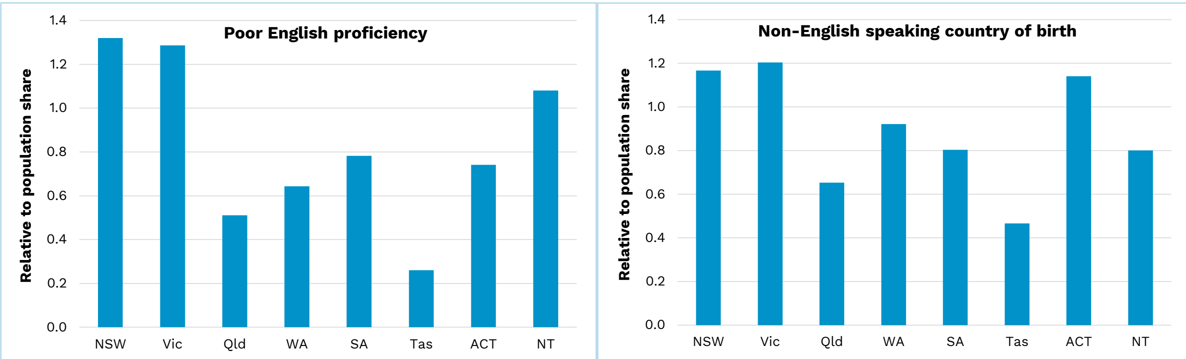
inclusion, and reliable and robust data, regardless of its materiality in individual assessments.[27]

245 In regard to Victoria's suggestion for a separate assessment of expenses states incur on multicultural health services and language support associated with all government services, the Commission has undertaken an indicative assessment of these expenses, on the assumption that all states spend at the same per capita level as Victoria.

246 Two options for defining culturally and linguistically diverse were considered – English proficiency and non-English speaking country of birth.

247 The analysis showed that while the prevalence of culturally and linguistically diverse people varied significantly by state (Figure 6), the level of spending across all services was not sufficient to result in a materially different distribution of GST compared with an equal per capita distribution (Table 17 and Table 18).

Figure 6 Prevalence in the population



Source: ABS 2021 Census data; Commission judgement was required in determining the list of non-English speaking countries.

Table 17 GST impact – English proficiency

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Natl spend on CALD ($m)	217	171	55	36	29	3	7	5	523
EPC share CALD spend ($m)	165	133	107	56	37	12	9	5	523
Difference from EPC ($m)	53	38	-52	-20	-8	-9	-2	0	0
Difference from EPC ($pc)	**7**	**6**	**-10**	**-7**	**-4**	**-15**	**-5**	**2**	**0**

Source: Commission calculation using Victorian data and ABS 2021 Census data.

Table 18 GST impact – country of birth

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Natl spend on CALD ($m)	192	160	70	52	29	5	11	4	523
EPC share CALD spend ($m)	165	133	107	56	37	12	9	5	523
Difference from EPC ($m)	27	27	-37	-4	-7	-6	1	-1	0
Difference from EPC ($pc)	**3**	**4**	**-7**	**-2**	**-4**	**-11**	**3**	**-4**	**0**

Source: Commission calculation using Victorian data and ABS 2021 Census data.

[27] CGC, 2025 Methodology Review - Commission's position on fiscal equalisation, supporting principles and assessment guidelines.pdf (cgc.gov.au), CGC, Australian Government, 2023, accessed 14 June 2024, p19.

Commission draft position

248 The Commission considers there is a conceptual case that people from different cultures have different use rates of state health services.

249 A substantial amount of work is required to incorporate this driver into the health assessment, including consultations with states. In particular, the choice of countries of birth to include in the low/medium/high use groups is sensitive. In addition, the Commission's disaggregated estimated resident population data would need to be further disaggregated by country of birth. The Commission proposes to consider how cultural and linguistic diversity affects state service costs as a part of its proposed forward work program.

250 The Commission does not propose to separately assess state spending on multicultural and language services in the 2025 Review as it is unlikely to result in a material impact on GST distribution.

Modifying age groups

251 New South Wales said the Commission should consider whether to modify the existing 3 oldest age groups in the health assessment to better capture the effect of age on state health expenses. Given the ageing of the Australian population, New South Wales suggested groups should be 45–69, 70–79 and 80+ rather than the existing 45–64, 65–74 and 75+.

Commission response

252 The impact of splitting the oldest age group was tested using admitted patient activity data. The highest age group was disaggregated into 75–84 and 85+. The other age groups could not be modified as the data currently available do not have a further breakdown. Splitting the highest age group did not have a material impact as the small number of people aged over 85 offset their higher costs (Table 19). Applying the same analysis to all hospital components did not make a material difference.

Table 19 Impact of disaggregating highest age group, health assessment, 2021–22

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Scenario ($m)	17,966	13,867	12,202	6,079	4,409	1,621	763	955	57,862
Base ($m)	17,955	13,855	12,222	6,085	4,403	1,621	764	957	57,862
Difference ($m)	**12**	**12**	**-20**	**-6**	**6**	**0**	**-1**	**-2**	**0**
Difference ($pc)	**1.4**	**1.8**	**-3.9**	**-2.2**	**3.3**	**-0.6**	**-2.2**	**-8.1**	**0.0**

Source: Commission calculation using 2021–22 data on Independent Health and Aged Care Pricing Authority National Weighted Activity Units, ABS population data and GFS expenses.

Commission draft position

253 The Commission proposes to maintain the existing age groups for the 2025 Review as splitting the oldest age group does not have a material impact. This will be retested in the next review.

Clustered design of Victoria's health system

254 Victoria said that it is not appropriate to apply remoteness weights to national weighted activity units when residents travel from more remote areas for treatment in hospitals located in less remote areas.

129 Victoria's health system follows a clustered design, where specialised and high-cost services and facilities are located in higher density areas closer to Melbourne's central business district. This clustering of services allows for efficiency in service delivery. Victoria said it would be inappropriate to apply a regional cost weighting to these services, as they are not provided in remote areas, despite being for residents from those areas.

Commission draft position

255 The Independent Health and Aged Care Pricing Authority applies cost weights for patients travelling from regional and remote areas to major cities for treatment because states incur additional costs in providing services to these people. It is appropriate that the Commission recognise these costs in its assessments.

Discounting the assessment of the National Health Reform Agreement

256 The terms of reference for the annual update of GST relativities require the Commission to assess Commonwealth payments to states under the National Health Reform Agreement (see below).

257 Queensland said that a portion of the payment is used to fund hospital services that states are providing because of shortfalls in the provision of Commonwealth-funded primary and aged care services. Specifically:

- Low acuity emergency department presentations. Queensland estimated 60% of these presentations could have been cared for via urgent care clinics or GP appointments. The cost to Queensland hospitals was estimated at $310 million.
- Potentially Preventable Hospitalisations. These are hospitalisations that could have been prevented through the provision of appropriate health interventions and early disease management in primary care and community-based care settings (including by GPs, medical specialists, dentists, nurses, and allied health professionals). The cost to Queensland hospitals was estimated at $548.9 million.
- Long stay patients. These are patients who has been in hospital for more than 35 days and no longer need active treatment. These patients usually require a level of care that could be appropriately provided in the community but may not be available. The cost to Queensland hospitals was estimated at $290–$445 million.

258 Queensland said the Commission should discount the assessment of the National Health Reform Agreement payments by a minimum of 12.5% on the basis that some of the funding is effectively being used to provide services for which states are not responsible.

Commission response

259 In 2021–22, Commonwealth payments under the National Health Reform Agreement amounted to around 46% of Queensland's total spending on admitted patient services or 42% of admitted patient and emergency department spending. Apportioning the costs identified by Queensland on the basis of a Commonwealth/state funding split of 35:65 to 43:57, around 7–10% of the Commonwealth payment is used to fund these costs.

260 The Commission uses a discount when it has concerns with the data used in the assessment or the assessment method. It is not appropriate to apply a discount for the problem that Queensland has raised.

261 There may be a case to not assess a proportion of the Commonwealth payment on the basis that it is funding services that are not a usual state responsibility and for which needs are not assessed. This is the approach the Commission takes with Commonwealth payments that address structural disadvantage (such as the stock of social housing in remote First Nations communities).

262 The National Health Reform Agreement would need to specify the amount of funding that relates to non-state functions.

Commission draft position

263 If the Commonwealth and states can agree that a portion of the National Health Reform Agreement Commonwealth payment funds hospital services that are not a state responsibility, and that share of the payment is specified in the agreement, then the Commission will treat that amount as a no impact payment.

264 The share of spending that is funded by states on hospital services that are a Commonwealth responsibility will continue to be assessed by the usual drivers of need. State needs to spend on these hospital services are likely to be best estimated by the usual health assessment methods.

Non-hospital patient transport

265 Victoria said the assessment of non-hospital patient transport costs is flawed because it assesses Western Australia and the Northern Territory to need more than double their actual spending.

266 Victoria presented evidence using data from the 2020 Review that higher spending in remote areas does not relate to higher remote population shares.

267 Victoria said that expenses on non-hospital patient transport should be assessed in the admitted patient assessment.

Commission response

268 Large differences between actual and assessed expenses are not necessarily an indication that the assessment is mis-specified. Actual expenses are affected by

state policy choices, the efficiency of service provision and the accuracy of expense reporting. However, large differences can justify a review of the assessment.

269 Aeromedical services and the Patient Assistance Transport Scheme are provided disproportionately to people in remote and very remote regions. This is the main reason why the Commission has assessed expenses associated with these services separately to other hospital expenses.

270 If the activity associated with aeromedical services and the Patient Assistance Transport Scheme were included in national weighted activity units, this would add weight to Victoria's argument that the expenses be included in the admitted patient assessment.

271 The activity associated with patient transport are included in the admitted patient national weighted activity units, and the remoteness costs weights produced by the Independent Health and Aged Care Pricing Authority include the cost of patient transport.[28] However, states submit patient transport costs inconsistently and this may not be fully reflected in state data submissions. It is not clear if the patient transport costs used to calculate national weighted activity units include aeromedical services, the Patient Assistance Transport Scheme or both, or whether these costs are classified elsewhere (that is, not identified as a transport cost).

272 The classification system for the National Hospital Cost Data Collection issued in 2023 now specifies that patient transport costs for aeromedical services and the Patient Assistance Transport Scheme are in scope and should be submitted.[29] However, it may take time for states to comply fully.

Commission draft position

273 Given the uncertainty about the extent that activity associated with patient transport are included in the admitted patient national weighted activity units, the costs associated with aeromedical services and the Patient Assistance Transport Scheme will be kept separate and assessed using the current method for the 2025 Review.

274 The Commission will continue to engage with the Independent Health and Aged Care Pricing Authority between reviews to determine whether an alternative approach is appropriate in future.

Adjustments for state bilateral cross-border arrangements

275 Victoria said it is a net exporter of hospital treatment to other states and territories, so there are consistent funding inflows for interstate patients. Victoria said it supports the Commission's current adjustment for cross-border health flows for

[28] Independent Health and Aged Care Pricing Authority, Consultation Paper on the Pricing Framework for Australian Public Hospital Services 2022-23, Independent Health and Aged Care Pricing Authority, 2021, accessed 14 June 2024, p20. Independent Health and Aged Care Pricing Authority, Australian Hospital Patient Costing Standards Version 4.1 - Part 1 - Standards, Independent Health and Aged Care Pricing Authority, 2021, accessed 14 June 2024, p37.

[29] Independent Health and Aged Care Pricing Authority, Australian Hospital Patient Costing Standards Version 4.2 - Part 1 - Standards, Independent Health and Aged Care Pricing Authority, 2023, accessed 14 June 2024, p40.

Commonwealth payments under the National Health Reform Agreement. However, Victoria questioned the extent to which this fully captures state-to-state cross border payments.

276 Victoria requested the Commission examine how the state-to-state funding flows for health services impact its assessments and confirm for states they align with the relevant clause of the National Health Reform Agreement.

Commission response

277 Commonwealth payments are an important source of revenue available to states and are taken into account when determining each state's fiscal capacity and GST share. In general, the higher the value of Commonwealth payments a state receives, the less its requirement for GST revenue.

278 The National Health Reform Agreement funding is shared by the Commonwealth and states. Section A111 of the National Health Reform Agreement relates to the funding arrangements for National Health Reform Commonwealth funding for cross-border activity. It specifies that the state where a patient normally resides should meet the cost of hospital services.

279 The Commission uses cross-border expense data provided by the National Health Funding Body to make cross-border adjustments to the National Health Reform Commonwealth payments. The adjustments ensure that the payment states are recorded as receiving only include services provided to their own residents. States that are net providers of health services to residents of other states have their National Health Reform payments reduced, so they are not penalised for their spending on services provided to residents of other states.

280 The Commission does not make any adjustment to the state share of National Health Reform funding. Bilateral agreements are in place to compensate states for the services provided to residents of other states. There is no need for the Commission to do anything about the state share of National Health Reform funding.

Commission draft position

281 The Commission proposes to continue to use cross-border data to apply cross-border adjustments to the National Health Reform Agreement Commonwealth payments. No further action is required to address Victoria's concerns.

Draft 2025 Review assessment method

282 Table 20 shows the proposed structure of the 2025 Review health assessment.

Table 20 Proposed structure of the health assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Admitted patients	Socio-demographic composition	Recognises that the use and cost of services varies by age, socio-economic status, remoteness, and Indigenous status.	No
	Non-state sector (a)	Recognises that non-state funded health services such as private health insurance funded hospital services affect state health spending.	Yes. Change to indicator
	Wage costs	Recognises differences in wage costs between states.	No
Emergency departments	Socio-demographic composition	Recognises that the use and cost of services varies by age, socio-economic status, remoteness, and Indigenous status.	No
	Non-state sector (b)	Recognises that non-state health services, such as general practitioners (GPs), affect state health spending.	No
	Wage costs	Recognises differences in wage costs between states.	No
Non-admitted patients	Socio-demographic composition	Recognises that the use and cost of services varies by age, socio-economic status, remoteness, and Indigenous status.	No
	Non-state sector	Recognises that non-state health services, such as specialists and private health professionals affect state health spending.	No
	Wage costs	Recognises differences in wage costs between states.	No
Community and public health	Ambulatory community mental health services (c)	Recognises that the use and cost of services varies by age, socio-economic status, remoteness, and Indigenous status.	Yes
	Balance of the component – socio-demographic composition (c)	Recognises that the use and cost of services varies by age, socio-economic status, remoteness, and Indigenous status.	Yes
	Non-state sector	Recognises that non-state health services, such as general practitioners (GPs), affect state health spending.	No
	First Nations grants adjustment	Recognises the impact of Commonwealth grants to Aboriginal Community Controlled Health Organisations.	No
	Cross-border	Recognises the net cost that the ACT incurs in providing services to NSW residents.	No
	Wage costs	Recognises differences in wage costs between states.	No
Non-hospital patient transport	Socio-demographic composition	Recognises that remoteness influences service use.	No
	Wage costs	Recognises differences in wage costs between states.	No
National Partnership on COVID-19	Actual per capita	Recognises that state spending under the National Partnership on COVID-19 reflected circumstance beyond state control.	Yes

(a) The Commission proposes that the non-state sector adjustment for admitted patients be based on privately insured patient expenses, instead of privately insured patient separations.

(b) The Commission proposes a change in data source based on Australian Institute of Health and Welfare data on the proportion of emergency department presentations that are potentially treatable by GPs.

(c) The Commission proposes these changes to the assessment of community and public health: use the Australian Institute of Health and Welfare data on ambulatory community mental health to determine per capita use rates for mental health services for the socio-demographic groups used in the health assessment; and expand the current proxy for activity (emergency department triage categories 4 and 5) to include selected non-admitted patient services, applied to the balance of the component.

Indicative distribution impacts

283 The impact of the proposed COVID-19 and non-COVID-19 changes to the health assessment are presented separately because of the particular circumstances associated with the separate assessment of state expenses on COVID-19.

284 First, there is a significant reduction in state spending on COVID-19 related health services between the assessment years for the 2024 Update and the assessment years relevant for the 2025–26 GST distribution (to be included in the final report of the 2025 Review). Consequently, rather than providing an indication of the impact of the change in terms of the impact on the 2024 Update, using the assessment years for the 2025 Review is more appropriate.

285 Second, given the COVID-19 Commonwealth payment to the states ended in 2022-23, the separate assessment of COVID-19 related health expenses would cease in the 2027 Update. To gain a better indication of the ongoing impact of the proposed non–COVID-19 changes to the health assessment, this impact has been calculated ignoring the COVID-19 change.

Impacts from non-COVID-19 changes

286 The indicative impact of the proposed changes to the health assessment on GST distribution in 2024–25, other than those related to the separate assessment of state spending on COVID-19, is shown in Table 21.

287 Community and public health expenses are proposed to be assessed using different measures of activity.

288 Broadening the proxy indicator of community and public health activity results in higher assessed spending needs for states with relatively larger shares of their population in less remote areas or in higher socio-economic status cohorts, or with relatively larger shares of non-Indigenous or younger people.[30]

289 Assessing expenses on ambulatory specialised community mental health using a direct measure of the use of these services results in higher assessed spending needs mainly for states with relatively larger shares of their population in less remote areas.

290 The proposed change to the indicator of admitted patient non-state activity affects the estimates of states' actual non-state sector activity as well as their assessed non-state sector activity, with the non-state sector adjustment being the difference between these 2 measures.[31]

291 Using updated data on New South Wales residents' use of ACT services increases GST distribution to the ACT and reduces it for New South Wales.

[30] See Figure 4 for more information.

[31] See Table 8, Table 9 and Table 10 for more information.

292 Using updated data on the split between state spending on hospital and non-hospital patient transport reduces expenses for non-hospital patient transport compared with the 2024 Update. This reduces GST distribution to states that are assessed to need to spend more than their per capita share on non-hospital patient transport.

Table 21 Indicative impact on GST distribution of proposed non-COVID-19 changes (disaggregated), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Community health use indicator	58	23	-34	27	-7	-11	31	-88	139
New ambulatory community mental health assessment	98	79	-26	-68	-18	-35	-2	-28	177
Admitted patient non-state sector indicator	68	34	138	-239	-17	33	-17	-1	274
Cross border	-10	0	0	0	0	0	10	0	10
Non-hospital patient transport	9	7	-1	-9	0	1	0	-7	17
Total	**223**	**143**	**78**	**-289**	**-42**	**-12**	**23**	**-123**	**466**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Community health use indicator	7	3	-6	9	-4	-19	65	-341	5
New ambulatory community mental health assessment	11	11	-5	-23	-9	-59	-5	-110	6
Admitted patient non-state sector indicator	8	5	25	-81	-9	56	-35	-4	10
Cross border	-1	0	0	0	0	0	22	0	0
Non-hospital patient transport	1	1	0	-3	0	2	0	-26	1
Total	**26**	**20**	**14**	**-98**	**-22**	**-20**	**47**	**-481**	**17**

Note: The analysis assumes no change to the assessment of COVID-19 related health spending.
Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapter.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025–26.

Impacts from COVID-19 changes

293 Table 22 shows the indicative impact on the GST distribution in 2025–26 (compared with the 2024 Update) of the proposal to separately assess state spending on COVID-19.

294 The change in distributions shown in the table are the net effect of:

- assessing revenue from the Commonwealth payment under the National Partnership on COVID-19 Response on an actual per capita basis compared with the no impact treatment of the payment in the 2024 Update
- assessing state spending of the Commonwealth payment on an actual per capita basis compared with the exclusion of this spending from the assessment in the 2024 Update

- assessing state spending from own-source revenue on COVID-19 on an actual per capita basis compared with assessing it in the health assessment in the 2024 Update.

295 Over 2021–22 and 2022–23, New South Wales, Victoria, Tasmania and the Northern Territory spent more than their per capita share on COVID-19 related health services. Under an actual per capita assessment method, these states have higher-than-average assessed expenses for COVID-19 health services. When compared with how these expenses were assessed under 2020 Review methods, Tasmania and the Northern Territory receive less GST.

Table 22 Indicative impact on GST distribution of proposed COVID-19 changes (disaggregated), 2025–26

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Commonwealth payment for COVID-19	-144	-193	268	14	64	-7	7	-10	353
State spending of Commonwealth payment	144	193	-268	-14	-64	7	-7	10	353
State own source COVID-19 spending	201	283	-306	-52	-75	-23	-2	-25	484
Net effect of treatment of COVID-19	**201**	**283**	**-306**	**-52**	**-75**	**-23**	**-2**	**-25**	**484**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Commonwealth payment for COVID-19	-17	-27	48	5	34	-11	14	-37	13
State spending of Commonwealth payment	17	27	-48	-5	-34	11	-14	37	13
State own source COVID-19 spending	24	40	-55	-18	-40	-39	-5	-96	18
Net effect of treatment of COVID-19	**24**	**40**	**-55**	**-18**	**-40**	**-39**	**-5**	**-96**	**18**

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapter.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025–26.
The indicative impacts are based on the reconciled value of the Commonwealth payments under the National Partnership on COVID-19 Response.

Attachment A: Tier 2 classification 2021–22

Table A-1 Tier 2 classification v7.0 2021–22

Group and Class	Description
Procedures	
10.01	Hyperbaric medicine
10.02	Interventional imaging
10.03	Minor surgical
10.04	Dental
10.05	Angioplasty/angiography
10.06	Endoscopy – gastrointestinal
10.07	Endoscopy – urological/gynaecological
10.08	Endoscopy – orthopaedic
10.09	Endoscopy – respiratory/ear, nose and throat (ENT)
10.10	Renal dialysis – hospital delivered
10.11	Chemotherapy treatment
10.12	Radiation therapy – treatment
10.13	Minor medical procedures
10.14	Pain management interventions
10.15	Renal dialysis – haemodialysis – home delivered
10.16	Renal dialysis – peritoneal dialysis – home delivered
10.17	Total parenteral nutrition – home delivered
10.18	Enteral nutrition – home delivered
10.19	Ventilation – home delivered
10.20	Radiation therapy – simulation and planning
Medical consultations	
20.01	Transplants
20.02	Anaesthetics
20.03	Pain management
20.04	Developmental disabilities
20.05	General medicine
20.06	General practice and primary care
20.07	General surgery
20.08	Genetics
20.09	Geriatric medicine
20.10	Haematology
20.11	Paediatric medicine
20.12	Paediatric surgery
20.13	Palliative care
20.14	Epilepsy
20.15	Neurology
20.16	Neurosurgery
20.17	Ophthalmology
20.18	Ear, nose and throat (ENT)
20.19	Respiratory
20.20	Respiratory – cystic fibrosis
20.21	Anti-coagulant screening and management
20.22	Cardiology

Group and Class	Description
20.23	Cardiothoracic
20.24	Vascular surgery
20.25	Gastroenterology
20.26	Hepatobiliary
20.27	Craniofacial
20.28	Metabolic bone
20.29	Orthopaedics
20.30	Rheumatology
20.31	Spinal
20.32	Breast
20.33	Dermatology
20.34	Endocrinology
20.35	Nephrology
20.36	Urology
20.37	Assisted reproductive technology
20.38	Gynaecology
20.39	Gynaecological oncology
20.40	Obstetrics – management of pregnancy without complications
20.41	Immunology
20.42	Medical oncology – consultation
20.43	Radiation therapy – consultation
20.44	Infectious diseases
20.45	Psychiatry
20.46	Plastic and reconstructive surgery
20.47	Rehabilitation
20.48	Multidisciplinary burns clinic
20.49	Geriatric evaluation and management (GEM)
20.50	Psychogeriatric
20.51	Sleep disorders
20.52	Addiction medicine
20.53	Obstetrics – management of complex pregnancy
20.54	Maternal foetal medicine
20.55	Telehealth – patient location
20.57	COVID-19 response
Diagnostic imaging	
30.01	General imaging
30.02	Magnetic resonance imaging (MRI)
30.03	Computerised tomography (CT)
30.04	Nuclear medicine
30.05	Pathology (microbiology, haematology, biochemistry)
30.06	Positron emission tomography (PET)
30.07	Mammography screening
30.08	Clinical measurement
Allied health	
40.02	Aged care assessment
40.03	Aids and appliances
40.04	Clinical pharmacy
40.05	Hydrotherapy

Group and Class	Description
40.06	Occupational therapy
40.07	Pre-admission and pre-anaesthesia
40.08	Primary health care
40.09	Physiotherapy
40.10	Sexual health
40.11	Social work
40.12	Rehabilitation
40.13	Wound management
40.14	Neuropsychology
40.15	Optometry
40.16	Orthoptics
40.17	Audiology
40.18	Speech pathology
40.21	Cardiac rehabilitation
40.22	Stomal therapy
40.23	Nutrition/dietetics
40.24	Orthotics
40.25	Podiatry
40.27	Family planning
40.28	Midwifery and maternity
40.29	Psychology
40.30	Alcohol and other drugs
40.31	Burns
40.32	Continence
40.33	General counselling
40.34	Specialist mental health
40.35	Palliative care
40.36	Geriatric evaluation and management (GEM)
40.37	Psychogeriatric
40.38	Infectious diseases
40.39	Neurology
40.40	Respiratory
40.41	Gastroenterology
40.42	Circulatory
40.43	Hepatobiliary
40.44	Orthopaedics
40.45	Dermatology
40.46	Endocrinology
40.47	Nephrology
40.48	Haematology and immunology
40.49	Gynaecology
40.50	Urology
40.51	Breast
40.52	Oncology
40.53	General medicine
40.54	General surgery
40.55	Paediatrics
40.56	Falls prevention

Group and Class	Description
40.57	Cognition and memory
40.58	Hospital avoidance programs
40.59	Post-acute care
40.60	Pulmonary rehabilitation
40.61	Telehealth – patient location
40.62	Multidisciplinary case conference - patient not present
40.63	COVID-19 response
40.64	Chronic pain management

Source: Independent Health and Aged Care Pricing Authority, Tier 2 non-admitted services classification 2021-22, Independent Health and Aged Care Pricing Authority, 2020, v7, accessed 14 June 2024.

Housing

Overview

1 On 6 October 2023, the Commission issued a consultation paper on the housing assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission's preliminary view was that there should be a separate assessment for public and community housing if it resulted in a material difference in GST distribution.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that the housing assessment remains fit for purpose notwithstanding recent developments in the housing market?

State views

5 Queensland, Western Australia, South Australia, Tasmania and the ACT agree that the housing assessment remains fit for purpose notwithstanding recent developments in the housing market.

6 New South Wales said the housing assessment should be revised to remove the use of socio–demographic drivers and instead directly assess the level of housing stress within each state. New South Wales said the demand for social housing derives from an inability of households to find suitable private housing, not from the intrinsic characteristics of certain socio–economic groups within the community.

7 New South Wales said using the proportion of households in each state that are in, or potentially in, housing stress is consistent with the Commission's intent to apportion national social housing expenses to states based on underlying need.

8 New South Wales said the Commission should investigate a more appropriate measure of calculating low socio–economic status households than equivalised national income per week. New South Wales said this approach is faulty as it is solely a measure of income and does not consider cost or household purchasing power within a state. New South Wales said if the Commission only accounts for the

income component at a national average level, it will not accurately capture the low socio–economic status populations under housing stress in each state.

9 New South Wales said a better approach would be to consider some combination of household income and cost, using the standard 30/40 measure of housing stress.[1] Under this measure housing stress is driven by income (i.e. lowest 40% of incomes) and cost (i.e. proportion of these households spending 30% of this income on shelter). New South Wales said alternatively, the Commission could adjust its $650 low socio–economic status income threshold for each state to recognise differences in average rents between states.

10 Victoria said that while the housing assessment remains mostly fit for purpose housing affordability should be introduced as a driver of need. Victoria said as housing affordability declines, people require more support from governments to stay in housing and rely on public services more. Victoria said this driver should be based on low-income households spending more than 30% of income on rent and account for the additional burden in urban areas.

11 In its response to the welfare consultation paper, Victoria said that if homelessness services are assessed separately, the homelessness component should form part of the housing category.

12 The Northern Territory said it has by far the highest rates of homelessness in Australia, at more than 10 times the national average. It said the majority of the Northern Territory's homelessness is due to severe overcrowding, which drives social housing need. The Northern Territory said there should be changes to the current method to directly account for overcrowding because the current method reduces assessed housing funding in states with above-average overcrowding. The Northern Territory said because the national average use rates are applied to each state's total households, a state with lower housing per capita, with higher overcrowding or homelessness rates, is apportioned less funding per capita.

13 The Northern Territory said the current method should be converted from a dwelling-based apportionment to a per capita apportionment. It said the method should also incorporate an indicator of residual drivers of housing need, such as differences in private housing stock.

14 Queensland noted the assessment is already overly complex and has the second lowest overall distribution of expense assessments. It said it did not support adding further disaggregation to this assessment as it is unlikely to be material and would result in additional unnecessary complexity.

[1] Australian Housing and Urban Research Institute (AHURI), *Understanding the 30:40 indicator of housing affordability stress*, AHURI, 2019, accessed 14 June 2024.

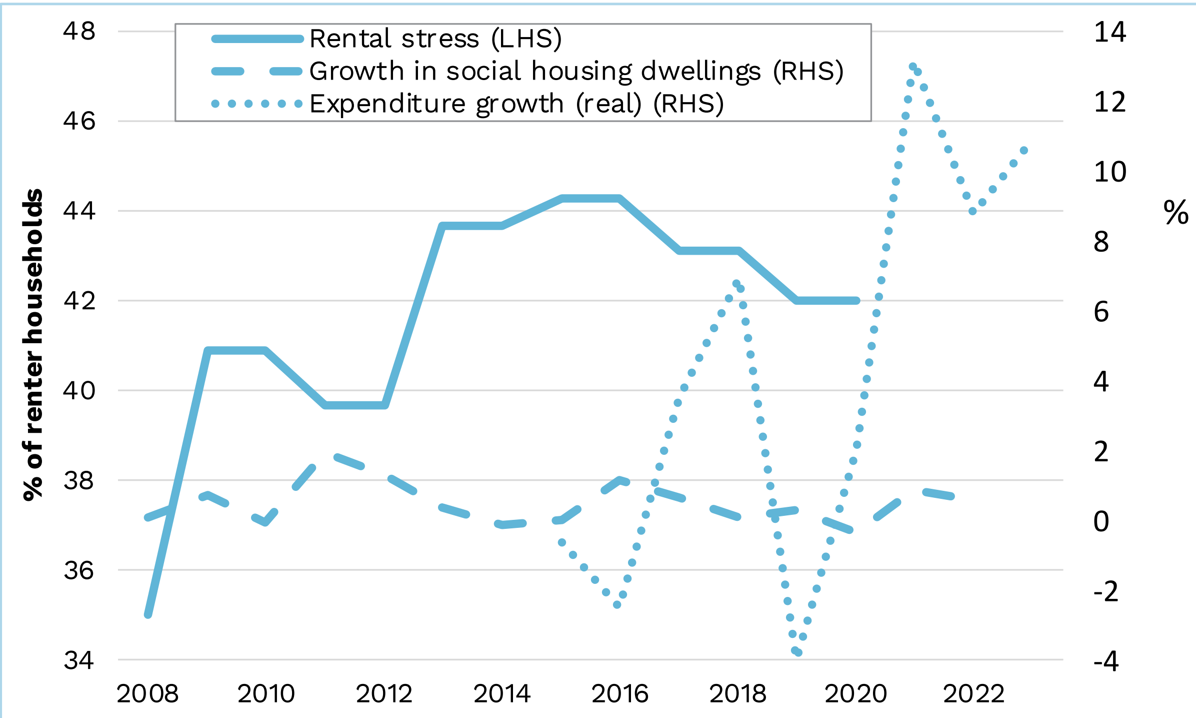
Commission response

Housing stress

15 The Commission agrees that there is a conceptual case that housing stress is a driver of demand for social housing. However, increased demand does not necessarily lead to increased provision of social housing. In response to state comments the Commission examined whether there were data available to quantify the relationship.

16 Figure 1 compares changes over time in rental stress (defined as share of low-income households paying more than 30% of income[2]) with the growth in state expenditure (recurrent and capital) on social housing and the growth in social housing dwellings. This does not present a compelling case for there being a relationship between housing stress and the provision of social housing. Expenditure growth will in part reflect the replacement of older social housing stock rather than the creation of additional stock. In addition, the caveats noted by the publisher of the dwellings data, the Australian Institute of Health and Welfare, mean the data may not be of sufficient quality to quantify a relationship between housing stress and the provision of social housing. In addition, states have not presented nor is the Commission aware of alternative data enabling the relationship between housing stress and state spending on social housing to be quantified.

Figure 1 Relationship between rental stress and social housing



Source: ABS Housing Occupancy and Costs, Australia, 2019-20; Productivity Commission, Review of Government Services, Housing Table 18A.1 various years; Australian Institute of Health and Welfare National, Housing Assistance in Australia 2023.

[2] Lower income households are defined as those households containing the 40% of people at or below the 40th percentile of equivalised disposable household income (excluding RA) calculated at the total Australian households level.

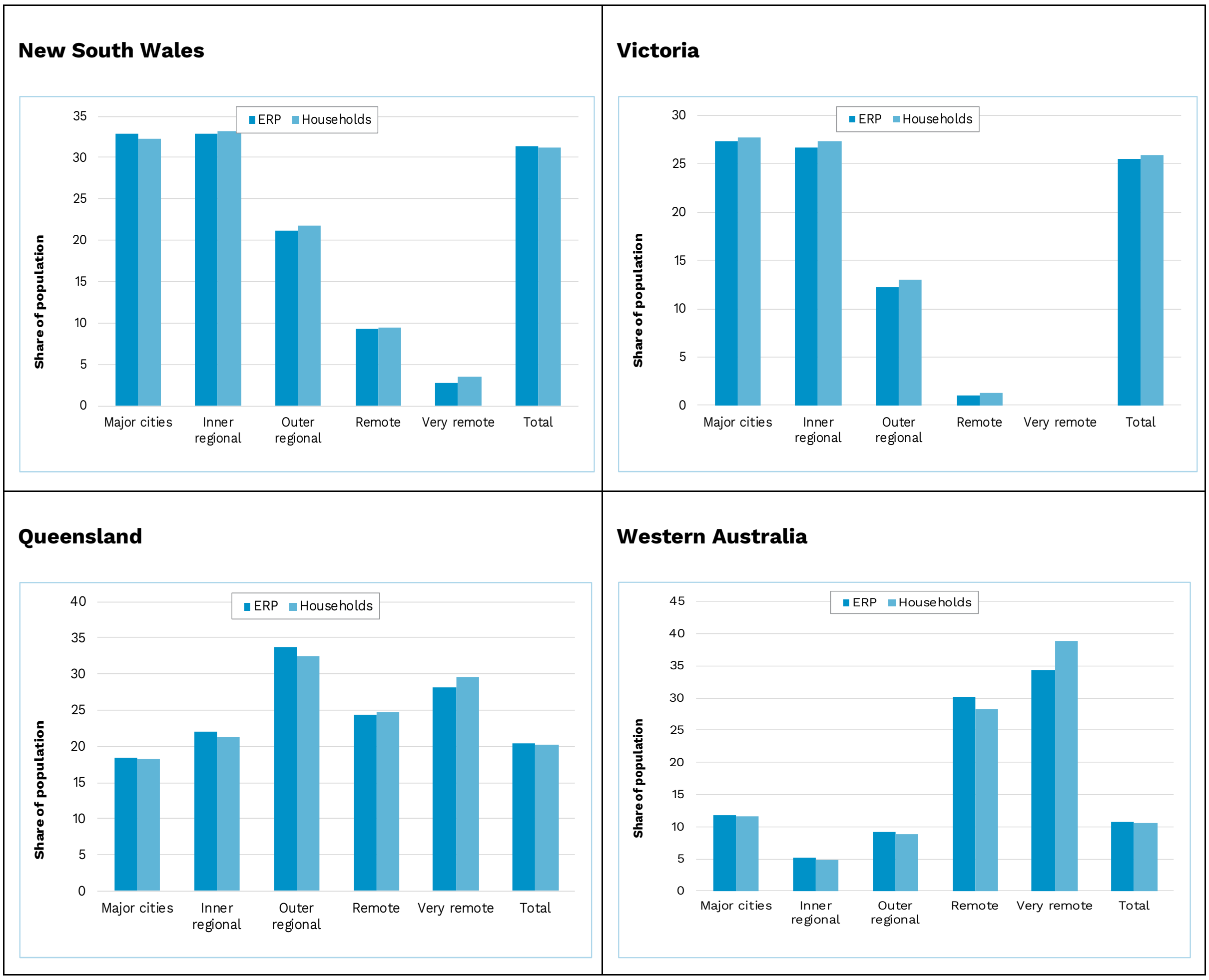
Measure of socio-economic status

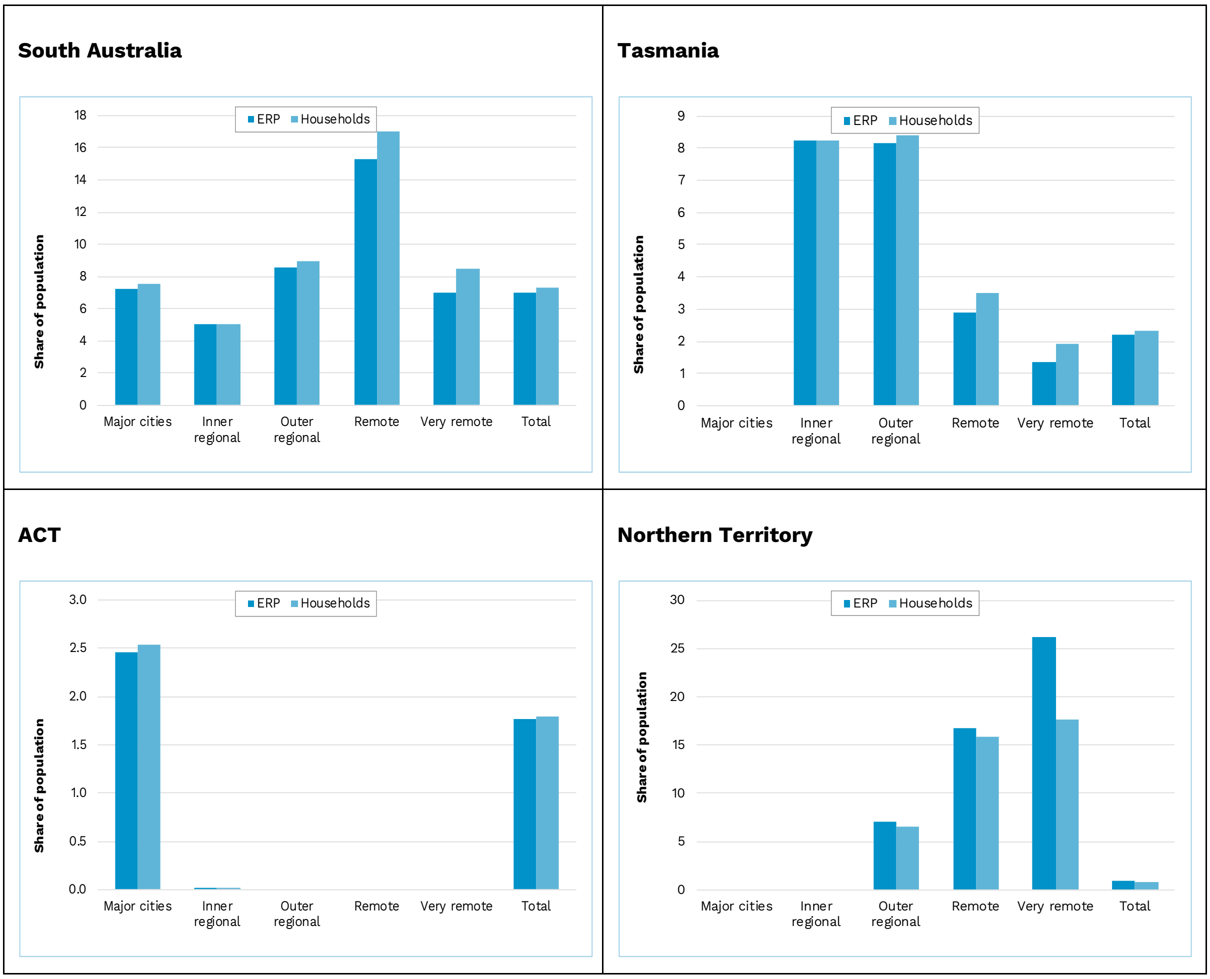
17 New South Wales suggested an alternative measure of socio–economic status in the housing assessment. However, states determine eligibility for social housing based on household income. As such, the Commission considers that household income remains the most appropriate measure of socio–economic status for the housing assessment.

Household undercount due to overcrowding

18 The 2020 Review assessment method is household-based. National average per capita expenses and revenues are apportioned by state, based on their share of households in each geographic area. The Commission agrees with the Northern Territory's view that states that have overcrowded social housing are disadvantaged by this approach. The largest difference between a state's share of individuals and its share of households occurs for the Northern Territory in very remote areas (see Figure 2). An individuals-based assessment has the potential to address this issue.

Figure 2 Population shares – Individuals vs households





Source: Commission calculation using ABS 2021 census counts of households and disaggregated estimated resident population at June 2021 rescaled to total estimated resident population at December 2021.

19 The Commission has developed an individuals-based assessment using census data enumerated by individuals. Socio–demographic groups (remoteness, Indigenous status, socio–economic status) are cross classified to derive national social housing use rates.

20 The process for classifying individuals by remoteness and socio–economic status does not change how any individual would be classified compared to the existing household-based assessment.

21 For socio–economic status, the individuals enumeration and the households enumeration use Equivalised Total Household Income (weekly)[3] to measure whether a household is considered high or low income.[4] For the individuals enumeration, each person in a household is allocated the same equivalised total household income as the household would be allocated in the households enumeration.

22 For remoteness, the enumeration of individuals uses the 5 ABS remoteness areas, as is the case in the 2020 Review method based on enumeration of households.

[3] ABS (Australian Bureau of Statistics), *Equivalised total household income (weekly) (HIED)*, ABS, 2021, accessed 14 June 2024.

[4] Current threshold is $650 per week (based on state social housing income eligibility for single income households).

23 However, it is possible for the Indigenous status of individuals to be different in the individuals enumeration compared to the households enumeration. For Indigenous status, the individuals enumeration uses the census variable *Indigenous Status*[5], which classifies the response of people who identified themselves as being First Nations. The current household enumeration uses the *Indigenous Household Indicator* census variable[6], which classifies households that have at least one person who identified as being First Nations. The difference is, for the individuals enumeration, in households with First Nations and non–Indigenous members, each person will be classified by their Indigenous status, whereas the households enumeration classifies a household with First Nations and non–Indigenous members as one Indigenous household.

Commission draft position

24 The Commission proposes to use an individuals-based assessment instead of a household assessment to better reflect the drivers of state spending. This approach addresses the underestimation of use for social housing due to overcrowding.

25 The Commission does not propose to include housing stress as a driver of need as reliable data are not available to establish a relationship between housing stress and the provision of social housing. The Commission proposes to continue to use household income as the measure of socio–economic status as this is what states use to determine eligibility for social housing.

Q2. Do states agree that there should be separate assessments for public and community housing if it results in a material change in GST distribution?

State views

26 New South Wales, Victoria, Queensland and Tasmania said there should not be separate assessments for public and community housing.

27 New South Wales said public and community housing represent different policy options available to states to provide for their overall social housing service needs and differences in states' public and community housing mix do not reflect any genuine difference in need or circumstance.

28 Victoria considers community and public housing should not be assessed separately because the demographic breakdowns of households in community and public housing appear to be very similar.

29 Queensland said where states have a higher concentration of community housing compared to public housing, this is most likely a result of the community housing

[5] ABS (Australian Bureau of Statistics), *Indigenous status (INGP)*, ABS, 2021, accessed 14 June 2024.

[6] ABS (Australian Bureau of Statistics), *Indigenous household indicator (INGDWTD)*, ABS, 2021, accessed 14 June 2024.

market responding to service delivery decisions made by states, rather than differences in fiscal needs.

30 Tasmania said the proportion of delivery by each sector is determined by a complex range of factors, including policy decisions of state governments. It is concerned that assessing community housing and public housing separately may inadvertently advantage or disadvantage states for these policy choices.

31 Western Australia, the ACT and the Northern Territory said they agree in-principle with the separate assessments. However, they have concerns that the available expense data does not accurately represent state spending on the different forms of social housing. The Northern Territory also said that it is unlikely that remote areas have similar capacity to support community housing due to different legal and economic circumstances in remote First Nations communities.

32 The Northern Territory said the Commission should recognise differing rates of Commonwealth Rent Assistance by state because states that receive higher Commonwealth Rent Assistance than their population share have a reduced spending burden. The Northern Territory suggested a revenue adjustment to distribute Commonwealth Rent Assistance by assessed housing stock.

33 South Australia said data to support the testing of this assumption will be provided as part of the data collection process. South Australia will consider the implications of a revised assessment after data has been returned from states, factoring in any concerns around data quality or comparability.

Commission response

34 The Commission explored the use of separate assessments for public and community housing due to the different funding models for the 2 forms of social housing. In particular, as the Northern Territory said, community housing tenants are eligible for Commonwealth Rent Assistance, which potentially reduces the extent that community housing providers need to be subsidised by state governments.

35 As Tasmania said, a complex range of factors are likely to determine the balance of public and community housing in a state's total social housing stock. All states do not necessarily have the same capacity to choose the mix of public and community housing due to limited availability of community housing providers. This may particularly be the case in remote First Nations communities, as pointed out by the Northern Territory. It is also evident from state comments that there are problems in separately identifying state expenses for public and community housing. On the basis of these considerations, the Commission acknowledges it would be problematic at this time to separately assess public and community housing.

36 Using expense data on public and community housing from the Productivity Commission's Report on Government Services, the Commission tested the materiality of separate assessments. It showed that separate assessments made a

material difference (reduction) to GST distribution for the Northern Territory with limited changes in distribution to other states.

Commission draft position

37 The Commission proposes to continue with a combined assessment of state spending on public and community housing.

Q3. Is the ABS census data on households with members that have long–term health conditions a suitable proxy for households that have high service needs?

Q4. Do states have data on the cost of servicing different household types that would enable the calculation of a cost gradient?

State views

38 New South Wales and Tasmania said there was a conceptual case for assessing households with high service needs as a driver of social housing costs. However, New South Wales, Victoria, Queensland, Western Australia and the Northern Territory do not consider ABS census data on households with members that have long–term health conditions a suitable proxy for households that have high service needs.

39 Queensland said the vast majority of persons within the Queensland social housing system have long–term health conditions and hence will already be included within the current assessment methods.

40 South Australia said while it acknowledges the conceptual case, it has concerns about the appropriateness of the data.

41 Tasmania said that the ABS 2021 Census includes data that are a reasonable proxy for the need to provide social housing households with additional services. It supports the use of these data to develop a driver of need.

42 The ACT said that there is some correlation between tenants of social housing in the ACT who have long–term health conditions and the provision of higher levels of service.

43 Most states said they have limited or no data on the cost of servicing different household types.

44 Tasmania holds data on the additional costs of providing social housing services to tenants with high service needs. Once data required by the Commission have been specified, Tasmania will be able to confirm whether the required information can be provided.

Commission response

45 Feedback from states indicates that ABS census data on households with members that have long–term health conditions are not a suitable proxy for households that have high service needs.

46 Most states are unable to provide data to enable the calculation of a cost gradient for low and high–cost social housing tenants.

Commission draft position

47 The Commission proposes not to pursue the development of a high–cost tenant cost gradient for the 2025 Review because reliable data are not available.

Other issues raised by states

Regional costs

48 New South Wales said it does not consider the 2020 Review general regional cost gradient to be an appropriate method of apportioning regional costs in the housing assessment. New South Wales considers that applying the general regional cost gradient risks overstating the slope steepness (and cost) of housing expenditure in regional and remote areas. New South Wales said a housing-specific gradient, preferably based on comprehensive state data, will provide a more accurate assessment.

49 Victoria said it has concerns with the 2020 Review method for implementation of regional costs for the housing assessment. Victoria said it is unclear why the provision of housing services should have the same remote cost weighting as hospitals and schools. Victoria said the general regional cost gradient should not be applied to the housing assessment. If it is applied, Victoria said a discount of at least 25% should be applied.

50 Western Australia said the general gradient greatly underestimates the costs to supply and maintain social housing in the regional areas. Western Australia said most of its First Nations communities are in the remote and very remote categories with some of these locations being the most isolated in the country. It can pay up to $10,000 in travel costs alone to send tradespersons to provide basic services. Western Australia said Rawlinsons' indices should be used instead of the general regional cost gradient because Rawlinsons' indices are widely used nationally and are developed specifically to provide data on construction costs and variations.

Commission response

51 State differences in tenancy management, maintenance and construction costs are recognised in the recurrent expenses and investment assessments of social housing. These costs are currently measured by using a general regional cost gradient and the Rawlinsons capital cost gradient, as seen in Table 1.

Table 1 Regional costs assessment for social housing assessments

Expense item	Expense weight	Regional costs indicator
Recurrent assessment		
Maintenance expenses	25%	Rawlinsons capital cost weights (50%)
		General regional cost gradient (50%)
Other social housing expenses (a)	75%	General regional cost gradient
Investment		
	100%	Rawlinsons capital cost gradient

(a) Other social housing expenses include tenancy management.
Source: Commission calculation.

52 For the 2025 Review, in response to a number of states that considered the general regional cost gradient was not appropriate for housing expenses, the Commission asked states for data on the cost of providing social housing by region to derive a housing specific regional cost gradient.

53 Only 2 states[7] were able to provide data to support an estimation of a housing specific regional cost gradient. The Commission considers this is not sufficiently representative of what states do to support a robust estimate of how costs change as remoteness increases. Therefore, for the 2025 Review, the Commission proposes to retain the 2020 Review regional costs assessment method for housing, using the general regional cost gradient and Rawlinsons capital cost gradient (Table 1).

Commission draft position

54 The Commission proposes to retain the 2020 Review regional costs assessment method for housing due to a lack of data to support the calculation of a housing specific regional cost gradient.

First Nations cost weight

55 Victoria said it agrees there is indicative evidence that remote and First Nations people utilise housing services more. Victoria noted for the 2020 Review that the Commission applied judgement to determine a cost weighting for First Nations households. State data indicated a cost weighting of 1.06, while data from the Productivity Commission's Report on Government Services produced a weighting of 1.27. The final figure chosen by the Commission was 1.20. Victoria said it supports the Commission's use of judgement where required, however, there is not sufficient justification for the implicit higher weighting towards Productivity Commission data. Victoria said it hopes the Commission can work with states so their data returns are a satisfactory source without the need for judgement.

56 Western Australia said the current First Nations cost weight of 1.20 severely underestimates the additional costs faced by Western Australia to provide housing for First Nations households. Western Australia said the elevated costs in

[7] Queensland and Western Australia.

Western Australia for First Nations social housing reflects the tenant profile (including household size and support needs), and very high repair and maintenance costs for First Nations households. Western Australia said the Commission should investigate other data sources to calculate the First Nations cost weight.

57 The Northern Territory said that the First Nations loading applied in the housing investment assessment should be allowed to vary between jurisdictions and the First Nations loading should be applied to all First Nations dwellings in First Nations communities, homelands and town camps. The Northern Territory said dedicated First Nations housing in these areas is due to state circumstances, influenced by geographic, legal and historical circumstances and is not a policy choice.

Commission response

58 The Commission asked states for data on the cost of providing public housing and State Owned and Managed Indigenous Housing to update the First Nations cost weight. Useable data was only received from 3 states[8] and this produced a First Nations cost weight of 1.24. The Commission also calculated a First Nations cost weight using data from the Productivity Commission's Report on Government Services[9], which produced a cost weight of 1.22.

59 To calculate the capital stock factor for the housing investment assessment, the First Nations cost weight is used to scale-up the number of First Nations people living in First Nations specific social housing. This is intended to account for the increased investment needs associated with First Nations-specific housing, which is often larger and with more expensive specifications than mainstream housing. A national average for the share of First Nations people living in First Nations specific social housing is used in the calculation rather than a state-specific share (Table 2).

Table 2 Proportion of First Nations social housing households living in First Nations-specific dwellings

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2018-19	0.38	0.33	0.49	0.23	0.40	0.31	0.00	0.73	0.42
2019-20	0.33	0.29	0.46	0.22	0.38	0.31	0.00	0.72	0.39
2020-21	0.35	0.30	0.44	0.22	0.36	0.29	0.00	0.72	0.39
2021-22	0.34	0.31	0.43	0.21	0.34	0.21	0.00	0.72	0.38
2022-23	0.33	0.28	0.42	0.20	0.31	0.21	0.00	0.72	0.36

Source: Productivity Commission, Report on Government Services 2024 – 18 Housing data tables [data set], 2024, accessed 14 June 2024.

60 The Commission agrees that each state's existing mix of mainstream and First Nations-specific social housing is likely to be the result of a range of factors and not simply a policy choice. However, by changing the calculation to use state-specific shares of First Nations people living in First Nations-specific social

[8] Queensland, South Australia and Tasmania.

[9] Productivity Commission, *Report on Government Services 2024 – 18 Housing data tables [data set]*, 2024, accessed 14 June 2024.

housing, rather than a national average, as requested by the Northern Territory, it may create an incentive for states to re-balance their mix of mainstream and First Nations-specific social housing.

61 The First Nations cost weight is calculated based on differences in costs associated with mainstream and First Nations specific housing. It would not be appropriate to apply this factor to First Nations people living in mainstream housing.

62 The Commission explored the use of national average shares of First Nations people living in First Nations-specific social housing, disaggregated by remoteness area. However, the Productivity Commission's Report on Government Services data does not allow the data to be disaggregated in this way.

Commission draft position

63 Taking into consideration the updated data provided by 3 states and data produced by the Productivity Commission in its Report on Government Services 2024, the Commission proposes to retain a First Nations cost weight of 1.2 for the 2025 Review.

64 For the calculation of the capital stock factor, the Commission proposes to continue to use the national average share of First Nations people living in First Nations-specific housing as it is policy neutral.

Cultural and Linguistic Diversity

65 New South Wales said the Commission should investigate introducing a cost weight for culturally and linguistically diverse clients in the housing assessment and consider the joint materiality of including a culturally and linguistically diverse driver across all relevant expenditure assessments. New South Wales said for social housing, it has previously been demonstrated that culturally and linguistically diverse households are more likely to require social housing assistance than non-culturally and linguistically diverse households. It provided data for 2020-21 which showed that 30.6% of clients on the social housing wait list had a culturally and linguistically diverse status household head.[10]

66 Victoria said there is significant evidence that culturally and linguistically diverse people use public housing services relatively more, and have higher costs associated when they do. Victoria said these costs are driven by translation services, culturally appropriate design (for example number of bedrooms and layout) and additional tenancy management to ensure social cohesion. Victoria said that a culturally and linguistically diverse driver should be included for the housing assessment to reflect the higher rate of access to social housing and the additional service costs.

[10] New South Wales Department of Communities and Justice, *Statistical Report 2020-21*, 2023.

Commission response

67 The Commission considers there is a conceptual case that people from different cultural backgrounds use social housing at different rates and have higher costs when they do.

68 A substantial amount of work is required to develop, test and consult with states on a potential culturally and linguistically diverse driver for the housing assessment. This includes, in particular, the appropriate definition of cultural and linguistical diversity in the context of social housing use as well as the availability of fit for purpose data.

Commission draft position

69 For the 2025 Review the Commission proposes not to include a cost weight for cultural and linguistic diversity or include cultural and linguistic diversity as a driver of need in this assessment. The Commission proposes to consider how cultural and linguistic diversity affects state service costs as a part of its proposed forward work program.

Cost weight for age

70 New South Wales said the Commission should investigate the materiality of including social housing tenant age as a driver of service costs. New South Wales said that there are higher service costs associated with older social housing tenants.

71 New South Wales said higher costs in providing services for these tenants can include the need for specialist services, the need to provide older tenants with properties with specific features (i.e. the greater difficulty in effectively placing tenants), and the need for minor renovations or other modifications to properties.

Commission response

72 The development of an aged-based cost weight will depend on accessing reliable data on the additional social housing costs associated with older tenants. The Commission will work with the states between reviews to determine if such data are available.

Commission draft position

73 For the 2025 Review the Commission proposes not to incorporate an aged-based cost weight. The Commission will pursue this issue between reviews in consultation with states.

Head Leasing Cost Driver

74 New South Wales said the Commission should evaluate the prevalence of social housing head leasing in each state and consider its impact as a driver of social housing costs.[11] New South Wales said private rental increases impact on the costs of head leasing. It said the cost of the head lease paid by the state government increases in line with the private market. It said, in contrast average state policy is to not increase social housing tenant rents at the same rate as the private market.

Commission response

75 State expenses on head leasing costs are likely to be classified against the Classification of Functions of Government (COFOG) codes that align with the housing assessment. As such, these expenses would be currently assessed by the social housing drivers of need.

76 To determine whether a separate assessment is required, states would first need to provide expense data and information on the socio–demographic composition of tenants in private housing supported by head leasing arrangements. If these expenses represent a significant share of costs and differences exist in the socio-demographic profile of tenants compared to social housing tenants, the development of a separate assessment may be justified. The Commission would need to consult with states on data collection and method development.

Commission draft position

77 For the 2025 Review the Commission proposes not to develop a driver of need for using private rental properties to meet social housing demand as reliable data are not available. The Commission will pursue this issue between reviews in consultation with states.

Affordable housing

78 Victoria said affordable housing programs are emerging across the country in response to increasing rates of housing stress. Victoria said renters living in affordable housing are distinct from social housing renters. It said eligibility requirements are different and rents are tied to the market rate, rather than income as in social housing. Victoria said if deemed to be material, these differences likely mean a separate assessment of affordable housing would be appropriate.

79 Victoria said the Commission should explore introducing a separate assessment of affordable housing as part of the 2025 Review and retain flexibility to address this ahead of the next review as this sector matures.

[11] Head leasing is an option used in both public and community housing, where a private rental property is leased by a provider of social housing and is then on-let to a social housing tenant.

80 The ACT said the amount of expenses on affordable housing are likely to be significant following the implementation of programs to meet affordable housing targets, including under the National Housing Accord, the Housing Australia Future Fund and the National Housing Infrastructure Facility. The ACT said the Commission still needs to undertake a significant amount of analysis and consultation prior to the introduction of a differential assessment of affordable housing.

Commission response

81 The term 'affordable housing' generally refers to a range of measures to assist people find accommodation (social housing; assistance to people in the private rental market; support and accommodation for people who are homeless or at risk of homelessness; and home purchase assistance).[12] Most affordable housing expenses are likely to be reported by states against the COFOG codes that align to the Commission's housing category.[13] Therefore, states' expense needs for most forms of affordable housing support are currently assessed by the Commission based on socio–demographic characteristics (Indigenous status, remoteness and socio–economic status).

82 For the Commission to undertake a separate assessment of states' affordable housing expenses for people in private accommodation, these expenses would need to be reported separately and drivers of these expenses would need to be identified. A materiality test could then be undertaken to determine whether it is appropriate to separately assess affordable housing expenses for people in private accommodation.

Commission draft position

83 The Commission agrees that states are supporting the housing needs of their residents in additional ways and the assessment of spending on housing support may need to reflect these developments. Following the 2025 Review, the Commission will continue to monitor developments in affordable housing support and explore, in consultation with states, whether a differential assessment of support for people in private accommodation should be implemented in the next review.

Data Issues

Census data

84 Victoria and Western Australia said they have concerns with the ABS census data used in the housing assessment.

[12] Federal Financial Relations (FFR), *National Affordable Housing Agreement*, FFR, 2021, accessed 14 June 2024.

[13] Some expenses related to homelessness are likely to be reported against the COFOG codes that align with the Commission's welfare category.

85 Victoria said census responses relating to households are not subject to the same level of revision and adjustment as responses relating to persons.

86 Western Australia said it is disappointed that (despite acknowledging an undercount of census households) the Commission continues to base social housing use solely on census numbers, rather than scaling using the Australian Institute of Health and Welfare data.

87 Western Australia said to counter the known inaccuracy of the number of social housing households, scaling census households with Australian Institute of Health and Welfare data (a more reliable and accurate data source) is necessary, regardless of materiality. Western Australia said the Commission should pro-rata the socio-demographics from the census data to the Australian Institute of Health and Welfare totals.

88 Victoria also said the Commission's method of imputing 'not stated' households is inappropriate and may introduce bias in the respective statistics. Victoria said instead of imputations and the use of assumptions to improve on the census count, the assessment should be discounted.

Government Finance Statistics data on expenses and revenue

89 New South Wales expressed concerns that expenses based on the Government Finance Statistics classification in the social housing component and overall Welfare assessment provided by states may be incorrect. New South Wales said the Commission should evaluate the quality of COFOG expenditure data on social housing and welfare as state data may be materially inaccurate.

90 Western Australia said social housing revenue data are not classified consistently across the states. Western Australia said the Commission should consult with states to analyse if states are including comparable data for the assessment.

Commission response

Census data

91 Both the ABS and the Australian Institute of Health and Welfare publish data on the number of households in social housing. The ABS data is self-reported from the census. The Australian Institute of Health and Welfare data is sourced from state housing authorities and community housing organisations. In 2021, the ABS data had 354,315 households in social housing, and the Australian Institute of Health and Welfare had 417,833.[14] Table 3 compares estimates from the 2 data sources by state and remoteness area.[15]

[14] Australian Bureau of Statistics (ABS), *2021 Census of Population and Housing* [Tablebuilder], 2021, accessed 14 June 2024; Australian Institute of Health and Welfare (AIHW), *Housing assistance in Australia 2023 – Data tables: Social housing households 2023* [data set], 2023, accessed 14 June 2024.

[15] Disaggregated ABS and AIHW data does not sum to the total household counts.

Table 3 Households in social housing – census vs AIHW measures

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Census									
Major cities	97,158	45,056	36,363	22,938	30,338	0	9,625	0	241,478
Inner regional	19,416	13,202	9,994	2,690	1,574	7,935	3	0	54,814
Outer regional	4,039	2,994	9,293	3,523	5,455	3,661	0	2,916	31,881
Remote	603	9	2,205	2,786	749	49	0	2,443	8,844
Very remote	390	0	4,000	4,200	847	65	0	4,877	14,379
Total	**121,606**	**61,261**	**61,855**	**36,137**	**38,963**	**11,710**	**9,628**	**10,236**	**351,396**
AIHW									
Major cities	116,047	55,097	40,954	27,542	33,887	0	11,176	0	284,703
Inner regional	23,156	16,174	10,940	3,103	3,107	10,518	21	0	67,019
Outer regional	5,300	3,396	10,645	3,486	5,370	3,192	0	3,786	35,175
Remote	453	18	1,177	2,201	799	61	0	2,197	6,906
Very remote	82	0	977	1,958	204	8	0	3,666	6,895
Total	**145,038**	**74,685**	**64,693**	**38,290**	**43,367**	**13,779**	**11,197**	**9,649**	**400,698**
Difference									
Major cities	-18,889	-10,041	-4,591	-4,604	-3,549	0	-1,551	0	-43,225
Inner regional	-3,740	-2,972	-946	-413	-1,533	-2,583	-18	0	-12,205
Outer regional	-1,261	-402	-1,352	37	85	469	0	-870	-3,294
Remote	150	-9	1,028	585	-50	-12	0	246	1,938
Very remote	308	0	3,023	2,242	643	57	0	1,211	7,484
Total	**-23,432**	**-13,424**	**-2,838**	**-2,153**	**-4,404**	**-2,069**	**-1,569**	**587**	**-49,302**

Source: Australian Bureau of Statistics (ABS) *2021 Census of Population and Housing* [Tablebuilder], 2021, accessed 14 June 2024; Australian Institute of Health and Welfare (AIHW), *Housing assistance in Australia 2023 – Data tables: Social housing households 2023 [data set]*, 2023, accessed 14 June 2024.

92 There are reliability issues with both datasets. The key concern with the ABS census data is the accuracy with which tenants categorise their landlord type and, as a result, incorrectly indicate a type of housing other than social housing.[16]

93 The Australian Institute of Health and Welfare data has a higher count of households in major cities, inner regional and outer regional, but a lower count of households in remote and very remote areas, compared to the ABS measure. This may be explained by the Indigenous community housing data quality statement associated with the Australian Institute of Health and Welfare data, which says that data were not available for all dwellings or Indigenous Community Housing Organisations and stated that care is required when comparing across states and territories.[17] More broadly, the Australian Institute of Health and Welfare says that the administrative

[16] See data notes at: Australian Institute of Health and Welfare (AIHW), *Housing assistance in Australia 2023 – Data tables: Social housing households 2023 [data set]*, 2023, accessed 14 June 2024.

[17] Australian Institute of Health and Welfare (AIHW), *Indigenous Community Housing Collection, 2021–22; Quality Statement*, 2023, accessed 14 June 2024.

data sets that are used for the Australian Institute of Health and Welfare Housing assistance data collections have inaccuracies, including missing data.[18]

94 In the 2020 Review, the Commission said that the Australian Institute of Health and Welfare data appeared to provide a better count of the number of social housing households because they are collected directly from service providers. However, it did not provide all the socio–demographic information required for the assessment and the Australian Institute of Health and Welfare said the data may not be comparable between states. The Commission decided not to make an adjustment because the adjustment was marginally material and it was unclear that the resulting changes improved the assessment of states' social housing needs.

95 The Commission instead decided to adjust the census count of households by Indigenous status and remoteness area using the adjustment factors for individuals derived from the census post enumeration survey. While this deals with the overall undercount in the census, it does not deal with the assumed undercount of social housing households due to the misclassification of landlord type.

96 The Commission is proposing to change to an individuals-based assessment for the 2025 Review. As explained earlier, the count of individuals in social housing is based on responses to census questions on household status. Therefore, there remains the potential for an inaccurate count of individuals in social housing.

97 The Commission proposes to adjust the census count of individuals in social housing by the ratio of the Australian Institute of Health and Welfare total social household count to the ABS census total social household count (i.e. 1.2). A corresponding adjustment would be made to non-social housing individuals to leave the total individual count unchanged (only the balance between social and non-social housing individuals has changed). The total count would then be adjusted by the adjustment factors for individuals derived from the census post enumeration survey.

98 In regard to Victoria's concerns with imputations to census data, the Commission adjusts census data, to include household responses that are 'not stated' or 'not applicable'.[19] This is done to ensure the assessment captures the total national housing stock.

99 The housing assessment measures the social housing use rates of socio-demographic groups, and to do this, the total national households in each socio–demographic group are used to measure the rate at which each group uses social housing. Therefore, the current adjustments are required in the assessment to measure social housing use rates of each socio–demographic group.

100 The current social housing assessment uses census data classified by landlord type, so 'not applicable' responses include households that are owned outright, or owned

[18] See data notes at: Australian Institute of Health and Welfare (AIHW), *Housing assistance in Australia 2023 – Data tables: Social housing households 2023* [data set], 2023, accessed 14 June 2024.

[19] Australian Bureau of Statistics (ABS), *Understanding supplementary codes in Census variables*, 2022, accessed 14 June 2024.

with a mortgage, which is approximately 66% of the national households. The ‘not stated’ responses imputed by the Commission for the social housing expenses assessment represent approximately 8% of the national households. A ‘not stated’ response is where a person does not complete a relevant field in the census.

Government Finance Statistics data

101 The Commission is aware of inconsistencies in how states report their expenses and revenues against the Government Finance Statistics COFOG codes. Where the Commission can identify misreporting and the size of the misreporting makes a material difference to the assessment, it works with states to resolve the issues.

102 To support the proposal in the welfare chapter to separately assess state spending on homelessness services, states will be asked to provide data on expenses for homelessness services currently recorded against COFOG codes that align with the housing category. These expenses will be transferred to the new homelessness component in the welfare category if the proposal is agreed for the 2025 Review. If states are unable to provide data, the Commission will use state expenditure data from the Report on Government Services and allocate the funding 50/50 between the social housing and welfare COFOGs.

103 This will improve the consistency of state expenses included in the social housing assessment.

Commission draft position

104 To address concerns with the accuracy with which tenants categorise their landlord type in the census, the Commission proposes to rebalance the social housing/non-social housing split using the Australian Institute of Health and Welfare data on social housing households. This change will not affect the assessment of recurrent spending on social housing because shares of the socio–demographic groups in social housing are being adjusted by the same proportion. However, it will affect the assessment of needs for investment in social housing via a change to the capital stock factor.

105 The assessment of state social housing needs requires the estimation of social housing use rates based on all households, not just those in rental properties. As such, the Commission proposes to continue to apportion the ‘not applicable’ and ‘not stated’ responses to relevant groups.

Draft 2025 Review assessment method

106 Following consideration of state views, the Commission proposes to:[20]

- introduce an individuals-based assessment
- introduce an adjustment to rebalance the social housing/non-social housing split in ABS census data using the Australian Institute of Health and Welfare data on social housing households.

107 Table 4 shows the proposed structure of the 2025 Review housing assessment.

Table 4 Proposed structure of the housing assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Social housing expenses	Socio-demographic composition	Recognises that income, Indigenous status and remoteness affect the use of housing services. In addition, a cost weight is applied to recognise the additional cost of providing services to First Nations people.	Yes Assessment is now individuals rather than household-based. ABS census data will be adjusted to rebalance the social housing /non-social housing split using AIHW data.
	Wage costs and regional costs	Recognises the differences in wage costs between states and in the cost of providing services to different areas within a state.	Yes. General regional gradient has been revised.
Revenue	Socio-demographic composition and capacity to raise revenue from rents	Recognises that income, Indigenous status and remoteness affect the number of social housing households as well as the rent paid by households.	Yes. Assessment is now individuals rather than household-based.
First home owner expenses	Equal per capita	This is an equal per capita assessment.	No

[20] The Commission's assessment guidelines specify that it will include a driver where a conceptual case exists, where there are reliable data and methods with which to assess the driver, and where that assessment is material.

Indicative distribution impacts

108 The indicative impact on the GST distribution in 2024-25 from the proposed method changes is shown in Table 5.

Table 5 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	-125	-239	69	129	26	4	-29	166	393
U2024 using draft R2025 methods	-260	-372	78	169	-17	-6	-34	441	689
Effect of draft method change	-134	-133	10	40	-43	-10	-5	276	325
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	-15	-34	12	44	14	7	-60	645	14
U2024 using draft R2025 methods	-30	-53	14	57	-9	-11	-71	1,718	25
Effect of draft method change	-16	-19	2	14	-23	-18	-11	1,074	12

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapters.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

109 The indicative change in the GST distribution compared to the 2024 Update would be due largely to the proposed change from a household-based to an individuals-based assessment (Table 6).

110 This change to the assessment would affect the share of total expenses attributed to each socio-demographic group at the national level. An individuals-based assessment would result in:

- a lower share of expenses in major cities and inner regional areas, and a higher share in remote and very remote areas
- a higher share of expenses for First Nations people
- a slightly higher share of expenses for high income people.

111 The proposed change to the assessment would mean national average per capita spending on each socio-demographic group would be apportioned to states based on their shares of individuals in each socio-demographic group rather than their shares of households. Differences between state shares of households and shares of individuals are shown in Figure 2.

112 Part of the change in GST distribution would relate to a reduction in the expenses assessed in the social housing component. The Commission is proposing to establish a new assessment of state spending on homelessness services in the welfare assessment (see welfare chapter). Based on data provided by states, expenses on homelessness services currently recorded against Classification of the Functions of Government (COFOG) codes that align with the housing category would be

transferred to the new homelessness component in the welfare category. The impact on GST distribution from these budget affects is shown in Table 6.

113 The overall impact on GST distribution from the proposed changes to the general regional cost gradient are shown in the geography chapter. The impact on the housing assessment of the proposed change cannot be separately identified. Part of the change in GST distribution attributed to an individuals-based assessment in Table 6 is due to the new general regional cost gradient.

Table 6 Indicative impact on GST distribution of proposed method changes (disaggregated), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Person level housing needs (a)	-141	-147	14	47	-40	-10	-7	284	0
Reclassified to homelessness	6	14	-4	-7	-3	0	2	-8	0
Total	**-134**	**-133**	**10**	**40**	**-43**	**-10**	**-5**	**276**	**325**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Person level housing needs (a)	-16	-21	2	16	-21	-18	-15	1,106	0
Reclassified to homelessness	1	2	-1	-2	-1	0	4	-32	0
Total	**-16**	**-19**	**2**	**14**	**-23**	**-18**	**-11**	**1,074**	**12**

(a) Includes the effect of the proposed changes to the general regional cost gradient.

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapters.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

Welfare

Overview

1 On 26 October 2023, the Commission issued a consultation paper on the welfare assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed 4 changes to the 2020 Review assessment method. The proposed changes were:

- collecting National Disability Insurance Scheme (NDIS) data from the Department of Social Services Portfolio Budget Statement
- developing a homelessness services assessment
- combining other welfare and non-NDIS disability services, aged care and the national redress scheme into a single assessment
- ceasing to collect national redress scheme spending.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position on the 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that the state NDIS contributions can be collected from the Commonwealth Budget papers rather than from the states?

State views

5 All states except Tasmania and South Australia agreed with the Commission's proposal to collect state NDIS contributions from Commonwealth Budget Papers, specifically the Social Services Portfolio Budget Statement.

6 Tasmania did not support the proposal and said this was because state NDIS contributions are not published in Commonwealth Budget Paper 2.

7 South Australia said it questioned whether state NDIS funding arrangements would be harmonised after the current funding negotiations. It noted that the states and Commonwealth will work together to implement legislative and other changes to the NDIS following the 2023 Review of the NDIS.

8 Western Australia said it questioned how the Commission would determine the share of state spending on non-NDIS disability services, which is currently collected from the states as part of the data provision.

9 Victoria said the Commission should provide states with a comparative analysis of data collected from states and the Commonwealth.

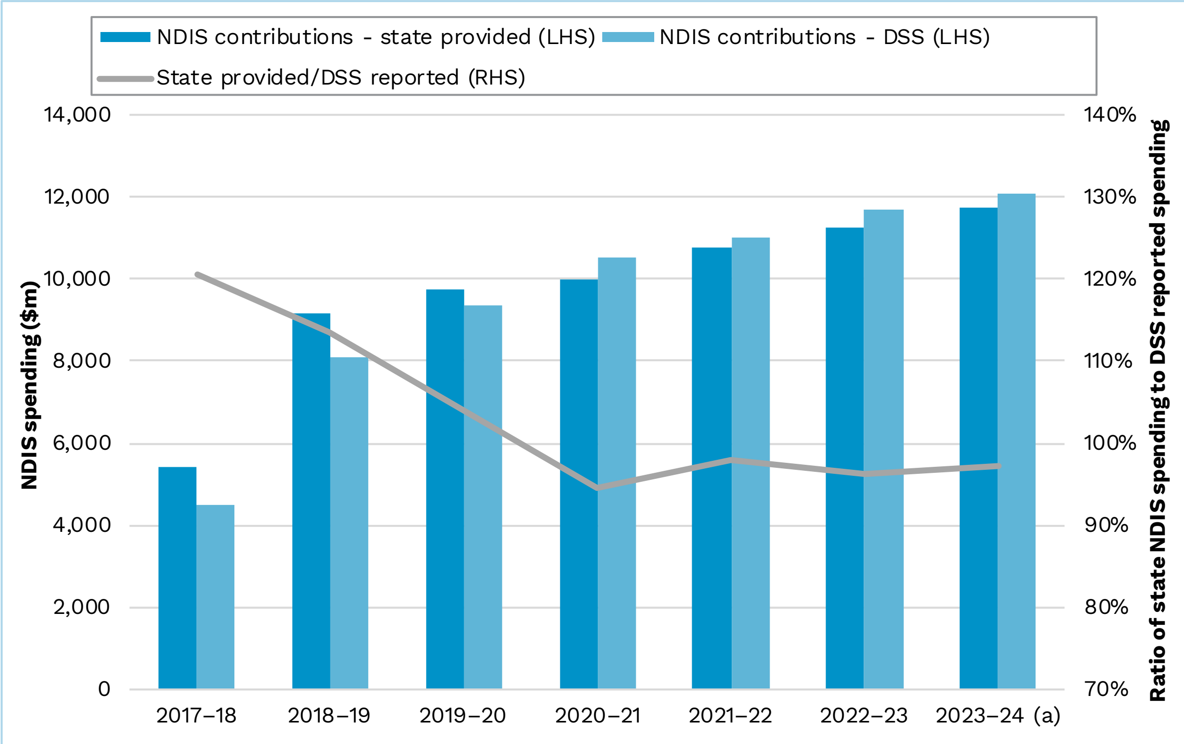
Commission response

10 The Commission notes that state NDIS funding contributions are not published in Commonwealth Budget Paper 2 and has clarified that they are published in the Department of Social Services Portfolio Budget Statement.

11 All existing funding arrangements for the NDIS, with new funding agreements negotiated under variations to existing terms, have a clause ensuring that should a state negotiate more favourable terms with the Commonwealth, these terms will also be reflected in all other funding agreements. This is expected to maintain harmonisation between states.

12 Figure 1 shows the difference between state provided NDIS spending data and state NDIS contributions reported by the Department of Social Services. Since 2021–22, state provided data is 97% of the total state and in-kind contributions to the NDIS. The remaining 3% represents the in-kind contributions from Commonwealth agencies. The NDIS assessment method in the 2020 Review, based on equal per capita at the most recent census, results in this discrepancy being distributed on a population basis across all states. The Commission proposes that this method be retained for the 2025 Review.

Figure 1 **Comparative analysis of state and Department of Social Services provided NDIS contributions from state governments**



(a) DSS estimate.
Source: Department of Social Services Portfolio Budget Statements and State data.

Commission draft position

13 The Commission proposes to collect state contributions to the NDIS from the Commonwealth Department of Social Services Portfolio Budget Statement.

14 The Commission proposes to derive state spending on non-NDIS disability services as the difference between total state spending on disability services and state NDIS spending from the Commonwealth Department of Social Services Portfolio Budget Statement.

Q2. Do states agree that the current NDIS assessment is fit for purpose?

State views

15 All states except South Australia supported maintaining the existing NDIS assessment.

16 South Australia referred to the potential impact of changes to NDIS funding agreements committed to on 6 December 2023 by National Cabinet.[1] It also said that

[1] A Albanese, *Meeting of National Cabinet – the Federation working for Australia* [media release], Australian Government, 6 December 2023, accessed 1 April 2024.

there was a possibility that state NDIS contributions may not be uniform across states and accordingly, it is not clear whether the existing method of assessing NDIS contributions will be appropriate going forward. As a result, South Australia stated it was not able to agree to the Commission's proposal.

17 The ACT agreed that under current arrangements the method remains fit for purpose, but if the NDIS funding allocations change, the Commission should remain open to reflecting this in the assessment method.

Commission response

18 The Commission agrees with South Australia and the ACT that if Commonwealth-state NDIS funding arrangements change, this should be reflected in the assessment method.

19 In the event states receive more favourable terms, the current Commonwealth-state funding agreements allow for states to petition the Commonwealth to receive the same terms offered to other states.[2]

Commission draft position

20 The Commission proposes to maintain the current method of assessing state contributions to the NDIS. The Commission will consider an alternative assessment method for state NDIS contributions if there is a change to current arrangements or the underlying driver of state NDIS contributions changes. Terms of reference for annual updates of GST relativities typically allow for a change of assessment method when there has been a significant change in Commonwealth-state relations.

Q3. Do states support the development of a homelessness services assessment?

State views

21 All states except Victoria and Queensland supported the development of a homelessness services assessment in concept, if it is material.

22 Western Australia said its support for a potential homelessness services assessment was conditional on the exclusion of socio-economic status as a driver of need (discussed below under Question 4).

23 South Australia said its support was dependent on the availability of appropriate and reliable data for all states.

24 Queensland said that it considered a differential assessment was unlikely to be material. It indicated that most expenditure on homelessness services is currently

[2] National Disability Insurance Agency (NDIA), Intergovernmental agreements, NDIS website, 2022, accessed 1 April 2024.

assessed in the housing, health and welfare categories, with similar drivers to the proposed homelessness services assessment.

25 Victoria said it questioned whether a differential assessment would be material, noting the small recurrent state spending on specialist homelessness services. In addition, Victoria said there was insufficient evidence of change since the 2020 Review to overturn the Commission's previous finding of no evidence of causal drivers of homelessness.

State concerns with the Australian Institute of Health and Welfare specialist homelessness services data collection

26 In the welfare consultation paper, the Commission proposed to use specialist homelessness services usage data from the Australian Institute of Health and Welfare to measure the use of homelessness services by different population groups. New South Wales, South Australia and the Northern Territory raised concerns with this data set based on the coverage of state programs and state specific circumstances.

27 New South Wales said that its temporary accommodation program was excluded from Australian Institute of Health and Welfare specialist homelessness services data. This was confirmed by the Australian Institute of Health and Welfare. New South Wales said that it was willing to work with the Commission to identify whether the temporary accommodation program was in scope and had a material impact on the proposed assessment. New South Wales said that it was also willing to provide cross-classified temporary accommodation use data to the Commission for its assessment.

28 South Australia said that their emergency accommodation program is currently excluded from homelessness services expenditure. Similarly, the preventative component of their Private Rental Assistance Program is also excluded.

29 The Northern Territory said the Commission should use Australian Bureau of Statistics (ABS) census data on homelessness rather than the Australian Institute of Health and Welfare specialist homelessness services data. It said that the Australian Institute of Health and Welfare dataset did not comprehensively capture the level of need in the Northern Territory, particularly the level of overcrowding.

Commission response

30 The Commission agrees with the need for nationally consistent data to assess state spending on homelessness services. While the Commission acknowledges that there are some limitations with the Australian Institute of Health and Welfare homelessness service data, this does not necessarily prevent its use in developing an assessment. The data remains the Commission's preferred data source because it is collected using consistent definitions, it allows for cross-classification of services users and is collected annually for all states. Consistent definitions across states for the data collection and contemporaneity are particularly important.

31 New South Wales and South Australia said that spending on temporary accommodation programs is not included in the Report on Government Services definition of specialist homelessness services.

32 The Commission does not have data on the use of the excluded temporary accommodation services in these states by population groups such as Indigenous status. Therefore, the Commission cannot evaluate whether it is appropriate to assess spending on these programs using Australian Institute of Health and Welfare specialist homelessness services use data. On this basis, the Commission considers that the New South Wales and South Australia temporary accommodation programs which are excluded from the Report on Government Services are out of scope of the proposed specialist homelessness services assessment. These expenses will continue to be assessed where states report them in the ABS Classification of the Functions of Government.

33 Currently, South Australia's private rental assistance program and similar programs provided by other states are assessed in the housing assessment, as noted in the Commission's 2020 Review report.[3] This will remain the case in the 2025 Review.

34 The Commission notes Queensland's and Victoria's observations on the materiality of the proposed homelessness services assessment. Table 1 shows the indicative impact of a socio-demographic assessment of specialist homelessness services compared to an equal per capita assessment.

Table 1 Indicative GST impact of assessing specialist homelessness services compared to an equal per capita assessment

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
GST impact ($m)	-9	-70	51	1	-7	7	-9	36
GST impact ($pc)	-1	-10	9	0	-4	12	-19	140

Note: Specialist homelessness services were assessed using Indigenous status, age, socioeconomic status and remoteness with a regional and wage cost adjustment. Expense data was sourced from the states and the Productivity Commission's *Report on Government Services*.

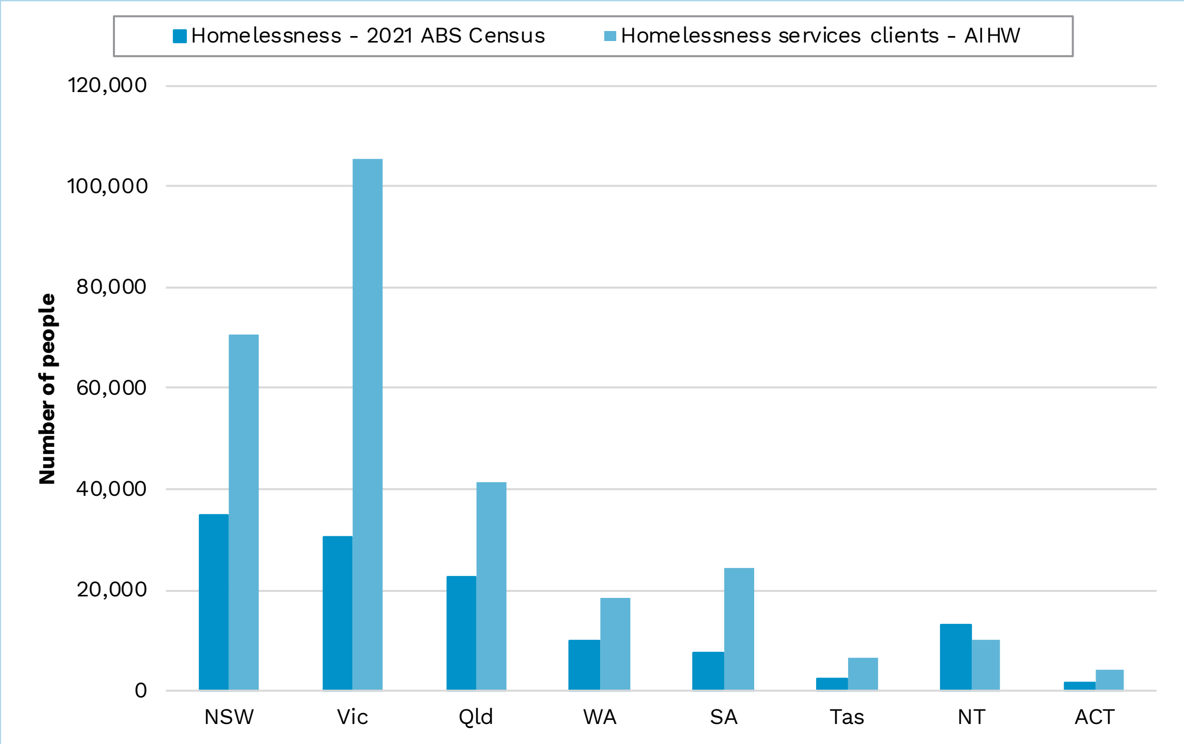
Source: Commission calculation.

35 The Commission does not consider the ABS 2021 Census homelessness data as a viable alternative to assess state government spending on homelessness services. The census captures the level of homelessness (including overcrowding) on census night. However, the census excludes the population at risk of homelessness. If the Commission assessed the population which reported being homeless on census night and assumed all people experiencing homelessness used services, 56% of the users of homelessness services would be excluded from the assessment (Figure 2). In addition, the rank of states differs when comparing the level of specialist homelessness service use and the reported homeless population on census night.

[3] Commonwealth Grants Commission (CGC), *Report on GST Revenue Sharing Relativities: 2020 Review,* Volume 2, Part B, Ch5–18, CGC, 2020, accessed 1 April 2024.

For example, the population accessing homelessness services in Victoria is larger than that in New South Wales, despite New South Wales having a larger homeless population on census night. This is also the case when comparing South Australia and Western Australia.

Figure 2 Number of people experiencing homelessness and number of people accessing specialist homelessness services



Source: Australian Bureau of Statistics (ABS), *2021 Census* [TableBuilder], accessed 1 April 2024 and Australian Institute of Health and Welfare (AIHW), *Specialist Homelessness Services Collection: 2011–12 to 2021–22* [dataset], AIHW, Canberra, 2022, accessed 1 September 2023.

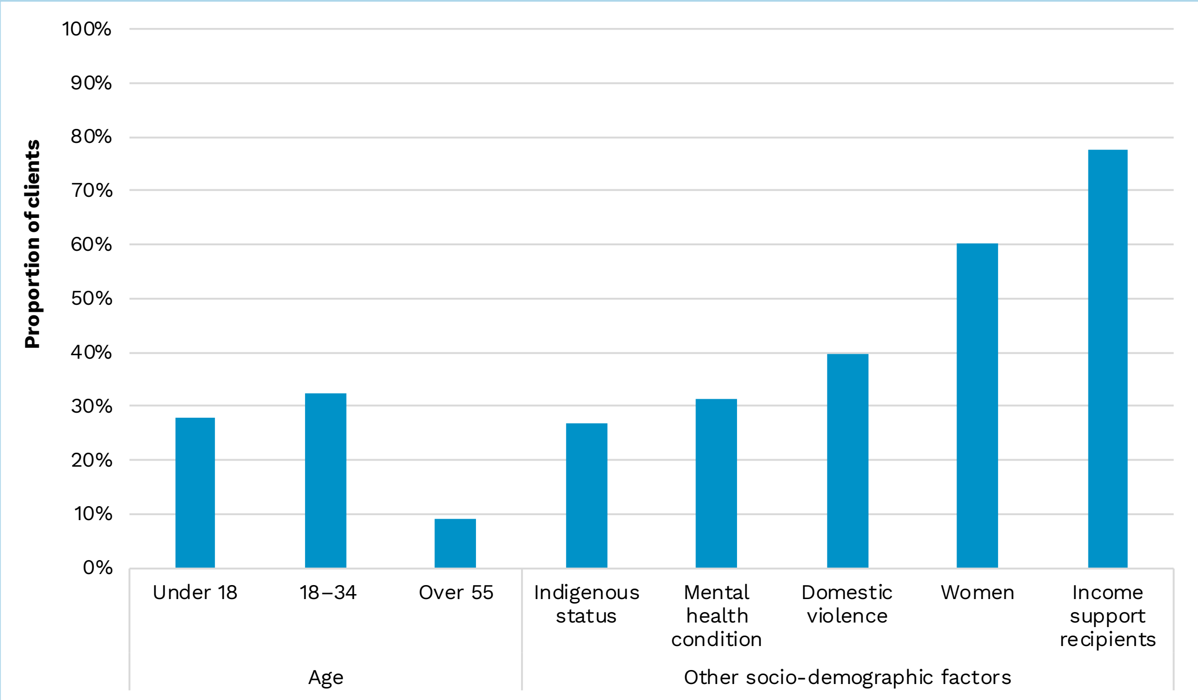
36 Victoria questioned whether there was evidence to change the Commission’s finding in the 2020 Review of no evidence of causal drivers of homelessness.

37 The Commission considers that the current proposal is not comparable to previous attempts to assess state spending on specialist homelessness services. The proposed assessment does not aim to directly assess the causes of homelessness, but instead, differences in the use of state services by population groups. This definitional change shifts the focus from a causal determinant of homelessness to the population groups that have a higher use of services. This is consistent with the approach taken in other assessments, for example health, where differences in service use are the focus, rather than the determinants of poor health.

38 Additionally, the Commission considers that there is sufficient evidence to revisit the treatment of state specialist homelessness services spending. Commission analysis of Australian Institute of Health and Welfare data indicates differential service usage by socio-demographic characteristics (Figure 3), with these population groups differing among states. As a result, an assessment based on socio-demographic

characteristics has been found to be materially different from an equal per capita assessment (Table 1).

Figure 3 Proportion of specialist homelessness services clients by socio-demographic characteristics



Source: AIHW, *Specialist Homelessness Services Collection: 2011–12 to 2021–22*.

Commission draft position

39 The Commission proposes to include a homelessness services assessment using data on specialist homelessness services use from the Australian Institute of Health and Welfare in the 2025 Review method.

Q4. Will states be able to identify spending on homelessness services and identify where that spending is reported in the Government Finance Statistics classifications?

State views

40 New South Wales, South Australia, Tasmania and the Northern Territory stated they would all be able to identify spending on homelessness services in the ABS Government Finance Statistics classification.

41 South Australia said that while most of its homelessness services expenditure is included in the ABS Classification of the Functions of Government (COFOG) 1051 (Housing) and COFOG 1069 (Social exclusion not elsewhere classified), some programs sit outside of this classification and there are other non-homelessness services programs reported in these COFOG classifications.

42 Queensland, Western Australia and the ACT expressed concerns about their ability to identify this expenditure within the ABS Government Finance Statistics classifications. These states said that homelessness services expenditure is reported in many ABS COFOG classifications because many state departments had service delivery obligations in this area including health, education and housing.

43 Victoria said that it would not be able to identify expenditure on homelessness services as reported in the ABS Government Finance Statistics. Further, Victoria viewed the ABS Government Finance Statistics as an inappropriate source because of differing definitions for homelessness across governments. Victoria stated it supported the use of the definition included in the Productivity Commission's Report on Government Services.[4]

Commission response

44 Currently, the Commission cannot identify where states are reporting homelessness services spending in the ABS Government Financial statistics. This means the Commission cannot accurately determine the current treatment of homelessness services spending.

45 The Commission agrees there is a need for a clear definition regarding what constitutes specialist homelessness services. In its consultation paper, the Commission proposed to use the definition from the Productivity Commission's Report on Government Services, which includes services such as 'supported accommodation, counselling, advocacy, links to housing, health, education and employment services, outreach support, brokerage and meals services, and financial and employment assistance.'[5] This remains the Commission's preferred definition.

46 The Commission understands the challenges in collecting data across agencies or departments and allocating spending to relevant COFOG classifications. However, the Commission notes that states report this information annually to the Productivity Commission for the Report on Government Services.

47 Where the Commission can identify misreporting and the size of the misreporting makes a material difference to the assessment, it works with states to resolve the issues.

Commission draft position

48 To support the new assessment method, the Commission proposes a new annual data request to obtain state expenses on homelessness services by COFOG classification, using the definition used by the Productivity Commission for the Report on Government Services. If states are unable to provide data to the

[4] Productivity Commission (PC), *Report on Government Services 2024*, Section 19: Homelessness services, PC, 2024, accessed 1 April 2024.

[5] PC, *Report on Government Services 2024*.

Commission, the Commission will use state expenditure data from the Report on Government Services and allocate the funding 50/50 between the social housing and welfare COFOGs.

Q5. Do states support the proposed drivers to assess homelessness spending, noting further work is to be undertaken on mental health conditions as a potential driver?

State views

49 All states except Victoria supported the proposed drivers of homelessness services spending in full or in part. However, states also cited that additional drivers should be considered when developing the assessment.

50 Victoria said that a separate assessment is inappropriate as the academic literature indicates there are no causal factors for homelessness, and that many of the drivers identified represent a cause and effect of homelessness. Victoria reiterated its support for an equal per capita assessment. However, Victoria also cited potential factors that may increase the risk of homelessness.

51 Potential drivers raised by states in addition to those proposed by the Commission in its consultation paper (age, socio-economic status, remoteness, Indigenous status and mental health) include:

- overcrowding (New South Wales and the Northern Territory)
- family and domestic violence (New South Wales, Victoria, South Australia and the Northern Territory)
- drug and alcohol use (New South Wales)
- disability (New South Wales and South Australia)
- cultural and linguistic diversity (South Australia)
- housing affordability (New South Wales, Victoria and Western Australia).

52 New South Wales said that while socio-economic status is a relevant factor, this could reflect a correlation with other variables such as domestic violence or disability. Western Australia did not support using low socio-economic status because it does not consider state specific circumstances such as income relative to rental affordability.

53 Queensland and Western Australia said they had reservations over the inclusion of mental health as a driver given concerns over the ability of the data to accurately represent psychological stress in remote areas. Tasmania supported the conceptual case for the inclusion of mental health as a driver of homelessness services expenditure.

54 New South Wales said that the current general regional cost gradient was not fit for purpose.

55 The ACT supported the inclusion of wage and regional cost factors, as well as a cross-border adjustment.

Commission response

56 The Commission notes that the literature presented in the 2020 Review suggested there was limited evidence for causal factors of homelessness. The Commission's proposed method does not aim to consider the causal factors of homelessness, rather it assesses the factors which influence the use of specialist homelessness services. The initially proposed drivers of Indigenous status, age, remoteness and socio-economic status are recognised as factors which correlate with increased use of homelessness services in the National Housing and Homelessness agreement.[6] In addition, the distribution of these population groups differs across states.

57 The Commission acknowledges that age itself does not fully encapsulate the complex movements in to and out of homelessness services and how risk factors influence different groups. The Commission views age as a reasonable risk factor for homelessness services spending, reflecting the priority groups from the National Housing and Homelessness Agreement, which includes children and young people and older people.[7]

58 The Commission notes Western Australia's view that low socio-economic status is not a driver of state spending on homelessness services, particularly in remote mining communities where there are severe housing shortages. Upon further consultation with Western Australia, the inclusion of all socio-economic status quintiles was sufficient to address this concern. The Commission considers there is a strong conceptual case for the inclusion of socio-economic status as a driver of homelessness services spending. The Australian Housing and Urban Research Institute notes the heightened risk of homelessness among those receiving income support or on low incomes.[8] The Commission views this as sufficient evidence to support the inclusion of socio-economic status as a driver of need.

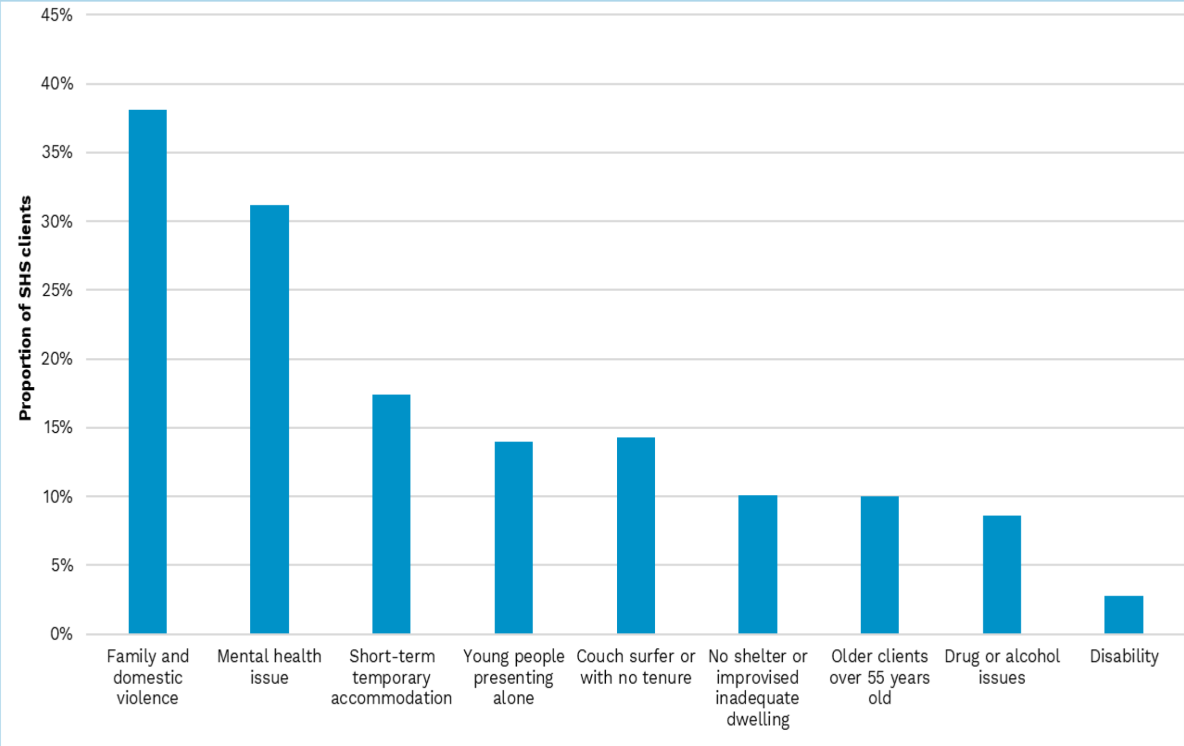
59 The Commission agrees with Tasmania that there is a strong conceptual case for mental health conditions to be a driver of homelessness services spending. The Commission also considers that there is a strong conceptual case for including family and domestic violence, alcohol and drug use and disabilities as drivers of state spending on homelessness services (Figure 4). However, data quality concerns prevent the Commission from developing robust drivers of need for homelessness services spending (Box 1).

[6] Department of Social Services (DSS), *National Housing and Homelessness Agreement,* DSS website, 2024, accessed 5 May 2024.

[7] DSS, *National Housing and Homelessness Agreement*.

[8] Australian Housing Urban Research Institute (AHURI), *Estimating the population at-risk of homelessness in small areas*, AHURI website, 2021, accessed 20 April 2024.

Figure 4 Proportion of specialist homelessness services clients by client group



Note: Young people presenting alone are aged 15–24. Children on a care and protection order are aged under 18 years. Older clients are aged 55 and over. Clients exiting custodial arrangements, clients with a current mental health issue, and clients with problematic drug or alcohol issues are aged 10 and over.

Source: AIHW, *Specialist Homelessness Services Collection: 2011–12 to 2021–22*.

60 For the Commission to be able to consider using a driver in an assessment, the data must satisfy 2 conditions:

- the population of service users must be able to be cross-classified by the proposed driver (i.e. mental health conditions) as well as other drivers
- the population of each state must be able to be cross-classified for each of the proposed drivers. This is necessary to derive a national policy neutral level of service use and assess state's different population characteristics.

61 Further, data sources are required to have broadly consistent definitions to ensure comparability. Data sources should also be of sufficient sample size to ensure that cross-classification does not result in excessive data loss, confidentiality concerns or null values for variables of interest.

62 The Commission identified Indigenous status, age, socio-economic status and remoteness as drivers of use of homelessness services which could be assessed using Australian Institute of Health and Welfare and national data.

63 In addition to this, the Commission considered the following drivers proposed by the states:

- overcrowding
- housing affordability
- family and domestic violence
- drug and alcohol use

- disability
- mental health conditions.

64 The Commission accepts that there is a conceptual case for the inclusion of these drivers as proposed by the states. However, it is not currently feasible to assess homelessness services spending using these drivers. This is because the national data necessary to undertake the assessment are not fit for the Commission's purpose.

65 Table 2 summarises the data sources the Commission investigated to determine whether it could assess the drivers proposed by the states.

66 The Australian Institute of Health and Welfare data can be used to cross-classify service use for all the drivers proposed by states except for overcrowding. This is because the Australian Institute of Health and Welfare data does not distinguish overcrowding from other sources of housing instability such as living in an inadequate dwelling or couch surfing.

67 Housing affordability derived from the 2021 Census Rent affordability indicator (RAID) cannot be used to assess homelessness services because it is collected at the household level, which prevents cross-classification by person level attributes including Indigenous status and age.

68 The ABS 2021–22 Personal Safety Survey is not suitable for estimating cross-classified prevalence of family and domestic violence. The sample of around 12,000 respondents is too small and not suitable for cross-classification. Cross-classified microdata will be subject to confidentiality restrictions when cross-classified by other factors of interest such as age and Indigenous status because of the small sample, preventing its use by the Commission.

69 Data on national drug and alcohol use from the National Health Survey is not suitable for the Commission's analysis. In the 2021–22 survey the alcohol and drug related problems stressor collection ceased. In addition, the National Health Survey is a sample survey like the Personal Safety survey. The sample of around 13,000 households will result in confidentiality concerns when cross-classifying the data by other variables of interest such as age and Indigenous status.

70 There are 3 data sources which could be used to estimate the prevalence of disabilities in the national population, each with limitations.

- The ABS Survey of Disability, Ageing, and Carers 2018–19 is the ABS's preferred source for the prevalence of disability. However, it is not suitable for the Commission's purposes because it does not allow for the cross-classification of respondents by Indigenous status.
- Core activity need for assistance from the 2021 ABS Census is not suitable for use because it does not distinguish the reason for requiring assistance such as old age or disability or other long-term health conditions.

- The National health survey 2021–22 is not suitable for the use by the Commission for the reasons outlined previously (paragraph 68). In particular, the small sample size prevents the cross-classification of data.

71 Detailed analysis on the options considered to assess mental health conditions as a driver of state homelessness services spending are outlined in Box 1.

72 Even for large sample data, the Commission is unable to assess all drivers simultaneously without exposing sensitive unit record data or excessive null values. This requires the Commission to use its judgement to prioritise which drivers will be assessed at the expense of alternatives.

Table 2 Feasibility of assessing proposed drivers using different data sources

Proposed driver	Available in AIHW data	National data source	Cross-classifiable person level data	Sufficient sample size and data quality	Definition consistent with AIHW definition
Indigenous status	✓	ABS Estimated resident population	✓	✓	✓
Age	✓	ABS Estimated resident population	✓	✓	✓
Socio-economic status	✓	ABS Estimated resident population	✓	✓	✓
Remoteness	✓	ABS Estimated resident population	✓	✓	✓
Overcrowding	✗	Homelessness operation groups (OPGP) — Census of Population and Housing: Estimating Homelessness	✓	✓	N/A
Housing affordability	✓	Rent affordability indicator (RAID) — Census of Population and Housing	✗	✓	✗
Family and Domestic Violence	✓	2021–22 ABS Personal Safety Survey	✗	✗	✓
Drug and Alcohol use	✓	ABS National Health Survey 2020-21	✓	✗	✗
Disability	✓	ABS Survey of Disability, Ageing and Carers	✓	✗	✓
Disability	✓	Core activity need for assistance (ASSNP)—ABS Census of Population and Housing	✓	✗	✗
Disability	✓	ABS National Health Survey 2020-21	✓	✗	✗
Mental Health	✓	ABS National Study of Mental Health and Wellbeing 2020-22	✗	✗	✓

Proposed driver	Available in AIHW data	National data source	Cross-classifiable person level data	Sufficient sample size and data quality	Definition consistent with AIHW definition
Mental Health	✓	Has mental health condition — ABS Census of Population and Housing	✓	✗	✓
Mental Health	✓	ABS National Health Survey 2020-21	✓	✗	✓

Box 1 Case study on assessing mental health as a driver of need for homelessness services spending

The Commission considered the inclusion of mental health conditions as a driver of state spending on homelessness services in the 2025 Review Consultation paper. However, upon further investigation, fit for purpose data were not available.

Data on the use of specialist homelessness services by people with mental health conditions from the Australian Institute of Health and Welfare are available, cross-classified by age, Indigenous status, remoteness and socio-economic status. This satisfies the first condition for a driver in a comprehensive socio-demographic assessment.

However, there were data quality concerns with the 3 potential national datasets which could have been used to estimate the prevalence of mental health conditions in cross-classified state populations.

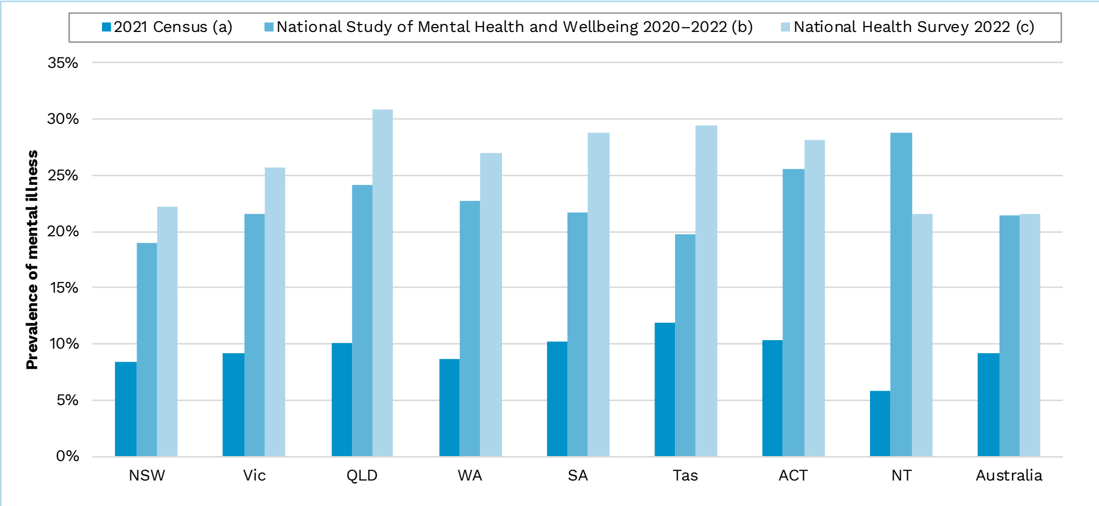
The ABS recommends using the National Study of Mental Health and Wellbeing to estimate the prevalence of mental health conditions in the community.[9] However, estimates are not available for First Nations people, nor does the survey include people living in very remote Australia. As a result, these data are not currently suitable to be used by the Commission. Work is being undertaken by the Commonwealth Department of Health and the ABS to develop a survey of First Nations people.

The second data source is the 2021 ABS Census. The 2021 ABS Census collected information on whether people were suffering from long-term health conditions, including mental health conditions. However, the 2021 Census is also unsuitable for the Commission's use because the census mental health condition question is self-reported leading to potential underreporting. These data are also inconsistent with the ABS's preferred data source for prevalence of mental health conditions (National Study of Mental Health and Wellbeing), particularly for the Northern Territory. This led the Commission to conclude that the 2021 Census data are not representative of the prevalence of mental health conditions in Australia (Figure 5). The Commission's view is that while using the 2021 Census data is feasible, the result is unlikely to reflect the impact of mental health conditions on the need for state spending on specialist homelessness services, particularly in the Northern Territory.

[9] ABS, *Comparing ABS long-term health conditions data sources*, ABS website, 2022, accessed 20 February 2024.

The final data source considered by the Commission to assess mental health conditions was the National Health Survey and the companion National Aboriginal and Torres Strait Islander Health Survey. Commission analysis of the survey microdata in the Person Level Integrated Data Asset (PLIDA) managed by the ABS demonstrated that survey samples did not allow for the cross-classification of mental health conditions by age, socioeconomic status, remoteness, Indigenous status and state because of confidentiality.[10]

Figure 5 National prevalence of mental health conditions, by state, by data source



(a) Long term health conditions – mental health. (b) 12-month mental disorder. (c) Mental and behavioural conditions.
Source: ABS, *2021 Census*; ABS, *National Study of Mental Health and Wellbeing*, ABS, 2023, accessed 1 April 2024; ABS, *National Health Survey*, ABS, 2023, accessed 1 April 2024.

Commission draft position

73 The Commission proposes to include a differential assessment of homelessness services spending using the drivers identified in the consultation paper:

- age
- Indigenous status
- socio-economic status
- remoteness.

74 The Commission agrees with states that mental health conditions, family and domestic violence, disability, and housing affordability are potential drivers of state spending. However, data limitations prevent the Commission from including these drivers in the proposed assessment for the 2025 Review. The Commission will continue to monitor for improvements in data quality for the proposed drivers and engage with the ABS and external data agencies on potential data improvements.

[10] The ABS rule of 10 prevents the release of microdata if the number of unique records is less than 10. Australian Bureau of Statistics (ABS), *Input and Output Clearance*, ABS website, 2021, accessed 28 March 2024.

Q6. Do states support combining the other welfare, non-NDIS aged care and National Redress Scheme components and assessing spending using the 2020 Review method for other welfare (equal per capita assessment method with regional and wage cost factors)?

State views

75 All states except South Australia supported combining the other welfare assessment and the non-NDIS disability services, aged-care and national redress scheme assessment, citing the benefit of simplifying the welfare assessment. They also supported retaining the regional cost and wage cost adjustments for the combined assessment, citing the immaterial impact of regional costs on national redress scheme spending.

76 South Australia did not support the proposal, citing the potential expansion of non-NDIS disability services and uncertainty on the scope of the non-NDIS foundational supports agreed by states and the Commonwealth on 6 December 2023.[11]

Commission response

77 The Commission agrees with South Australia that if there are substantial changes to non-NDIS disability supports, this could require a different assessment approach. However, currently the prospect of changes to non-disability supports is uncertain.

Commission draft position

78 The Commission proposes to combine the other welfare assessment and the non-NDIS disability services, aged-care and national redress scheme assessment into a single other welfare assessment.

79 The Commission will continue to monitor developments in the future Commonwealth-state framework for providing non-NDIS foundational supports.

Q7. Do states support the Commission ceasing to collect state spending on the National Redress Scheme?

State views

80 All states supported the Commission's proposal to stop collecting state spending on the National Redress Scheme for Institutional Child Sexual Abuse, citing the immateriality of national redress scheme spending.

[11] A Albanese, *Meeting of National Cabinet – the Federation working for Australia* [media release], Australian Government, 2023, accessed 1 April 2024

Commission draft position

81 The Commission proposes to stop collecting state spending on the National Redress Scheme from the states because it is not material.

Other issues raised by states

Cultural and Linguistic Diversity (CALD)

82 New South Wales and Victoria said the Commission should include a cultural and linguistic diversity cost or use weight, citing the increased cost of providing support to migrants and refugees.

Commission response

83 The Commission considers that there is a conceptual case that in providing welfare services to culturally and linguistically diverse populations, states incur additional costs.

84 A substantial amount of work is required to develop, test and consult with states on a potential cultural and linguistic diversity driver for the welfare assessment. This includes the appropriate definition of cultural and linguistic diversity for welfare service use as well as identifying fit for purpose data. It is proposed that this work be undertaken in consultation with states between reviews.

Commission draft position

85 The Commission proposes to consider how cultural and linguistic diversity affects state service costs as a part of its proposed forward work program.

Welfare specific regional cost gradient

86 New South Wales said the Commission should use a combined welfare specific regional cost and service delivery scale gradient. This would replace the existing general regional cost gradient. New South Wales said it engaged a consultant to undertake analysis, which found that the general regional cost gradient overstates the impact of travel to regional and remote communities after considering traffic in major cities.

Commission response

87 While New South Wales said that the general cost gradient overstated costs in New South Wales, the Commission is not aware of evidence that this is the case in other states.

88 The report commissioned by New South Wales has not been provided to the Commission or other states. As a result, the Commission has not been able to consider the implications of the findings in the report on the welfare assessment.

89 In the 2020 Review, the Commission concluded that there was insufficient category specific data to develop a category specific regional cost gradient. This remains the Commission's view for the 2025 Review.

Commission draft position

90 The Commission proposes to continue to use the general regional cost gradient.

Service delivery scale in child protection services

91 New South Wales said that the introduction of the service delivery scale factor in the child protection and family services assessment was not supported by sufficient evidence in the 2010 Review.

Commission response

92 The Commission acknowledges that there was limited empirical evidence in the 2010 Review and judgement was used to include service delivery scale in the child protection services assessment.

93 The Commission considers there is a conceptual case that the costs of providing child protection services in regional and remote communities increase because of the small scale of service provision in these communities. The partial centralisation of state child protection referral systems in most states, accompanied by a network of government service centres indicates there could be some economies of scale from centralising service provision. However, the Commission is not aware of empirical evidence that supports the decision in the 2010 Review to include service delivery scale in the child protection and family services assessment.

94 The Commission acknowledges the complexity of child protection and family services provision and the challenges states face providing these services in both remote and urban communities. The Commission also recognises the importance of service provision networks in increasing accessibility to regional and remote communities.

Commission draft position

95 The Commission will continue to apply the service delivery scale factor to child protection and family services expenditure based on the persisting conceptual case.

96 The Commission will continue to monitor the availability of evidence regarding service delivery scale, including working with states to estimate how the scale of service delivery affects the costs of service provision in regional and remote areas.

First Nations cost weight for child protection and family services

97 Western Australia said the Commission should include a First Nations cost weight to represent the cost associated with providing child protection and family services to First Nations Australians.

98 Western Australia said that the funding model for child protection and out of home care services has differential cost profiles for locations with a high proportion of First Nations children. This is to facilitate the additional staff needed to provide culturally appropriate services.

Commission response

99 This issue was raised by the Northern Territory in the 2020 Review. The Commission concluded that a First Nations cost weight was not justified because Productivity Commission data showed there was no difference in the average time spent in out of home care by First Nations and non-Indigenous children. The Commission is not aware of a reliable source of data that would support the inclusion of a First Nations cost weight.

Commission draft position

100 The Commission proposes not to include a First Nations cost weight in the child protection and family services assessment.

Draft 2025 Review assessment method

101 Following consideration of state views, the Commission proposes to differentially assess state spending needs for homelessness services rather than treat the spending as equal per capita.

102 To support the new assessment method, a new annual data request will obtain state expenses on homelessness services, using the definition used by the Productivity Commission for the Report on Government Services.

103 The Commission also proposes to jointly assess other welfare, non-NDIS aged care and the National redress scheme as equal per capita, recognising the prior separate equal per capita treatment in the 2020 Review.

104 The Commission will collect state expenditure on the NDIS from the Commonwealth Department of Social Services' Portfolio Budget Statement rather than from the states.

105 Table 3 shows the proposed structure of the 2025 Review welfare assessment.

Table 3 Proposed structure of the welfare assessment

Component	Driver of need	Influence measured by driver	Change since 2020 Review?
Child protection and family services	Socio-demographic composition	Recognises that service use is influenced by the socio-demographic composition of the state population including those aged 0-14, Indigenous status, socio-economic status (SES) and where people live.	No
	Wage costs	Recognises differences in wage costs between states.	No
	Regional costs and service delivery scale	Recognises the cost of providing services to different areas within a state and to small population centres.	No
National Disability Insurance Scheme	Census population shares	2021 Census population shares.	No
Concessions	Socio-demographic composition	Recognises that numbers of pensioner concession card and health care card holders affect the use and cost of providing concessions.	No
Homelessness services	Socio-demographic composition	Recognises that service use is influenced by the socio-demographic composition of the state population, including Indigenous status, SES, age and location.	Yes
	Wage costs	Recognises differences in wage costs between states.	Yes
	Regional costs	Recognises the cost of providing services to different areas within a state.	Yes
	Cross-border costs	Recognises the cost to the ACT of providing homelessness services to New South Wales residents.	Yes
Other welfare including non-NDIS, aged care, and National Redress Scheme	Equal per capita	This is an equal per capita assessment.	Yes
	Wage costs	Recognises differences in wage costs between states.	No
	Regional costs	Recognises the cost of providing services to different areas within a state.	No

Indicative distribution impacts

106 The impact on the GST distribution in 2024–25 of the proposed method changes is shown in Table 4.

Table 4 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	56	-696	357	37	-17	62	-78	278	790
U2024 using draft R2025 methods	56	-765	406	40	-27	68	-86	309	878
Effect of draft method changes	0	-69	48	4	-10	5	-9	31	88
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	7	-99	64	12	-9	107	-162	1,082	29
U2024 using draft R2025 methods	7	-109	72	14	-14	116	-180	1,202	32
Effect of draft method changes	0	-10	9	1	-6	9	-18	119	3

Note: Based on no change to either the wage costs assessment or the measure of socio-economic status. The effect of these changes is shown in the wage costs and socio-economic status chapters.

The GST pool and population estimates are equivalent to those used in the 2024 Update.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.

Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on the GST distribution for 2025–26.

107 The proposed changes to the welfare assessment will increase the GST distributed to the Northern Territory, Tasmania and Queensland. The largest driver of change is the introduction of a differential socio-demographic assessment of state spending on specialist homelessness services (Table 5). Under the new method, these states are assessed as having higher spending needs because of the increased use of homelessness services by First Nations people.

108 The proposed introduction of a specialist homelessness services assessment will reduce the GST distributed to the ACT and Victoria. For these states, the reduction in GST is because of their small First Nations populations and the relatively higher socio-economic status of their populations.

Table 5 Indicative impact on GST distribution of proposed method changes (disaggregated), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
New homelessness assessment (a)	-9	-70	51	1	-7	7	-9	36	96
Revisions to general regional cost gradient for child protection and family services	9	7	-2	-3	-1	-1	1	-9	16
Other (b)	0	-5	-1	6	-2	0	0	3	9
Total	**0**	**-69**	**48**	**4**	**-10**	**5**	**-9**	**31**	**88**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
New homelessness assessment (a)	-1	-10	9	0	-4	12	-19	140	3
Revisions to general regional cost gradient for child protection and family services	1	1	0	-1	0	-2	1	-33	1
Other (b)	0	-1	0	2	-1	0	0	13	0
Total	**0**	**-10**	**9**	**1**	**-6**	**9**	**-18**	**119**	**3**

(a) The impact of the new homelessness services assessment includes the budget effect of moving homelessness services spending from housing to welfare, based on data reported by 6 states. For remaining states, data is sourced from the Report on Government Services, with 50% of the spending assumed to be reported in the housing category.

(b) Other changes to the assessment method include: amalgamating other welfare and the non-NDIS disability, aged care and national redress scheme assessments and changing the data source for state contributions to the NDIS to the annually published Department of Social Services Portfolio Budget Statement.

Note: Based on no change to either the wage costs assessment or the measure of socio-economic status. The effect of these changes is shown in the wage costs and socio-economic status chapters.

The GST pool and population estimates are equivalent to those used in the 2024 Update.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.

Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on the GST distribution for 2025–26.

109 The proposed revisions to the regional and service delivery scale general cost gradient would lead to a fall in GST distributed to the Northern Territory from the child protection and family services assessment. All other states are largely unaffected by revisions to the general gradient. The revisions to the regional cost and services delivery scale gradients are discussed in the Geography chapter.

110 Other changes to the assessment method, including the amalgamation of the other expenses and non-NDIS disability services, aged care and national redress scheme and the data source change for the NDIS assessment would have a negligible impact on the GST distribution.

Attachment A: Supplementary information on data sources for drivers of homelessness services spending

111 Tale A-1 in the welfare chapter summarises the attributes of available data sets for proposed drivers of homelessness services, and whether they lend themselves to use in an assessment of homelessness services.

112 This attachment provides further detail on the data sources that are not considered suitable for the proposed assessment method.

Table A-1 Feasibility of assessing proposed drivers using different data sources

Proposed driver	Available in AIHW data	National data source	Cross-classifiable national data	Sufficient sample size and data quality	Definition consistent with AIHW definition
Indigenous status	✓	ABS Estimated resident population	✓	✓	✓
Age	✓	ABS Estimated resident population	✓	✓	✓
Socio-economic status	✓	ABS Estimated resident population	✓	✓	✓
Remoteness	✓	ABS Estimated resident population	✓	✓	✓
Overcrowding	✗	Homelessness operational groups (OPGP) — Census of Population and Housing: Estimating Homelessness	✓	✓	N/A
Housing affordability	✓	Rent affordability indicator (RAID) — Census of Population and Housing	✗	✓	✗
Family & Domestic Violence	✓	2021–22 ABS Personal Safety Survey	✗	✗	✓
Drug and Alcohol use	✓	ABS National Health Survey 2020–21	✓	✗	✗
Disability	✓	ABS Survey of Disability, Ageing and Carers	✓	✗	✓
Disability	✓	Core activity need for assistance (ASSNP)—ABS Census of Population and Housing	✓	✗	✗

Proposed driver	Available in AIHW data	National data source	Cross-classifiable national data	Sufficient sample size and data quality	Definition consistent with AIHW definition
Disability	✓	ABS National Health Survey 2020–21	✓	✗	✗
Mental Health	✓	ABS National Study of Mental Health and Wellbeing 2020–22	✗	✗	✓
Mental Health	✓	Has mental health condition — ABS Census of Population and Housing	✓	✗	✓
Mental Health	✓	ABS National Health Survey 2020–21	✓	✗	✓

Overcrowding

113 The Australian Institute of Health Welfare's Specialist Homelessness Services Collection (SHSC) does not differentiate between those considered homeless and those living in overcrowded dwellings.[12] This reflects the focus in the collection on users of homelessness services. The survey assesses individuals as homeless or at risk of homelessness based on the following criteria:

The SHSC considers people to be experiencing homelessness if they:

- *have no shelter or are living in an improvised/inadequate dwelling*
- *are living in short-term temporary accommodation, or*
- *are couch surfing or living with no tenure in a house, townhouse or flat.*

People are considered at risk of homelessness if they are at risk of losing their accommodation and are living in:

- *public or community housing, either as a renter or rent free*
- *private or other housing, as a renter, rent free or owner, or*
- *institutional settings.*[13]

114 The Specialist Homelessness Services Collection does not collect information on overcrowding. As a result, the use of specialist homelessness services by people living in overcrowded situations is not known.

[12] Australian Institute of Health and Welfare (AIHW), *Australia's youth: Homelessness and overcrowding*, AIHW website, 2021, accessed 10 April 2024.

[13] Australian Institute of Health and Welfare (AIHW), *Specialist homelessness services annual report 2022–23*, AIHW website, 2024, accessed 10 April 2024.

115 The Commission considers that while there is a conceptual case to consider overcrowding is a driver of the use of homelessness services, it is not feasible to assess this driver in the 2025 Review.

Housing affordability

116 The Rent Affordability Indicator variable is collected as part of the Census of Population and Housing at the household level. This considers whether a household is collectively spending over 30% of their income on rent.[14]

117 The household Rent Affordability Indicator is not compatible with person level data from the Australian Institute of Health and Welfare collection. The data being collected at the household level also prevents the cross-classification of data by person-level attributes including Indigenous status and age.

118 There are also inconsistent definitions between the Census Rent affordability indicator and attribution of service use to housing affordability, in the Australian Institute of Health and Welfare collection. The survey asks whether housing affordability stress or the housing crisis was the main reason for seeking out homelessness services. In contrast, the Census Rent Affordability Indicator variable specifies a 30% of income threshold. This difference in specificity may elicit different reporting behaviour.

119 The Commission proposes that although rental affordability is a driver of use of homelessness services, it is not feasible to assess this driver in the 2025 Review.

Family and Domestic Violence

120 The 2021–22 Personal Safety Survey includes data on instances of violence and the characteristics of these instances.[15] While the Personal Safety Survey specifies violence, physical violence and sexual violence, domestic and family violence does not exist as a variable. Microdata are not currently available. However, even if the microdata were available the survey sample of around 12,000 individuals will result in data confidentiality concerns when data are cross-classified by other variables of interest.

121 Further, the Personal Safety Survey is targeted at those above 18 years of age and therefore is unable to be cross-classified by the lower age brackets included in the proposed assessment method.

122 The Commission considers there is a conceptual case for considering family and domestic violence as a driver of use of homelessness services, although it is not feasible to assess this driver in the 2025 Review.

[14] Australian Bureau of Statistics (ABS), *Rent affordability indicator (RAID), 2021*, ABS website, 2021, accessed 10 April 2024.

[15] Australian Bureau of Statistics (ABS), *Personal Safety Australia, 2021–22*, ABS website, 2023, accessed 10 April 2024.

Drug and Alcohol Use

123 The Australian Institute of Health and Welfare categorises and provides data on service users with a 'history of drug or alcohol misuse.'[16] The Australian Institute of Health and Welfare also reports on specific drugs of concern, including alcohol.[17]

124 The National Health Survey is a large sample survey designed to give prevalence estimates for a range of health conditions. Previous iterations of the National Health Survey have collected data on selected stressors and whether they have been experienced in the last 12 months. One listed stressor was experience of 'alcohol or drug related problems.' However, as of the 2022 National Health Survey, these data are no longer being collected.[18]

125 The ABS says the National Health Survey is the preferred data source for health conditions and the survey features numerous sociodemographic details allowing cross-classification. However, the ABS highlights that the survey 'do not generally support reliable output at lower geographical levels or for specific sub-populations of interest.' This is problematic for the Commission's proposed approach considering prevalence of the factors influencing use of homelessness services for small areas across different remoteness levels.

126 In addition, the National Health Survey is also subject to data confidentiality when cross-classifying microdata. The 2021–22 National Health Survey had around 13,000 household responses. Cross-classifying the microdata by service uses and other drivers of interest will expose sensitive unit record data.

127 The Commission proposes that although drug and alcohol use is a driver of use of homelessness services, it is not feasible to assess this driver in the 2025 Review.

Disability

128 The Australian Institute of Health and Welfare's questions regarding disability are based on identifying 'whether the client has any difficulty and/or need for assistance with 3 core activities (self-care, mobility and communication).'[19]

129 The Australian Institute of Health and Welfare cautions against comparing disability responses between age groups given the differing interpretations on what requiring assistance means, particularly for young children.[20] This is a concern given the proposed cross-classification based on age.

[16] Australian Institute of Health and Welfare (AIHW), *Alcohol, tobacco & other drugs in Australia*, AIHW website, 2024, accessed 10 May 2024.

[17] AIHW, *Alcohol, tobacco & other drugs in Australia.*

[18] Australian Bureau of Statistics (ABS), *National Health Survey methodology, 2022,* ABS website, 2023, accessed 10 April 2024.

[19] Australian Institute of Health and Welfare (AIHW), *Specialist homelessness services annual report 2022–23*: clients with disability, AIHW website, 2024, accessed 10 April 2024.

[20] AIHW, *Specialist homelessness services annual report 2022–23.*

130 There are 3 potential data sources for assessing the prevalence of disabilities in the national population. They are the:

- Survey of Disability, Aging and Carers
- 2021 ABS census
- National Health Survey.

The Survey of Disability, Ageing and Carers 2018-19

131 The ABS says that the Survey of Disability, Ageing and Carers provides 'a demographic and socio-economic profile of people with disabilities, older people, and carers compared with the general population.'[21]

132 The survey excludes those in very remote areas, making it unable to be classified by the proposed drivers. The survey also does not sample those living in discrete First Nations communities, potentially underestimating the prevalence of disabilities in those communities.

133 The Survey of Disability, Ageing and Carers also does not allow for the cross-classification of the Indigenous and non-Indigenous population.

134 The Commission's view is that the survey of disability, aging and carers is not suitable for use in the proposed homelessness assessment because Indigenous status is a known driver of the need for homelessness services and other government services.

Core activity need for assistance (ASSNP) – ABS Census of Population and Housing

135 This question, asked as part of the Census of Population and Housing aligns closely with that asked by the Australian Institute of Health and Welfare, covering the same 3 core activity areas. The ABS, however, notes the cause for this need for assistance is broader than disability alone, including old age and other long-term health conditions. The ABS does not differentiate between these causes. This means responses to this question may capture a broader population group than intended for this assessment.

136 Further within data use considerations, the ABS notes 'only the Survey of Disability, Ageing and Carers is considered to comprehensively measure disability populations, and to provide rates of prevalence at the national and state levels.'[22]

137 The Commission's view is that the core activity need for assistance from the 2021 Census is not suitable for use in the proposed homelessness assessment because it does not comprehensively measure the presence of disabilities.

[21] Australian Bureau of Statistics (ABS), *Disability, Ageing and Carers, Australia: Summary of Findings methodology, 2018*, ABS website, 2019, accessed 10 April 2024.

[22] Australian Bureau of Statistics (ABS), *Core activity need for assistance (ASSNP) 2021*, ABS website, 2021, accessed 10 April 2024.

ABS National Health Survey 2020–21 and National Aboriginal and Torres Strait Islander Health Survey

138 Disability is included among long-term health conditions in the National Health Survey, in line with the 10th revision of the International Classification of Diseases.[23] Information is collected regarding the type, severity and impact of the disability on education and employment.

139 The aforementioned limitations of using the National Health Survey to estimate prevalence of mental health conditions by remoteness classifications also apply here. Similarly, as noted previously, data confidentiality will also prevent the cross-classification of the presence of disability by other drivers of interest.

140 Further, the specificity of the ABS definition for disability under the International Classification of Diseases contrasts with the more general need for assistance in core activities asked about by the Australian Institute of Health and Welfare.

141 The Commission considers the National Health Survey 2020–21 is not suitable for use in the proposed homelessness assessment because of data confidentiality, the exclusion of areas of interest (remote and very remote areas) and inconsistent definitions of disability.

[23] ABS, *National Health Survey methodology, 2022*.

Services to communities

Overview

1 On 21 June 2023, the Commission issued a consultation paper on the draft services to communities assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 While the Commission did not propose changes to the 2020 Review assessment method, it did identify an issue for consideration following the 2025 Review.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that the existing assessment methods for spending on disaster mitigation remain appropriate?

State views

5 There was general support from states for the continuation of the existing equal per capita assessment of spending on natural disaster mitigation. New South Wales, Victoria, Queensland and Tasmania supported ongoing investigation following the 2025 Review of whether a differential assessment was feasible.

6 States discussed potential drivers of need. New South Wales focused on exposure to disasters. Victoria noted that the subject is complex, with the need for mitigation likely driven by relationships between mitigation, risk, previous mitigation efforts and the need for disaster responses. South Australia said that, similar to expenditure on environmental protection, there is no reliable driver of need as each state has its own unique climatic issues and circumstances. It also noted that the occurrence of natural disasters on its own is not a reliable proxy for mitigation expenditure. The ACT noted that more work is required in order to appropriately capture, measure, and analyse drivers of need as well as report on disaster mitigation spending. The Northern Territory said that matters such as local planning rules and legacy planning decisions can influence both the propensity of a disaster to impact states, and the costs which arise from those disasters.

Commission response

7 As noted by states, there are significant challenges in developing a separate assessment for mitigation expenses. These include agreeing on a definition of mitigation, separately reporting expenses and determining a reliable driver of state expense needs.

Commission draft position

8 The Commission does not propose to separately assess state spending on natural disaster mitigation in the 2025 Review. Following the 2025 Review, the Commission will continue to monitor developments and proposes to explore, in consultation with states, whether a differential assessment is appropriate and can be measured robustly.

Q2. Do the definitions used in the National Partnership on Disaster Risk Reduction provide an appropriate basis for describing the type of spending that could be classified as natural disaster mitigation?

State views

9 States generally agreed on the importance of a collective understanding of what constitutes natural disaster mitigation spending. However, views differed on whether the definition used in the National Partnership is appropriate.

10 Queensland, Tasmania and the ACT expressed support for the definition. New South Wales also expressed general support for the definition but advocated the incorporation of expenses associated with pandemics, pests and invasive species, as well as other disaster events. The ACT noted that its definition of disaster risk reduction is currently under review, in line with the development of the ACT Disaster Resilience Strategy and Strategic Action Plan for Disaster Risk Reduction. The ACT suggested the Commission remain open to consider any new developments surrounding the definitions and coverage of natural disaster mitigation.

11 Victoria, South Australia and the Northern Territory expressed concerns with the definition used in the National Partnership on Disaster Risk Reduction.

12 Victoria noted its expenditure includes more than what is included in the National Partnership definition, and a broader definition is required to incorporate all of its mitigation operations. This would include the need to recognise upfront investment to minimise or avoid future disasters.

13 South Australia said that, practically, it may be difficult to distinguish elements of expenditure on general infrastructure/maintenance programs from expenditure with the specific purpose of disaster risk reduction. For example, the construction of a seawall, wetland or road in a densely forested area may have disaster mitigation

benefits but its main purpose could be a general improvement to public amenity (not specifically related to disasters).

14 The Northern Territory said that the definition was too broad. It noted that this definition is suitable in a funding context as it creates flexibility, but is less suitable as an accounting definition, as it covers many areas which are assessed in other expenditure categories or are a component of general expenditure.

Commission draft position

15 As part of the ongoing work on this issue, the Commission proposes to monitor developments, including any relevant recommendations that come from the Independent Review of Commonwealth Disaster Funding,[1] and consult with states on the definition and measurement of natural disaster mitigation expenses.

Q3. Where is this spending currently classified in the Government Finance Statistics framework?

State views

16 States acknowledged the difficulty in identifying how all mitigation expenses are currently classified. States said that expenses are most likely to be reported against multiple classifications of the functions of government (COFOG) codes, including civil and fire protection services, public order and safety, environmental protection, natural disaster relief, community development, and road maintenance and construction.

Commission draft position

17 The Commission will use the information provided by states on the classification of natural disaster mitigation expenses to monitor changes in spending.

Q4. Is spending on mitigation measures expected to increase significantly over the next 5 years?

State views

18 New South Wales, Victoria, Queensland, Western Australia and the ACT all expected spending on mitigation measures to increase. New South Wales and Victoria considered that this will occur in response to increased frequency and severity of natural disasters, although New South Wales acknowledged that spending may remain more heavily focused on recovery and relief activities, rather than mitigation and preparedness. Queensland and Western Australia said that the Commonwealth's Disaster Ready Fund would support an increase in state spending. The ACT said the

[1] NEMA (National Emergency Management Agency), Independent Review of Commonwealth Disaster Funding, NEMA, 2023, accessed 13 June 2024.

expected increase is primarily a refocus of response and recovery funding into areas of disaster and emergency management that demonstrate greater effectiveness and efficiency on a 'per dollar' basis, to reduce the impacts of disasters.

19 South Australia does not currently have significant increases in mitigation spending included in its forward estimates. Tasmania and the Northern Territory were less certain than other states about the trajectory of mitigation spending.

Commission draft position

20 As part of the ongoing work on this issue, the Commission proposes to monitor state spending on natural disaster mitigation and developments in national disaster resilience policy.

Other issues raised by states

Drivers of water supply subsidies

21 Victoria said it was concerned about the use of small communities and regional costs as the only drivers of the cost of water subsidies. While acknowledging the conceptual case that costs are likely to be higher in remote and small communities, Victoria said that other factors also impact the cost of supplying water, such as: distance from water supply; water quality; water availability; ageing assets; and the number of users per fixed infrastructure.

22 Victoria said that the use of remoteness and remote communities, as the main drivers of need, may provide an incentive for states with higher remote populations to continue inefficient community service obligations, even though under the National Water Initiative all states have agreed to remove them where possible.

23 Western Australia said that water quality and availability affect the cost of providing water. State governments regulate and subsidise water and sewerage providers to ensure communities have access to services at a reasonable price and a nationally determined quality. They subsidise providers to assist with the cost of providing services in regions where full cost recovery is not viable.

24 Western Australia suggested 2 options for assessing states' needs to subsidise water supply:

- expand the population used in the small communities assessment to include non-capital towns with poor water quality and availability
- assess water subsidies actual per capita or blend the current assessment with an actual per capita method.

25 To support its case for an actual per capita assessment, Western Australia pointed to a Productivity Commission Inquiry Report on National Water Reform from December 2017[2] that found evidence of under-pricing in only a few states. It said this was evidence that pricing policies are not the reason for the above average spending on subsidies by Western Australia, South Australia and the Northern Territory.

Commission response

26 In the 2020 Review, all states supported an assessment of subsidies to water utilities due to unavoidably high costs that meant full cost recovery from consumers was impractical. The Commission decided that the additional costs faced by utilities in supplying water to small communities justified an assessment of state needs to provide subsidies for these small communities.

27 States presented a conceptual case in the 2020 Review that other factors that contribute to the cost of supplying water, such as water quality and availability, remoteness, isolation and distance from the water source, mean that utilities cannot fully recover the costs of supplying water and therefore subsidies are justified.

28 The Commission agreed that there was a conceptual case that water quality is a factor that drives utilities' costs but was unable to derive a simple and reliable measurement. The Commission did not make an additional assessment for populations in isolated outer regional towns serviced by exceedingly long pipelines. This was due to the lack of conclusive evidence about the relationship between distance from surface water sources and subsidies.

29 The Commission considers that an assessment of differences between states in the cost of supplying water should take into account all the non-policy drivers of costs. The *National performance report 2021–22: urban water utilities*[3] published by the Bureau of Meteorology listed the following factors that influence operating costs for utilities supplying water and wastewater:

- utility size
- government policy
- climate and rainfall
- distance and method by which water is transported (for example, piped)
- sources of water (for example, purchased from a bulk utility or sourced from dams or alternative sources such as desalination plants)
- input costs (for example, fuel, chemicals, and labour)
- level of water and sewage treatment required

[2] Productivity Commission, Overview and recommendations - National Water Reform - Inquiry Report, Productivity Commission, 2017, accessed 13 June 2024.

[3] Bureau of Meteorology, National performance report 2021–22: urban water utilities, Bureau of Meteorology, 2023, accessed, 13 June 2024.

- capital procurement strategies (for example, public–private partnerships or build–own–operate–transfer schemes).

30 The Commission has used the data that accompany the Bureau of Meteorology's report to compare operating costs of water utilities by state, which incorporate all policy and non-policy factors affecting the cost of supplying water. This analysis showed that Victoria, Queensland and the Northern Territory had above-average connection costs and other states were either below or equal to the national average (Table 1). An analysis of how costs varied by remoteness area was not possible as the region serviced by individual utilities often extends across multiple remoteness areas.

Table 1 Relative costs of supplying water, average 2017-18 to 2021-22

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Operating cost relative to national average	0.8	1.1	1.5	0.8	0.7	1.0	1.0	1.5

Source: Bureau of Meteorology, Urban National Performance Report, Bureau of Meteorology, 2023, accessed 13 June 2024.

31 Table 2 shows an indicative impact on GST distribution from using actual operating costs of water utilities by state to assess needs for states to subsidise water supply. Although Victoria has higher than average cost per connection, its share of connected properties is less than its population share and so its share of the total operating costs of utilities is less than its population share. The opposite is the case for South Australia. The GST distribution using this approach compared to an equal per capita distribution would not be material for any state.

Table 2 Water subsidies, impact on GST distribution

	NSW	Vic	QLD	WA	SA	Tas	ACT	NT	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Equal per capita	89	72	57	30	20	6	5	3	282
Assessed (operating costs)	66	71	80	22	29	6	5	3	282
Difference to EPC	-23	-1	23	-8	10	-1	0	0	0
Difference ($pc)	-3	0	4	-3	5	-1	1	1	0

Source: State data, Bureau of Meteorology, Urban National Performance Report, Bureau of Meteorology, 2023, accessed 13 June 2024, Commission calculations.

32 The data used in this analysis have limitations that mean it is insufficiently reliable to use in an assessment. These data are influenced to some extent by regulatory policies of states. Some states provide subsidies to bulk water utilities (wholesalers) and so the costs incurred by retail utilities accessing water from these wholesalers may not reflect the full cost of water supply. Further, these data do not allow an analysis of how water supply costs are affected by remoteness. However, the Commission considers they provide sufficient support for the continuation of an equal per capita assessment of water subsidies that states provide to locations outside small communities, as defined by the Commission.

33 The Productivity Commission's *National Water Reform 2020* report stated:

> "Under the National Water Initiative, any operational subsidies should be provided as transparent and untied Community Service Obligation payments. But beyond stating a preference for support in the form of Community Service Obligation payments, the National Water Initiative does not specify how payments to unviable urban water systems should be calculated, nor did it define scheme viability, leaving both as decisions for state and territory governments.
>
> The lack of prescription has allowed state and territory governments to approach funding decisions in ways that reflect the diversity in their service delivery models. But it has also meant that there are no agreed principles on how to fund regional and remote community services …"[4]

34 In the absence of a consistent national water pricing arrangement (or enforcement mechanism), the Commission cannot conclude that water subsidies are not policy influenced. As such, an actual per capita assessment is not appropriate. The Commission's view is that an actual per capita assessment may undermine the water pricing objectives in the National Water Initiative.

35 The Commonwealth has committed to work with states to renew the National Water Initiative. The Commission will monitor developments to determine if future Commonwealth-state commitments on water pricing have implications for the assessment.[5]

Commission draft position

36 The Commission will continue to assess water subsidies provided to small communities using a driver of need based on the population each state has in communities that meet the criteria of a small community.

37 For water subsidies provided to residents outside of these small communities, state population will continue to be the driver of need (that is, an equal per capita assessment).

Community criteria and regional cost gradients for the assessment of water and electricity subsidies

38 Victoria said the Commission should apply a discount to the small communities water subsidies assessment if, as occurred in the 2020 Review, only a small number of states can provide data to calculate the regional cost weight.

[4] Productivity Commission, Inquiry report - National Water Reform 2020, Productivity Commission, 2017, accessed 13 June 2024.

[5] DCCEEW (Department of Climate Change, Energy, the Environment and Water), National Water Initiative, DCCEEW, 2024, accessed 13 June 2024.

39 Western Australia proposed that communities with populations of fewer than 50 people should be included in the assessments because:

- the lower limit of 50 people is arbitrary
- 60% of regional and remote communities in Western Australia with populations fewer than 50 rely on subsidised state water and electricity services
- many isolated farms and stations are connected to state services, depending on their distance to local centres.

Commission response

Remote communities electricity subsidies

40 The Commission asked states for data on electricity subsidies to update the criteria for communities assessed to need electricity subsidies and to update the regional cost gradient applied to remote and very remote communities. The materiality of a separate assessment of electricity subsidies for remote communities was also re-tested.

41 Based on the updated data, the Commission proposes to remove the 50 person minimum population requirement. In the 2020 Review method, the relevant populations for the remote communities electricity subsidies had a minimum community size of 50 people. This minimum was set to exclude isolated farms and stations that may rely on their own water and electricity services. However, the number chosen was arbitrary and adds complexity and removing it has a negligible impact on the assessment.

42 To further simplify the assessment, the Commission proposes to remove the community population density requirement of 60 people per km^2 for geographic areas not identified as urban centres and localities.

43 The new criteria capture 77% of the 151 off-grid communities receiving subsidies.

44 The updated criteria results in 5,522 remote communities and 5,885 very remote communities being assessed as needing electricity subsidies. This compares to 128 remote and 182 very remote communities using the previous criteria. The corresponding numbers in the 2020 Review were 116 remote and 202 very remote communities (Table 3).

45 The updated data on subsidies and assessed communities were used to calculate the population weighted subsidy per capita for remote and very remote communities. These figures were then used to derive the cost gradient (3.0) the Commission proposes for 2025 Review (Table 3).

46 For the 2020 Review method, the Commission used a cost gradient derived using a per capita subsidy by location (not population weighted). Given that the cost gradient is applied to eligible populations, not eligible locations, it is more appropriate to use a population weighted gradient. The population weighted gradient is also less sensitive to changes in ABS census remoteness classifications and the criteria used to define eligible communities (see Table 3).

47 A separate assessment of electricity subsidies for remote communities continues to result in a material distribution of GST for the Northern Territory (around +$400 per capita compared to an equal per capita distribution).

Table 3 Population and regional cost gradients for the electricity subsidies assessment

	Number of communities	Population	Total subsidy	Subsidy Unweighted	Subsidy Weighted	Cost gradient Unweighted	Cost gradient Weighted
2020 Review							
			$m	$pc	$pc		
Remote	116	190,419	188	577	989	1	1
Very remote	202	129,603	239	1,989	1,843	3.45	1.86
2025 Review with 2020 Review criteria							
Remote	128	217,998	109	164	499	1	1
Very remote	182	133,653	193	1,795	1,442	10.94	2.89
2025 Review with new criteria							
Remote	5,522	299,365	109	5	365	1	1
Very remote	5,885	191,071	211	97	1,105	20.31	3.03

Source: Commission calculations using ABS and state provided data.

Small communities water subsidies

48 The Commission requires data from states on water subsidies to update the criteria for small communities assessed to need water subsidies and to update the regional cost gradient applied to small communities.

49 States were unable to provide the Commission with sufficient data to update the regional cost gradient. For the 2025 Review, the Commission proposes to retain the 2020 Review regional cost gradient.[6]

50 To simplify the assessment, for the population criteria for small communities, the Commission proposes to remove the community population density requirement of 60 people per km^2 and the 50 person minimum population requirement, as proposed for the assessment of electricity subsidies (see above). The upper bound for small communities needing water subsidies will remain at 3,000 people.

51 The change in the share of small community populations for each state is shown in Table 4.

[6] The 2020 Review cost weights are 2.171 for outer regional and 4.448 for remote and very remote communities.

Table 4 Change in share of small community populations from proposed changes to community criteria (percentage points)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Inner regional Australia	-4	5	0	0	-1	0	0	0
Outer regional Australia	1	-1	1	-2	0	1	0	1
Remote Australia	1	1	-3	2	1	-2	0	0
Very remote Australia	1	0	-4	5	1	1	0	-4
Total	**-1**	**3**	**-1**	**-1**	**-1**	**1**	**0**	**-1**

Source: Commission calculations using ABS data.

52 A separate assessment of water subsidies for small communities continues to result in a material distribution of GST for the Northern Territory (around +$66 per capita compared to an equal per capita distribution).

Commission draft position

53 The Commission proposes to simplify the criteria used to define which remote communities are assessed to need electricity subsidies and which small communities are assessed to need water subsidies. Population, in all communities in remote and very remote areas, is proposed as the driver of need for remote community electricity subsidies. Population, in communities with up to 3000 people, is proposed as the driver of need for water subsidies for small communities.

54 For remote community electricity subsidies, a cost weight of 3.0 is proposed for very remote communities.

55 For small community water subsidies, the Commission proposes to retain the 2020 Review regional cost gradient due to a lack of data to support an update.

First Nations Community Development

56 Victoria said that historical circumstances mean that it has a smaller proportion of Indigenous people living in discrete First Nations communities, compared with other states, but dispersed First Nations communities living in larger cities and regional centres. It said that Victoria incurs costs to support these communities through programs such as the Aboriginal Community Infrastructure Program, Victoria's First Mortgage and Community Infrastructure Program, Right People for Country Program and Treaty Readiness and Nation Building.

57 Victoria said that its spending on First Nations communities should be included in the assessment and the assessment method should be based on hectares managed by traditional owners under settlement agreements or treaties rather than the current assessment based on populations in discrete First Nations communities.

58 Western Australia said that costs for First Nations community development are higher in Western Australia due to the need for additional engagement with local First Nations communities regarding the mining industry.

59 Western Australia said that any decisions involving major ground disturbances affecting a site of First Nations importance requires an approval process between First Nations people and the state government. It said the costs associated with these processes should be included in the assessment.

Commission response

60 The types of expenses currently included in the assessment of spending in discrete First Nations communities are:

- land management and development expenses including costs associated with changes to land tenure issues and land tenure reform
- developing community plans to improve overall service delivery
- planning, coordinating and supporting implementation of capital works programs including for essential and municipal services
- land transfer administration (excluding costs assessed under the native title and land rights assessment)
- capability development for First Nations community leaders and future leaders
- community amenities which are usually provided by local government such as street lighting, public conveniences, pedestrian shopping malls, drinking fountains, bus shelters, cemeteries and crematoria
- general revenue support for local government services provided to councils with a predominantly First Nations population which cannot be assigned to a specific function (for example: housing, water, electricity).

61 The Commission considers that population in discrete First Nations communities continues to be the appropriate driver of need for these expenses.

62 The expense programs listed by Victoria in its submission have varying degrees of connection to land managed by traditional owners under settlement agreements or treaties. The Commission is not aware of evidence indicating these expenses varied by the size of the land managed by traditional owners.

63 Similarly, the Commission is not aware of evidence that population in discrete First Nations communities is the appropriate driver of need for expenses related to approval processes between First Nations people and the state government for decisions involving major ground disturbances affecting a site of First Nations importance.

Commission draft position

64 The Commission does not propose to broaden the type of expenses included in the discrete First Nations communities assessment or change the driver of need.

Drivers of spending on environmental protection

65 Victoria and Western Australia proposed alternative drivers of spending on environmental protection.

66 Victoria said that it has higher costs associated with protecting the environment due to:

- the quantity of infrastructure associated with high population growth and density, coupled with a more progressive but expensive regulatory framework that has allowed the government's capital expenditure program to go ahead while minimising harm to the environment
- higher land costs and smaller farm size. Victoria said that biodiversity and landscape protection costs are driven by land prices in all states and Victoria spends relatively more than other states to compensate landowners for land set aside for biodiversity measures due to its high land prices. Also, the lack of available land means that small farms require higher compensation to participate in biodiversity programs.

67 Western Australia acknowledged the difficulty the Commission has had in previous reviews in identifying a policy neutral driver of need for spending on environmental protection. It said one of the main drivers of spending for national parks and wildlife services is meeting international and Commonwealth obligations and this is the average policy that is applied by states when declaring land to be protected areas.

68 As in the 2020 Review, Western Australia proposed that the assessment of national parks and wildlife costs should be based on national park area rather than population. It said that larger national parks have greater costs associated with maintenance of roads and bridges, which are critical to access for weed and pest control, fire control, and other natural disaster mitigation. It also said that the costs to control and prevent beach erosion are not correlated to population and should be assessed on the length of beach that needs to be maintained.

Commission response

69 In the 2020 Review, the Commission decided to assess environmental protection expenses on an equal per capita basis, as they cover a wide variety of services and it is not possible to identify a single broad indicator for assessing total spending.

70 Service expenses in the environmental protection assessment include:

- Waste and wastewater management
- Pollution abatement
  - monitor noise levels near airports; development and monitoring of standards covering pollution and air quality; prevention of pollution through use of cleaner technologies or cleaner products; treatment of exhaust gases; monitoring and control of the concentration of pollutants and air quality; development and use of anti-pollution devices; decontaminating and cleaning up surface water following accidental pollution.
- Research and development on environmental protection
- Protection of biodiversity and landscape
  - national parks and wildlife services; control and prevention of erosion of beaches and foreshores; flood mitigation in urban areas; places on the Commonwealth Heritage List and the National Heritage List; protection of native plants, animals and habitats; creation and maintenance of nature

conservation areas; administration of tree protection regulations; new plantings to create 'green corridors'; measures to protect and restore ecosystems; measures to control non-native feral animals; measures to control noxious weeds; wildlife sanctuaries; fire control activities carried out in national parks, state reserves and crown land; subsidies for agricultural and grazing practices aimed at reducing harm to soils and water bodies; protection and remediation of soil, ground-water and surface water from physical degradation.

71 The comments from Victoria and Western Australia highlighted the challenges in identifying an appropriate driver for all environmental protection.

Commission draft position

72 State spending on environmental protection is impacted by the features of each state and these features vary markedly between states. Some potential drivers of need, such as the land area of national parks, are also policy influenced. A common policy neutral driver of need for spending is difficult to identify. The Commission proposes to continue to assess environmental expenses on an equal per capita basis.

Regional cost weights for expenses to protect biodiversity and landscape

73 Western Australia said that expenses for the protection of biodiversity and landscape are unrelated to the size of the population in each remoteness area. It said that the regional cost factors being applied to national parks expenses should be weighted by their land area and the regional costs applied to spending that prevents coastal erosion should be weighted by the length of the affected beach.

Commission response

74 Regional costs are applied to expenses for the protection of biodiversity and landscape in the environmental protection component. The general cost gradient cannot be applied directly to expenses because expenses cannot be disaggregated by remoteness area. As such, a state regional cost factor needs to be calculated. Currently, to create a state regional cost factor from the general cost gradient, population in each remoteness area is used to weight the cost factors for each remoteness area.

75 The variable used to weight the regional cost gradient for converting to a state regional cost factor should relate to the proportion of spending that occurs in each remoteness area. For most assessments the amount of money spent is broadly in proportion to the number of people in an area and so population is used as the weight (that is, more money is spent in major cities compared to outer regional areas and there are more people in major cities than outer regional areas).

76 As discussed in the previous section, state spending on environmental protection, even within the subset for which regional costs are applied (protection of

biodiversity and landscape), is very diverse and heavily influenced by the features of each state.

77 For example, most costs for one state in managing national parks may relate to land area, while for another state it may relate to visitor numbers or mitigating the impacts of economic and visitor activity because the parks are close to population centres.

78 Also, costs per beach in controlling and preventing erosion may relate to the length of beach. However, states tend to undertake these activities on beaches where people live.

79 While examples exist within the diverse range of state spending on the protection of biodiversity and landscape where most spending is occurring in parts of the state where there are the fewest people, this may not be the case for all states and for all types of biodiversity and landscape protection activities.

Commission draft position

80 The Commission proposes to maintain the regional cost weights for state spending on the protection of biodiversity and landscape.

Transition to net zero emissions

81 Victoria said it supports in principle consideration of a separate assessment for state expenditure under the transition to net zero.

Commission response

82 The share of non-renewable energy use, individual jurisdictions' resource endowments, and the extent to which they may or may not support the transition to net zero, are important considerations in assessing the intensity of effort and investment required. A significant consideration should be the share of non-renewable energy use within a state as a driver of cost, impacting the relative costs of energy transition across states.

Commission draft position

83 The Commission will continue to monitor state spending to support the transition to net zero emissions.

84 The chapter on services to industry discusses the assessment of state spending to promote industries supporting the transition to net zero and spending to replace industries in regions that are transitioning away from high emission activities. The services to industry chapter discusses whether there are identifiable policy neutral drivers of states spending needs which could be used to assess net-zero spending.

Draft 2025 Review assessment method

85 Table 5 shows the proposed structure of the 2025 Review services to communities assessment.

Table 5 Proposed structure of the services to communities assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Water subsidies			
Small communities	Small communities	Recognises that costs are higher for small communities.	Community criteria updated
	Regional costs	Recognises the higher costs for small communities in outer regional and remote areas.	No
	Wage costs	Recognises the differences in wage costs between states.	No
Other	EPC	The driver of these expenses is state population.	No
Electricity subsidies			
Remote communities	Remote communities	Recognises that costs are higher for remote communities.	Community criteria updated
	Regional costs	Recognises the higher costs for providing services in very remote communities.	Gradient updated
	Wage costs	Recognises the differences in wage costs between states.	No
Other	EPC	The driver of these expenses is state population.	No
First Nations community development	Population in discrete First Nations communities	Recognises the higher costs of providing services in discrete First Nations communities.	No
	Wage costs	Recognises the differences in wage costs between states.	No
	Regional costs	Recognises the higher costs of providing services to remote communities.	Yes. General regional gradient has been revised.
Other community development and amenities	EPC	The driver of these expenses is state population.	No
	Wage costs	Recognises the differences in wage costs between states.	No
	Regional costs	Recognises the higher costs of providing services to remote communities.	Yes. General regional gradient has been revised.
Environmental protection	Non-deliberative EPC	These expenses are not differentially assessed.	No
	Wage costs(a)	Recognises the differences in wage costs between states.	No
	Regional costs (a)	Recognises the higher costs of providing services to remote communities.	Yes. General regional gradient has been revised.

(a) Applied only to the protection of biodiversity and landscape sub-component

Indicative distribution impacts

86 The indicative impact on the GST distribution in 2024-25 from the proposed changes to the services to communities assessment is shown in Table 6.

Table 6 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	-255	-308	70	192	-8	-6	-19	334	596
U2024 using draft R2025 methods	-244	-298	62	189	-4	2	-20	312	566
Effect of draft method change	11	10	-8	-3	4	8	0	-22	33
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	-30	-44	13	65	-4	-10	-40	1,299	22
U2024 using draft R2025 methods	-29	-42	11	64	-2	4	-41	1,214	21
Effect of draft method change	1	1	-1	-1	2	13	-1	-85	1

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapters. The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

87 The driver of need for water subsidies in small communities is the population each state has in these communities. The change in the share of small community populations for each state from the proposed change to the criteria for defining communities for the purpose of this assessment is shown in Table 4.

88 The change in the GST distribution, shown in Table 7, reflects the combined effect of changes to the share of state population in small communities and the application of the unchanged regional cost gradient to these changed population shares.

89 The driver of need for electricity subsidies in remote communities is the population each state has in remote and very remote communities. The proposed changes to the criteria for defining communities for the purpose of this assessment would reduce the share of the population in remote communities for Western Australia and the Northern Territory (and increase the shares for other states) and reduce the share in very remote communities for Queensland and the Northern Territory (and increase the shares for the other states).

90 Assessed needs for electricity subsidies in remote communities would be affected by the proposed reduction in the cost gradient between remote and very remote communities.

91 The net effect on the GST distribution of these two changes to the remote communities electricity subsidies assessment is show in Table 7.

92 The general regional cost gradient is applied to expenses in the First Nations community development component, other community development and amenities

component and the environmental protection component. The proposed changes to the general regional cost gradient are explained in the geography chapter. The changes would increase the distribution of GST to states with a greater share of the population in more remote areas (see Table 7).

Table 7 Indicative impact on GST distribution of proposed method changes (disaggregated), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
New definition of water subsidies population	5	11	-6	-3	-1	3	0	-9	20
Changes to electricity subsidies assessment	8	1	-2	-1	5	3	0	-15	18
New general regional costs gradient	-2	-2	1	1	0	1	0	2	5
Total	**11**	**10**	**-8**	**-3**	**4**	**8**	**0**	**-22**	**33**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
New definition of water subsidies population	1	2	-1	-1	-1	5	0	-35	1
Changes to electricity subsidies assessment	1	0	0	0	3	6	0	-57	1
New general regional costs gradient	0	0	0	0	0	2	-1	8	0
Total	**1**	**1**	**-1**	**-1**	**2**	**13**	**-1**	**-85**	**1**

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapters.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

Justice

Overview

1 On 13 June 2023, the Commission issued a consultation paper on the justice assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method with one additional element, the inclusion of a juvenile detention cost weight (if material).

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that COVID-19 resulted in a temporary departure from long term patterns of justice service provision, use and costs such that the 2020 Review Justice model remains appropriate if used with fit for purpose data?

State views

5 New South Wales, Queensland, Western Australia, South Australia, Tasmania, the ACT and the Northern Territory broadly agreed that the 2020 Review justice model remained appropriate.

6 Queensland supported the overall approach, subject to changes in the method for assessing policing needs.

7 Western Australia raised concerns with the prisons regression and New South Wales raised concerns with cost weights in the police and prisons assessments.

8 Victoria did not support the 2020 Review justice model and engaged a consultant to review the Commission's assessment methods. The consultant reported in December 2023.

Commission response

9 Most states were broadly supportive of retaining the 2020 Review model, although Victoria expressed a number of concerns. Some states made suggestions for improving the model. These are outlined and discussed in the sections below, along with a response to Victoria's concerns.

Commission draft position

10 The Commission proposes to broadly retain the 2020 Review model for the justice assessment, with some changes. The Commission's proposals are outlined in the relevant sections below.

Q2. Do states agree that data from 2019–20, 2020–21, and 2021–22 include the effects of COVID-19 related public health orders and do not reflect typical justice services and costs?

Q3. If data from 2019–20 to 2021–22 are not fit for purpose, do states support using data from 2022–23 to update the justice assessment? If so, can states provide an indication of when 2022–23 data could be provided to the Commission?

Q4. If data from 2022–23 are considered fit for purpose but are not available in time for inclusion in the 2025 Review, do states support updating the assessment in an update following the 2025 Review?

State views

11 All states agreed that data from 2019–20 to 2021–22 did not reflect typical justice services and costs.

12 Other than South Australia, all states supported using 2022–23 data in the assessment. South Australia would like data to be analysed for potential COVID-19 influence prior to use.

13 All states that responded supported updating the assessment with 2022–23 data in an update following the review if the data were not available in time for the review.

14 Western Australia, South Australia and the Northern Territory raised concerns over using only one year of data.

15 Western Australia and South Australia said 2022–23 data could still contain COVID-19 related impacts and therefore not reflect conditions in future years. Western Australia acknowledged that the justice data request could be burdensome for states to complete on an annual basis, however, it believed it would be prudent to also include 2023–24 and 2024–25 data.

16 The Northern Territory proposed the Commission move to annual updates of the justice data. It considered that trends in offences and associated services change more frequently than a 5-year period. In particular, the Northern Territory pointed towards the frequent changing patterns of offences during the COVID-19 period.

17 The Northern Territory also said that, during the COVID-19 affected years, the diversion of police resources for border control activities, and the impact of temporarily increased welfare payments, altered offence patterns associated with the justice system. The Northern Territory understood that similar increases in the number of offences have been seen in remote parts of Queensland and Western Australia. The short and medium-term policy landscape, and offender data, remain uncertain. Considering the ongoing changes in offence patterns (and resulting changes in policy), the Northern Territory submitted that an annual update is appropriate for the justice assessment. The Northern Territory said it can provide data for justice on an annual basis.

18 While Victoria agreed with the Commission's preliminary position, it expressed concerns regarding the data used to inform the justice assessment. It said that the lack of a 'national agreement and a nationally consistent data framework' means the current assessment is unable to adequately capture the drivers of justice expense needs. Victoria recommended the Commission discount, or assess components equal per capita, until a nationally consistent dataset is available.

19 The Victorian consultant's report said it was crucial to acknowledge the variability in costs across the states and that this lack of consistency signifies that any assessment of costs should acknowledge such uncertainties. It suggested this lack of consistency underscored the importance of a flexible and nuanced justice expense assessment that can adapt to the diverse landscape of state-level justice administration. It also said that these data limitations warranted discounting the justice assessment.

Commission response

20 Where possible, the Commission uses data from organisations with nationally consistent frameworks in place (such as the Australian Bureau of Statistics [ABS] or Australian Institute of Health and Welfare). The Commission considers that using data from these organisations increases the comparability and consistency of the data.

21 Some data used in the justice assessment are currently sourced from the ABS, the Australian Institute of Health and Welfare and the Productivity Commission. However, most data are sourced directly from states.[1] Data from the states can be used to determine national average use rates and cost weights.

22 Variability in costs across states does not necessarily signify uncertainties in the data that would warrant discounting. This variability is likely due partly to states' different policy choices. Using national average data smooths policy differences

[1] Prisoner data are sourced from the ABS. Juvenile detainee data are sourced from the Australian Institute of Health and Welfare. Courts costs are sourced from the Productivity Commission.

across states and provides a benchmark with which to assess needs in the context of diverse approaches to justice administration.

23 The Commission considers the data used in the justice assessment are the best currently available and fit for purpose. It is not aware of any other sources that would provide the required information to the same standard. The Commission has not identified sufficient concerns with the current data to support a discount or pursue an equal per capita assessment.

Updating data and the assessment

24 In the 2020 Review, processing new justice data provided by states was time consuming and resource intensive. The Commission considers such a large data request on a yearly basis would be a significant imposition on states, and the level of processing required would not be practical. The time between receiving the data from all states to completing all the processing is unlikely to be sufficient to meet update deadlines.

25 Furthermore, while the Commission acknowledges that some jurisdictions may experience fluctuations in the use of justice services, its analysis of national totals in ABS data on proceedings, defendants and prisoners shows that these measures are relatively stable over a 5-year period. Annually updating data would increase the burden on states for little benefit.

26 The Commission considers data from 2022–23 are likely to be more reliable than data collected during the pandemic-affected years. By 2022–23, public health orders associated with COVID-19, including lockdowns, had been removed or relaxed in all states. The Commission's analysis of ABS data indicates data for 2022–23 are not unduly affected by COVID-19. It expects state data will follow these same trends.

27 The Commission agrees that incorporating a second year of data (2023–24) would better reflect current and future state justice needs. The 2020 Review method incorporates an average of 2 years of data (2015–16 and 2016–17) in a number of the justice assessments. These 2 years of data also aligned with the 2016 Census year. The state-provided justice data were not updated during the 2020 Review period.

28 Given the time required to process states' justice data and consult with states on proposed method changes the Commission anticipates that this work will not be completed in time for the 2025 Review final report. To complete this work, the Commission needs to process and analyse data in several steps.

- First, state data need to be validated to ensure they are fit for purpose. This involves checking all data are provided in the correct format and data appear reasonable. This may also involve asking states to clarify abnormalities or to provide updated data.
- Second, data need to be processed and collated into a single format that can be used in the assessment. For instance, states report police, prisons and criminal courts data using different geographical areas (mainly by suburb or local government area), which need to be manually assigned an ABS remoteness area

before being added to the assessment model. This will involve building unique calculations for each state's data.

- Third, the Commission needs to analyse data to explore any potential method changes, including those put forward by states, and verify the final method. For instance, the Commission will need to test whether the regression models used in the police and prisons assessments are returning valid results and methods are fit for purpose.

29 Throughout this process, the Commission needs to consult with states regarding any data issues and to allow them the opportunity to comment on analysis and any proposed changes to the assessment method. The Commission also seeks to be transparent by providing states with details of any modifications made to their data for use in the assessment.

30 During the 2020 Review the process of validating and analysing data took place over 2 years. The Commission considers that it is not feasible to validate and analyse all the data in time for the 2025 Review.

31 To allow for appropriate consultation with states, the Commission proposes to maintain the 2020 Review method for GST distribution in 2025–26 and update the justice assessment method in the 2026 Update. The proposed timetable for this process is outlined in Attachment B.

32 Delaying the inclusion of the new method will also allow the Commission to incorporate and average 2022–23 and 2023–24 data rather than introducing data in stages.

Commission draft position

33 The Commission proposes to:

- not apply any new equal per capita assessments or discounts due to data concerns
- update the justice assessment method in the 2026 Update with data from 2022–23 and 2023–24 and maintain the 2020 Review method for GST distribution in 2025–26
- not request justice data from states on an ongoing annual basis.

Q5. Do states agree that the Commission:

- **apply a cost weight for juvenile detainees in the prisons assessment if material?**
- **not make any changes to the juvenile detainees age groups in the prisons assessment?**

State views

34 New South Wales, Queensland, Western Australia, Tasmania, the ACT and the Northern Territory supported the application of a juvenile detainee cost weight in the prisons assessment if it is material.

35 South Australia suggested the Commission wait until 2022–23 prisons data have been provided to confirm the strength of the growth of juvenile detainee costs and to test materiality.

36 Queensland proposed a method for calculating cost weights for juvenile detainees based on the proportion of juvenile detainees in the 0–14 and 15–24 ages groups.[2] It also noted that the cost of detainment (per night) for youth detention is almost 12 times greater than the cost for prisons.

37 Victoria said it did not support the application of a cost weight because it considered the *Report on Government Services 2023* juvenile detention expenditure data were not comparable across states.

38 All states that responded supported not changing the juvenile detainee age groups in response to changes to the minimum age of criminal responsibility across states. South Australia noted that this position should be revisited prior to the 2025 Review if all states adopted uniform policies.

Commission response

Juvenile detainee cost weight

39 The Commission has considered Queensland's proposed model for calculating the juvenile detainee cost weight. However, it does not appear to use national average data.

40 The Commission notes the Productivity Commission's *Report on Government Services 2024* juvenile detention expenditure data are published with a qualifier that says the

[2] Queensland's juvenile detainee cost weight is based on the difference in the cost of daily detainment for juvenile detainees compared with adult prisoners (derived from *Report on Government Services* data). Queensland has calculated this cost weight to be 12. The full cost weight is applied to the 0–14 years assessed detainee group. A second cost weight is calculated for the 15–24 years group. This is based on the percentage of juvenile detainees in the 15–24 years group of assessed prisoners. For example, if the 15–24-year age group contains 12 per cent youth detainees, it would be *juvenile detainees* (12% x 12) + *adult prisoners* (0.88 x 1) = 2.32. The 2.32 cost weight would be applied to the 15–24 year assessed detainees.

data are not comparable across states.[3] The Productivity Commission advised that data are not comparable because states have different funding structures for their youth justice services.

41 Despite the Productivity Commission's caveat, the *Report on Government Services* juvenile detention expenditure data are currently the best available for determining adult prisoner versus juvenile detainee cost differences. The Commission proposes to use the *Report on Government Services* national average data to calculate juvenile detainee cost weights and considers this will smooth out policy influences from any one state. The juvenile detainee cost weights are shown in Table 1 below.

Table 1 Juvenile detainee cost weight

	2020-21	2021-22	2022-23
Cost juvenile detention ($m)	771	848	855
Cost adult prisons ($m)	4,424	4,605	4,630
Juvenile detainees (No.)	793	827	828
Adult prisoners (No.)	42,798	40,342	41,814
Yearly cost per juvenile detainee ($)	972,218	1,024,918	1,032,919
Yearly cost per adult prisoner ($)	103,372	114,160	110,726
Cost weight – juvenile detainees	**9.41**	**8.98**	**9.33**

Note: The juvenile detainee cost weight is calculated by dividing the yearly cost per juvenile detainee by the yearly cost per adult prisoner.

Source: Productivity Commission's Report on Government Services 2024, Youth justice services Table 17A.21, Corrective services 8A.2 and ABS Prisoners in Australia 2023 Table 21.

42 If the cost weight is material once it has been applied to the final 2025 Review data, the Commission proposes to apply the cost weight to a (revised) 0–17 year age group, instead of trying to split the cost weight over 2 different age groups (the current 0–14 and 15–24 age groups).[4] This is because it is simpler to apply a cost weight to one age group instead of calculating proportional cost weights for some of the prisoners in an age group (that is, not all prisoners in the 15–24 age group are juvenile detainees).

43 The 0–17 years age group will include all juvenile detainees derived from Australian Institute of Health and Welfare data. The cost weight would be updated yearly because prisons data are updated yearly. Consistent with the treatment of other cost weights in the justice assessment, materiality will not be tested each year.

Changes to the minimum age of criminal responsibility

44 As of March 2024, Victoria, the ACT and the Northern Territory have raised the age of criminal responsibility to 12, or plan to do so prior to the 2025 Review.[5] Victoria and

[3] This refers to the *Report on Government Services 2024* Youth Justice data on 'Cost per young person subject to detention-based supervision, 2022-23', table 17A.21. The table notes include the qualifier that data 'are not comparable across jurisdictions but are comparable (subject to caveats) within jurisdictions over time'.

[4] To test the materiality of applying a cost weight, prisoner use rate age groups will be changed from 0–14 years and 15–24 years to 0–17 and 18–24 years. This change will mean all juvenile detainees are grouped together in the 0–17 years age group and a cost weight, applicable only to juvenile detainees, will be applied.

[5] Justice and Community Safety Directorate (JACS), Raising the Age, JACS website, 2023, accessed 29 February 2024.

the ACT have committed to raising this age to 14 in the next few years. While Tasmania is likely to have raised the age of minimum criminal responsibility to 14 before the next review, it also plans to set the minimum age of incarceration at 16.[6] New South Wales, Queensland, Western Australia and South Australia currently have no plans to raise the minimum age of criminal responsibility.

45 A significant change in the composition of the 0–14 age group might warrant revising the age group structure. However, even if all states transitioned to adopt 12 years as the minimum age of criminal responsibility prior to the 2025 Review, the 0–14 age group would still be appropriate because it would continue to capture juvenile detainee numbers. Therefore, if a juvenile detainee cost weight is not material, the Commission considers a change in the 0–14 age group is not warranted to account for changes in the minimum age of responsibility.

Commission draft position

46 The Commission proposes to include a cost weight for juvenile detainees in the prisons assessment, if material. The cost weight would be derived using juvenile detainee data from the *Report on Government Services* data. If material, the assessment will be implemented in the 2026 Update and updated each year for the remainder of the review period.

47 The Commission does not propose to change the prisons assessment to account for proposed increases in the age of criminal responsibility.

Other issues raised by states

Police assessment

Does the assessment reflect what states do?

48 Queensland said that the Commission's current police model splits state expenses between 'offender' and 'community' policing. It interpreted the 2020 Review 31:69 split of police assessed expenses to reflect the costs associated with policing offenders versus policing the community.[7] Queensland said that the 'cost and time attributed to criminal activity' within Queensland police is significantly higher than the approximately 31% of policing costs attributed to criminal policing.[8] Queensland

[6] Department of Education, Children and Young People (Tas), Youth Justice Blueprint 2024–2034, Tasmanian Government, 2023, p5.

[7] The 31:69 split refers to the 2020 Review proportion of cost weighted regional population (69%) versus the proportion of the cost weighted assessed offenders (31%). Both these populations are added together to become the final assessed population for estimating states' policing expense needs.

[8] Queensland Treasury, Assessment consultation papers – Tranche 1 – 2025 Methodology Review: Queensland submission, Queensland Government, 2023, p 26.

considered that the split of its offender and community policing costs was around 70:30.

49 Queensland proposed altering the police assessment to recognise expense needs through a socio-demographic composition assessment of assessed offenders that is weighted by regional costs (instead of applying the cost weights to regional populations).[9] Queensland said that 'spending on community policing, including crime prevention, providing a visible police presence and community safety and support, is driven by crime and propensity rather than population'.

50 During the state visit, Queensland also presented evidence that suggested policing offenders in remote regions is considerably more costly than in other regions.

51 The Victorian consultant said it is crucial to note that, within police expenditure, the costs extend beyond just the marginal cost of policing crime. Police departments engage in a variety of activities, each with their own associated costs, which need to be factored into the overall assessment. It said this highlights the need for a nuanced approach that considers the diverse range of police responsibilities and the complexities in estimating their costs.

52 Victoria said that the causal link between police presence and offence rates is unclear. Victoria considered that the current police assessment is based on reactive police measures, such as offender numbers, which are a poor indication of need. Victoria said that 'modern policing is complex, with a growing focus on preventative and proactive services'.

53 Victoria recommended that, in the absence of robust preventative policing measures, the Commission should adopt a conservative approach and assess police equal per capita or discount the assessment.

54 Queensland said it did not support Victoria's proposed changes to the police assessment because it considered preventative policing expenses were driven by crime and crime propensity, and that preventative and reactive policing were inherently intertwined.

55 Victoria also said the police regression was based on data on 139 police districts. It noted that each police district is not a standardised data point. Each district has a different sized area, population and composition. More importantly, each state has a different number of police districts. This means the regression results could be biased by the policies of states, including the size, number, and location of police districts. Unless the regression can be adjusted to account for differences in state policy, the regression should not be used, or a discount should be applied.

[9] In the 2020 Review method, police regional cost weights are applied to regional populations instead of assessed offender numbers which are calculated through a socio-demographic composition assessment.

56 The Victorian consultant recommended using a simplified model based only on police district population and remoteness since it found the offence variable to be ineffective at capturing cost drivers.

57 The consultant also recommended that a population variable be added to the regression model to fully account for the differences in police district size. It held concerns that states' different police district sizes would disproportionately affect the model, beyond what is accounted for by the population weighting of these districts. The consultant suggested that this is indicated by the different cost weights generated by adding population to the model.

Commission response

58 The police regression captures all recurrent expenses in the policing task and estimates a national average policing cost per offender and a policing cost for each regional area. As noted in the 2020 Review, this should not be interpreted as a split between the costs associated with targeting offenders and the cost of general community policing (as referred to in Queensland's comments).[10] Rather, the regression estimates the national average per offender policing cost and a policing cost for each region. It does not assign costs to a specific policing task.[11] A more detailed breakdown of the current model is in Attachment A.

59 There are 2 elements used in the current police assessment.

- A socio-demographic composition assessment captures each population sub-group's national average offence rates and applies these to each state's population. The police regression estimates the national average cost of each offender.
- A population-based assessment reflects the cost of policing in each remoteness region. The police regression estimates the national average cost of policing in each region.

60 Any state costs incurred through the policing of offenders, above that captured in the offender cost weight, will be captured in the regional cost weight calculation.

61 Assessing all police expenditure either by only using national average offender numbers, or only using population (per capita) would not adequately recognise all the drivers of police costs. Submissions from states and advice from police officials in previous reviews, as well as research undertaken by the Commission for the current review, indicate that in addition to providing resources based on the level of criminal activity (that is, offender numbers), police also carry out other activities such as preventative policing, central policing operations and providing extra government services in remote areas.

[10] Commonwealth Grants Commission (CGC), Report on GST Revenue Sharing Relativities - 2020 Review, CGC, Australian Government, 2020, 2:267.

[11] Accordingly, these proportions are not comparable to the 2015 Review method which split costs between 'specialised' and 'community' policing.

62 The current model recognises that the costs of these other activities are driven by population size and remoteness as well as offender socio-demographic composition. An assessment that only relies on offender socio-demographic composition calculation would not capture all the costs related to other policing activities.

63 While testing in the 2020 Review indicated that capturing offender costs by region was not significant, the Commission considers that the high cost in remote regions is capturing the higher cost of policing offenders as well as higher cost of policing the regions. The Commission will test whether state data support an additional cost weight for remote offenders. Any change will be implemented in the 2026 Update.

64 In previous reviews, the Commission acknowledged that states weighed the balance between offender driven costs and costs driven by other activities differently. The difference between states may reflect state policy choices.

65 Research undertaken by the Commission for the 2025 Review suggests that state policies regarding policing activities continue to differ. In the last 5 years some states, such as Victoria and the ACT, have emphasised proactive policing strategies, such as increasing police visibility and providing community-based programs aimed at reducing crime rates.[12] These strategies have been guided by the National Crime Prevention Framework, which emphasises the importance of effective proactive policing in creating community safety and security.[13] Queensland and Western Australia have indicated that, while they undertake proactive strategies, they maintain a focus on reactive policing.[14]

66 During the state visit, Victoria Police indicated that, while preventative policing is becoming an increasingly important part of the policing task, resources are allocated according to availability and need at any point in time. It suggested that, for this reason, quantifying separate resource allocations for preventative and criminal policing would be difficult.

67 In relation to the police regression, the dataset contains costs, offence numbers and population for each police district in each state. Each state has a different number of police districts and so contributes a different number of data rows to the overall dataset (with each row representing the data for one police district).

68 While each state has a different number of police districts, each of the police district costs is weighted by the population in the police district. For example, if one police district contains 200,000 people, then the regression turns this into 200,000 data points, each with the same police costs per capita. The regression uses the

[12] Community Crime Prevention, Crime Prevention Strategy, Victorian Government, 2022; Police Media, More police engagement with Canberra community [Media Release], ACT Policing, 12 August 2020, accessed 28 November 2023.

[13] Australian Institute of Criminology (AIC), National Crime Prevention Framework, AIC, Australian Government, 2012.

[14] Queensland Treasury, Assessment consultation papers – Tranche 1 – 2025 Methodology Review, Queensland Treasury, Queensland Government, 2023, pp 25–27; Western Australia Police Force, Annual Report 2023, Western Australian Government, 2023, p 84.

cost per capita to estimate the national average policing cost in each region and national average cost per offender. Using this type of population weighting negates the bias due to states having different numbers and population sizes of police districts.

69 Regarding the consultant's concern about different police district sizes affecting the model, the Commission considers the different regional weights produced by adding a population variable are due to the strong correlation between population and population-weighted police districts. When variables in a linear regression are correlated in this way, their impact on the model becomes difficult to disentangle, undermining the precision of the affected coefficients.

70 The Commission considers the current police assessment remains an appropriate method for determining states' policing costs and provides a better horizontal fiscal equalisation outcome than an equal per capita or a discounted approach.

71 However, the Commission considers there may be a case for recognising increased costs for offenders in very remote regions and will consider this when analysing the data.

Commission draft position

72 The Commission proposes to retain the 2020 Review method for assessing police expenses, based on the socio-demographic composition of offenders, population and their associated costs.

73 Further analysis of state data and consultation is required to determine whether there should be an additional cost weight for remote offenders. If the outcome of this analysis and consultation supports inclusion of an additional cost weight, it will be implemented in the 2026 Update.

Allocation of central costs

74 New South Wales and Victoria outlined issues with the method used to allocate central policing costs to regions when deriving offender and regional cost weights.

75 New South Wales said allocating all central policing costs across all police districts/regions in a state overestimates the cost of remoteness. It considered that central costs should be allocated to police districts on an equal per capita basis, and an additional 25% discount should be applied to the regional cost gradient to account for higher central policing costs in metropolitan regions.[15] New South Wales considered these central types of policing have significantly different service use rates across different remoteness areas.

[15] Examples of these higher policing costs include services such as police force commands for counter-terrorism and special tactics, state intelligence, cybercrime, forensic services, marine and aviation services.

76 Victoria considered the current method overestimates remoteness cost weights and the socio-demographic use weights. Victoria said it is more likely that central costs are driven by state population size rather than number of offences or remoteness of the population.[16] By including these costs in the police regression, any relationship between expenditure, offence rates and remoteness will be amplified. Victoria considered that central costs should be excluded from the regression and assessed separately on an equal per capita basis.

77 The Victorian consultant also raised concerns with central costs being allocated across states' policing districts. It recommended assessing some central costs on an equal per capita basis and most police support services costs allocated according to the number of full-time equivalent police officers.

78 Queensland said that it does not support New South Wales' and Victoria's proposals to split central costs. It said that splitting these costs is impractical and the application of police central services is too policy dependent. It suggested that regional and remote police services rely more heavily on central policy services because they lack the capability of metropolitan police stations. It also said that central policing costs are driven by actual policing need and are not detached from other police spending.

Commission response

79 In the 2020 Review, the Commission allocated each state's central police costs across all its police districts (within a state). It used the resulting costs data to calculate regional cost weights (via a regression model).

80 While some types of police services such as counter-terrorism, state intelligence and cybercrime are likely to be skewed towards metropolitan areas, it is likely that some types of central costs (for example, those related to human resources, IT, education and financial services) would be used by police services across the whole state and not just major cities. Excluding all central costs from the regression would underestimate costs outside capital cities.

81 Data from states for the 2020 Review showed the national average central police cost, as a proportion of total policing costs, was 48%. This proportion ranged from 36% to 58% across states.

82 The Commission requested further data from states as part of the 2025 Review. The Commission proposes to use these data to inform its position on the appropriate treatment of central costs in the police assessment.

[16] Victoria said examples of central costs include corporate costs related to human resources, corporate finance, IT and legal services, in addition to state-wide policing activities like counter terrorism, forensic services, or intelligence and covert support. Department of Treasury and Finance (Vic), Victorian response to CGC 2025 Review consultation, Department of Treasury and Finance (Victoria), Victorian Government, 2023, p 59.

Commission draft position

83 Further analysis of state data and consultation is required to form a view on the treatment for central costs in the police assessment. The outcome of this analysis will be incorporated in the 2026 Update.

Global cities assessment and regional costs

84 New South Wales said densely populated and highly globalised cities face costs and pressures that other areas do not. These include terrorism, complex crime, disproportionate rates of federal prisoners and culturally and linguistically diverse prisoners. These effects should be assessed jointly to determine materiality. Alternatively, police service use rates could be estimated by remoteness level, which may allocate higher shares of costs related to complex crime to metropolitan areas.

85 Queensland did not consider complex crimes to be unique to major cities and noted that the Commonwealth agencies often manages the investigation of these crimes. It also suggested there was a lack of evidence that the operation of justice services in major cities incurs greater expenses than anywhere else.

Commission response

86 In the 2020 Review, the Commission investigated policing costs relating to global cities, such as counter-terrorism, federal prisoners and culturally and linguistically diverse prisoners. It found that the available data were insufficient to reliably measure the relative impact of these drivers on state costs and that assessments of these drivers were unlikely to be material.

87 For the 2025 Review the Commission requested more recent data from states on policing expenses including those related to counter terrorism and complex crime. The Commission is analysing these data to determine whether certain costs are unique to major cities and whether a reliable material assessment can be developed.

88 The Commission investigated the materiality of federal prisoners. Table 2, shows the extra cost of providing services to federal prisoners is not material.

Table 2 Cost of federal prisoners, 2022–23

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
A. Number of federal prisoners	650	372	136	126	35	8	12	22	1,361
B. Yearly cost of a prisoner ($)									111,508
C. Yearly cost of all federal prisoners ($m) (A*B)	72.5	41.5	15.2	14.0	3.9	0.9	1.3	2.5	151.8
D. Population (millions)	8.2	6.7	5.4	2.8	1.8	0.6	0.5	0.3	26.3
E. Per capita cost of federal prisoners ($pc) (C/D)	8.8	6.2	2.8	5.0	2.1	1.6	2.9	9.8	5.8

Source: ABS Prisoners in Australia, 2023, Table 38 Federal prisoners selected characteristics by states and territories, 2013 to 2023; *Report on Government Services 2024*, Corrective services, Table 8A.20 Real net operating expenditure per prisoner and per offender per day, 2022-23 dollars; ABS Estimated Resident Population 2022-23.

89 Regarding culturally and linguistically diverse prisoners, the Commission accepts there is a conceptual case that certain population groups could drive higher costs in providing justice services. However, there are significant impediments to reliably identifying and quantifying how such groups affect costs across justice services. In preparation for the next review, the Commission proposes to work with states and relevant data providers to examine available data and consider potential drivers.

Commission draft position

90 Further analysis of state data and consultation is required to determine whether certain police costs are unique to major cities and should be included in the police assessment. The outcome of this analysis will be incorporated in the 2026 Update.

91 The Commission proposes to consider how cultural and linguistic diversity affects state service costs as part of its proposed forward work program.

Barriers to policy reform

92 Victoria considered the current assessment approach could present barriers to reform. In its submission, Victoria said:

> For example, a state attempting to reduce Indigenous offence… rates may spend more, including on diversionary programs, and successfully reduce offence… rates for Indigenous residents. However, if that state has a higher-than-average proportion of Indigenous residents, reducing offence rates for that group would reduce the national average offence rate, and therefore the number of assessed offenders in that state, resulting in a reduction in its assessed justice expenditure needs. The state would effectively be punished for implementing good policy.[17]

93 The Victorian consultant said it was important that any system of redistribution does not disincentivise investments in evidence-based measures that cut costs and crime. It advocated the allocation of cost weights to population characteristics directly, without employing offences as the only police service proxy.

94 The Victorian consultant said that the Commission should consider weighting different offence types by seriousness, using the National Offence Index, to reflect that costs involved in policing different offences are not equal. It considered that not recognising the unequal costs of policing different offences could disincentivise a state from reducing the number of minor offences it prosecuted. It suggested that this conflicted with the principle of policy neutrality.

95 The consultant also recommended that offences should be excluded from the model if they are overly influenced by state policies, or a discount be applied to the assessment, to account for the impact of state policy on offender numbers.

[17] Department of Treasury and Finance (Vic), Victorian response to CGC 2025 Review consultation, Department of Treasury and Finance (Vic), Victorian Government, 2023, p 57.

Commission response

96 The Commission's assessments are designed to be based on national average policies. If all states report a reduction in 15–24-year-old offenders, for example, then the assessment will capture the national average reduction. If only one state reports a reduction in 15–24-year-old offender rates, it is unlikely to materially affect the national average use rates. In this case, a state with fewer than national average 15–24-year-old offenders would not see a reduction in its GST share.

97 For example, a state would be assessed to need the national average level of expenses to provide police services in relation to 15–24-year-old offenders. However, if its own offender rates have decreased, that state is considered to be more efficient and gets to keep the assessed GST difference between its lower level of 15–24-year-old offender rates and the national average level.

98 The Commission's current police assessment considers all policing costs, not only costs related to offender rates. If a state chooses to increase spending on diversionary programs to reduce offending, these costs will be captured as part of other policing activities costs in the police assessment and inform the national average per capita costs for policing in each region.

99 In relation to the weighting of offences by seriousness, the Commission acknowledges there is a conceptual case that the cost of investigating some crimes is significantly more expensive than others. A state may face higher costs beyond its control if these offences are committed more often within its borders than in other states.

100 However, the Commission is not aware of any available data that would allow it to determine whether a more serious crime equates to greater policing costs in each case. For instance, it cannot determine whether an investigation into illicit drug importation is more costly than a murder investigation despite it being considered a less serious crime in the National Offence Index.[18] It is also true that the costs associated with 2 crimes of the same seriousness may differ dramatically. The Commission therefore considers the weighting of offences by seriousness to be unfeasible given current data availability.[19]

101 The Commission does not consider having an equal weight for each offence to conflict with the principle of policy neutrality. With an equal weighting of offences states may focus police activities on whichever offences they choose.[20] These policy choices form part of the national average policy on what states spend per offender. This cost weight is then applied to each state's assessed offenders rather than its

[18] Australian Bureau of Statistics (ABS), National Offence Index, ABS website, 2018, accessed 5 February 2024.

[19] The Commission will continue to explore whether suitable data can be identified for use in weighting offences for the next review.

[20] The Commission does not make judgements on what states could or should do.

actual offenders. In this way, individual states are only able to influence their assessed GST needs in proportion to how much they affect national average policies.

102 Excluding certain offences from the national average because they might reflect policy choices would therefore be inappropriate. Furthermore, the Commission does not consider a discount to be warranted because the impact of individual state policies is mitigated by using national averages.

103 Given the current data availability, the Commission considers the assessment method to be appropriate for assessing state spending on police services. It has not identified any evidence suggesting that the method is not broadly capturing states' spending needs.

Commission draft position

104 The Commission does not propose to make changes to the police assessment due to potential barriers for policy reform.

Exclusion of traffic and breach of bail offences

105 Western Australia said the Commission should determine if there has been any change in the robustness of traffic and breach of bail offence data and revisit the decision to exclude these offences if data are sufficiently robust. Because traffic and breach of bail offences make up a significant proportion of total offences, it suggests their inclusion would provide a more accurate representation of police expenses.

Commission response

106 During the 2020 Review the ABS recommended the Commission exclude traffic and breach of bail offence data because of quality and comparability concerns.

107 The Commission sought advice from the ABS about whether this would again be the case for data provided for the 2025 Review. The ABS indicated that it had not recently reviewed the quality and comparability of traffic and breach of bail offence data across states. In the absence of evidence of improvements in the quality and comparability of the data, the Commission considers that these data have not been demonstrated as being fit for purpose. Therefore, traffic and breach of bail offence data will again be excluded from the assessment.

108 The Commission does not consider the exclusion of these offences to raise significant issues with the model since, as noted in the 2020 Review, they tend to require fewer resources than other types of crime.

109 In any event, it is likely the model used in the police assessment would partially capture the effects of these types of offences. For example, to the extent people committing these offences share a similar profile to other offenders, the regression will attribute costs to offender numbers. If their profile is different, as may be the case with some traffic offenders, the regression will attribute costs to police activities other than those relating to offender numbers.

Commission draft position

110 The Commission proposes to continue to exclude traffic and breach of bail offence data from the police assessment.

The use of proceedings data for assessed offenders

111 The Victorian consultant recommended that the Commission use ABS' offender counts rather than its proceedings count to calculate the Commission's measure of assessed offenders.[21] It considered proceedings to be an inappropriate measure of cost allocation.

Commission response

112 The Commission uses proceedings data in the police assessment to ensure that it captures the costs associated with investigating and charging a single offender on multiple occasions within a single year.[22] For instance, an individual may be charged with several offences in July and then further offences in November. This individual would be counted as a single offender but have 2 separate proceedings recorded against them.[23] Using the ABS' offenders count would not recognise the costs associated with the second (or more) separate instances of offending.

113 Commission analysis of ABS' proceedings data for 2022–23 indicates that 27% of offenders have more than one proceeding against them.[24] The costs associated with multiple proceedings against a single offender would therefore have a significant impact on the cost of policing.

Commission draft position

114 The Commission proposes to continue to use proceedings data in the calculation of assessed offenders as it considers they are an appropriate measure of offenders in the assessment.

5-tier socio-economic status structure for First Nations people

115 The Victorian consultant recommended that the Commission adopt the standard 5-tier structure of assessing First Nations socio-economic status groups rather than the 2020 Review method's 3-tier structure. It said that the non-linear relationship between socio-economic status and offences did not warrant merging socio-economic groups together and overlooks the nuances of the relationship. It

[21] The Commission scales state provided data to ABS' totals to calculate the Commission's number of assessed offenders.

[22] Australian Bureau of Statistics (ABS), Recorded Crime - Offenders methodology, 2022-23, ABS website, 2024, accessed 24 May 2024.

[23] Each instance of offending would be counted as a separate proceeding regardless of the number of offences an individual is charged with.

[24] Australian Bureau of Statistics (ABS), 'Table 17. Offenders, Age by number of times proceeded against by police, Selected states and territories, 2022–23' [data set], Recorded Crime - Offenders, ABS website, 2024, accessed 1 March 2024.

also noted that other variables had non-linear relationships, such as remoteness, but the structure of these were not simplified.

Commission response

116 For many years, criminologists have identified a strong relationship between socio-economic status and offence rates.[25] In previous reviews, the Commission has consistently adopted the use of a socio-economic status structure that shows this linear relationship. In the 2020 Review, the linear relationship was observable in the 5-tier socio-economic structure for non-Indigenous people. However, for First Nations people, the same relationship was not found using a 5-tier structure. Instead, a simplified 3-tiered approach was found to assess the socio-economic status of the First Nations population as accurately as the available data allowed.[26]

117 Adopting a socio-economic structure that does not show a linear relationship may mean that the measure is capturing the effects of factors unrelated to socio-economic status (for which the Commission cannot control because of data limitations). For First Nations people, this may reflect the effects of structural inequalities or being removed from culture and/or family.[27]

118 In relation to other variables with non-linear relationships that are not simplified, the Commission only alters the structure of these if it identifies a reason to do so, or on materiality grounds. As the remoteness variable can capture related effects such as economies and diseconomies of scale, the Commission does not expect the remoteness variable to always have a linear relationship.

Commission draft position

119 The Commission proposes to continue to apply the socio-economic status approach for First Nations people that best reflects a linear relationship with offence rates.

120 Further analysis of state data and consultation is required to determine an appropriate socio-economic structure for First Nations people. The outcome of this analysis will be included in the 2026 Update.

Discounting for method and data concerns

121 The Victorian consultant recommended that the Commission apply a discount to the police assessment because of concerns over not attributing a cost weight for different offence types and to recognise the inconsistencies in data reporting across states.

[25] L Ellis, DP Farrington and AW Hoskins, *Handbook of Crime Correlates*, 2nd edn, Academic Press, London, 2019, pp 92–102.

[26] Commonwealth Grants Commission (CGC), Report on GST Revenue Sharing Relativities – 2020 Review, CGC, Australian Government, 2020, 2:262.

[27] Australian Law Reform Commission (ALRC), Pathways to Justice–Inquiry Into The Incarceration Rate Of Aboriginal And Torres Strait Islander Peoples, ALRC, Australian Government, 2018, accessed 6 February 2024.

Commission response

122 The Commission acknowledges that states incur different costs for different types of offences and there are some differences in the way states collect data. However, it is currently not aware of any evidence suggesting that these differences are having a material impact on its estimate of states' police expense needs.

123 The assessment recognises that geographically large states with dispersed populations and higher levels of disadvantage are expected to spend more per capita on policing. As noted in the *Commission's position on fiscal equalisation, supporting principles and assessment guidelines* paper, applying a discount for the general uncertainty over method or data may result in an inferior assessment.[28] The Commission has not identified any evidence suggesting that the police assessment is significantly adversely affected by method or data concerns and is not broadly capturing state needs such that a discount is warranted.

Commission draft position

124 The Commission proposes not to apply a discount to the police assessment to account for the inability of the assessment to recognise different costs for different offence types or inconsistencies in data reporting.

Criminal courts

Criminal courts finalisations

125 Victoria considered the conceptual case and data to support the criminal courts assessment lacked robustness and that a discount should be applied.

126 Victoria said that the relationship between state spending and the volume of finalised defendants who used criminal courts was highly variable between states, and therefore is an inadequate measure of state need. Victoria considered the current assessment lacked appropriate data to capture expense needs.

127 The consultant said that in the 2020 Review, state-reported data on court expenses showed a strikingly wide variance in the proportion of criminal court expenditure across states. This high variance questions the data's reliability for making accurate comparative assessments or for drawing broad conclusions about state-level spending practices.

[28] Applying a discount would assume that, in all cases, states currently assessed to have above-average assessed GST needs for police are only in this position because of a method or data issue. Commonwealth Grants Commission (CGC), Commission's position on fiscal equalisation, supporting principles and assessment guidelines, CGC, Australian Government, 2023, pp 22–23.

128 During its state visit, Victoria also suggested that programs, including several of its specialist courts, that were used to divert people away from the court systems were not captured in national data.

Commission response

Data used in the criminal courts assessment

129 The Commission's criminal courts assessment uses primarily state provided data to estimate regional costs as well as the number of assessed finalised defendants in each state by Indigenous status, age, remoteness and socio-economic status.[29]

130 The Commission acknowledges there are policy differences in how states provide their criminal court services that may affect the number of finalised defendants or courts costs in the data provided to the Commission.

131 For example, the number of a state's actual finalised defendants reflects the level of crime within that state and the propensity of police, in accordance with state policy, to deal with matters outside of the court system by using measures such as warnings and infringement notices.

132 The Commission has identified several factors that influence states' actual spend per defendant in criminal courts.

- The structure of court systems differs by state. Most states have 3 levels of courts, however there are only 2 in Tasmania, the ACT and the Northern Territory.
- The types of cases heard by each court level varies between states as well as the method used to finalise them. This means, for instance, that a similar case presided over by a magistrate in one state may require a trial by jury in another, which are generally more costly.
- The number of staff employed by states to provide court services vary, after controlling for number of finalised defendants.

133 The Commission also understands that the number of active cases in a state's courts system can affect the actual cost per defendant. Adjournments, re-trials, late entering of pleas and other related activities which lengthen the court process (therefore increasing the cost per defendant) occur most often where resourcing is overstretched.[30]

134 The Commission notes the current assessment only applies a regional cost weight (based on national average costs) to magistrates' courts. This is because in the 2020 Review it was found that magistrates' courts were the main level of court

[29] The Commission uses the ABS' definition of a finalised defendant in the assessment: 'A person or organisation for whom, all charges relating to the one case have been formally completed (within the reference period) so that they cease to be an item of work to be dealt with by the court'. Australian Bureau of Statistics (ABS), Criminal Courts, Australia methodology, 2022-23, ABS website, 2024, accessed 24 May 2024.

[30] J Payne, 'Criminal trial delays in Australia: trial listing outcomes', *Research and Public Policy Series 74*, Australian Institute of Criminology, Australian Government, 2007, p 72.

affected by regional cost differentials.[31] These costs are applied to assessed finalised defendants in each region.[32]

135 While the additional costs of some higher courts, such as district courts, were identified in the 2020 Review, these were found to be largely offset by the fact that not all defendants from remote areas whose cases were finalised used remote courts. For simplicity these offsetting costs were excluded from the gradient.

136 Despite there being a number of differences between states that affect defendant numbers and criminal courts costs, the Commission considers it reasonable, and less complex than alternative approaches, to assume there is a relationship between defendant volume and state court expenses. Also, the assessment uses national average finalised defendants and costs which provides a policy neutral measure of assessed GST needs. The only cost weight applied in the assessment relates to magistrates' court costs. This cost weight reflects the national average cost of magistrate's courts in remote versus non-remote regions. As magistrates' court costs are only a proportion of total court costs, this reduces the effect of variability in costs across states.

137 The current assessment uses finalised defendants as a measure of criminal courts use. The Productivity Commission, while reporting on finalised defendants, also uses 'lodgements' as the basis of court workload and indicator of community demand for court services.[33] However, the number of lodgements does not always equal the number of finalisations in the same year as not all matters lodged in one year will be finalised in the same year.[34] The Commission is not aware of other sources of data that could be used as an alternative for criminal courts use.

138 The Commission considers that finalised defendants remain the best available data to capture drivers of states' criminal court expense needs.

Specialist courts and diversion programs

139 The current criminal courts assessment includes states' spending for all courts related expenses as defined by the Government Financial Statistics data. This enables the Commission to include all criminal courts spending in its assessment, including the costs of running specialist courts and court-based diversion programs.

[31] In the 2020 Review, magistrates criminal courts costs were on average 51% of all criminal court costs. The magistrate criminal court regional cost weight applied to finalised defendants from remote and very remote regions in the 2020 Review was 20.6%.

[32] In relation to criminal court costs, the current assessment recognises magistrate court regional cost differences, but does not apply any other assessment of cost - such as cost per finalisation.

[33] Productivity Commission (PC), 7 Courts, PC website, 2023, accessed 30 November 2023.

[34] Lodgements are matters initiated in the court system and provide the basis for court workload as well as reflecting community demand for court services. Finalisations represent the completion of matters in the court system so that they cease to be an item of work for the court. Each lodgement can be finalised only once. Matters may be finalised by adjudication, transfer, or another non-adjudicated method (such as withdrawal of a matter by the prosecution or settlement by the parties involved). The pattern of finalisations across states is similar to that of lodgements, but lodgements will not equal finalisations in any given year because not all matters lodged in one year will be finalised in the same year. Steering Committee for the Review of Government Service Provision, Part C Justice - Report on Government Services 2023, PC, Australian Government, 2023, accessed 13 February 2024.

140 While the number of assessed finalised defendants currently excludes finalised defendants in specialist courts and diversion programs, excluding these data produces a better nationally comparable cost per assessed defendant.[35] Defendants in these types of programs are finalised (and therefore counted as a finalised defendant) in the court where their case was first heard, normally the magistrates' court.[36] Including any additional finalisations would lead to double counting of finalised defendants because these programs are often provided by the same court.[37] This would impact how the Commission calculates the national average of what states spend on each defendant, particularly if states provide these services at different rates.

141 Expenses relating to some diversion programs may not be captured using the current method because they may be provided by non-court agencies. These types of costs may be assessed elsewhere in the justice profile, such as the police assessment, or may be captured in the Commission's other categories. For example, some costs associated with drug diversions may be captured in the health assessment because in some states they are funded by health agencies. The Commission considers reallocating these expenses from other categories to criminal courts to be impractical as it would require highly disaggregated state data. Producing these data, if possible, would place a burden on states.

Commission draft position

142 The Commission proposes to continue to use the number of finalised defendants as it considers it remains the most appropriate driver of criminal court expenses and is a suitable measure for determining state spending needs.

Data quality and averaging in the criminal courts assessment and defendant socio-economic status

143 Victoria said that using data from only 5 states in the socio-demographic composition calculation and 4 states in the criminal courts regional cost gradient fails to accurately capture the average of state policy.

144 The Victorian consultant recommended limiting modelling to data available in every state (age and socio-economic status) or imputing data for any missing states rather than excluding them from the national average.

[35] This exclusion is consistent with ABS' practice of counting defendants.

[36] Defendants who are transferred to a specialist court are finalised by transfer. Australian Bureau of Statistics (ABS), Criminal Courts, Australia methodology, ABS website, 2024, accessed 24 January 2024. Defendants who have successfully completed diversion programs may be finalised by being acquitted or having their cases withdrawn, for example, Magistrates' Court of Victoria (MCV), Diversion, MCV website, 2020, accessed 24 May 2024; Legal Aid Queensland (LAQ), Court Diversion for a minor drug offence, LAQ website, 2023, accessed 24 May 2024; Legal Services Commission South Australia (LSC), Magistrates Court Diversion Program, LSC website, 2019, accessed 24 May 2024.

[37] In some cases, individuals may be returned to the court that transferred them for an additional finalisation. Although this individual would be counted as 2 defendants, the Commission considers the ABS' approach to counting defendants minimises the effect of double counting.

Commission response

145 Data from Victoria, Tasmania and the ACT were not included in the socio-demographic composition calculation for the 2020 Review because these states were unable to provide the Indigenous status of finalised defendants.

146 Six states provided data for the criminal courts' regional gradient. However, data from 2 states were not useable. This is because the cost data those states provided were distributed proportionally to the number of finalisations a court had. These data were not the actual cost of these courts and therefore offered no ability to compare costs between remote and non-remote areas.

147 For the 2025 Review, the Commission agrees that, where possible, the assessment should be based on data from all states. However, given the importance of Indigenous status, limiting modelling to only those data available for every state would be contrary to the objective of horizontal fiscal equalisation.

Commission draft position

148 The Commission proposes to use data from all states in the criminal courts component. If this is not possible, the Commission will use its judgement to determine the best approach consistent with the objective of horizontal fiscal equalisation.

149 Further analysis of state data and consultation is required to determine the socio-demographic composition calculation for the regional cost gradient in the criminal courts assessment. The outcome of this analysis will be included in the 2026 Update.

Treatment of not-stated Indigenous status

150 Western Australia said it did not support the current 2020 Review method used to attribute Indigenous status to criminal court finalised defendants who have not provided their Indigenous status.

151 Western Australia noted the Commission currently applied the Indigenous status from population shares (that is, estimated resident population) to those finalised defendants with a 'not-stated' Indigenous status. It provided data to show this approach underestimated the number of finalised defendants who identify as First Nations.

152 Western Australia said Indigenous status should be attributed to the not-stated finalised defendants based on the proportion of 'stated' defendant responses, which the Commission does elsewhere in the justice assessment.

153 The Victorian consultant supported the use of the 2020 Review method of attributing not-stated responses based on population proportions.

Commission response

154 In the 2020 Review the Commission was concerned that attributing Indigenous status to not-stated finalised defendants by shares of stated defendant responses would overestimate the number of First Nations finalised defendants. Similar to the Victorian consultant's view, it considered the vast majority of First Nations offenders may have already been identified in the data.

155 Data provided by Western Australia for the 2020 Review showed a large proportion of the state's non-stated defendant responses for traffic offences came from areas where First Nations people make up a smaller proportion of the population.

156 Western Australia's 2022–23 data show 24% of finalised defendants (before attributing Indigenous status to not-stated responses) identified as First Nations.[38] This proportion of First Nations responses more closely aligns with 2020 Review data when not-stated responses are attributed by shares of stated defendant responses (23% First Nations) rather than population shares (16% First Nations).

157 The Commission also notes that the proportion of not-stated defendant responses has fallen to 7% in the 2022–23 data down from 41% in the 2020 Review data.

158 As data provided by Western Australia informed the decision in the 2020 Review on how to attribute not-stated responses, the Commission considers that attributing Indigenous status to not-stated finalised defendants by shares of stated defendant responses would not overestimate the number of First Nations finalised defendants.

Commission draft position

159 The Commission proposes to attribute Indigenous status to not-stated finalised defendants by the proportion of the stated defendant responses for inclusion in the 2026 Update. This means all justice components will now use the same approach to attributing not-stated responses.

Regression for regional and service delivery scale costs

160 Western Australia considered a regression could be used to quantify a regional cost factor in the criminal courts component. It said this regression could also be used to account for service delivery scale costs. Western Australia suggested that if a regression cannot be developed for the criminal courts component, the service delivery scale factor derived from the prisons assessment should be applied to criminal courts.

[38] Western Australia said it made the reasonable assumption that the composition of offenders has not changed structurally from 2016–17 to 2022–23 for traffic offences.

Commission response

161 The regional cost gradient in the current criminal courts assessment recognises the combined effect of regional and service delivery scale costs. The gradient takes into account:

- the relative costs of court services in different regions
- the standard of service provided in different areas
- the propensity of residents to travel to non-remote areas to attend court
- that magistrates' courts represent about half of all court costs, and higher courts rarely travel to remote areas.

162 In the 2020 Review, the Commission decided to adopt a simple approach to calculating costs for different court districts due to data limitations and offsetting cost factors.

163 As states were unable to meaningfully attribute court costs at the district level, the regional costs gradient could only account for proportionally higher costs per case at the regional level. The cost gradient was only applied to the magistrates' courts since data showed this was the main level of criminal court affected by regional factors.

164 While the additional costs of some higher courts, such as district courts, were identified in the 2020 Review, these were found to be largely offset by the fact that not all finalised defendants from remote areas used remote courts. For simplicity these offsetting costs were excluded from the gradient.

165 A regression may potentially be developed if state data are of sufficient quality and were able to be disaggregated at the district level. However, given the offsetting factors a regression may add unnecessary complexity to the model.

Commission draft position

166 The Commission proposes to continue to apply a cost gradient when assessing regional and service delivery scale costs in the criminal courts assessment. Updated data has been requested from states for the 2025 Review. Analysis of the updated state data and consultation is required to determine an appropriate cost gradient. The outcome of this analysis will be included in the 2026 Update.

Split between other legal services and criminal courts

167 Victoria said the expense split between criminal courts and other legal services was unreliable because it relied heavily on state data. It considered the data had high levels of variability likely due to classification inconsistencies between states. The Victorian consultant raised similar concerns.

168 Victoria recommended the Commission use the *Report on Government Services* criminal courts expenditure data for criminal and civil courts and place any remaining difference between expense totals in *Report on Government Services* data and Government Financial Statistics data into the other legal services component.

Commission response

169 The Commission has previously explored using *Report on Government Services* data for splitting criminal courts and other legal services but found it unsuitable. Non-courts expenditure (such as the costs of running state departments of justice and legal aid) are a large portion of state expenses and are not captured in the *Report on Government Services* data. Some criminal court related expenses, such as those incurred by specialist courts, are also excluded.

170 Victoria's proposed method would attribute any courts costs missing from the *Report on Government Services* to the other legal services expenses, although some of these expenses would relate to criminal courts. Splitting court expenses in this manner would not provide the best estimate of costs incurred by states' criminal courts and other legal services.

Commission draft position

171 The Commission proposes to continue to use data provided by states for the 2025 Review to split other legal services and criminal courts expenses.

Prisons

Prisons regression and cost weights

172 New South Wales said the prisons assessment lacked evidence to support inclusion of the service delivery scale factor in calculating a regional cost gradient. While it agreed small prisons are more expensive than large prisons, it did not consider the effect reliably driven by remoteness. It said remote prisons were not driven by necessity and may not reflect average state policy.

173 New South Wales said its state-level modelling suggests the operating costs of metropolitan prisons in New South Wales were higher (per prisoner) than for remote prisons. New South Wales proposed the Commission replace the remoteness dummy variable in the prisons regression with a major cities dummy variable. Alternatively, it said a discount to remoteness and service delivery scale effects may be appropriate to recognise standard errors and uncertainty.

174 Victoria said the conceptual case for cost weighting remote prisons based on remote residents was weak and the Commission had not presented a compelling case that there was a material relationship between population remoteness and prison remoteness. It considered neither a remoteness cost weight nor a combined remoteness and service delivery scale cost weight should be applied to the prisons component. At the very least, a high discount should be applied.

175 Victoria said prisons are not located based on population dispersion, nor are prisoners commonly imprisoned near their prior residence. Prison location is independent of prisoner origin and prisons are not built in a particular location to

service the imprisonment needs of the surrounding area. Prison locations are often based on historical circumstances or are a policy choice. Prisoners are placed and moved between prisons based on capacity and prisoner characteristics (such as gender, security needs, medical needs, and the stage of their sentence). Victoria said the situation appears similar in other states, with security being the primary driver and proximity to family sometimes not referenced at all.

176 Victoria said the results of the 2020 Review prison regression were not statistically significant, with high standard errors. It suggested the results were not sufficiently robust to meet the Commission's principles or the review terms of reference. It said the Commission used judgement to apply the results, without any discount to account for associated uncertainty. For example, in the 2020 Review, the Commission stated:

> the regression approach represents the most reliable available measure of the likely magnitude. As such it has decided to use the regression-based approach. It is worth noting that one reason for the low explanatory power of the model is major differences between States in the cost per prisoner. However, whether this reflects different levels of efficiency, or different accounting treatment and data standards, cannot be determined.[39]

177 The Victorian consultant suggested the Commission further explore regional costs given their analysis of the prisons regression, based on Victorian data, which found the remoteness coefficient to be insignificant. It noted that its findings showed the relationship between prison costs and remoteness was the opposite of the Commissions' assessment and were similar to New South Wales Treasury's analysis.

178 Queensland said that remoteness is a key cost driver within the prisons model and adds considerable explanatory power.

179 Western Australia said the conceptual case for costs being higher for prisons in remote areas was very strong. However, the prisons regression that calculates regional cost factors has a relatively low explanatory power. In the 2020 Review, the adjusted R-squared statistic was 19% which implies that a large proportion of variance in the prisoner cost variable is not explained by the independent variables included in the regression. It also implied that the coefficients of those variables are not robust.

180 It suggested the following variables influence prison expenses: prisoner gender, remand prisoners, prisoners with disabilities, prison age, prison funding model. If included in the regression, these variables could potentially increase the regression's explanatory power. Western Australia considered these data could be obtained from states.

[39] CGC, 2020 Review, 2:278.

181 Queensland said that adding new variables to the model would produce a less meaningful regression, introduce policy influence and increase complexity.

Commission response

182 In the 2020 Review, the prisons cost weights (which took into account a combination of service delivery scale,[40] remoteness and maximum-security prisoner costs) were calculated using a regression model. The regression had an R-squared of 0.2133 and adjusted R-squared of 0.1887.[41] This suggests it had a low explanatory power with only around 20% of the variation in the output variables being explained by the input variables. The Commission considered that, while greater explanatory power was preferable, the conceptual case for the assessment was strong and the regression approach was the most reliable measure available.

183 The Commission acknowledges state concerns with the regression method and reiterates that a regression model with greater explanatory value is preferred. Data provided by states for the 2025 Review will be analysed to determine whether a regression-based approach remains appropriate.

Regional cost weights

184 In the 2020 Review, a combined service delivery scale and regional cost gradient was calculated based on prison location but was allocated to states based on the usual residence of the assessed prison population. The regional cost was reduced by around 60% to account for the fact that not all prisoners from remote locations will go to a remote prison.[42] Allocating the costs in this way led to prisoners assessed to originate from remote areas being 17% more expensive than prisoners assessed to originate from non-remote areas.

185 All states currently have prisons in major city, inner regional or outer regional areas. Queensland, Western Australia, South Australia and the Northern Territory also have prisons and/or prison work camps in remote or very remote regions.[43] These 4 states also have above-average or close-to-average remote populations (Figure 1).

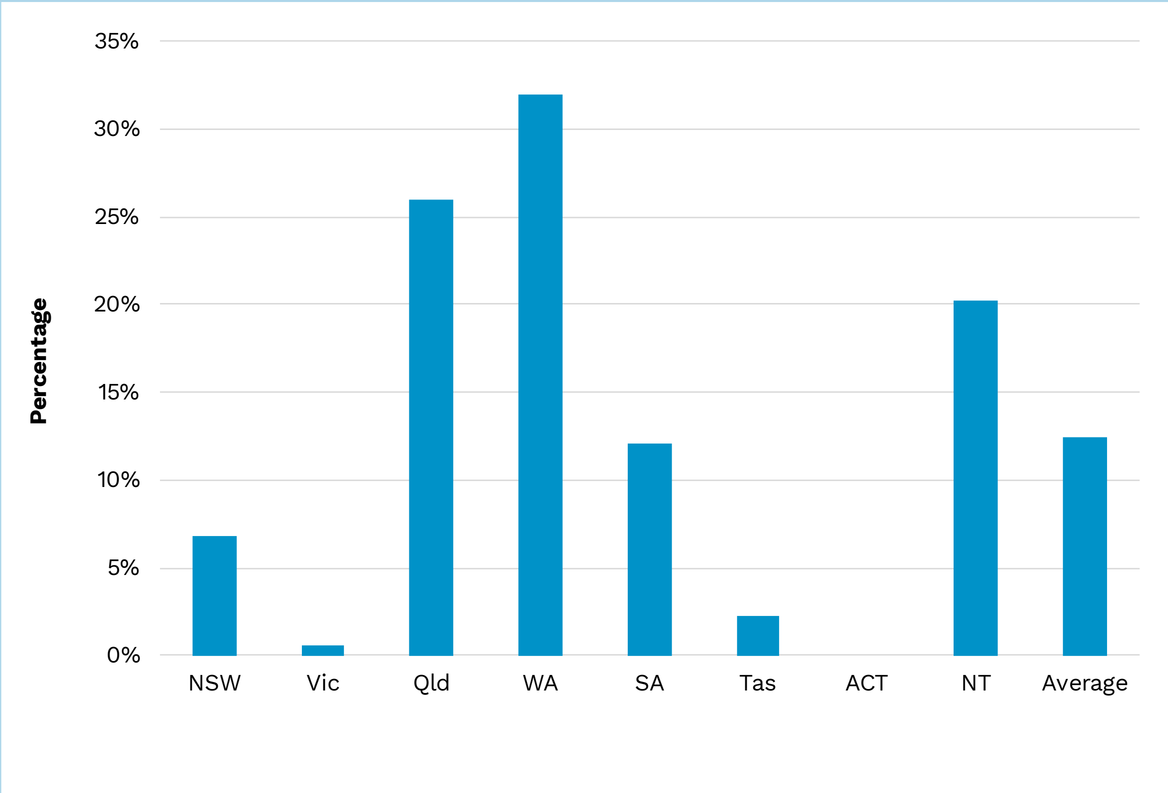
[40] Service delivery scale measures the additional costs of providing a service because the population served is small and isolated from other points of service delivery. CGC, 2020 Review, 2:507.

[41] The R-squared value is the proportion of the variance in the response (or outcomes) variable that can be explained by the predictor variables in the model. The value for R-squared can range from 0 to 1 where a value of 0 indicates that the response variable cannot be explained by the predictor variables at all. A value of 1 indicates that the response variable can be perfectly explained by the predictor variables. Z Bobbitt, How to Interpret Adjusted R-Squared (With Examples), Statology website, 2024, accessed 24 May 2024.

[42] This reflected the difference between the number of assessed prisoners in remote areas and the number of actual prisoners in remote prisons.

[43] Australian Bureau of Statistics (ABS), 'Table 34. Prison location by sex' [data set], Prisoners in Australia, 2023, accessed 23 February 2024. Queensland also has prison work camps in its remote or very remote regions, however, these were not included in the ABS data. Queensland Government, Prison work program, Queensland Government website, 2018, accessed 27 February 2024.

Figure 1 Shares of total remote population, 2022–23



Source: Commission calculation.

186 Not all states with remote populations have a remote prison, for example, New South Wales and Tasmania have remote populations and no remote prisons. However, the Commission's approach to average policy is based on a weighted average of all states, recognising that some states may choose not to provide a service. Therefore, the Commission considers it average policy to have prisons in remote areas to service remote populations.

187 The Commission considers that there is a reasonable link between remote prisoners' usual address and their placement in a remote prison. For instance, in Western Australia, remote prisoners are more likely to be sent to a prison in the same region as they were convicted. This indicates that residents of the Pilbara, for example, will be sent to a remote prison at Roebourne.[44] The Commission acknowledges that not all remote prisoners will go to a remote prison. However, the regional cost weight is adjusted to reflect this.[45]

[44] Corrective Services, Roebourne Regional Prison, Western Australian Government website, 2024, accessed 5 March 2024.

[45] The regional cost weight of remote prisoners is reduced by 60%. This reflects the difference between the assessed number of remote offenders and the actual number of remote prisoners.

188 Several factors influence where a prisoner is placed.[46] While the location of a prisoner's family may be considered during prisoner placement or prison transfers, it does not appear to be the main deciding factor for most states. Other considerations, such as the prisoner's security classification, risk posed to others or their own welfare and medical conditions, appear to be stronger factors.

189 The Commission also notes, however, that Queensland prisoner placement and transfer information mentions that prisoner welfare in relation to family proximity and First Nations family links are taken into consideration for placement. Information from Western Australia also mentions that remote prison work camps allow First Nations prisoners to maintain links with traditional lands, culture and family.

190 The Commission does not consider that the link between a prisoner's usual place of residence and their prison placement is as strong for non-remote areas. This view is supported by data provided by Victoria in its submission.[47] They show that a prisoner from a non-remote area may be placed in a major city, inner regional or outer regional prison. However, the Commission notes that Victoria's data show that outer regional prisons largely hold prisoners from outer regional areas. This may suggest the link between prisoner usual place of residence and prisoner placement increases as remoteness increases.

191 The Commission acknowledges that the current assessment method has some limitations as no strong relationship has been established between non-remote prisoner usual place of residence and prison placement. The higher costs of major city prisons compared with inner regional and outer regional prisons is less influential in the 2020 Review model when it is combined with these other remoteness areas. This is done because the Commission has no means of determining whether an assessed offender from a major city, for instance, will be placed in a major city prison rather than an inner regional or outer regional prison.[48] As such, the costs associated with major city prisons cannot be attributed directly to assessed major city prisoners. Therefore, applying a more disaggregated regional cost weight to assessed prisoners in non-remote areas would be inappropriate.

[46] Corrective Services New South Wales (NSW), Classification and Placement of Inmates, Department of Communities and Justice (NSW), 2019, accessed 5 November 2023; Corrections Victoria, Prisoner placement, Corrections Victoria website, 2022, accessed 5 November 2023; Department of Correctional Services (SA), After sentencing, Corrections South Australia (SA) website, accessed 5 November 2023; Tasmania Prison Services, Director's Standing Order: Classification and Placement, Department of Justice, Tasmanian Government, 2017, accessed 5 November 2023; Northern Territory Government, Going to prison, nt.gov.au, accessed 5 November 2023; Queensland Corrective Services, Prisoner placement information sheet, Queensland Government website, 2019, accessed 1 March 2024; Queensland Government, Prisoner's rights, Queensland Government website, 2018, accessed 1 March 2024; Department of Justice Western Australia (WA), Work camps, WA Government website, 2023, accessed 1 March 2024.

[47] Department of Treasury and Finance (Vic), Victorian response to CGC 2025 Review consultation, Department of Treasury and Finance (Victoria), Victorian Government, 2023, p 69. The Commission notes that data in Victoria's Tranche 1 submission use a different remoteness structure to the ABS. Nevertheless, these data can still be used to show that the relationship between usual residence and prison placement increases with remoteness, even though it defines remoteness areas using different criteria.

[48] Additionally, the prisons regression only found a 2-tiered regional cost gradient (remote and non-remote) to be significant once regional differences in maximum security prisoner numbers had been accounted for.

192 If data received from states as part of the 2025 Review process show a material relationship between regionality and costs, the Commission proposes to maintain an assessment of the cost of regional prisons. It will examine data to determine the relationship between regionality and costs and investigate whether a regression approach to estimating regional costs remains appropriate.

Service delivery scale

193 Based on state provided 2020 Review data, nearly all states have small or very small prisons, across all regions.[49] The majority of small and very small prisons were in major city to outer regional areas (16) compared with remote and very remote regions (8). One very large prison was also located in a remote area.

194 This information suggests it is average policy to have small prisons across all regions. However, the Commission is not aware of any evidence that suggests states need to have a certain number of small prisons in a specific region. The number of small (or large) prisons each state has across its regions may be due to policy choices.

195 The Commission proposes to reassess the treatment of service delivery scale costs using 2025 Review data to determine if an assessment of service delivery scale is required.

Commission draft position

196 Further analysis of state data and consultation is required to determine an approach to regional and service delivery scale costs for the prisons assessment. The outcome of this analysis will be included in the 2026 Update.

Defendant socio-economic status used as a proxy

197 Victoria considered the use of defendant socio-economic status as a proxy for prisoner socio-economic status to be inappropriate because state defendant data were incomplete and likely biased. It suggested, for this reason, that socio-economic status should not be used in the assessment, or a discount should be applied.

198 While the Victorian consultant did not examine this data issue, it supported the approach of using defendant socio-economic status as a proxy for prisoner socio-economic status. The consultant considered that the complex relationship between socio-economic status and sentencing patterns is not oversimplified by the approach.

Commission response

199 The Commission uses defendant socio-economic status as a proxy for prisoner socio-economic status as data on prisoner socio-economic status are not available.

[49] The Commission has grouped states' prisons into 5 size groups: Very large prisons (500 and over inmates), Large (250–499), Medium (100–249), Small (25–99) and Very small (24 or less).

200 During the 2020 Review, defendant data from 5 states were used to estimate defendant socio-economic status. This was because, as noted above, Victoria, Tasmania and the ACT were not able to provide finalised defendants' Indigenous status.

201 For the 2025 Review, the Commission will use all available and robust data for calculating defendant socio-economic status. This issue is discussed above.

Commission draft position

202 The Commission proposes to continue to use defendant socio-economic status as a proxy for prisoner socio-economic status in the prisons assessment without applying a discount.

A separate assessment of non-custodial services

203 New South Wales asked for a split between custodial and non-custodial services in the prisons component, noting non-custodial services make up about 65% of corrective services, but only 15% of corrective services costs. Given the disproportionate costs of full-time custodial and non-custodial services, it considered a separate assessment was appropriate.

204 Queensland did not support the introduction of a split between custodial services because it considered non-custodial expenses to be policy contaminated and changes in their magnitude since the 2020 Review to be driven by New South Wales.

Commission response

205 Non-custodial sentences include a broad range of activities, with certain sub-classifications of these sentences being outside the scope of prison-type expenses.[50] Community correction orders are a subset of non-custodial sentences and appear to be closer to the scope of the type of expenses included in the prisons assessment.[51] The Commission considers there is a conceptual case for community corrections orders to be assessed in the prisons assessment.[52]

206 The Commission has tested the materiality of including an assessment for community correction orders based on the 2024 Update prisons assessment and found it to be material. The Commission will retest the materiality of community

[50] Community correction orders include restricted movement, parole, bail, fines, community service, sentenced probation and post-sentence supervision. Australian Bureau of Statistics (ABS), Corrective Services, Australia methodology, December Quarter 2023, ABS website, 2024, accessed 24 May 2024.

[51] The ABS Government Finance Statistics expenses for prisons (COFOG 0341) includes costs related to community-based correction activities where the offender or alleged offender is at large in the community but is required to adhere to certain rehabilitation sessions such as parole and probation services, community service orders and attendance centres. Australian Bureau of Statistics, Law courts and associated activities (COFOG-A 033), ABS website, 2015, accessed 28 November 2023.

[52] The Commission used ABS Community correction order data and the Productivity Commission Report on Government Services data to test materiality instead of ABS non-custodial order data. Australian Bureau of Statistics (ABS), 'Table 4. Persons in Community-based corrections' [data set], Corrective Services, Australia, Age Standardised Community-based corrections, ABS website, 2023, accessed 24 November 2023.

correction orders using 2022–23 and 2023–24 data. If material, an assessment of these orders will be included for the prisons assessment in the 2026 Update. By using national average policies, the Commission mitigates the impact of individual state policies on community corrections expenses.

207 The Commission calculated the materiality using the Productivity Commission's *Report on Government Services* data for the expense split between prisons and community corrections expenses and ABS data for number of persons undertaking community corrections orders (which is broken down by Indigenous status and age).[53] The socio-economic status profile of people undertaking community corrections was assumed to be the same as finalised defendants.[54]

Commission draft position

208 The Commission proposes to include an assessment of community correction orders in the prisons assessment if it is material in the 2026 Update. To account for the socio-economic status profile of people on community correction orders, the Commission proposes to apply the socio-economic status profiles currently used for finalised defendants.

Draft 2025 Review assessment method

209 Data for 2019–20 to 2021–22 are not considered fit for purpose given COVID-19 related impacts. The Commission considers it preferable to use the most recent data for 2 years which are not impacted by COVID-19, this would be data for 2022–23 and 2023–24. However, given there is insufficient time to analyse and consult on 2023–24 state data to be included in the 2025 Review, the Commission proposes to finalise the justice assessment after the 2025 Review in the 2026 Update. The proposed process and timing are outlined in Attachment B.

210 Following consideration of state views on the consultation paper, the Commission is considering several proposals for further analysis, including:

- Whole of justice assessment:
  - Maintain the 2020 Review method for GST distribution in 2025–26.
  - Adopt any method changes and incorporate 2022–23 and 2023–24 data into the assessment in the 2026 Update.

[53] Productivity Commission, '8 Corrective Services' [data set], Report on Government Services 2023, Productivity Commission website, 2023, accessed 24 November 2023; Australian Bureau of Statistics (ABS), 'Table 4. Persons in Community-based corrections' [data set], Corrective Services, Australia, Age Standardised Community-based corrections, ABS website, 2023, accessed 24 November 2023.

[54] The socio-economic status of defendants is also used as a proxy for prisoner socio-economic status in the prisons assessment. Therefore, both prisoners and community corrections orders used the same measure of socio-economic status.

- Police:
  - Determine an appropriate treatment of police central costs.
  - Determine if there are global city type police expenses that are unique to major cities and test if these are material.
  - Determine if adding a cost weight for remote offenders is appropriate.
- Courts:
  - Distribute ‘not-stated’ Indigenous status defendant responses by shares of ‘stated’ responses.
- Prisons:
  - Include a cost weight for juvenile detainees, if material, and alter age groups to reflect a new 0–17-year-old range.
  - Include an assessment of community corrections expenses if material.
  - Determine an appropriate treatment of regional costs.
  - Determine whether an assessment of service delivery scale is required.

211 Table 3 shows the proposed structure for the 2025 Review justice assessment.

Table 3 Proposed structure of the justice assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Police	Regional costs	Recognises the cost of providing police services increases as the level of remoteness increases. *(method for distributing central costs to be determined based on analyses of data and consultation with states)*	To be determined
	Offender cost	Recognises the cost of providing police services due to offender numbers. *(additional cost for remote offenders will be considered based on analyses of data and consultation with states)*	To be determined
	Socio-demographic composition	Recognises that certain population characteristics (Indigenous status, age, and SES) affect the degree of police activity.	No
	Wage costs (a)	Recognises the difference in wage costs between states.	No
Criminal courts	Regional costs	Recognises the additional costs of providing services in remote areas. *(method to be determined based on analyses of data and consultation with states)*	To be determined
	Socio-demographic composition	Recognises that certain population characteristics (Indigenous status, age, and SES) affect the use of criminal court services.	No
	Wage costs (a)	Recognises the difference in wage costs between states.	No
Other legal services	Regional costs	Recognises the additional costs of providing services in remote areas. *(method to be determined based on analyses of data and consultation with states)*	To be determined
	Wage costs (a)	Recognises the difference in wage costs between states.	No
Prisons	Regional costs	Recognises the additional costs of providing prison services in remote areas. *(method to be determined based on analyses of data and consultation with states)*	To be determined
	Juvenile detainee costs	Recognises the higher cost of providing services for juvenile detainees *(if material)*.	To be determined
	Socio-demographic composition	Recognises that certain population characteristics (Indigenous status, age and SES) affect the use of prisons. *(A socio-demographic composition assessment of people on community correction orders will be implemented if material).*	To be determined
	Wage costs (a)	Recognises the difference in wage costs between states.	No

Note: The 2020 Review method included an assessment of national capital policing costs. For the 2025 Review, the Commission is proposing that the national capital assessment be discontinued. Please see the national capital chapter for more information.

(a) The Commission will separately consult with states on the wages assessment.

Indicative distribution impacts

212 For the 2025 Review, the justice assessment will be based on the 2020 Review method. Changes in GST distributions in the 2025 Review will reflect updates to annual data.

213 The Commission will consult states on any proposed method changes and provide details of the indicative distribution impacts prior to the 2026 Update.

Attachment A: Current police model

214 The police assessment includes costs for all police activities that closely match those types of expenses outlined by the ABS' Government Finance Statistics (COFOG 0311) Police Services classification.[55] For example:

- central costs
- preventative policing
- investigating, processing, transporting and detaining offenders
- all other police activities.

215 The current assessment uses a regression model to estimate the national average cost for policing activities associated with:

- Offenders – this is a national average per offender policing cost
- Regional cost of policing – this is a per capita policing cost weight for each region that is not dependent on offender numbers. It includes all costs not already captured in the national offender cost weight.

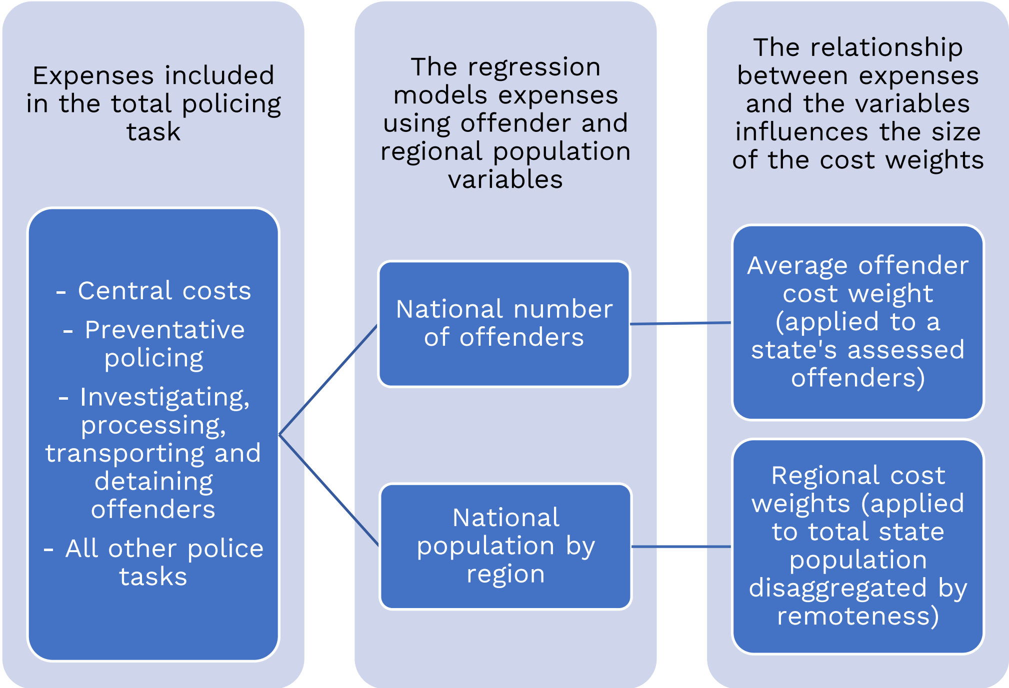
216 While each state may have its own estimation of crime versus non-crime costs, the regression reflects the national average costs associated with policing in general.

217 The cost estimates produced in the regression inform the offender and regional cost weights. The offender cost weight is applied to the number of assessed offenders in each state, while the regional cost weights are applied to the population in each remoteness area.

218 Figure A-1 below demonstrates how the model estimates police costs.

[55] Some police related expenses recorded in ABS' Government Finance Statistics under Public order and safety not elsewhere classified classification (COFOG 0399), such as community policing and community justice programs, are assessed in the other expenses category. This treatment reflects that they are aimed at the general public and therefore assessed on an equal per capita basis.

Figure A-1 How expenses are modelled in the police regression



Note: Expenses and offenders are state-provided data. State-provided offenders are scaled to the proceedings total estimated using ABS data. Population data are sourced from the ABS.

Source: Commission calculation.

Attachment B: proposed process and timing for finalising the justice assessment

Timing	Process
2024	
April – May	2022–23 justice data provided by states
May - July	Data validation
June	Draft Report outlines Commission response to states' submissions on the justice consultation paper
June – July	Data processed and collated
August – end 2024	Data analysis and calculation build
2025	
April	Justice draft assessment paper released to states
May	State submissions on draft assessment and 2023–24 data due
July	Final assessment paper released to states
2026	
February	New justice assessment applied in the 2026 Update

Roads

Overview

1 On 19 October 2023, the Commission issued a consultation paper on the roads assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method. Following consideration of state views, the Commission proposes 4 modifications:

- remove routes to mines, national parks, gas wells and ports from the rural road network
- hold constant the urban/rural split for light and heavy vehicle traffic volume for the duration of the review, instead of updating it every 2 years
- use the Rawlinsons cost gradient rather than the general cost gradient
- discount the assessment by 12.5%.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support retaining the 2020 Review method of assessing urban road length, using population as the driver for large towns?

State views

5 Victoria, Queensland and the Northern Territory supported using population as the driver for urban road length. Although the ACT supported the proposed assessment if no alternative was available, it also supported allowing for higher road lengths in smaller capital cities due to different levels of dispersion in small capitals compared to similarly sized non-capitals. New South Wales supported the proposed assessment using population, but considered that other geographical factors such as elevation also affected costs.

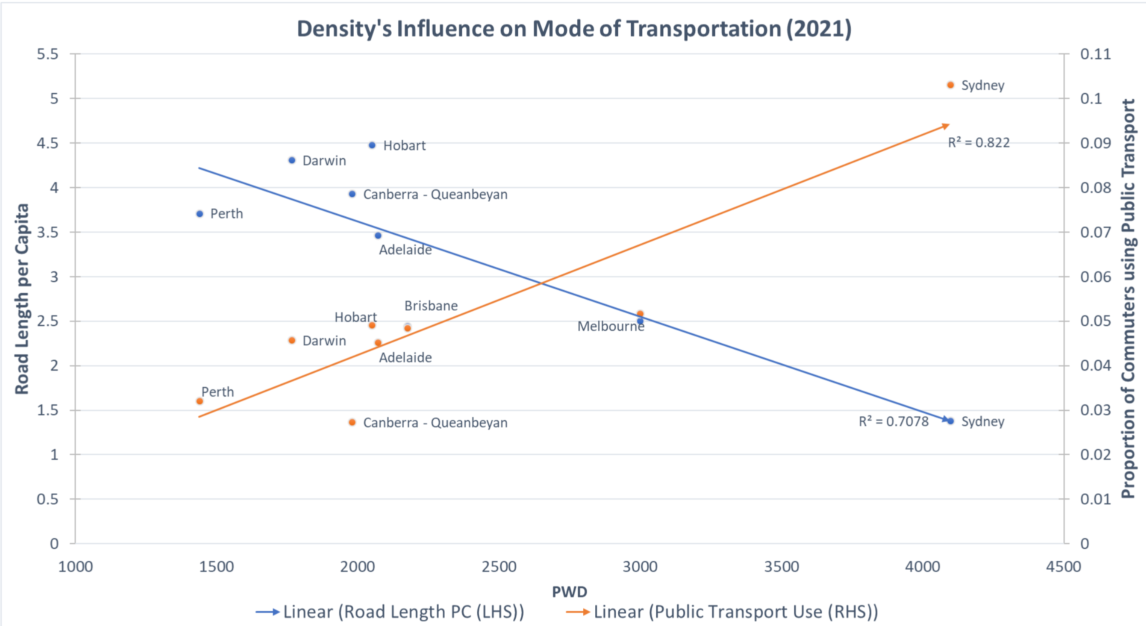
Does road length per person fall as cities grow?

6 Western Australia, South Australia and Tasmania did not support using urban populations as a proxy for road length in urban areas. They said that there is a strong inverse relationship between population density and road length in capital cities,

mirroring the relationship the Commission relies upon in its transport assessment. They said that this makes conceptual sense as larger public transport provision reduces the need for road length.

7 South Australia presented findings from international literature and an analysis of Commission data to argue that increased population-weighted density increases public transport needs and decreases road length by comparable amounts (Figure 1). Although the relationship between population density and road length was not seen in non-capital cities, South Australia said there may be other factors not currently assessed and recommended further work being conducted as more data become available.

Figure 1 Relationship between density, road length and public transport



Source: South Australian Treasury, 2025 Review consultation papers tranche 2: Draft South Australia Treasury Submission, p. 16.
Note: The Brisbane road length per capita data point coincides and is indistinguishable from its proportion of commuters using public transport in this figure.

8 Western Australia and Tasmania supported splitting the assessment of urban road length for large non-capital cities and capital cities.

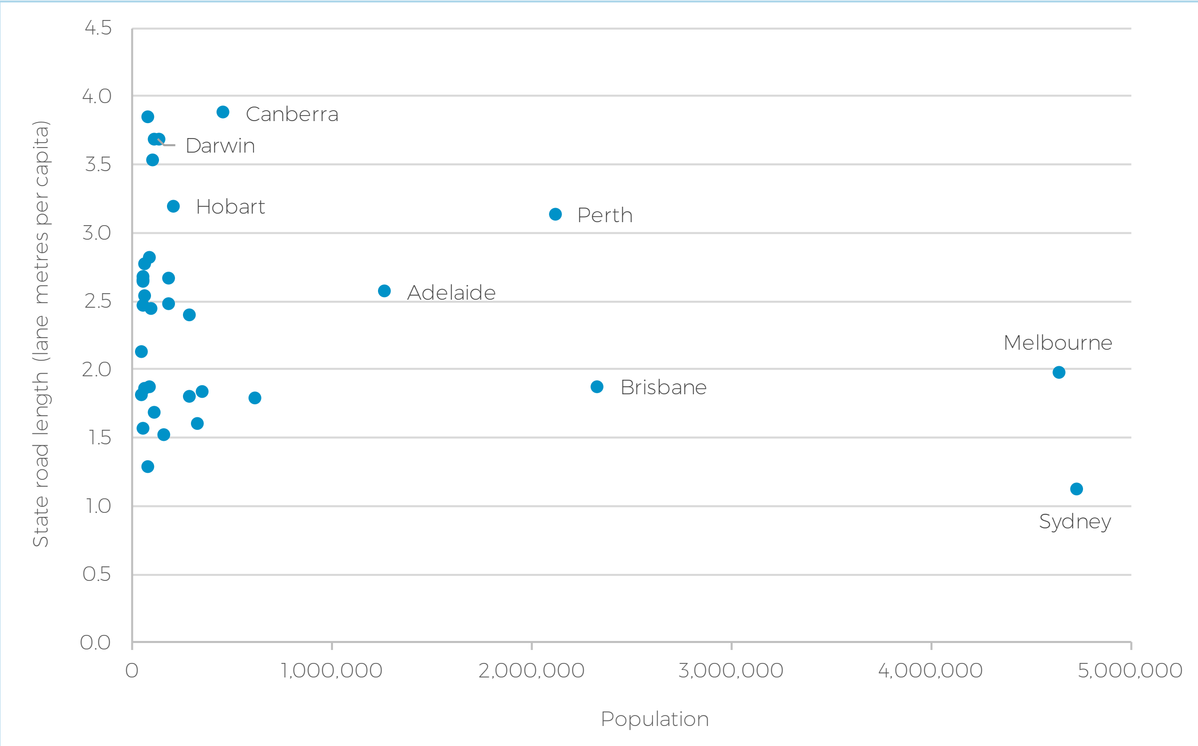
- Both supported assessing capital cities using estimated road length per capita via a fitted line (see the blue line above).
- Western Australia supported assessing non-capital cities using the average road length per capita for those towns, or alternatively using actual urban road lengths for all large urban centres. Tasmania supported retaining the 2020 Review method for non-capital cities.

Commission response

9 In its consultation paper, the Commission observed that: ‘Although road lengths per capita decline with increasing population size for the capital cities, this

relationship is not evident among the other towns.'[1] This can be seen in Figure 2, where there is a downward slope for capital cities, but no relationship for the full complement of urban centres with more than 40,000 people. For example, Darwin has a similar population to Toowoomba and Cairns, but with significantly higher lengths of major roads per capita (3.7 metres for Darwin compared to 1.7 and 1.5 metres respectively).[2] The Commission does not consider it necessary to treat Darwin differently to these other cities, simply due to Darwin's capital city status.

Figure 2 Urban major road length per capita and population in large towns, 2021



Note: Each data point is an urban centre of over 40,000 people.
State road length refers to major roads (highways, arterials, sub-arterials and busways). Each road segment has been assumed to have dual lanes.

Source: Commission calculation using ABS population data and road lengths from Geoscience Australia, National Roads [ESRI ARC geodatabase file format], Digital Atlas website, 2023, accessed 27 July 2023.

10 Sydney has fewer kilometres of major urban roads per capita than other cities, but this may reflect the urban form and historical development of the city. While roads with high traffic volumes in other cities are almost universally arterial roads, Sydney has many suburban streets that attract large traffic volumes. Roads classified as arterials or other major roads form 13% of the total road network in Sydney, the lowest proportion in any city, well below the 17% average across capital cities, or 24% in Canberra and 22% in Darwin. In the absence of a nationally comparable

[1] Commonwealth Grants Commission (CGC), 2025 Methodology Review: Roads consultation paper, CGC, Canberra, 2023, p 11.

[2] Major urban roads in the Commission's (and South Australia's) analysis refer to roads classified as highways, arterial or sub-arterial roads in the Geoscience Australia dataset. This is used as a proxy for state roads.

classification of roads, it is not clear that the pattern in Figure 1 or Figure 2 is reliable for Commission purposes.

11 The 2 papers cited by South Australia found negative relationships between net population density and road expenses for governments. However, these papers were examining aspects of the road network not considered by the Commission's assessments. Mattson examined the expense burden for state governments and local (municipal) governments combined in the USA.[3] Cleveland et. al. focussed on Canadian local roads, excluding highways altogether (which would be state-managed in Australia), and did not analyse any cost data.[4] The Commission's assessment is intended to only capture roads that are state government owned and operated, as local government spending is out of scope of the Commission's work.

12 The Commission has identified additional United States of America based-research (Holcombe and Williams[5]) that found no statistically significant relationship between urban sprawl (relatively low density development), highway expenses and vehicle kilometres travelled.

13 Infrastructure Australia is working with states to publish the National Service Level Standards for roads, which will be a nationally comparable dataset classifying roads on a consistent basis. The Commission will investigate using this dataset in its assessments when it becomes available.

Commission draft position

14 The Commission proposes to retain population as the driver for urban road lengths in towns of over 40,000 people, and to investigate the suitability of using the National Service Level Standards data when they become available.

[3] J Mattson, 'Relationships between Density and per Capita Municipal Spending in the United States'. *Urban Science*, 2021, 5(3):69, doi:10.3390/urbansci5030069.
United States Census Bureau, 2021 State & Local Government Finance Historical Datasets and Tables [data set], census.gov, 2023, accessed 29 Apr 2024.

[4] T Cleveland, Tristan, P Dec and D Rainham, 'Shorter Roads Go a Long Way: The Relationship Between Density and Road Length Per Resident Within and Between Cities'. *Canadian Planning and Policy / Aménagement Et Politique Au Canada,* 2020, 2020(1):71–89, doi:10.24908/cpp-apc.v2020i0.13406.

[5] R G Holcombe and D W Williams, 'Urban Sprawl and Transportation Externalities', *The Review of Regional Studies,* 2010, 40(3):257-273.

Q2. Do states agree that the 2020 Review synthetic rural road network should not be updated?

State views

15 Victoria, Queensland, Tasmania, the ACT and the Northern Territory supported retaining the 2020 Review method for the synthetic rural road network. South Australia did not oppose the proposal. New South Wales and Western Australia had issues with the assessment.

16 New South Wales disagreed with including all routes to mines, gas wells, ports and national parks, as these are often the responsibility of the private sector or local governments. Roads to national parks are also often maintained at a lower standard to other state roads.

17 New South Wales criticised the current method for using the *shortest* route between towns. It said that using the *quickest* route often shortens the synthetic network (due to the way connections are routed) and better reflects actual road use. It identified several examples of routes it considered to be incorrect, such as using a sub-optimal route or not terminating at the correct junction. New South Wales estimated this issue affects around 5,000 lane kilometres (1.5% of the rural road network).

18 Western Australia had issues with the expenses allocated to road length, discussed further in the section Using National Transport Commission data to apportion expense categories.

19 New South Wales, the ACT and the Northern Territory supported investigating the use of National Service Level Standards for roads data to update this assessment when they become available, potentially as part of an update. Western Australia also supported updating the synthetic road network, if necessary, prior to 2030.

20 Victoria and South Australia supported rural road lengths being re-examined as part of the next review.

Commission response

21 The Commission agrees that the synthetic rural road network is not always reflective of travel patterns on rural roads. Some routes are also now out of date.

22 The current inclusion of routes to mines, gas wells, ports and national parks may overcomplicate the model, and imply an unrealistic degree of precision. The Commission also recognises that some mining roads are owned and maintained by the private sector and that some roads to national parks are maintained at a lower standard compared to the average state government-managed road, which would reduce costs. Removing these routes would reduce the rural road network by 43,000 lane kilometres, or 13%.

23 Using the quickest route between 2 centres, rather than the shortest distance, would require all roads to have an estimate of achievable speed. Some datasets have a measure of this (although it is often legal speed limits rather than practically achievable speed limits). The dataset used by the Commission to produce its synthetic road network does not contain these data. While there will be individual connections between 2 centres where the shortest and quickest routes differ, these are likely to have a minimal impact on the total assessed road length.

Commission draft position

24 The Commission proposes to retain the 2020 Review methods for synthetic rural road network but remove the routes to mines, national parks, gas wells and ports.

25 The Commission will investigate the suitability of using the National Service Level Standards data when they become available.

Q3. Do states agree that traffic volume should continue to be assessed using data from the Bureau of Infrastructure and Transport Research Economics and the National Transport Commission?

State views

26 All states supported using Bureau of Infrastructure and Transport Research Economics and the National Transport Commission data as an interim measure.

27 Western Australia and the ACT encouraged the Commission to explore alternative data sources.

28 Victoria recommended applying a medium (25%) discount to affected assessments (heavy vehicle use and traffic volume) to recognise the discontinuation of the Survey of Motor Vehicle Use and the increasing unreliability of the data.

Commission response

29 The Commission considers that the Bureau of Infrastructure and Transport Research Economics and the National Transport Commission data continue to be the most reliable, despite the discontinuation of the Survey of Motor Vehicle Use.

30 Further analysis of traffic volume data using traffic counters has failed to produce usable results. Traffic counters capture a very small percentage of the road network, with large differences in coverage between states, and no capture of end-to-end journeys. Additionally, Western Australia has no traffic counter data suitable for trend analysis due to frequently moving the location of counters.

31 Since the release to the states of the roads consultation paper for the 2025 Methodology Review, the National Transport Commission has advised it will no longer provide highly disaggregated traffic volume data due to the discontinuation of the Survey of Motor Vehicle Use and its concerns with the data's increasing

unreliability. This dataset was previously used to split heavy and light traffic volumes between rural and urban areas.

32 The Bureau of Infrastructure and Transport Research Economics provides data split by capital city/non-capital city and state. However, using these data as a proxy for urban/rural would greatly understate urban traffic volume and misidentify urban traffic as rural traffic.

Commission draft position

33 The Commission will hold the current shares of urban/rural traffic for light vehicles and heavy vehicles constant until a suitable data source is found.

34 Instead of applying a medium discount to this driver, as suggested by Victoria, the Commission proposes to apply a low discount (12.5%) to the entire roads assessment, as discussed under the Overall validity of the assessment and discounting section of this chapter.

Other issues raised by states

Unrecognised urban road cost drivers

35 New South Wales proposed that the urban road component should also assess:

- older networks
- high mean slope
- densely populated and congested urban areas.

36 New South Wales noted that congestion in the Greater Sydney area added to costs by requiring all road maintenance to be conducted at night.

Commission response

37 Historical factors such as age of network are not typically assessed across any category. The investment assessment gives states the capacity to replace depreciated assets.

38 The Commission agrees that slope affects costs, and data are available to calculate slope across the national road network. However, it is difficult to quantify the additional expense related to slope, independent of other environmental factors. These other factors are discussed further under Influence of rainfall and soil composition, below.

39 The Commission agrees that congestion affects maintenance and safety costs. New South Wales cited a cost premium of 16% for conducting maintenance work in

the Greater Sydney area due to having to conduct 100% of this work after hours.[6] Assuming these cost premiums applied in Sydney and Melbourne, but nowhere else in Australia, the GST impact would not be material (Table 1). In practice, most larger towns and cities across all states would likely conduct at least a portion of their maintenance work after hours, which would further reduce any relative cost premium for Sydney and Melbourne.

Table 1 GST impact of applying a potential night-time road works cost weight to Sydney and Melbourne, 2024-25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Change in GST distribution ($m)	54	66	-62	-31	-15	-5	-5	-2	-114
Change in GST distribution ($pc)	6	9	-11	-11	-8	-8	-10	-7	-4

Source: Commission calculation using 2024 Update data and weights from the Transport for New South Wales, CGC 2025 Methodology Review Presentation, 13 March 2024, slide 28.

Commission draft position

40 The Commission proposes no additional cost drivers to the urban roads component.

Influence of rainfall and soil composition

41 New South Wales said the assessment should recognise additional costs associated with rainfall. Water weakens the supports underlying road pavements, increasing maintenance costs, and increasing safety costs to maintain landscaping and remove vegetation hazards. States experience different rainfall levels. Soil type also affects maintenance and construction. Clay soils, more common in the eastern states are the weakest soil types, which interacts with high rainfall to increase costs.

Commission response

42 The Commission agrees there is a conceptual case that rainfall and soil type affect recurrent and capital costs. While national rainfall and soil type information is available, the Commission would require a model for the relationship between soil type, rainfall and road maintenance or construction costs.

43 The House of Representatives Standing Committee on Regional Development, Infrastructure and Transport's Inquiry into the implications of severe weather events on the national regional, rural, and remote road network found 'significant data gaps' on information about road assets, and 'a lack of standardised data and sharing across all levels of government.'[7] Nevertheless, it noted the need for sealing roads against water ingress due to severe weather events, and the high cost associated with building and maintaining roads to this standard.

[6] Transport for New South Wales, CGC 2025 Methodology Review Presentation, 13 March 2024, slide 28.

[7] House of Representatives Standing Committee on Regional Development, Infrastructure and Transport, Inquiry into the implications of severe weather events on the national regional, rural, and remote road network, Parliament of Australia, Canberra, 2023, accessed 12/03/2024, p viii.

44 Other studies have found conflicting relationships between environmental factors and road costs.[8]

45 While the Commission recognises that environmental factors play a role in determining costs, the relationship between environmental variables and expenses is complex. Several national agencies such as Infrastructure Australia and the Bureau of Infrastructure and Transport Research Economics have concluded there are issues with data availability when assessing the impact of climate on the need for road asset maintenance.[9]

Commission draft position

46 The Commission proposes not to add additional cost drivers to reflect rainfall and soil composition to the roads assessment in this review.

Using National Transport Commission data to apportion expense categories

47 Western Australia said that the National Transport Commission data do not reflect road expenses, as the purpose of this collection is to allocate costs between light vehicle and heavy vehicle users.

48 Servicing and operating expenses and low-cost safety and traffic improvement expenses are both currently allocated 100% to general vehicle traffic volume. Western Australia said that some of these costs are driven by road length. For example, these categories include expenses such as monitoring of road pavement conditions, drain and vegetation clearing, signage repair, off-road repairs and maintenance (servicing and operating expenses) and installing audible edge lines, sealing road shoulders and repairing barrier fencing on higher risk rural roads (low-cost safety and traffic improvement expenses).

Commission response

49 As noted by Western Australia, the National Transport Commission's cost allocation matrix was developed to apportion costs for heavy vehicle users, and not necessarily to split costs between states. However, the National Transport Commission is the leading authority for these data, and therefore the Commission does not consider it has the data to make changes to the cost allocation matrix.

[8] J Balston, S Li, I Iankov, J Kellett, & G Wells, Quantifying the Financial Impact of Climate Change on Australian Local Government Roads, *Infrastructures*, 2017, 2(1):2, accessed 12/03/2024.
Austroads, Improving Cost Allocation by Road Type, AP-T195-12, Austroads Ltd, Sydney, 2012, accessed 12/03/2024, p 31.

[9] Infrastructure Australia, *An Assessment of Australia's Future Infrastructure Needs: The Australian Infrastructure Audit 2019*, Infrastructure Australia, Australian Government, 2019, accessed 11/04/2024.
Bureau of Infrastructure and Transport Research Economics (BITRE), *Road and Rail Supply Chain Resilience Review*: Phase One report, BITRE, Australian Government, 2023, accessed 11/04/2024.

50 During the recent National Transport Commission review of heavy vehicle charges, the Victorian Department of Treasury and Finance commissioned its own cost allocation report, which continued to allocate servicing and operating expenses and low-cost safety and traffic improvement expenses as being driven by traffic volume, and not by road length, as suggested by Western Australia.[10] Compared to the National Transport Commission data, the Victorian report allocated more costs to heavy vehicle use, but was based largely on Victorian data and thus the Commission does not consider it to be representative of national allocations.

Commission draft position

51 The Commission proposes to continue using the National Transport Commission data as it is the best available source for this dataset.

Culverts and floodways

52 Western Australia said the bridges and tunnels component is incomplete due to not assessing the length of culverts and floodway crossings.

Commission response

53 Based on National Transport Commission classifications, the Commission currently assesses culvert expenses within the bridges and tunnels component and floodway crossings in the rural roads and urban roads components, using length, and heavy and light vehicle use. Culverts and floodway crossings have lower costs per kilometre than bridges and tunnels, but higher costs than standard roads.

54 The Commission requested data from states on the lengths, recurrent and capital costs for floodway crossings and culverts. Some of these data are not available for most states, and the Commission has concerns about the consistency of the available data.

55 As noted in the discussion on the Influence of rainfall and soil composition, the Commission accepts the conceptual case that environmental factors affect the cost of the building and maintaining the state road network, however, reliable data on states' relative costs are not currently available.

Commission draft position

56 The Commission proposes to retain the existing assessment of bridges and tunnels.

[10] T Martin, Road Cost Allocation Literature Review Findings, report to the Victorian Department of Treasury and Finance, Australian Road Research Board, 2017, accessed 12/03/2024.
Houston-Kemp, Review of the parameters used to allocate road infrastructure costs to heavy vehicles, report to the National Transport Commission, Houston-Kemp, 2017, accessed 12/03/2024.

Regional costs

57 Western Australia noted the roads category applies the general cost gradient, which doesn't capture the true costs in remote regions. It considers the Rawlinsons indices to be a better alternative.

Commission response

58 During the 2020 Review, the Commission used a general regional cost gradient, based on the costs of service delivery for schools and hospitals, to assess the impact of remoteness on rural road lengths and bridges and tunnels. Rawlinsons measures the construction costs of various types of buildings. The Commission agrees with Western Australia that the impact of remoteness on the cost of maintaining roads is likely to be more similar to the costs of constructing a building than it is to the costs of service delivery.

Commission draft position

59 The Commission proposes to replace the general cost gradient with the Rawlinsons construction cost gradient for rural road lengths and the bridges and tunnels component.

Commonwealth infrastructure payments

60 Half of Commonwealth payments for national road and rail networks are treated as having no impact on the GST distribution. This discount is applied because roads and transport infrastructure projects can have national objectives related to the efficient movement of people and goods, which the Commission's assessments do not capture.

61 Queensland supported continuing to apply the 50% discount of National Road Network Commonwealth payments. It noted that the selection of national road and rail network projects is largely determined by the Commonwealth.

Commission response

62 The Commission considers that roads of national significance are a driver of spending need that it does not otherwise assess. The best available proxy for state needs to spend on such roads is 50% of the Commonwealth payments for such roads. This is because these roads are also of state significance. Under this treatment, 50% of national network payments and their related expenditure are removed from the adjusted budget. The remaining 50% are assessed under the infrastructure category, applying state needs for roads (for road network payments) and transport (for rail network payments).

63 The Commission considers that nothing has changed since the 2020 Review that would warrant a change to this assessment. However, the forthcoming National Service Level Standards for roads dataset may identify roads of national significance

on a consistent basis. As such, for the next methodology review, there is a possibility that Commonwealth payments for roads of national significance may be treated as fully impacting on the GST distribution.

Commission draft position

64 The Commission proposes to retain the 50:50 no impact/impact blended treatment of national network road and rail network payments, and to continue monitoring the development of the National Service Level Standards for roads.

Overall validity of the assessment and discounting

65 New South Wales said that the ratio of actual spending to assessed spending is below 1 in some states. Where this occurs, states have very low actual expenses compared to their assessed expenses but maintain their roads to a similar standard as other states, which suggests that the Commission's assessments are missing major drivers of costs.

66 Victoria said that with the deteriorating quality of traffic volume data due to the discontinuation of an ongoing Survey of Motor Vehicle Use, the Commission should discount this part of the assessment.

Commission response

67 The Commission uses the ratio of actual to assessed spending as an indicator when considering the accuracy of its assessments. For an expense category, there are 4 reasons why a ratio can differ from one:

- a state may provide above or below average quality services
- a state may be more or less efficient than average
- government finance statistics measuring state actual spending may be inaccurate
- the Commission may not be accurately capturing all drivers of state need.

68 The Commission considers that there are drivers of state spending on roads that are not measured (such as soil type and rainfall), or that are not measured with high accuracy (for example, the synthetic road network is an approximate proxy of the state network).

69 However, there is evidence that the Government Finance Statistics for some states are of low quality. Over the 4 assessment years of the 2024 Update, New South Wales spent between 100% and 167% of what the Commission assessed it as needing to spend on roads (Table 2). While capital spending on roads may be lumpy, recurrent spending is less likely to be so.

70 The variation over time, evident particularly in New South Wales, Victoria and Tasmania suggests there is a high level of variability in how a particular service is classified. With such variability within individual jurisdictions, there is likely even greater variability between jurisdictions. The Commission is not confident, for

example, that the low apparent spending on roads in South Australia reflects low actual spending on roads.

71 The Commission considers that the poor quality of data on state actual spending means that it is not possible to use the ratio of actual to assessed spending as an indicator to assess the overall validity of the roads assessment.

Table 2 Ratio of actual to assessed spending on roads, 2024 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	%	%	%	%	%	%	%	%	%
2019-20	99.6	153.2	75.0	97.3	32.5	93.2	150.5	74.0	100.0
2020-21	126.7	141.5	65.2	85.3	27.2	73.7	123.3	58.9	100.0
2021-22	129.0	129.5	71.5	92.2	24.2	99.6	111.4	40.8	100.0
2022-23	167.2	78.0	70.3	88.9	29.1	42.1	120.2	72.6	100.0

Source: Commission calculation.

72 The Commission considers that the assessment of road expenditure is not as accurate as some other assessments. It is concerned with the reliability of:

- total actual state spending on roads
- the synthetic rural road network as a reflection of state rural road length needs
- heavy and light vehicle traffic volume data
- the relative importance of road length, heavy and light vehicle traffic as drivers of expense needs
- the comprehensiveness of major drivers of differences in spending need.

73 Given the range of uncertainties, the Commission considers a discount of the assessment is warranted. The level of discount is subject to judgement. In the Commission's other assessments, low (12.5%) discounts are used to recognise proxy data in the health assessment, and concerns with interstate comparability for property values in the land tax assessment.

74 Similar magnitudes of uncertainty apply for the roads assessment. While the Commission remains of the view that overall the assessment is largely fit for purpose, given concerns with some aspects of the assessment, it considers a discount of 12.5% is appropriate.

Commission draft position

75 The Commission considers that overall the roads assessment remains appropriate, although given its concerns with some aspects of the assessment, proposes to introduce a discount of 12.5%.

Draft 2025 Review assessment method

76 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method with 4 modifications:

- the rural road network no longer includes routes to mines, national parks, gas wells and ports
- the urban/rural split for light and heavy vehicle traffic volume is held constant for the duration of the review instead of being updated every 2 years
- Rawlinsons cost gradient is used rather than the general cost gradient
- the assessment is discounted by 12.5%.

77 Table 3 shows the proposed structure of the 2025 Review roads assessment.

Table 3 Proposed structure of the roads assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Rural roads	Length	Recognises that the length of the rural road network influences costs. Routes to mines, national parks, gas wells and ports have been removed.	Yes (a)
	Traffic	Recognises that traffic volume influences costs.	No (a) (b) (c)
	Heavy vehicles	Recognises that heavy vehicles damage roads.	No (a) (b)
	Regional costs	Recognises the differences in the cost of providing services to different areas within a state (applied to road length only).	Yes (a) (d)
	Wage costs	Recognises the differences in wage costs between states.	No
Urban roads	Length	Recognises that the length of the urban road network influences costs.	No (a)
	Traffic	Recognises that traffic volume influences costs.	No (a) (b) (c)
	Heavy vehicles	Recognises that heavy vehicles damage roads.	No (a) (b)
	Wage costs	Recognises the differences in wage costs between states.	No
Bridges and tunnels	Length	Recognises that the length of bridges and tunnels influences cost.	No (a)
	Heavy vehicles	Recognises heavy vehicles damage bridges and tunnels.	No (a) (b)
	Regional costs	Recognises the differences in the cost of providing services to different areas within a state.	Yes (a) (d)
	Wage costs	Recognises the differences in wage costs between states.	No

(a) The Commission proposes to apply a new 12.5% discount to the roads assessment before the wage costs factor (which is already discounted) is applied.

(b) In the 2023 Update, the Commission changed this assessment due to the cessation of the ABS Survey of Motor Vehicle Use.

(c) In the 2024 Update, the Commission used data from the 2022 Update to split traffic volume between urban and rural use. This change was also due to the cessation of the ABS Survey of Motor Vehicle Use. The Commission proposes to hold constant this split between urban/rural light and heavy vehicle traffic volume for the remainder of the review, whereas it was previously updated every 2 years.

(d) The regional cost weight now uses Rawlinsons construction cost index (previously it used the regional costs general gradient).

Indicative distribution impacts

78 The impact on GST distribution in 2024-25 from the proposed method changes is shown in Table 4.

Table 4 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	-210	-401	238	247	89	4	-97	130	708
U2024 using draft R2025 methods	-188	-356	188	229	76	1	-86	136	629
Effect of draft method change	22	46	-50	-19	-13	-3	11	6	85
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	-25	-57	42	84	47	6	-202	507	26
U2024 using draft R2025 methods	-22	-51	33	77	40	1	-178	531	23
Effect of draft method change	3	6	-9	-6	-7	-5	24	24	3

Note: Based on no change to the wage costs assessment. The effect of that change is shown in the wage costs chapter.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on the GST distribution for 2025–26.
The draft R2025 method also proposes to hold constant the split of urban/rural light and heavy vehicle traffic volume. Both methods shown above use the same split, therefore this change does not affect the GST impact between these methods.

79 Table 5 shows the proposed changes will have the largest effect on the GST distribution for the ACT and the Northern Territory. A 12.5% discount reduces the effect of the assessment and increases the GST of states with below average needs for roads expenses, such as the ACT, and decreases the needs for states such as the Northern Territory with above average needs.

80 The Northern Territory's GST decrease due to the 12.5% discount was more than offset by the changes to the rural road network and by using Rawlinsons as the remoteness cost weight.

Table 5 Indicative impact on GST distribution of proposed method changes (disaggregated), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Discount	30	50	-30	-29	-14	-1	13	-19	
Other (a)	-9	-4	-20	10	1	-2	-1	25	
Total	**22**	**46**	**-50**	**-19**	**-13**	**-3**	**11**	**6**	**85**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Discount	4	7	-5	-10	-7	-2	26	-74	
Other (a)	-1	-1	-4	3	0	-3	-3	98	
Total	**3**	**6**	**-9**	**-6**	**-7**	**-5**	**24**	**24**	**3**

Note: Based on no change to the wage costs assessment. The effect of that change is shown in the wage costs chapter.

The GST pool and population estimates are equivalent to those used in the 2024 Update.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.

Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on the GST distribution for 2025–26.

The draft R2025 method also proposes to hold constant the split of urban/rural light and heavy vehicle traffic volume. Both methods shown above use the same split, therefore this change does not affect the GST impact between these methods.

(a) Other changes include reducing the rural road network by removing all routes to mines, national parks, gas wells and ports; using Rawlinsons for the regional cost gradient; and updating bridge and tunnel lengths.

Transport

Overview

1 On 27 June 2023, the Commission issued a consultation paper on the transport assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed several changes to the 2020 Review assessment method.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

5 The Commission is currently analysing state data. The positions in the Draft Report may change based on the results of this analysis. Further details will be provided in an addendum to the Draft Report (see paragraph 28 for more information).

Consultation questions

Q1. Do states agree that the 2020 Review model for assessing urban transport needs remains appropriate?

State views – high level comments on the model

6 New South Wales, Victoria and the ACT said the model remains broadly appropriate for measuring urban transport needs. Victoria noted that while the model is the best available approach, COVID-19 highlighted an issue with the model's capacity to reflect what states do in response to short to medium term disruptions to demand or where 'uneconomical' services are required to ensure access and social equity. Victoria said it will be 5 to 10 years before stable long-term trends in patronage are apparent. It also outlined concerns with the inclusion of insignificant variables in the model.

7 While New South Wales supported the model, it recommended that a larger land area should be used for measuring population density, based on the Australian Bureau of Statistics' (ABS) Statistical Area Level 2s (SA2s).

8 Queensland, Western Australia, South Australia and Tasmania did not support the model.

9 Queensland considered that the 2020 Review process was rushed and that the changes over the last 4 updates, combined with COVID-19, have highlighted

weaknesses in the model. It said the model lacks a conceptual foundation, as it assumes diseconomies of density despite evidence in academic literature of economies of density and scale in transport provision. The sensitivity of the model to state policies was also seen to challenge its conceptual foundation.

10 Queensland raised concerns about the population-weighted density variable, suggesting that it lacks explanatory validity due to the influence of the dominant significant urban areas, Sydney and Melbourne. The measure was not seen as being comparable between states, with evidence provided of differences in the treatment of non-residential land, urban area boundaries and development policies (urban sprawl).

11 Queensland suggested that the inability of the model to respond to changes in commuter habits and work from home arrangements undermines its contemporaneity. Queensland considered that the use of policy-affected net expense data, the inability to use all significant urban areas in the regression due to unavailable data, and a reliance on proxies in the model indicate design limitations in the model.

12 In its tranche 2 submission, Queensland also raised the inability of the model to reflect the role states play in providing public transport as a social service for equality of mobility and transporting students. It noted that the reliance of the model on commuters ignores students and concession users.

13 In its tranche 1 submission, Queensland proposed replacing the model with an assessment based on state shares of urban populations (consistent with the 2015 Review approach). This position was revised in its tranche 2 submission, which recommended a separate assessment of urban and non-urban school transport. For the remaining urban transport expenses Queensland suggested replacing the regression model with an assessment based on state shares of concession card holders and urban populations.

14 Western Australia considered the model to have fundamental problems. These include the influence of the Sydney data point on the model and the passenger number and population-weighted density variables. Western Australia also said the inability of states to access the net expense data used in the regression limits their ability to test the reasonableness of the model, restricting genuine consultation. This view was shared by Victoria and Queensland.

15 South Australia suggested that COVID-19 has caused significant disruptions in the transport market, which will not be captured under any of the proposed approaches in the consultation paper. It also raised problems related to policy neutrality and the measurement of population-weighted density.

16 Tasmania raised concerns about the effect of COVID-19, the inability of the model to account for economies of density, and the use of public transport for non-commuting purposes.

17 Queensland, Western Australia and South Australia supported a detailed review of the model in consultation with states.

18 The Northern Territory considered the model to have significant limitations but did not specify improvements.

Commission response – high level

19 The Commission recognises the complexity of the transport assessment and the impact that COVID-19 has had on the use and provision of public transport services. Beyond the impact of COVID-19, a number of states said the current assessment is not fit for purpose and have significant reservations with the current approach. These concerns have been carefully considered and are discussed below.

20 The Commission recognises that states' transport needs vary significantly. For example, in large cities the task is mainly driven by commuters and the influence of peak demand on infrastructure and service requirements (see Appendix A). In smaller cities transport services are particularly focused on the travel requirements of non-commuters to ensure equality of access, with key user groups including the elderly, low socio-economic status persons and students. However, the bulk of spending is in the larger cities, which is reflected in the design (and outcomes) of the assessment.

21 To identify whether the variables currently used in the assessment remain appropriate, the Commission examined the relevant theoretical principles and academic literature. Studies were found to support the impact of demand, supply, network complexity and topography variables as significant drivers of transport spending (see Appendix A).

22 In response to state comments, the Commission has identified improvements to the current assessment. The Commission considers that, with the changes outlined below, the current approach remains appropriate, and is preferable to a return to using state shares of urban populations or adopting a measure that captures spending needs based on shares of concession card holders and urban populations.

23 The Commission notes the concern of Victoria, Queensland and Western Australia relating to the inability to view some state data used to inform the regression. Wherever possible, the Commission encourages states to allow data to be shared with other states. This facilitates transparency, scrutiny and more robust assessments. As some states did not allow all of their data to be shared, the Commission was unable to provide states all the data informing the 2020 Review regression.

24 Following the 2026 Census, when fit for purpose data become available, the Commission will conduct further analysis to test the model's capacity to reflect the post–COVID-19 public transport task faced by states. This process will be undertaken in close consultation with the states.

25 The Commission’s responses to detailed issues raised by states under Question 1 are provided below.

Commission draft position

26 The Commission considers the regression model, incorporating the proposed changes listed below, remains appropriate for assessing urban transport needs. It is preferable to alternatives based solely on urban population shares or shares of urban populations and concession card holders.

27 The proposed improvements to the urban transport model include:

- updating the regression with new state net expense data for 2022–23 and 2023–24
- calculating population-weighted density using the square kilometre grid instead of Statistical Area Level 1s (SA1s)
- indexing 2016 Census passenger numbers using Bureau of Infrastructure, Transport and Research Economics kilometres travelled
- modelling passenger numbers using a regression model.

28 The Commission is in the process of collecting, validating and transforming the net expense data for use in the urban transport regression model. These data will be used to update the model coefficients and retest the assumptions underpinning the variables. The positions in the Draft Report may change based on the results of the analysis.

29 The results of this analysis and any change to the positions in the Draft Report, along with quantitative impacts, will be provided in an addendum to the Draft Report.

30 In response to some states’ concerns relating to the urban transport assessment, the Commission will seek external advice on the urban transport assessment prior to the next methodology review. The advice would include retesting the assumptions underpinning the urban centre characteristics regression model. Relevant 2026 Census data that would be needed to inform the advice will likely be available progressively in 2027 and 2028.

Detailed consideration of issues

Issue 1 – Conceptual foundation and impact of COVID-19 and model contemporaneity

State views

31 Western Australia said that COVID-19 highlighted its long-held belief that equilibrium between supply and demand in the public sector is not a realistic assumption and that the sector alternates between excess supply and excess demand. It said supply would be better approximated by the capacity of public transport than by passenger numbers. It also recommended the Commission use

new data to explore the alternate models provided by the 2020 Review consultant, Jacobs and Synergies Economic Consulting.

32 Victoria noted that COVID-19 has highlighted that states do not aim to equalise demand and supply in the short or medium term.

33 Queensland similarly noted that COVID-19 has changed commuting patterns, with a permanent shift in working from home. It said the use of commuters in the model is no longer justified and hence the model is no longer contemporaneous.

34 Queensland's position is that the regression model should not be used in the assessment. In its tranche 2 submission Queensland recommended that the assessment should separately assess school transport, with remaining expenses assessed based on state shares of urban population and concession card holders.

Commission response

35 The Commission recognises that COVID-19 has changed the nature of service use and challenged the assumption that supply equals demand in the short term. During the pandemic, states maintained public transport services to minimise the risk of transmission and provide transport for essential workers, despite steep declines in demand. While public transport usage is recovering, the evidence from Transport New South Wales and Infrastructure Victoria suggests that it is likely that the demand will remain below pre COVID-19 levels due to a sustained uptake in working from home arrangements.[1,2]

36 Over time, the Commission expects that states will adjust their supply to account for changing use patterns by adjusting services (for example greater use of public transport outside peak periods) and deferring or reconsidering existing investment plans.[3] While the relationship between demand and supply was temporarily disrupted as a result of COVID-19, the Commission expects states will eventually reach a new 'normal' for transport provision.

37 Further, as Victoria suggested, it takes a number of years (5 to 10 years) for states to make significant adjustments to service provision. It is too early to ascertain the impact of COVID-19 on long-term trends in public transport provision.

38 The Commission agrees with Western Australia that public transport provision varies between excess supply and excess demand. However, the Commission

[1] Infrastructure Victoria (2021). The post-pandemic commute – The effects of more working from home in Victoria. https://www.infrastructurevictoria.com.au/resources/the-post-pandemic-commute

[2] Transport for NSW (2021). Technical Note on assessing the impacts of COVID-19 for business cases. https://www.transport.nsw.gov.au/news-and-events/reports-and-publications/tfnsw-technical-note-on-assessing-impacts-of-covid-19-for

[3] PWC (2020). Where next for transport? How Australia's transport sector can be rebooted for a sustainable future. https://www.pwc.com.au/government/where-next-for-transport.pdf

considers that, in the long run, states will adjust supply to respond to demand. A model that equates supply and demand therefore remains appropriate.

39 The Commission considers that the re-estimation of the model with new net expense data will allow the assessment to reflect the post–COVID-19 environment.

40 The Commission has considered Queensland's recommendation to remove the regression model from the assessment and instead use state shares of urban populations and concession card holders. While COVID-19 has caused challenges with updating the model variables, the model was designed to reflect the features of urban areas influencing transport demand that could not be solely captured through population numbers.

41 This was supported by an analysis of the data provided in the 2020 Review. The predicted expenses obtained using the regression model were much closer to actual spending for each significant urban area than the amount based on urban population shares.[4] This is evidenced by the fact that the national median difference between the actual expenses and the regression model was 24%, whereas the median difference between actual expenses and the urban population share was around 865%. When both concession card holders and urban populations were used, the median difference rises to around 1,200%.

Commission draft position

42 The Commission considers that, despite the disruption caused by COVID-19, states will over time adjust their supply to account for any change in use patterns. This means that the key assumptions underpinning the regression model remain valid.

43 The Commission considers the regression model, incorporating the proposed changes outlined below, remains appropriate for assessing urban transport needs. When compared with an alternative based solely on urban population shares or shares of urban population and concession card holders, the regression approach is more accurately able to represent the transport task faced by states.

Issue 2 – Economies of density

State views

44 Queensland, Western Australia, South Australia and Tasmania outlined concerns that the model does not account for economies of density.

45 Queensland and South Australia considered that the observed diseconomies of scale in the regression model are due to the cost recovery policies of individual

[4] The root mean squared error and median absolute error were much smaller for the regression model (55 and 40 respectively) compared with the amount based on urban population shares (339 and 373 respectively).

states, while Western Australia provided evidence that heavy rail has a lower per kilometre cost compared with other modes.

46 In a supplementary submission, New South Wales said that the economies of density and scale in urban transport, which were cited in other state submissions, are already captured in the regression. The inclusion of the log of passenger numbers in the model recognises that costs per passenger grow more slowly as passenger numbers increase. New South Wales said that the population-weighted density variable captures both changes in unit costs per service (economies of scale) as well as changes in the required volume of services.

Commission response

47 The Commission has examined the literature provided in Queensland's and Tasmania's submissions (see Appendix A). Studies by Giacmo and Ottoz (2010), Savage (1997), Bitzan and Karanki (2022), Farci et al. (2007), Mizutani and Uranishi (2013), Li et al. (2019), Anupriya (2020), Gschwender et al. (2016), Batarce and Galilea (2018), Karlaftis and McCarthy (2002), Karlaftis, McCarthy and Sinha (1999) and Viton (1981) found evidence of the existence of economies of density in public transport systems.

48 In these studies, after holding the size of the public transport network fixed, economies of density were measured using the cost savings per public transport passenger. These cost savings reflect greater usage of public transport systems. The usage in these studies was measured using the number of passengers on public transport or the number of kilometres travelled on a fixed bus route or rail line.[5]

49 The Commission agrees that, as the density of passengers on public transport increases, the marginal cost per passenger should decline. In the Commission's regression these economies are captured through the passenger number variable. Applying a logarithmic form to passenger numbers implies that the impact on net expenses per capita decreases as additional passengers are added to a transport network. Thus, the Commission considers that these economies of passenger density are accounted for in the model, a view supported by New South Wales.

50 To determine if economies exist with regard to population density of an area, the Commission examined the available literature. Studies by Tsai, Mulley and Merkert (2015), Vigren (2016), Cooke and Behrens (2017), Li et al. (2019), and Nerhagen (2023) did not find significant evidence of cost savings resulting from population density. One explanation for this can be found in Li et al. (2019), which concluded that, when passenger numbers were captured separately in a regression model, population density did not exhibit significant economies.

[5] Other measures included train and bus hours, train and bus kilometres or passenger kilometres.

51 As studies such as Vigren (2016) show, increased population density can result in lower cost recovery. This can occur as the increased congestion on road networks necessitates the need for more frequent and complex public transport services (such as moving from bus networks to heavy rail, or the need to invest in elevated rail tracks) to handle the additional capacity. This increase in complexity drives the linear increase in costs that is captured in the Commission's current measure of population density. Similar evidence was also presented in the Consultant's report commissioned for the 2020 Review.[6]

Commission draft position

52 The Commission considers the model adequately captures economies of passenger density through the log treatment of passenger numbers in the regression.

Issue 3 – Calculation of population-weighted density

State views

53 New South Wales, Queensland, South Australia and Western Australia said that the volatility of the SA1 measure indicated that it is not fit for purpose to calculate population-weighted density.

54 Queensland said that problems with inconsistencies in the measurement of population-weighted density support its proposal that the regression model should no longer be used in the assessment. Western Australia considered that the problems with the density variable justify a discount to the variable in the regression or a discount to the method overall.

55 These concerns were also raised by states as part of the 2024 Update New Issues process. Queensland, Western Australia and South Australia supported retaining the 2016 Census boundaries for SA1s given the large revisions to the population-weighted density when the 2021 Census data were incorporated (ranging from 0.4% to 21.8% for capital cities). They said that this volatility demonstrated the problems with the current assessment.

56 Queensland stated that expense assessments should not be this volatile between methodology reviews and that changes resulting in a material redistribution of GST should not be made during update years. South Australia questioned whether the methodology was accurately capturing underlying changes in density rather than boundary issues or factors irrelevant to transport demand.

[6] While the Jacobs and Synergies Economic Consulting Stage 1 report examined the theoretical drivers of public transport spending and available data, the Stage 2 report assessed the suitability of potential proxies for use in the model with regard to the theory.

57 New South Wales suggested that SA1 be replaced with SA2 because it is more closely aligned with 'neighbourhood', the level at which areas experience population density and public transport is designed.

58 As part of its tranche 2 submission, Queensland provided evidence against the use of the SA2 areas suggesting that, similar to the SA1 areas, inconsistencies exist in the residential and non-residential land included in individual SA2s between states.

59 As an alternative to the SA1 measure, in its 2024 New Issues submission, South Australia proposed a measure of population-weighted density using the ABS' square kilometre grid, saying that this approach was not impacted by arbitrary drawing of boundaries. In its supplementary submission, New South Wales also supported this measure. It said that population-weighted density would be best measured using consistently sized and shaped sub-areas. However, New South Wales noted that the square kilometre grid does not exactly align to urban centres.

60 Queensland, Western Australia and South Australia also said that the size and features of SA1s are not comparable across urban areas due to differences in zoning and greenfield development.[7]

Commission response

61 As part of the 2020 Review, the transport consultant identified that population density was an important determinant of transport demand. This was due to higher density increasing traffic congestion, lowering private vehicle ownership and influencing the location and frequency of urban public transport infrastructure.

62 The consultant selected a population-weighted density measure based on SA1 areas because this was the smallest practical area available and had significant explanatory power. Mesh Block areas were also considered by the consultant to measure population-weighted density. They were not practical for use in the assessment as they produce a population-weighted density measure that is highly volatile to small changes in population.[8]

63 A measure of population density is needed to ensure that the model accurately reflects factors influencing the need for public transport in urban centres. In response to state concerns, the Commission investigated:

- the volatility of the population-weighted density measure caused by changes to SA1 boundaries following a census

[7] Statistical Area Level 1 is a geographical area measure designed by the Australian Bureau of Statistics to capture similar population sizes (between 200 and 800 persons) and common geographical features. They are predominantly rural or predominantly urban in character and are typically internally connected by road.

[8] Mesh Blocks are the smallest geographic areas defined by the ABS and form the building blocks for the larger regions of the Australian Statistical Geography Standard. They broadly identify land use such as residential, commercial, primary production and parks. Wherever possible, each Mesh Block is designed to have a single land use, for example parkland.

- the impact on the population-weighted density measure of size and composition differences of SA1 areas.

64 Results of the investigation reveal that the SA1-based density measure is associated with large changes following a census, with increases in density of up to 21.8% across capital cities in the 2024 Update. The SA1 areas also have statistically significant differences in the size and land composition between states.

65 Evidence was also found to support Queensland's view that differences exist in the treatment of residential land included in SA1s between states. The Commission notes that this is somewhat influenced by urban development policies.

66 To identify if improvements to the population-weighted density measure could be made, the Commission examined alternatives based on SA2 areas and the square kilometre grid. The Commission examined the capacity of each measure to capture transport demand, minimise volatility and variation between urban areas, and address functional considerations such as the ability to capture transport networks.

67 For completeness, the Commission also considered Statistical Area Levels 3 and 4 (SA3 and SA4). SA3 boundaries are mainly designed for collating data by regions but can capture clusters of suburbs in more populated urban areas. SA4 boundaries are designed to capture labour markets, which could also potentially reflect employment concentration and travel patterns.

68 The large size of SA3 and SA4 areas proved unsuitable for use in the assessment. Outside capital cities, multiple individual urban areas are captured in the same SA3 and SA4 boundary. These measures would not be detailed enough to capture pockets of dense development within non-capital city urban areas. This would lead to an inconsistency in density measures between urban areas and an underestimation of density outside capital cities. The size of SA3s and SA4s also varies considerably by state.

69 The SA2 boundaries are part of the Australian Statistical Geography Standard (ASGS) produced by the ABS. They are the base unit of geography for the ABS, from which all other areas are derived (including SA1s).

70 The ABS defines SA1s and SA2s with consistent populations as a key criterion. For SA1s, it aims for a population range between 200 to 800 people and an average population of about 400. For SA2s, the desired population range generally is 3,000 to 25,000 and an average population of about 10,000.[9]

71 SA1s and SA2s are highly variable in terms of their land area size. Significant urban area SA1s range in size from 0.0005 to 92.6 square kilometres with an average size

[9] The Australian Statistical Geography Standard Edition 3 provides a description of the technical definitions of SA1s and SA2s. https://www.abs.gov.au/statistics/standards/australian-statistical-geography-standard-asgs-edition-3/jul2021-jun2026/main-structure-and-greater-capital-city-statistical-areas/statistical-area-level-2

of 0.39 square kilometres. SA2s in significant urban areas range in size from 0.17 square kilometres to 119 square kilometres with an average of 10.4 square kilometres.[10]

72 As sub-areas in a population-weighted density calculation become smaller, the observed population-weighted density increases even with the same population. When using SA1s or SA2s, the sub-areas are smaller in more populated urban areas to maintain consistent populations. As highlighted by Queensland, this introduces bias in the calculation of population-weighted densities, overestimating the relative density of larger urban areas and underestimating the relative density of smaller urban areas.

73 While the populations used in the SA2s can be updated annually to reflect population growth, the boundaries are fixed between census years and are only updated once new census data become available.

74 The square kilometre grid boundaries and associated population grid files were also obtained from the ABS based on the National Nested Grid Standard developed by the Australia and New Zealand Land Information Council (ANZLIC).[11]

75 The populations within each grid are constructed based on the ABS estimated resident population data matched to the ABS Address Register. Populations within square kilometres across Australia range from 0 to 32,561. The ABS updates the population of square kilometres annually while the boundaries of the square kilometres do not change.

76 For both measures, the SA2s and square kilometres were first mapped to Urban Centre and Locality boundaries before being aggregated to significant urban areas. This ensures that the non-urbanised areas on the fringes of larger significant urban areas (typically reserves, mountainous areas, forests and waterways) could also be removed. As square kilometres can cross urban centre boundaries, residents were allocated to each area based on the proportion of land in each urban centre boundary. While this increases the complexity and reduces the transparency of the calculations, the empirical validity is maintained.[12]

77 The Commission considers that both the SA2-based measure and the square kilometre-based measure of population-weighted density represent an improvement over the use of SA1s. This is because the population-weighted density calculated using the SA2 areas and square kilometre grid is less volatile than the SA1-based measure. The SA2s and square kilometre grid are also more consistent in terms of the composition of land included in areas boundaries and more closely

[10] Over 99% of SA2s have an area greater than 1 square kilometre.

[11] The files used to construct the square kilometre gird were collected from the ABS 2021-22 *Regional Population* release and can be accessed here: https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-downloads. Further information about the National Nested Grid standard can be found here: National Nested Grid | ANZLIC

[12] The calculations and necessary data will be made available to the states.

align with the areas (or populations) used to make transport planning decisions compared with SA1s.

78 To determine which of these approaches represents the better alternative to use in the assessment, the Commission compared the ability of the SA2s and square kilometres to respond to the concerns raised by states.

Issue 3.1 – Volatility

79 Currently, between censuses, population-weighted density is updated each year with new population data. The size of significant urban areas, urban centres and localities and SA1s is fixed between censuses. Updating population results in relatively small changes in density from year to year.

80 Following a census, the ABS revises both population and geographies. This can have a significant impact on density, resulting in volatility. This was evident in the 2024 Update when 2021 Census geography for the SA1 areas were incorporated into the method, resulting in large changes to the population-weighted density of some cities.[13]

81 While revisions to populations can cause changes in population-weighted density, volatility mainly occurs when the size of the areas used to calculate density changes. In the 2021 Census, the decision to split existing SA1s that were close to the upper population limit caused large increases in population-weighted density, particularly for capital cities.

82 Compared with the SA1s, the larger population ranges for the SA2s reduce the number of areas required to be split after each census. In the 2021 Census, boundary changes were necessary for 155 SA2s compared with 2,070 SA1s.

83 As the square kilometre grid is constructed to ensure a uniform area size rather than uniform population ranges the boundaries do not change. This reduces the volatility of population-weighted density calculated using square kilometre grid compared with both SA1s and SA2s.

84 Regardless of which measure is used, changes in density will occur due to population revisions and changes to the significant urban areas, urban centres and localities on which the SA1s, SA2s and square kilometres are mapped.

85 The relative volatility of each measure can be seen by comparing the change in population-weighted density between the 2016 and 2021 censuses (Table 1 provides the change by capital city as density cannot be averaged across a state).

86 While the SA1s have a maximum change in population-weighted density of 21.77%, the larger size of the SA2s resulted in a smaller maximum change of 4.5%. Removing the impact of boundary changes by using the square kilometre grid

[13] The terms of reference require the Commission to use the latest available data which are fit-for-purpose wherever possible.

resulted in the smallest change in population-weighted density for most capital cities.

Table 1 Population-weighted density based on SA1 areas compared with SA2 areas and the square kilometre grid, (persons per square kilometre, 2021–22)

	Sydney	Melbourne	Brisbane	Perth	Adelaide	Hobart	Canberra	Darwin
SA1-based density measure								
2016 Census	6,393	4,209	2,999	2,566	2,507	1,911	3,006	2,564
2021 Census	7,202	5,126	3,420	2,661	2,521	1,991	3,307	2,671
Change (%)	12.66	21.77	14.04	3.72	0.55	4.23	10.02	4.16
SA2-based density measure								
2016 Census	3,567	2,642	1,920	1,771	1,835	1,227	1,894	1,657
2021 Census	3,727	2,723	1,926	1,787	1,814	1,225	1,860	1,646
Change (%)	4.50	3.08	0.30	0.92	-1.12	-0.15	-1.79	-0.69
Square kilometre-based density measure								
2016 Census	4234	3034	2381	2120	2135	1574	1975	1874
2021 Census	4244	3111	2389	2137	2140	1575	2022	1874
Change (%)	0.24	2.54	0.34	0.78	0.21	0.06	2.36	-0.01

Note: The numbers differ slightly from the 2024 New Issues paper as final population estimates have been received from the ABS.

Issue 3.2 – Consistency of areas within boundaries

87 States have raised concerns about the differences in the treatment of residential and non-residential land in SA1s between states and the impact this can have on population-weighted density. It was suggested that non-residential areas (such as schools, parks, commercial districts and hospitals) were more likely to be included as separate SA1s in Sydney, while being combined with residential land in other capital cities.

88 By using the ABS' Mesh Blocks, which contain land use by category, and aggregating to the SA1 level, the Commission identified significant differences in zoning of land within SA1s by state ($p<2.2e-16$). The Commission agrees that a greater consistency in the measure of population-weighted density between states would improve the assessment method.

89 As shown in Table 2, the aggregation of individual SA1s to create the SA2 boundaries results in a greater mix of residential and non-residential land included in each area on average. This reduces the variation between states but does not completely eliminate significant differences ($p=0.019$). This is consistent with Queensland's submission, which found that differences between areas were not completely eliminated if the SA2 areas were used.

90 There is no straightforward method available to determine the composition of land within the square kilometre grid. However, as the square kilometre grid is based on a uniform area size and shape, rather than population, both residential and non-residential land contribute to the composition and must be included. This results in differences in states being entirely due to natural geographic features or planning decisions rather than inconsistent treatment. The consistency of treatment of the land included in each area is one of the major benefits associated with square kilometres when compared with both the SA1s and SA2s.

Table 2 Average percentage of residential and non-residential land within SA1s and SA2s areas captured in the urban transport assessment

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
SA1s captured in the assessment								
Residential land	80	83	80	80	80	76	73	75
Non-residential land	20	17	20	20	20	24	27	25
SA2s captured in the assessment								
Residential land	60	64	62	59	60	62	57	57
Non-residential land	40	36	38	41	40	38	43	43

Source: Commission Calculation using 2021 Census data; disaggregated data on land use within square kilometres are not available. Only SA1s and SA2s included in urban areas were used to construct the table.

Issue 3.3 – Functional considerations

91 As New South Wales highlighted, the SA2 measure more closely aligns with public transport networks than SA1. This is because transport services are typically provided at the town level (in regional areas) or to suburbs (in cities), rather than to individual residential blocks. As defined by the ABS, SA2s are designed to represent a community that interacts together socially and economically.[14] The design of SA2 boundaries using roads often results in one transport network being used by several surrounding SA2 suburbs.

92 However, while the SA2 areas better capture communities, they were not designed for the purpose of calculating density or to reflect transport needs. The ABS has advised that SA2s are designed for the purposes of collecting social, economic and demographic statistics.

93 In comparison, the square kilometre grid is not aligned with suburbs and localities. Typically, suburbs in major cities are captured in several square kilometres. However, the square kilometre grid is the internationally recognised base unit of

[14] Australian Bureau of Statistics(ABS) Census Geography glossary. Census geography glossary | Australian Bureau of Statistics (abs.gov.au), 2022, ABS website, accessed 3 November 2023

area used to measure population density.[15] The square kilometre grid is used by Australian departments such as the Department of Infrastructure, Transport, Regional Development, Communications and the Arts and the Department of Climate Change, Energy, the Environment and Water.[16]

94 The Commission consulted with the Department of Infrastructure, Transport, Regional Development, Communications and the Arts about why it uses the square kilometre grid to measure population-weighted density. Previously it used the smallest ABS geographical area (Mesh Blocks) to provide the most detailed and spatially accurate point measure of density.[17] It moved from using Mesh Blocks to the square kilometre grid because this provides more consistent area sizes and unit of measure over time.

95 In reporting population density statistics, the ABS considers that 'the population grid offers a consistently sized spatial unit and gives a refined model of population distribution. It is also an established, easy to understand and readily comparable international standard which enables users to make local, national and international comparisons of population density'.[18] The square kilometre grid also ensures that the size of each area does not influence its contribution to the calculation of population-weighted density. This view was reflected in the South Australia's New Issues submission and the New South Wales' supplementary submission. South Australia noted that by using the square kilometre grid, it is possible to create an alternative measure of population-weighted density that is not impacted by the treatment of geographical features. New South Wales considered that an ideal measure of population-weighted density would be based on consistently sized and shaped sub-areas.

Summary of Commission deliberations

96 The Commission agrees that the issues raised by states with the SA1-based population-weighted density measure are significant. Both the square kilometre grid and the SA2-based measures represent an improvement over the use of SA1s. Both of the alternative measures have different benefits in terms of reduced volatility, better consistency of areas and the ability to represent the characteristics of urban transport demand.

[15] Australian Bureau of Statistics (ABS). (2023). Regional population methodology. https://www.abs.gov.au/methodologies/regional-population-methodology/2021-22

[16] Bureau of Infrastructure, Transport and Regional Economics (BITRE). (2019). An introduction to where Australians live. https://www.bitre.gov.au/publications/2019/is_96. The Department of Climate Change, Energy the Environment and Water (DCCEEW) first changed to a square kilometre grid density measure in the 2016 State of the Environment report. The most recent report can be found here Department of Climate Change, Energy the Environment and Water (DCCEEW). (2021) Australia – State of the Environment: Urban. Introduction | Australia state of the environment 2021 (dcceew.gov.au)

[17] Mesh Blocks form part of the Australian Statistical Geography Standard released by the ABS. Mesh Blocks are the smallest geographic areas, designed to capture different land use, such as residential, commercial and industrial land.

[18] Australian Bureau of Statistics (2021). Regional population methodology. https://www.abs.gov.au/methodologies/regional-population-methodology/2021-22

97 There are advantages in using the SA2 areas instead of the SA1s.

- The SA2s are based on the ABS Australian Statistical Geography Standard.
- SA2s better represent the communities that interact together socially and economically and are consequently more likely to access the same public transport services (although one transport network services multiple SA2s).
- SA2s are constrained within a single significant urban area. This means fewer practical adjustments are required compared with using the square kilometre grid where adjustments are required if part of the square kilometre falls outside of a significant urban area or falls between 2 distinct significant urban areas.

98 However, there are greater advantages in using the square kilometre grid, which make it more appropriate for the purpose of calculating population-weighted density.

- Relative to SA1 and SA2, a population-weighted density measure based on the square kilometre grid is less volatile. The fixed boundaries of the square kilometre grid ensure that any changes in the measure are driven by population and better reflect changes in transport demand.
- The square kilometre grid has greater uniformity in the treatment of land use. As both residential and non-residential land contribute to the square kilometre area requirements, it is not possible for differences between states to be due to arbitrary boundary decisions.
- The square kilometre grid is a more internationally recognised and accepted measure of population-weighted density.

99 While a measure of population-weighted density based on SA2 areas may align more closely with functional areas, the Commission considers it is more important to ensure that the density measure is reliable and fit for purpose and reflects what states do. Compared with the SA2 areas, the square kilometre grid better addresses these criteria.

100 The use of the square kilometre grid as an international standard for measuring density indicates it has been subject to a high level of scrutiny and can be considered highly reliable. The reduced volatility, particularly following a census, indicates the square kilometre grid is more fit for purpose. As it is only driven by population movements and concentration, rather than boundary changes, it better reflects transport needs and what states do. The use of the square kilometre grid also ensures uniformity in the treatment of land between states, which was a major criticism of the existing SA1-based approach.

101 The GST impact of using the square kilometre grid to calculate the population-weighted density measure will be presented in an addendum to the Draft Report once the regression model has been re-estimated and updated regression coefficients obtained.

Commission draft position

102 The Commission proposes to calculate population-weighted density using the square kilometre grid.

Issue 4 – Policy neutrality

State views

Cost recovery policies

103 Queensland, Western Australia, South Australia and Tasmania had concerns about the impact of state policies on population-weighted density and costs, citing differences in urban infill and rates of cost recovery between states. In its tranche 1 and tranche 2 submissions, Queensland provided evidence suggesting that Sydney should have higher cost recovery than other Australian capital cities due to its higher population-weighted density and lower proportion of concession passengers.

104 Queensland and Western Australia provided evidence that supply of public transport is not uniform across cities, indicating that public transport in Sydney is provided at a higher level than average.

Density policies

105 Queensland, Western Australia and South Australia raised concerns relating to the impact of policies in large cities, citing the impact of Sydney on the regression model. These states considered that decisions regarding Sydney's urban transport spending would be reflected in the coefficient for the population-weighted density variable (given that Sydney has much higher density).

106 Queensland also said that an over-reliance of the model on population-weighted density unfairly penalises states that pursue low-density development policies, underestimating their need for public transport. Queensland provided evidence that the existence of green spaces in urban areas and greenfield development lower population-weighted density, leading to underestimation of urban transport need in these areas.

107 In its supplementary submission, New South Wales modelled cities with a population over 250,000, showing a similar relationship between their public transport users and population-weighted density (whether Sydney and Melbourne were included or not). From this, New South Wales argued that there was a strong case for population-weighted density as a proxy for demand and that Sydney did not unduly influence the model through the density variable.

Impact of Sydney on the regression model

108 Queensland and Western Australia provided evidence that the strength of the estimated relationship between population-weighted density and passenger numbers was being influenced by the Sydney data point. When Sydney was

excluded, the strength of the estimated relationship fell slightly. Removing all non-capital cities resulted in no evidence of a significant relationship.

109 This contrasts with evidence provided by New South Wales that the relationship between population density and public transport commuters was effectively unchanged if Sydney was excluded from the regression model.

Commission response

Cost recovery policies

110 While cost recovery in Sydney is low by international standards, care needs to be taken in comparing public transport systems across nations due to differences in relative income, economic development, car ownership, demographic characteristics (such as age) and social attitudes towards transport.[19,20,21]

111 When compared with available data on other Australian capital cities, Sydney has similar cost recovery rates. Sydney's farebox recovery in 2015 (around 22%) is similar to Melbourne (22%) and Brisbane (23%) but below Perth (at 30%). 2015 data were not provided for Adelaide, Hobart, Canberra or Darwin.[22]

112 The relative cost recovery in Australian states varies depending on the source and the mode of public transport. Research by the Productivity Commission (2021) and the Bureau of Infrastructure, Transport and Regional Economics (BITRE; 2014) show that Sydney's fare recovery level compared with operating expenses is comparable to or higher than other Australian capital cities.[23,24] Other studies by the Imperial College London (2020) and the Tourism & Transport Forum (2016) show that Sydney's fare recovery is below other Australian capitals.[25,26]

113 Studies by the Centre for International Economics (2020), the Independent Pricing and Regulatory Tribunal (2016) and the Bureau of Infrastructure, Transport and Regional Economics (BITRE; 2014) have shown that buses and ferries are associated

[19] C Zhang and X Yu, 'Factors and Mechanism affecting the Attractiveness of Public Transport: Macroscopic and Microscopic perspectives', 2022, *Journal of Advanced Transportation,* DOI: https://doi.org/10.1155/2022/5048678

[20] D Ashmore, D Pojani, R Thoreau, N Christie and N Tyler 'Gauging differences in public transport symbolism across national cultures: implications for policy development and transfer', 2019, *Journal of Transport Geography, 77*: 26-38

[21] J Holmgren 'An analysis of the determinants of local public transport demand focusing on the effects of income changes', 2013, *European Transport Research Review, 5*: 101-107.

[22] Tourism & Transport Forum (TTF). 'Ticket to ride: Reforming fares and ticketing for sustainable public transport', 2016, TTF website, accessed 19 November 2023.

[23] Productivity Commission (PC), 'Public transport pricing', PC website, 2021, accessed 15 February 2024.

[24] Bureau of Infrastructure, Transport and Regional Economics (BITRE), 'Urban public transport: updated trends', 2014, BITRE website, accessed 19 November 2023.

[25] Imperial College London Transport Strategy Centre (TSC), 'Sydney Trains Update 2020: Comparison with International Benchmarking Groups', TSC website, 2020, accessed 25 October 2023.

[26] Tourism & Transport Forum (TTF). ' Ticket to ride: Reforming fares and ticketing for sustainable public transport', 2016, TTF website, accessed 19 November 2023.

with a higher cost recovery than trains, which may explain the higher cost recovery for Queensland and Perth identified in Queensland's submission.[27,28]

114 To ensure policy neutrality across all states, a comparable indicator of cost efficiency would need to measure average state policy with regard to service levels and fare recovery.

115 The Commission has tried to develop a comparable indicator of cost efficiency but has been unable to find a reliable or internally consistent data source. As a result, there is no clear way of disentangling the effect of state decisions with fare recovery policies from non-policy influences.

116 In the 2020 Review, evidence was found that higher service levels across states (in particular Sydney) were due to higher employment density and increased congestion, rather than solely due to policy decisions. This was supported by Commission analysis, which indicated that for larger urban areas such as Sydney to provide an identical level of services to other capital cities, public transport use would need to fall by over 50% or 352,000 passengers.[29]

117 The Commission notes that applying modelled passenger numbers (rather than actual) to the estimated regression coefficients moderates the impact of individual state policies. Using modelled passenger numbers ensures that a state cannot increase its assessed needs for transport by lowering fares or increasing services to raise the number of urban transport passengers.

Density policies

118 Queensland and Western Australia said that the model's population-weighted density variable is policy influenced. They said that urban densities are a result of state policies on urban development and sprawl, and, in the case of Sydney, its densities are the result of state planning policies.

119 Consistent with the 2020 Review, the Commission considers that the majority of the differences in population-weighted density are due to circumstances outside current state control. For example, the relatively high population-weighted density of the Sydney urban area is mainly the result of its geographic constraints as a result of the harbour, mountains and national parks surrounding the urban area.

120 In addition, there is no strong evidence that recent policies in Sydney have deviated significantly from other fast growing capital cities dealing with the consequences of increasing congestion. The *State of the Environment 2021* report compared capital city development plans and found that 70% of planned new housing developments

[27] Centre for International Economics, '[Measuring cost recovery of NSW public transport services]', 2020, Independent Pricing and Regulatory Tribunal (IPART) website, accessed 21 January 2024.

[28] Independent Pricing and Regulatory Tribunal (IPART), '[Cost Recovery - Public Transport Fares Final Report Part 2]', 2016, IPART website, accessed 23 November 2023.

[29] Using 2022–23 data.

in Sydney were to occur in existing urban areas. This was comparable to Melbourne (70–75% of new developments), Brisbane (60%) and the ACT (70%).

121 Further, a review of density policies across capital cities using the square kilometre grid indicates that most states have adopted policies that encourage greater density. Sydney's population-weighted density has increased by only 4.07% between 2016 and 2022, below other capital cities such as Brisbane and Canberra (see Table 3).

Table 3 Change in population-weighted density by capital city between 2016 and 2023

	Sydney	Melbourne	Brisbane	Perth	Adelaide	Hobart	Canberra	Darwin
2016	4,299	3,097	2,165	1,963	1,981	1,435	1,748	1,882
2023	4,473	3,334	2,490	2,244	2189	1,570	2,077	1,882
Change (%)	4.07	7.67	15.01	14.35	10.50	9.40	18.80	-0.01

Source: Commission calculation using ABS data. The square kilometre grid was used to calculate the population-weighted density, similar results were obtained using the SA1 and SA2 areas. 2021 census areas were used.

Impact of Sydney on the regression model

122 Sydney has significantly higher density than the other state capitals. Because of this, it has a large effect on the model's estimated density variable. This raises the possibility that New South Wales' policy choices may excessively influence the regression model through its impact on the density variable.

123 The urban transport model is designed to model public transport spending within Australian cities. Removing Australia's largest cities, and with them the majority of spending on public transport in Australia, would fundamentally change the model and the assessment.

124 Given that Sydney is Australia's largest and most dense city, with over 20% of the national population, any model of public transport need in Australia will be influenced by Sydney.

125 Sydney (and to a lesser extent Melbourne) represents a large share of total urban transport spending relative to the remaining states. This cannot be explained solely by policy decisions. Any model that removes the influence of Sydney from the regression would not reflect what states do and would not be a reliable predictor of overall transport spending.

126 The Commission notes that the proposed change to the method used to calculate population-weighted density will provide a more consistent measure of density across urban centres and will mitigate the influence of Sydney in the regression.

127 While the differential costs associated with sprawling cities are not accounted for through the population-weighted density variable, they are captured in the model through the distance to work variable. This occurs because residents in sprawling cities typically have higher distances they need to travel. By including both population-weighted density and distance to work in the regression model, the additional costs associated with highly dense and sprawling cities can be identified.

128 As cities expand transport opportunities will progress from individual motorised transport to lower cost bus or light rail transport to high-cost rail as density increases.[30,31]

Commission draft position

129 The Commission acknowledges that there are limitations in the model, in particular surrounding differences in states' cost recovery policies. However, there is no reliable method of isolating the impact of these policy differences. As such, an adjustment cannot be reliably made. The approach in the 2020 Review of blending the urban centre characteristics model (75%) with state urban population shares (25%) was implemented to account for such limitations in the model and the uncertainty inherent in the assessment.

Issue 5 – Passenger and other variables

State views

130 Western Australia and Tasmania recommended including variables to account for non-commuter use, including socio-economic status, concession users, students (Tasmania) and the impact of remoteness (Western Australia). Western Australia suggested splitting out school transport from the transport assessment while Tasmania suggested splitting the assessment into 2 components: commuter journeys and other travel.

131 Tasmania said that, in contrast to the emphasis on commuters in the model as a key determinant of public transport expenditure, service levels and network complexity are driven in part by the needs of persons of low socio-economic status and the elderly. Tasmania also considered that the distance to work variable is not able to take into account the more complex journeys associated with concession travel.

132 Western Australia recommended that regional costs should be incorporated into the assessment to account for the substantially higher costs required to run transport services in very remote regions. Western Australia also recommended that student expenses should be separately assessed. It considered that while students in metropolitan areas can use mainstream public transport services, students in remote areas have dedicated government school bus services. The current assessment would not be able to capture the needs of these students.

[30] In the 2020 Review the Commission recognised that, as urban centres become significantly large, the introduction of heavy rail into the public transport mode mix becomes unavoidable. This is supported by the academic literature, see M Burke, 'Problems and Prospects for Public Transport Planning in Australian Cities', *Built Environment*, 2016, 42(1): 37-54.

[31] The academic literature widely supports the link between increasing sprawl in Australian cities, increased car dependence and reduced access to public transportation, see BT Hiller, BJ Melotte and SM Hiller, 'Uncontrolled sprawl or managed growth? An Australian case study', *Leadership and Management in Engineering*, 2013, 13(3): 144-170. Also see G Currie, A Delbosc and K Pavkova, 'Alarming trends in the Growth of Forced Car Ownership in Melbourne', *Australasian Transport Research Forum 2018, Proceedings*, 2018.

133 Queensland, South Australia and Tasmania raised concerns with the capacity of the model to reflect changes in passenger behaviour and with the quality of data used in the model.

134 Queensland considered that the model cannot account for non-commuter travel, which is provided by states to ensure equality of mobility and student transport. Queensland highlighted the complex transport systems required to enable access to services for concession users along routes that are not necessarily accessed by commuters. Queensland also highlighted the increased costs of providing such services. It recommended that students and concession passengers should be incorporated in the method.

135 Queensland further recommended that the assessment should separately assess school transport, with remaining expenses assessed based on state shares of urban population and concession card holders.

136 Victoria recommended making the model simpler by taking out insignificant variables.

137 South Australia recommended that the ferry variable should be removed because of the large standard errors.

Commission response

138 The Commission considered variations to the current model suggested in state submissions, including models recognising remoteness, socio-economic status, concessions and student numbers (see Appendix B). To ensure the models could be accurately compared with the 2020 Review specification, 2016 Census data were used for testing. As data were not sufficiently disaggregated to distinguish between concessional and non-concessional passengers on public transport, proportions of student, low-income and elderly population groups were used.

139 While these variables have a strong conceptual link to transport spending, their inclusion in the regression leads to non-intuitive results. Results suggest lower transport needs for areas with higher proportions of students and the elderly, and similar net expenses regardless of socio-economic status or remoteness.

140 The Commission notes that while the numbers of non-commuters are not directly captured in the regression, the method of modelling passenger numbers partially captures non-commuters. It does so by applying the use rates, derived from commuter passengers, to the total population in an urban area. The Commission also notes that the current blending of the urban centre characteristics assessment with urban population shares also accounts for the limitations due to the use of proxies in the regression model. Therefore, the Commission considers the proposed model appropriately mitigates this issue and remains fit for purpose.

141 The Commission considers it appropriate to re-examine issues of non-commuter travel, following the release of fit for purpose 2026 Census data. This is likely to

coincide with the next review cycle.[32] These data will be progressively released by the Australian Bureau of Statistics during 2027 and 2028.

142 Tasmania's proposal to split the assessment into commuter and non-commuter transport is not feasible as sufficiently disaggregated passenger data for all states are not available. In addition, it would be difficult to separate the proportion of urban transport costs in each significant urban area relating to each group.

143 Western Australia recommended that supply should be proxied by network capacity instead of passengers. This measure was considered as part of the 2020 Review consultancy. It concluded that the available data on network capacity are insufficient to include in the model and are more highly influenced by policy decisions compared to the current passenger number variable.

144 The Commission considers commuter numbers remain an appropriate proxy for supply. Commuter numbers were chosen to reflect peak demand. While states provide services for non-commuting purposes, the commuter peak reflects the greatest use of transport across most states. While transport in smaller urban areas is undertaken with a greater focus on access and social welfare objectives, it does not constitute a large proportion of state urban transport spending (at about 2% of total net spending on urban transport).

145 Victoria suggested excluding insignificant variables from the model (see Appendix B). Although bus and light rail is not a significant variable, its inclusion in the models tested was necessary to account for differences in transport service provision in small urban areas. This is necessary as only 14% of modelled urban areas have heavy rail services. The ferry variable was similarly included to account for all transport modes and to address policy neutrality concerns. The remaining variables were found to have strong conceptual links to transport spending, as they capture the complexity of transport networks and topography, which can influence the feasibility and expansion of transport modes.

Commission draft position

146 The Commission proposes to retain all variables currently used in the regression model if they continue to be supported by updated net expense data.

[32] 2026 Census journey to work data are likely to be released progressive during 2027 and 2028.

Q2. Do states consider the urban transport net expense data from 2019–20 to 2021–22 are likely to be overstated?

Q3. If 2019–20 to 2021–22 data are not fit for purpose, do states support updating the regression with data from 2022–23? Can states provide an indication of when these data could be provided to the Commission.

Q4. If 2022–23 data are considered fit for purpose but are not available for inclusion in the 2025 Review, do states support updating the assessment in an update following the 2025 Review?

State views

147 All states agreed that net expense data from 2019–20 to 2021–22 are likely to be overstated.

148 With the exception of Victoria, Queensland and South Australia, states supported the use of 2022–23 net expense data to update the assessment. New South Wales supported using data from multiple years to avoid anomalous results. It suggested using data from 2018–19 and 2022–23 in conjunction with updated passenger data.

149 New South Wales and the Northern Territory said 2022–23 data would be impacted by industrial actions and ticketing system changes respectively.

150 Victoria and South Australia did not support using 2022–23 data. They noted that patronage levels are still increasing post–COVID-19 lockdowns and have yet to stabilise. Given this, South Australia did not support using 2022–23 as the single year of data in the assessment.

151 Queensland had fundamental issues with the model and did not support updating it with any data.

152 All states, excluding Victoria and Queensland, supported updating the assessment in an update following the 2025 Review if 2022–23 data were considered fit for purpose and not available for the 2025 Review. Victoria recommended that the model should be re-estimated in an update year but only after reliable data become available.

153 All states indicated they can provide 2022–23 data in April 2024.

Commission response

154 The Commission considers that net expense data from 2019–20 to 2021–22 are not fit for purpose for use in the urban transport assessment. While the effects of COVID-19 may still be apparent in the 2022–23 data, these data better reflect current circumstances of states compared with pre–COVID-19 data and data from

2019–20 and 2021–22. It is appropriate to update the model to capture what states do with respect to transport post–COVID-19 lockdowns and restrictions.

155 The Commission acknowledges the benefits of including more than a single year of expense data in the model. While 2018–19 data could be used, they are not likely to be representative of the current transport task and risk underestimating state transport spending needs. The transport landscape following COVID-19 is different from the one reflected in the 2018–19 data. The onset of the pandemic saw patronage and associated revenue dramatically decline, while providers retained a full, or at times increased, frequency of services.[33] Despite COVID-19 restrictions being eased, patronage has not fully recovered to pre–COVID-19 levels due to an uptake in work from home arrangements and an associated reduction in office occupancy levels in city centres.[34] In addition, direct spending on pandemic-related measures – such as increased cleaning, social distancing and public information campaigns – may still remain higher than pre–COVID-19 levels.

156 The Commission considers incorporating data from 2 years, 2022–23 and 2023–24, is appropriate because it mitigates the risk associated with potentially large COVID-19 impacts on 2022–23 data and better reflects current transport needs. These data are also more closely aligned with other data used in the model, the adjusted passenger numbers based on the latest Bureau of Infrastructure and Transport Research Economics data and population-weighted densities based on 2021 Census data.

157 The Commission considers it is appropriate to update the assessment with the latest, fit for purpose data when available.

Commission draft position

158 The Commission has requested 2022–23 net expense data from all states. If data are of sufficient quality and if they confirm the relationships in the model, the Commission proposes that they be used to update the assessment in the 2025 Review. Details of the changes will be provided in an addendum to the Draft Report.

159 The Commission proposes to request 2023–24 data from states for incorporation into the regression in the 2026 Update.

[33] Sydney Trains Annual Reports | Transport for NSW, volume 1, pg. 33; https://www.victrack.com.au/about/annual-reports, Annual-Report-2020-21 (vline.com.au) pg.5; Queensland Rail Annual and Financial Report 2021-22.pdf pg.8

[34] PwC, Changing Places: How hybrid working is rewriting the rule book, 2021. https://www.pwc.com.au/important-problems/future-of-work/changing-places-report.pdf

Q5. Do states support retaining the 2020 Review proxy variable data in the regression model until fit for purpose net expense data are available?

State views

160 With the exception of Queensland and South Australia, states supported retaining the 2020 Review proxy data. South Australia pointed to the significant changes in public transport since 2016 while Queensland did not support retaining the model.

161 New South Wales recommended that the Commission use 2018–19 and 2022–23 data to update the regression model, citing that industrial action in 2022–23 has reduced the reliability of its net expense data.

Commission response

162 The Commission agrees with South Australia that the nature of public transport has changed since the model was initially estimated.

163 Updating the model using currently available data from 2018–19 could help to better capture changes to public transport provision and spending that have occurred since 2016. However, the data would not be reflective of the post–COVID-19 public transport task and would risk understating the net expenses faced by states.

Commission draft position

164 The Commission considers that it would not be appropriate to update the regression model without updating the net expense data.

165 Updated 2022–23 net expense data have been requested from states and will be incorporated into the regression and proxy variables updated where possible. The results will be presented in an addendum to the Draft Report.

Q6. Do states agree that the 2021 Census journey to work data were distorted by the COVID-19 lockdowns and are not a fit for purpose measure of current passenger numbers?

Q7. If the 2021 Census journey to work data are not fit for purpose, do states support the continued use of 2016 Census journey to work data in the model?

State views

166 All states agreed that the 2021 Census journey to work data are not fit for purpose.

167 New South Wales, Victoria, Western Australia, Tasmania and the ACT broadly supported the continued use of 2016 Census Journey to work data. Tasmania said

that retaining 2016 Census data is appropriate if the model continues to use commuter numbers to proxy supply.

168 South Australia and the Northern Territory did not support using the 2016 Census data, arguing they are too dated.

169 New South Wales and the ACT supported using the 2016 Census journey to work data, with an adjustment to account for the introduction of the new transport networks including the light rail since 2019.

170 Western Australia supported retaining the 2016 Census journey to work data but did not support its use as a proxy for supply.

171 Queensland did not support retaining the model, including the Census journey to work data.

Commission response

172 The Commission recognises that the 2016 data are dated, but a fit for purpose alternative has not been identified.

173 While passenger numbers have fallen following COVID-19 lockdowns and restrictions, states have not had similar reductions in supply. During COVID-19 lockdowns and restrictions, states maintained supply for essential workers.

174 The Bureau of Infrastructure and Transport Research Economics adjustment will make the 2016 Census passenger numbers more contemporaneous (see Q9 below for a more detailed discussion of the proposal).

175 The Commission would ideally remove commuter transport that was not provided or subsidised by the public sector. However sufficiently disaggregated data are not available to identify trips taken on private services not contracted by state governments. The Commission considers that non-subsidised private sector trips taken by bus, light rail and heavy rail would comprise a relatively small share of total commuter trips.

Commission draft position

176 The Commission considers 2016 Census Journey to work data to be the best option until 2026 Census data become available.

Q8. Do states agree that 2021 Census distance travelled to work data were not significantly distorted by COVID-19 lockdowns and are a reliable measure of network complexity?

State views

177 New South Wales, Western Australia, the ACT and the Northern Territory said that distance to work data were not significantly distorted by COVID-19 lockdowns.

178 New South Wales said that, while distance to work is a sensible proxy, the existence of multiple employment hubs may explain Sydney's shorter median distance to work compared with other capital cities. It suggested investigating a more direct measure based on actual network design measured through the number of connecting nodes.

179 Victoria, South Australia and Tasmania considered that the distance to work data could potentially be affected by COVID-19 lockdowns. South Australia and Victoria suggested that there is no way to test if distance to work data are COVID-19 affected.

180 Tasmania had concerns with the proxy being used to represent network complexity, questioning how Perth and Canberra could have more complex networks than Sydney, which has a shorter median distance to work. It suggested that complexity could already be captured in the density variable.

181 Queensland disagreed because of its broader concerns about the assessment.

Commission response

182 The distance travelled to work data were selected to reflect that relatively long-distance commutes made possible by the lack of congestion in some urban areas result in greater complexity and length for the average passenger journey regardless of density. As the complexity and length of individual journeys increases, so does the length of the public transport network required and thus their cost. The variable also accounts for costs associated with transport needs of sprawling cities. As cities extend outward commuters would be required to commute further to the central business district, which would be reflected in a higher median distance to work for the urban area. This relationship has not changed significantly since the 2020 Review, indicating that the current measure remains appropriate.

183 Compared with alternative measures, such as transport nodes, this measure is less easily affected by policy decisions surrounding transport networks.

184 The Commission notes the concerns raised by South Australia and Victoria but considers that the wording of the census question ensures reliability and consistency between census years. The 2021 Census asked respondents to record their usual place of work regardless of where they actually worked during the census period. Responses should not be significantly affected by lockdowns.

Commission draft position

185 The Commission considers that 2021 Census data on distance travelled to work provide a reliable measure of network complexity and are suitable for use in the 2025 Review.

Q9. Do states agree that, if material, 2016 Census journey to work data should be adjusted using the Bureau of Infrastructure and Transport Research Economics measure of passenger kilometres travelled until the 2026 Census data are available (when modelling passenger numbers to apply to regression coefficients)?

Q10. Do states agree that if net expense data are available before the 2026 Census passenger numbers it is appropriate to use Bureau of Infrastructure and Transport Research Economics data to index actual passenger numbers (when updating the actual passengers numbers in the regression)?

State views

186 New South Wales, South Australia, Tasmania and the Northern Territory supported using the Bureau of Infrastructure and Transport Research Economics data to adjust the modelled passenger numbers and to update the passenger numbers when re-estimating the regression model.

187 New South Wales supported the Commission's proposal to use the adjusted 2016 Census data but did not support applying the capital city index to all urban areas, citing differences in public transport recovery following COVID-19.

188 Western Australia and the ACT supported updating 2016 Census passenger numbers but preferred ticketing data.

189 South Australia agreed that adjustments are needed to more accurately reflect usage. South Australia recommended that, before the Bureau of Infrastructure and Transport Research Economics data are used, further work be done to assess suitability of the index to more accurately reflect usage levels.

190 Western Australia and South Australia also supported, in principle, updating the regression using indexed passenger numbers but suggested that the increased uncertainty means that the regression should attract a larger discount/blending.

191 Queensland disagreed because of its broader concerns about the assessment.

192 Victoria did not support using Bureau of Infrastructure and Transport Research Economics data, stating that they are affected by COVID-19, similar to the census passenger numbers.

193 Victoria did not support adjusting 2016 Census passenger numbers due to concerns that the data are only collected for capital cities yet applied for all regions. The data were also considered to be COVID-19 influenced and not suitable for use in the assessment. Victoria recommended retaining 2016 Census commuter data. Victoria preferred to continue using pre–COVID-19 data.

Commission response

194 The Commission recognises concerns regarding the impact of using data that reflect changes in consumer behaviour post–COVID-19 lockdowns and restrictions. However, when balanced against contemporaneity issues, the Commission considers the Bureau of Infrastructure and Transport Research Economics data to be the best available.

195 Bureau of Infrastructure and Transport Research Economics data on passenger kilometres travelled are based on quarterly surveys of state authorities across states. The latest release covers the 2022–23 period, which can be used to ensure that the assessment remains contemporaneous and accounts for changing public transport use patterns following COVID-19.

196 Bureau of Infrastructure and Transport Research Economics data are collected on a national basis and are comparable across states and mode types. The data are also available for all states, unlike ticketing data which can only be obtained from 6 states. Some ticketing data are also confidential and not able to be shared with all states.

Commission draft position

197 When modelling passenger numbers, the Commission proposes to index 2016 Census passenger data using Bureau of Infrastructure and Transport Research Economics data.

198 The Commission also proposes to use the Bureau of Infrastructure and Transport Research Economics data to adjust the 2016 Census data when re-estimating the regression. Once census data unaffected by COVID-19 are available, the Commission proposes to return to using unadjusted census data.

Q11. Do states support retaining the 2020 Review blending ratio for the urban transport assessment?

State views

199 New South Wales proposed removing blending and using only the regression model for both the urban transport and investment in urban transport assessments. It considered that the concerns relating to the reliability of the net expense data and use of proxies in the model are not sufficient to justify blending the model. New South Wales indicated that the Commission could resolve any data quality concerns through its data request. New South Wales also viewed the proxies as well-reasoned and reliable representations of the concepts that influence public transport spending (demand and supply) and noted that it is common for proxy measures to be used in the social sciences. New South Wales considered that blending the regression model with urban populations may worsen equalisation outcomes.

200 In contrast, Queensland initially proposed assessing urban transport expenses and investment using only urban population shares. Queensland subsequently proposed removing the blending and recommended assessing student transport expenses differentially and assessing the remaining expenses based on urban populations and concession card holders.

201 Western Australia and Tasmania proposed a higher blending ratio, so that urban population shares would have a larger influence on the assessment.

202 Western Australia suggested the ratio should be at least 50:50 to account for data related concerns and to reflect unreliability in the method (due to a lack of external verification).

203 South Australia proposed that a discount should be applied to the assessment or the blending ratio of the model be increased.

204 The ACT proposed removing the blending and instead applying a discount to the assessment.

205 Victoria supported the current approach. The Northern Territory also supported the current blending ratio but noted it had less confidence in the model following the 2021 Census.

Commission response

206 The Commission notes that the 2020 Review method blends the urban centre characteristics model with urban populations shares (at a ratio of 75 to 25) mainly to address 2 data-related issues: the reliability of net urban transport expense data and the use of proxy variables to capture supply and demand.

207 The Commission acknowledges that concerns with this model (including ongoing concerns about policy influences, particularly cost recovery policies) have prompted calls for a permanent increase in the level of blending. However, the Commission considers that the proposed changes will make the model more fit for purpose such that it remains the best available method for assessing state urban transport needs.[35] Therefore, the Commission does not consider a permanent increase in blending is required to address issues associated with the underlying method.

208 Noting the additional data issues associated with this assessment due to COVID-19, the Commission recognises the case to moderate the impact of the regression model until fit for purpose passenger data become available. Blending with state shares of urban populations provides a suitable means of moderating the urban transport assessment in this case.

[35] Using a square kilometre grid-based measure of population-weighted density, adjusting 2016 Census data using an index based on available Bureau of Infrastructure and Transport Research Economics data to re-estimate the regression and modelling passenger numbers using a regression.

209 To address this issue, the Commission considers there is a case for a temporary adjustment to the existing 75% regression model and 25% urban population shares blending ratio. This would be an additional 10 percentage points for urban population shares, with the regression model weighted 65% and urban population shares 35%. This would recognise the increased data concerns due to COVID-19 rather than fundamental concerns over the regression model. The Commission considers that it is appropriate to return to the 75:25 blending levels once fit for purpose data become available.[36]

210 As noted in the 2020 Review, the Commission considers that applying a discount (using total population shares), would result in an inferior outcome. A discount would attribute needs to the entire state population regardless of where they live.

Commission draft position

211 The Commission proposes a temporary increase to the blending ratio by 10 percentage points (to a 65:35 blend between the model and urban population shares) to account for data issues related to COVID-19. Once fit for purpose 2026 Census data become available in 2028, the blending ratio will return to the 75:25 split.

Q12. Do states support replacing the ferry dummy variable in the urban transport model with the proportion of total commuters using ferry services?

State views

212 Tasmania and Western Australia supported using the proposed preliminary approach. New South Wales supported changing from a dummy but would rather use the proportion of total commuters than total public transport users. New South Wales also wanted to include Newcastle's ferry.

213 South Australia wanted the dummy removed altogether (no assessment for ferries), while the Northern Territory and Victoria wanted to retain the current dummy variable based on concerns about the ability of passenger numbers to reflect the fixed cost of ferries and potential for the actual passenger numbers to be policy influenced. Victoria also wanted to include trips between Geelong and Docklands (Melbourne) as part of the urban transport task.

214 The ACT recommended that the Commission share the analysis of the proposed model based on ferry commuter proportions with states prior to reaching a position.

[36] Post–COVID-19 census data will not be available until 2027–28.

Commission response

215 The Commission recognises Victoria's and the Northern Territory's concerns about the ferry dummy variable. While the proposed measure is able to better account for the scale of ferry services in areas with ferries, the dummy variable accounts for the fact that ferry usage is not necessarily related to the overall level of transport demand.

216 The Commission also recognises that the measure based on passenger numbers cannot effectively account for non-state ferry services and may raise concerns about the potential for policy influence. Noting these concerns, the Commission proposes to retain the current ferry dummy in the regression model.

217 The Commission tested the impact of including the proportion of ferry passengers relative to total commuters (see Appendix B). While this does represent an improvement over the model based on the share of public transport users in terms of greater explanatory power, it also has the same limitations with regard to potential policy influence and an inability to account for the fixed cost associated with ferry services.

218 Although the ferry variable is not significant in any model tested, the Commission considers that ferry usage should continue to be accounted for in the model, as it is a necessity in certain urban areas and ensures that the assessment captures all major transport modes.

219 While the Commission recognises that a ferry service exists connecting Melbourne and Geelong, the ferry does not provide any services within the Geelong significant urban area. As such, it does not meet the Commission's definition of urban travel.

220 The ferry service in Newcastle operates solely within the urban area and will be included in the assessment.

Commission draft position

221 The Commission proposes that the dummy variable to reflect ferries that provide an intra-urban area service should continue to be used in the model and that Newcastle will be assessed as having a ferry service.

Q13. Do states agree that using a regression model to recognise the growth in passenger numbers in urban areas is a more suitable method for modelling passenger numbers?

State views

222 New South Wales, Victoria, Western Australia, Tasmania and the ACT agreed with the preliminary position.

223 New South Wales raised the possibility of using density to model passenger numbers. It said that the need for heavy rail is an outcome of population density

and that including heavy rail as a dummy variable is less direct than simply including population density itself. The preferred specification for New South Wales estimated public transport users per 10,000 people based on population-weighted density, a dummy to capture the different needs of areas with high density (defined as density greater than 1,750 persons per square kilometre), and an interaction term between high density areas and population-weighted density.

224 South Australia suggested that instead of using a regression model the Commission should adjust the existing value ranges to account for growth of urban centres (adjusting the lower and upper limits).

225 The Northern Territory said that the areas with the greatest population growth are also the areas with the greatest potential decline in passenger numbers due to behaviour changes following COVID-19.

Commission response

226 The Commission acknowledges that updating the value ranges has merit. However, applying a continuous approach would better capture changing rates of public transport usage as cities grow.

227 The Commission considered the suggestion by New South Wales to model passenger numbers based on population-weighted density. However, the division of urban areas into those above and below a density of 1,750 square kilometres would be arbitrary, with more urban areas crossing the boundary as time goes on. Additionally, as density is already included as a separate variable in the regression model to capture the demand for public transport, this approach would result in double counting.

Commission draft position

228 The Commission proposes to use a regression to model passenger numbers.

Q14. Do states support the following changes to the non-urban transport assessment:

- **assessing non-urban rail passenger expenses based on shares of non-urban train commuters?**
- **assessing all remaining expenses based on shares of non-urban populations?**

State views

229 Queensland, Western Australia, South Australia, Tasmania and the Northern Territory did not support the preliminary proposal, citing that actual train passenger numbers do not give a policy neutral measure of non-urban transport needs.

230 Differences between the share of non-urban train passengers and actual spending were also raised. A common example used was New South Wales, whose share of non-urban train passengers is much higher than its share of state non-urban transport spending.

231 Queensland recommended assessing all non-urban transport expenses based on shares of regional population. However, Queensland updated its position to assess non-urban expenses based on populations 400 kilometres outside greater capital city statistical areas.

232 New South Wales supported using passenger numbers but basing the definition of non-urban travel as travel between centres more than 100km or 2 hours apart. New South Wales also raised some issues with differences between the definition of non-urban transport used by the Commission and the classification of the functions of government classifications used to capture non-urban transport spending.

233 Victoria questioned the utility of having a separate non-urban component and suggested that it may be appropriate to combine the urban and non-urban assessments.

234 Victoria also proposed that satellite cities be counted as part of its nearby metropolitan centres for the purpose of calculating urban characteristics and that travel between geographically joined urban areas be considered urban transport.

235 The ACT recommended that the Commission share the analysis of Commission's proposal to use non-urban rail passengers with the states prior to reaching a position.

236 The Northern Territory proposed to retain the existing method for simplicity, and noted weaknesses associated with assessing non-urban transport based on a single mode.

Commission response

237 The Commission acknowledges state concerns that actual passenger numbers may not be sufficiently policy neutral to directly include in the assessment. The Commission also recognises that the relationship between shares of non-urban train passengers does not match the shares of non-urban transport spending under the current classification of the functions of government definitions.

238 The Commission considered Queensland's suggestion to use populations more than 400 kilometres from a capital city. It found that this approach would not accurately reflect state needs. This is because a large proportion of non-urban spending is due to passenger travel between large urban centres (for example Geelong to Melbourne, or Gold Coast/Sunshine Coast to Brisbane). It is also possible for populations in urban areas to access non-urban transport services between urban

areas or to non-urban areas, which would not be reflected in an assessment based on non-urban populations.

239 In the absence of a suitable alternative, the Commission considers an equal per capita assessment of non-urban transport assessment remains appropriate.

240 While the Commission recognises that costs may be higher in more regional or remote locations, this is already reflected in the regional gradient applied to the non-urban transport assessment.

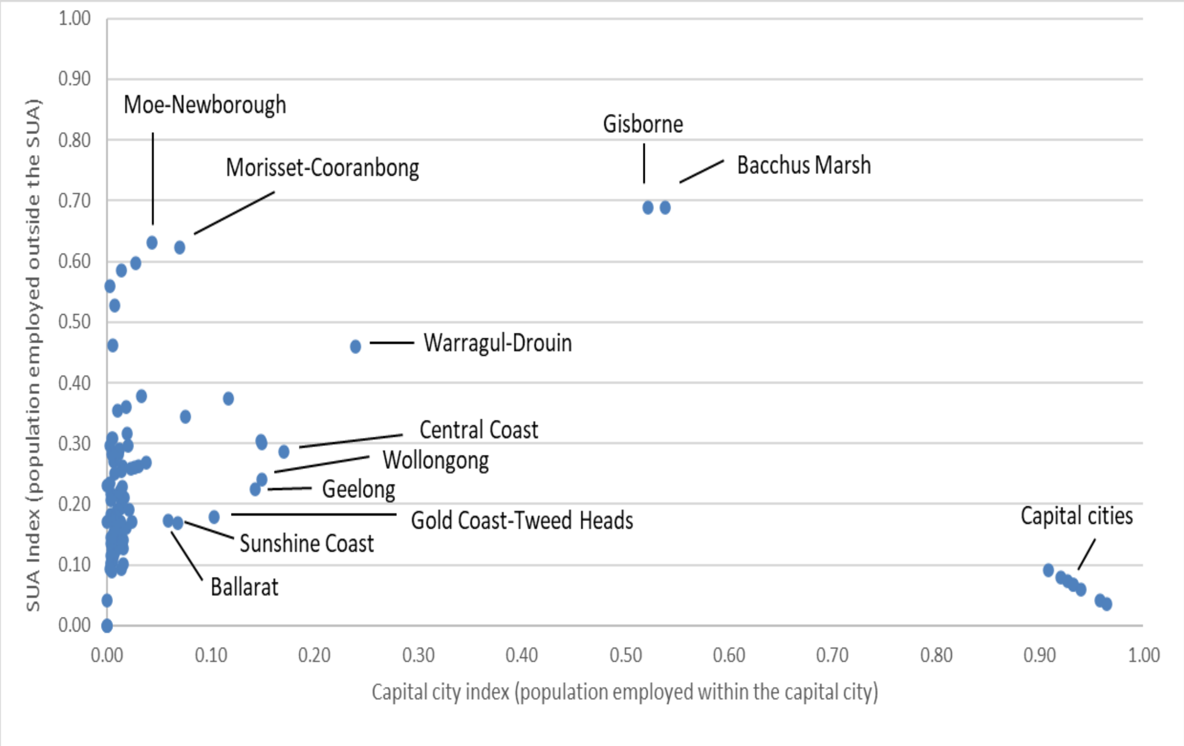
241 The Commission does not support Victoria’s recommendation that travel between adjacent urban areas should be considered as urban transport. This is because geographical proximity alone is not sufficient to capture the level of integration between cities.

242 In the 2020 Review the Commission extensively examined the level of labour market integration between nearby urban areas, using self-sufficiency indices to measure the levels of employment outside the urban area, and employment in the relevant capital cities. For most adjacent urban areas that were not identified as satellites (Geelong, Central Coast, Gold Coast, Sunshine Coast and Wollongong) analysis revealed that fewer than 20% of residents commuted to the capital city for work. Based on the analysis Gisborne, Bacchus Marsh, Melton and Yanchep were identified as satellite cities.

243 The appropriateness of the current method is supported by the fact that 2 former satellites identified by the Commission (Melton and Yanchep) have since been formally amalgamated into Melbourne and Perth respectively.

244 As part of the 2025 Review, the Commission re-estimated the self-sufficiency indices to identify if there had been any changes warranting the inclusion of new significant urban areas. The results presented in Figure 1 do not identify any additional areas with a sufficiently integrated labour market to be considered as satellite cities. The Gisborne and Bacchus Marsh significant urban areas will be retained as satellites to Melbourne.

Figure 1 Self-sufficiency indices for all significant urban areas, 2021 Census



Source: Commission calculation using ABS data.

245 The Commission also considers that the drivers of urban and non-urban spending are sufficiently different to warrant separate assessments. A separate assessment of non-urban transport spending recognises that populations outside urban centres require access to transport services.

246 The Commission notes that some inter-urban transport expenses are captured in the urban transport Government Finance Statistics expenses to which the urban centre characteristics assessment is applied. The urban centre characteristics assessment was not designed to estimate the need for travel between urban areas. This is reflected in the measures of passenger numbers, which only include commuters within an urban area.

247 Therefore, the Commission considers these Government Finance Statistics costs should be allocated to non-urban transport for the purposes of the assessment. Any inter-urban travel costs should also be removed from the net expense data used to inform the regression model.

Commission draft position

248 In the absence of a suitable alternative, the Commission proposes that an equal per capita assessment of non-urban transport expenditure remains appropriate.

249 The Commission proposes that inter-urban transport expenses are best assessed in the non-urban transport assessment.

Other issues raised by states

Victoria V/Line issue

250 Victoria recommended that a greater proportion of V/Line expenses should be classified to the urban transport component to recognise travel within the Melbourne significant urban area. It provided evidence that 46% of all V/Line trips occur within the same urban area.

Commission response

251 Victoria raised the issue of the treatment of V/Line expenses in the 2021 Update, which resulted in the Commission apportioning 8% of V/Line costs to the urban transport category based on the usage of V/Line services within the Geelong significant urban area. While 2021 Census data are available to update this proportion, the data are likely to be influenced by the COVID-19 restrictions in Victoria and would not be a reliable indicator of use. The Commission proposes to re-examine the use of V/Line services and to update this proportion once fit for purpose passenger number data become available in the 2026 Census.

252 In the 2021 Update it was confirmed that most stations utilised by V/Line inbound trains within the significant urban area of Melbourne are only for alighting and not boarding.

253 Victoria provided a list of stations that are served exclusively by V/Line that allow both boarding and alighting within the significant urban area of Melbourne. However, without supporting information to inform an analysis of explicit user data by station, it would be difficult to appropriately allocate V/Line expenses to the use of these particular stations.

254 It is reasonable to suggest that the cost per user of V/Line services would be different depending on the distance travelled by individual passengers. Passengers travelling within the Melbourne urban area are likely to have a lower cost compared with passengers using V/Line services to access regional areas such as Ballarat, Bendigo, Echuca, Wodonga and Bairnsdale from Melbourne. This would not be reflected using the proportion of total passengers accessing V/Line services.

255 If disaggregated data on the costs associated with V/Line travel within the Melbourne significant urban area become available in the future, the Commission will investigate making an appropriate adjustment.

Commission draft position

256 The Commission proposes to retain the current method of allocating V/Line expenses until 2026 Census data are available.

Assessment of urban transport infrastructure

257 New South Wales supported the application of the urban centre characteristics model in the investment assessment and recommended the blending be removed to reduce complexity and better achieve horizontal fiscal equalisation.

258 Queensland, Western Australia and South Australia raised concerns with the use of urban populations squared approach when blending the urban centre characteristics model in the urban transport investment assessment.

259 Western Australia said that the use of squared urban populations in the urban transport investment assessment was not sufficiently resolved in both the 2015 and 2020 reviews. Western Australia recommended blending the regression model with state shares of urban populations instead of population squared, due to concerns about the strength of the relationship between per capita assets and urban populations. South Australia noted that in the 2020 Review the Commission committed to reviewing the relationship for the next review.

260 This view was also reflected in Queensland's tranche 2 submission, which raised concerns about the use of the population-squared variable in the transport component of the investment assessment. Queensland considered the population-squared variable represents an even more significant and inappropriate form of the incorrect approach adopted in the urban transport expense regression. It is Queensland's view that the diseconomies of scale and density that are ingrained within the population-squared variable are refuted by the academic literature.

261 Queensland also suggested that the data used to test the relationship between per capita asset values and density (which was used in the 2020 Review to justify the use of the population-squared term) is policy influenced. Queensland said that the population-squared variable is not fit for purpose and is distributing GST in a way that is inconsistent with horizontal fiscal equalisation.

Commission response

262 The Commission notes that blending was applied in the 2020 Review to address 2 main data-related issues: the reliability of net urban transport expense data and the use of proxy variables to capture supply and demand. As these concerns remain, the Commission does not think it is appropriate to reduce the level of blending used in the assessment.

263 As mentioned in the 'Issue 2 – Economies of density' section, the Commission reviewed the literature provided by Queensland and determined that the economies of scale and density discussed refer to the reduction in per passenger costs as the number of passengers using a transport network rises. This is distinct from economies of population density that which would occur if per capita costs fall as the population-weighted density of an area rises. Whilst the Commission

agrees that additional passengers on a fixed transport network will lead to lower costs per passenger, larger cities require more frequent, larger scale and more complex public transport networks. This would lead to the higher asset requirements per person, which the assessment captures through the density variable in the regression model, and the population-squared term.

264 The Commission seeks to use state data whenever possible to determine the average policy for an assessment. Any state expenditure on public transport will be to some extent policy influenced, but this does not mean the data are unsuitable in determining what drives state needs. The Commission's methods should, as far as practicable, reflect what states collectively do. The Commission does not make judgements about what states could, or should, do. Instead, the Commission bases its assessments on the average policies of all states.

265 The Commission has requested asset data from states to retest the relationship between asset values and urban populations. If the data continue to support the use of urban population squared the Commission will retain the current blending approach. Alternatively, if data support the use of urban populations, the Commission will apply urban population when blending in the investment assessment. Results of the analysis will be presented in an addendum to the Draft Report.

266 Consistent with the proposed change in the recurrent urban transport assessment, the Commission propose to temporarily adjust the blending ratio by 10 percentage points to 65% urban centre characteristics and 35% urban populations (squared).

Commission draft position

267 The Commission proposes to blend urban centre characteristics with urban populations squared if the updated state data support the relationship. If the data support the use of urban populations, this will be applied. Results of the analysis will be presented in an addendum to the Draft Report.

Student transport and pipeline transport expenses

268 Queensland recommended the classification of the functions of government – Australia (COFOG-A) items for urban and non-urban student transport should be assessed separately. It also suggested that pipeline and other transport should be reclassified as non-urban transport spending.

Commission response

269 The Commission agrees that pipeline and other transport expenses should be assessed as non-urban transport. Expenses in this category relate to transport of petroleum and natural gas through pipelines. It also includes the expenses related to transport systems not captured in other COFOGs, including funiculars, cable cars and chairlifts which are not commonly provided in urban areas.

270 Although separate expenses can be identified for urban and non-urban school transport there does not appear to be a relationship between state shares of student populations and the student transport expenses provided (see Table 4).

Table 4 Student transport relative to student populations, 2021–22

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Share of student population (%)	31	25	22	11	7	2	2	1
Share of student transport expenses (%)	61	13	11	8	3	2	0.3	1

Source: Commission calculation using ABS data.

271 Further data and analysis of the school transport spending will be needed to inform any assessment of state needs. This will require further consultation with states to identify the relevant expense data within the COFOG-A framework. The Commission considers that in the in the meantime, the expenses should remain in the urban transport assessment.

Commission draft position

272 The Commission proposes to move pipeline and other transport COFOG-A (1171) from the urban transport component to the non-urban transport component, and to continue to assess school transport expenses in the urban transport component.

Draft 2025 Review assessment method

273 Following consideration of state views, the Commission proposes to apply the following changes to the transport assessment:

- replace the current SA1-based measure population-weighted density with a measure based on the square kilometre grid
- adjust 2016 passenger numbers using Bureau of Infrastructure, Transport and Research Economics data on passenger kilometres
- use a regression to model passenger numbers
- increase blending ratio by 10 percentage points to 65% urban centre characteristic and 35% urban population
- re-classify pipeline transport to the non-urban transport category.

274 The following positions are outstanding.

- Finalising the variables included in the urban centre characteristics regression
- Identifying the appropriate population measure to apply to blending in the investment assessment.

275 Commission proposals will be included in an addendum to the Draft Report.

276 The Commission will request 2023–24 net urban expense data from states to re-estimate the urban centre characteristics regression model.

277 Table 5 shows the proposed structure of the 2025 transport assessment.

Table 5 Proposed structure of the transport assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Urban transport	Urban centre characteristics (a)	Recognises that the use and cost of services varies based on population-weighted density, use and presence of a public transport mode, distance to work and topography (variables included in the regression to be confirmed in an addendum to the Draft Report).	Yes*
	Urban population	Recognises that urban transport services vary by the share of the state population living in urban areas.	No
	Wage costs (b)	Recognises differences in wage costs between states.	No
Non-urban transport	Population (EPC)	Recognises that non-urban transport services vary based on state populations.	No
	Wage costs and regional costs (b)	Recognises differences in wage costs between states and in the costs of providing services to different areas within a state	No
Investment in urban transport	Urban centre characteristics (a)	Recognises that urban transport investment need varies based on population-weighted density, use and presence of a public transport mode, distance to work and topography (variables included in the regression to be confirmed in an addendum to the Draft Report).	Yes*
	Urban population squared	Recognises that urban transport investment needs per capita vary by the share of the state population living in urban areas (if supported by data – Commission proposal to be included in addendum to the Draft Report).	No*
Investment in non-urban transport	Population (EPC)	Recognises that non-urban transport services vary based on state populations.	No
	Wage costs and regional costs (b)	Recognises differences in wage costs between states and in the costs of providing services to different areas within a state.	No

(a) The Commission proposes to update the inputs into urban centre characteristics model with 2022–23 data provided by states. The Commission also proposes to use a regression to determine a policy neutral estimate of public transport users in each state. The blending between the regression model and urban populations has been increased.

(b) The Commission will separately consult with states on the wages and regional costs assessment.

* Decisions outstanding. Commission proposals will be presented in an addendum to the Draft Report.

Indicative distribution impacts

278 The impact on the GST distribution in 2024–25 from the proposed method change will be presented in an addendum to the Draft Report.

Appendix A: Relevant literature used to inform an assessment of urban transport spending

Studies which support the position that costs and public transport infrastructure need is driven by peak use

R Balcombe, R Mackett, N Paulley, J Preston, J Shires, H Titheridge, M Wardman and P White, 'The demand for public transport: a practical guide', *TRL Report TRL593*, 2004.

C Camén and H Lidestam, 'Dominating factors contributing to the high(er) costs for public bus transport in Sweden', *Research in Transportation economics*, 2016, 59: 292–296.

GT Clifton and C Mulley, 'A historical overview of enhanced bus services in Australian cities: What has been tried, what has worked?', *Research in Transport Economics*, 2016, 59: 11–25.

E Eriksson, L Winslott Hiselius and H Lidestam, 'Measures reducing travel by public transport during peak hours', *Transportation Research Procedia,* 2023, 72: 3609–3616.

S Jara-Díaz, A Fielbaum and A Gschwender, 'Optimal fleet size, frequencies and vehicle capacities considering peak and off-peak periods in public transport', *Transportation Research Part A*, 2017, 106: 65–74.

H Lidestam, C Camén and B Lidestam, 'Evaluation of cost drivers within public bus transports in Sweden', *Research in Transportation Economics,* 2018, 69: 157–164.

Studies which account for density, passengers, topography, network length (distance) and transport modes as factors which influence transport provision and cost

A Chakraborty and S Mishra, 'Land use and transit ridership connections: Implications for state-level planning agencies', *Land Use Policy*, 2013, 30: 458-469.

Y Chen, Z Li and WHK Lam, 'Modeling transit technology selection in a linear transportation corridor', *Journal of Advanced Transportation,* 2015, 49: 48–72.

S Cooke and R Behrens, 'Correlation or cause? The limitations of population density as an indicator for public transport viability in the context of a rapidly growing developing city', *Transport Research Procedia*, 2017, 3003-2016.

R Daniels and C Mulley, 'Planning Public Transport Networks – The Neglected Influence of Topography', *Journal of Public Transportation*, 2012, 15(4): 23–41.

C De Gruyter, T Saghapour, L Ma and J Dodson, 'How does the built environment affect transit use by train, tram and bus?' *Journal of Transport and Land Use,* 2020, 13(1): 625–650

M Gascon, O Marquet, E Grácia-Lavedan, et al., 'What explains public transport use? evidence from seven European cities', Transport Policy, 2020, 99: 362–374.

LA Guzman and SG Cardona, 'Density-orientated public transport corridors: Decoding their influence on BRT ridership at station-level and time-slot in Bogotá', *Cities*, 2021, 103071.

M Haider, 'Diminishing Returns to Density and Public Transit', *Transport Findings, October.*

A Johnson, ‘Bus transit and land use: Illuminating the interaction’, *Journal of Public Transportation,* 2003, 6(4): 21–39.

KA Kakar and CSRK Prasad, ‘Impact of Urban Sprawl on Travel Demand for Public Transport, Private Transport and Walking’, *Transport Research Procedia*, 2020, 48: 1881–1892.

M Kamruzzaman, D Baker, S Washington and G Turrell, ‘Advanced transit oriented typology: case study in Brisbane, Australia’, *Journal of Transport Geography*, 2014, 34:54–70.

J Mattson, ‘Relationships between density, transit, and household expenditures in small urban areas’, *Transportation Research Interdisciplinary Perspectives,* 2020, 8: 100260.

R Merket, C Mulley and MM Hakim, ‘Determinants of bus rapid transport (BRT) system revenue and effectiveness – A global benchmarking exercise’, *Transportation Research Part A*, 2017, 106: 75–88.

K Obeng, R Sakano and C Naanwaab, ‘Understanding overall output efficiency in public transport systems: The roles of input regulations, perceived budget and input subsidies’, *Transportation Research Part E*, 2016, 89: 133–150.

D Oh, S Lee, J Park, and C Roh. ‘Applying modified-data mining techniques to assess public transportation in vulnerable urban and suburban city areas’, *Heliyon*, 2023, 9(11): e21213.

H Pan, J Li, Q Shen and C Shi, ‘What determines rail transit passenger volume? Implications for transit orientated development planning’, *Transportation Research Part D,* 2017, 57: 52–63.

M Pasha, SM Rifaat, R Tay and AD Barros, ‘Effects of Street Pattern, Traffic, Road Infrastructure, Socioeconomic and Demographic Characteristics on Public Transit Ridership’, *Journal of Civil Engineering*, 2016, 20(3): 1017–1022.

Productivity Commission, ‘*Public Transport Pricing*’, Research Paper, 2021, Canberra.

J Rodrigue, ‘The Geography of Transport Systems’ *New York: Routledge*, 2020, doi.org/10.4324/9780429346323

T Saghapour, S Moridpour and RG Thompson, ‘Public transport accessibility in metropolitan areas: A new approach incorporating population density’, *Journal of Transport Geography*, 2016, 54: 273–285.

BD Taylor, D Miller, H Iseki and C Fink, ‘Nature and/or nurture? Analyzing the determinants of transit ridership across US urbanized areas’, *Transportation Research Part A*, 2009, 43: 60–77.

C Zhang, Z Juan and G Xiao, ‘Do contractual practices affect technical efficiency? Evidence from public transport operators in China’ *Transport Research Part E*, 2015, 39–55.

C Zhang, Z Juan, Q Luo and G Xiao, ‘Performance evaluation of public transit systems using a combined evaluation method’ *Transport Policy*, 2016, 45: 156–167.

Studies used to verify whether economies of density/scale exist in transport service provision

GM Ahlfeldt, SJ Redding, DM Sturm and N Wolf, 'The economies of density: Evidence from the Berlin Wall', *Econometrica*, 2015, 83(6): 2127–2189.

A Anupriya, DJ Graham, JM Carbo, RJ Anderson and P Bansal, 'Understanding the costs of urban rail transport operations', *Transportation Research Part B: Methodological*, 2020, 138: 292–316.

M Batarce and P Galilea, 'Cost and fare estimation for the bus transit system of Santiago', *Transport Policy*, 2018, 64: 92–101.

JD Bitzan, 'Railroad Costs and Competition: The Implications of Introducing Competition to Railroad Networks', *Journal of Transport Economics and Policy*, 2003, 37(2): 201–225.

JD Bitzan and F Karanki, 'Costs, density economies, and differential pricing in the U.S. railroad industry', *Transport Policy*, 2022, 119: 67–77.

YS Chang, SJ Jo, YT Lee, and Y Lee, 'Population Density or Populations Size. Which Factor Determines Urban Traffic Congestion?', *Sustainability*, 2021, 13(8): 4280.

S Cooke and R Behrens, 'Correlation or cause? The limitations of population density as an indicator for public transport viability in the context of a rapidly growing developing city', *Transportation Research Procedia*, 2017, 25: 3003–3016.

W Cox, 'Urban Travel and Urban Population Density', *Sustainable Urban Transport,* 2012, 19–28.

M Farci, A Fetz and M Filippini, 'Economies of Scale and Scope in Local Public Transportation', *Journal of Transport Economics and Policy*, 2007, 41(3): 345–360.

MD Giacomo and E Ottoz, 'The Relevance of Scale and Scope Economies in the Provision of Urban and Intercity Bus Transport', *Journal of Transport Economics and Policy*, 2010, 44(2): 161–187.

DJ Graham, 'Productivity and efficiency in urban railways: Parametric and non-parametric estimates', *Transportation Research-Part E*, 2008, 44: 84–99.

DJ Graham, A Couto, WE Adeney and S Glaister, 'Economies of scale and density in urban transport: effects on productivity', *Transportation Research Part E,* 2003, 39:443–458.

A Gschwender, S Jara-Díaz and C Bravo, 'Feeder-truck or direct lines? Economies of density, transfer costs and transit structure in an urban context', *Transport Research Part A*, 2016, 209–222.

DA Hensher, R Daniels, and I Demellow, 'A Comparative Assessment of the Productivity of Australia's Public Rail Systems 1971/72-1991/92', *The Journal of Productivity Analysis,* 1995, 6: 201–223.

MG Karlaftis and P McCarthy, 'Cost structures of public transit systems: a panel data analysis', *Transportation Research Part E*, 2002, 36: 1–18.

MG Karlaftis, PS McCarthy and KC Sinha, 'System size and cost structure of transit industry', *Journal of Transportation Engineering*, 1999, 125(3): 208–215.

TE Keeler, ‘Railroad Costs, Returns to Scale, and Excess Capacity’, *The Review of Economics and Statistics*, 1974, 56(2): 201–208.

H Li, K Yu, K Wang and A Zhang, ‘Market power and its determinants in the Chinese railway industry’, *Transportation Research Part A: Policy and Practice*, 2019, 120: 261–276.

Y Liu, S Wang, and B Xie, ‘Evaluating the effects of public transport fare policy change on together with built and non-built environment features on ridership: The case in South East Queensland, Australia’, *Transport Policy,* 2019, 76: 78–89.

F Mitazuni, ‘Privately Owned Railways’ Cost Function, Organizational Size and Ownership’, *Journal of Regulatory Economics*, 2004, 25(3): 297–322.

F Mitazuni and S Uranishi, ‘Does vertical separation reduce cost? An empirical analysis of the rail industry in European and East Asian OECD Countries’, *Journal of Regulatory Economics*, 2013, 43: 31–59.

F Mizutani, A Smith, C Nash and S Uranishi, ‘Comparing the Costs of Vertical Separation, Integration, and Intermediate Organisational Structures in European and East Asian Railways’, *Journal of Transport Economics and Policy*, 2015, 49(3): 496–515.

H McGeehan, ‘Railway Costs and Productivity Growth: The Case of the Republic of Ireland, 1973-1983’, *Journal of Transport Economics and Policy*, 1993, 27(1): 19–32.

L Nirhagen, D Brandt and R Mortazavi, ‘Use of public transport as a means to reach national climate objectives - On the importance of accounting for spatial differences and costs’, *Transport Policy*, 2023, 131: 56–65.

RJ Pozdena and LD Merewitz, ‘Estimating cost functions for rail rapid transit properties’, *Transportation Research*, 1978, 12(2): 73–78.

I Savage, ‘Scale economies in United States rail transit systems’, *Transportation Research Part A: Policy and Practice*, 1997, 31(6): 459–473.

C Tsai, C Mulley and R Merkert, ‘Measuring the cost efficiency of urban rail systems’, *Journal of Transport Economics and Policy*, 2015, 49(1): 17–34.

A Vigren, ‘Cost efficiency in Swedish public transport’, *Research in Transportation Economics*, 2016, 59: 123–132.

PA Viton, ‘A Translog Cost Function for Urban Bus Transit’, *Journal of Industrial Economics*, 1981, 29(3): 287–304.

N Wills-Johnston, ‘Cost Functions for Australia’s Railways’, *Journal of Infrastructure Systems*, 2011, 17(1): 1–14.

Appendix B: Supplementary models considered by the Commission

279 Several states requested alternative approaches to assessing needs. For example, the assessment could consider socio-economic status or removing insignificant variables.

280 The Commission tested a number of supplementary models involving different specifications and different ways of measuring density and passenger numbers. The results of these models are summarised below.

281 The validity of these models has been judged based on conceptual reasoning (whether there is a basis for including or excluding certain variables), the predictive power of the model, and whether the model provided sensible estimates for the impact of certain variables on net expenses.

282 The Commission notes that many of these specifications were extensively tested during the 2020 Review.

Testing exclusion of the passenger number and density variables

283 Given concerns about the appropriateness of retaining 2016 Census passenger numbers and the measure of population-weighted density in the model the Commission considered alternative models which separately excluded these variables. The estimated regression coefficients are provided below.

Table A-1 Regression model excluding passenger numbers and population-weighted density

Variable	R2020 model coefficients	R2020 model - no passenger variables	R2020 model - no density
Intercept	-128.63	-182.58	-70.42
Ferry	13.86	37.45	59.57
Heavy rail passengers	12.31		18.62
Bus and light rail passengers	5.60		19.34
Population-weighted density	0.085	0.12	
Mean slope	6.92	8.10	8.17
Distance to work	3.07	8.47	1.13
Adjusted R-squared	0.8303	0.7896	0.7772
Residual standard error	56.22	62.59	66.91

Note: The 2013–14 to 2015–16 net expenses data collected for the 2020 Review was used to estimate the model. 2016 census journey to work data and 2016 Geoscience data were used to estimate the models. Density is based on SA1 areas to enable comparison with the 2020 Review. The 68 significant urban areas with available data were used in the regression.

284 In general the models excluding either variable are not improvements over the current specification. The passenger number variables account for the cost differences between modes, which may not be sufficiently captured in the density

variable. If the density variable were to be excluded the model would fail to account for the size of the transport task facing urban areas (as measured by underlying demand).

285 The results also indicate that these models do not have a higher explanatory power than the 2020 Review regression model. This is evident from the lower R-squared value and higher residual standard error.

Testing the impacts of difference approaches to measure population-weighted density

286 Changes to the population-weighted density variable have been raised to reduce volatility and to ensure that the variables used are fit for purpose. The regression has been re-estimated with these variables included in the model to assess the indicative effects and to ensure that the proposal can be properly scrutinised by states.

Table A-2 Regression model with alternative specifications for the population-weighted density variable

Variable	R2020 model coefficients	R2020 model - SA2-based density	R2020 model - square kilometre-based density
Intercept	-128.63	-68.22	-147.71
Ferry	13.86	21.37	21.27
Heavy rail passengers	12.31	15.03	11.90
Bus and light rail passengers	5.60	9.17	4.28
Population-weighted density	0.085	0.085	0.129
Mean slope	6.92	4.78	7.20
Distance to work	3.07	1.56	3.92
Adjusted R-squared	0.8303	0.7856	0.8107
Residual standard error	56.22	63.17	59.69

Note: The 2013–14 to 2015–16 net expenses data collected for the 2020 Review were used to estimate the model. 2016 census journey to work data and 2016 Geoscience data were used to estimate the models. The 68 significant urban areas with available data were used in the regression.

287 While the model with the SA1s has the highest explanatory power, it is volatile due to census revisions. Comparing the alternative approaches considered by the Commission, the model based on the square kilometre grid outperforms the model based on SA2s in terms of explanatory power and a lower standard error. For all 3 models, the significance of the variables does not change. Heavy rail passengers and the density variable have a highly significant impact on net per capita expenses.

288 While the models can be compared using the adjusted R-squared and residual standard error values, the coefficients of the model cannot be directly compared. This is because the magnitude of the population-weighted density of the square

kilometre grid and SA2s differs from the SA1s. In the square kilometre grid model, a higher coefficient does not necessary mean that the variable has a higher influence on the predicted urban transport expenses.

Testing the impact of excluding insignificant variables

289 An additional model excluding all insignificant variables and a model excluding only the ferry variable were also tested based on comments by Victoria and South Australia respectively. The variable capturing bus and light rail passengers was retained to ensure that transport services in small urban areas could continue to be accounted for.

Table A-3 Regression model excluding insignificant variables and the ferry dummy

Variable	R2020 model coefficients	R2020 model - only significant variables	R2020 model - no ferry variable
Intercept	-128.63	-100.98	-132.23
Ferry	13.86		
Heavy rail passengers	12.31	14.18	12.44
Bus and light rail passengers	5.60	7.21	6.00
Population-weighted density	0.085	0.085	0.087
Mean slope	6.92		6.68
Distance to work	3.07		3.07
Adjusted R-squared	0.8303	0.8264	0.8325
Residual standard error	56.22	56.85	55.85

Note: The 2013–14 to 2015–16 net expenses data collected for the 2020 Review were used to estimate the model. 2016 census journey to work data and 2016 Geoscience data were used to estimate the models. The 68 significant urban areas with available data were used in the regression.

290 The results indicate that the model excluding insignificant variables does not have a higher explanatory power compared to the 2020 Review model.

291 While the ferry dummy does not improve the predictive power of the model, it was selected for inclusion in the 2020 Review to ensure that the assessment can capture all relevant forms of transport. It also recognises that the decision to introduce a ferry service into a public transport network is to address complex jurisdictional topography and to complement other transport modes.

Testing the impact of a logarithmic specification for density and the removal of non-residential land from the density measure

292 Queensland, Western Australia and Tasmania suggested that economies of density are not being captured in the model.

293 Queensland and South Australia also suggested that inconsistencies in the zoning of land within SA1s make them inappropriate for use in the model.

294 The Commission investigated models based on a logarithmic form of density (which would account for potential economies of density) and population-weighted density measures that exclude non-residential land. The results are summarised below.

Table A-4 Regression model accounting for a non-linear relationship between net expenses and population-weighted density, and density based on residential land

Variable	R2020 model coefficients	R2020 model - logarithmic form for density	R2020 model - residential land only
Intercept	-128.63	-660.91	-114.26
Ferry	13.86	52.14	22.87
Heavy rail passengers	12.31	16.77	13.76
Bus and light rail passengers	5.60	10.11	11.59
Population-weighted density	0.085	87.28	0.044
Mean slope	6.92	8.47	6.46
Distance to work	3.07	1.89	2.23
Adjusted R-squared	0.8303	0.7708	0.7934
Residual standard error	56.22	65.33	62.03

Note: The 2013–14 to 2015–16 net expenses data collected for the 2020 Review were used to estimate the model. 2016 census journey to work data and 2016 Geoscience data were used to estimate the models. Density is based on SA1 areas to enable comparison with the 2020 Review. The 68 significant urban areas with available data were used in the regression.

295 The results do not support the presence of economies of population density in the model, confirming the results from the literature and the results from prior testing by the consultant during the 2020 Review. When a logarithmic form is applied to the population-weighted density variable, the explanatory power of the model declines sharply.

296 The results do not vary considerably when non-residential land is excluded but they still do not represent an improvement over the current model in terms of its explanatory power.

Testing the impact of ferry commuter proportions

297 In response to New South Wales' submission the Commission tested the impact of including ferry commuter proportions rather than the proportion of public transport users taking ferries.

Table A-5 Regression model accounting for different specifications of the ferry passenger variable

Variable	R2020 model coefficients	R2020 model - proportion of public transport users	R2020 model - proportion of commuters
Intercept	-128.63	-127.62	-110.29
Ferry	13.86	4.26	281.94
Heavy rail passengers	12.31	12.73	11.77
Bus and light rail passengers	5.60	5.17	6.35
Population-weighted density	0.085	0.086	0.068
Mean slope	6.92	6.48	6.45
Distance to work	3.07	3.06	3.72
Adjusted R-squared	0.8303	0.8306	0.8446
Residual standard error	56.22	56.57	62.59

Note: The 2013–14 to 2015–16 net expenses data collected for the 2020 Review were used to estimate the model. 2016 census journey to work data and 2016 Geoscience data were used to estimate the models. Density is based on SA1 areas to enable comparison with the 2020 Review. The 68 significant urban areas with available data were used in the regression.

298 When interpreting these models, the coefficient of the ferry variable cannot be directly compared, as the scale of the measures is different. As there is a very low proportion of total commuters taking ferry services (typically less than 1% of total commuters) compared with the public transport users only, the coefficient for the commuter proportion model is much larger.

299 The results suggest that a model based on the proportion of ferry passengers relative to total public transport users performs better than the other alternatives.

300 However, as states such as Victoria and the Northern Territory have indicated, the current measure used to assess ferry spending accounts for the fact that ferry usage is not necessarily related to the overall level of transport demand, cannot effectively account for non-state ferry services, and may raise concerns about the potential for policy influence. Noting these concerns, the Commission has elected to retain the current ferry dummy in the regression model.

Testing the impact of variables to account for non-commuter users and variables to account for remoteness

301 In response to Tasmania's recommendation that the model should account for non-commuter use of transport services, models were also tested including students and other concession groups (unemployed and elderly populations) in the regression model. Although the number of individuals specific concessions can be identified, it would not be suitable to include as a variable in the model due to the potential for individuals to receive more than one concession (for example unemployment benefit payments, rent assistance and a health care card). Concession passengers on public transport were also not available for testing in the model as data are not available for the majority of significant urban areas.

302 To test the Western Australia's position that remoteness should be accounted for, dummy variables were constructed based on whether the urban area could be classified as a major city, inner regional, outer regional and remote/very remote area. The inclusion of both remoteness categories as a single variable was necessary due to the small number of urban areas included in either category. The estimated regression coefficients are provided below.

Table A-6 Impact of including characteristics of concession and student populations in the model

Variable	R2020 model coefficient	R2020 model – including concession groups	R2020 model – including remoteness categories
Intercept	-128.63	-83.90	-163.83
Ferry	13.86	9.52	5.61
Heavy rail passengers	12.31	12.37	13.83
Bus and light rail passengers	5.60	4.36	7.15
Population-weighted density	0.085	0.088	0.086
Mean slope	6.92	8.45	7.34
Distance to work	3.07	3.73	3.48
Percentage of unemployed persons		7.23	
Percentage of students		-1.22	
Percentage of elderly (>65)		-2.36	
Inner regional			22.87
Outer regional			23.46
Remote and very remote			39.13
Adjusted R-squared	0.8303	0.8254	0.8241
Residual standard error	56.43	57.02	57.23

Note: The 2013–14 to 2015–16 net expenses data collected for the 2020 Review were used to estimate the model. 2016 census journey to work data and 2016 Geoscience data were used to estimate the models. Density is based on SA1 areas to enable comparison with the 2020 Review. The 68 significant urban areas with available data were used in the regression.

303 Compared with the original model, the model including students and concession population groups does not provide reasonable estimates. It suggests areas with higher proportions of these groups need to spend less on transport services. In addition, the coefficients for all variables were not found to be statistically significant.

304 The reason for the negative coefficients relates to the fact that the urban areas with the highest concentrations of students, unemployed persons and elderly populations are outside the capital cities and thus have relatively low spending on urban transport services. While these passenger groups use services at a higher

rate during off-peak periods, the bulk of transport services and infrastructure needs are associated with peak commuter travel.

305 For the remoteness categories, although the signs are positive as expected, they are not significant. This indicates that the differences between spending in regional or remote areas are not sufficiently large to warrant separate variables.

Services to industry

Overview

1 On 6 October 2023, the Commission issued a consultation paper on the services to industry assessment. In the consultation paper, the Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method with 2 changes. The Commission proposed to change its assessment of the need for spending on industry regulation from a price sensitive measure of industry size to a volume of production measure. It also proposed to reintroduce the number of businesses as a driver of need for regulatory spending if it was material. The Commission also sought state and territory (state) views on the potential for developing a differential assessment of state spending on the net-zero transition.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support replacing total factor income as the measure of industry size with the chain volume measure of industry value-add to assess the need for spending on industry regulation?

Q2. Do states support the development of an average or representative base year to index changes in the chain volume of production?

State views

5 All states supported the conceptual case to move away from using a price sensitive measure of industry size — currently total factor income — to assess state regulatory costs. All states agreed that using a price sensitive measure of industry size resulted in greater volatility in the assessment than could be explained by changes in state regulatory spending.

6 All states except Queensland supported replacing total factor income with the volume-based chain volume measure of industry value added published by the

Australian Bureau of Statistics (ABS). However, some states were concerned about the requirement to determine a base year to index the chain volume of industry value added.

7 Most states supported the proposal to determine a base year as a practical necessity of using the chain volume of industry value added. However, some states expressed concerns about how the Commission would determine the base year, and the implications of choosing a base year for the assessment, because it would rely on judgement.

8 South Australia said it qualified its support pending further information from the Commission on the approach to developing a base year. South Australia said it was concerned that in determining the base year, the Commission would be picking winners and losers.

9 Victoria said it could not form a view on the proposal because it was unable to assess whether the 2 approaches would lead to materially different results.

10 Western Australia said its support would be dependent on the change accurately measuring the composition of output across states in the base year.

11 Queensland said the proposed changes did not adequately address the volatility in the assessment and instead substituted it with Commission judgement. Queensland suggested that instead of moving to a measure of the chain volume of industry value added, the Commission should consider retaining total factor income and supplement this with a 5-year long-term moving average to smooth the year-on-year changes. Queensland said that this approach would strike the appropriate balance between a contemporaneous volatile measure and a less contemporaneous stable measure of industry activity.

12 Queensland said that if the Commission proceeded with developing a base year, that it should use an average base year over 3 or 5 years to reduce the likelihood of the base year resulting in winners and losers in the assessment.

Commission response

13 Queensland's proposal to continue to use total factor income, supplemented with a 5-year moving average, does not address the conceptual concern with the current method that changes in commodity prices do not lead to changes in regulatory costs. On this basis, if a volume-based measure of industry output is available, it is preferable to smoothing or retaining the price influenced total factor income.

14 The Commission acknowledges Queensland's and South Australia's concerns over determining the base year for using the chain volume measure of industry value added. The Commission considers that if a base year can be determined, or the need for a base year mitigated, then a volume-based measure of production is preferred to the 2020 Review approach.

15 The Commission has received the aggregate measures of production for each state from the ABS for 2021–22. These data are a measure of the underlying output indicator used to estimate the chain volume of industry value added and gross domestic product for the national and state accounts. These data are a measure of the aggregate output of industries and will not require the rebasing of the indicator.

16 For years beyond 2021–22, the Commission proposes to use the percentage change in the chain volume of industry value added to develop an annual indicator of industry output, which measures the change in the volume of production to scale state production. This is consistent with ABS national and state accounts methods.

Commission draft position

17 The Commission proposes to replace total factor income as a measure of industry size with the aggregate measures of industry output, provided by the ABS. This measure does not require rebasing for each update.

18 The Commission proposes to update the aggregate measures of state industry output using the percentage change in chain volume of industry value added published annually by the ABS, consistent with ABS national and state account methods.

Q3. Do states support the reintroduction of the number of businesses as a driver of need for regulatory spending if it is material?

State views

19 All states except Western Australia were supportive or indifferent to the reintroduction of the number of businesses as a driver of need if it is material.

20 Western Australia said that large operations such as those in the Pilbara, have complex regulatory requirements which include not only the mining operations, but also the necessary infrastructure such as ports and railways, which increase the cost of enforcing mine rehabilitation requirements. It said that the number of businesses is not a suitable driver for assessing the additional costs borne by states of these activities.

21 New South Wales said that if the Commission reintroduces business counts as a driver of need, it should also re-estimate the weights applied to the number of businesses and industry size in the assessment.

Commission response

22 The conceptual case for including the number of businesses as a driver of state spending was established in the 2020 Review. The Commission accepted the case put forward by New South Wales, Victoria and South Australia that the cost of regulating many small businesses is higher than regulating fewer large businesses.

The Commission did not include a business count driver in the 2020 Review because it was not material.

23 The Commission agrees that regulating the development of railways and ports and their rehabilitation (where required) is costly and a necessity for export-oriented industries such as mining. However, these expenses are out of scope of the activities covered by mining regulation, which includes the exploration, production and rehabilitation of mine sites and not the associated infrastructure such as railways and ports.

24 The Commission is not aware of evidence that supporting infrastructure increases the cost of enforcing mine rehabilitation requirements. Further, costs associated with the rehabilitation of infrastructure after mine closure are generally borne by asset owners, with enforcement administered centrally.

25 The Commission views regulating the development and operation of port and railway infrastructure as part of other state and federal regulatory activities for infrastructure and construction, including environmental approvals, rather than specifically mining regulation.

26 The Commission considers there is a conceptual case for including business counts as a driver of state spending on regulatory activities. However, the challenges of implementing the driver appear to outweigh the benefit of the driver to the GST distribution.

27 Determining use weights for the number of businesses in each of the regulation assessments will require a degree of judgement from the Commission. Similarly, there are data limitations with the count of Australian businesses from the ABS. Multi-location businesses including department and grocery stores and multi-commodity miners, are attributed to one geographic location, such as the head office in a capital city. This is expected to disadvantage small states, by overstating the costs in states with corporate headquarters and discounting the costs to states of regulating local operations of national businesses.[1]

28 In addition, data on business entries and exits excludes businesses that have a turnover of less than $75,000 (or who have not registered an Australian Business Number) and businesses which have not been coded to an Australian and New Zealand Standard Industrial Classification (ANZSIC) category, which are regulated by states.[2]

[1] Australian Bureau of Statistics (ABS) *Counts of Australian Businesses, including Entries and Exits methodology* ABS Website 2023 accessed 13 March 2024.

[2] ABS *Counts of Australian Businesses, including Entries and Exits methodology*

Commission draft position

29 The Commission proposes not to assess business counts when assessing state government spending on regulatory activities because of the limitations of the ABS business count data, particularly the treatment of multi-site businesses.

Q4. Will states be able to identify spending on the net-zero transition and provide it to the Commission to develop an assessment?

State views

30 All states except South Australia said they could identify most of their specific net-zero transition expenditure.

31 States noted that there are dedicated net-zero programs including:

- Victoria's $540 million acceleration of renewable energy zones, and $335 million energy efficiency upgrades for low-income households
- Queensland's $500 million land restoration fund and $4.5 billion renewable energy and hydrogen jobs fund
- the ACT's $300-$400 million Williamsdale Big Battery project.

However, states also noted that significant net-zero related expenditure is embedded in other state service delivery and that there will be difficulties disentangling this spending.

32 New South Wales, Victoria and Queensland also indicated that it would be useful for the Commission to provide a more detailed proposal to states to help them in identifying relevant expenditure, including a consistent definition of net-zero spending.

33 South Australia noted that it is reviewing its current net-zero activities, which will enable it to identify expenditure in the future.

Commission response

34 All states provide funding to support business development, including investment and trade promotion, regional development programs, and support for small business. Under the 2020 Review method the Commission does not separately assess business development spending by industry category. In anticipation that spending on the transition to a net-zero economy is an area of growth, the Commission sought state views on whether they could separately identify spending. Separately identifying this spending would be a necessary first step should the Commission wish to separately assess differences between states in the need for spending on the transition to a net-zero economy.

35 The Commission acknowledges that there are difficulties with classifying net-zero transition expenditure, as well as disentangling net-zero related spending from regular state functions and Commonwealth involvement.

36 The Commission considers that further work is required to:

- develop a consistent definition of net-zero spending
- identify state spending on localised programs to support communities to transition from emissions intensive industries
- identify spending on broader state programs such as facilitating new energy generation capacity or storage.

37 The Commission views the net-zero transition as an emerging issue that it will continue to investigate following the 2025 Review. It is expected that there will be significant state and Commonwealth spending to support regions transitioning from emissions intensive industries to new industries.

Commission draft position

38 The Commission will work with states and Commonwealth agencies, including the ABS and the Net Zero Economy Authority, following the 2025 Review to develop a consistent definition of net-zero spending and identify net-zero business development (and non-business development) spending.

Q5. Can states identify and provide data on potential drivers of state spending on the net-zero transition?

State views

39 All states considered it a challenge to identify policy neutral drivers of state net-zero spending citing the complicated mix of structural factors and state policy choices (both historical and current).

40 All states except South Australia and Tasmania identified factors the Commission could consider when developing an assessment. Drivers suggested by the states include:

- the current industry mix of each state's economy, and exports (New South Wales, Western Australia and the Northern Territory),
- historical policy choices to develop industries (New South Wales),
- geographic factors (Western Australia and the Northern Territory)
- resource endowments (Victoria and Western Australia)
- current energy generation mix (Victoria and Western Australia)
- the level and marginal cost of emissions abatement (New South Wales and Queensland)
- the presence of infrastructure deficits or the requirement for additional infrastructure (the Northern Territory)
- diseconomies of scale (the Northern Territory and the ACT).

41 Queensland said that the level of abated emissions in each period could also be considered. However, New South Wales said this driver had the potential to reward

states that had not previously reduced emissions. Queensland also said that it has a higher emissions profile than other states.

42 New South Wales and South Australia noted that each state has its own net-zero strategy, which are policy influenced.

43 New South Wales, Queensland and the Northern Territory suggested that any drivers of state spending on the net-zero transition must also consider the potential for cost sharing between industry and governments.

44 New South Wales, Victoria and the Northern Territory said that further work is required post the 2025 Review to identify policy neutral drivers of net-zero spending.

Commission response

45 In the 2020 Review method the Commission does not separately assess spending on business development by industry category. Using this method, the need for business development spending is assessed on an equal per capita basis with an adjustment for wage costs. For the 2025 Review, the Commission raised the possibility of separately assessing business development spending on the transition to a net-zero economy. This would require policy neutral drivers to be identified.

46 The Commission notes the suggestions from states on both the potential drivers of spending on the transition to net-zero and the issues that the Commission should consider further. This includes the potential for perverse incentives and the impact of state policy choices and cost sharing between industry and governments.

47 The Commission concurs with New South Wales, Victoria and the Northern Territory, that further work beyond the 2025 Review is required to identify potential policy neutral drivers of state spending.

Commission draft position

48 The Commission proposes to include the identification of the drivers of state spending on the net-zero transition in its proposed work with the states and Commonwealth agencies (including the ABS and the Net Zero Economy Authority) between reviews.

Q6. Do states expect there to be a sufficient increase in state net-zero transition spending to warrant a separate assessment, within or outside of the business development assessment?

State views

49 All states except Tasmania expected there to be increases in state spending on the net-zero transition, which would warrant a separate assessment.

50 Tasmania said that it is unclear whether spending will be material, and notes that any assessment should not disadvantage states that have already invested heavily in the transition.

51 New South Wales highlighted that expenditure is expected to increase as the transition progresses to harder to abate sectors including steel, concrete and chemical manufacturing.

52 New South Wales, Victoria, Queensland and the ACT said that a separate assessment of state net-zero transition expenditure will be warranted if it can be feasibly assessed.

Commission response

53 The Commission notes state views on the expected growth in state government spending on the net-zero transition and their views on the potential future treatment of net-zero spending.

54 The Commission agrees that state spending on the net-zero transition is expected to continue to increase in most states to 2030 and beyond.

Commission draft position

55 The Commission proposes to continue to work with the states and Commonwealth agencies including the Net Zero Economy Authority after the 2025 Review, to monitor the net-zero transition spending and consider the potential for assessing state spending needs.

Other issues raised by states

Historical treatment of COVID-19 Business Support

56 New South Wales and Victoria both raised the historical treatment of COVID-19 business support payments. Both states said that an equal per capita treatment of state government business support during the pandemic was not appropriate, suggesting an actual per capita treatment as an alternative.

57 New South Wales asked for a retrospective adjustment to compensate it for the treatment of COVID-19 business support spending in the 2022, 2023 and 2024 updates.

Commission response

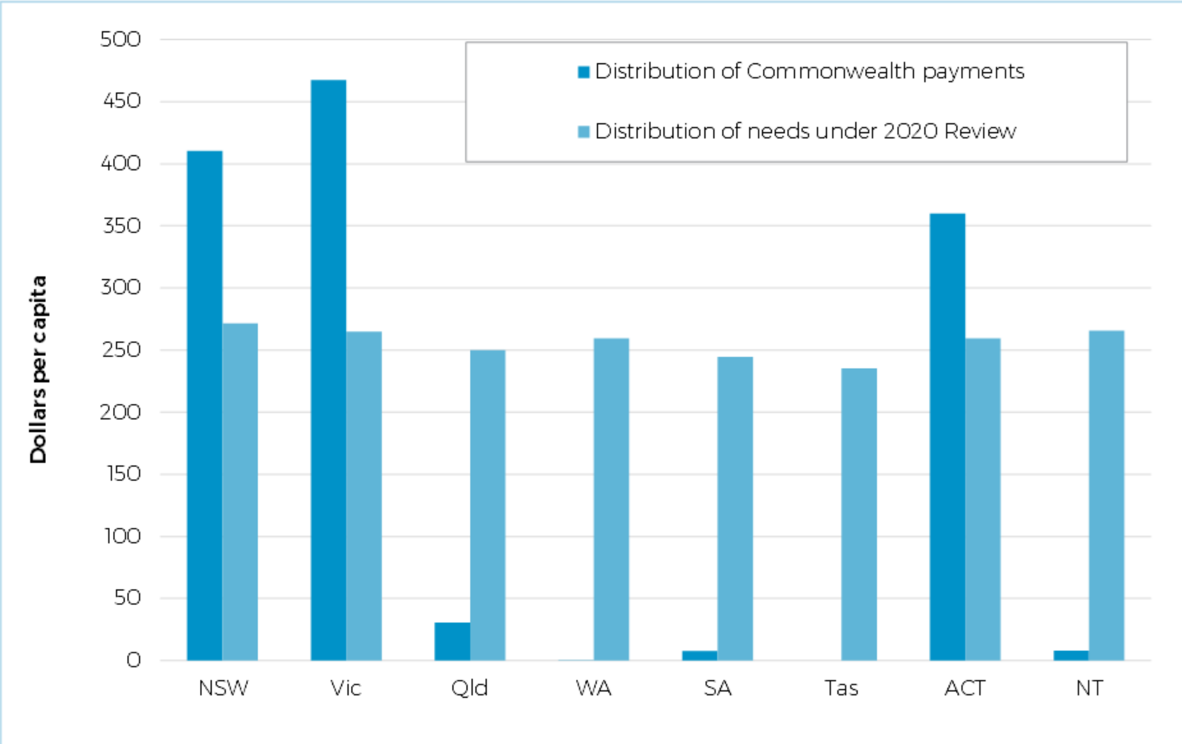
58 The Commission, as part of the 2023 Update, noted that it considered state responses to the COVID-19 pandemic were driven by circumstances outside of state control rather than policy choices.

59 The Commission recognises that the treatment of COVID-19 business support in the other industry regulation and business development assessments did not capture the drivers of state spending. However, the terms of reference for the 2021, 2022, 2023 and 2024 updates did not provide the Commission with flexibility to change the business development assessment method in response to state COVID-19 spending.

60 The Commission acknowledges that the 2025 Review provides the opportunity to change the treatment of spending on COVID-19 Business support.

61 In the 2023 Update New Issues discussion paper, the Commission noted that the drivers of state business support differed from the usual drivers of business development spending (Figure 1).

Figure 1 Distribution of Commonwealth payments under the COVID-19 business support national partnership agreements compared with distribution under existing assessment methods



Source: Commonwealth Grants Commission (CGC) New Issues in the 2023 Update CGC, 2023, accessed 15 February 2024.

62 The Commission also noted that it would, 'If terms of reference allow for a change in method:

- treat Commonwealth payments under the national partnerships on COVID-19 business support as impact; and
- assess state expenses that meet the definition of non-assessable non-exempt using a driver of need based on the reduction in hours worked in each state; or
- if data on state expenses that meet the definition of non-assessable non-exempt cannot be obtained, assess the state spending associated with the national partnerships on COVID-19 business support on an actual per capita basis.'[3]

63 The Commission proposed 2 options for defining and assessing state spending on COVID-19 business support in the 2023 Update:

[3] Commonwealth Grants Commission (CGC) Discussion paper for the 2023 Update - Consultation October 2022 CGC, 2022, accessed 13 March 2024

- 'Option 1 — Assess spending covered by the COVID-19 business support national partnership agreements
  - The amount spent by the Commonwealth on the programs covered by the national partnerships is published in the Commonwealth of Australia, 2021–22 Final Budget Outcome. On the basis that the funding for the programs covered by the national partnerships was funded on a 50:50 basis, the Commission could implement this option without requesting additional expense data from the states.
  - However, the national partnerships do not cover spending undertaken by states prior to 2021–22.
- Option 2 — Assess business support payments that were made non-assessable non-exempt by the Commonwealth for Income tax purposes.
  - Non-assessable non-exempt tax treatment is only provided in exceptional circumstances. Eligibility was limited to COVID-19 grant programs directed at supporting businesses who were the subject of a public health directive and whose operations were significantly disrupted because of the public health directive.
  - However, not all business support spending by states in 2020–21 would be included.
  - States would have needed to provide the Commission with their expenses on the non-assessable non-exempt programs in time for the 2023 Update. This may not be practical.'[4]

64 The Commission considers it impractical to implement Option 2 in the 2025 Review. The implementation of this method will require data requests to the states to identify non-assessable non-exempt spending and the identification of suitable data to underpin the driver of need. Therefore, the Commission proposes to implement an actual per capita assessment (option 1) of state spending on COVID-19 Business support.

65 The Commission considers that the National partnership agreements which co-funded state COVID-19 business support programs to be sufficiently homogenous to enable an actual per capita assessment.

66 The treatment of spending prior to 2021–22 is not a consideration for the 2025 Review with 2020–21 falling out of the assessment years for the 2025 Update.

67 New South Wales and Victoria supported an actual per capita assessment treatment of COVID-19 business support payments.

Commission draft position

68 The Commission proposes not to retrospectively adjust the GST distributions of the 2022, 2023 and 2024 updates. Although the Commission has previously made a retrospective adjustment in the natural disasters assessment, these adjustments

[4] Commonwealth Grants Commission (CGC) Discussion paper for the 2023 Update - Consultation October 2022 CGC, 2022, p 15.

were to reflect corrections to the data reported under the disaster recovery arrangements for an existing actual per capita assessment, rather than a change in the assessment method. The Commission does not consider retrospective method changes to be within the scope of annual updates or the 2025 Review.

69 The Commission proposes to assess state spending covered by the COVID-19 business support national partnership agreements using an actual per capita treatment from 2021–22.

70 Most assessable COVID-19 business support occurred in 2021–22, with the State-Commonwealth funding agreements nominally expiring 30 June 2022. However, $111 million of Commonwealth funding under the agreements occurred in 2022–23.[5] As a result, the actual per capita assessment for COVID-19 business support is expected to continue until the 2027 Update when 2022–23 is no longer assessed.

Remoteness driven costs of business development

71 Western Australia suggested the inclusion of a regional cost weight in the business development assessment.

72 Western Australia said that although many grant processes and tenders are administered from a centralised location (usually a capital city), the level of funding for projects in regional and remote locations is greater than in a capital city.

73 Similarly, Western Australia said that their budget process recognises regional costs associated with delivering training activities for local government officers and subsidising airfares in regional areas.

Commission response

74 Western Australia raised the inclusion of regional costs in the business development assessment in the 2020 Review.

75 The Commission's view in the 2020 Review was that:

'The amounts allocated for grants and subsidies are set amounts with no provision for regional or other costs. The Commission therefore does not agree that regional cost disabilities should apply to business development expenses.'[6]

76 Western Australia has not provided evidence that states consider the regional or other costs in determining state expenditure on grants and subsidies for business development. Similarly, the Commission is not aware of evidence supporting the inclusion of regional costs in the business development assessment.

[5] Commonwealth of Australia, *Final Budget Outcome 2022–23*, Commonwealth of Australia 2023, p.g. 84, accessed 2 February 2024.

[6] Commonwealth Grants Commission, *R2020 Report Volume 2 Part B (Ch19-33)*, CGC 2020, p.g. 361 accessed 2 February 2024

Commission draft position

77 The Commission proposes to continue to assess business development expenses as equal per capita with a wage cost adjustment.

Draft 2025 Review assessment method

78 Following consideration of state views, the Commission proposes to:

- replace total factor income in the business regulation assessments with a volume driven indicator of industry size
- separately assess state COVID-19 business support expenses, using an actual per capita assessment.

79 Table 1 shows the proposed structure of the 2025 Review services to industry assessment.

Table 1 Proposed structure of the services to industry assessment

Component	Driver of need	Influence measured by driver of need	Change since 2020 Review?
Agriculture regulation	Economic environment	Recognises the cost of providing regulatory services to the agricultural sector is determined by the level of economic activity in the sector measured by volume of production	Yes
	Wage costs	Recognises the differences in wage costs between states	No
	Regional costs	Recognises the higher cost of providing services in more remote areas	No
Mining regulation	Economic environment	Recognises the cost of providing regulatory services to the mining sector is determined by the level of economic activity in the sector measured by volume of production	Yes
	Wage costs	Recognises the differences in wage costs between states	No
	Regional costs	Recognises the higher cost of providing services in more remote areas	No
Other Industries regulation	Economic environment	Recognises the cost of providing regulatory services to 'other industries' is determined by the level of economic activity in the sector measured by volume of production	Yes
	Population	Recognises that some regulatory functions such as consumer protection services target the total population rather than businesses or industries	No
	Wage costs	Recognises the differences in wage costs between states	No
	Regional costs	Recognises the higher cost of providing services in more remote areas	No
Business development	EPC	This is an equal per capita (EPC) assessment. The driver of these expenses is state population	No
	Wage costs	Recognises the differences in wage costs between states	No
COVID-19 Business support	Actual per capita	Recognises that actual spending on COVID-19 Business support reflects differences between states in the need for spending	Yes

Indicative distribution impacts

80 The impact of the proposed method changes on the GST distribution in 2024–25 is shown in Table 2.

Table 2 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	33	-153	-128	292	-41	2	-23	18	345
U2024 using draft R2025 methods	335	296	-535	167	-224	-33	-26	19	1098
Effect of draft method changes	302	449	-407	-124	-183	-36	-3	1	753
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	4	-22	-23	99	-22	4	-47	70	13
U2024 using draft R2025 methods	39	42	-95	57	-119	-58	-53	76	40
Effect of draft method changes	35	64	-73	-42	-97	-62	-6	5	28

Note: Based on no change to either the wage costs assessment or the measure of socio-economic status. The effect of these changes is shown in the wage costs and socio-economic status chapters.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.

Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

81 The largest driver of the change in assessed GST needs is the actual per capita treatment of state spending on COVID-19 Business support (Table 3). This will lead to an increase in the GST distributed to New South Wales, Victoria and the ACT. At the same time, the GST distributed to all other states will fall relative to the 2024 Update. Most state spending on COVID-19 business support occurred in New South Wales, Victoria and the ACT in response to lockdowns in 2021–22. All other states spent significantly less on COVID-19 business support under the national partnership agreements.

82 The net impact of the COVID-19 business support assessment is the GST impact after accounting for the offsetting revenue and expenditure effects of Commonwealth payments. Under the Commonwealth-state national partnership agreements the Commonwealth contributed 50% of state expenditure on COVID-19 business support. The increase in revenue to the states from Commonwealth payments is exactly offset by state spending (Table 3). As a result, the net impact of COVID-19 spending represents the actual per capita assessment of state own-source spending.

Table 3 Indicative impact on GST distribution of proposed method changes (disaggregated), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Commonwealth payment for COVID-19	-469	-542	476	298	185	46	-17	25	1,029
Spending of Commonwealth payment for COVID-19	469	542	-476	-298	-185	-46	17	-25	1,029
State own source COVID-19 spending	435	541	-452	-306	-170	-38	17	-26	992
Net effect of COVID-19 treatment	**435**	**541**	**-452**	**-306**	**-170**	**-38**	**17**	**-26**	**992**
Update regulation/development shares	-79	-89	2	159	-2	8	-14	14	183
Updated measure of industry size — ABS industry output	-54	-3	43	22	-11	-6	-5	14	79
Total	**302**	**449**	**-407**	**-123**	**-183**	**-36**	**-3**	**1**	**753**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Commonwealth payment for COVID-19	-55	-77	85	101	98	78	-36	98	38
Spending of Commonwealth payment for COVID-19	55	77	-85	-101	-98	-78	36	-98	38
State own source COVID-19 spending	51	77	-81	-103	-90	-66	35	-102	36
Net effect of COVID-19 treatment	**51**	**77**	**-81**	**-103**	**-90**	**-66**	**35**	**-102**	**36**
Update regulation/development shares	-9	-13	0	54	-1	14	-30	53	7
Updated measure of industry size — ABS industry output	-6	0	8	7	-6	-9	-10	54	3
Total	**35**	**64**	**-73**	**-42**	**-97**	**-62**	**-7**	**5**	**28**

Note: Based on no change to either the wage costs assessment or the measure of socio-economic status. The effect of these changes is shown in the wage costs and socio-economic status chapters.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

83 The indicative GST impact of the new methods also includes revisions to the average state business regulation and business development weights from the 2020 Review using data provided by the states. The weights are presented in Table 4.

84 Excluding the impact of assessing COVID-19 business support, under the proposed new methods, the GST distributed to Western Australia and the Northern Territory will increase. In the case of Western Australia, this is the result of the update to the mining business regulation and development weights (Table 4). The increase in the weight of mining regulation compared to mining business development will lead to an increase in assessed mining regulation spending, and a reduction in the equal per capita assessed mining business development expenditure. The assessed need for mining regulation in Western Australia is significantly higher than other states reflecting the large scale of the mining industry in the state.

85 The Northern Territory will also have an increase in its GST distribution because of the change in business regulation and development weights for agriculture and mining.

86 In addition, the change in the driver of business regulation to the volume of industry output will also increase the GST distribution to the Northern Territory. This has resulted in an increase in the share of national agricultural and mining production occurring in the Northern Territory.

Table 4 Average state business regulation and business development weights

	2010 Review	2020 Review	2025 Review
	%	%	%
Agriculture			
Regulation	50	50	63
Business development	50	50	37
Mining			
Regulation	na (a)	80	90
Business development	na (a)	20	10
Other industries			
Regulation	37	53	62
Business development	63	47	38

Note: These weights are based on data from 8 states except for agriculture which is based on 7 states. The agriculture weight will be updated if new data is provided to the Commission by the states before the final 2025 Review report.

87 Under the proposed methods, New South Wales, Victoria, and the ACT will receive less GST, because of the increase in the weight of business regulation compared to business development for agriculture and mining (Table 4). This results in less spending being allocated to the equal per capita assessed business development which benefits states with a smaller than population share of industry activity.

Natural disaster relief

Overview

1 On 6 October 2023, the Commission issued a consultation paper on the natural disaster relief assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method.

3 A summary of state and territory (state) responses to the consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support the continuation of the natural disaster relief assessment in its current form?

State views

5 New South Wales, Queensland, Western Australia, South Australia, the ACT and the Northern Territory supported the retention of the natural disaster relief assessment in its current form.

6 New South Wales and South Australia said it was important for the Commission to recognise the interaction between natural disaster relief and natural disaster mitigation expenses when considering the assessment of mitigation and relief expenses in future reviews.

7 South Australia, Tasmania and the Northern Territory said it was important to take account of the outcome of reviews into Australia's disaster funding arrangements.

8 Victoria did not support the continuation of the current natural disaster relief assessment because:

- the 2014 Productivity Commission Inquiry Report on Natural Disaster Funding Arrangements highlighted policy influences on spending on natural disaster relief[1]
- the differences in states' rates of insurance of state assets could influence the need for disaster relief funding

[1] Productivity Commission (PC), *Natural Disaster Funding Arrangements*, Volume 1, inquiry report no. 74, PC, Australian Government, 2014, accessed 1 June 2024 (PC, Natural Disaster Funding Arrangements inquiry report).

- local government expenses are included in the assessment and should be removed for consistency across assessments.

9 Victoria recommended the assessments of natural disaster relief and mitigation should be considered together to account for their complex interrelationship. Victoria recommended that, if a policy neutral driver cannot be identified, natural disaster relief should be assessed equal per capita.

Commission response

Policy influences on natural disaster relief expenses

10 The 2014 Productivity Commission Inquiry Report on Natural Disaster Funding Arrangements stated:

> 'The incentives for governments to manage risks to their assets, and to support management of shared risks more broadly, are undermined by the structure of the Natural Disaster Relief and Recovery Arrangements and the budget treatment of this funding. This has led to a bias towards governments retaining risks rather than investing in mitigation or funding the transfer of risks through insurance.'[2]

11 The Productivity Commission also stated:

> 'The GST redistribution due to natural disaster relief costs creates another avenue for cost-shifting. It is not clear to what degree equalisation of natural disaster relief costs affects the incentives for states to effectively manage natural disaster risks, but it may influence incentives at the margin.'[3]

12 It concluded that:

> 'It would be imprudent at this stage to recommend ad hoc changes to GST distribution formula due to the significant potential for unintended consequences.'[4]

13 Sharing the cost of responding to natural disasters among states is a long-standing feature of the GST distribution arrangements and, consistent with the objective of horizontal fiscal equalisation, helps ensure that a state's capacity to provide services is not adversely compromised as a result of experiencing and responding to natural disasters. The Commission is not aware of any evidence suggesting the GST arrangements are creating a disincentive for states to reduce their exposure to natural disasters. While the Productivity Commission suggested the GST distribution arrangements could marginally influence incentives for mitigation spending, its conclusion was not to recommend changes.

[2] PC, *Natural Disaster Funding Arrangements* inquiry report, p 128.

[3] PC, *Natural Disaster Funding Arrangements* inquiry report, p 33.

[4] PC, *Natural Disaster Funding Arrangements* inquiry report, p 34.

Insurance

14 The Disaster Recovery Funding Arrangements require states to insure their assets against natural disasters.

> 'States have a responsibility to put in place insurance arrangements which are cost effective for both the state and the Commonwealth.'[5]

15 The adequacy of state insurance arrangements was addressed in the 2020 Review.

> 'The Commission considers that the Commonwealth is best placed to decide if state insurance arrangements are sufficient to satisfy the requirements of the funding agreements and to receive Commonwealth assistance.'[6]

16 No new evidence has been presented in the 2025 Review to support a change. The Commission is not persuaded of the need to adjust its assessment method due to differences in states' natural disaster insurance arrangements.

Local government expenses

17 The treatment of local government expenses was considered in the 2020 Review. The Commission concluded that 'it is average policy for states to fund a significant proportion of the local government out-of-pocket expenses.' No new evidence has been provided in the 2025 Review to the contrary.

18 Under the Disaster Recovery Funding Arrangements, local government expenses are treated as equivalent to state expenses and are equally eligible for Commonwealth reimbursement.[7]

19 All states (except the ACT) fund local government natural disaster relief expenses, although policies vary.

20 Victoria's concern about inconsistent treatment of state support for local government across assessments was also addressed in the 2020 Review.

> 'While financial assistance grants, including local roads grants, are removed from the adjusted budget, other payments to local government are included. These payments contribute to the average expenses to which disabilities apply. Therefore, it is not inconsistent for the Commission to assess state payments to local government for disaster recovery. The Commission considers this does not amount to local government equalisation. It recognises an unavoidable cost that all states fund.'[8]

[5] Department of Home Affairs, *Disaster Recovery Funding Arrangements 2018*, Home Affairs, Australian Government, 2018, accessed 1 June 2024, (Home Affairs, Disaster Recovery Funding Arrangements 2018), p 15.

[6] Commonwealth Grants Commission (CGC), *Report on GST Revenue Sharing Relativities: 2020 Review*, Volume 2, Part B (Ch19–33), CGC, Australian Government, 2020, accessed 1 June 2024, (CGC, 2020 Review), p 373.

[7] Home Affairs, *Disaster Recovery Funding Arrangements 2018*, p 10.

[8] CGC, *2020 Review*, p 373.

Commission draft position

21 The Commission sees no case to change the long-standing treatment of natural disaster expenses in the GST distribution arrangements. The current approach is consistent with the objectives of horizontal fiscal equalisation. The Commission is not aware of any evidence that the GST distribution arrangements are creating a disincentive for states to reduce their exposure to natural disasters.

22 As stated in the services to communities chapter, following the 2025 Review, the Commission will continue to monitor developments and explore in consultation with states whether a differential assessment of natural disaster mitigation expenses is appropriate. The Commission will consider the outcome of the Independent Review of National Natural Disaster Governance Arrangements which concluded in December 2023, with the final report being considered by the Australian Government.[9] The Commission will consult with states on the implications of the Government response for the assessment of natural disaster relief expenses.

23 For the 2025 Review, the Commission's draft position is that the actual per capita assessment method should be retained.

Draft 2025 Review assessment method

24 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method.

25 Table 1 shows the structure of the proposed 2025 Review natural disaster relief assessment.

Table 1 Proposed structure of the natural disaster relief assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Natural disaster relief	Actual per capita	Recognises that natural disaster relief expenses are beyond state control and are policy neutral.	No

Indicative distribution impacts

26 No method changes are proposed for this assessment.

[9] National Emergency Management Agency, 'Independent Review of National Natural Disaster Governance Arrangements', NEMA website, n.d., accessed 1 June 2024.

Native Title and land rights

Overview

1 On 13 June 2023, the Commission issued a consultation paper on the Native Title and land rights assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that the actual per capita assessment of Native Title expenditure remains appropriate?

State views

5 Most states agreed that the actual per capita assessment of Native Title expenditure remains appropriate, given their obligations arise under Commonwealth legislation. Moreover, states indicated that as they are operating within the frameworks informed or legislated by the *Native Title Act 1993* (Cth), there is a high degree of uniformity between state policies.

6 In discussing uniformity between jurisdictions, some states noted the impact of the National Guiding Principles for Native Title Compensation, which call for 'consistency within and across jurisdictions and with national best practice in approaches to assessing, valuing and resolving Native Title compensation'.[1] This supports retaining the actual per capita assessment.

7 Victoria submitted that an actual per capita assessment is not appropriate as state spending is policy influenced, suggesting an equal per capita assessment instead. It said that, in states where alternative mechanisms are available, some parties may pursue Native Title claims through state legislation, which introduces policy influence into the assessment. It said that its own *Traditional Owner Settlement*

[1] National Indigenous Australians Agency (NIAA), National Guiding Principles for Native Title Compensation Agreement Making, NIAA, Australian Government, 2021, accessed 23 October 2023.

Act 2010 (Vic) demonstrates the scope for difference between states in responding to Native Title claims, allowing for an alternative system for resolving claims, with an emphasis on mediation and negotiation.

8 Victoria also raised the High Court decision in *Northern Territory v Griffiths* [2019] HCA 7 (Timber Creek case). It said that the High Court's ruling may change the way in which compensation for Native Title rights is calculated, because it does not set out specific guidelines for the compensation of spiritual or cultural loss, leaving the calculation of this compensation to depend upon case-specific facts and state-based legislation. It said that this also introduces policy influence into the assessment.

9 Conversely, Queensland submitted that while the Timber Creek case may have changed how compensation is calculated under the Native Title Act, compensation for spiritual and cultural loss will still be assessed under the existing Commonwealth legislation and national guiding principles. This means policy uniformity between jurisdictions remains. Moreover, Queensland considered that any differences in compensation are the result of circumstances specific to each claim, not state policy differences.

10 The Northern Territory said that the GST impacts of the Native Title and land rights assessment should be monitored by the Commission. If the impact increases significantly, the assessment should be reviewed. The Northern Territory also noted the potential for future changes in the type or scale of Native Title claims as litigation continues, but until these matters are resolved, discussions on any changes in quantum or scope of compensation are speculative.

Commission response

11 Most states confirmed the Commission's preliminary view that states continue to act in broadly the same way when addressing their obligations under the Native Title Act. The Commission also notes the National Guiding Principles for Native Title Compensation and the Native Title Act ensure that there is a high degree of uniformity between jurisdictions.

12 The Commission notes that, while Victoria's Traditional Owner Settlement Act may provide an alternate pathway for claim resolutions in Victoria, the act draws heavily on the Commonwealth's Native Title Act, relying on its definitions of several key terms in section 3, and for general provisions for settlement agreements in section 10.[2] Given Victoria's Traditional Owner Settlement Act is informed by the Native Title Act, the Commission considers that Victoria is broadly following the national framework for settling Native Title claims.

[2] Traditional Owner Settlement Act 2010 (Vic) s 3, s 10.

13 The Commission also notes that the Traditional Owner Settlement Act places emphasis on negotiation and mediation in the same way the National Guiding Principles do.[3] Therefore, the Commission considers that this approach is not unique to the Traditional Owner Settlement Act and is reflective of the common approach used by all states.

14 The Commission does not consider that the Timber Creek case has introduced policy influence into the assessment. The Commission considers that differences in compensation for cultural or spiritual loss claimable under the Native Title Act will relate to the differences in individual circumstances of claims, not state policy differences, and will still be settled according to the national guiding principles.

15 While the Commission acknowledges that states may choose to settle compensation claims through different mechanisms and provide different forms of compensation, it considers that the costs associated with settling Native Title claims continue to reflect state need, and that inconsistencies in quantum or volume of claims are due to historical circumstances outside state control. The actual per capita treatment of this spending reflects the Commission's judgement that costs are driven predominantly by state circumstances rather than state policy. As such, the Commission does not consider an equal per capita assessment would provide a better equalisation outcome.

Commission draft position

16 The Commission considers that an actual per capita assessment of Native Title expenditure remains appropriate. The Commission will continue to monitor approaches to Native Title compensation and associated expenditure patterns.

Q2. Do states anticipate that Treaty processes will affect how they negotiate Native Title and land rights claims?

State views

17 States expressed different views on whether they anticipate Treaty processes to affect the negotiation of Native Title and land rights claims.

18 Most states submitted that, while they believe Treaty processes may eventually influence how they negotiate Native Title and land rights claims, it is too early to say how this will materialise. These states suggested that the Commission monitor the development of Treaty processes throughout the next review cycle.

19 Victoria considered it likely that Treaty processes will impact Native Title and land rights claims.

[3] National Indigenous Australians Agency, National Guiding Principles for Native Title Compensation Agreement Making.

20 Tasmania and South Australia said that any influence Treaties have on Native Title claims would be policy influenced.

21 Western Australia noted that it does not currently plan to pursue formalised, statewide Treaty negotiations, and as such it does not anticipate Treaty processes will affect its negotiation of Native Title and land rights claims.

22 The ACT also does not anticipate Treaty processes affecting how it negotiates Native Title claims.

Commission response

23 The Commission agrees with the view of most states that the effects of Treaty mechanisms on the negotiation of Native Title and land rights claims can only be assessed once Treaties are operational.

Commission draft position

24 The Commission considers recent developments in Treaty negotiation mechanisms do not warrant a move away from an actual per capita assessment at this time. It will monitor the impact of Treaty negotiations on Native Title and land rights expenditure in updates.

Other issues raised by states

Should Treaty-related costs be included in the Native Title and land rights assessment?

25 Victoria said that some of its spending on Treaty processes should be assessed under the actual per capita Native Title and land rights assessment.

26 Victoria said that other states may be incurring expenses through Native Title and land rights settlements similar to those incurred through its Treaty processes, for example, costs relating to the provision of some services to First Nations communities. As Victoria is relatively advanced in its Treaty development compared with other states, and because it classifies these costs as Treaty-related expenditure, its spending on these outcomes is not captured by the assessment.

27 The Northern Territory submitted that if Treaty-related costs were to be assessed, the Commission should assess them separately to Native Title and land rights expenditure. It said that assessing costs associated with the negotiation, implementation or settlement of claims arising from Treaty processes would introduce policy influence into the assessment, as there is currently no national framework for this process.

28 Queensland submitted that if Treaty costs were assessed in the Native Title and land rights assessment, the actual per capita assessment of expenditure should be

reviewed. Tasmania and South Australia also submitted that it is likely that Treaty-related costs would be policy influenced.

Commission response

29 While the Commission notes that some spending incurred under Treaty processes may be for services similar to those provided for in Native Title settlements, they fall outside the scope of the assessment.

30 The Commission agrees with the point raised by several states that including Treaty-related costs would introduce policy influence into the assessment. There is currently no nationally consistent approach to developing or implementing Treaty processes, and therefore an actual per capita assessment of Treaty-related expenses would not be appropriate.

31 Moreover, the Commission considers Treaty-related costs as separate from the spending captured by the Native Title and land rights assessment, given the significant differences in function, scope and purpose between Native Title or land rights legislation and Treaties. As more states progress further with Treaty processes, and Treaty-related expenses increase, appropriate drivers of spending may be examined separate to Native Title and land rights costs.

Commission draft position

32 The Commission proposes not to include Treaty-related costs in the Native Title and land rights assessment.

Draft 2025 Review assessment method

33 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method.

34 Table 1 shows the proposed structure of the 2025 Review Native Title and land rights assessment.

Table 1 Proposed structure of the Native Title and land rights assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Native Title and land rights	Actual per capita	Spending by each state	No

Indicative distribution impacts

35 No method changes are proposed for this assessment.

Administrative scale

Overview

1 On 13 June 2023, the Commission issued a consultation paper on the administrative scale assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support the continuation of the administrative scale expense assessment in its current form?

State views

5 New South Wales, Victoria and Queensland did not support the continuation of the assessment in its current form. They said that the costs are overstated and do not represent the true minimum costs underlying the conceptual case of the assessment. Other states supported the assessment or did not express concerns.

6 Victoria said that other assessments, such as schools and health, already account for fixed costs. It said this means the application of the administrative scale adjustment imposes double counting and that these costs should be netted out.

7 Western Australia, South Australia, Tasmania, and Northern Territory indicated that there was no evidence to suggest that the minimum fixed costs of running state services had changed since the derivation of the costs in the 2020 Review. These states said that applying indexation annually to the current assessment would sufficiently maintain contemporaneity for the 2025 Review.

8 While the ACT did not express concerns about the current methodology, it recommended that the Commission should rederive administrative scale expenses in the future. The Northern Territory was also open to this, although advising that it may not be feasible within this review.

Commission response

9 Regarding Victoria's concern about potential duplication of fixed costs, the Commission notes that fixed costs in specific assessments are distinct from those being measured in the administrative scale assessment.

10 For example, service delivery scale in schools accounts for the recurrent fixed costs incurred in running individual schools. It accounts for the need to establish smaller schools as a result of dispersed populations. The fixed cost of establishing and running an education department in the administrative scale assessment is a separate cost.

11 Regarding the views of New South Wales, Victoria and Queensland that administrative scale expenses are overstated, the Commission accepts that there is uncertainty around the level. However, it is not aware of any systematic bias in its estimates, or evidence to suggest that the minimum fixed costs of running state services have changed since the 2020 Review.

Commission draft position

12 The Commission considers the detailed analysis underpinning the assessment remains valid and proposes to retain the current adjustment.

Other issues raised by states

Centralisation

13 New South Wales, Victoria and Queensland said the quantum of expenses is overstated and should be rederived with consideration of the potential for cost reduction through the use of shared services and outsourcing.

14 These states referenced the consolidation of corporate services, saying that many departments in smaller states pool corporate services (such as payroll, human resources and communications) to generate efficiencies in service delivery.

15 Additionally, Victoria said that the design of stylised minimum staffing structures guided by administrative structures in smaller jurisdictions does not capture what states do and allows for policy contamination.

Commission response

16 The Commission agrees that shared services and outsourcing can reduce costs. However, even under an outsourcing and shared servicing approach, some minimum corporate service costs remain.

17 In the 2020 Review, the Commission examined the prevalence of outsourcing and shared servicing in each core head-office function in different states and factored that into the derivation of the quantum.

18 The Commission found that states used shared services differently in different areas. For example:

- First Minister's Department, *has a Corporate Services (or similar) unit. They are at least branches and are division equivalents in the large States… Some States have shared service providers to provide transactional processing services, but not policy and oversight services.*
- Public Service Commission, *each Commission has its own corporate services area in most of the larger States, but those services are provided by a parent department or a shared service provider in the smaller States.*
- Audit Office, *larger States have corporate and support services units. Shared service providers deliver most of those services in Tasmania, the ACT and the Northern Territory, but the Audit offices have resources for managing the services.*[1]

19 The Commission found that in all cases of shared servicing and outsourcing of corporate services, some staff and resources had to be retained to coordinate and manage those services. The amount of shared services required by an agency are largely proportional to the size of its task. The Commission considers that the fixed costs elements of human resources, information technology and other services are unlikely to be materially affected by the change in the level of centralisation or decentralisation of those services since the 2020 Review calculations were made.

20 In the 2020 Review, the Commission adopted a comprehensive process, involving extensive data collection from states, to construct a hypothetical organisation chart reflecting the minimum staffing structures for each state function. The recalculation distributed only an additional $6 per capita nationally compared to the 2019 Update (which had relied on the quantum derived in the 2004 Review). In the absence of evidence indicating material changes since the 2020 Review, the Commission decided it was impractical to re-estimate administrative scale in this review. It calculated the size of the task in the 2004 and 2020 Reviews, but did not in the 2010, 2015 or 2025 reviews.

21 The Commission accepts that what the smaller states do has a stronger bearing on its calculation of the minimum administrative task than what the larger states do. However, it does not consider that this provides any policy neutrality concerns or dominant state effect. The Commission is not aware of any evidence indicating that smaller states are responding to theoretical incentives and creating a bureaucracy for administrative scale type functions that is significantly larger than other states.

22 The 2020 Review method assumes departmental structures of smaller jurisdictions more closely represent the underlying concept, which is the theoretical minimum staffing structure. The Commission considers this approach is not policy contaminated and is the most appropriate way to estimate what 'states do', or at

[1] Commonwealth Grants Commission (CGC), *2020 Review - Draft assessment paper - Administrative scale*, CGC, Australian Government, 2018.

least ‘what states would do’, in the hypothetical scenario of a minimal level of service delivery scale.

23 The Commission accepts that state departmental structures may have changed since the collection of data in the 2020 Review. For example, it is possible that states have become more centralised to maximise the efficiency of a centralised system, or less centralised to maximise the responsiveness of a devolved system. No evidence has been provided to demonstrate that any state has systematically changed their approach in one direction or the other since the 2020 Review.

Commission draft position

24 The Commission proposes to retain the current methods for assessing administrative scale for the 2025 Review. It plans to include a broader examination of the impact of administrative scale as part of its proposed forward work program.

Wage related costs

25 The administrative scale assessment is calculated based on an assumed number of staff required to perform a function. To calculate the associated total spend, the Commission estimates the average wage per employee, and the non-wage costs per employee.

26 New South Wales said that labour costs should comprise a larger proportion of total administrative costs. It supported the argument by presenting data that compared departments with the primary organisational objective of policy design and corporate functions (non-service delivery departments) and service-delivery departments. The data suggested that non-service delivery departments have a higher proportion (around 80:20) of labour related costs than the Commission’s 60:40 estimate. It said that service-delivery departments have a lower proportion that is more in line with the Commission’s estimate.

27 New South Wales said that non-service delivery agencies more closely align with the concept of administrative scale, the theoretical minimum staffing structure. It suggested that in the absence of service volume, costs in running core head-offices would be overwhelmingly driven by labour costs.

28 New South Wales and Victoria said that the labour cost proportion should not be applied to Australian Public Service salaries and that it should instead be applied to each jurisdiction’s salaries, given the substantial differences in public service salaries between states.

29 Queensland also disputed the assumption that 60% of costs are attributable to labour.

Commission response

30 In the 2020 Review, the Commission used Commonwealth public servant classifications and salaries, as there is no single state classification, and no way of

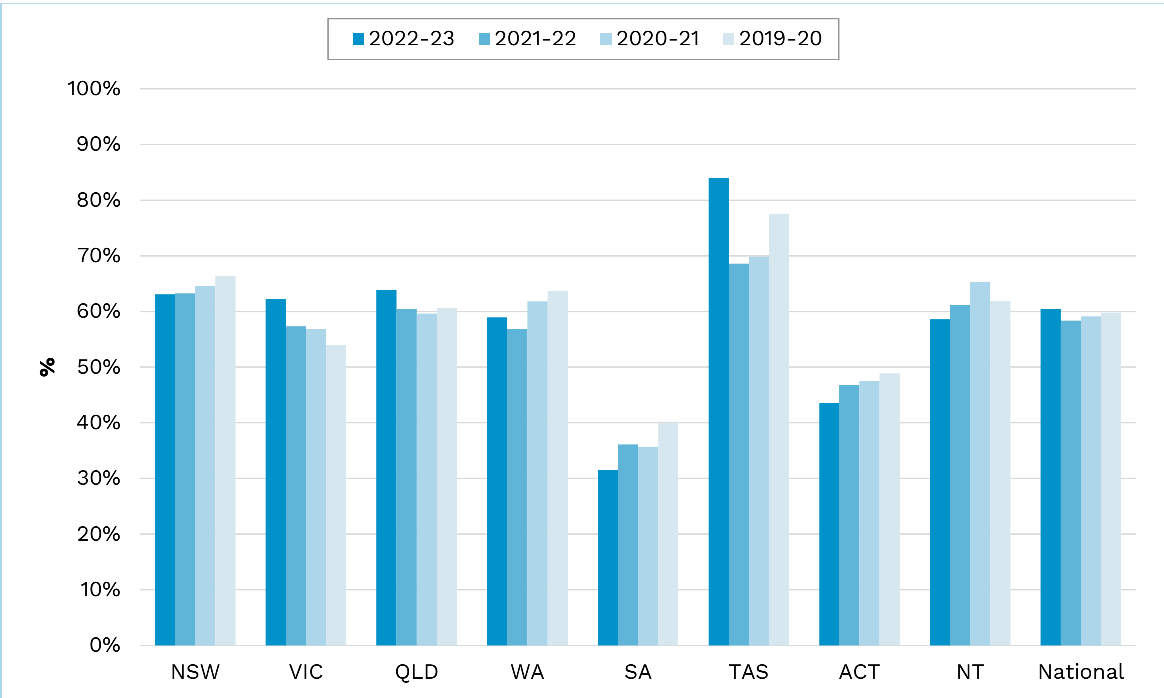
identifying an average state classification. The Commission considers this rationale remains appropriate. Differences between the salaries paid to state and Commonwealth public servants to undertake comparable work are likely to be a minor issue in terms of the overall appropriateness of the assessment.

31 The Commission accepts that different departments in different states have variable proportions of labour costs. It also shares a similar view to New South Wales that in deriving this proportion, it should restrict its focus on data representing administrative costs of operating core head office functions. By design, these costs are likely to be dominated by costs attributable to corporate functions and policy development.

32 The Commission investigated using those classification of functions of government categories from Government Finance Statistics, but the data across states appeared inconsistent, with some states having 100% labour costs for some functions.

33 The Commission has instead used annual report data from First Ministers' departments in all states for the last 4 years.

Figure 1 Percentage of costs that are wage related for First Ministers' departments



Source: Annual reports from the First Ministers' departments for various states.

Note: Grants, intergovernmental transfers and interest expenses have been excluded. Data for ACT represents the Chief Minister, Treasury and Economic Development Directorate.

34 The First Ministers' departments are primarily a non-service delivery function of each state and part of the core head office functions included in the assessment. The proportion of expenses that are employee related are approximately 60% nationally, supporting the Commission's estimate of the labour intensity of administration.

35 In small states, a high proportion of departmental expenses relate to the core concept of administrative scale. In large states, this is a lower proportion. The

absence of any evident relationship between state size and labour intensity of First Ministers' departments suggests that both administrative scale driven expenses and service delivery scale driven expenses have similar labour intensity.

36 Higher non-wage related costs for South Australia were driven by substantial investments in IT, analytics and communications services over this period.

37 The Commission considers that using Government Finance Statistics for all state functions is more appropriate than selecting specific government departments, such as First Ministers' departments. It considers the use of First Ministers' departments data to be a validation of its current approach, rather than a superior approach.

Commission draft position

38 The Commission proposes not to change the 60:40 wage cost to non-wage cost ratio in administrative scale expenses.

Diseconomies of large scale administration

39 Referencing academic literature, New South Wales and Victoria said that large states face diseconomies of scale in administration. They said that assessing unavoidable fixed costs but not assessing unavoidable costs arising from large populations is an asymmetrical approach favouring smaller states.

40 New South Wales and Victoria referred to a paper by Chan and Petchey (2024)[2], which argues that states with larger populations have higher costs per capita attributable to congestion.

Commission response

41 The Commission accepts the New South Wales proposition that, relative to smaller states, larger states often have more agencies, more complicated organisational structures, a larger number of senior executives and higher paid senior executives. This increased complexity is captured by the Commission's current model of a linear relationship of service delivery. This reflects that a large state needs more teachers than a small state, and more senior bureaucrats. However, to identify diseconomies would mean that New South Wales (with 17 times the population of the ACT) needs more than 17 times the number of senior bureaucrats. The Commission has seen no conceptual case or evidence for this.

[2] F. Chan and J. Petchey, *The Cost of Congestion for State and Local General Government Services in Australia*, The Australian Economic Review, 2024, vol. 00, no. 00, pp. 1–21, DOI: 10.1111/1467-8462.12543.

Box 1 State population and expenses

The administrative scale assessment considers the relationship between population size and costs of administration. There is the broader question of the range of mechanisms that may influence the relationship between total expenses per capita and population size.

The Commission considers there is a conceptual case that large cities can drive higher per capita costs in service delivery. For example, it assesses needs relating to population density in the transport assessment. There is also a conceptual case in the justice assessment, the evidence for which will be considered by the Commission when it analyses state data (see Justice chapter).

Chan and Petchey (2024) argued that that the complexity of the entire system increases with population, and that an additional 10,000 people in either Sydney or Byron Bay increases the complexity of the New South Wales government system, such that costs per capita increase.

Chan and Petchey (2024), argued that spending per capita increases with increasing state populations. This was based on a finding that the national total state and local government expenditure per capita rose between 1983 and 2024. With Australia's population growing over this period, they found a correlation between higher population and higher costs per capita. Assuming over this period governments "maintain[ed] the per person benefit provided", they found a relationship consistent with increases in population driving a reduction in efficiency, or diseconomies of large scale due to increased congestion.

Commission draft position

42 The Commission proposes not to assess diseconomies for large administrative systems for the 2025 Review. It will continue to examine the conceptual case and evidence for the range of mechanisms that may influence the relationship between total expenses per capita and city or total state population size.

Draft 2025 Review assessment method

43 Table 1 shows the proposed structure of the 2025 Review administrative scale assessment.

Table 1 Proposed structure of the administrative scale assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Administrative scale	Minimum size of administration	Recognises that there are fixed costs of administering a state, that do not vary with the size of the state	No
	Wage costs	Recognises the differences in wage costs between states	No

Indicative distribution impacts

44 No method changes are proposed for this assessment.

Wage costs

Overview

1 On 20 June 2023, the Commission issued a consultation paper on the wages assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method. The Commission then engaged Professor Alison Preston to provide advice on the assessment. On 27 September 2023, it issued an addendum, incorporating its response to Professor Preston's paper.

2 In both papers, the Commission proposed changes to the 2020 Review assessment method.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here for the consultation paper and here for the addendum.

Consultation questions

Q1. Do states agree on continuing to use private sector wages as a policy neutral proxy for the market pressures faced by public sector employers?

State views

5 States had mixed views. New South Wales, Western Australia, the ACT and the Northern Territory supported using the proxy. Queensland, South Australia and Tasmania did not support using the proxy. Victoria expressed concerns about the conceptual basis and policy neutrality of the proxy, but supported its use provided the discount is maintained.

6 New South Wales said that the private sector responds to similar drivers as the public sector. It noted that there is a reasonably low influence of public sector employers on private sector wages, allowing its use as a proxy.

7 Victoria raised concerns that in states with large public sectors, public sector wage levels could significantly influence private sector wage levels. Victoria also questioned some of the factors listed by the Commission as non-policy drivers of regional differences in wages but did recognise climate as one such factor.

8 Queensland said that there is national competition for labour in specific public sector occupations, and that competition between states is much more significant than competition between the public and private sectors for such workers. During the Commissioners' state visit, Tasmanian officials also made the case that healthcare workers are recruited from national and international labour markets. However, Victoria questioned whether states significantly compete with each other for workers, quoting analysis of the Household Income and Labour Dynamics in Australia survey showing low interstate migration associated with job changes.[1]

9 Queensland said that the private sector proxy is not appropriate, as public sector wages may be more influenced by factors such as 'national sectoral conditions and shortages for skilled workers that are predominantly public sector employees', rather than geographic factors. It also said that the relevant market for many public-sector occupations is the national labour market for these occupations. South Australia also said that private sector wage movements are primarily influenced by local and national sectoral conditions rather than the broader local labour market.

10 Victoria said that the Commission's model, rather than capturing differences in wages for comparable employees, does not fully control for differences in state labour markets. The apparent high wage costs in Western Australia and the ACT may reflect the prevalence of high wage industries in these states.

11 South Australia was concerned with the interstate comparability of employees, stating that wage differentials likely reflect differences in 'responsibilities, differences in employment status (e.g. tenure), timing differences from when pay adjustments take effect, the impact of non-wage benefits and other policy choice differences'.

12 Tasmania pointed to differences in public and private sector wage differentials as well as differences in labour market composition as evidence that the underlying geographic wage pressures do not equally affect the public and private sector. Tasmania said that this may result in underestimation of public sector wage pressure differentials and does not appropriately reflect recent wage movements.

Commission response

13 The Commission recognises that public sector wage setting can indirectly affect private sector wages, and that this effect is likely to be more pronounced in states with relatively large public sectors. Notwithstanding this relationship, a private sector proxy results in less policy contamination than any direct measure of public sector wages.

14 Regarding Victoria's reservations about the identification of non-policy drivers of interstate wage differences, the Commission's model does not attempt to quantify

[1] RBA (Reserve Bank of Australia), Labour Market Turnover and Mobility, RBA, 2012, accessed 14 February 2024.

individual drivers. As long as there are drivers of differences in wages between states beyond causes that are controlled for in the model, the total effect of these drivers will be reflected in the state regression coefficients. Victoria acknowledged that such drivers exist.

15 States compete for labour in both the local private sector market and national and international markets. Analysis using the Australian Census Longitudinal Dataset shows that over 25% of public sector workers in 2011 who were still employed in 2016 had switched to the private sector.[2] Where national labour markets exist, the conceptual validity of the assessment and the proxy measure only require that some factor beyond state control (such as cost of living or climate) affects worker relocation decisions and wage negotiations in both the public and private sectors. When workers choose to move between jurisdictions, they consider these factors in addition to wages. There is no evidence that factors like cost of living or climate are weighted differently by workers in a particular sector or industry.

16 The Commission agrees with Queensland that national sectoral conditions and shortages for skilled workers in certain occupations is likely to have a bigger influence on the wage paid to some public sector employees than geographic differences. Nationally consistent sectoral/occupational effects are already controlled for through industry/occupation variables in the regression. The wage costs assessment measures the residual differences that cause states to face different employee costs in the national labour market. While geography is not the primary influence on a person's salary, it is an influence.

17 For instance, on average, workers will demand a higher wage to work in a remote community than in a metropolitan area. This is consistent with the above-average wage cost factor measured in the Northern Territory. The prevalence of high-wage industries in states such as Western Australia or the ACT is likely to be accompanied by a higher cost of living, increasing local wage pressures for all industries.

18 The Commission sees no conceptual basis to expect a systematic difference between the responsibilities or non-wage benefits of similar private sector employees in different states. Measured wage differentials should not reflect differences in employment status, education, tenure and experience, as these variables are controlled for in the model. Timing differences in pay adjustments for private sector employees should balance out on average.

19 The Commission recognises different interstate differentials in the public and private sectors. This may be due to differences in the responsiveness of the public and private sectors, labour markets of different industries varying, and state wage setting policies directly affecting public sector wage levels. There is also imperfect

[2] Australian Bureau of Statistics (ABS), Australian Census Longitudinal Dataset (ACLD) [TableBuilder], ABS website, 2016, accessed 5 March 2024.

measurement in both sectors. These issues do not preclude the proxy being an unbiased estimate of state-specific pressure on public sector wages.

20 While noting that public and private labour markets are distinct, Professor Preston (who the Commission engaged as a consultant to review the wages assessment) recommended the continued use of relative private sector wages as a policy neutral proxy for public sector wage costs.

Commission draft position

21 The Commission proposes to continue to use relative private sector wage levels as a proxy for relative public sector wage costs.

Q2. Do states agree that the Commission should continue to use all private sector employees to proxy for public sector drivers of costs?

State views

22 Most states supported the use of a private sector sample including males and females. South Australia said that female private sector workers are more representative of pressures on public sector salaries than male private sector workers. It suggested using a weighted average of female and male estimates, combined in proportion to their share of the public sector.

23 Tasmania and South Australia also recommended the Commission consider removing industries with little relevance to the public sector, such as mining.

Commission response

24 The Commission accepts the conceptual case that the accuracy of the model might be improved by either selecting a sub-sample of private sector workers more closely resembling the public sector workforce, or by reweighting the sample to better reflect the public sector profile. However, the ABS Characteristics of Employment Survey does not have a sufficiently large sample to support these options. The Commission considers that the reduction in sample size from a female-only model would outweigh any potential gains in accuracy, particularly given the objective to mitigate volatility.

25 The Commission developed a model in which private sector workers were reweighted by gender, to reflect the gender breakdown of the public sector workforce. As with limiting the sample to females only, reducing the weights of males relative to females in the sample reduced the explanatory power of the model and increased the standard errors of the estimates, although not to the same extent as the female-only model. The coefficients produced by the model were no better correlated to the public sector coefficients than when using the unadjusted weights in the private sector sample.

26 Weighting the sample to reflect the size of a group in the public sector has some conceptual appeal. However, to do this by industry would result in a very small effective sample and one dominated by private sector health and education industries, which are likely to be more affected by wage setting policies of the state government.

27 The Commission also investigated a model in which private sector workers were weighted according to their industry. Weighting to the actual industries of employment in the public sector would drastically reduce the effective sample, as outlined above. Instead, a proxy measure of substitutability across industries was applied.

28 Using the Australian Census Longitudinal Dataset, the Commission examined the numbers of public sector workers in 2011 who worked in each private sector industry in 2016, among workers who did not change their level of qualification between 2011 and 2016.[3] These data were used as a proxy for how substitutable workers in each of those industries are with public sector workers. A new model was built after reweighting workers by industry based on this measure.

29 Former public sector workers are most under-represented in the manufacturing and retail trade industries. Private sector workers in these industries had their weight reduced to one-third of the weight they have in the standard model. Workers who left the public sector were most over-represented in the education and training industry. Private sector workers in this industry were given 2.5 times the weight they had in the standard model. While this approach is more representative of public sector type workers, the reduction in the effective sample more than offsets this gain. The reduction in effective sample introduced sufficient random error to drown out any potential gains in accuracy, and standard errors were raised considerably.

30 The average standard errors of estimates of state relative wages using the alternative weighting methods tested by the Commission are shown in Figure 1.

[3] The 2016 to 2021 longitudinal census is not yet available.

Figure 1 **Average standard errors on state relative estimates using alternative sample weighting methods**

Note: Average standard errors over 5 years of annual estimates 2018–2023, using the Commissions proposed 2025 Review model specification.

Source: Commission calculations using Characteristics of Employees survey data and Australian Census Longitudinal Data.

31 The Commission does not consider that the added complexity of creating custom weights in the survey data is justified. Reducing the sample by omitting individuals based on their industry, occupation or gender is likewise hard to justify and greatly reduces the reliability of estimates.

Commission draft position

32 The Commission does not propose to exclude groups from or apply custom weights to the private sector employees survey data.

Q3. Do states support the continued use of the Characteristics of Employment survey data?

State views

33 Most states supported the use of the ABS Characteristics of Employment Survey. Several states encouraged investigation into other data sources for the purposes of validating the results, or as potential alternative assessment methods.

34 Tasmania expressed concern over the Tasmanian sample size resulting in high standard errors. It also drew attention to variables concerning workplace size and employee health not being available in the Characteristics of Employment Survey, and considered their absence may bias state coefficients.

35 Several states expressed an interest in investigating the use of alternative data sources. Victoria suggested the Household, Income and Labour Dynamics in Australia Survey, Victoria and Queensland suggested the Person Level Integrated Data Asset.[4]

36 Western Australia expressed concerns that a household survey, such as the Characteristics of Employment Survey, is significantly affected by measurement error. It said this may be alleviated by an employer survey such as Average Weekly Earnings. It said that the reduced range of variables that can be controlled for would be more than offset by the increased quality of labour cost data. The ACT suggested considering the Monthly Employee Earnings and Weekly Payroll Jobs, or the Linked Employer-Employee Database.

Commission response

37 For use in the wages assessment, a dataset should:

- have a large sample size in all states to estimate all state coefficients with reasonable certainty
- have sufficient information about factors that determine differences in wages between individuals
- reliably capture the data it purports to capture.

38 Each available dataset has relative strengths and weaknesses in these domains. The Commission needs to identify the data source with the best overall combination of the above attributes. Its analysis has found the following:

- The Household, Income and Labour Dynamics in Australia survey allows for control for endogeneity through a range of employee information, but it has an extremely small sample size. For example, it follows the same sample of fewer than 50 private sector employees in the Northern Territory every year. By comparison, the Characteristics of Employment Survey creates independent samples of over 500 private sector employees in the Northern Territory each year.
- The Person Level Integrated Data Asset (or other linked administrative datasets) has a much larger sample than survey-based data, however the quality of the data is lower. It would be necessary to relate total income earned in a financial year (as reported to the Australian Taxation Office) to the occupation, hours and other attributes described for one week in August in the census. This weak link between the outcome of interest (annual income) and the predictors (employment status and occupation at one point in time) reduces the precision of the model.
- Employer-based collections, such as Average Weekly Earnings, Single Touch Payroll data, or the Linked Employer-Employee Dataset, may provide a more precise estimate of labour costs. However, they only allow limited controls such as industry and hours. This means they cannot adjust for key differences in state labour markets.

[4] Formerly known as the Multi-Agency Data Integration Project (MADIP).

39 For validation purposes, the Commission has built models using the Person Level Integrated Data Asset and the Household, Income and Labour Dynamics in Australia survey data. While it does not see these as alternative datasets for the Commission's assessment, they help to provide confidence in the patterns found in the Characteristics of Employment Survey and can assist in identifying any bias from using this dataset.

40 The models using the alternative data sources all show the same basic pattern between states. Switching to an alternative data source would not change the general ordering of the states but would increase the quantum of the effects for smaller states, due to a reduced ability to control for confounding variables in the alternative data sources identified.

41 Analysis of Tasmania's concerns with potential bias due to omission of workplace size and employee health controls has been conducted using the Household, Income and Labour Dynamics in Australia survey data.

42 Including an index of self-reported health in a model using the Household, Income and Labour Dynamics in Australia survey data did improve the ability to predict individual level wages, however it had no consistent effect on any state coefficients. There is no evidence to suggest that there is any bias in the state estimates due to the health of the workforce in different states. This is consistent with poor health reducing a person's earnings. While some states have poorer average health outcomes than others, these health differences are largely explained by other variables in the model, such as lower educational attainment, fewer hours worked and lower skilled occupations.

43 There is a documented effect of workplace size on wages.[5] Workers in small workplaces have less opportunity for advancement, and thus tend to have lower wages than comparable workers in larger workplaces. Smaller workplaces also provide less opportunity for specialisation and reduced ability to match labour with capital, resulting in lower productivity and reduced wages.

44 Including a coefficient of workplace size in a model using the Household, Income and Labour Dynamics in Australia survey data led to increased explanatory power of the model and consistently moved the coefficient for one state (Tasmania). While the level of movement is extremely small relative to the reliability of the limited survey data and is never statistically significant, it does represent a material difference for Tasmania. Unfortunately, the Household Income and Labour Dynamics survey does not have sufficient sample size to reliably measure such effects, especially for smaller states, so these results must be treated with caution.

[5] W. OI and T. Idson, 'Chapter 33, Firm Size and Wages', Handbook of Labor Economics Volume 3, Elsevier, 1999.

45 If this variable existed in the Characteristics of Employment Survey and showed the same relationship to state coefficients as it does in Household, Income and Labour Dynamics in Australia survey data, then the Commission could include it in its model.

46 The Commission has built models in the Person Level Integrated Data Asset and tested the inclusion of a proxy for workplace size. There is no material effect of including workplace size for any state other than the Northern Territory in those data. This result does come with a caveat, as the employee and work characteristics in the model all come from the 2021 Census week, when many workplaces were affected by COVID-19 emergency measures.

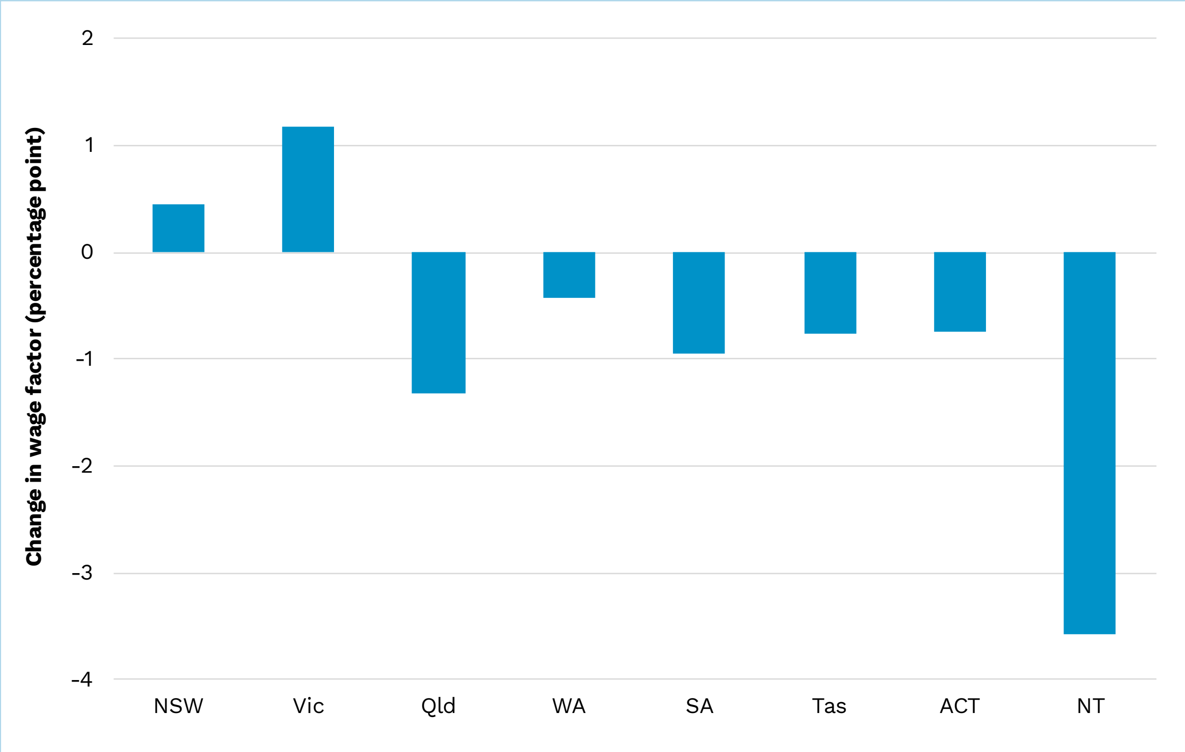
47 The balance of evidence is not compelling that there is a consistent bias in the model due to the omission of workplace size as an explanatory variable. However, the possibility of such bias cannot be ruled out, and the Commission will continue to investigate this issue after the 2025 Review as further data become available.

48 The Commission considered using Average Weekly Earnings in the 2020 Review. It concluded that, without controls for basic human capital underpinning the Mincer model, a model based on Average Weekly Earnings would be overly affected by omitted variable bias.[6] Some differences in labour market composition can be controlled for by industry in an Average Weekly Earnings based model. However, differences within industries between states due to workforce characteristics cannot be controlled for using Average Weekly Earnings data.

49 To evaluate the bias present in a model using Average Weekly Earnings data, the Commission constructed a model in the Characteristics of Employment Survey, controlling for only the information available in Average Weekly Earnings (gender, industry, and basic hours controls). This model resulted in lower overall model fit, higher standard errors on state coefficients and systematically different estimates to the proposed model. This systematic difference in state estimates indicates the existence of systematic bias due to omitted variables in the model. Excluding variables in the Characteristics of Employment Survey, but not in the Average Weekly Earnings, would systematically increase the estimated wage coefficients for New South Wales and Victoria and reduce them for all other states (Figure 2).

[6] Chapter 27, paragraph 75, 2020 Review Report.

Figure 2 Bias introduced by removing variables not in ABS Average Weekly Earnings



Source: Commission calculation.

Commission draft position

50 The Commission proposes to continue to use the ABS Characteristics of Employees survey as the data source to measure differences in wage pressures between states.

Q4. Do states agree the Commission should use hourly wages rather than weekly wages as the dependent variable?

State views

51 Most states did not express concerns with the use of hourly wages rather than weekly wages. Following advice from a report it commissioned, Queensland preferred weekly wages for 3 reasons.[7]

- Hourly wages may lead to spurious correlation, especially if measures of hours or other variables correlated with hours of work are included as regressors.
- The use of hourly wages is better suited to samples in which workers vary their hours of work, while weekly wages are more appropriate where workers' hours are comparable. The rationale of the assessment is to measure differences in the earnings of comparable private sector workers, which is better aligned with the 2020 Review approach (estimating weekly wages)

[7] C. Rose, L. Yu and A. Rambaldi, 'Modelling Public Wages Expenses Across States and Time Using Survey data', University of Queensland, 2023.

- A switch to hourly wage from weekly wage decreases the explanatory power of the model.

Commission response

52 A standard approach in the literature is to estimate a weekly wage when no information on hours worked is available.[8] This is usually accompanied by a restriction to full-time workers, which ensures workers are comparable along the lines of hours of work. Using weekly wages is not favoured when detailed information on hours of work is available, since it reduces sample size significantly and will produce a result that is not informative of wage differences for part-time workers (who are prevalent in the public sector).

53 As discussed in the wages consultation paper, the decrease in explanatory power (R-squared) associated with a switch to hourly wages is not a real reduction in explanatory power. Weekly wages are much more variable than hourly wages, and a great deal of this variation can be directly explained by hours worked per week. Switching to hourly wage removes the variation that is explained directly by hours worked, so while the proportion of variation explained is reduced, the total unexplained variation remains the same. This change results in identical estimates on all coefficients other than logarithm of hours.

54 The report commissioned by Queensland said that if state of residence is correlated with hours of work, this may bias state coefficients.[9] This bias may affect a model predicting hourly wage as a ratio of weekly pay to hours worked, such as the proposed model, but not a model predicting weekly wage, such as the 2020 Review model.

55 The Commission tested this concern by including hours recorded on payslip in the proposed model in a form that makes it functionally equivalent to a weekly wage model. Inclusion of this variable did not improve the model fit, or substantively change state coefficients. This indicates that there is no bias to the state coefficients arising from the use of hourly wage.

Data concerns

56 Using hourly wage as the outcome variable requires measuring hours of work using the number of hours recorded on each individual's payslip rather than their usual hours. In the 2021 survey data, first used in the 2023 Update, there were many workers stood down due to COVID-19 lockdown measures, and the link between usual hours and weekly wages was broken. In that situation the Commission used hours recorded on payslips to remove the bias. Large scale weather events, strikes

[8] A. Preston, Wage Costs Consultant Report, Commonwealth Grants Commission, 2023.

[9] R.A. Kronmal, 'Spurious Correlation and the Fallacy of the Ratio Standard', *Journal of the Royal Society Series A*, 1993, 156(3):379-392.

or plant shutdowns could also lead to similar biases. An advantage of the new approach is that estimates will be robust to disruptions of this nature.

57 In the 2020 survey data however, there was a different bias due to stage 4 COVID-19 lockdowns in Melbourne combined with JobKeeper payments. This resulted in many workers being paid their usual salary, while their payslips showed reduced working hours. Under the weekly wage model with usual hours the JobKeeper bias was removed by removing workers earning exactly $750 per week, as for other workers their weekly wage reflected their usual hours of work.

58 Under the hourly wage model there is no easy way to remove the bias arising from this combination of JobKeeper payments and lockdowns. The relative state hourly wage estimates from the 2020 survey data are extreme outliers from the average, with a known cause of bias. The Commission proposes to remove the 2020 survey data from the methods used to estimate relative state wages.

Commission draft position

59 The Commission proposes to use hourly wages rather than weekly wages as the dependent variable, and to disregard the biased estimates from 2020 when constructing relative state wage costs.

Q5. Do states support including usual hours of work in the model as 3 categories, part-time, full-time and more than full-time hours?

State views

60 No state disagreed with this approach, however several asked for further justification. The ACT said that full-time and long-hours workers may have similar earning potential and therefore only a part-time control is needed.

61 Queensland did not oppose investigation into this method. However, it questioned the conceptual basis for an hours control - in particular, the notion that an individual's hourly pay may depend on their hours of work.

Commission response

62 There are conceptual reasons for such a control. For example, an individual who usually works fewer hours is likely to accrue lower job-specific human capital with the same level of tenure, and therefore, hourly earnings may increase with hours of work. Conversely, an individual who regularly works overtime is likely to experience more rapid human capital accumulation.

63 Part-time and long-hours effects have been identified in the literature.[10] These effects display a similar pattern to coefficient estimates from the model, where part-time workers earn a lower hourly wage and long-hours workers earn a higher wage.

64 The ACT's concern that hourly wages may not vary between full-time and long-hours workers is not supported by the data. The coefficients for these variables differ significantly, indicating that these workers have significantly different wage levels, after controlling for all other differences.

Commission draft position

65 The Commission considers that hours worked can affect a person's hourly wage, and proposes to include three categories of usual working hours in the model to capture this.

Q6. Do states support replacing imputed work experience and imputed work experience squared with 5-year age groups?

State views

66 No state disagreed with this approach. Queensland noted differing opinions on the best functional form between the Commission's proposed approach, the Commission's consultant's report, and its consultants from the University of Queensland as rationale for a discount.

Commission draft position

67 The Commission proposes to replace work experience and work experience squared with 5-year age groups. Uncertainty regarding the ideal functional form is addressed in the Commission's draft position on responses to question 10.

Q7. Do states agree with the Commission's proposed criteria for including control variables in the model?

State views

68 Most states agreed with this approach. New South Wales agreed that a variable must change state coefficients and have a strong conceptual basis. However, it disagreed that it must improve overall fit and decrease standard errors of state coefficients.

69 Victoria agreed with the criteria, but did not consider that a sufficient conceptual case for each change has been demonstrated. It requested analysis, such as log-likelihood tests and information criteria, to ensure the model is not overfitted.

[10] A. Bick, A. Blandin and R Rogerson, 'Hours and Wages', *The Quarterly Journal of Economics*, 2022, 137(3):1901-1962.

70 South Australia said that the criteria must be weighed against each other as a trade-off, rather than a list of requirements that must be completely satisfied.

Commission response

71 The Commission provided diagnostic tests, including the Akaike information criterion and the Bayesian information criterion (Attachment B of the Addendum to wages consultation paper). The Commission has not proposed the addition of variables that are shown to increase the risk of overfitting.

72 The Commission agrees with South Australia that these criteria must be weighed against each other. For instance, a variable with a strong conceptual basis that changes state coefficient estimates and decreases standard errors may still be included in the model even if it does not improve the overall model according to the information criteria.

73 The motivation for considering both movement in state coefficients and decreased standard errors is to balance the need to eliminate omitted variable bias, and the associated risk of overfitting. The selected conditions must accurately capture this trade off.

74 The Commission and states agree that decreased volatility is an important goal in model selection. Omitting conditions 3-4 would disregard volatility or overfitting completely. Therefore, the Commission proposes to continue to evaluate its model with reference to overall fit and state standard error, to appropriately mitigate the risk of overfitting resulting from a more complex model.

Commission draft position

75 The Commission proposes to maintain its suggested criteria for including control variables in the model, and to weigh these criteria against each other when considering a variable that does not strictly meet all criteria.

Q8. Do states support using a less complex model by replacing industry group categories with industry division categories and removing the interaction terms with gender and every other independent variable?

State views

76 Most states agreed, but New South Wales said that the exclusion of detailed industry categories leads to omitted variable bias, and detailed industry categories should be included in the model. New South Wales argued that a move to a model that includes detailed industry categories leads to material distributional effects.

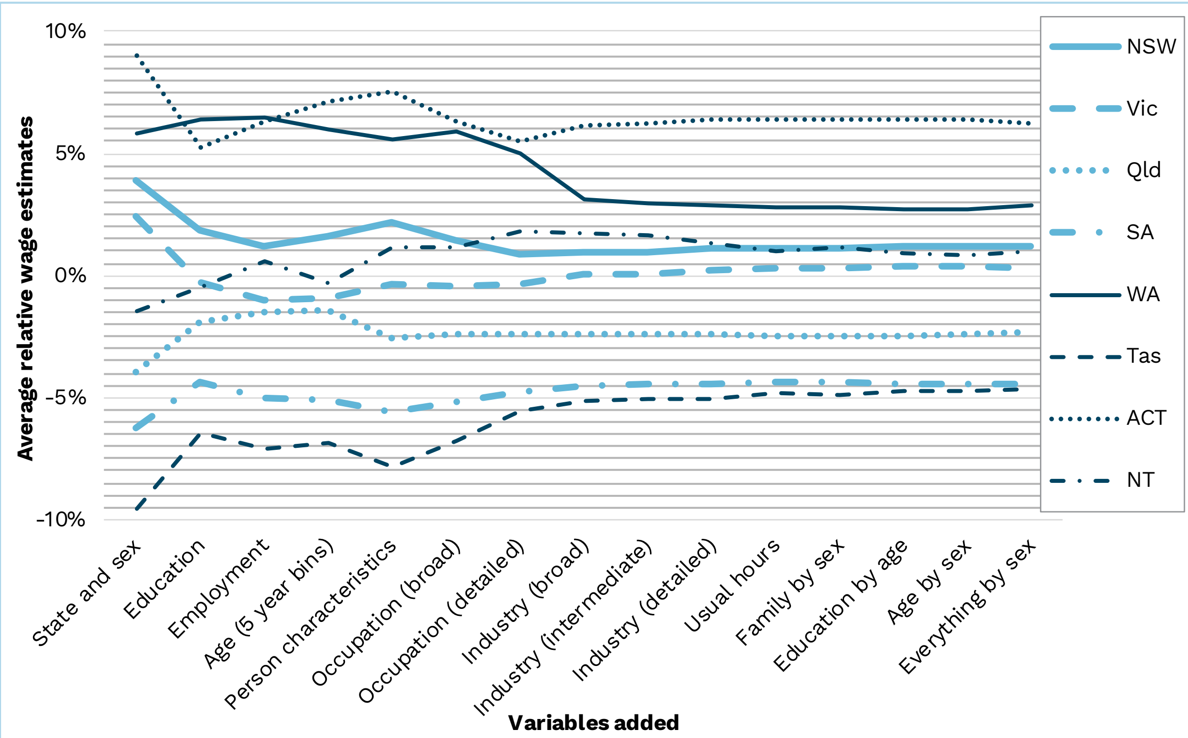
77 Victoria suggested that occupation could be specified at a lower level of detail, in line with the specification of industry.

Commission response

78 Using a pooled sample from 2018 to 2022, the Commission developed stepwise models, progressively adding variables in the order suggested by New South Wales.

79 Including detailed industry categories at any stage in the stepwise regression will increase the standard errors for state coefficients, implying the introduction of random variation in the estimates. By including this element earlier in the stepwise regression, valuable information using the family characteristics and usual hours of work would also be disregarded in the selected model. Figure 3 shows average estimates from these models, which show only minimal deviation after New South Wales' proposed model (the vertical blue line).

Figure 3 Average state coefficients when including additional control variables in the regression model (2018–22)



Notes: Horizontal gridlines represent the approximate amount of change that would materially affect the GST distribution for an average state.
Employment includes a permanent/casual indicator and tenure in current job.
Person characteristics include marital status, migrant status and having dependent children.
Family by sex allows for marital status and dependent children to have a different effect on male and female wages.
Individuals working fewer than 5 hours or 60 or more hours are excluded from the model.
Source: Commission calculation.

Table 1 Average standard errors of state coefficients when including additional control variables in the regression model (2018–22)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Average
State and sex	0.0102	0.0102	0.0107	0.0116	0.0129	0.0145	0.0237	0.0210	0.0144
Education	0.0095	0.0097	0.0100	0.0108	0.0120	0.0137	0.0225	0.0205	0.0136
Employment	0.0093	0.0088	0.0095	0.0110	0.0117	0.0130	0.0223	0.0199	0.0132
Age (5 year bins)	0.0092	0.0088	0.0095	0.0106	0.0119	0.0130	0.0213	0.0197	0.0130
Person characteristics	0.0089	0.0087	0.0095	0.0103	0.0114	0.0124	0.0201	0.0185	0.0125
Occupation (broad)	0.0088	0.0081	0.0088	0.0101	0.0107	0.0119	0.0190	0.0180	0.0119
Occupation (detailed)	0.0085	0.0081	**0.0085**	0.0101	0.0100	0.0116	**0.0175**	0.0172	0.0114
Industry (broad)	0.0084	0.0082	0.0086	**0.0098**	0.0098	0.0116	0.0177	**0.0169**	**0.0114**
Industry (intermediate)	0.0084	0.0083	0.0088	0.0098	**0.0095**	0.0113	0.0178	0.0172	0.0114
Industry (detailed)	0.0084	0.0083	0.0090	0.0102	0.0099	0.0116	0.0182	0.0176	0.0117
Usual hours	**0.0083**	0.0082	0.0090	0.0101	0.0098	0.0116	0.0181	0.0178	0.0116
Family by sex	0.0083	0.0082	0.0090	0.0102	0.0098	0.0115	0.0181	0.0177	0.0116
Education by age	0.0084	**0.0080**	0.0091	0.0103	0.0098	**0.0113**	0.0180	0.0176	0.0116
Age by sex	0.0084	0.0080	0.0090	0.0103	0.0098	0.0114	0.0181	0.0177	0.0116
Everything by sex	0.0087	0.0083	0.0093	0.0105	0.0100	0.0116	0.0189	0.0178	0.0119

Notes: Minimum average standard errors for each column are in bold.
See notes to Figure 1.

Source: Commission calculation.

Table 2 Average model fit statistics of regression models including additional variables (2018–22)

	R^2	R^2 (adj)	log Likelihood	AIC	BIC	States with consistent movements
State and sex	0.0198	0.0193	-12,863	25,747	25,823	
Education	0.1345	0.1336	-11,878	23,790	23,920	6
Employment	0.1832	0.1823	-11,422	22,881	23,027	7
Age (5 year bins)	0.2402	0.2389	-10,853	21,763	21,985	5
Person characteristics	0.2592	0.2575	-10,652	21,378	21,661	7
Occupation (broad)	0.3116	0.3097	-10,075	20,237	20,574	5
Occupation (detailed)	0.3563	0.3503	-9,545	19,385	20,513	4
Industry (broad)	0.3671	0.3605	-9,411	19,152	**20,418**	**6**
Industry (intermediate)	0.3750	0.3655	-9,311	**19,098**	20,917	0
Industry (detailed)	0.3870	0.3711	-9,160	19,114	22,158	2
Usual hours	0.3893	0.3735	-9,129	19,057	22,117	4
Family by sex	0.3913	0.3754	-9,105	19,013	22,087	2
Education by age	0.3993	0.3810	-9,000	18,935	22,522	1
Age by sex	0.4016	0.3829	-8,969	18,894	22,557	2
Everything by sex	**0.4232**	**0.3894**	**-8,682**	19,101	25,757	2

Notes: Optimal model based on each statistic is in bold.
"States with consistent movements" counts the number of state coefficients which move in a consistent direction in all years when including additional control variables in the regression model.
See notes to Figure 1.
Source: Commission calculation.

80 The addition of "Industry (detailed)" immediately following "Industry (broad)" results in an increase in standard errors for all states, and on average (Table 1). This also results in a sharp increase in Bayesian Information Criterion, a statistic designed to penalise overfitting (Table 2). In this series, both Bayesian Information Criterion and average standard errors are minimised by the model "Industry (broad)".

81 Under the proposed criteria for evaluating models, detailed industry is supported by a strong conceptual case and results in some movement in state coefficients. However, these changes are inconsistent in direction, resulting from the higher uncertainty. As such, the Commission does not believe that this is a reliable result, or that the inclusion of detailed industry is justified.

82 With this stepwise ordering, the selected model under the proposed criteria would be "Industry (broad)". This ordering prevents the addition of further variables such as "Usual hours" without the inclusion of detailed industry.

83 The Commission notes Victoria's concern that the specification should only include 1-digit occupation controls, to achieve parsimony and avoid overfitting, noting the similar proposed treatment of industry. The Commission proposes to maintain 3-digit occupation controls for reasons outlined in the addendum to the wage costs consultation paper. Detailed occupation has a strong conceptual case for inclusion, moves state coefficients, decreases average standard errors for all states, and

improves average fit based on all fit statistics considered. 3-digit industry did not meet these criteria, and since industry and occupation are separate variables, they do not need to be included at the same level of detail.

Commission draft position

84 The Commission proposes to maintain its ordering of stepwise inclusion of variables in the model and exclude detailed industry controls from the model and remove the gender interaction terms.

Q9. Do states agree with the proposed approach to combine estimates of relative differences in states' wages across years?

State views

85 All states agreed with the proposal to implement a smoothing/pooling method to reduce volatility and improve the reliability of annual estimates. Support for the proposed method was mixed. South Australia and the ACT explicitly preferred the variance-weighted average approach to a pooled approach. The Northern Territory supported the approach, but preferred an implementation that would not lead to revisions (only using data older than the year in question when combining estimates for a given assessment year).

86 Victoria, Western Australia and South Australia were not concerned with the validity of the proposed method, but expressed concerns that the complexity may not warrant its use over the simpler pooled regression approach.

87 New South Wales did not support the proposed approach, instead supporting pooling. It expressed concerns with complexity and said that the differences in standard errors between years are not significant enough that heterogeneous weighting leads to a substantially more reliable estimate. It also expressed concerns with potential revision effects.

88 Queensland similarly did not support the variance-weighted average method, expressing concerns that the weights placed on certain years appear arbitrary and are not transparent. It argued that statistical power is decreased when compared to a true pooling method and expressed concerns that correct standard errors are difficult to compute.

89 Tasmania did not support the variance-weighted average method, expressing concerns that as the series of estimates become longer, estimates become less responsive to current labour market conditions.

Commission response

90 The Commission's proposed approach to smoothing reduces volatility more than using a 3-year pooled sample. This is shown in Table 3. It does this by using a

sample that covers a longer time period than in the 3-year pooled sample, including all the historic estimates back to 2016–17.

Table 3 Magnitudes of GST effects from updating relative state wages under different approaches to smoothing

	Average state			Biggest mover		
	U2022	U2023	U2024	U2022	U2023	U2024
	$pc	$pc	$pc	$pc	$pc	$pc
R2020 methods	46	37	57	112	109	184
Pooled model	34	30	39	129	70	68
Weighted averages	21	9	13	105	24	23

Note: These changes include minor revision effects due to ABS sample reweighting.
Source: Commission calculation.

91 Regarding Tasmania's view that the proposed method compromises contemporaneity, the Commission recognises that estimates become less influenced by newer years of data. However, insofar as wage movements are reflected in the ABS's Wage Price Index, all indexed estimates for a single year are reflective of the relative wage levels for that year.

92 Queensland raised concerns that the proposed approach would reduce statistical power and be somewhat arbitrary. The Commission notes that the proposed approach applied to only 3 years, and without indexation, would produce identical results to the pooled approach. However, using additional years increases the statistical power, and indexation ensures they are contemporaneous.

93 The Commission recognises that the method proposed in the consultation paper would introduce revision effects as each new year of data is used to recalibrate estimates from previous years. To address these concerns about revision effects the Commission agrees with New South Wales and the Northern Territory and will not incorporate newer years of data into previous estimates, avoiding revision effects as new years of data become available.

Commission draft position

94 The Commission proposes to smooth data over time using the proposed method, but not to incorporate newer years of data into earlier estimates to avoid revision effects.

Q10. Do states agree that a 12.5% discount remains appropriate?

State views

95 State views on the appropriate level of discounting were mixed. Victoria agreed that a 12.5% discount remains appropriate, and Queensland agreed that at least a 12.5% discount is appropriate. New South Wales, Western Australia, the ACT and the Northern Territory said no discount is required. South Australia and Tasmania said a 25% discount is appropriate.

96 In the wage costs assessment, the 12.5% discount is due to uncertainty from the model, rather than correcting a systematic bias of state coefficients away from zero. New South Wales said that given no evidence of systematic bias, the reliability of the Characteristics of Employment survey, the extent of econometric controls, and the strength of the private sector proxy, a discount is not warranted.

97 The Northern Territory said that the wages assessment already underestimates differences in cost pressures, which will be made worse by a discount.

98 Western Australia and the ACT said that, as the proposed changes will improve both reliability and volatility, the need for a discount on these grounds would no longer be warranted if these changes are implemented.

99 In supporting the removal of the discount, New South Wales and Western Australia drew attention to Professor Preston's endorsement of the private sector proxy. Western Australia additionally drew attention to New South Wales' consultant Professor Morley's review, which made no criticism of the strength of the proxy.[11]

100 Queensland said that due to issues with the private sector proxy, differing views between the Commission and Professor Preston in the modelling approach, and small sample sizes in the Characteristics of Employment survey, a discount of at least 12.5% remains appropriate.

101 University of Queensland consultants conducted econometric analysis, selecting the largest discount that would not significantly bias state coefficients towards zero in each year. This demonstrated that a discount of 12.5% does not introduce measurable bias.

102 South Australia said that, due to compositional differences between the public and private sectors, differences in outcomes between the sectors and possible differences in remote working between the sectors, the weakness of the conceptual case for the private sector proxy warrants a discount of 25%.

103 Tasmania also said that due to differing private and public sector outcomes, and small sample size, a 25% discount is appropriate. In addition, Tasmania said that the modelling approach may not account for non-geographic biases and said that a 25% discount is applied in the urban transport assessment for a similar level of uncertainty due to the use of a proxy and reliability of data.

Commission response

104 The changes proposed by the Commission are expected to improve the reliability and reduce the volatility of the wages assessment. However, uncertainty from the use of private sector proxy data, as identified in the Commission's consultant's report, remains. This continues to warrant some discounting. The Commission does not

[11] J. Morley, 'Report on CGC Estimates of State-Specific Wage Costs', *The University of Sydney,* 2022.

consider that the strength of the private-sector proxy has weakened such that the size of the discount needs to be increased. On balance, the Commission considers the existing 12.5% discount remains appropriate.

Commission draft position

105 The Commission proposes to maintain a 12.5% discount, reflecting continuing general uncertainty about measurement issues and the use of the private sector wages proxy.

Other issues raised by states

Wage to non-wage costs

106 Victoria raised concerns about the calculation of the proportion of state expenses that are wage related, in particular in the housing, roads and transport assessments.

107 The Commission classifies spending as wage, non-wage or other and calculates wages as a proportion of wage and non-wage costs and extrapolates that to all spending. Victoria said this approach results in an overstatement of the wage proportion of expenses. For example, direct grants to remote communities which subsidise the provision of electricity and water are classified as ‘other’ and hence have an assumed embedded wage cost.

108 State recurrent spending on housing, roads and transport has a very low proportion of wages, largely reflecting the high use of contractors in these areas. Government Finance Statistics (GFS) on the wage proportion in these categories are an unreliable proxy for the overall local wage share. The Commission currently sets the wage share for these categories as equal to the average of all other categories. Victoria said that these components are more capital intensive than the average of other assessments, and as such, should have a lower-than-average wage cost proportion.

109 Victoria pointed to Bureau of Infrastructure and Transport Research Economics data, which suggest local labour costs make up 34% of spending on roads, lower than the 63% average proportion. Victoria requested the Commission remove the adjustment to GFS data or consider alternative data sources for adjustment if GFS data are not satisfactory.

Commission response

110 Expenses attributed as other expenses (neither wage nor non-wage) generally relate to direct grants that are generally for the provision of state type services. For example, a state may give a grant to a not-for-profit to provide services. The Commission considers that in this scenario, the not-for-profit would be expected to face the same wage to non-wage mix and pressures. While this will not be the case in all circumstances, including direct grants as non-wage costs in the calculation of proportions would understate the wage cost proportion.

111 In housing, roads and transport, the majority of expenses in GFS data are attributed as other expenses. This generated uncertainty about the actual wage proportion of expenses in these categories. In the 2020 Review method the wage proportion of these categories was extrapolated as the average proportion of all other categories.

112 The Commission has analysed ABS national account Input-Output table data. Local labour makes up less than the average proportion in housing, roads and transport.

113 Instead of imputing the categories with higher levels of unattributed spending, the Commission proposes to impute unattributed spending in all categories based on the ratio of total known wage and non-wage spending, just as it does for other categories.

114 The comparison of these methods can be seen in Table 4. By splitting the unattributed expenses in each category by the total known wage to non-wage proportions, all categories move closer to the average. This effect is more pronounced in categories with a higher proportion of unattributed expenses.

Table 4 Wage costs by category, 2018–19 to 2021–22 averages

	Wage	Non-wage	Unattributed	Wage ratio	R2020 method	Proposed method
	$m	$m	$m	%	%	%
Schools	33,969	12,108	2,551	73.7	73.7	73.0
Post-secondary education	3,587	2,809	1,430	56.1	56.1	56.7
Health	55,159	30,509	2,920	64.4	64.4	64.2
Housing	628	1,144	3,203	35.4	62.5	50.7
Welfare	3,947	6,939	12,191	36.3	36.3	48.4
Services to communities	3,331	4,511	4,394	42.5	42.5	48.5
Justice	17,143	7,137	529	70.6	70.6	70.4
Roads	1,874	5,009	3,053	27.2	62.5	37.1
Transport	1,196	8,028	6,323	13.0	62.5	31.8
Services to industry	3,087	3,448	9,376	47.2	47.2	54.3
Other expenses	10,536	10,955	6,931	49.0	49.0	51.5

Source: Commission calculations using ABS Government Financial statistics data.

Commission draft position

115 The Commission proposes to treat all categories in the same manner, and to estimate wage costs by applying the ratio of overall total wage to non-wage expenses to the other expenses in every category.

Indicative distribution impacts

116 The impact on the GST distribution in 2024–25 from the proposed method changes is shown in Table 5. This includes the effects of the amended regression model, the smoothing of annual estimates and the change to the way the wage/non-wage split is calculated from the GFS data.

117 To avoid double counting of method changes in the analysis in this report, changes to the wage costs assessment have not been included in the changes shown in the category specific chapters.

Table 5 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	807	-217	-736	813	-639	-322	176	118	1,914
U2024 using draft R2025 methods	678	21	-719	466	-517	-215	202	85	1,452
Effect of draft method changes	-129	238	17	-348	122	107	26	-33	510
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	95	-31	-131	275	-338	-555	366	459	70
U2024 using draft R2025 methods	79	3	-128	157	-274	-371	420	331	53
Effect of draft method changes	-15	34	3	-118	64	184	54	-129	19

Note: This includes the effects of applying the new wage assessment methods to all expense categories, after other method changes have been applied within each category.

The GST pool and population estimates are equivalent to those used in the 2024 Update.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.

Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

The impact of the U2024 using R2020 methods line does not match the comparable line included in Table 2-10 from the 2024 Update. This is for 2 reasons. Firstly, the wage costs assessment also feeds into the cost of construction line under investment in Table 2-10. Both these effects are included here. Secondly, these are the effects of U2024 wage methods after applying other R2025 method changes.

118 The proposed smoothing approach replaces an annual estimate with the long-term trend estimate. States with assessment year wage cost estimates below their long-term trend levels had their estimates increased, increasing their GST distribution and vice versa. In the long-term, the average impact of this method change should be negligible for all states.

119 Changes to the regression model included moving from weekly to hourly pay, reducing the level of detail in the industry classification and removing the interaction terms between gender and every other variable. For the years under consideration, the combined effect of these changes was to increase the GST distribution for Victoria, South Australia, Tasmania and the ACT, and to reduce it for the other states.

120 There has been a reduction in the estimated labour share of total costs in housing, transport and roads, and an increase in welfare, services to communities and services to industry. These changes have affected the impact of wages costs on

states, depending on their relative need for spending in different areas, and their relative wage levels. For example, Western Australia has above average wage costs and the net effect of changes to estimated labour share increases the total labour share of Western Australia's assessed expense needs, increasing their GST distribution.

Table 6 Indicative impact on GST distribution of proposed method changes (disaggregated), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Smoothing	-151	57	151	-177	60	80	-27	7	355
New model	-1	296	-177	-308	89	76	77	-52	538
New wage/non-wage split	22	-114	43	137	-27	-49	-24	11	214
Total	**-129**	**238**	**17**	**-348**	**122**	**107**	**26**	**-33**	**510**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Smoothing	-18	8	27	-60	32	137	-56	28	13
New model	0	42	-32	-104	47	130	161	-201	20
New wage/non-wage split	3	-16	8	46	-14	-84	-50	45	8
Total	**-15**	**34**	**3**	**-118**	**64**	**184**	**54**	**-129**	**19**

Note: This includes the effects of applying the new wage assessment methods to all expense categories, after other method changes have been applied within each category.

The GST pool and population estimates are equivalent to those used in the 2024 Update.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.

Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

Geography

Overview

1 On 13 June 2023, the Commission issued a consultation paper on the use of geography in the Commission's various assessments. The Commission considered changes since the 2020 Review and their implications for the assessment method. The main issues are the calculation of regional cost and service delivery scale assessments using the Australian Bureau of Statistics (ABS) remoteness areas classifications.

2 The Commission proposed to retain the 2020 Review assessment approach.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support continuing the current methodology for estimating regional costs and service delivery scale effects?

State views: general gradient

Where the general gradient is applied

5 New South Wales said that the nature of service delivery varies across sectors. It had concerns with extrapolating regional costs from one assessment to another. It accepted applying a general gradient when a specific measure could not be obtained.

6 New South Wales said service delivery scale costs do not apply to child welfare because services are typically delivered from centralised hubs rather than small outposts.

7 Victoria said the general cost gradient is no longer appropriate in its current form. It said that costs in regional areas may be higher on average, but that the impact will not be the same across all services.

8 Victoria said the general cost gradient should not be applied in areas where there is a lack of information, data or strongly established conceptual case for regional costs or service delivery scale. It said that supporting evidence is needed to justify applying the gradient.

9 Queensland said there is a conceptual case for regional costs in the urban transport assessment, using the general gradient.

10 Western Australia raised concerns that the general cost gradient currently underestimates the additional costs of delivering services in regional areas. It said that land area of national parks and reserves should be considered as the basis for applying regional costs in environmental protection.

Data used in the calculation of the general gradient

11 New South Wales said providing schooling in regional areas differs greatly in nature from providing other regional services. It said the provision of schools is much more decentralised than other services. For example, a very small community may have its own school but not have other state services delivered locally. New South Wales, therefore, argued that schools should be removed from the calculation of the general gradient as these data were overstating the actual average gradient for state services.

12 Queensland said many services are provided in a one-on-one framework, such as child protection. It said that these services would incur higher regional and service delivery scale costs than services that are provided more centrally such as hospitals. Queensland argued that the general gradient was therefore understating the actual average gradient for state services.

13 New South Wales and Western Australia criticised the general gradient for relying on only 2 assessments. They suggested including more regional cost gradients from other assessments to make the general gradient more robust.

14 Victoria pointed to digital service delivery options and asked the Commission to monitor developments in this area that could impact regional service delivery costs.

15 Western Australia suggested that Rawlinsons indices could be used to measure regional costs in some assessments. It highlighted that there are already nationally consistent data and said that using Rawlinsons indices would result in a more accurate cost gradient for the Commission's purposes. Western Australia asked the Commission if it had considered the application of Rawlinsons capital cost gradient in assessments that include construction or maintenance costs or in place of the general gradient.

Discounting the general gradient

16 New South Wales and Victoria advocated for further discounting of the general gradient if assessment-specific gradients are not implemented. New South Wales suggested further discounting of the general gradient could be applied broadly or to specific components.

17 Queensland and Western Australia advocated for less (or no) discounting of the gradient. Queensland said that if the discount is not removed for all components, it should be removed from the following components in particular:

- Indigenous community development

- other community development and amenities
- social housing.

18 The Northern Territory said cost gradients should only be discounted if there is evidence to support doing so.

State views: Category-specific measures of regional costs and service delivery costs

19 New South Wales and Western Australia said the Commission should investigate developing more assessment-specific gradients. New South Wales said some assessments that currently rely on the general gradient, such as housing and welfare, could instead use a specific gradient.

20 Queensland said that service delivery scale costs should apply more broadly. It argued that, where a conceptual case for regional costs exists, the case also exists for service delivery scale.

21 South Australia noted that developing an alternative measurement of regional costs and service delivery scale would require time for the data to be collected and tested. Both Queensland and South Australia suggested that the Commission retain the 2020 Review approach and investigate more robust methods following the 2025 Review.

Commission response: general gradient

Where the general gradient is applied

22 The Commission agrees that if a reliable, component-specific measure of regional costs and service delivery scale can be calculated, it would provide the best estimate of remoteness cost impacts. Therefore, it is the Commission's preference to use component-specific measures of regional and service delivery scale costs where data allow. If a component-specific measure cannot be estimated, a category-specific measure using data from within the relevant category would be preferred to a general gradient.

23 In cases where a category-specific cost gradient cannot be estimated and there is a strong conceptual case that regional or service delivery scale costs are present, the general gradient should be applied.

24 The Commission proposes to continue applying service delivery scale to the child protection and family services component of welfare for the 2025 Review. This issue is discussed in more detail in the welfare chapter.

25 Queensland suggested regional costs should be considered in the urban transport assessment. The Commission considers that while there is a conceptual case that maintenance costs are higher for regional areas, there is also a conceptual case that higher congestion levels and the need for night maintenance in less remote areas leads to a higher cost of servicing. In addition, urban transport is only provided in

significant urban areas. It would be inaccurate to apply a cost gradient developed for all areas in a region just to the large towns in that region.

26 Western Australia's suggestions on environmental protection are addressed in the services to community chapter.

Data used in the calculation of the general gradient

27 The effect that remoteness has on the cost of service delivery varies considerably between services (Figure 1). Part of this variation reflects the extent to which the approach to service delivery is centralised or decentralised. Many health services are delivered in a relatively centralised way. For example, patients sometimes travel significant distances to a hospital. Schools are delivered in a much more decentralised manner, with very small communities often having their own primary school. Some other services, including welfare and industry regulation, can be delivered at a client's home or business. Given that some services to which the general gradient is applied are more decentralised than schools, the Commission considers it appropriate to continue to include the schools data in the calculation of the general gradient.

28 In response to comments by New South Wales and Western Australia, the Commission has considered what data should be included into the calculation of the general gradient. Currently, the general gradient uses government schools and admitted patients data but is applied to a wide range of services. The Commission recognises a gradient that incorporates a more diverse range of state services would be more representative of the state services where the general gradient is applied.

29 The Commission has identified additional data from the following assessment components that could be incorporated into the calculation of the general gradient:

- health - emergency departments
- health - non-admitted patients
- services to communities - water subsidies
- services to communities - electricity subsidies
- justice - prisons
- justice - criminal courts
- post-secondary education
- investment (Rawlinsons regional cost gradient).

30 The Commission considers there is a strong conceptual case for regional costs in a range of services. However, the conceptual case for service delivery scale is only strong for a subset of these services (see Table 2 at the end of the chapter). The Commission therefore requires a general gradient for regional costs, as well as a general gradient for combined regional and service delivery scale costs. The Commission proposes to include data in the respective gradients as outlined in Table 1 based on the data available in each component.

31 The Commission proposes these components be weighted in proportion to their share of total national spending of all relevant services. This would mean that the components used in the 2020 Review general gradient (the admitted patients and schools components), which attract greater total state spending, would still have the largest influence on the general gradient slope.

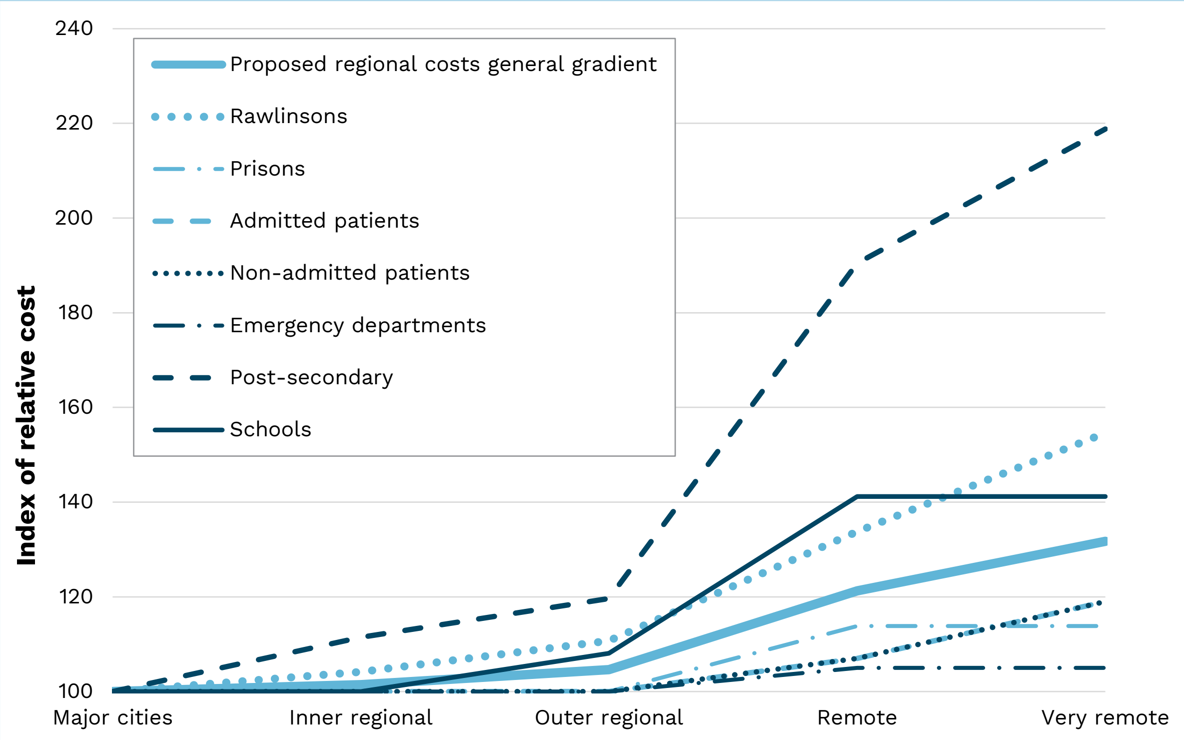
Table 1 Components contributing to regional costs and service delivery scale general gradients

Component	Contribution to regional costs gradient	Contribution to regional and service delivery scale costs gradient
Health - admitted patients	36.2%	49.0%
Health - emergency departments	3.8%	5.2%
Health - non-admitted patients	5.7%	7.7%
Services to communities - water subsidies (a)	0.5%	-
Services to communities - electricity subsidies (b)	1.4%	-
Justice - prisons	4.6%	6.2%
Justice - criminal courts	-	2.6%
Post-secondary education	4.4%	-
Schools – state funding of government schools	21.8%	29.5%
Investment (Rawlinsons) (c)	21.6%	-

Note: (a) Water subsidies does not have a relative cost that includes major cities. Therefore, it is only used to distinguish costs between inner regional, outer regional, remote and very remote locations.
(b) Electricity subsidies does not have a relative cost outside of remote and very remote areas. Therefore, it is only used to distinguish between remote and very remote locations.
(c) Rawlinsons gradient contains state-specific gradients. The regional costs assessment uses a national average difference in costs in comparable regions. Therefore, it is proposed to use the average gradient across all states.
Source: Commission calculations.

32 The slope of the regional cost gradients of the services proposed for the general gradient calculations differ considerably (Figure 1 and Figure 2). The Commission proposes the general gradients be calculated as the weighted average of these gradients, with a 25% discount. This average is used to approximate the relative cost of service provision where no other data exist.

Figure 1 Regional costs gradients of service components used in the regional costs general gradient, 2022–23

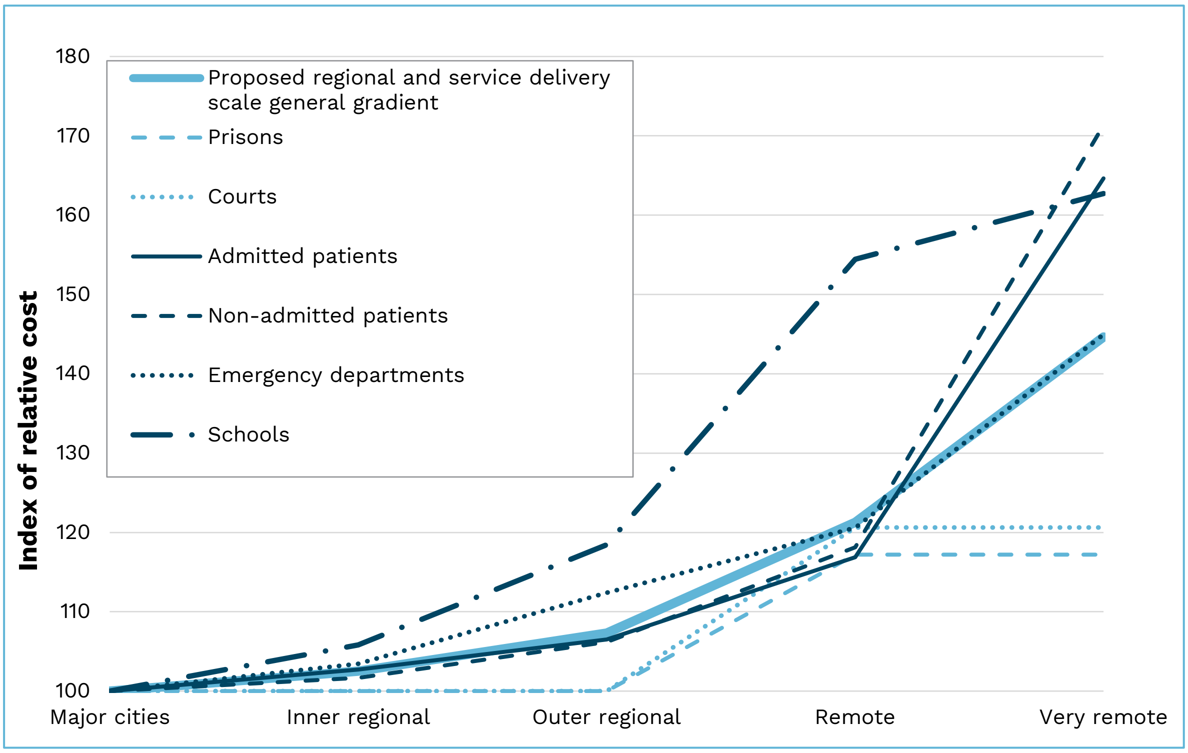


Note: Water subsidies does not have a relative cost that includes major cities and therefore cannot be shown in this figure. These data show outer regional areas to be 117% more expensive than inner regional areas. These data also show remote and very remote areas to be 345% more expensive than inner regional areas.

Electricity subsidies does not have a relative cost outside of remote and very remote areas and therefore cannot be shown in this figure. These data show very remote areas to be 203% more expensive than remote areas.

Source: Commission calculations.

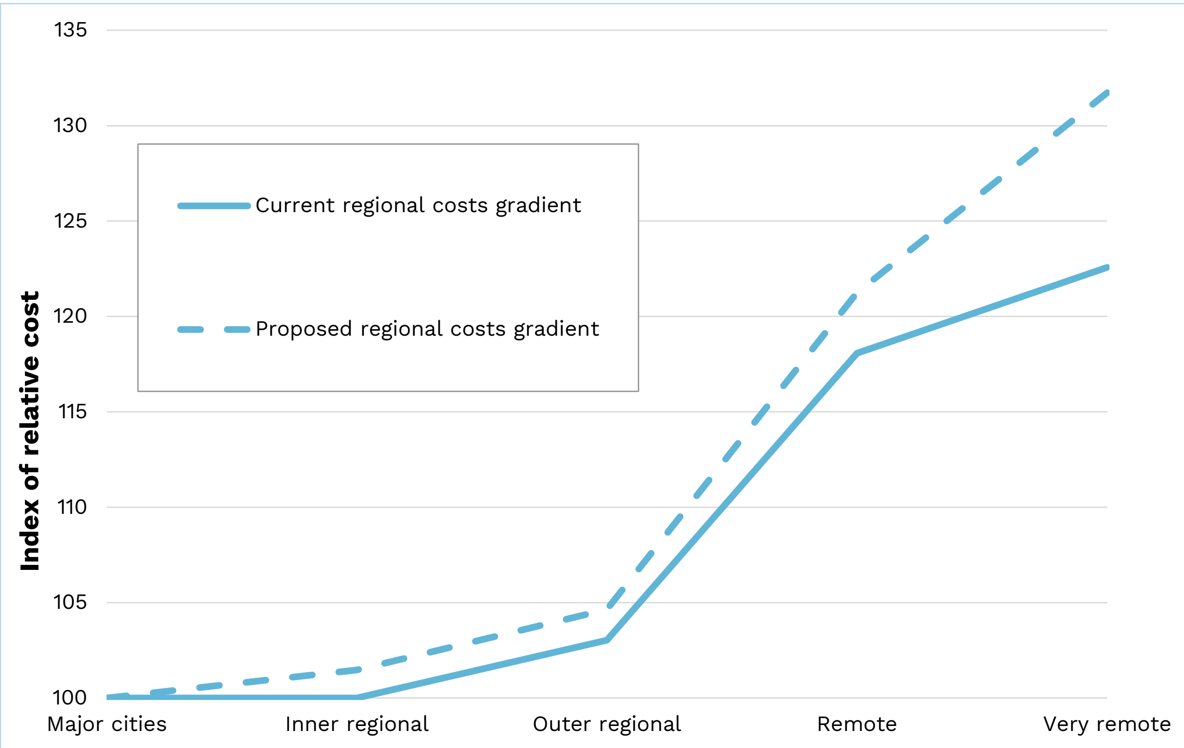
Figure 2 Regional and service delivery scale costs gradients of service components used in the regional and service delivery scale costs general gradient, 2022–23



Source: Commission calculations.

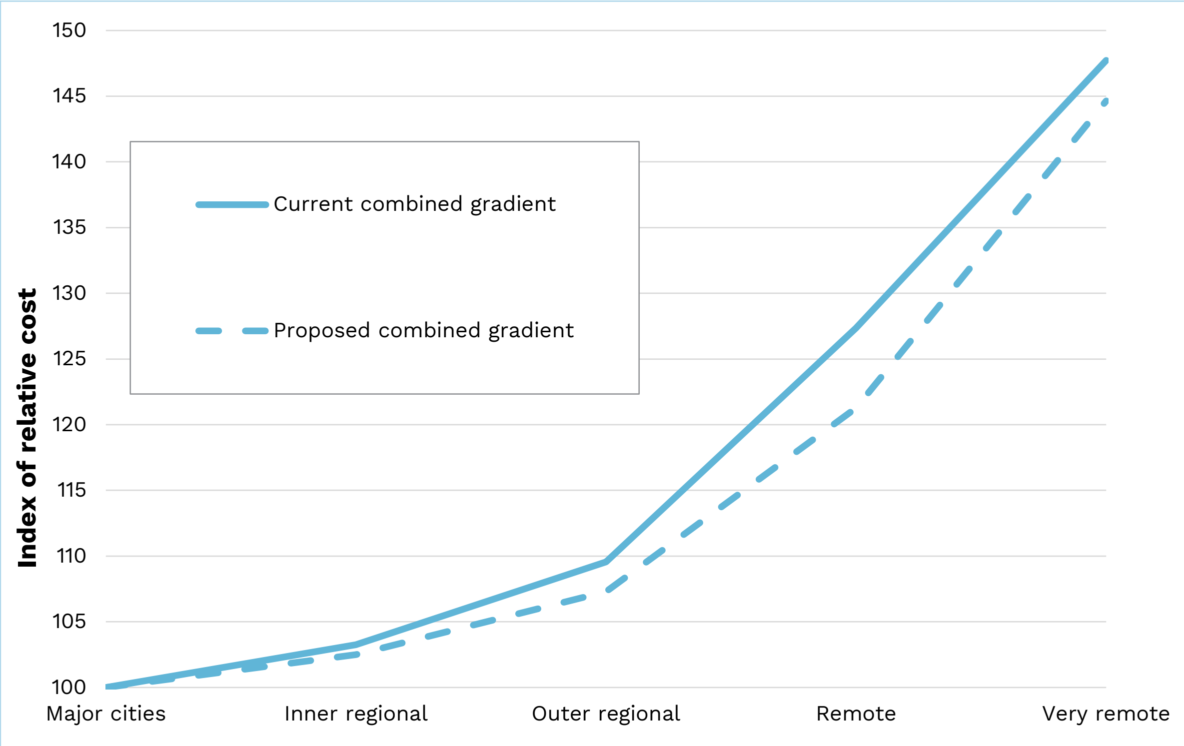
33 Figure 3 outlines the difference between the proposed regional costs gradient and the current gradient. Figure 4 outlines the difference between the proposed regional and service delivery scale costs combined gradient and the current gradient.

Figure 3 Regional costs general gradients, 2022–23



Source: Commission calculations.

Figure 4 Regional and service delivery scale costs combined general gradients, 2022–23



Source: Commission calculations.

34 New South Wales provided evidence that the regional cost gradient for child protection in New South Wales is considerably lower than the national general gradient. It stated that the combined general gradient may be overstating costs in the child protection assessment. However, without comparable data for other states, the Commission cannot determine whether the general gradient misrepresents the remoteness costs faced by all states on average.

35 The Commission agrees with Victoria that service delivery options and models change over time in response to new technology and changes in service standards. This means that the gradient for regional costs and service delivery scale can change over time and should be regularly recalculated. The health and schools data that are used in the general gradient are updated annually. The other data proposed to be incorporated into the general gradient such as post-secondary education, courts and prisons data are updated 5-yearly or as part of each review. Where annual data are available, the Commission proposes to continue updating the general gradient annually.

Discounting the general gradient

36 Currently, the Commission applies a 25% discount to the general gradient and does not discount the more reliable gradients that are component or category-specific. The purpose of the discount to the general gradient is to reflect the uncertainty around the strength of the gradient when it is applied to areas where a gradient cannot be directly measured.

37 The Commission applies the general gradient to services where there is a strong conceptual case to do so. It recognises these services are delivered in unique ways and face their own specific regional costs, however, it is unable to determine a reliable basis for different levels of discount for different services.

38 The addition of emergency departments, non-admitted patients, water subsidies, electricity subsidies, prisons, criminal courts, post-secondary education and Rawlinsons data to the general gradient makes the gradient more representative of the range of state services. However, the Commission does not consider that the level of uncertainty associated with the application of the general gradient to components where data do not exist has changed. Therefore, the Commission proposes retaining the current 25% discount.

Commission response: Category-specific measure of regional costs and service delivery costs

39 There is a conceptual case for a regional costs adjustment where there is a higher cost in maintaining or supplying a service in more remote areas. There is a conceptual case for a service delivery scale costs adjustment if fewer people will be serviced per staff member in smaller centres. This can occur because:

- the indivisibility of labour means a small user-population requires a high staff to client ratio, for example with schools and health services
- there can be high travel times between visiting clients in sparsely populated areas, for example in child welfare.

40 Table 2 contains a summary of the assessments of regional costs and service delivery scale across all expense components.

41 The Commission investigated whether more service-specific measures of remoteness impacts can be obtained for each component for the 2025 Review. The Commission requested state data to underpin a component-specific regional costs gradient in social housing, but only 2 states were able to provide data on social housing costs by region. Using these data would not allow for a robust assessment of regional cost impacts across all states. Therefore, the Commission proposes to retain the general gradient in the housing assessment.

42 In the health assessment, data from the Independent Hospital and Aged Care Pricing Authority have matured.[1] As a result, since the 2020 Review a component-specific gradient has become possible for non-admitted patients. This component-specific measure became available through data developments applied in the 2022 Update. The capacity to calculate component-specific gradients for admitted patients, emergency departments and non-admitted patients has increased the robustness of the measures of remoteness costs within the health assessment.

[1] IHACPA Annual Report 2022–23

Commission draft position

43 The Commission proposes to continue its current approach to estimating regional costs and delivery scale effects. This includes:

- using component-specific measures of remoteness costs and/or service delivery scale where the availability of reliable data makes that possible
- using category-specific measures of remoteness and/or service delivery scale costs where component-specific measures are not possible
- using a general gradient where a service-specific gradient would not be appropriate or cannot be measured, but there is a strong conceptual case for remoteness costs and/or service delivery scale.

44 The Commission proposes improving the representation of services included in the general gradient calculation (currently composed of schools and admitted patients data). The Commission proposes using a weighted average of schools, admitted patients, emergency departments, non-admitted patients, water subsidies, electricity subsidies, prisons, criminal courts, post-secondary education and Rawlinsons construction cost data to calculate the gradient.

45 The Commission proposes to continue implementing the 25% discount to the general gradient.

46 The Commission proposes to apply regional costs and service delivery scale to the same assessments as in the 2020 Review.

Q2. Can states identify any data to measure differences in non-wage costs between major cities?

State views

47 Victoria, Queensland, South Australia, Tasmania, the ACT and the Northern Territory said they were unaware of changes in the conceptual case or new data sources that would warrant or enable measurement of differences in non-wage costs between major cities. New South Wales and Victoria raised concerns with a judgement-based approach to this assessment.

48 Western Australia and the ACT said there was merit in including an isolation factor for major cities. They suggested, given the timeframe, the adjustment applied in the 2015 Review should be reintroduced.

Commission response

49 Many of the inputs used by states are available in major cities from national supply chains with nationally consistent pricing policies.

50 In the 2020 Review, the Commission found little evidence for a material difference in non-wage costs. Travel and accommodation for interstate meetings was the largest single driver of such potential costs. As technology continues to develop, and

business practices have evolved, in-person meetings have become less common, reducing the potential materiality of non-wage cost differences.

51 While the Commission acknowledges that Perth is more geographically isolated than other major cities, there is not consistent evidence that this materially increases its overall costs. For example, crowd-sourced data on fuel costs suggest that fuel costs in Perth are typically lower than in other capital cities.

52 Some costs in Canberra, particularly fuel, are higher than in other states. However, interstate meetings are likely to remain disproportionately hosted in Canberra, or in cities easily accessible from Canberra. Therefore, there is no consistent evidence that the ACT has higher costs than other major cities.

53 The Commission considers Hobart and Darwin to have higher costs than most other capital cities, but this is captured by them being treated as inner and outer regional cities, respectively.

54 The Commission has not identified evidence that non-wage costs differ between capital cities, other than because some capital cities are inner regional (Hobart) or outer regional (Darwin).

Commission draft position

55 The Commission proposes not to introduce an interstate non-wage cost assessment.

Other issues raised by states

Remoteness classification

Definitions of remoteness

56 Western Australia, Tasmania and the Northern Territory said the remoteness definitions as defined by the ABS do not accurately measure differences in service delivery costs.

57 Western Australia said that service costs will be higher in locations that are further away from a major city. It said it was inappropriate to average expenses across states by remoteness area unless the remoteness areas can be made more comparable. Western Australia said that the remoteness areas currently used cannot capture the extent of the cost differences.

58 Western Australia said the calculations underpinning the ABS' remoteness classifications were designed to strip out extreme cases of isolation through capping relative distances to service centres at 3 times the national average. Western Australia said that this limited the capacity to capture additional costs incurred in locations that are significantly isolated. It also said the Commission's needs are not met by the ABS' practice of measuring distance to the nearest service centre town of a given size, even if that service centre is in another state.

59 Western Australia raised concerns that under the current approach, towns with very different accessibility profiles can fall under the same remoteness classification.

60 Western Australia brought forward alternative approaches to using ABS remoteness areas to better capture the regional costs faced by states:

- use continuous ARIA+[2] score
- remove the truncated ARIA+ score
- use measure of amenity (distance from a major road)
- blend ARIA+ and distance from capital city.

61 Western Australia said if the suggestions it has put forward are not achievable, more options need to be explored so that remoteness costs can be accurately calculated.

Classification of Hobart

62 Tasmania raised concerns that Hobart's population may eventually cross a threshold of 250,000. While this would not significantly change the actual cost profile of services in Tasmania, it would significantly change the assessed cost profile. Western Australia said that, while the urban centre of Hobart (which is the geographical concept measured by the ABS) has a population of less than 200,000, the significant urban area has a population approaching 250,000, and so the cost profile is approaching that of a major city.

Road quality and seasonal challenges

63 While the distance of any point from the various population centres is measured as road distance, the Northern Territory was concerned that road quality and seasonal impassability meant not all road distances were equal. It said that poor quality roads and seasonal road closures mean the measured remoteness of many Northern Territory locations is dramatically underestimated. It suggested that accessibility and the condition of roads be considered when classifying remoteness areas.

Commission response

64 The Commission's preference is to use national standard approaches to data issues. For the Commission to generate its own version of remoteness rather than using the ABS' approach would require a very strong case that the Commission's needs differ from those of other statistical agencies. The Commission does not have any evidence for any particular, significant bias in the current approach that should be overcome.

[2] The Accessibility/Remoteness Index of Australia Plus (ARIA+) is an index of remoteness developed by the National Centre for the Social Applications of Geographic Information Systems (GISCA) at Adelaide University.

Definitions of remoteness

65 Remoteness categories aim to group areas with broadly comparable circumstances. The Commission recognises that not all towns within a remoteness category have identical characteristics. However, there are difficulties in defining which combinations of characteristics within a remoteness category make a town more expensive to service than another.

66 Western Australia raised concerns around the remoteness classifications of Karratha compared with Clermont in Queensland. Western Australia said Clermont, being only 300km from a centre of 120,000 people should be classified as less remote than Karratha which is 1,520km from such a centre. The Commission agrees that services that are only provided in larger town centres would be more easily accessible in Clermont than in Karratha. However, services that are available in smaller centres are more accessible in Karratha (population 22,000) than in Clermont, (population 3,000). Remoteness classifications need to reflect accessibility to both smaller and larger centres. There is a lack of evidence to say whether distance from a larger centre is significantly more important than distance to smaller centres when measuring regional costs.

67 Western Australia suggested removing the truncation of ARIA+ scores or using a continuous ARIA+ score to measure remoteness costs. The Commission, like the ABS, continues to consider that the current ARIA+ score reflects the effects of remoteness better than if distance limits were removed.

68 The Commission only has data on cost per user across each location of Australia for a small number of services, such as schools. The relationship between a continuous ARIA+ score and costs is unlikely to be linear. Developing a model such as the schools regression, which takes into account multiple drivers (including First Nations students, socio-educational disadvantage and school size) and adding a non-linear relationship with ARIA+ score, is unlikely to be reliable. Building similar models for other services with more limited data on service delivery by location costs would bring even more challenges.

69 Western Australia suggested blending the distance from a capital city with ARIA+ scores or accounting for the distance from a major road. Currently, the distance to a capital city contributes 20% to a remoteness classification. There is a lack of evidence to support the proposition that the distance from a capital city should contribute more to the geographical classification than it already does.

70 The proportion of people who do not live near a major road is small. Therefore, the Commission does not consider this disaggregation is helpful in distinguishing populations. It would also be difficult to identify the relevant populations. Much of the Commission’s data are gathered at too high a level to allow for this disaggregation.

Classification of Hobart

71 Hobart, with a population of fewer than 200,000 people is unlikely to be reclassified as a major city in the 2026 Census of ABS geography classifications. While the region surrounding Hobart does currently contain a population approaching 250,000 people, Hobart does remain quantitatively different from major cities around Australia. It appears more appropriate to group Hobart with other cities of about its size, than to group it with cities much larger than it. The Commission, therefore, proposes to retain the standard ABS classification of remoteness.

Road quality and seasonal challenges

72 Much of monsoonal Northern Territory faces seasonally impassable roads. This is also a challenge faced in northern Western Australia and Queensland. Most of the areas that face this problem fall into the very remote geographical classification. Therefore, adjusting for seasonal impassability would not impact their classification (they would remain very remote). On this basis and noting the Commission's preference to use nationally consistent data classifications where it can, the Commission proposes to retain the current remoteness classifications.

Commission draft position

73 The Commission proposes to retain the ABS standard classification of remoteness.

Where people receive services

74 Victoria raised concerns that remoteness loadings are based on the remoteness of where people live rather than where services are delivered.

Commission response

75 Where people live is the measurable demographic attribute that differs between states. Where services are delivered is the attribute that drives the cost of delivering services. Therefore, remoteness gradients are calculated based on where a service is delivered and applied based on where people live.

76 For example, in the admitted patients component of the health assessment, the Commission uses data which calculate the additional costs of remote hospitals. It then applies this additional cost to the extent to which residents of remote areas use remote hospitals. Similarly, in the justice assessment, prisoners held in remote prisons are around 45% more expensive to house than prisoners in non-remote prisons. However, only around 40% of prisoners who lived in remote areas prior to sentencing are sent to remote prisons. To account for both these factors, the Commission calculates that the average remote prisoner incurs an effective additional cost of 18% (0.45% x 0.40%). This approach means that even when data are collected according to place of service delivery, they are applied on place of residence.

Commission draft position

77 The Commission proposes to retain its current approach and measure the extent to which costs increase for people who live in different regions.

Potential misallocation of regional cost effects

78 Victoria raised concerns about double counting. It said there are many drivers including Indigenous status, remoteness and socio-economic status that are heavily influenced by geography. Victoria said compounding effects could occur if these drivers measure the same underlying cost or demand driver.

79 Victoria said it is important to identify the unique effect of each driver in isolation. While these issues are addressed appropriately in the health assessment, in areas with less comprehensive data, the Commission's estimation of different cost gradients from different sources can potentially lead to double counting. It raised specific concerns with housing and welfare.

Commission response

80 The Commission aims to measure the impact of each driver individually for each category. The Commission designs assessments in ways that take account of any potential double counting.

81 For example, the Commission includes the general regional cost and service delivery scale gradient in welfare. It adjusts the assessed number of clients in each remoteness region to avoid double counting other influences that are correlated with remoteness such as Indigenous status and socio-economic status.

Commission draft position

82 The Commission proposes to continue to take measures to avoid any double counting within assessments.

Draft 2025 Review assessment method

83 Table 2 shows the structure of the proposed use of geography in 2025 Review assessments.

Table 2 Proposed structure of the geography assessment

Category	Component	Driver	Type of assessment	Change since 2020 Review?
Schools	State spending on government school	RC & SDS	# Component	No
	State spending on non-government schools	RC & SDS	Component	No
	Commonwealth funding of government schools	RC & SDS	Embedded in the Schooling Resources Standard	No

Post-secondary education	Post-secondary education	RC	# Component	Included in general gradient
Health	Admitted patients	RC & SDS	# Component	No
	Emergency departments	RC & SDS	# Component	Included in general gradient
	Non-admitted patients	RC & SDS	# Component	New measure introduced in U2022. Included in general gradient
	Community and public health	RC & SDS	Category[(a)]	No
	Non-hospital patient transport	—		No
	COVID spending	—		New component
Housing	Social housing expenses	RC	General gradient	No
	Revenue	—		No
	First home owner expenses	—		No
Welfare	Child protection and family services	RC & SDS	General gradient	No
	National Disability Insurance Scheme	—		No
	Concessions	—		No
	Homelessness services	RC	General gradient	New component
	Other welfare including non-National Disability Insurance Scheme, aged care, and National Redress Scheme	RC	General gradient	No
Services to communities	Water subsidies	RC	# Component	Included in general gradient
	Electricity subsidies	RC	# Component	Included in general gradient
	First Nations community development	RC	General gradient	No
	Other community development and amenities	RC	General gradient	No
	Environmental protection	RC	General gradient	No
Justice	Police	RC & SDS	Component[(b)]	No
	Criminal courts	RC & SDS	# Component	Included in general gradient
	Other legal services	RC & SDS	Category[(a)]	No
	Prisons	RC & SDS	# Component	Included in general gradient
Roads	Rural roads	RC	Rawlinsons[(c)]	Rawlinsons applied instead of general gradient
	Urban roads	—		No
	Bridges and tunnels	RC	Rawlinsons[(c)]	Rawlinsons applied instead of general gradient
Transport	Non-urban transport	RC	General gradient	No
	Urban transport	—		No
Services to industry	Agriculture regulation	RC	General gradient	No
	Mining regulation	RC	General gradient	No
	Other industries regulation	RC	General gradient	No
	Business development	—		No

	COVID-19 Business support	—		New component
Other expenses	Service expenses	RC	General gradient (d)	No
	Natural disaster relief	—		No
	Administrative scale	—		No
	Native Title and land rights	—		No
	National capital	—		No

Note: RC refers to regional costs, SDS refers to service delivery scale.
# indicates that an assessment is used in the calculation of the general gradient.
(a) The cost gradient is extrapolated from other components within the same category.
(b) In the police component, regional costs and service delivery scale are measured together as a single cost gradient along with the differential use of police resources in different remoteness areas. Where assessed, differential use of services is considered separately from regional costs in all other categories.
(c) In the roads assessment, Rawlinsons applies to road length.
(d) In service expenses, the general gradient is applied to half the expenses in the component.

Indicative distribution impacts

84 The Commission proposes to make a number of assessment changes that include changes to geography variables. Some of these changes are specific to a category and therefore, the corresponding impact on the GST distribution is shown within that category in the relevant chapter.

85 Proposed changes to the elements that contribute to the general gradient calculation would change the distribution of GST across several categories. The impact of these proposed changes on the GST distribution in 2024–25 in isolation from any other proposed changes is shown in Table 3.

86 The comparable tables in expense categories include the impact of changing the general gradient as well as any other proposed changes within that category. Therefore, the impact captured in Table 3 will also be captured through the relevant expense category GST impacts.

Table 3 Indicative impact on GST distribution of proposed changes to the general gradient (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	-176	-136	49	98	14	13	-11	147	322
U2024 using draft R2025 methods	-187	-144	55	104	11	19	-14	153	343
Effect of draft method changes	-10	-8	6	6	-3	5	-3	7	24
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	-21	-19	9	33	7	23	-23	571	12
U2024 using draft R2025 methods	-22	-20	10	35	6	32	-28	597	14
Effect of draft method changes	-1	-1	1	2	-2	9	-6	27	1

Note: The data included in the table have not been subject to full quality assurance processes and, as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

87 As a result of including additional components in the regional costs general gradient, the slope of the gradient has become steeper as shown in Figure 3. As a result of additional components included in the regional and service delivery scale costs combined general gradient, the slope of the gradient has become flatter as shown in Figure 4. Given the slope of one gradient has become steeper and the other, flatter, the net impact of the proposed changes, as captured in Table 3, include offsetting elements.

Socio-economic status

Overview

1 On 21 June 2023, the Commission issued a consultation paper on the socio-economic status assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed changes to the 2020 Review assessment method.

3 A summary of state responses to the consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that an annual Person Level Integrated Data Asset-based measure of socio-economic status for non-Indigenous people has the potential for a more contemporaneous assessment?[1]

State views

5 New South Wales and the ACT supported the investigation of an annual measure. New South Wales suggested that other variables, particularly housing stress, should be considered.

6 Queensland said that Socio-Economic Indexes for Areas (SEIFA) is the more accurate measure as at census time, but that it could be updated annually with the Person Level Integrated Data Asset (PLIDA). While Queensland said the dataset is not yet fit for this purpose, it supported ongoing work to identify its suitability in the future. Western Australia supported an annual measure in principle but had concerns about the proposed approach. It also proposed that any new measure be tested against the current measure and different results explained. Like Queensland, it saw potential in updating the current measure using this dataset.

[1] The Multi Agency Data Integration Project (MADIP) formally changed its name to the Person Level Integrated Data Asset (PLIDA) in August 2023.

7 South Australia emphasised the need for rigorous testing of the measure and was awaiting the outcome of such testing. It was particularly cautious about potential volatility.

8 Tasmania was not convinced that PLIDA was a better measure of socio-economic status than the current measure.

9 Victoria and the Northern Territory had strong concerns about the proposed approach.

10 All states supported working with the Commission on any further analysis. Specific feedback highlighted the following concerns.

Reliability

11 Victoria questioned the accuracy of the proposed approach. It also raised concerns about coverage, particularly the lack of indicators relating to the labour market or human capital, and the weight given to medical indicators. Victoria questioned the usefulness of including a high-income variable. It was also concerned that state policies could affect the measure.

12 Queensland said that this dataset was not designed to be used for the purpose being proposed by the Commission. It was particularly concerned with the use of medical proxies, noting that service use could undercount disadvantaged people, particularly in regional and remote areas.

13 Western Australia noted that using only 3 indicators could lead to less reliability. It also noted that the mix of advantage and disadvantage indicators could result in fly-in-fly-out workers reducing a region's socio-economic status profile, even though their use of services is more like that of people with low socio-economic status.

14 Tasmania was concerned with the small number of indicators proposed. It said this might oversimplify a complex area where needs should be tailored to each assessment.

15 The Northern Territory agreed with Western Australia that a measure of advantage (as opposed to disadvantage) may not reflect drivers of state service use. It was also concerned that the proposed income support and health indicators could underestimate disadvantage in remote areas, where:

- mutual obligation compliance is more difficult and is often required for access to income support
- access to diagnosis and prescriptions is more difficult.

16 On the high-income indicator, the Northern Territory noted:

- it would not illuminate differing degrees of disadvantage at the low end
- it would treat younger, highly taxed workers as more advantaged than older, concessionally taxed retirees or landlords, and would not take account of high levels of wealth
- it would not accurately measure the circumstances of regions with large agricultural sectors, which experience volatility in incomes.

Simplicity

17 Victoria noted the proposed approach could increase inconsistency between measures of Indigenous and non-Indigenous disadvantage.

18 Queensland noted a need to test any new measure against the Non-Indigenous Socio-Economic Indexes for Areas and to standardise and rescale to this every 5 years.

Stability

19 Victoria, Western Australia, South Australia and Tasmania noted a possible trade-off between contemporaneity and stability. Western Australia cited the potential volatility impact of using only 3 indicators. South Australia noted the benefits of stability in assessments.

Commission response

20 The Commission considers there is the potential for material improvements to its assessments from using PLIDA data, particularly with respect to contemporaneity. However, recognising the scale of the change, the Commission proposes to work through the issues highlighted by the states and consult further following the 2025 Review. This work would inform consideration of a possible change in the measure of socio-economic status for non-Indigenous people in a future review.

21 Attachment A contains some high-level comments on the concerns raised by states.

Commission draft position

22 The Commission proposes no change to the measure of socio-economic status for the non-Indigenous population in the 2025 Review. It proposes to undertake further work in consultation with the states following the 2025 Review to inform consideration of a possible change in a future review.

Other issues raised by states

Lack of granularity in measuring socio-economic status for First Nations people

23 The Northern Territory raised concerns about the Commission's use of quartiles and quintiles in classifying populations, saying this understates its level of disadvantage. It showed that the Northern Territory's First Nations populations tend to cluster at the lower end of each band, and that existing assessment methods do not adequately account for this.

24 The Northern Territory noted that, in remote areas, the Commission does not necessarily disaggregate by socio-economic status. It considers that this further understates its level of disadvantage.

Commission response

25 The Commission aims to disaggregate as far as it can, having regard to the reliability of the relevant data. There is a trade-off between having a large enough population to produce a reliable estimate of national spending on each population group and having a small enough population with the granularity to measure differences between heterogenous groups.

26 The Commission generally aims to have the greatest level of disaggregation that can support a reliable pattern of state spending. For example, where disaggregated data indicate that the middle quintile has higher use rates than a lower quintile, against the general trend across the 5 quintiles, the Commission will group quintiles together. This reflects 3 considerations:

- estimates based on small samples can be volatile
- some geographic data are aggregated from Statistical Area Level 2 or postcodes, and do not perfectly align with population data aggregated from Statistical Area Level 1
- the measure of socio-economic status may not be an accurate proxy for the underlying concept that drives differential use.

27 The Commission retests each assessment in each review to ensure it uses the most granular data possible. For example, in this review the Commission proposes to adopt decile level data for socio-educational advantage among school students. This is described in the schools chapter.

Commission draft position

28 Consistent with its approach in the 2020 Review, the Commission proposes to use socio-economic status for First Nations and non-Indigenous people in as much detail as can be supported by the data. Where patterns of cost and use are inconsistent with the conceptual case upon which they are based, the Commission proposes to aggregate data, or not differentially assess socio-economic status.

Review of Indigenous Relative Socioeconomic Outcomes index

29 The Northern Territory noted that this index has not been reviewed since its construction in 2001. Given the significant non-demographic growth in the First Nations population in the period since, it suggested that the Commission should review the index's relevance. It noted that this might occur after the 2025 Review has been finalised.

Commission response

30 The Commission agrees that this index warrants review. There are constraints on the Commission's ability to conduct such a review, as it needs to involve partnership with First Nations researchers. The Commission proposes to work with states after the 2025 Review to progress such a review.

Commission draft position

31 The Commission proposes to work with states to initiate a review of the Indigenous Relative Socioeconomic Outcomes index after the completion of the 2025 Review.

Draft 2025 Review assessment method

32 Following consideration of state views, the Commission proposes to retain the 2020 Review measures of socio-economic status for First Nations people and non-Indigenous people.

33 Following the 2025 Review, the Commission proposes to work with states to identify if measures of First Nations and non-Indigenous socio-economic status can be developed that better meets the needs of the Commission than its current approach.

Indicative distribution impacts

34 No method changes are proposed for this assessment. Changes to categories using this measure of socio-economic status are included in the indicative distribution impacts in relevant chapters.

Attachment A: Commission response to state views

35 The Commission proposes to continue to use the census-based non-Indigenous SEIFA. However, after the completion of the 2025 Review, the Commission proposes to engage with states on the potential for an alternative measure of socio-economic status. In anticipation of this process, the Commission has responded to state concerns on the model flagged in the consultation paper.

Reliability

36 This was the main concern raised by states. The Commission agrees that reliability would be a pre-requisite for proceeding with a new approach.

37 The Commission's PLIDA-based measure outlined in the consultation paper has only 3 variables, compared with 15 in SEIFA, which could reduce reliability of the new measure. However, if these, or other PLIDA indicators demonstrate a stronger link to the use of services than the census indicators, the new measure could be more reliable, even using fewer indicators.

38 Some of the census-based measures offer relatively little explanatory power. Many of the census indicators are based on very small numbers of people. For example, there are around 170,000 people with no educational attainment (less than 3 in an average Statistical Area Level 1 [SA1]). Of the 15 variables used in SEIFA, only 3 have counts of more than 20 in an average SA1. The PLIDA indicators tend to be based on more prevalent attributes and be less subject to small volatile numbers. Therefore, while the number of included variables would be lower under PLIDA, this does not necessarily mean a less robust or reliable measure.

39 Because people on high incomes use services less than people on middle incomes, there may be merit in considering using a high-income measure in an indicator to predict state service use. This could be done in addition to measuring the prevalence of disadvantage, potentially by considering access to social security payments. SEIFA can also measure advantage. The SEIFA Index of Relative Socio-Economic Disadvantage and Index of Relative Socio-Economic Advantage and Disadvantage would both be benchmarks upon which to test PLIDA based models.

40 In terms of identifying the disadvantaged (as opposed to people with a low income but high wealth), neither PLIDA nor census measures directly reflect wealth. However, the PLIDA indicators may indirectly identify low-income people with high wealth, for example people on a low income who do not qualify for social security payments. The relevant census income question currently identifies such people as low income.

41 There are also some low-income people who do not receive social security payments because of mutual obligation requirements. Such people are also likely under-represented in the census. In developing a PLIDA based measure, the

Commission will investigate both these sources of bias and consider approaches to minimising them.

42 Queensland's concern that some PLIDA indicators can reflect different levels of disadvantage in different regions is valid. However, this concern also applies to census indicators. In both circumstances, it is resolved by the Commission's practice of cross-classifying socio-economic status by remoteness region. This means that state spending on disadvantaged people in major cities would be allocated between states based on their share of disadvantaged people in major cities. Similarly, state spending on disadvantaged people in remote areas would be allocated between states based on their share of this group. The Commission's allocation of GST is not generally affected by differences in the practical definition of disadvantage between major cities and remote areas. It would only be a concern if there were differences in the level of medical diagnoses between similar remoteness regions in different states.

43 Some PLIDA and census-based approaches can reflect different levels of disadvantage in different regions. For example, census indicators of carless households, and low-income households reflect different circumstances depending on the quality of public transport and the cost of living in different regions. Similarly, PLIDA indicators such as the propensity to be diagnosed with specific conditions can reflect differential access to health services. Using socio-economic status cross classified by remoteness, as the Commission does, should minimise the effect of this. A person's socio-economic status would effectively only be compared with that of other people in the same remoteness region.

Simplicity

44 Changing the socio-economic indicator for the non-Indigenous population, but not the First Nations population, would mean that these measures of socio-economic status would differ. The Commission is initially exploring the proposed change in approach for the non-Indigenous population but if this proved successful, it would examine the potential to change the First Nations measure.

45 At a minimum, the proposed approach would need to be more reliable than the current approach in non-census years. If a PLIDA measure could be found that reflects socio-economic status as well or better than the census in census years, 5-yearly benchmarking would be unnecessary.

Stability

46 The Commission recognises the importance of stability, although only updating data every 5 years can result in large revisions at that point. If the census year is not representative of medium-term average levels of socio-economic status, it can create considerable bias. The level of volatility in the PLIDA methods will be a factor in determining suitability.

47 Early work suggested that a PLIDA based approach may better reflect changes in socio-economic status between censuses, but at census times SEIFA may be

superior. If this conclusion is maintained, there may be merit using a SEIFA measure every 5 years, updated annually with a PLIDA measure. However, if a PLIDA-based measure can be developed that reflects the drivers of state service use better than a census-based measure, the preferred approach may be to use only the PLIDA-based measure. The relationship between a PLIDA-based model and a census-based model will be examined and considered in detail.

National capital

Overview

1 On 6 October 2023, the Commission issued a consultation paper on the draft national capital assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to discontinue the national capital assessment if it is immaterial.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support discontinuing the national capital assessment if the assessment is immaterial?

State views

5 Most states supported discontinuing the national capital assessment if it is immaterial. Western Australia and Tasmania noted that this would be consistent with the Commission's materiality thresholds and supporting principles.

6 The ACT did not support discontinuing the assessment. It recommended the Commission include in the planning allowance the additional investment costs incurred because of the National Capital Plan's impact on capital works, including the Canberra Theatre redevelopment and light rail projects. It noted that adding these costs would likely make the assessment material. At the state visit, ACT officials elaborated on the additional costs for the light rail project, noting the need for wire-free running, grass tracks and 'barrier free' design in the parliamentary zone.

7 The ACT also said the planning allowance should be continued and the police allowance suspended temporarily. The ACT expected its average actual police salary to revert to being higher than its average assessed police salary in the future.

8 Victoria said it would not support continuing an immaterial assessment on the basis that it may be material in the future. It suggested the Commission could test the materiality of the assessment in the next review.

Commission response

9 The Commission agrees that discontinuing the national capital assessment would be consistent with its materiality thresholds and supporting principles.

10 The Commission notes that judgement is required if a driver may become material in the future. However, while Australian Federal Police wage levels may increase in the future, the increase to ACT's average actual police salary would have to be significant for an assessment to become material. The last time that the national capital assessment was material in an annual update was in the 2020 Review.[1] This was when the ACT's actual average police salary was well above its assessed average police salary.[2] Even if Australian Federal Police salaries increase faster than state police salaries, the Commission does not anticipate the ACT's actual average police salary returning to this level before the next review. The Commission will consider relevant cost drivers for its assessments at that time.

11 In regard to including capital works costs in the planning allowance, the Commission has previously considered this proposal in the 2020 Review. It found that assessing these costs posed significant data issues. The Commission is not aware of any changes since this time that would have resolved these issues.

12 The Commission faces considerable challenges in calculating the unavoidable extra costs faced by the ACT because of the higher quality materials and design needed to satisfy the National Capital Plan's requirements. There are no explicit standards for the quality of materials and design used to meet these requirements. During the 2020 Review, the ACT's consultant suggested that any interpretation of these standards is subjective.[3] Furthermore, as the consultant concluded in its report on Canberra parks, there is no means of determining whether infrastructure projects 'merely met the required standards, or exceeded them, and if so, to what extent'. The Commission therefore currently has no robust data on which to base an assessment of ACT's additional capital works costs that result from the National Capital Plan's requirements.

Commission draft position

13 The Commission acknowledges that the ACT faces additional costs because of the National Capital Plan's impact on its capital works projects, however an assessment of these costs cannot be made at this stage given data limitations.

14 The Commission proposes to discontinue the national capital assessment if it is immaterial.

[1] In the 2020 Review the national capital assessment increased the ACT's assessed GST needs by $35 per capita. The materiality threshold at the time was $35 per capita.

[2] The ACT's assessed average police salary is calculated as the state average actual police salary multiplied by the ACT's wage costs factor.

[3] M Chappé, Territory Design and Materials Standards Against NCA Standards, Rider Levett Bucknall, 2018, p 2.

Other issues raised by states

Cost advantages in the national capital assessment

15 New South Wales and South Australia raised concerns that the 2020 Review method for national capital only recognised the additional costs incurred by the ACT because of Canberra's status as the national capital.

16 New South Wales said that this is not consistent with the methodology for any other state in any other assessment.

17 South Australia suggested that any national capital assessment should also consider the cost advantages of Canberra's status as the national capital.

18 During the state visit, ACT officials said that Canberra's status as the national capital brought added amenities, but not cost advantages.

Commission response

19 The Commission acknowledges that the basis of the national capital assessment in the 2020 Review was to only assess additional costs incurred by the ACT. It did not anticipate that Australian Federal Police wage levels would fall below state police wages to such an extent that the police allowance would more than offset the planning allowance.

20 The Commission has previously recognised some cost advantages in the national capital assessment for the ACT, particularly prior to the territory first gaining self-government. For example, the state-type services offered by the Australian National Botanic Gardens previously reduced the ACT's national capital allowances. However, the Commission found defining and quantifying cost advantages to be both practically and conceptually difficult.

21 Given that national capital costs are likely to be immaterial even after accounting for police wage differences, the Commission does not need to develop an assessment to address any national capital costs (or potential advantages) in this review.[4]

Commission draft position

22 The Commission proposes not to assess any cost advantages or disadvantages relating to national capital status in the 2025 Review.

ACT's special circumstances

23 The ACT considered that the *Australian Capital Territory (Self-Government) Act 1988* Section 59(2) provides that the ACT is not liable for certain expenses related to its

[4] Had the Commission not suspended the national capital assessment in the 2024 Update, the assessment would have reduced ACT's assessed GST needs by $14 per capita.

special circumstances. The ACT said it would work with the Commission to determine these additional costs.

24 During the ACT state visit, officials noted that there was no mechanism to compensate the ACT for these additional costs other than through the process of horizontal fiscal equalisation.

Commission response

25 The Commission also interprets the *Australian Capital Territory (Self-Government) Act 1988* Section 59 as providing measures to ensure that its special circumstances are considered as part of federal financial relations. However, for its purpose of undertaking horizontal fiscal equalisation, the Commission must consider these special circumstances within the framework of its principles and methodology, including materiality thresholds.

26 If it is the case that national capital costs are not addressed within the process of horizontal fiscal equalisation, the Commission considers such an outcome would not be inconsistent with the *Australian Capital Territory (Self-Government) Act 1988.*

27 The Commission would welcome the opportunity to work with the ACT to determine any additional costs it incurs because of its special circumstances. However, addressing these costs through the horizontal fiscal equalisation process may prove difficult given data constraints. The Commission would need reliable evidence of the extent to which capital work costs are increased by the operation of the National Capital Plan.

28 As the Commission does not have robust data to inform an assessment of national capital costs that is fit for purpose and material, it proposes to not assess these costs for the 2025 Review.

Commission draft position

29 The Commission is open to working with the ACT as part of the next review process, to determine whether an assessment that captures the expenses incurred because of the ACT's special circumstances can be developed and is material.

Draft 2025 Review assessment method

30 The Commission proposes to discontinue the national capital assessment.

Indicative distribution impacts

31 Discontinuing the national capital assessment will have no change on GST distribution compared with the 2024 Update because the assessment was suspended for that update.

Other expenses

Overview

1 On 12 October 2023, the Commission issued a consultation paper on the other expenses assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree with the expenses classified to the other expenses category?

State views

5 All states agreed that there have been no significant developments that warrant a change in the expenses classified in the other expenses category.

Commission draft position

6 The Commission is proposing no change to the classification of expenses under the other expenses category.

Q2. Do states agree that other expenses should be assessed equal per capita?

State views

7 All states agreed to assessing other expenses on an equal per capita basis, as the drivers of these expenses are likely to be best represented by state population.

8 Victoria raised concerns with the application of regional and wage costs to a subset of expenses in the other expenses category. It said that the Commission had not explained the decision and it appears arbitrary to make the adjustments to only a subset of expenses.

Commission response

Regional costs

9 The range of state expenses included in the other expenses assessment is listed in Table 1.

10 There are likely to be differences in the cost of providing some of these services to different regions within a state. To determine if costs are likely to change with remoteness, the Commission has reviewed information on service delivery arrangements for the services included in the other expenses category.

11 Where the nature of the service suggests service delivery would likely involve transporting equipment and/or public servants from less remote to more remote areas (with associated accommodation costs for the public servants), or service delivery would likely require more travel within a region on a regular basis, the Commission considers costs are likely to increase with remoteness. For example, the delivery of functions such as fire protection services and recreational and sporting services would likely be more expensive in remote areas. In contrast, services such as central agency functions and public debt transactions are largely unaffected by regional costs.

12 The share of expenses for which costs are likely to increase with remoteness has been estimated at around 47% of total expenses in 2021–22. This compares to 62% using the approach in the 2020 Review.

13 The general regional cost gradient is used because it is not practicable to directly measure the effect of remoteness on each of the service expenses for the category. As is the case wherever the general gradient is used, a 25% discount is applied, reflecting the uncertainty about the nature of the relationship between remoteness and cost for some functions.[1]

[1] Commonwealth Grants Commission (CGC), *Report on GST Revenue Sharing Relativities: 2020 Review,* Volume 2, Part B, Ch19–33, CGC, Australian Government, 2020, accessed 1 June 2024, p 443.

Table 1 Expenses in the other expenses assessment

	Subcomponent (COFOG)	Description	Do regional costs apply?
Public safety	**820-10**		
	321	Civil protection services	Yes
	322	Fire protection services	Yes
	391	Control of domestic animals and livestock	Yes
	399	Public order and safety n.e.c.	Yes
Sports and Recreation	**820-20**		
	811	Recreational and sporting services	Yes
	821	Film production services	Yes
	829	Cultural services	Yes
	831	Broadcasting and publishing services (part of)	No
	832	Publishing services	No
	841	Religious and other community services	Yes
	851	R&D - Recreation, culture and religion	No
	891	Community centres and halls	Yes
	899	Recreation, culture and religion n.e.c.	Yes
Communications	**820-30**		
	451	Communication	Yes
	475	R&D - communication	No
Other purposes	**820-40**		
	0	COFOG n.e.c.	No
	1091	Natural disaster relief	Yes
	111	Executive and legislative organs	No
	112	Financial and fiscal affairs	No
	113	External affairs	No
	121	Economic aid to developing countries	No
	122	Economic aid routed through international orgs	No
	131	General personnel services	No
	132	Overall planning and statistical services	No
	139	General services n.e.c.	No
	141	Basic research	Yes
	151	R&D - general public services	No
	161	Public debt transactions	No
	171	Transfers between difference levels of government	No
	199	General public services n.e.c.	Yes

Wage costs

14 Differences in wage costs between states have a differential effect on the cost of providing services. Based on the information provided by states with their latest expense data, around 51% of total costs in the other expenses category are wage costs. This compares to 62% using the approach in the 2020 Review. The proportion

of total costs for which a wages adjustment is relevant will be updated each year based on the annual expense data submitted by states.

Commission draft position

15 The Commission proposes that other expenses should continue to be assessed equal per capita with adjustments for regional and wage costs for a sub-set of expenses.

16 The Commission considers that costs to deliver some services will increase with remoteness. On the basis of a review of state expense data for the services included in this category, it is proposed that the share of expenses for which regional costs will be applied will be around 47%, with the exact share to be determined on an annual basis based on state expenses. The general regional gradient, discounted by 25%, remains the best regional cost gradient for this category. For details on the proposed changes to the general regional gradient, see the geography chapter. Wage costs will also be applied to around 51% of total costs in this category, with the exact share to be determined on an annual basis based on state expenses.

Draft 2025 Review assessment method

17 Following consideration of state views, the Commission proposes that expenses be assessed on an equal per capita basis with adjustments for regional and wage costs for a sub-set of expenses. The Commission proposes that the share of expenses for which regional costs will be applied will be around 47% and wage costs will be applied to around 51% of total costs with the exact share to be determined on an annual basis based on state expenses.

18 Table 2 shows the proposed structure of the 2025 Review other expenses assessment.

Table 2 Proposed structure of the other expenses assessment

Component	Driver of need	Influence measured by disability	Change since 2020 Review?
Other expenses	EPC	The driver of these expenses is state population (a)	No
	Wage costs	Recognises differences in wage costs between states affect the costs of delivering services (b)	Yes. Share of relevant costs reduced
	Regional costs	Recognises the higher cost to deliver services to regional and remote areas (b)	Yes. Share of relevant costs reduced

(a) Population is considered the only driver for some but not all components of expenses in this category.

(b) Applied to a subset of service expenses: 47% of total category expenses for regional costs and 51% for wages costs in 2021–22.

Indicative distribution impacts

19 The impact on the GST distribution in 2024–25 from the proposed changes is shown in Table 3.

20 The proposed reduction in the share of expenses for which wage costs are applied would increase the GST distributed to states with below average wage costs. The proposed reduction in expenses for which regional costs are applied would increase GST distributed to states with a larger share of their population in less remote areas. The proposed changes to the general regional cost gradient are explained in the geography chapter. The changes would increase the distribution of GST to states with a larger share of their population in more remote areas.

Table 3 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	-619	-815	3	185	92	315	368	471	1,434
U2024 using draft R2025 methods	-591	-814	-17	199	73	308	373	469	1,422
Effect of draft method changes	28	1	-20	15	-19	-7	5	-3	48
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	-73	-116	0	62	49	543	768	1,835	52
U2024 using draft R2025 methods	-69	-116	-3	67	39	531	778	1,825	52
Effect of draft method changes	3	0	-4	5	-10	-12	10	-11	2

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapters.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025–26.

Investment

Overview

1 On 12 October 2023, the Commission issued a consultation paper on the draft investment assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method with 2 changes designed to reduce volatility and ease state data compliance burdens.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states support smoothing user population growth to reduce volatility, with an associated reduction in contemporaneity?

Q2. If user population growth were to be smoothed, do states support a 3-year moving average of growth rates?

State views

5 New South Wales, Victoria, Queensland and Western Australia did not support the proposal, preferring the retention of the 2020 Review approach. New South Wales said that, outside of COVID-19 affected years, the volatility in population growth is not a substantive concern.

6 New South Wales, Queensland, and Western Australia valued contemporaneity over smoothness, noting the 3-year assessment period already reduces volatility.

7 Victoria was concerned that introducing a smoothing measure would necessitate double counting COVID-19 affected years.

8 Tasmania, South Australia, the ACT and the Northern Territory supported the proposal to smooth population growth, saying investment decisions reflect long-term population growth, not volatile annual growth.

9 Western Australia said that if smoothing is to be used, it should be over as short a period as possible.

Commission response

10 Over time, both a smoothed and unsmoothed approach should give similar results, albeit smoothing would add complexity to the current assessment method.

11 The Commission notes Victoria's comments that moving to a smoothed approach would lead to some years' population growth influencing GST distributions more than others (Table 1). This could distort the assessment, particularly where these years were COVID-19 affected. Phasing in the smoothed approach could mitigate this effect somewhat but this would add even more complexity.

Table 1 Contribution of data years to inquiries, introduction in 2025 Review

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	Total
	%	%	%	%	%	%	%	%	
2020 Review	33								
2021 Update	33	33							
2022 Update	33	33	33						100
2023 Update		33	33	33					100
2024 Update			33	33	33				100
2025 Review		11	22	33	22	11			100
2026 Inquiry			11	22	33	22	11		100
2027 Inquiry				11	22	33	22	11	100
2028 Inquiry					11	22	33	22	
2029 Inquiry						11	22	33	
2030 Inquiry							11	22	
2031 Inquiry								11	
Total contribution over time	**100**	**111**	**133**	**133**	**122**	**100**	**100**	**100**	

Source: Commission calculation.

12 The Commission also notes that, even with smoothing of user population growth, significant volatility in the assessment could still arise from fluctuations in relevant investment spending.

13 On balance, the Commission considers the additional complexity involved in implementing the smoothing approach outweighs the benefits of the change.

Commission draft position

14 The Commission proposes not to smooth user population growth.

Q3. Do states support freezing the component shares of the value of assets for the life of the 2025 Review?

State views

15 Western Australia, Tasmania and the Northern Territory supported the proposal to freeze component shares of assets for the 2025 Review.

16 New South Wales, Victoria and Queensland did not support the proposal. They argued that any reduction of volatility was likely to be minimal and the burden of providing the data is not significant.

17 South Australia did not explicitly agree or disagree with the proposal but indicated a preference for improving the current data sources to alleviate the volatility and asset revaluation issues.

18 The ACT wanted more analysis of the impacts on GST distribution to be made available before supporting or rejecting the proposal.

Commission response

19 The view in the investment consultation paper was that state revaluations of assets appeared to increase the volatility of the assessment without necessarily increasing its reliability. It was also considered to impose significant administrative burden on states. The proposed freezing method change was intended to reduce noise, volatility, complexity, and the state data burden, without a significant cost to the contemporaneity or accuracy of the assessment.

20 Freezing the component shares of asset stock would result in a loss of contemporaneity and responsiveness of the assessment to investment trends. It could potentially introduce bias into the assessment due to the implied assumption that asset stocks grow at the same rate among all components when in reality some grow much faster than others. Component shares for urban roads and urban transport have increased significantly, while the share for rural roads has fallen since the 2020 Review. The proposal, if implemented in the 2020 Review, would have resulted in the assessment not appropriately accounting for changes in what states do. The analysis also showed that the impacts on volatility reduction would be marginal, corroborating the views of New South Wales, Victoria and Queensland.

21 The Commission notes the advice from states that the data burden is not significant. After consulting with states and further analysing the potential impacts of the initial proposal, the Commission proposes not to freeze component shares, favouring the retention of the 2020 Review method.

Commission draft position

22 The Commission proposes to retain the 2020 Review method and not freeze component shares.

Other issues raised by states

Cost of construction

23 Victoria recommended the Commission evaluate the suitability of the Rawlinsons construction cost indices and consider replacing them or discounting their use. Victoria questioned the contemporaneity and policy neutrality of the Rawlinsons indices. Victoria suggested the Commission explore the use of data from private quantity surveyors that may provide a more accurate and contemporaneous picture of states' costs.

24 Tasmania noted that Rawlinsons already considers labour costs. It was concerned the use of Rawlinsons blended with the Commission's wage costs assessment double counts the impact of wages and argued for Rawlinsons to be used without the blending with wage costs.

Commission response

25 In response to Victoria, the Commission notes that Rawlinsons data are publicly available, widely used, and increase the transparency of this assessment. The Commission is not aware of any superior practical alternative. Victoria's suggestion of engaging quantity surveyors to provide a more contemporaneous estimate of costs may provide a better estimate of such costs. However, to produce such estimates for all states would require engaging quantity surveyors in all states and developing a mechanism to ensure their estimates were comparable.

26 Rawlinsons is one of at least 3 regional construction cost guides in Australia. Alternatives include the Cordell Construction Cost Index and BMT's Construction Cost Calculator.[1] These guides do not appear to be as comprehensive as the Rawlinsons construction cost guide. The Commission is not aware of any source of nationally consistent data on construction costs that is likely to rival Rawlinsons for the Commission's purposes.

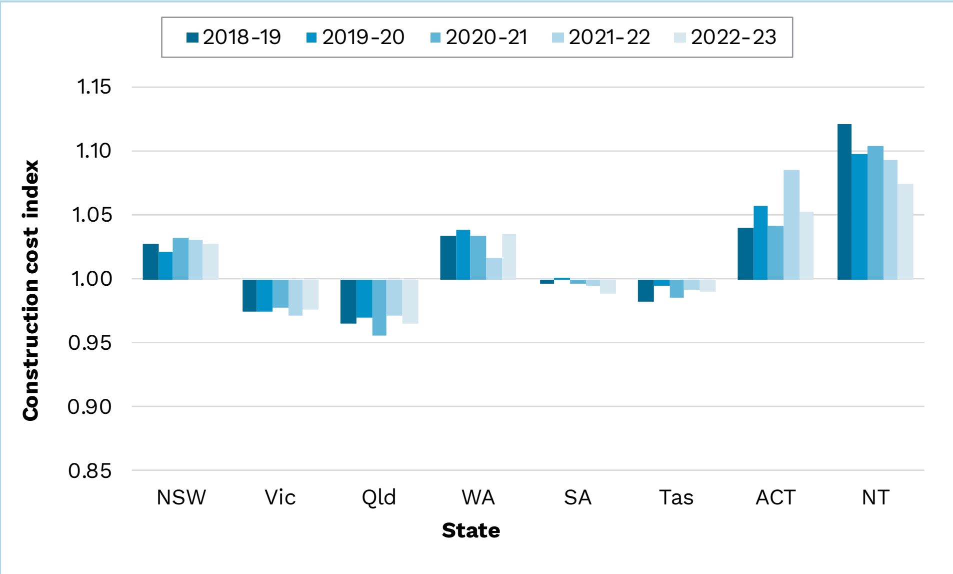
27 While Rawlinsons may not be as contemporaneous as directly engaging quantity surveyors, the Commission does not consider this to be a major concern. State departments building new projects require highly contemporaneous, or even forward-looking, data on prices. The Commission's requirements for contemporaneity are less stringent. The analysis below suggests that while construction costs have increased nationally in recent years, the difference between states is marginal.

28 The Commission accepts that construction costs may be affected by state policies, particularly if a state has a very high level of investment projects that drive up

[1] Cordell Construction Cost Index (CCCI) | CoreLogic Australia; Construction Cost Calculator & App | BMT Tax Depreciation (bmtqs.com.au)

prices. The Commonwealth has expressed concerns that large state infrastructure projects have been increasing inflationary pressure in recent years, prompting a review and reprioritisation of Commonwealth funding.[2] Rawlinsons estimates of construction costs have shown general rates of inflation since 2020 across all states (Figure 1). The inflation appears relatively consistent across all locations, therefore not indicating any substantial divergence in costs in different cities over time. This suggests that there are no major individual state policy influences on construction cost differentials or that Rawlinsons is not a contemporaneous and reliable source for relative construction costs.

Figure 1 Relative construction costs, 2018–19 to 2022–23



Source: Commission calculation.

29 The Commission has considered Tasmania's argument that blending Rawlinsons with the wage costs assessment leads to double counting. All investment costs are subject to local labour costs. The Commission has 2 approaches to measuring this: using the Rawlinsons estimates and using the wage costs assessment. The Commission effectively applies Rawlinsons factors to half of assessed state investment and the wage costs factors to the remaining half of assessed state investment. This means that every dollar of state spending has an adjustment for local labour costs, without any dollar having both factors applied.

Commission draft position

30 The Commission proposes to retain the 2020 Review method while continuing to monitor the appropriateness of Rawlinsons cost indices.

[2] Nation-building infrastructure for a better Australia | Ministers for the Department of Infrastructure

Brownfields investment

31 Victoria asked the Commission to actively monitor the potential for assessing states' brownfields investment needs and associated higher costs.

Commission response

32 In the 2020 Review, the Commission used Victorian data and found that while some services, such as schools, are more expensive to provide for growing populations in established urban areas, other services can be supported by existing infrastructure. The additional cost of services such as schools was not material.

33 The Commission investigated whether the prevalence of brownfields investment has significantly increased since the 2020 Review. Schools are the major service that require construction in brownfields areas, as they are highly localised, so need is responsive to local population growth. Only 3 of the 74 new schools built or under construction in Victoria since 2020 are in a brownfields area.[3] This suggests that construction in brownfields areas is unlikely to be significantly larger than when the Commission found it to be immaterial in the 2020 Review.

Commission draft position

34 The Commission proposes not to introduce a brownfields assessment.

Appropriate user populations

35 New South Wales raised concerns regarding the appropriateness of the user populations for the various investment components.

Urban transport

36 New South Wales, Queensland and South Australia considered that population squared should not be used as part of the proxy of user populations for urban transport.

37 New South Wales argued for the removal of the urban population squared blend, favouring the use of the regression only to assess the user population for investment in urban transport.

38 Queensland did not support the current approach for assessing investment in urban transport. Queensland argued that urban population be used as the user population for urban transport investment, replacing the blend of the recurrent expense regression and urban population squared. Queensland disagreed with the conceptual case of both the regression (as noted in the tranche 1 urban transport response) and urban population squared.

[3] New schools | schoolbuildings.vic.gov.au

39 South Australia also raised concerns about the use of blended population squared, arguing that its use should be reviewed.

Commission response

40 In the 2020 Review, for most components the Commission used state shares of recurrent spending as a measure of state shares of investment user populations. The Commission considers that for these components the recurrent spending approach remains appropriate. This section considers where measures of investment user populations differ from measures of recurrent spending.

41 The need for schools infrastructure differs slightly from recurrent schools needs. Infrastructure is driven by student numbers, with only First Nations students in schools with at least 25% First Nations students deemed to have higher capital requirements per student. The socio-educational profile of students that affects recurrent needs is not applied to capital needs. The Commission considers this approach remains appropriate.

42 The measure of need for road infrastructure is the same as for recurrent road spending, although the drivers are combined with capital specific weights. The Commission considers this approach remains appropriate.

43 The Commission has included new components in the health and welfare assessments, including mental health and homelessness respectively. In the 2020 Review, the health measure of capital needs included all health components, in proportion to their recurrent expenses. The Commission considers that states build infrastructure for mental health services, and so proposes to include mental health needs in the calculation of health capital needs. In the 2020 Review, the capital needs for welfare excluded the provision of concessions. In the 2025 Review, the Commission considers that states do not provide infrastructure for the National Disability Insurance Scheme, and that that component should also be excluded from the calculation of welfare capital needs. Homelessness services are more capital intensive than other welfare services, with soup kitchens and homeless shelters requiring capital. However, states contract non-government organisations to provide some homeless services, and in these cases do not build capital assets. On balance, the Commission considers that homeless services should be included in the calculation of welfare capital needs.

44 The measure of need for transport infrastructure in the 2020 Review differed from the recurrent driver of transport needs. States have made comments on issues associated with the measure of transport infrastructure needs and these are considered in the transport chapter.

Commission draft position

45 The Commission’s proposed changes to the urban transport recurrent assessment will affect user populations for the urban transport component of the investment assessment. The Commission proposes that capital stock requirements in health

include mental health assessed expenses and in welfare capital needs to include homeless services expenses but exclude National Disability Insurance Scheme expenses. For the remaining investment components, the Commission proposes to retain the approaches from the 2020 Review.

Draft 2025 Review assessment method

46 Table 2 shows the proposed structure of the 2025 Review investment assessment.

Table 2 Proposed structure of the investment assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
All components	Population growth	Capital requirement for additional user population	No (a)
	Capital deepening	Capital improvement and replacement of depreciated assets for existing user population	No (a)
	Cost of construction	Recognises the cost of construction	No

(a) Some component user populations will change as a result of method changes to the recurrent expense category drivers.

Indicative distribution impacts

47 The impact on the GST distribution in 2024–25 from the proposed changes in the investment assessment is shown in Table 3. These changes comprise changes in recurrent category methods flowing through to investment and changes to measures of user populations.

Table 3 Indicative impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
U2024 using R2020 methods	176	-1,271	565	999	-532	-283	-118	464	2,204
U2024 using draft R2025 methods	105	-1,229	468	1,055	-502	-275	-96	474	2,101
Effect of draft method change	-72	42	-98	56	31	8	22	10	169
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
U2024 using R2020 methods	21	-181	101	338	-282	-487	-246	1,806	81
U2024 using draft R2025 methods	12	-175	83	357	-266	-473	-200	1,844	77
Effect of draft method change	-8	6	-17	19	16	14	47	38	6

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapter.
The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

48 The impacts on the GST distribution in 2024–25 from changes in other categories that affect the investment assessment are shown in Table 4. To estimate the full

impact of a change in a recurrent method, it is important to add the effect shown in the recurrent category chapter and the effect shown here.

Table 4 Indicative impact on GST distribution from proposed changes in recurrent expense categories that affect the investment assessment, 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
Investment in schools	4	10	-7	-2	1	1	1	-8	17
Investment in health	-76	-30	17	51	28	6	16	-11	117
Investment in housing	-27	-26	8	12	-7	0	-2	42	62
Investment in welfare	1	-10	5	1	0	0	-1	3	11
Investment in rural roads	56	100	-96	-43	-4	-2	12	-22	168
Investment in urban roads	-17	9	-24	12	15	4	-1	4	43
Investment in urban transport (a)	—	—	—	—	—	—	—	—	—
Investment in services to industry	-13	-10	0	26	-2	0	-1	1	26
Total	**-72**	**42**	**-98**	**56**	**31**	**8**	**22**	**10**	**169**
	$pc	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**
Investment in schools	0	1	-1	-1	0	1	1	-29	1
Investment in health	-9	-4	3	17	15	10	32	-43	4
Investment in housing	-3	-4	2	4	-4	0	-4	164	2
Investment in welfare	0	-1	1	0	0	1	-2	13	0
Investment in rural roads	7	14	-17	-15	-2	-3	25	-87	6
Investment in urban roads	-2	1	-4	4	8	6	-3	17	2
Investment in urban transport (a)	—	—	—	—	—	—	—	—	—
Investment in services to industry	-1	-1	0	9	-1	0	-3	3	1
Total	**-8**	**6**	**-17**	**19**	**16**	**14**	**47**	**38**	**6**

(a) Indicative GST impacts of changes to urban transport investment will be detailed in the transport addendum.

Note: Numbers are calculated using the same GST pool and population as were used in the 2024 Update report.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.

Net borrowing

Overview

1 On 12 October 2023, the Commission issued a consultation paper on the draft net borrowing assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment.

3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that the conceptual basis for the net borrowing assessment remains unchanged?

State views

5 All states, except for Queensland, agreed that the conceptual case for the net borrowing assessment remains unchanged.

6 Queensland did not agree with the conceptual case for the net borrowing assessment. It said that "Net borrowing represents the amount by which the total outlays of the general government sector exceed its total revenue", arguing that the Commission's other assessments (expenses, revenue, and investment) implicitly equalise the residual that is net borrowing need. For this reason, Queensland argued to discontinue the assessment, or failing that, to apply a 50% discount.

7 Queensland also said that there has been a fundamental shift in the level of borrowing undertaken by states, largely driven by the increased spending throughout the COVID-19 pandemic. It said that COVID-19 related spending, and subsequent increases in state debt, were policy contaminated.

8 Queensland said that population growth as a measure of need does not sufficiently capture state circumstances. It said that states with different socio-demographic characteristics have different capacities to service debt and therefore should be considered in the assessment.

9 Queensland also said that states with higher population growth rates need to borrow more to fund increased infrastructure needs.

Commission response

10 The net borrowing assessment has 2 conceptual parts:

- equalising per capita net borrowing in the assessment year (assessed equal per capita)
- equalising states' net debt per capita (allowing for different states having different rates of population growth).

11 As Queensland pointed out, equalising expense, revenue, and investment needs implicitly equalises the year-on-year change of residual net borrowing needs. This is why the change in net financial position is assessed equal per capita.

12 If the Commission did not allow for the effect of differential population growth on the stock of net debt, then faster growing states would have lower debt per capita than slower growing states. Lower debt per capita would lead to lower interest payments. The impact of changes in state populations on average net financial positions is not implicitly equalised by the other assessments.

13 The Commission has considered Queensland's argument that increases in state net borrowing and net debt have fundamentally changed the basis of the assessment. While these changes have made net borrowing a more significant driver of GST distribution, they have not changed the conceptual basis of the assessment. Different states have different levels of net borrowing and net debt. In total, states had net borrowing of $40 billion in 2022–23. Thus, the average of what states collectively did was to borrow $1,517 per capita in that year.

14 The Commission recognises that state borrowing activities have diverged, and on average, grown. Neither of these changes affects the conceptual basis of the assessment method.

15 The Commission has considered Queensland's argument that population growth should be replaced by growth of specific sub-populations to assess capacities to service debt. States' different fiscal capacities across revenue, expense and investment assessments are equalised. This means that the requirement to borrow in the assessment year should not be influenced by growth in the specific sub-populations.

16 Queensland also argued that growing states need to borrow more to fund increased infrastructure. This need is assessed in the investment assessment. To include this in the net borrowing assessment would represent double counting of this need.

Commission draft position

17 The Commission proposes to retain the current net borrowing assessment method.

Q2. Do states support smoothing population growth to reduce volatility in the net borrowing category if a change is made to smooth population growth in the investment assessment?

State views

18 All states agreed with the proposal to keep the population growth measure consistent between the investment and net borrowing assessments.

19 New South Wales, Victoria, Queensland and Western Australia argued against smoothing population growth in the investment assessment, but accepted that if it were to be introduced in the investment assessment, the net borrowing assessment should smooth population growth as well.

Commission response

20 As outlined in the investment chapter, the Commission proposes not to smooth population growth in the investment assessment. Therefore, it proposes not to smooth the population growth in the net borrowing assessment, to retain consistency between the capital assessments.

Commission draft position

21 The Commission proposes not to change the net borrowing assessment.

Draft 2025 Review assessment method

22 Table 1 shows the proposed structure of the 2025 Review net borrowing assessment.

Table 1 Proposed structure of the net borrowing assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Net Borrowing	Population growth	Recognises population growth	No

Indicative distribution impacts

23 No method changes are proposed for this assessment.

Commonwealth payments

Overview

1 On 27 June 2023, the Commission issued a consultation paper on the draft Commonwealth payments assessment. The paper considered changes since the 2020 Review and their implications for the assessment method.

2 The Commission proposed to retain the 2020 Review assessment method with 2 additional elements:

- a default 'impact' treatment for payments where there is substantial uncertainty about whether relevant state expenditure needs are assessed or the purpose of the payment
- excluding Commonwealth own-purpose expenses (COPEs) from the scope of payments considered.

3 A summary of state and territory (state) responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree the guideline for deciding the treatment of Commonwealth payments remains appropriate?

State views

5 All states said the guideline remains appropriate, although Queensland and the Northern Territory qualified their agreement.

6 Queensland said it agreed subject to a discount being applied to the National Health Reform Agreement payments to offset higher expenses incurred by states on hospital services due to perceived deficiencies in Commonwealth funding of primary and aged care services.

7 The Northern Territory said it broadly agreed subject to the guideline clarifying that payments aimed at addressing structural disadvantage belong to a category of services where the Commission does not assess need. The Northern Territory also said the framework should clarify that mixed-purpose agreements with separated funding schedules may attract different GST treatments.

Commission response

8 Queensland's suggestion for a discount to the National Health Reform Agreement is addressed in the health chapter of this report.

9 The Commission notes the Northern Territory's issue regarding payments aimed at addressing structural disadvantage. If payments for structural disadvantage are separately identified and needs are not assessed, the payment would be treated as no impact according to the guideline. This issue is discussed further in the section on payments for structural disadvantage below.

Commission draft position

10 The Commission considers its existing guideline for deciding the treatment of Commonwealth payments remains appropriate. It proposes to retain the guideline, with additional guidance on its implementation discussed below.

Q2. Do states agree to a default treatment of 'impact' in cases where there is substantial uncertainty about the payment's purpose or whether relative state expenditure needs are assessed? It remains open to states to provide evidence in support of no impact.

State views

11 Most states said they agreed with a default impact treatment for payments where there is substantial uncertainty about the purpose of a payment or uncertainty about whether the Commission is assessing needs. Some states said such an approach would give a degree of certainty on the treatment of new payments.

12 Queensland and Tasmania emphasised that states should continue to be afforded the opportunity to present a case, supported by evidence, where they disagree with the impact treatment. Queensland said the Commission should continue to assess payments on a case-by-case basis and should be willing to reconsider its decision in light of new evidence. Western Australia said if states are able to challenge the default treatment after the new issues paper is released, other states should also be given the opportunity to respond.

13 South Australia proposed an alternative approach. It said uncertain payments could be treated 50% impact and 50% no impact. It said this approach would moderate the redistribution compared to a default impact treatment.

Commission response

14 The Commission will continue to consider Commonwealth payments on a case-by-case basis. Where it is clear that a payment is not for a state service or that needs are not assessed, the payment will be treated as no impact. The default impact treatment is only intended to apply to the minority of payments where the

Commission is uncertain if they fund a state service or if they fund expenditure for which the Commission assesses needs.

15 In response to the issues raised by Queensland and Tasmania, the Commission notes that states will continue to have the opportunity to challenge the default impact treatment as part of the new issues process in an annual update of GST relativities. It also agrees that states should have the opportunity to respond to the comments of other states in cases where the Commission is considering changing its initial view.

16 The Commission recognises that the South Australian proposal to adopt a 50% impact treatment of uncertain payments is a simple approach to deal with payments where there is substantial uncertainty. However, the Commission considers the proposed approach of defaulting to an impact treatment, with states having the opportunity to challenge the outcome, is more consistent with equalisation than an arbitrary 50/50 split.

Commission draft position

17 The Commission proposes to adopt a default treatment of impact in the small number of cases where there is substantial uncertainty about whether a Commonwealth payment is for a state service for which needs are assessed. States will continue to have the opportunity to challenge this default treatment.

Q3. Do states agree to discontinue the assessment of Commonwealth own-purpose expense payments?

State views

18 Most states supported the proposal to discontinue the assessment of COPEs. Several states said that assessed COPEs make up a very small proportion of Commonwealth payments and there is not a comprehensive list of COPEs. Western Australia said the current approach of considering some COPEs but not others was inequitable. It added that if they were properly classified as COPEs by the Commonwealth, they should be treated as no impact. While Victoria and South Australia supported the proposal, they said if the quantum (or materiality) of COPEs increased in the future, their exclusion should be reviewed.

19 New South Wales said that conceptually all Commonwealth payments that support state services for which needs are assessed should be considered, including COPEs. It said the Commission should test the materiality of identified COPEs and only exclude those that do not meet a materiality threshold. New South Wales said the issue was similar to the treatment of state health services provided by the private sector. It said in both cases a state is relieved from the need to undertake expenditure and that this should be captured in the Commission's assessments.

Commission response

20 In keeping with the Commission's guideline for the treatment of Commonwealth payments, all payments that support states services, or that relieve a state from providing a service, should be included as impact.[1] However, in the absence of comprehensive data on COPEs, the Commission is only able to consider a limited number of COPEs paid to state entities – those which are easily identifiable or have been brought to the Commission's attention by states. In addition, the Commission does not have visibility of COPEs paid to non-government organisations, some of which may reduce the amount a state needs to spend on a service.

21 The Commission also notes there has been a significant reduction in the value of COPEs included in assessments since the transition to the current Federal Financial Relations framework in 2009. It is unclear whether the reduction reflects an overall reduction of COPEs by the Commonwealth, or a shift towards funding activities through non-government organisations rather than state governments. While the Commission does not apply a materiality threshold to Commonwealth payments, it observes that there is only one COPE (Rural and other health grants) that would be material at the $40 per capita driver threshold and this is only material for the Northern Territory.

22 Under the New South Wales proposal, the Commission could continue to assess single material COPEs. However, given the possibility of unidentified COPEs paid to states, the Commission considers removing all COPEs from the assessment is a more consistent and equitable approach.

23 To test the materiality of individual COPEs on a case-by-case basis as proposed by New South Wales or monitor the quantum of COPEs as suggested by Victoria and South Australia, the Commission would have to continue requesting data from numerous Commonwealth Government agencies. On practicality grounds, the Commission is not inclined to do this. However, if there are significant changes to Federal Financial Relations, or evidence of significant increases in funding paid to states outside of the Federal Financial Relations framework, the Commission may review its position.

Commission draft position

24 Given the small size of identified COPEs and the difficulty in comprehensively identifying all COPEs, the Commission proposes to cease including the revenue paid to states in the form of COPEs in its Commonwealth payments assessment.[2]

[1] The Commission's guideline is outlined in the consultation paper.

[2] The Commission notes that, to the extent COPEs are captured in ABS Government Finance Statistics data, they will be reflected in the Commission's 'balancing item'. The balancing item ensures the sum of individual Commonwealth payments sourced from the Commonwealth Final Budget Outcome matches total Commonwealth payments in Government Finance Statistics data. The balancing item does not move states' relative fiscal capacities away from an equal per capita assessment.

Q4. Do states agree that the guideline for determining the GST treatment of Commonwealth payments should be applied in cases where payments include elements aimed at addressing pre-existing structural disadvantage?

State views

25 Most states said the Commission's guideline remains valid in the cases where payments include elements that are aimed at addressing pre-existing structural disadvantage. Seven states said payments aimed at addressing structural disadvantage are best excluded through the terms of reference for an update.

26 New South Wales said if a state considers a payment to be outside average policy, it should be required to provide evidence that expenditure needs are not assessed. South Australia said there was a risk of overcompensation relative to actual state needs if a payment was excluded where expenditure needs are actually assessed.

27 New South Wales said equalisation by itself will not necessarily provide states with the sufficient funding to overcome disadvantage. It said that if it is average policy to address specific forms of disadvantage, then equalisation will act to distribute funds to states according to their differential needs.

28 New South Wales said to decide whether to treat Commonwealth funding related to overcoming disadvantage as no impact, the Commission would first need to determine the extent to which states' existing expenditure efforts are already reflected in an assessment. It said any payment that a state considers outside of average policy should require the state to provide evidence of how the corresponding expenditure is not captured in the expenditure assessments.

29 The Northern Territory said that payments aimed at addressing pre-existing structural disadvantage should be excluded from the GST calculations. It said payments aimed at addressing pre-existing structural disadvantage are driven by the aim of achieving outcomes that are not currently met, rather than the delivery of state average services and therefore should be excluded from the assessment for the purpose of fiscal equalisation.

30 The Northern Territory said fiscal equalisation seeks to equalise to the average level of services delivered by jurisdictions. This can lead to significant divergence in outcomes as average expenditure level makes no allowance for whether the expenditure is sufficient to achieve similar outcomes for all persons or within all jurisdictions. It said excluding payments aimed at addressing pre-existing structural disadvantage is a clarification of the existing guidelines for excluding payments for services which needs are not assessed.

Commission response

31 The Commission considers that there is scope within the existing guideline to consider whether payments relating to structural disadvantage should be excluded from the GST calculations. If needs for structural disadvantage are not assessed, then payments for such purposes should be excluded from impacting the GST distribution as per the current guideline.

32 The Commission agrees with the view of 7 states that for clarity it would be preferable for the terms of reference for an update to exclude payments for structural disadvantage. Should the terms of reference not quarantine these payments, this will not necessarily preclude the Commission from making a no impact decision if it concludes that the payment is for existing structural disadvantage and the needs are not assessed. The Commission agrees with New South Wales that any such decision should be based on evidence provided to the Commission.

Commission draft position

33 The Commission considers that it should apply its existing guideline for deciding the treatment of payments to all Commonwealth payments, including those that might contain elements addressing pre-existing structural disadvantage.

34 In taking this position, the Commission notes that if there is clear evidence that a payment or part payment is for pre-existing structural disadvantage and needs are not assessed, it will be treated as no impact.

Other issues raised by states

Commonwealth-state disagreements about the nature of a payment

35 New South Wales said it had concerns about cases where the Commonwealth Treasury and a state disagree on the nature of a specific payment. It said, in such cases, the Commission should come to a decision on the matter through its own analysis, rather than solely relying on the Commonwealth Treasury's position.

36 New South Wales cited the specific example, from the 2020 Review, of a payment under the Skilling Australia Fund that New South Wales considered a reward payment, but the Commonwealth Treasury did not. New South Wales said where the Commission relies solely on Commonwealth Treasury advice, there may be a disincentive for states to enter a funding agreement, if the benefit to the state is reduced by the GST redistribution.

37 New South Wales said although this issue would ideally be managed between the Commonwealth and the states, there was a role for the Commission in the event of

a dispute. It said there would be benefit in the Commission reconciling the reward payments identified by the Commonwealth with those identified by each state.

Commission response

38 Terms of reference specify a default no impact treatment for reward payments. In response to the comments from New South Wales, the Commission contacted Commonwealth Treasury and it confirmed previous advice that there were no reward payments in recent updates. The Commission may not always be well placed to determine whether a payment meets the definition of a reward payment. The Commission will continue to be guided on these issues with advice from the Commonwealth Treasury and the states, as well as considering published national agreements.

Commission draft position

39 The Commission proposes to continue to apply its existing guideline for deciding the treatment of Commonwealth payments. Where appropriate, it will continue to be guided by the advice of Commonwealth Treasury and the states, as well as considering published national agreements, to determine which payments are reward payments.

Draft 2025 Review assessment method

40 Following consideration of state views, the Commission proposes to retain the 2020 Review assessment method with 2 changes to its implementation:

- a default impact treatment will be adopted for payments where there is substantial uncertainty as to whether or not a Commonwealth payment is for a state service for which needs are assessed
- COPEs will no longer be included in the assessment.

41 Table 1 shows the proposed structure of the 2025 Review Commonwealth payments assessment.

Table 1 Proposed structure of the Commonwealth payments assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
Impact payments	Actual payments per capita	Recognises that states which receive above-average per capita Commonwealth payments have greater fiscal capacity.	No

Indicative distribution impacts

42 The impact on the GST distribution in 2024-25 from the proposed changes is shown in Table 2. Removing COPEs from the assessment would increase the GST distributed to the Northern Territory and reduce the distribution to New South Wales, Victoria, Queensland and Tasmania.

Table 2 Indicative revenue impact on GST distribution (difference from an equal per capita distribution), 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	$m	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
U2024 using R2020 methods	685	1,400	-1,310	-344	52	-116	154	-521	2,291
U2024 using draft R2025 methods	663	1,375	-1,320	-344	54	-117	156	-466	2,248
Effect of draft method changes	-22	-25	-10	0	3	-1	1	54	-59
	$pc	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**
U2024 using R2020 methods	80	199	-234	-116	27	-200	322	-2,028	84
U2024 using draft R2025 methods	78	195	-236	-116	29	-202	325	-1,816	82
Effect of draft method changes	-3	-4	-2	0	1	-1	3	212	-2

Note: The GST pool and population estimates are equivalent to those used in the 2024 Update.
The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.
Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025-26.

43 The Commission proposes to change the treatment of the Commonwealth payments *COVID-19 public health response* and *Support for businesses impacted by COVID-19* lockdowns from a no-impact treatment to an impact treatment. The impact of this change is not included in Table 2. More information on those changes is provided in the health and services to industry chapters.

Adjusted budget

Overview

1 On 6 October 2023, the Commission issued a consultation paper on the adjusted budget. The Commission considered changes since the 2020 Review and their implications for the adjusted budget method.

2 The Commission proposed to retain the 2020 Review method with 2 additional elements: the use of the Australian Bureau of Statistics (ABS) preliminary Government Finance Statistics data for the most recent assessment year and clarification on methods for making an adjustment to Government Finance Statistics data.

3 A summary of state and territory (state) responses to each consultation question, responses to states' other issues, the Commission's draft position and the draft 2025 Review assessment method are included below.

4 State submissions can be viewed here.

Consultation questions

Q1. Do states agree with the Commission's preliminary view to use:

- **ABS preliminary Government Finance Statistics data for year 3?**
- **a state's year 3 data if the ABS preliminary data are not available?**
- **the final ABS Government Finance Statistics data for the first 4 assessment years (year minus 1 to year 2)?**

State views

5 There was broad support from New South Wales, Victoria, Queensland, Western Australia, South Australia, Tasmania and the Northern Territory for the Commission's proposal to use preliminary ABS Government Finance Statistics data for year 3, use a state's year 3 data if preliminary ABS data were not available, and continue to use final ABS Government Finance Statistics data for the first 4 years of data. The ACT did not support using preliminary ABS data for year 3.

6 New South Wales, Victoria, South Australia and the ACT raised concerns about the late availability of the preliminary ABS data.

7 New South Wales said in cases where preliminary ABS data are not available for all states, the Commission should determine whether it is appropriate to use data from 2 sources (states and the ABS) to compile the adjusted budget. New South Wales noted, however, that this issue may not cause a material difference since only national totals are relevant for the Commission's purposes.

8 Victoria had concerns over whether there will be sufficient time for states to respond to late requests for year 3 data if the preliminary ABS data are not available on time, particularly if further state engagement is required to verify data. Victoria asked the Commission to outline the process for managing this challenge.

9 Victoria also said the Commission should provide more information to states regarding the adjustments made by the ABS to states' raw data when preparing the preliminary ABS year 3 data.

10 South Australia said that if there were delays in receiving ABS preliminary data resulting in the use of state year 3 data, further consideration may need to be given to the data source for year 3 data.

11 While the ACT supported using final ABS data for the first 4 assessment years, it did not support using preliminary ABS data for year 3. The ACT noted that not all jurisdictions would be able to provide their preliminary data in time for the annual updates. Further to this, the ACT said it was unable to reconcile the adjustments made by the ABS to its preliminary data at the category level (such as at the health, education or transport level).

12 The ACT also referred to the Commission's analysis of 2021-22 data indicating significant revisions to the preliminary ABS data compared with the final ABS data for both the ACT and the national totals. In the case of investment expenditure for the ACT, the total was revised down in the preliminary ABS data and then revised back up in the final ABS data.[1]

13 The ACT also noted its year 3 data reflects the implementation of the Australian Accounting Standard Board (AASB16) Leases accounting standard. This means its year 3 data will not require an adjustment, while such an adjustment will be required if the preliminary ABS data are used for year 3.

Commission response

14 The Commission considers that final ABS Government Finance Statistics data are the most reliable and fit-for-purpose source of state budget data. This is because the data are audited by the ABS for consistency of coding and quality across all states.

[1] As part of its yearly adjusted budget process, staff provide states (typically in December each year) with the revisions made by the ABS to their previous years' category level revenue, expense, and investment data. In early 2024, staff also provided states with similar revisions (made by the ABS) to states' ABS preliminary data compared with their ABS final data.

15 While preliminary ABS Government Finance Statistics data are not subject to the same validation and consolidation processes as the final ABS data, they have undergone some basic standardisation processes, including bringing all jurisdictions' files into a standard format and applying a range of fundamental business rules to carry out re-coding of particular types of data. This should improve consistency of Government Finance Statistics data between states and reduce the number of adjustments and revisions that are currently required due to the use of raw state data.

16 Even so, given the preliminary nature of the data, differences between the preliminary data and final data are expected. The Commission will continue to monitor differences in the preliminary ABS data and the final ABS data and consider adjustments in consultation with the relevant state and the ABS where necessary.

17 The Commission notes that in the 2024 Update, the preliminary ABS data from most states were available by mid-December 2023, with one state providing its file in early January 2024.

18 If preliminary ABS data are not available in time, the Commission proposes to use the states' year 3 data instead. This means a mix of preliminary ABS data and state year 3 data may be used to create the adjusted budget. If using preliminary ABS data from all states is not possible, using preliminary ABS data from as many states as possible is preferable.

19 To ensure year 3 adjusted budget data (either preliminary ABS data or state data) are available in a timely manner, the Commission proposes to send out data requests to states in July as per the usual update process. States will be asked to inform the Commission when they plan to give their raw Government Finance Statistics data to the ABS. If states anticipate data will not be provided to the ABS before December, they will be asked to complete the data request and submit their year 3 data directly to the Commission before December or as soon as possible after. If states subsequently provide preliminary ABS data to the Commission, these will be used instead of the data provided by states.

20 The ABS has provided a high-level outline (below) of the data adjustments made to states' raw data to turn it into the preliminary ABS data.

- States' Government Finance Statistics data files are brought into a standard format.
- Business rules are applied to re-code certain data combinations. For example, re-coding a current grant expense from General Government to the Public Non-Financial Corporation sector from a current grant to a subsidy.
- Incomplete codes are identified and repaired. For example, a missing Classification of Function of Governments – Australia (COFOG-A) code on an expense transaction. The ABS may consult state treasuries in this process.
- Any state treasury coding relating to AASB16 is not changed by the ABS in the unit record creation process. For example, if states code their Government Finance Statistics file so that the effect of AASB16 is removed, or if states leave

in the effect of applying the AASB16 accounting standard, both of these types of coding will remain in the preliminary unit record files returned to state treasuries by the ABS.

21 It is the Commission's understanding that the ABS provides states with the preliminary ABS data and then states in turn provide these data to the Commission. This means states can compare their raw Government Finance Statistics data with the preliminary ABS data to see what specific changes the ABS has made.

22 Regarding the treatment of the AASB16 accounting standard, the Commission has confirmed (as noted above) that the preliminary ABS data include the effect of the standard which means that no adjustment needs to be made to year 3 data. An adjustment for AASB16 is still required in each update for the final ABS data (for assessment years 1 and 2). This has been the case since the 2022 Update following the introduction of the new accounting standard.

23 The Commission will monitor the progress of using preliminary ABS data. If ongoing issues are encountered, the use of preliminary data may need to be re-examined in the next review.

Commission draft position

24 The Commission proposes to use preliminary ABS General Finance Statistics data from states for year 3 where they are available, and state year 3 data in cases where they are not available. This process will be monitored to ensure using preliminary ABS data remains appropriate for year 3. The Commission will continue to use final ABS General Finance Statistics data for the first 4 assessment years.

Q2. Do states consider the proposed process for implementing adjustments in the 2025 Review adjusted budget is appropriate?

State views

25 There was broad support from all states for the proposed process for implementing adjustments in the 2025 Review. Queensland, South Australia, Tasmania, and the ACT said, if adjustments are made, states should be consulted.

26 Victoria asked for further clarity on how the Commission intends to consult with states concerning the adjustments process. Victoria said all states should be made aware of adjustments that are applied to ensure transparency. This should be documented through annual updates, either in the update report, or in the assessment simulator spreadsheets.

27 New South Wales and Western Australia said some adjustments should be made regardless of materiality, such as where obvious errors are found.

28 New South Wales also said if data are required to be reclassified to align with the Commission's assessment structure, the reclassification should happen. It said that

a materiality threshold of $12 per capita equates to nearly $100 million for New South Wales.

29 Western Australia provided an example where the adjusted budget included mining revenue (a water extraction charge) for the ACT for the years 2015–16 to 2017–18, despite the ACT being assessed as having zero revenue raising capacity for mining revenue. It said that if such an error is not corrected it has the potential to confuse stakeholders and should be corrected regardless of materiality.

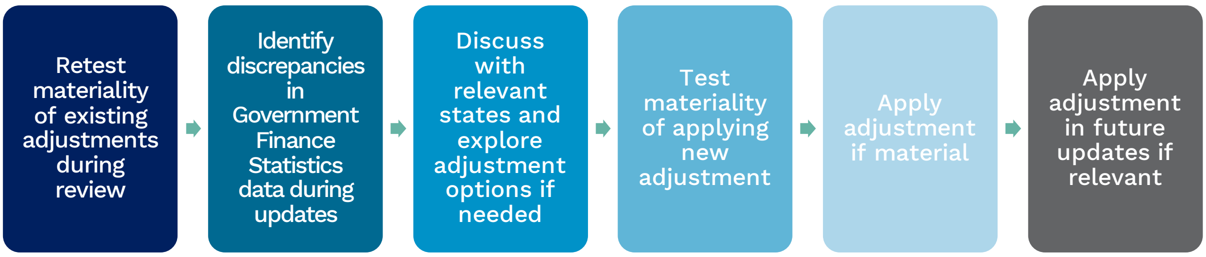
30 New South Wales asked the Commission to clarify whether adjustments found to be immaterial in one update will be tested again in subsequent updates.

31 The Northern Territory noted that many adjustments are likely due to the discrepancy between the adoption of accounting standards by states, and different reporting rules used by the ABS, such as on the treatment of leases (AASB16).[2] The Northern Territory said ABS data will continue to diverge from state data over time and may not be able to be reliably adjusted. The Northern Territory said a long-term solution may be desirable to resolve this issue and prevent the proliferation of adjustments. However, it acknowledged this may be an issue for the ABS to consider in its Government Finance Statistics reporting framework, such as through the Heads of Treasury Accounting and Reporting Advisory Committee, rather than a method change for the Commission.

Commission response

32 The Commission proposes the following process for implementing existing and new adjustments in the 2025 Review and subsequent updates.

Figure 1 Proposed adjustment process for the 2025 Review



33 ***Existing adjustments*** - The materiality of all adjustments applied in the 2024 Update will be tested for the 2025 Review. If an existing adjustment is not material (at $12 per capita) it will not be applied in the review or in subsequent

[2] New accounting standards were introduced around 2019–20. These were the introduction of leases (AASB 16), revenue recognition (AASB 15 & 1058), and service concession arrangements (AASB 1059). The ABS has not adopted the new standards and therefore its Government Finance Statistics data are consistent with its historical treatments. States have generally implemented these changes in their Government Finance Statistics data. This situation has resulted in increased divergences between ABS economic statistics publications and state government financial reporting. Australia Bureau of Statistics (ABS) Government Finance Statistics 2021-22 revisions-and-changes, ABS website, 2023, accessed 5 September 2023.

updates. The materiality of an existing adjustment will not be retested in future updates unless there is new information to suggest it has become material. If a state considers there has been a change to a previously immaterial adjustment, and it now considers the adjustment is material, this can be bought to the Commission's attention during the New Issues process for each update.

34 ***New adjustments*** – If the Commission or any state identifies a new issue with Government Finance Statistics data, the Commission will consult with the relevant state(s) and determine materiality before applying any new adjustments. The consultation process will be undertaken as soon as possible after a potential adjustment has been identified.

35 If new adjustments are identified that impact most or all states, early in the update process, the Commission will inform all states during the yearly New Issues process. These will likely be related to any adjustments required for the Year minus 1 to Year 2 ABS final data as they are received earlier than the year 3 data. Regarding adjustments for year 3 data, the Commission notes that due to timing constraints, some of the consultation with relevant states is likely to occur in December or January.

36 Once an adjustment has been implemented, the Commission will continue to apply that adjustment in subsequent updates, if required. The materiality of the adjustment will not be retested until the following review.

37 To ensure transparency, the Commission seeks to provide all calculations to states in the assessment system simulator.[3] Where confidential data prevent the calculation from being shared in its entirety to all states, the Commission will endeavour to provide as much detail in the calculation as possible without compromising data confidentiality protocols. A state can also separately request data on the adjustments made to its budget data.

38 The Commission agrees that it would be optimal to ensure the adjusted budget for each state aligns perfectly with the Commission's category structure regardless of the materiality of any required adjustments. However, the Commission also sees value in reducing the manual manipulation of Government Finance Statistics data to avoid introducing complexity and reducing transparency of the calculations. The Commission recognises its limitations in being able to identify all such misclassification errors, particularly if they are small. Therefore, where errors are identified for one state or across all states due to the COFOG-A coding not aligning between the Commission's category structure and ABS coding framework, the Commission will consider making an adjustment in accordance with the adjustment process (including materiality thresholds) outlined above.

[3] The assessment system simulator is a copy of all non-confidential calculations that contribute to the relativities. It allows for states to view data and methods providing greater transparency of the Commission's methods.

39 The Commission acknowledges that the use of final ABS Government Finance Statistics data and preliminary ABS or state data, will result in some inconsistencies between years that require adjustment. The different treatment of AASB16 is an example. While it would be preferable for both sources to align, the Commission acknowledges that state financial data and Government Finance Statistics data serve different purposes, and states and the ABS have different reporting obligations. The Commission is open to working with states and the ABS to better understand these differences.

Commission draft position

40 The Commission proposes to implement adjustments according to the proposed process described above.

Other issues raised by states

Reconciliation of data used by the Commission back to original state data

41 New South Wales said that to assist states in understanding the data used by the Commission, it would be beneficial for states if the Commission provided a comprehensive reconciliation of adjusted budget data used by the Commission back to original state data, including all adjustments.

Commission response

42 The Commission seeks to provide all calculations to states in the assessment system simulator. A state can also separately request data on the adjustments made to its budget data if these are not visible due to confidentiality concerns. The Commission will work towards providing greater clarity of the adjustments made to states data during the process of creating the adjusted budget.

43 Currently, disaggregated ABS Government Finance Statistics data are confidential and cannot be shared with states. Therefore, only aggregated GFS data can be provided in the simulator which limits the extent to which states can reconcile data. The ABS has informed the Commission that each state can be provided with its own disaggregated Government Finance Statistics data as this is covered under the return-to-source provisions.

Commission draft position

44 The Commission proposes to provide non-confidential data to states to allow for reconciliation of state and ABS Government Finance Statistics data.

Process for correcting data errors in prior years and the relative GST distribution for the impacted year

45 New South Wales said the Commission should introduce a defined process for correcting prior year data errors, as well as correcting the relative GST distribution for the impacted year.

46 New South Wales says the Commission should clearly articulate its position on retrospective data adjustments, including whether there is a materiality threshold or other factors that influence the Commission's assessment of whether a retrospective adjustment is fair and appropriate. New South Wales considers retrospective adjustments should be rare and subject to a high materiality threshold.

Commission response

47 The Commission does not generally make retrospective data adjustments to correct GST distribution for an impacted year. Retrospective data adjustments have been made in the natural disaster assessment where expenses are assessed on an actual per capita basis. In this situation, the accuracy of an individual state's expenses is more important than for assessments that rely on average spending of all states. In addition, it is difficult for the Commission to independently validate the natural disaster relief expense data reported by states in a timely manner. These conditions arise in rare situations only and do not apply to most assessments.

48 The Commission will only make retrospective data adjustments in very rare circumstances. In these instances, it will use its judgement on a case-by-case basis. It considers this approach is appropriate given the unknown nature and impact of data errors.

49 The standard process for correcting previous years' data errors is that the Commission will correct these errors in the update in which they are found. This ensures that they do not impact future GST distributions. Using a 3-year average mitigates the impact of a data error for the update in which the error was made.

Commission draft position

50 When data errors are discovered in previous assessment years, the Commission proposes to correct these errors in the corresponding assessment years of the current update. The Commission will generally not make an additional adjustment to correct for errors in GST distribution as a result of the data error in previous updates.

Improving COFOG-A data across states

51 New South Wales said the Commission, along with the ABS and states, should engage in a structured process to improve the quality of COFOG-A data.

52 New South Wales said there are a number of implausible actual to assessed expenditure ratios for individual states. It said this implies there are significant issues with the quality of COFOG-A data provided by states to the ABS, or there are fundamental errors in the assessment of drivers in these expenditure categories. It noted that assessments are based on state total expenditure figures and considered the misclassifications will impact the distribution of GST between states.

53 New South Wales said it has also carried out analyses of expenses across categories for the same assessment year, over consecutive updates. It said that putting aside the year 3 to year 2 estimates of expense for an individual financial year, which it accepts is impacted by the use of preliminary data, the per capita differences for individual states significantly exceed the materiality threshold set by the Commission.

Commission response

54 The Commission considers ABS data are the most comprehensive and comparable data available. It notes the ABS does on occasion make revisions and changes to how it codes its Government Finance Statistics data, which may include revising previous years' data. These revisions are outlined on the ABS Government Finance Statistics website.[4]

55 The Commission acknowledges there are differences in data across states, however, analysis undertaken by the Commission to identify differences (at the category level) between state and ABS Government Finance Statistics data that would potentially result in a material revision indicates that there are very few differences that warrant adjustment. Where material differences occur repeatedly, the Commission works closely with the relevant state to resolve the issue.

56 The Commission also uses ABS year 2 data proportions to create the component level splits in most expense categories for year 3, which smooths data differences between states and the ABS.

57 It is possible that differences in COFOG-A coding could contribute to the difference in a state's assessed and actual data for a particular category. However, there are many reasons why assessed and actuals diverge, including the influence of individual state policies. Disentangling these impacts is not always possible.

58 The Commission does not consider it is best placed to ensure consistency in Government Finance Statistics reporting across states. The ABS advised the Commission its Government Finance Statistics section works very closely with state treasuries during the production of Government Finance Statistics data. As part of this process, the ABS provides states with comparison tables that identify and explain changes made by the ABS to state provided data. States have the

[4] Australian Bureau of Statistics (ABS), Government Finance Statistics, Annual, ABS website, 2023, accessed 19 March 2024.

opportunity to review these tables and seek clarification from the ABS prior to the publication of final data.

59 The ABS advises that the Government Finance Statistics are governed by the International Monetary Fund (IMF). The IMF has committed to a new endorsed Government Finance Statistics manual by the end of 2027. Australia will then likely update its current Australian System of Government Finance Statistics (2015) (AGFS15) manual to align with the updated IMF manual. This would be a natural point for the ABS to engage with state treasuries and influence the improvement of COFOG-A and other Government Finance Statistics reporting.

60 The Commission is happy to assist states and the ABS understand the implications for the Commission's work and provide assistance where possible.

Commission draft position

61 The Commission proposes to work with states and the ABS, where appropriate, to improve alignment of ABS Government Finance Statistics and state budget data.

Draft 2025 Review adjusted budget

62 Following consideration of state views, the Commission proposes 3 changes. These are listed below.

- The Commission proposes to use preliminary ABS Government Finance Statistics data for year 3.
  - If the preliminary ABS data are not available for a particular state, the Commission proposes to request the year 3 data directly from the state.
- The Commission proposes to apply the process described above when implementing adjustments in the 2025 Review and in subsequent updates.
- The Commission proposes to assist states and the ABS, where appropriate, to improve the consistency of Government Finance Statistics data across states.

Proposed structure of the adjusted budget

63 The Commission's starting position for the structure of the 2025 Review adjusted budget is the category and component structure used in the 2020 Review.

64 The adjusted budget structure is driven by the needs of the category and component assessments. During the process for settling the category and component assessments for the 2025 Review period, the structure of the adjusted budget may need to change. Any changes will be outlined in the 2025 Review final report.

New data requirements

65 No new data are proposed for the adjusted budget for inclusion in the draft report. Any new data requirements that arise during the 2025 Review will be discussed with states.

Flexibility to consider method changes between reviews

Overview

1 Clause 6 of the terms of reference for the 2025 Review asks the Commission to:

> ...consider if there is a case for the Commission to be given the flexibility to consider alternative methods in cases where there is a significant unanticipated shock (such as a pandemic) or where major policy reforms are enacted in between reviews.

2 On 19 October 2023, the Commission issued a consultation paper on flexibility to consider method changes between reviews.

3 The Commission's preliminary view was that it would be beneficial for there to be additional flexibility to change methods between reviews. This would only occur in consultation with states and territories (states), and where there have been significant changes in state fiscal circumstances as a result of unanticipated shocks or major policy reforms between reviews that result in existing methods not appropriately measuring state fiscal capacities. The Commission considered it may be too restrictive to define, or introduce quantitative measures of what constitutes, a major unanticipated shock. Instead, it would require an element of judgement by the Commission. The Commission expected flexibility would only need to be exercised in very limited circumstances.

4 The Commission sought state views on the case to extend the circumstances in which the Commission could consider alternative methods between reviews, in consultation with states, and how such flexibility could be operationalised.

5 A summary of state responses to each consultation question is included below, as well as the Commission's draft position.

6 State submissions can be viewed here.

Consultation questions

Q1. Do states agree that there may be situations, such as a significant unanticipated shock or major policy reform, such that there is a case to extend the circumstances when the Commission may need to consider alternative methods between reviews?

State views

7 New South Wales, Victoria, Queensland and the ACT agreed there may be situations that require flexibility to consider alternative methods between reviews. Tasmania said there were some benefits in greater flexibility to change methods, but it had concerns about how that flexibility would be implemented in practice. New South Wales said, while the existing arrangements technically allow for flexibility through the annual terms of reference, that process has not functioned effectively.

8 New South Wales and Victoria said there can be circumstances in which existing methods limit the achievement of, or actively undermine, fiscal equalisation. They said examples included the Commission's inability to make adjustments to reflect the fiscal impacts of the COVID-19 pandemic on the health and services to industry assessments, or for New South Wales' proposed property tax reform. They said such flexibility must be appropriately managed and balanced against stability, predictability and public confidence in the robustness of the Commission's methods. New South Wales said flexibility should be used sparingly and any new process must not unintentionally create an annual review of methods.

9 Queensland said there may be exceptional circumstances where the Commission could consider alternative methods between reviews, such as unanticipated shocks or major policy reforms. It said the threshold for that should be high and the default position should be for method changes to be considered in reviews, providing greater certainty. Tasmania said while the existing arrangements are sufficient to cover most situations that arise, there could be unforeseen circumstances in future that may not be covered by the existing flexibility. It said no state should be disadvantaged through the GST distribution as a result of undertaking a major reform, but in most cases these issues should be addressed in methodology reviews.

10 Western Australia, South Australia and the Northern Territory did not agree there could be situations that require flexibility to consider alternative methods. Western Australia said it could not identify a shock that would impact just one or 2 states, or where one or 2 states are impacted to a greater degree, without being due to policy differences. South Australia said the current approach appropriately balances stability in methods with reflecting changing state circumstances. It said the COVID-19 pandemic demonstrated the difficulty in developing a robust, policy

neutral alternative assessment based on reliable data in a limited time. The Northern Territory said sufficient and appropriate flexibility exists through the terms of reference process to respond to major shocks.

11 South Australia said GST distributional impacts are not a material or driving issue in developing major tax reform proposals. It said the gradual implementation of many reforms, together with the Commission's averaging process, meant those reforms were unlikely to have a material impact of GST distribution between 5 yearly reviews.

Commission response

12 Terms of reference for the Commission's annual updates have asked it to use 'the same principles, categories and methods of assessment' as in the most recent methodology review.[1] However, they have allowed method changes between reviews, in consultation with states, to overcome data problems or in response to major changes in Commonwealth-state relations.[2] Method changes in updates for those 2 reasons have not been common.[3]

13 Terms of reference for updates have also asked the Commission, while using the same assessment methods, to base its assessments on the latest available, fit for purpose data. The aim is to have a set of GST relativities that reflect, to the extent available data allow, the relative fiscal circumstances of states in the year in which those relativities will be used to distribute GST revenue.

14 Limiting most method changes to 5-yearly reviews has ensured stability of methods across annual updates.[4] It has allowed states, in their forecasting and budget planning, to focus on changes to GST relativities in updates that arise from changes in state fiscal circumstances as reflected in the latest available data.

15 The Commission considers that, in most cases, the approach of 5-yearly reviews and annual updates has appropriately balanced stability in methods with the need to capture changes in state circumstances over time. However, in rare circumstances, developments can significantly affect states' relative fiscal capacities in ways that are not adequately captured by the existing assessment methods. In those very limited circumstances, it would be beneficial for the Commission to have flexibility to change methods, in consultation with states, such that they better reflect changed state circumstances.

[1] Update terms of reference typically ask the Commission to use the same principles, categories and methods of assessment as the previous update to accommodate the limited circumstances in which method changes have been made in updates since the most recent review (for example, due to data problems or changes in Commonwealth-state circumstances).

[2] For example, see clauses 8(b) and 10 of the 2024 Update Terms of Reference.

[3] Examples in the last 12 years include an adjustment to data used in the wage costs assessment in the 2023 Update to minimise any bias due to COVID-19 lockdowns, and a change in the treatment of Commonwealth payments for specialist disability services for older people in the 2013 Update in response to the Commonwealth assuming responsibility for all aged care services.

[4] Since 1988, the Commission has been asked to review its assessment methods about every 5 years, with annual updates in between (starting in 1989).

16 While the Commission aims to develop methods that will capture states' fiscal circumstances as they evolve, not all changes in circumstances can be anticipated when the Commission is finalising a methodology review. In its consultation paper, the Commission cited 2 major developments since the 2020 Review – the COVID-19 pandemic and a proposed New South Wales property tax reform – which illustrated that the requirement to use the 2020 Review methods resulted (or could have resulted) in measures of state fiscal capacities that were inconsistent with fiscal equalisation. In both cases, the ability to consider, consult on and implement adjustments to assessment methods prior to the 2025 Review could have improved the assessment of state fiscal capacities.

17 Western Australia said a shock that mainly affects one or 2 states would likely involve differences in state policies. As with its approach to all assessments, the Commission would seek to identify, and only adjust for, those influences that were beyond a state's direct control. The process the Commission would follow is discussed under question 3 below.

Commission draft position

18 The Commission considers that it would be beneficial for it to have additional flexibility to consider alternative methods between reviews in very limited circumstances, and in full consultation with states. Those circumstances are outlined in the next section.

Q2. Do states agree that the circumstances supporting the case to extend the Commission's flexibility to change methods between reviews should include:

- **major unexpected developments that have a significant impact on state fiscal positions, are not captured in existing assessment methods, and a change in methods is required for the Commission to achieve the objective of fiscal equalisation?**

State views

19 Victoria, Queensland and the ACT agreed. Victoria said it broadly supported the proposed circumstances, but the wording should be amended to include major policy reforms. It said limiting changes to 'unexpected developments' does not adequately allow for changes in response to policy reforms. Queensland said the scope to make method changes in updates should only be exercised in very exceptional circumstances and must be appropriately constrained by an agreed decision-making framework. It said that framework could include a high materiality threshold, a greater than standard level of consultation, an annual review of the change and a clear process for unwinding temporary changes. The ACT recommended the Commission develop guidelines, in consultation with states, that define what constitutes a major unexpected event.

20 New South Wales, South Australia and Tasmania said it would be difficult to define the circumstances in which flexibility to change methods should apply. New South Wales and Tasmania said while having too broad (or no) criteria risked uncertainty and arbitrariness, the Commission's proposed circumstances may prove too restrictive. New South Wales said they should extend to major policy reforms.

21 South Australia and Tasmania said states were likely to disagree on what constitutes a major unexpected development. South Australia said it would be difficult to assign a threshold and it may have to be determined, in consultation with states, on a case-by-case basis.

22 Western Australia and the Northern Territory said they did not support the case to change methods between reviews in the proposed circumstances. Western Australia said it was problematic to define 'major' developments and 'significant' impacts.

Commission response

23 A key issue for most states was that alternative methods should only be considered in very limited circumstances. This is also the Commission's view. The Commission agrees with New South Wales, South Australia and Tasmania that it is difficult to specify in advance the precise nature or characteristics of what would constitute a significant unanticipated event that warrants the initiation of a process of consultation with the states between reviews to consider alternative methods.

24 Instead, the Commission proposes defining what constitutes such an event based on its consequences. Those consequences include:

- a major adverse fiscal impact on one or more states
- an existing assessment method is inappropriate and would produce outcomes that are clearly inconsistent with the objective of fiscal equalisation, and
- there is a reasonable basis to conclude that an alternative method, if one were able to be identified, should be introduced before the next review.

25 The Commission agrees with New South Wales and Victoria that these circumstances should include major policy reforms, where those reforms require a change in method to be introduced before the next review.

Commission draft position

26 The Commission considers that the limited circumstances in which the Commission should have flexibility to consider method changes include major unexpected developments that:

- have a significant impact on the fiscal positions of one or more states
- are not captured in existing assessment methods, and
- there is a reasonable basis to conclude that a change in methods before the next review would better achieve the objective of fiscal equalisation.

27 This would include major policy changes where a change in method needs to be introduced before the next review to better achieve the objective of fiscal equalisation.

Q3. Do states agree that any consideration of whether method changes are warranted between reviews be undertaken in consultation with the states and the expectation should be that this flexibility would only be exercised in very limited circumstances?

State views

28 All states agreed that consideration of whether method changes between reviews are warranted should be undertaken in consultation with states.

29 South Australia said it strongly believed the Commission, in close consultation with states, would have to agree on a case-by-case basis what constitutes a shock. This included whether the shock was material and whether existing methods captured the impact of the shock. It also included whether there were differences in policy responses and, if those policy differences could be addressed, whether an alternative method should be pursued.

30 Tasmania said without further guidance around the concepts of major development and significant impact, states may disagree on whether a particular event warrants consideration of a method change.

31 All states said that, if there was flexibility to make method changes between reviews, it should only be used in very limited circumstances.

Commission response

32 The Commission's expectation is that flexibility to consider method changes would be exercised in the very limited circumstances outlined in paragraphs 26 and 27. The first step in the process would be to consult with states on whether an event falls within those circumstances, the case for why existing methods may no longer be appropriate and the case for why alternative methods should be considered before the next review. The Commission would issue a consultation paper to the states on these issues.

33 Having considered state views, if in the Commission's judgement consideration of alternative methods was warranted, it would then consult with states on all aspects of possible changes to assessment methods.

34 The Commission would consider alternative methods in the same way as it does in a methodology review, involving extensive consultation with states. The Commission

would apply its supporting principles and assessment guidelines.[5] That is, there would need to be a sound conceptual case for the change supported by sufficient empirical evidence, the Commission would need to identify a reliable and implementable method and fit for purpose data and any change would have to be material.[6] The Commission would exercise its judgement to balance any trade-offs between its supporting principles. After consulting states on the development of an alternative method, the Commission would issue a final consultation paper to states on any proposed change.

35 If, after considering state views, the Commission decided to change an assessment method, it would aim to make the change in the earliest practicable update following consultation. This may not be the first update following the change in circumstances, given the availability of reliable data and the need for adequate time to consult with states. It could also be possible that, notwithstanding the circumstances that initiated the process, a reliable alternative method may not be able to be identified, and no change would be made, but could continue to be considered in the next review. In the case of policy reform, a state may be seeking an indication of how a proposed reform would be assessed, prior to proceeding with the reform. This was the case with the New South Wales proposed property tax reform.

Commission draft position

36 The Commission proposes that consideration of whether method changes are warranted between reviews be undertaken in consultation with states on a case-by-case basis, and in accordance with the process outlined in paragraphs 32 to 35.

Q4. Should the extended flexibility to change assessments between reviews in certain circumstances be operationalised in standing terms of reference for updates?

State views

37 Queensland, Western Australia and the ACT supported extended flexibility being operationalised in standing terms of reference for updates.

38 Queensland said the standing terms of reference should note the Commission would have the capacity to respond to events in extreme circumstances, with the Commission to review and consider whether this should be addressed through the distribution of the GST rather than through other means.

[5] See Commission position paper on fiscal equalisation, supporting principles and assessment guidelines.

[6] In the 2025 Review, a revenue or expense driver is material if it redistributes more than $40 per capita for any state compared to an equal per capita assessment.

39 Western Australia said, if flexibility were given to the Commission, it should be operationalised in standing terms of reference for updates. It said it should also be written into the Commission's Update Guidelines document.

40 Victoria said a standing terms of reference clause in updates may be an adequate mechanism to operationalise flexibility, but its preference was for flexibility to be established as a condition of the 2025 Review methodology. It said there should be a mechanism to monitor implementation and allow for review, if required.

41 South Australia said 5 yearly reviews should be the primary vehicle for method changes and that any changes to the standing terms of reference for updates to allow method changes between reviews would need to be carefully considered.

42 Tasmania said it was not opposed in principle to standing terms of reference allowing flexibility in certain circumstances, but it would like to see the proposed wording.

43 New South Wales and the Northern Territory did not support extended flexibility being operationalised in standing terms of reference for updates.

44 New South Wales said it was concerned that operationalising flexibility in standing terms of reference, without a definition of events that necessitate a method change, would require significant judgement from the Commission and introduce an element of uncertainty. It proposed an alternative process in which the Commission would recommend to the Commonwealth Treasurer (after consulting states) where method changes might be warranted. The Treasurer would then provide a formal response to the Commission's recommendation as part of the terms of reference for the annual update.

45 The Northern Territory said no extended flexibility was warranted and therefore standing terms of reference were not needed. It said the Commonwealth Treasurer can change terms of reference on a needs basis by exception.

Commission response

46 The Commonwealth Treasurer has asked the Commission to provide advice on whether it should be given additional flexibility to consider alternative methods between reviews.

47 Under existing arrangements, the Commonwealth Treasurer can ask the Commission, though terms of reference, to consider particular method changes in an update. However, this places the Commonwealth Treasurer in the position of 'umpire' on changes where there will always be winners and losers.

48 In its consultation paper, the Commission said an option would be for additional flexibility to be provided in standing terms of reference for updates. Such an approach would be consistent with the Commission's role as the independent agency responsible for advising the Commonwealth Treasurer on states' relative

fiscal capacities for the purposes of GST distribution. It is always open to the Commonwealth Treasurer not to accept the Commission's recommendations.

49 Including the additional flexibility in the standing terms of reference for updates would also complement the existing flexibility in the terms of reference to change methods where there are data problems or in response to significant changes in Commonwealth-state relations. Standing terms of reference could require that the Commission send a separate report and recommendation to the Commonwealth Treasurer on the alternative method adopted in the update.

Commission draft position

50 The Commission supports operationalising flexibility to change methods between reviews in standing terms of reference for updates.

Other issues raised by states

Timing of consideration and implementation of alternative methods

51 Victoria said the Commission should address the timing of the process for method changes between reviews. It said the Commission could take a scenario planning approach to identify key risks and potential responses, which may alleviate some time pressures to develop methods between update years. Victoria said, in cases where the Commission is unable to implement new methods in an update, it could consider backwards adjustments in future years.

Commission response

52 In exercising flexibility to consider alternative methods, the Commission would follow the processes (including consultation) outlined in its response to question 3. The Commission considers a scenario planning exercise may be problematic since the unforeseen or unexpected scenarios and their implications would, by definition, be difficult to predict. However, the Commission would be willing to work with states on such an exercise and is always open to discussing the GST distribution implications of possible or planned policy reforms.

53 The Commission does not consider it appropriate to make retrospective adjustments to GST relativities for method changes between reviews. The Commission has not made retrospective adjustments to GST shares for previous method changes. It considers retrospective adjustments may increase budget uncertainty for states.

Commission draft position

54 The Commission does not propose to retrospectively adjust GST shares for method changes between reviews.

Draft 2025 Review approach

55 The Commission considers that it would be beneficial for it to have additional flexibility to consider alternative methods between reviews in very limited circumstances, and in full consultation with states.

56 Those circumstances would include major unexpected developments that:

- have a significant impact on the fiscal positions of one or more states
- are not captured in existing assessment methods, and
- there is a reasonable basis to conclude that a change in methods before the next review would better achieve the objective of fiscal equalisation.

57 This would include major policy changes that require a change in method to be introduced before the next review.

58 The Commission proposes that consideration of whether method changes are warranted between reviews be undertaken in consultation with states on a case-by-case basis, and in accordance with the process outlined above.

59 The Commission supports operationalising flexibility to change methods between reviews in standing terms of reference for updates.

60 The Commission does not propose to retrospectively adjust GST shares for method changes between reviews.

Forward work program

1 As noted in the relevant assessment chapters, several issues were identified during consultations with states where it was considered further detailed work should be undertaken following the 2025 Review in preparation for the next review.

2 As outlined in the justice chapter, given the time needed to analyse and consult on the latest state data, the justice assessment will be completed following the release of the 2025 Review Final Report, and any changes will be incorporated in the 2026 Update.

3 States will be kept informed of the progress on the Commission's forward work program and will have the opportunity to provide input. Recognising that many states 'staff up' just for review periods, the Commission will be mindful of the burden on state officials of consultation arrangements as part of the forward work program. There will be full consultation with the states on any proposed changes coming from the forward work program as part of the next methodology review arrangements.

4 Topics on the Commission's proposed forward work program are listed below. More information is included in the relevant assessment chapters. The Commission will look to use its Research Paper series to report on the progress of work on these topics.

5 In addition to the specific topics identified as part of its proposed forward work program, the Commission will continue to examine all assessment methods in preparation for the next review. This includes examining the framework for its methodologies, developments that may impact methods and potential improvements. The Commission will liaise with states to capture changes in what states do.

Urban transport

6 Some states expressed concerns with the model used for the urban transport assessment, while other states were supportive. The Commission considers that the proposed changes to the urban transport assessment in the 2025 Review will address many of the states' concerns. However, given the assessment's complexity and the degree of unease amongst some states, the Commission considers it would be appropriate to seek external advice on the assessment prior to the next methodology review, including retesting the urban centre characteristics regression model. Data from the Australian Bureau of Statistics (ABS) 2026 Census are needed to inform the advice, and are expected to be available progressively in 2027 and 2028.

Health

7 Several states questioned the conceptual basis and approach for the non-state sector adjustment in the health assessment. This is a complex area, and the Commission agrees with the proposal by some states to explore in detail the evidence on the relationship between the provision of health services by the private sector and the Commonwealth government, and the amount spent by state governments on health services. This work will also consider alternative approaches to recognising the substitutability between state and non-state sectors.

8 There were also concerns that the Commission's approach to assessing health expense needs, based on national average spending on health services by socio-demographic group, does not account for state differences in the health status of people in similar socio-demographic groups. Given the concerns of some states, the Commission proposes to explore in detail the evidence on health service needs of people in similar socio-demographic groups across states.

9 More broadly, the Commission notes that the health assessment currently relies on a number of judgements (in part due to data availability) which adds to its complexity. As such, the Commission considers that a review of the health assessment framework in preparation for the next methodology review would be beneficial. The Commission intends to engage with the states on the potential improvements to the health assessment framework ahead of the commencement of the next review.

Administrative scale

10 In the 2020 Review, the Commission developed the underlying basis for the administrative scale assessment by constructing a hypothetical organisational chart reflecting the minimum staffing structures for each state function. Several states called for this work to be updated. It was, however, a comprehensive and time-consuming exercise, and it was impractical to repeat it in the time available for the 2025 Review. To ensure the assessment remains contemporary, the Commission proposes to undertake a similar comprehensive analysis before the next review.

Cultural and linguistic diversity

11 Three states said several of the Commission's expenditure assessments should include culturally and linguistically diverse populations as a cost driver of state service provision. The Commission accepts there is a conceptual case that various culturally and linguistically diverse population groups can drive higher costs in providing some state services. However, significant challenges stand in the way of reliably defining, identifying and assessing how such groups affect costs across the range of state services. In preparation for the next review, the Commission proposes to work with the states and relevant data providers to consider the basis for

culturally and linguistically diverse drivers, and appropriate definitions and data, in the context of the Commission's various expense assessments.

Net zero

12 As part of global efforts to decarbonise, all Australian governments have committed to achieving net zero emissions by no later than 2050. The Commission has identified this as an area of state spending that is expected to grow significantly and may need to be assessed. Several states have highlighted the challenges of isolating spending specific to the net zero transition and identifying policy neutral drivers of the different spending needs of the states. The Commission proposes to monitor policies in this area, identify relevant expenses, and examine whether reliable policy neutral drivers of spending across states can be identified.

Elasticity adjustments

13 Two states proposed that elasticity adjustments be incorporated in revenue assessments where material, while other states opposed this on the basis of resulting complexities and measurement issues. The Commission acknowledges there is a conceptual case for including elasticity adjustments and recognises that if differences in state tax rates have material effects on their observed revenue bases, incorporating elasticity adjustments (provided they can be reliably measured) would improve the policy neutrality of assessments. The Commission proposes to continue to consider how the complexities and uncertainties can be addressed in preparation for the next review.

Data

14 Data challenges remain a significant issue for many assessments, and the Commission proposes to work with the states and data providers, including the ABS, to explore opportunities to obtain improved data. Specific data issues are discussed in the relevant assessment chapters, including health, welfare, payroll tax, roads and socio-economic status.