NSW Treasury

2025 GST Methodology Review

Tranche 2 Consultation

1 March 2024



Acknowledgement of Country

We acknowledge that Aboriginal and Torres Strait Islander peoples are the First Peoples and Traditional Custodians of Australia, and the oldest continuing culture in human history.

We pay respect to Elders past and present and commit to respecting the lands we walk on, and the communities we walk with.

We celebrate the deep and enduring connection of Aboriginal and Torres Strait Islander peoples to Country and acknowledge their continuing custodianship of the land, seas and sky.

We acknowledge the ongoing stewardship of Aboriginal and Torres Strait Islander peoples, and the important contribution they make to our communities and economies.

We reflect on the continuing impact of government policies and practices, and recognise our responsibility to work together with and for Aboriginal and Torres Strait Islander peoples, families and communities, towards improved economic, social and cultural outcomes.

Artwork:

Regeneration by Josie Rose



Contents

List	of Fig	ures	5
List	of Tal	bles	6
List	of Ac	ronyms	7
1	Adju	isted budget	8
	1.1	Using ABS preliminary data	8
	1.2	Implementing data adjustments	9
	1.3	Reconciling to raw state data	10
	1.4	Retrospective data adjustments	11
	1.5	COFOG data integrity	12
2	Payı	oll tax	14
	2.1	Payroll tax surcharges	14
	2.2	Continuation of the existing method	15
3	Gam	Ibling revenue	17
	3.1	Drivers of gambling	17
	3.2	Equal per capita assessment	18
4	Othe	er revenue	19
	4.1	Revenue classification	19
	4.2	Equal per capita assessment	20
5	Hou	sing	21
	5.1	Housing stress as the driver of service need	22
	5.2	Community and public housing	24
	5.3	Disability and other high service needs	26
	5.4	Regional costs	28
	5.5	CALD status as a cost driver	29
	5.6	Age	30
	5.7	Head leasing cost driver	30
	5.8	Defining low-income households	31
	5.9	Data issues	32
6	Wel	fare	34
	6.1	Homelessness	35
	6.2	NDIS contributions	46
	6.3	Other welfare components	46
	6.4	Culturally and linguistically diverse populations	47
	6.5	Combined regional cost and SDS gradient	49
7	Roa	ds	51
	7.1	Urban road length	52
	7.2	Higher maintenance and operating costs in densely populated urban environments	52

	7.3	Rural road length	
	7.4	Measuring traffic volume	61
	7.5	Reassessing the fundamentals of the roads assessment	
8	Serv	rices to industry	67
	8.1	Chain volume measure of production	
	8.2	Number of businesses as a driver	
	8.3	Net-zero transition	
	8.4	Future spending on net-zero	
	8.5	COVID business support costs	
9	Natu	ıral disaster relief	80
	9.1	Continuation of the existing method	
	9.2	Pandemic-related expenditure	
10	Othe	er expenses	83
	10.1	Continuation of the existing method	83
11	Inve	stment	85
	11.1	Smoothing population growth	
	11.2	Freezing the value of asset stock	
	11.3	A simpler approach to the assessment	
	11.4	Appropriate user population for each assessment	
	11.5	Urban transport component user population	
12	Net	borrowing	90
	12.1	Conceptual basis of the net borrowings assessment	
	12.2	Population growth smoothing	
13	Adm	ninistrative scale	92
	13.1	Continuation of the existing method	
	13.2	The conceptual case for administrative scale	
	13.3	Calculation of administrative scale	
14	Nati	onal capital	98
	14.1	Discontinuing the national capital assessment	
15	Geo	graphy	100
	15.1	Regional costs and service delivery scale	101
	15.2	Non-wage costs in major cities	
	15.3	Regional costs in the Justice assessment	
16	Add	itional mining submission (coal)	
	16.1	The conceptual case for separately assessing coal	
	16.2	Data to support an assessment	

List of Figures

Figure 1-1: Proposed approach for making data adjustments	10
Figure 6-1: Specialist homelessness services clients per 10,000 people by state, 2021-22	35
Figure 6-2: Detailed housing suitability, Indigenous households, ABS 2021	40
Figure 6-3: General housing suitability, Indigenous households, ABS 2021	40
Figure 6-4: Rate of SHS use by number of quarters since last mental health service use for both cohorts compared to the population without mental health service use, 2016-17	45
Figure 6-5: Non-economic migrants as a proportion of state populations, 2018-19 to 2022-23 (%)	47
Figure 6-6: Net permanent non-economic migrants by state, 2018-19 to 2022-23	48
Figure 6-7: Estimated regional and remote cost loadings of child protection services	49
Figure 7-1A: State type roads by capital city	54
Figure 7-1B: State type roads by capital city	55
Figure 7-2: Map of Australian road network	59
Figure 7-3: Rural road length measures	60
Figure 7-4: State roads in Cape York Peninsula	60
Figure 7-5: Sea Swift operations in Northern Australia	61
Figure 7-6: 2020 Review synthetic road network and average rainfall	64
Figure 7-8: Soil map of Australia	66
Figure 8-1: Australian energy mix by state, 2008-09 and 2021-22	72
Figure 8-2: Industry contribution to total emissions (1990)	73
Figure 8-3: Industry contribution to total state emissions (2019)	74
Figure 8-4: Major coal importers by energy mix, 1990 and 2019	76
Figure 8-5: Other major national economies energy use by fuel type	77
Figure 15-1: Regional cost gradients, 2021-22	102
Figure 15-2: Combined SDS and regional costs gradients, 2021-22	102
Figure 15-3: Combined gradient with welfare, prisons and courts, 2017-18	103
Figure 16-1: Historical coal prices, A\$/t	108
Figure 16-2: Recoverable demonstrated coal resources across Australia	110
Figure 16-3: QLD Treasury coal price royalty thresholds	112
Figure 16-4: Excerpt from Queensland 2023-24 Budget	113

List of Tables

Table 1-1: Estimated Justice Category Expenditure, \$per capita	13
Table 2-1: State shares of payroll tax base (%)	15
Table 2-2: State shares of payroll tax base – annual difference to five-year average (%)	15
Table 5-1: Prevalence of housing stress by state	23
Table 5-2: Comparison of current assessed and proposed measure of underlying social housing demai	nd23
Table 5-3: SDC splits in New South Wales social housing, 2022 (%)	25
Table 5-4: Type of long-term health condition by core activity need for assistance, 2021	27
Table 5-5: Percentage of NSW waitlist applicants by head of household age group, 2020-21	
Table 6-1: Breakdown of housing situation of national SHS clients, 2022-23	
Table 6-2: State proportions of total overcrowded households, 2021 Census	
Table 6-3: Geographic regions by overcrowding and homelessness, 2021 Census	41
Table 6-4: Outer regional, remote and very remote regions by overcrowding, 2021 Census	41
Table 6-5: Major city overcrowding effects, 2021 Census	
Table 6-6: Usage of specialist homelessness services by geographic area, 2022-23	43
Table 6-7: Proportion of persons speaking a language other than English at home (%)	47
Table 7-1: Cost premium for after-hours road maintenance	53
Table 7-2: State-type roads lane kilometres by grade, capital cities	53
Table 7-3: Comparison of actual state rural road lane kilometres and the synthetic road network	56
Table 7-4: Errors in 2020 Review synthetic rural road network	58
Table 7-5: Ratio of actual versus assessed roads expenditure	63
Table 7-6: Pavement Health Index, % Good or Very good	63
Table 7-7: 2020 Review synthetic rural road length by annual rainfall	65
Table 8-1 Assumed contribution of business count and industry size to size of regulatory task	69
Table 8-2: Charts on state total net emissions production (1990 vs 2019)	75
Table 11-1: Mean absolute change in needs from previous review or update	
Table 11-2: Application of review methodology to individual data years	
Table 12-1: Comparison of closing and derived opening net financial worth - \$ billion	90
Table 13-1: Estimated congestion costs – March 2023	
Table 13-2: Comparison of relative administrative scale and congestion needs - \$ per capita	95
Table 13-3: Non-service delivery agencies, 2022-23	96
Table 13-4: Service delivery agencies, 2022-23	97
Table 16-1: New South Wales coal industry statistics	
Table 16-2: Queensland saleable coal production, total net output (tonnes), by coal type	
Table 16-3: Queensland's tiered royalty structure	111

List of Acronyms

ABS:	Australian Bureau of Statistics
AFP:	Australian Federal Police
AIHW:	Australian Institute of Health and Welfare
APC:	actual per capita
AGM:	Average Gross Mass
BLADE:	Business Longitudinal Analysis Data Environment
CALD:	Culturally and linguistically diverse
CBR:	Californian Bearing Ratio
COFOG:	Classification of the Functions of Government
DRFA:	Disaster Recovery Funding Arrangements
EPC:	equal per capita
BITRE:	Bureau of Infrastructure and Transport Research Economics
GFS:	Government Finance Statistics
GST:	Goods and Services Tax
HFE:	Horizontal Fiscal Equalisation
HMA:	Hot mix asphalt
MADIP:	Multi-Agency Data Integration Project
NCP:	National Capital Plan
NDDA:	National Disability Data Asset
NDIS:	National Disability Insurance Scheme
NSLSR:	National Service Level Standards for Roads
NTC:	National Transport Commission
OOHC:	Out-of-home care
PLIDA:	Person Level Integrated Data Asset
ROGS:	Report on Government Services
SDC:	Socio-demographic characteristics
SEIFA:	Socio-economic Indexes for Areas
SDS:	Service delivery scale
SES:	Socio-economic scale
SHS:	Specialist homelessness services
SHSC:	Specialist homelessness services collection
SMVU:	Survey of Motor Vehicle Use
SOMIH:	State Owned and Managed Indigenous Housing
TA:	Temporary Accommodation
UCL:	Urban Centre and Locality
VKT:	Vehicle Kilometres Travelled
WARRIP:	Western Australian Road Research and Innovation Program

1 Adjusted budget

This category covers the compilation of states' annual adjusted budget figures for use across other categories.

Overview of category

- The adjusted budget is a comprehensive representation of states' yearly budgets, broken down into the Commission's category and component structure.
- The purpose of the category is to detail the process the Commission follows in arriving at consistent and comparable adjusted budget figures for states including what, if any, adjustments are made to raw Australian Bureau of Statistics (ABS) or state data and the circumstances in which they are made.

NSW Treasury position

• NSW Treasury supports the Commission's proposals to use preliminary ABS data for all data years, provided the data are available, and to test existing and future data adjustments for materiality, fixing in place all adjustments that are found to be material.

1.1 Using ABS preliminary data

- Do states agree with the Commission's preliminary view to use:
 - ABS preliminary Government Finance Statistics data for year 3
 - $_{\odot}$ $\,$ 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).
- Generally, NSW Treasury prefers the Commission use ABS data where possible, across all of its categories and assessments. Using nationally consistent, high-quality data that has been subject to consistent checks and standardisation processes increases confidence in the appropriateness and reliability of the Commission's assessments.
- To that end, NSW Treasury supports using ABS preliminary Government Finance Statistics (GFS) data for Year 3, rather than state data. While preliminary ABS data has not been thoroughly reviewed and checked by the ABS it has still been subject to standardisation and is more nationally consistent than state data.
- Moreover, using preliminary ABS data should reduce potential data issues. The preliminary ABS data is ultimately closer in substance to the final ABS data that will be used for Year 1 and Year 2, compared with state data. We consider it likely, therefore, that using preliminary ABS data will minimise data differences between Year 3 and Years 1 and 2.
- Furthermore, we expect that using preliminary ABS data will minimise data revisions over time. Since the Commission uses a rolling three-year window for its assessment of state fiscal capacities, a given year will inform three annual updates. Data for a year will first appear as Year 3 before appearing in subsequent updates as Year 2 and Year 1. Using the same source and

format of data for all three years minimises the potential need for revision as the data moves from Year 3 to Year 1.

- The potential drawback of ABS preliminary data relates to its timeliness. Historically, the preliminary data has not been available early enough to be realistically used as part of the annual update process. In recent years, the preliminary data has been available earlier, to the extent that using the preliminary data as part of the annual process is now feasible.
- Notwithstanding the recent tendency to earlier availability, it remains the case that the preliminary ABS data will always be available after the state data is available. As such, using preliminary ABS data carries more risk than state data with respect to timeliness.
- NSW Treasury considers that the Commission is best placed to judge whether the timeframes feasibly allow it to use the preliminary data. If it is considered feasible to do so, the preliminary data should be used.
- State data will always be available as a back-up in the case that preliminary ABS data is not available within the required timeframes for a given year. However, it may not be ideal to use state data for those states that do not have preliminary ABS data available and preliminary data for the other states. This would lead to potential inconsistencies between states within the one year.
- In cases where preliminary data is not available for at least one state, the Commission will need to determine whether it is best served using state data for all states or only for the state/s that do not have preliminary data available. Since it is only national totals that are relevant for the Commission's purposes, this issue may be immaterial.

1.2 Implementing data adjustments

- Do states consider the proposed process for implementing adjustments in the 2025 Review adjusted budget is appropriate?
- The Commission is proposing to review all existing data adjustments and test each for materiality. The Commission will maintain any adjustment that is found to be material using a \$12 per capita threshold. That is, if making the data adjustment changes any one state's per capita distribution by more than \$12, the adjustment is considered material and will be maintained.
- Any adjustment that is found to be material will be maintained throughout the life of the 2025 Review application years. Adjustments will not be re-tested for materiality on an annual basis.
- Additionally, the Commission will identify potential new adjustments as part of its annual update process. Where potential adjustments are identified, the Commission will test them for materiality as above. Any adjustment that is found to be material will be applied in all subsequent annual updates that are based on the 2025 Review.
- The Commission's proposed approach is presented in Figure 1-1, which is taken from the Commission's consultation paper.

Figure 1-1: Proposed approach for making data adjustments



- NSW Treasury is broadly comfortable with the outlined approach. Arguably, some adjustments should be made regardless of materiality. Where the Commission identifies a clear and obvious error, such an error should ideally be rectified. Likewise, if data is required to be reclassified to align with the Commission's assessment structure, the reclassification should happen. We note that a materiality threshold of \$12 per capita equates to nearly \$100 million in the case of New South Wales.
- We acknowledge, however, that delineating between adjustments that meet the criteria above and all other adjustments requires judgement. This is particularly true for defining a 'clear and obvious' error. It is generally preferable to avoid requiring the Commission to apply judgement in its assessments.
- As such, and to remain consistent with the Commission's desire for practicality and simplicity, NSW Treasury is comfortable adopting a materiality threshold for all data adjustments. The threshold allows for a clear rationale for the inclusion or exclusion of identified adjustments.
- For the same reasons, NSW Treasury also supports fixing adjustments for all remaining relevant years once they have been identified and found material. This includes existing adjustments which will be retested for materiality for the 2025-26 Update and retained if material.
- Presumably there will be occasions where the Commission identifies a potential adjustment but finds that it is immaterial. In that case, it is unclear whether the Commission will assume that the adjustment remains immaterial for the life of the Review or whether it will retest the materiality in subsequent years in case the adjustment becomes more pertinent. The Commission should clarify its intended approach in this case.

1.3 Reconciling to raw state data

- Greater effort be made to provide a full reconciliation of data used by the Commission to original state data.
- The data that are eventually used by the Commission in its assessments have been subject to multiple adjustments. What begins as state data reported in total state financial accounts is sent to the ABS. The ABS applies various adjustments to state data to achieve broad consistency and comparability across states. There are also a series of differences in accounting treatment applied by the ABS and various states. Adjusted ABS data is then sent to the Commission. The Commission applies a series of data adjustments, either as part of its "adjusted budget" or in category-specific assessments.
- To assist states in being able to reconcile data used by the Commission back to state financial statements, it would be beneficial if the Commission provided a comprehensive (to the dollar) reconciliation of the adjustments it makes to ABS and Year 3 state data.
- We acknowledge that the adjusted budget consultation paper includes a list of the Commission's data adjustments and the 'simulator' files made available to states include most, if not all, data adjustments made by the Commission. However, a more comprehensive reconciliation and

accounting of data adjustments, presented in a single place, would greatly assist states in understanding the data used by the Commission.

• It will be incumbent on states to further reconcile their own state budget or financial statement data with the ABS data used by the Commission. This should be possible, given states ultimately provide data to the ABS in the first place.

1.4 Retrospective data adjustments

- That the Commission introduces a defined process about correcting for prior year data errors, as well as correcting the relative GST distribution for the impacted year.
- Currently, the Commission's position is that it does not make retrospective adjustments to correct for prior year data errors. There was a singular exception in recent years, related to natural disaster relief which was 'fixed' through the 2020 Review. The implication of this position is that material errors in GST distribution can remain in place, even if the Commission recognises the error has occurred.
- We acknowledge that this situation will typically reflect a state's error rather than one of the Commission. Nonetheless, we are concerned that GST distributions to states can be knowingly wrong. A minor data input error, subsequently identified and corrected in a following year, should not result in a material redistribution of GST to/from a state. A retrospective adjustment would likely be actioned via increases or decreases to a state's distribution in the following year, such that the total distribution over time is correct.
- The Commission's three-year rolling average assessment approach helps to reduce the severity of any data error. Where an error is made in Year 3 data and then subsequently corrected for Year 2 and Year 1, then the effect of the error on redistribution is limited to one-third of its potential magnitude. Nonetheless, a state is never able to recover (or repay) the GST it loses (or gains) from the year in which the incorrect data informed the assessment.
- Given that the Commission previously made a \$1.8 billion adjustment in the 2020 Review to adjust for incomplete data it has received on natural disaster expenditure in the 2019 Update, it is unclear what current framework applies to data corrections.
- The Commission should clearly articulate a position on retrospective data adjustments. If there is a de facto materiality threshold applied by the Commission, or if other factors¹ influence the Commission's assessment of whether a retrospective adjustment is fair and appropriate, we seek clarity on those factors. If the Commission's position is simply that no retrospective adjustments be made, a clear statement to that effect is still valuable.
- We would contend that, in support of the Commission's current position, retrospective adjustments should be rare and subject to a high materiality threshold.

¹ For example, the natural disaster relief adjustment related to an APC assessment. This makes an adjustment quite straightforward.

1.5 COFOG data integrity

- That the Commission, along with the ABS, should engage in a structured process with states to improve the quality of COFOG data.
- States operate on the basis of their respective administrative arrangements, which rarely map to ABS Classification of the Functions of Government (COFOG). While states are required to publish high level expenditure breakdowns by broad functional areas, the incentive to ensure this data is accurate is minimal.
- For the purpose of the Commission's assessments, a number of detailed breakdowns of COFOG data are required. From an analysis of the ratio of actual to assessed expenditure, NSW Treasury believes there are a number of implausible ratios for individual states. This implies there are significant issues with the quality of COFOG data provided by states to the ABS or there are fundamental errors in the assessment of disabilities in these expenditure categories.
- While the Commission's assessments are based on national aggregate expenditure in each functional area, misclassification of expenditure between functional areas will impact the distribution of GST between states.
- NSW Treasury has tracked the movement in actual expenditures classified to several Commission expenditure categories over the period since the 2020 Review. Our analysis indicates that expenditure allocated to individual Commission expenditure categories varies significantly with each annual update.
- Even putting aside the first to second estimate of expenditure for an individual financial year, which we accept is impacted by the use of preliminary data, we have observed changes in per capita expenditure for individual states that significantly exceed the materiality threshold set by the Commission. Table 1-1 provides an example of our analysis for the Justice category.

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aus
				Actual ex	kpenses fo	r 2018-19			
2020 Review	789.0	921.3	768.6	1,123.4	887.7	816.2	742.5	2,549.0	877.6
2021 Update	814.7	890.8	768.6	1,122.9	907.4	861.2	724.2	2,543.4	879.9
2022 Update	814.7	890.8	768.6	1,122.9	907.4	846.6	725.3	2,543.6	879.6
2023 Update	819.1	898.4	768.5	1,108.6	899.9	825.6	704.7	2,526.7	880.4
				Actual ex	penses fo	r 2019-20			
2021 Update	821.5	954.9	802.4	1,175.0	851.3	925.9	775.6	2,596.2	909.6
2022 Update	850.9	939.2	798.5	1,159.6	898.3	901.3	758.5	2,678.2	915.7
2023 Update	857.5	950.1	798.4	1,139.2	887.9	849.8	731.1	2,652.4	916.4
				Actual ex	penses fo	r 2020-21			
2022 Update	884.9	937.4	854.5	1,185.9	909.3	883.4	772.8	2,749.9	941.3
2023 Update	940.7	954.0	850.2	1,148.7	927.4	846.5	744.6	2,715.3	958.7

Table 1-1: Estimated Justice Category Expenditure, \$per capita

• With the above in mind, we believe the Commission, along with the ABS, should initiate a structured process with the states to improve the quality of COFOG data.

2 Payroll tax

This category covers revenue from taxes imposed on wages and related benefits paid by employers.

Overview of category

- The assessment determines assessed payroll tax revenues by considering the total taxable remuneration paid in a state above a weighted average payroll tax threshold.
- Payroll tax revenue is assessed by apportioning total national revenue to states based on their shares of total taxable remuneration.

NSW Treasury position

• NSW Treasury considers the current assessment is broadly fit for purpose and supports its continuation.

2.1 Payroll tax surcharges

- Do states support assessing revenue from payroll tax surcharges on the same basis as payroll tax?
- NSW Treasury supports assessing payroll tax surcharges on the same basis as payroll tax. We consider that the surcharges in question are broadly the same as payroll tax.
- As noted by the Commission, the surcharges are:
 - o raised under payroll tax legislation;
 - o levied against the same tax base as payroll tax; and
 - o collected on the same basis as payroll tax.
- The surcharges are clearly comparable to levies applied against other taxes, including land tax and stamp duties, which are assessed jointly with the relevant tax. The same should continue to apply for payroll tax surcharges.
- We note that surcharges nationally are expected to generate approximately \$2.2 billion in 2023-24. This represents around 5.8 per cent of total budgeted payroll tax revenues for 2023-24. A separate assessment for surcharges may or may not be material.
- Additionally, it would only be appropriate to make a separate assessment for payroll tax surcharges if it were considered average state policy to levy them. Since only two states² – Victoria and Queensland – currently levy surcharges, we do not believe a separate assessment is warranted. Were a separate assessment made, it is unclear how the Commission would determine an appropriate weighted average threshold beyond which the levy would apply, given that most jurisdictions do not have one.

² The ACT is also scheduled to introduce a surcharge from 1 July 2025.

2.2 Continuation of the existing method

The Commission asks:

- 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?
- 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?
- NSW Treasury considers the current assessment and data are fit for purpose.
- We note that the assessment draws on ABS survey data and, as a result, can be subject to volatility arising from sampling and revision. The Commission manages this volatility through its application of a rolling three-year average assessment window, as per all of its assessments. No other adjustments are made.
- NSW Treasury considers volatility in the current assessment is at a reasonable level. While it is difficult to isolate volatility from underlying movements in state revenue capacity, Table 2-1 and Table 2-2 show each states' assessed share of the payroll tax revenue base and the difference between these shares and the states' five-year average shares respectively.

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2017-18	33.73	25.00	18.46	13.32	5.12	1.44	1.63	1.31
2018-19	33.74	25.73	17.97	13.11	5.38	1.40	1.56	1.11
2019-20	32.97	26.12	17.99	13.41	5.64	1.39	1.50	0.98
2020-21	33.26	25.53	17.73	14.06	5.67	1.35	1.46	0.93
2021-22	32.79	25.47	17.78	14.65	5.37	1.41	1.55	0.98
Average	33.30	25.57	17.99	13.71	5.44	1.40	1.54	1.06

Table 2-1: State shares of payroll tax base (%)

Source: CGC 2023 Simulator

Table 2-2: State shares of payroll tax base – annual difference to five-year average (%)

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2017-18	0.43	-0.57	0.47	-0.39	-0.32	0.04	0.09	0.25
2018-19	0.44	0.16	-0.01	-0.60	-0.06	0.00	0.02	0.05
2019-20	-0.33	0.55	0.00	-0.30	0.21	-0.01	-0.04	-0.08
2020-21	-0.04	-0.04	-0.26	0.35	0.24	-0.05	-0.07	-0.13
2021-22	-0.51	-0.10	-0.21	0.94	-0.07	0.01	0.01	-0.08

Source: CGC 2023 Simulator

- To the extent the shares differ from the five-year average, this appears to be reflective of trend changes in state payroll tax capacity. While there is some residual volatility, it does not appear to be a significant component of states' assessed revenue.
- Nonetheless, consistent with its standard terms of reference to use the most recent and best available data, the Commission should continue to monitor developments with the BLADE and PLIDA datasets.³ If the data evolves to meet the needs of the Commission's assessment, it might

³ BLADE – Business Longitudinal Analysis Data Environment. PLIDA – Person Level Integrated Data Asset.

be appropriate to transition away from the current data. States should be consulted on any potential changes through the annual new issues process.

• Generally, it seems likely that using BLADE or PLIDA data will increase the complexity and decrease the transparency of the Commission's assessment. As the data can only be accessed through the ABS DataLab, with its associated data handling restrictions, states may be hampered in their efforts to work through and reproduce the Commission's analysis. These drawbacks will need to be weighed against potential improvements in the stability of the assessment, noting previous attempts by the Commission to simplify its methods.

3 Gambling revenue

This category covers state revenues from gambling taxes.

Overview of category

- States generate revenue through taxation of gambling. Gambling taxes are a mix of direct taxes, licencing fees, levies, and other contributions on the predominant forms of gambling or wagering.
- The main forms of gambling currently taxed by states include racing, lotteries, gaming machines, casino-based wagering, and sports betting.
- Gambling is heavily regulated. Different states allow gambling activity to be undertaken to various degrees and within various limitations. This affects the revenue those states generate.

NSW Treasury position

- Gambling taxes should continue to be assessed equal per capita. No satisfactory alternative exists.
- Any difference in gambling revenue between the states is overwhelmingly driven by policy choice. Observed revenue or activity data is fundamentally not fit for the purpose of determining a state's capacity to generate gambling revenue under average national policy.
- To be consistent with the Commission's principles, a differential assessment of gambling revenue capacity would need to be based on the underlying propensity of a state's population to gamble. NSW Treasury has not been able to identify any reliable indicator.

3.1 Drivers of gambling

- Do states agree there is no reliable method for differentially assessing gambling taxes? If not, what do states consider to be a reliable method of assessing state gambling taxes?
- NSW Treasury agrees that there is no reliable method for differentially assessing gambling taxes. Or, put another way, there is no reliable way to determine how much revenue a state could generate from gambling if it followed average state policy.
- The Commission has identified three approaches for making a differential assessment:
 - An activity-based approach, determining a state's capacity based on the level of gambling within that state.
 - A population-based approach, determining the underlying propensity of a state's population to gamble.
 - A broad revenue approach, assessing gambling capacity to be proportionate to broad indicators of income.
- NSW Treasury rejects any activity-based approach as it would clearly be influenced by existing state policies on gambling availability. This would plainly contravene the Commission's policy

neutrality principle. Such an approach would obviously understate Western Australia's capacity to generate gambling revenue due to its prohibition on gaming machines outside of its casino.

- A population-based approach would be consistent with the Commission's approach to most other assessments. Gambling revenues ultimately derive from people's choice to gamble. The propensity of people to gamble in one state versus another will determine the difference in revenue capacity between those states, assuming they both followed average state policy.
- This approach would require the identification of individual drivers of gambling activity and expenditure. NSW Treasury agrees with the Commission that no robust or material indicators are available.
- Most literature on predicting gambling behaviour focuses on personal and relational characteristics, subjective social norms and attitudes to gambling. Such indicators are of little use to the Commission. To the extent that some demographic trends are evident – such as that men tend to gamble more than women – these would not support a material differential assessment between states.
- A broad revenue approach is superficially appealing in that a population's capacity to gamble is constrained by its income and/or wealth. However, such a broad approach is not taken in any other assessment. What matters for a state's fiscal capacity is not whether a person *can* gamble but whether they *do* gamble. Intuitively, factors beyond income determine gambling propensity. However, as above, no reliable indicators have been identified. At any rate, the relationship between disposable income and gambling activity is limited and, as such, this cannot be used as a reliable indicator.
- NSW Treasury does use a broad income measure to forecast at least some annual gambling revenues. We model revenue using a basic autoregressive approach with an additional explanatory variable related to disposable income. In the absence of any deeper theoretical model of gambling behaviour, we consider this approach best estimates short-term changes in total gambling loss.
- This approach says nothing of the underlying propensity to gamble. Growth in disposable income from one period to the next provides a plausible estimate of the direction and magnitude of changes in gambling over the same period. Disposable income by itself, however, cannot reliably predict gambling behaviour and could not be used to compare gambling propensities between different states. The Commission's regression analysis supports this conclusion.

3.2 Equal per capita assessment

- Do states agree that state gambling taxes should be assessed equal per capita in the other revenue category?
- NSW Treasury agrees that gambling taxes should be assessed equal per capita. As noted above, there are no reliable indicators of states' capacities to generate gambling revenue. In the absence of any indicator, a differential assessment is inappropriate.
- Given state revenues are highly affected by gambling policies, any consideration of an actual per capita assessment should be immediately dismissed.
- The only reasonable approach available to the Commission is an equal per capita assessment. This has been the Commission's conclusion in each of the past four reviews (including the current review) and there has been no relevant development to support any other conclusion. NSW Treasury considers this matter settled.

4 Other revenue

This category is a residual category, comprising revenues not assessed in other revenue categories.

Overview of category

- The other revenue category is a residual category, made up of revenues not assessed elsewhere. Revenues in this category are assessed equal per capita (EPC), which means redistributions do not arise and there is no further effect on states' GST distributions.
- Revenues included in the category are those where states are assessed to have the same per capita capacity, where the data are not reliable to support an assessment or where a differential assessment would be immaterial.
- The category includes gambling taxes; fees, fines, and forfeits; interest income; dividend incomes; municipal rates only for ACT; and user charges that the Commission assesses EPC.

NSW Treasury position

• NSW Treasury agrees with the residual revenues classified under the other revenue category and agrees that other revenues should continue to be assessed equal per capita.

4.1 Revenue classification

- Do states agree with the revenues classified to the other revenue category?
- NSW Treasury agrees with the residual revenues classified under other revenue category, primarily because there is no reliable method for differentially assessing those taxes classified under "other revenue". This approach means the assessment does not affect states' relative fiscal capacities and does not affect the GST distribution due to:
 - Uniform per capita capacity: states are considered to have a consistent per capita capacity to raise revenue. This is particularly relevant in cases where revenues, such as interest income and dividend income, are uniform across states or differ only because of differences in state policy.
 - Lack of assessment method or reliable data: in situations where either a reliable assessment method is absent or there is insufficient reliable data to support an assessment, the other revenue category is a practical alternative. For instance, there is no reliable method for differentially assessing gambling taxes. This has been discussed in more detail in the Gambling section of our submission.
 - Immaterial differential assessment: the other revenue classification is suitable when a conceptually valid and practical differential assessment turns out to be immaterial.
 For instance, assets acquired below fair value, where deviations from standard assessments are not significant enough to warrant a separate classification.

4.2 Equal per capita assessment

- Do states agree that other revenue should be assessed equal per capita?
- NSW Treasury agrees that other revenue should be assessed equal per capita. Given state revenues are highly affected by policies and the residual revenues listed under other revenue category are consistent across states, any consideration of an actual per capita approach should not be pursued.
- The obviously reasonable approach available to the Commission is an equal per capita assessment of the identified residual revenues.

5 Housing

This category covers state spending on social housing services provided by the public non-financial sector, subsidies to community housing providers, and home purchase assistance for first home buyers, and public rents revenue.

Overview of category

- Social housing is subsidised housing provided by the government and community sectors, which includes public and community housing, and State Owned and Managed Indigenous Housing (SOMIH).
- Public housing is state owned and managed and is mostly provided through state public nonfinancial corporations. Community housing is managed by not-for-profit organisations, which receive various direct and in-kind subsidies from state governments.
- The assessment includes:
 - State spending on social housing services provided by the public non-financial sector and subsidies to community housing providers.
 - Revenue received from public housing rents.
 - State spending on home purchase assistance for first home buyers.
- The assessment excludes:
 - Accommodation for state employees, such as teachers and police officers in remote areas, which is assessed in the schools and justice categories respectively.
 - Residential institutions mainly providing living quarters for people with special needs, such as the young or disabled, which is assessed in the welfare category.
 - Tax expenditures on concessional rates of conveyance duty for first homeowners, which are assessed in the stamp duty on conveyances category.
 - Homeless persons assistance, including emergency accommodation and women's shelters, which is assessed in the welfare category.

NSW Treasury position

- NSW Treasury recommends the Housing assessment be revised to directly assess the level of housing stress within each jurisdiction. This will better approximate the policy neutral demand for social housing services each state faces. It will also remove any need to rely on socio-demographic characteristic (SDC) proxies.
- If the Commission does not revise the Housing assessment to account for this, we have also proposed separate changes that could still improve the overall assessment.
- We do not support separating assessments for public housing and community housing and think there is a risk that the Commission's position misrepresents social housing dynamics, as it implies states have separate and different needs for community housing and public housing. Community and public housing are simply different service delivery options which both provide for the overall need for social housing within each state.
- Long-term health condition data from the ABS is not appropriate to use as a proxy for high service needs in social housing households. While we conceptually agree that high service needs

lead to higher costs, we do not consider this proxy to be sufficiently linked to the cost driver. The provision of relevant data could also prove difficult in developing an assessment.

• The social housing assessment could be expanded to include additional drivers, such as housing stress, land costs, and the age and culturally and linguistically diverse (CALD) status of clients. We also consider that the general regional cost gradient is inappropriate in its application to this assessment. This is discussed in further detail in the Geography chapter.

5.1 Housing stress as the driver of service need

- Do states agree that the housing assessment remains fit for purpose notwithstanding recent developments in the housing market?
- NSW Treasury proposes a significant overhaul of the current Housing assessment to directly capture differences between states in underlying social housing service demand. At a fundamental level, housing affordability drives social housing demand and therefore expenditure needs. Yet the Commission's current approach does not recognise this.
- The demand for social housing derives from an inability of households to find suitable affordable accommodation in the private sector. It does not derive, as is currently implicitly assumed by the Commission, from the intrinsic characteristics of certain socio-economic groups within the community.
- That is, low socio-economic or Indigenous households do not live in social housing simply because of their socio-economic status (SES) or their Indigeneity. Instead, these groups represent a higher share of social housing tenants because these groups are less likely to be able to afford accommodation within the private sector.
- The Commission uses the prevalence of SDC groups with a higher propensity to use social housing as a proxy for overall social housing demand in a state. This is consistent with the approach taken across multiple assessments where proxies are required.
- In the context of housing, however, we believe proxies are unnecessary and misleading. The Commission can directly measure the prevalence of housing (rental) stress among low SES households to determine relative state social housing needs.
- The Commission has previously been reluctant to use a direct measure of housing stress in its assessment, arguing that it sees no linkage between the level of housing stress in jurisdictions and the level of social housing provided.
- Such an argument ignores the role of state policies in determining the level of response to housing stress within jurisdictions. Regardless of individual state policy to constrain social housing provision, it is housing stress which gives rise to the need to provide any level of social housing at all. Providing social housing to alleviate housing stress constitutes 'what states do.'
- We believe it is implausible to suggest, as the Commission currently does, that New South Wales
 has a below average need for social housing when housing affordability in New South Wales is
 so much worse than other states.⁴ The Commission already implicitly recognises higher housing
 costs in NSW through its stamp duty and land tax. However, it fails to recognise the impact this
 has on the demand for social housing.

⁴ Note that by focusing on housing affordability rather than housing cost, we control for differences in income between states. All else equal, higher incomes make housing more affordable while higher rents make housing less affordable.

- NSW Treasury believes the Commission should measure the underlying need for social housing in each jurisdiction by looking at the proportion of households in each state that are in, or are potentially in, housing stress. The following table attempts to do this by combining:
 - the number of households in actual private rental stress, as measured under the '30/40 rule' and
 - the number of households potentially in housing stress, as measured by the current number of households in social housing.
- While we acknowledge that the above approach assumes that all current social housing households would be in rental stress if they were forced to find accommodation in the private sector, we believe this is still a superior methodology to that currently used by the Commission.

	Private households in stress	Social housing households	Total housing stress	Total households	Rate of housing stress	Share of national housing stress
NSW	132,600	148,517	281,117	3,179,457	8.8%	35.3%
Vic	93,400	77,008	170,408	2,667,895	6.4%	21.4%
Qld	81,700	71,481	153,181	2,015,869	7.6%	19.2%
WA	29,800	40,179	69,979	1,028,759	6.8%	8.8%
SA	21,000	44,275	65,275	730,898	8.9%	8.2%
Tas	6,200	14,117	20,317	233,164	8.7%	2.6%
ACT	5,600	11,039	16,639	176,468	9.4%	2.1%
NT	7,300	11,818	19,118	80,982	23.6%	2.4%
Aus	377,600	418,434	796,034	10,113,492	7.9%	100.0%

Table 5-1: Prevalence of housing stress by state

Source: AIHW Housing assistance in Australia, CGC Housing consultation paper

• The data in the above table clearly indicate a higher intrinsic need for social housing in New South Wales, South Australia, Tasmania, the ACT and the Northern Territory. This compares with the current distribution of assessed demand as shown in Table 5-2.

Table 5-2: Comparison of current assessed and proposed measure of underlying social housingdemand

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Current Assessed Share of Social Housing Demand [#]									
	30.1%	22.6%	21.4%	11.6%	8.1%	2.3%	1.2%	2.7%	100.0%
Proposed Share of Social Housing Demand									
	35.3%	21.4%	19.2%	8.8%	8.2%	2.6%	2.1%	2.4%	100.0%
# NCW Transury calculations using the 2022 CCC Simulator, surrent demand evaluate sect usights									

NSW Treasury calculations using the 2023 CGC Simulator, current demand excludes cost weights

• Our proposed approach to measuring demand is entirely in keeping with the Commission's stated intent to apportion national social housing expenditure to states on the basis of the underlying need. Additionally, by considering housing stress rather than the extent of current social housing provision and the composition of existing social housing tenants, our proposal remains policy neutral, while still being fundamentally based on what states do.

- Under our proposed methodology, the Commission would, after recognising a demand disability, apply cost disabilities for various tenant groups in receipt of social housing to reflect their higher needs as per its existing method.
- If the Commission elects to maintain the current structure of its assessment basing its calculation on population characteristics then NSW Treasury recommends specific amendments be made to the low socio-economic disability to account for differences in housing affordability as discussed in Section 5.8.

5.2 Community and public housing

- Do states agree that there should be separate assessments for public and community housing if it results in a material change in GST distribution?
- NSW Treasury does not agree with the need for separate assessments for public and community housing. We consider that these represent different policy options available to states to provide for their overall social housing service needs. Differences in states' public and community housing mix do not reflect any genuine difference in need or circumstance.
- People need social housing, not community or public housing. Community and public housing simply represent different policy settings for providing for each state's relative need for social housing. Public and community housing users are drawn from the same pool of applicants who are registered on the social housing waitlist.
- Available data from New South Wales supports the Commission's data which shows that the SDC profiles of community and public housing users are broadly similar. Table 5-3 provides summary statistics for community and public housing users in New South Wales, as well as for those on the social housing waitlist.
- To the extent that there are differences, we attribute this to changing demographics in the total population. As the population changes, the demographics of new entrants to the social housing system will be different to the demographics of existing users. In that case, we would expect that the profile of applicants on the waitlist will differ from the profile of existing users.⁵
- As community housing is more recently and readily available, it will more closely reflect SDC profiles that are between the waitlist and the (older, more established) public housing user base. These slight differences in demographics do not represent differences in need or differences in required state expenditure. Expenditure is driven by total social housing need.

⁵ Differences between the waitlist and existing users can also be driven by other exogenous factors, such as housing stock demand and supply in allocation zones.

Community Housing	Public Housing	Social Housing Waitlist
11.9%	10.6%	16.7%
88.1%	89.4%	83.3%
66.4%	88.9%	70.0% ⁶
28.3%	8.7%	-
5.3%	2.1%	-
0.0%	0.2%	-
0.0%	0.0%	-
99.8%	100.0%	-
0.2%	0.0%	-
4.7%	1.3%	10.2%
42.2%	36.0%	59.6%
53.0%	62.7%	30.1%
	Community Housing 11.9% 88.1% 88.1% 66.4% 66.4% 28.3% 6.2% 0.0% 0.0% 100%	Community HousingPublic Housing11.9%10.6%11.9%10.6%88.1%89.4%66.4%88.9%28.3%8.7%28.3%2.1%0.0%0.2%0.0%0.0%0.0%0.0%0.2%0.0%0.2%0.0%4.7%1.3%42.2%36.0%53.0%62.7%

Table 5-3: SDC splits in New South Wales social housing, 2022 (%)

Source: NSW Department of Communities and Justice internal data

- Indeed, a large number of community housing dwellings were previously public housing dwellings. As a consequence of state policy choice, the management of these dwellings was transferred to the community housing sector. States continue to have an important funding role in relation to these properties.
- Furthermore, we do not think there is a conceptual case for any non-SDC cost or use drivers to be differentially applied across public and community housing assessments. The underlying cost and use drivers for both categories are functionally the same.
- Usage of public versus community housing is largely a function of availability, which is in turn driven by government policy. To the extent that there are differences between states in the relative sizes of their public and community housing sectors, no evidence has been presented of underlying or unavoidable factors that drive this.
- There has been past intent among housing ministers to increase the stock of community housing, including a proposed 2009 target to raise community housing in states to 35 per cent of the total

⁶ While not readily comparable, NSW data indicates Greater Sydney, Illawarra Shoalhaven, Hunter New England, and the Central Coast comprise 70.0% of current users on the social housing waitlist. This is a reasonable proxy for the prevalence of major city need.

social housing stock.⁷ The fact that some states acted earlier than others to shift towards community housing, as is the case for Tasmania and New South Wales, does not reflect any greater underlying or structural availability of community housing within states.

• Notwithstanding the above, we acknowledge the Commission may still investigate whether separating public and community housing proves material. Since the services are separately identifiable, a separate assessment is feasible, although we consider it is unlikely to be material. If it is material, the Commission will need to put forward a conceptual case for why social housing need should be considered as two separate, underlying needs.

5.3 Disability and other high service needs

The Commission asks:

- 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?
- NSW Treasury supports the conceptual case that households with members that have disabilities or other high service needs will likely require higher levels of servicing and therefore cost more compared to social housing for households without such needs.
- However, we do not consider that the ABS data on long-term health conditions is an appropriate proxy for higher service needs and an assessment should not be based on this data. We also do not consider it straightforward to distinguish what proportion of the higher costs of high services needs can be attributed to social housing expenditures over other expenditures.
- It would be useful for the Commission to define 'high service needs' in the context of its assessment to best consider the appropriateness of long-term health conditions as a proxy for these needs. This definition should be based on average state policy,
- It is unclear how a reasonable link can be made between individual long-term health conditions and the housing support required by a high service need client. It is also unclear how the Commission proposes to differentiate between different long-term health conditions, as the conditions identified in the Commission's consultation paper require varying levels of additional support with varying costs.
- Any proposal to treat all long-term health conditions as having equivalent high service needs would clearly not be appropriate and should not be used as the assessment approach.
- For example, in most cases, household members with dementia do not have comparable service needs to those with asthma. Clearly, instances of dementia are much more likely to require specific accommodations or additional support compared to instances of asthma. We would seek greater understanding from the Commission on how they consider this data could be refined into an appropriate proxy.
- While we broadly consider the measure inappropriate, if the Commission maintains its position to use the data in an assessment, it may be more appropriate to also apply the ABS' core activity

7

https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/Budge tReview201718/Social_housing_and_homelessness#_ftn5

need for assistance' measure.⁸ The requirements for long-term health conditions and a core activity need for assistance are identified in Table 5-4, produced directly from the ABS.

Type of long-term health condition	Has a core activity need for assistance (%)	Does not have a core activity need for assistance (%)
Arthritis	21.6	77.3
Asthma	10.0	89.3
Cancer	20.5	78.5
Dementia	81.9	14.4
Diabetes	21.0	78.0
Heart disease	26.2	72.6
Kidney disease	35.1	63.5
Lung condition	31.9	66.9
Mental health condition	19.2	79.9
Stroke	46.2	52.3
Any other long-term health conditions(s)	27.3	71.9

Table 5-4: Type of long-term health condition by core activity need for assistance, 2021⁹

Source: ABS, Long-term health conditions, https://www.abs.gov.au/articles/long-term-health-conditions, 2023.

- Continuing the comparison between asthma and dementia, of household members with longterm asthma, only 10.0% had a core activity need for assistance. In contrast, household members with dementia had an 81.9% core activity need for assistance. Using core activity need for assistance would likely be a better proxy of high service needs.
- We note that a core activity need for assistance does not necessarily mean that such assistance would be provided by a social housing provider. Instead, assistance may often come from a family or household member, requiring no adjustments in housing services. Many core activity needs may also represent the need for regular or constant support from professional staff, rather than a specific limitation that requires physical property adjustments. Overall, a core activity need for assistance does not necessarily correlate to a need for adjustments to a social housing property.
- Due to respondents being able to identify multiple health conditions, there is a risk that applying disabilities based on individual long-term health conditions will overstate costs. New South Wales cannot provide social housing cost data specific to the individual conditions listed in the ABS data.
- Many physical property adjustments may represent disabilities associated with older age. There may instead be a case for the Commission to evaluate whether age is a potential alternative driver of higher service need, given the greater availability of data on client age. This is discussed in greater detail in Section 5.6.
- If the Commission decides to proceed with an assessment based on ABS census data, we would propose that the following elements should be incorporated:

⁸ Core activity need for assistance – People with a profound or severe core activity limitation needing assistance in their day to day lives in one or more of the three core activity areas of self-care, mobility, and communication because of a long-term health condition (lasting six months or more), a disability (lasting six months or more), or old age.

⁹ Data is sourced directly from the ABS – it is unclear why rows do not sum to 100 per cent.

- **Use of private dwelling data only, excluding non-private dwellings**. Non-private dwellings include aged care and hospital dwellings that could materially overstate the prevalence of long-term health conditions, as well as other dwellings that are not relevant to the question at hand, such as boarding schools and prisons.
- Use of long-term health condition by core activity need for assistance. While not an ideal proxy of high service needs, we consider it is more likely to represent high service needs than solely using the overall prevalence of long-term health conditions in the population.

The Commission asks:

- Do states have data on the cost of servicing different household types that would enable the calculation of a cost gradient?
- We do not think there is sufficient evidence to link the proposed proxy to the actual incidence of disability within social housing households. However, we have provided commentary on the nature of available data for the Commission's information.
- Though New South Wales is able to identify households who receive disability support payments, this does not include further detail about the specific condition a social housing client has. There is also the capacity to identify the number of NDIS participants, and consider high needs based on package size; however, this still does not necessarily represent higher service needs in relation to social housing.
- New South Wales also has data based on the level of modifications to a home, on a low / medium / high structure, and this is a potential proxy for service cost. However, modifications are only linked to the actual property, rather than specific tenants or households. This means that the extent of modifications in social housing properties does not necessarily represent the service need of clients at any given point in time.
- New South Wales can produce data to determine average annual maintenance cost related to age, disability status, and Indigenous status; however, this data would not provide more detailed information on different needs of clients with a disability status. As stated previously, we do not have cost data specific to ABS long-term health conditions.
- Overall, while we have the capability to provide data related to property modifications, this does not adequately link to the incidence or extent of disability (or long-term health condition) within the social housing client cohort.

5.4 Regional costs

- That the Commission revisit the viability of a housing-specific regional cost gradient in place of the existing general regional cost gradient.
- A more detailed discussion on the general regional cost gradient is outlined in Section 15 dealing with Geography. For the purposes of this chapter, we provide specific comment on the gradient's impact on the Housing assessment.
- We do not consider the current general regional cost gradient to be an appropriate method of apportioning regional costs and propose that the Commission instead implement a housing-

specific regional cost gradient. The Commission should preference assessment-specific regional cost gradients, where available.

- We consider that applying the general regional cost gradient risks overstating the slope steepness (and cost) of housing expenditure in regional and remote areas. A housing-specific gradient, preferably based on comprehensive state data, will provide a more accurate assessment than the existing approach.
- If the Commission finds that state data are not sufficiently comprehensive to support a housingspecific cost gradient, then the existing discount needs to be increased to reflect the extent of the overstated steepness of the general regional cost gradient for social housing. We do not consider it reasonable that the same discount is applied across all expenditure assessments that use the general regional cost gradient when some have been demonstrated to have a greater risk of overstated regional costs.
- As part of the 2020 Review, New South Wales proposed that the general regional cost gradient risked overstating the housing remoteness cost slope by comparison against actual data in New South Wales. It is understood that data provided at the time likely overstated the remoteness impact in New South Wales, and that it is even lower than originally presented.
- The Commission was supportive of a change in the gradient and identified in the 2020 Review Draft Report that available state data would provide a housing-specific national gradient and subsequently address our concerns.
- However, the new gradient did not progress as states' data were not sufficiently comprehensive. The Commission instead decided to continue the use of the existing general regional cost gradient, without any increase in its discount, despite it clearly overstating the regional and remote drivers of housing expenditure. We urge the Commission to revisit the matter.

5.5 CALD status as a cost driver

- That the Commission should investigate a social housing user's CALD status as a driver of service cost.
- The Commission should investigate introducing a cost weight for CALD clients in the Housing assessment and consider the joint materiality of including a CALD driver across all relevant expenditure assessments. While we acknowledge that social housing CALD adjustments are minor, they should be considered as part of the overall assessment of a CALD driver.
- The conceptual case for a CALD driver was established as part of the 2020 Review and we have discussed the continued relevance of this conceptual case in more detail in the Welfare chapter. We consider that the CALD driver continues to apply to social housing as well.
- For social housing, it has previously been demonstrated that CALD households are more likely to require social housing assistance than non-CALD households. Per 2020-21 reporting, 30.6 per cent of clients on the social housing wait list had a CALD status household head.¹⁰
- Additionally, in New South Wales, the provision of tenancy management services includes a five per cent cost loading for providing services for CALD clients. This can be due to the need for assistance with communication, as well as assistance in developing knowledge and operating

¹⁰ NSW Department of Communities and Justice, *Statistical Report 2020-21,* <u>https://www.facs.nsw.gov.au/resources/statistics/statistical-report-2020-21</u>, 2023.

within the social housing system.

5.6 Age

NSW Treasury proposes:

- That the Commission should investigate a social housing user's age as a driver of service cost.
- New South Wales contends that the Commission should investigate the materiality of including social housing tenant age as a driver of service cost. Conceptually, we consider that there are higher service costs associated with older social housing tenants. We also note it is highly likely that there is significant overlap between older tenants and greater need for social housing property modifications.
- Higher costs in providing services for these tenants can include the need for specialist services, the need to provide specific properties (i.e. the greater difficulty in effectively placing tenants), and the need for minor renovations or other modifications to properties.
- A majority of waitlist applicants for government-managed public housing need a property modification to be able to move into a home, or to appropriately age in place. This also aligns quite closely to the number of existing residents who either receive the age or disability support pension.
- We consider that the costs of providing for 55+ households are likely to be higher on average that younger age groups, though this would require more detailed investigation. The Commission should investigate the introduction of an age cost driver, which may be more readily achievable than implementing the proposed high service need driver tied to long-term health conditions.

Household	0-18	18-24	25-54	55+
Indigenous	0.7%	23.4%	68.5%	7.3%
Non-Indigenous	0.2%	7.5%	58.0%	34.3%
Total	0.3%	9.9%	59.6%	30.1%

Table 5-5: Percentage of NSW waitlist applicants by head of household age group, 2020-21

Source: NSW Department of Communities and Justice, *Statistical Report 2020-21*, <u>https://www.facs.nsw.gov.au/resources/statistics/statistical-report-2020-21</u>, 2023.

5.7 Head leasing cost driver

- That the Commission should investigate the inclusion of head leasing costs and private rent prices as a driver of service cost.
- In the 2020 Review, NSW Treasury proposed incorporating a housing stress variable into the Commission's preferred SES indicator (SEIFA)¹¹ to better represent the impact of housing pressures on low SES households in Australia. Both the Commission and the ABS saw merit in

¹¹ SEIFA – Socio Economic Indexes for Areas.

this proposal. However, data concerns and materiality resulted in the SEIFA measure remaining unchanged.

- As part of the Commission's consideration of a new inter-review socio-economic status measure, the PLIDA, we again proposed that the Commission investigate the viability of including a housing stress measure as a variable within the indicator.¹² However, we think that there are other avenues for recognising the impact of housing stress that can be incorporated into the Housing assessment.
- We contend that the head leasing component of each state's social housing mix drives additional net costs for states. 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. The need for head leasing can be driven by demand exceeding supply in an allocation area, the suitability of existing housing stock for a specific need, and the potential urgent nature of some social housing needs.
- Private rental increases impact on the costs of head leasing, as the cost of the head lease paid by the state government therefore increases. As per Housing Australia, social housing rents are typically set between 30 to 50 per cent of a state's private rental mean. In recent years, states that have experienced significant private market rent rises have fallen to the bottom of this range¹³. This has mainly impacted New South Wales, Victoria and Queensland.
- Evidently, it has been average state policy to not increase social housing tenant rents at the same rate as the private market. Had social housing rents increased, they would have remained proportionate to private rents. This would have increased the cost burden on both social housing tenants and providers.
- Instead, what we have seen in practice is states having partially shielded social housing tenants from private market rent increases. This means that for states where private rents are rising disproportionately, the net cost is increasing from states either leaving subsidised rents static or increasing at a slower rate to the private market.
- Even if states did proportionally increase their social housing rents in line with the private market, those states experiencing greater private market increases would still face increasing social housing costs. We contend that 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.

5.8 Defining low-income households

- That the Commission should investigate a more appropriate measure of calculating low-SES households than equivalised national income per week for this assessment.
- In Section 5.1 we proposed replacing all service use drivers with a single measure: the number of households in each state experiencing or potentially experiencing housing stress. From a service use perspective, this would remove the need for any SDC-based disaggregation of the number of social and total households. Any SDC-based adjustments for cost can still be applied under this approach.
- If the current SDC approach is continued, then we believe the low-SES measure should be adjusted to account for housing affordability. Given the need to cross tabulate Census SES data

¹² PLIDA was formerly titled as the 'Multi-Agency Data Integration Project' or MADIP.

¹³ Housing Australia, NHFIC Analysis on Australia's rental markets,

Ahttps://www.housingaustralia.gov.au/sites/default/files/2022-12/nhfic_rents_report_2022.pdf, 2022.

with other SDC characteristics, a practical approach would be to weight each state's count of low-SES households by a factor that represents relative housing affordability in that state.

- In the 2020 Review, the Commission defined low-income households as those with an equivalised household income of less than \$33,799 a year or \$649 per week. Equivalised income considers gross income less tax adjusted for household size and composition. This was considered close to the average income eligibility thresholds for single person public housing access across states.
- This approach is faulty as it is solely a measure of income and does not consider cost or household purchasing power within a state. If the Commission only accounts for the income component at a national average level, it will not accurately capture the low-SES populations in each state under housing stress.
- Social housing demand reflects affordability, which is fundamentally a combination of income and cost factors. Households do not access social housing because they are a low-income household, they access social housing because their income is not sufficient to meet housing costs.
- The current approach benefits states who have lower average incomes by assigning them a higher proportion of national low-SES households, even if those households have greater housing purchasing power than higher income households in other states. This approach implies that the need for social housing is determined solely by household income, when the actual demand is given by the subset of low-income households that cannot meet housing costs.
- A better approach would be to consider some combination of household income and cost. The standard 30/40 measure of housing stress considers that housing stress is driven by income (i.e. lowest 40 per cent of incomes) and cost (i.e. proportion of these households spending 30 per cent of this income on shelter).
- The Commission could use this measure to weight the number of low-SES households in each state to recognise differences in rent costs between jurisdictions. ABS data is available to determine the total number of households in Australia that meet this 30/40 definition of housing stress, as well as the state to which each household belongs. Comparing this number for each state with the raw number of households in each state that are in the bottom 40 per cent of national incomes will indicate the relative likelihood of low-SES households in each state to be experiencing housing stress. This could be the basis of the Commission's low-SES weighting for each state.
- Alternatively, the Commission could adjust its \$649 low-SES income threshold for each state to recognise differences in average rents between jurisdictions. Under this approach, each state would have a different threshold for the purpose of identifying the number of low-SES households in that state. This would better capture the likelihood of a household in a given state to be experiencing housing stress.

5.9 Data issues

- That the Commission evaluates the quality of COFOG expenditure data on social housing and welfare as state data may be materially inaccurate.
- We have concerns that COFOG expenditure in the social housing component and overall Welfare assessment provided by states may be incorrect. We believe the impact of these data issues would be material for some states with respect to GST redistribution.
- We propose that the Commission should seek specific state spending data on social housing, as well as other relevant welfare categories (i.e. homelessness), that could be captured in housing

COFOG codes. This would enable the Commission to evaluate state COFOG data against state internal data on social housing and welfare expenditure.

• It is recognised that issues with COFOG data are not likely to be specific to the Housing assessment alone. We note this data is available to all states through the 2023 simulator. We have provided more general COFOG comments in Section 1.5 of the Adjusted Budget chapter.

- That the Commission limits the use of ROGS data on greatest need households to evidence state comparisons and conceptual positions.
- The Commission should not use Report on Government Services (ROGS) data relating to "greatest need" households. We believe differences in how states define greatest need renders this data unsuitable for interstate comparisons.
- In the 2020 Review, the Commission identified that New South Wales has a much lower rate of providing new allocations for greatest need households relative to the national average. This was in response to a Victoria proposal that high land prices increased housing costs, and therefore social housing and homelessness service expenditure.
- We dispute this finding. Instead, this is driven by states having different definitions of greatest need clients. If a state identifies most waitlist clients as greatest need, this approach will result in new allocations being mostly comprised of greatest need clients.
- For instance, in the 2024 Report on Government Services, Queensland's greatest need households made up 98.2 per cent of the public housing waitlist, with new allocations at 99.7 per cent. In contrast, New South Wales had 12.9 per cent and 74.3 per cent respectively for these measures. However, New South Wales provides for greatest need households at a 5.8:1 ratio compared to other clients (i.e. greatest need clients receive allocations at a much greater rate than other clients). This contrasts with Queensland providing it at practically a 1:1 rate¹⁴.
- Accordingly, we are concerned that inconsistencies in state definitions of greatest need populations can heavily limit the Commission's ability to undertake comparisons between states. We would seek that the Commission accounts for this in future positions.

¹⁴ We do not suggest that New South Wales prioritises greatest need clients more than Queensland. Only that differences in approach mean that such comparisons are limited.

6 Welfare

This category covers state spending on various welfare services, including child protection and family services, disability, aged care, concessions, homelessness, and other welfare services.

Overview of category

- States have policy and service delivery responsibility for most welfare services other than aged care services and disability services, with the full implementation of the National Disability Insurance Scheme (NDIS). All states have now transitioned to the NDIS.
- The assessment includes:
 - Child protection and family services, including out-of-home care (OOHC).
 - State contributions to the NDIS.
 - Residual disability and aged care services not provided by the Commonwealth.
 - Payments under the National Redress Scheme for Institutional Child Sexual Abuse.
 - Concessions (excluding transport concessions) for pensioner and health care card holders on electricity and other energy, water and wastewater, rates, and other low-income concessions.
- Other welfare services, which covers homelessness assistance, women's shelters, refugee care, prisoners' aid, Indigenous welfare services, and other information, advice and referral services.

NSW Treasury position

- NSW Treasury supports the Commission investigating the materiality and drivers of need for a separate homelessness assessment. However, we have concerns about solely using specialist homelessness services (SHS) data to determine usage given the significant Temporary Accommodation (TA) program in New South Wales.
- Furthermore, there is a risk that if the Commission undertakes materiality testing using ROGS expenditure data, expenditure will be understated, particularly for New South Wales. It may be appropriate to seek state non-SHS data for materiality testing as well.
- We also have concerns that the proposed drivers, while a reasonable starting point, do not sufficiently represent state need. We contend that domestic violence, mental health conditions, and client disability need to be fully investigated in developing the assessment. We also consider that the complexity of overcrowding needs to be evaluated by the Commission, particularly regarding its impact on Indigenous status as a driver of service use.
- NSW Treasury otherwise supports the proposals put forward by the Commission.
- The Commission should evaluate the applicability of introducing a CALD cost driver for this assessment. We also consider that the general regional gradient is incorrectly applied in this assessment, including the use of service delivery scale (SDS) for child protection. This gradient is discussed in most detail in the Geography chapter (Section 15) of this submission.

6.1 Homelessness

6.1.1 The case for a homelessness assessment

The Commission asks:

- Do states support the development of a homelessness services assessment?
- We support the Commission separately assessing homelessness services, provided it proves material and that an appropriate set of drivers can be found. However, we have concerns about the Australian Institute of Health and Welfare (AIHW) data on SHS being used to determine the usage rate of homelessness services.
- The AIHW identifies multiple specific issues for comparing state data in its technical notes.¹⁵ For New South Wales, the TA program, which should be included within the expenditure base of any assessment, delivers significant services for homeless or at risk of homelessness clients, but is not within scope of the Specialist Homelessness Services Collection (SHSC) as TA is considered distinct from SHS. We believe the Commission should evaluate whether there are any material differences in service use between the two service types.
- As per Figure 6-1, taken from the Commission's 2025 Review Welfare consultation paper, New South Wales is identified as having a lower rate of homelessness services clients per 10,000 people compared to the national average.



Figure 6-1: Specialist homelessness services clients per 10,000 people by state, 2021-22

Source: AIHW, Specialist Homelessness Services Collection, 2011-12 to 2021-22, Australian Bureau of Statistics (ABS), Estimated residential population by state,

• We do not believe this accurately represents the usage rate of homelessness services in New South Wales for the reasons outlined above. Under the AIHW SHSC, there were 68,473 SHS clients in New South Wales in 2021-22. In comparison, Victoria had 101,675 clients and

¹⁵ AIHW, Specialist homelessness services annual report 2022-23, <u>https://www.aihw.gov.au/reports/homelessness-</u> services/specialist-homelessness-services-annual-report/data, 2023.

Queensland had 41,587 clients.¹⁶ However, based on quarterly reporting, New South Wales had an additional 37,037 clients using TA in 2021-22 who will not be included in AIHW usage data.¹⁷

- Given this, a significant portion of homelessness service clients in New South Wales will be excluded from the Commission's materiality testing. This underreporting may materially affect the assessment if SDC use and cost drivers differ between SHS and TA.
- New South Wales can provide data on the annual use of the TA program to the Commission, including use by different SDC groups, if the Commission determines it will incorporate this information within materiality testing for the assessment. Some work will be required to remove any overlap in client usage between SHS and TA.
- We also consider it important that the Commission's methodology appropriately recognises that the users of homelessness services are clearly split between people who are homeless and people who are at risk of homelessness. The characteristics and usage of services of these groups may differ.
- Finally, we note that state data on current homelessness services provision may not accurately reflect underlying demand for services, given unmet demand. The extent to which states provide services is ultimately a policy decision. Nonetheless it is average policy to make homelessness services available for homeless and at-risk populations. Underlying demand should not be measured by SHS availability, but by the number of clients who would use the service if it was sufficiently available (or made available at national average rates).
- If the Commission determines that it will not develop a new assessment, we expect that homelessness services would continue to be assessed as part of 'other welfare'.
- We have separate concerns about the quality of COFOG data currently used as part of the Welfare assessment. We believe that the classification of expenditure between this assessment and the social housing component of the Housing assessment appears incorrect. This is discussed in detail as part of the Housing chapter.

- Will states be able to identify spending on homelessness services and identify where that spending is reported in the Government Finance Statistics classifications?
- New South Wales can readily identify homelessness expenditure and associated programs. This can be provided for both SHS and other non-SHS programs on an annual basis.
- We note that while the Report on Government Services (ROGS) includes annual reporting on homelessness expenditure, it relates only to SHS. Accordingly, ROGS is not a sufficiently comprehensive source of homelessness services information and cannot be used for materiality testing. The Commission may be better served by seeking additional data from states on non-SHS programs for its materiality testing.
- Homelessness expenditure should be captured under the following COFOG codes:
 - COFOG-A 103 Family and children Specialist homelessness services for youth provided under the National Housing and Homelessness Agreement
 - COFOG-A 106 Social exclusion not elsewhere classified Assistance for homeless people other than youth such as that provided under the National Housing and Homelessness Agreement

¹⁶ AIHW, Specialist homelessness services annual report 2022-23.

¹⁷ DCJ, Social housing delivery dashboard 2023.
- COFOG-A 109 Social protection not elsewhere classified Social protection affairs and services that cannot be classified to social exclusion not elsewhere classified.
- We can confirm that homelessness expenditure in New South Wales, including for programs that are not captured within SHS, are allocated to these COFOG codes. We note that other programs that are not related to homelessness will also be included under these codes.

6.1.2 The Commission's proposed homelessness drivers

The Commission asks:

- 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?
- The Commission has initially proposed the following expenditure drivers:
 - o socio-economic status (SES)
 - o age
 - o Indigenous status
 - o remoteness
 - o (potentially) mental health conditions.
- NSW Treasury considers that the Commission's proposed drivers are a useful and relevant starting point but are not sufficiently comprehensive to capture the complexity of homelessness service demand.

SES status

- We agree that socio-economic status is a key indicator of homelessness service use, and lower-SES groups are significantly more likely to access SHS. This may reflect a correlation between low SES status and other drivers of homelessness risk, including disability, domestic and family violence (DFV) and substance abuse. These potential drivers are discussed below.
- However, we are concerned that the use of homelessness services is also driven by the inability of low socio-economic groups to find suitable affordable accommodation. In the Housing chapter of this submission, we have outlined our concerns with the exclusion of this factor in that assessment. We consider this factor should also be accounted for in homelessness.
- We believe that as part of any SES calculation for a homelessness assessment, the income threshold for person classified as low socio-economic status should reflect differences in housing costs. Possible calculation methods outlined in the Housing chapter could be readily applied in the homelessness assessment as well.

Age

• We agree that age is a useful identifier of potential service use, noting that service use tends to skew younger. It is likely that other, more specific factors are more pertinent than age alone. For example, homelessness risk is increased for young people exiting OOHC or for prisoners exiting custodial sentences¹⁸ (with prisoners tending to be younger).

¹⁸ DCJ, Pathways to Homelessness, 2021.

- Older cohorts have increased risk of homelessness for other reasons. Specifically, homelessness is associated with drug and alcohol abuse, which is more prevalent within older population cohorts compared to the overall population of homelessness service users.¹⁹
- Solely considering age within the general population does not adequately capture the complexity outlined above. If possible, it may be better for the Commission to directly capture the causative factors noted above, rather than use age as a potential proxy.

Overcrowding

- We contend that the Commission must account for overcrowding as a driver for the need to provide homelessness services in any assessment. This is particularly relevant when considering Indigenous status and remoteness, which are discussed in more detail in the following sections. This section provides a short background on overcrowding and homelessness.
- Overcrowding is itself a form of homelessness, under the ABS definition.²⁰ It can require a different level and form of government response compared to other forms of homelessness.
- For the purposes of the SHSC, the AIHW identifies a person as homeless if they are in either of:
 - o non-conventional accommodation or sleeping rough (such as living on the street)
 - short-term or emergency accommodation due to a lack of other options (such as living temporarily with friends and relatives).
- The SHSC classifies clients living in overcrowded households as at-risk of homelessness rather than homeless. An overcrowded dwelling is defined as a dwelling where one or more additional bedrooms are required to adequately house its inhabitants. For the SHSC, at-risk persons can be currently housed in public or community housing, as well as private housing.
- Table 6-1 presents the breakdown of SHS clients. The largest proportion of users are from atrisk households (52.7 per cent) with around two-thirds of these in private tenancies.²¹

Homeless status	Housing situation	Total clients	Per cent of total clients
Homeless	No shelter or improvised/inadequate dwelling	27,571	11.4%
	Short-term temporary accommodation	47,711	19.7%
	House, townhouse or flat – Couch surfer or no tenure	39,168	16.2%
	Public or community housing – renter or rent free	34,173	14.1%
At risk	Private or other housing – renter, rent free or owner	84,491	34.9%
	Institutional settings	8,875	3.7%

Table 6-1: Breakdown of housing situation of national SHS clients, 2022-23

Source: AIHW, Specialist homelessness services annual report 2022-23.

¹⁹ DCJ, Pathways to Homelessness, 2021.

²⁰ Here we use the Canadian National Occupancy Standard (CNOS): a household is overcrowded when it requires at least one more bedroom. Also relevant is the ABS definition – a household is severely overcrowded when it requires at least four more bedrooms. This is commonly considered a form of homelessness.

²¹ This analysis excludes other or not stated housing situations. We note again that this client base does not include the significant number of TA clients within New South Wales.

• We contend that overcrowding is a major driver of the use of homelessness services and impacts the ability of the Commission to apply use drivers (i.e. Indigenous status, remoteness) without making further adjustments. State rates of overcrowding are show in Table 6-2.

State	No. of overcrowded households	Per cent of total overcrowded households	Total households	Overcrowded as per cent of state households
NSW	129,264	41.6%	2,900,466	4.46%
VIC	73,211	23.6%	2,390,229	3.06%
QLD	52,013	16.7%	1,869,452	2.78%
WA	19,364	6.2%	964,729	2.01%
SA	18,015	5.8%	691,303	2.61%
TAS	6,778	2.2%	218,418	3.10%
ACT	5,175	1.7%	168,403	3.07%
NT	7,015	2.3%	70,660	9.93%
Total	310,835	100.0%	9,273,660	3.35%

Table 6-2: State proportions of total overcrowded households, 2021 Census

Source: ABS TableBuilder, Census of Population and Housing, 2021 Census.

Indigenous status

- Indigeneity is clearly correlated with homelessness. We are concerned, however, that this relationship is overstated by the prevalence of overcrowding in Indigenous households in the Northern Territory. Adopting Indigenous status as a driver without accounting for this risks understating service needs in the Northern Territory and overstating needs for other states.
- As demonstrated in the Northern Territory's submission to the Inquiry into Homelessness in Australia, the nature of Indigenous homelessness and overcrowding in the Northern Territory is not like other states.²² We have reproduced a similar analysis to the Northern Territory's submission from the 2021 census below.

²² Northern Territory, Homelessness in the Northern Territory



Figure 6-2: Detailed housing suitability, Indigenous households, ABS 2021

Source: ABS TableBuilder, Census of Population and Housing, 2021 Census.



Figure 6-3: General housing suitability, Indigenous households, ABS 2021

Source: ABS TableBuilder, Census of Population and Housing, 2021 Census.

• As Figure 6-2 and Figure 6-3 demonstrate, Indigenous households in the Northern Territory face significant overcrowding. In contrast, Indigenous households nationally are more likely to have appropriate utilisation or under-utilisation of housing space. This variance occurs in both urban and non-urban households. We interpret this to mean there are significant differences in the needs of Indigenous households in the Northern Territory and the rest of Australia.

Remoteness - overcrowding

• Overcrowding also complicates an assessment of the impact of remoteness on service use. Applying a typical approach to remoteness use and cost weights would risk understating the needs of both major cities and the Northern Territory. Table 6-3 shows rates of homelessness and overcrowding by remoteness.

Table 6-3: Geographic regions by overcrowding and homelessness, 2021 Census

Statistic	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote
Total overcrowded households*	239,999	39,543	21,240	4,051	6,002
Overcrowded households per 10,000 households	361.0	230.8	277.1	415.6	1,245.6
Total homeless population (excl. severely overcrowded)*	50,063	12,048	8,180	2,524	1,240
Homeless population per 10,000 population (excl. severely overcrowded)	26.9	26.1	39.0	83.7	63.2
Total severely overcrowded population	27,576	4,587	2,943	2,222	10,566
Severely overcrowded population per 10,000 population	14.7	9.9	14.0	73.7	538.5

Source: ABS TableBuilder, Census of Population and Housing, 2021 Census. ABS, Estimating homelessness, 2021 Census.

*Note that severely overcrowded households have been included in overcrowded data rather than homeless data for the purpose of this analysis. For transparency, the severely overcrowded population has also been included in separate rows to clearly outline its impact.

• The data presented above are skewed by the unique circumstances in the Northern Territory. Table 6-4 isolates the outer regional, remote and very remote incidences of overcrowding in the Northern Territory from all other states.

Table 6-4: Outer regional, remote and very remote regions by overcrowding, 2021 Census

Statistic	States (excluding Northern Territory)			Northern Territory			
	Outer Regional	Remote	Very Remote	Outer Regional	Remote	Very Remote	
Total overcrowded households	18,683	2,483	3,112	2,557	1,568	2,890	
Overcrowded households per 10,000 households	259.7	300.0	787.1	540.6	1,065.6	3,341.0	
Homeless population per 10,000 population	33.0	53.5	62.9	117.6	226.1	63.9	
Severely overcrowded population per 10,000 population	13.9	28.3	163.4	15.8	287.7	1,686.4	

Source: ABS TableBuilder, Census of Population and Housing, 2021 Census. ABS, Estimating homelessness, 2021 Census.

• Clearly, people in remote and very remote communities are more likely to be homeless or in overcrowded dwellings. However, the Northern Territory's rate of overcrowding, particularly severe overcrowding, is significantly beyond that of other states. We consider its remote and very remote populations to have different needs to comparable populations in other states. Using unadjusted data to calculate typical remoteness service use factors would likely

understate service needs in the Northern Territory and overstate needs for other states with proportionally higher remote communities.

• Overcrowding may also be driving some of the observed difference in service use between major cities, regional areas, and remote services. Table 6-5 shows that overcrowding is more prevalent for major cities than regional areas. A typical remoteness driver would subsequently risk understating the need in major cities.

State	Share of major city overcrowded households	Share of major city households	Household gap	Share of severely overcrowded households
NSW	46.4%	32.3%	14.1%	47.0%
VIC	25.8%	27.9%	-2.1%	27.4%
QLD	13.5%	18.1%	-4.6%	13.3%
WA	6.1%	11.6%	-5.5%	4.5%
SA	6.1%	7.6%	-1.5%	6.1%
ACT	2.2%	2.5%	-0.3%	1.7%
Total	100.0%	100.0%	0.0%	100.0%

Table 6-5: Major city overcrowding effects, 2021 Census

Source: ABS TableBuilder, *Census of Population and Housing*, 2021 Census. Note: Tasmania and the Northern Territory are excluded from the table due to having no major city populations.

Remoteness - other

- Beyond overcrowding, we consider there may be other issues with the Commission's initial analysis on per capita service usage by remoteness. People in remote areas are much more likely to access homelessness services, but those services can be different in nature to services in regional and metropolitan areas. This has a bearing on the relative costs of those services.
- As evidenced in Table 6-6, while the client use rate is much higher in remote areas, the median number of days supported are significantly lower.²³

²³ Note the client use rate is significantly understated from excluding the TA program in New South Wales

Statistic	Major Cities	Inner Regional	Outer Regional	Remote
Total clients	176,567	78,312	33,404	13,225
Total requests provided for	29.9%	21.0%	31.3%	75.1%
Client use rate (per 10,000 pop.)	94.0	169.4	159.1	265.6
Median days supported	54	72	53	16
Client use rate adjusted for median support days – Index	100.0	240.3	166.1	83.7
Usage of short-term or emergency accommodation	34.4%	33.5%	41.4%	74.0%

Source: AIHW, Specialist homelessness services annual report 2022-23 – Service geography, ABS, Regional population 2021-22,

- In accounting for service use by remoteness, the Commission should also account for the different types of services used between geographic areas. Treating all SHS provision as constant, despite the differences in complexity between short-, mid- and long-term services, would produce an inaccurate assessment of service cost.
- Separately, while we agree regional cost factors should be included in the assessment, we do not support using the general regional gradient as it overstates the cost of providing regional and remote welfare services. This is discussed in greater detail in Section 6.5 and the Geography chapter (Section 15).

Other

- We agree that the existing wage factor should be included in the assessment, as wages are a key cost driver for New South Wales in providing homelessness services.
- We also note the cross-border adjustment for homelessness services and expect that, for simplicity, this will continue to be assessed as part of the Health category.

6.1.3 Other homelessness drivers

- NSW Treasury considers that additional drivers should be explored as part of a homelessness assessment, beyond earlier points on the impact of overcrowding.
- The 2020 Review identified that the four factors most consistently linked to homelessness were DFV / family breakdown, drug and alcohol abuse, mental health conditions, and Indigenous status. The Commission proposes to include only one of these factors in its homelessness assessment (Indigenous status). We believe that the Commission should fully investigate the remaining factors.

²⁴ These AIHW data include clients who may have requested multiple services and assistance types, so total clients in Table 1-6 will not add to AIHW total for all unique clients (273,648 clients in 2022-23).

Domestic and family violence

- While we note the Commission's position that there is a lack of suitable national DFV data that would enable cross-classification with other demographic characteristics, NSW Treasury considers that as DFV is such a significant driver of homelessness, the Commission should continue to investigate options for including it.
- DFV is the main reason women and children leave their homes in Australia. Clients experiencing DFV make up a substantial portion of SHS clients in New South Wales approximately 38 per cent with an average annual increase since 2011-12 of 3.2 per cent. This is higher than the national average increase of 2.5 per cent.
- We would note that, while complex and multifaceted, DFV has been demonstrated to be linked to housing stress. Absence of a direct measure of DFV arguably strengthens the case for inclusion of housing stress as a driver of service use in a homelessness assessment.

Mental health conditions

- We support the Commission investigating the inclusion of mental health status as a driver of service use. Past use of mental health services can clearly be linked with a higher likelihood of using homelessness services, whether SHS or TA.
- The Commission should evaluate whether there is the capacity to delineate between acute and broad mental health conditions, as more severe conditions are clearly associated with higher service usage rates. As the AIHW has identified from literature review, 'the likelihood of experiencing homelessness can depend on the type of mental health condition'.²⁵
- This is further demonstrated from the provision of SHS and TA services in New South Wales. As per Figure 6-4, people with an acute mental health condition are more likely to use either SHS or TA compared to the general population. In contrast, people with a broad mental health condition have a slightly higher use rate than the general population, but the difference is relatively minor.

²⁵ AIHW, Specialist homelessness services annual report 2022-23,

https://www.aihw.gov.au/reports/homelessness-services/specialist-homelessness-services-annual-report/data, 2023.





Source: DCJ, Pathways to Homelessness, 2021.

• Additionally, in its consultation paper the Commission asked 'whether mental health can be included as a driver of need for specialist homelessness services'. We reiterate that the assessment should encompass all state homelessness services, not just SHS.

Disability

- Homelessness research referenced in the 2020 Review identified that having a disability or chronic health condition was linked to homelessness. The Commission should investigate the materiality of including disability as a driver for homelessness services, noting that materiality should be assessed with respect to its impact across all relevant categories (Schools, Housing, Welfare).
- Specifically, the Commission should monitor the development of the National Disability Data Asset (NDDA) to assess whether it can be used to capture the impact of disability, for this and other relevant expenditure assessments.
- The NDDA is currently being developed. It aims to link de-identified data from various government agencies about Australians with and without disability to better understand the experiences of people with disability in interacting with programs and services in Australia.
- Early analysis from an NDDA Outcome Reporting study into SHS found that 37 per cent of SHS clients in 2019-20 were identified as having a disability, which is materially higher than current administrative data on client disability.²⁶ This greatly exceeds the incidence of disability within the broader population, suggesting disability is a major driver of homelessness service use.
- Clearly, current administrative data collections may be understating the number of homelessness clients with a disability. The NDDA should improve the quality of data available at a national level and may better demonstrate the impact of disability on service demand.

²⁶ https://www.aihw.gov.au/getmedia/d86bae1e-ddc8-45b6-bb85-6e85380d041f/aihw-aus-246.pdf

• Additionally, the provision of SHS for clients with a disability may incur a greater service cost than for clients without a disability. This could result from the need to provide various adjustments and accommodations to meet additional needs. However, as per our comments in the Housing chapter (Section 5) of this submission, current data may not be sufficient to derive a cost use driver for disability in Housing or Welfare.

6.2 NDIS contributions

The Commission asks:

- Do states agree that the state NDIS contributions can be collected from the Commonwealth Budget papers rather than from the States?
- Do states agree that the current NDIS assessment is fit for purpose?
- NSW Treasury agrees that, with the expected harmonisation of state NDIS funding agreements, it would be appropriate to simplify the data collection process by sourcing NDIS funding contributions directly from the Commonwealth Budget papers. We otherwise support the current NDIS assessment and are not recommending any changes.

6.3 Other welfare components

The Commission asks:

- 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 (EPC assessment method with regional and wage cost factors)?
- Do states support the Commission ceasing to collect state spending on the National Redress Scheme?
- We agree that combining these two components is a reasonable approach for the Commission to take and would improve the simplicity of the assessment. We support the use of a wages cost factor for the combined component.
- As discussed in this chapter and in detail in the Geography chapter (Section 15), we have concerns about the use of the general regional cost gradient in its current form. However, we acknowledge that it is reasonable to include a regional cost factor for most of the combined component.
- While we consider that it is not conceptually ideal to assess National Redress Scheme expenditure with regional and wage cost factors, doing so has an immaterial impact on redistribution. As such, we accept the Commission's position to no longer collect state spending data.

6.4 Culturally and linguistically diverse populations

NSW Treasury proposes:

- That the Commission introduces a culturally and linguistically diverse (CALD) cost weight for the child protection and family services component.
- The Commission should investigate introducing a cost weight for CALD clients in the Welfare assessment and consider the joint materiality of including a CALD driver across all relevant expenditure assessments. The Commission has previously supported the conceptual case for a CALD driver. However, it was unable to identify comprehensive data to support an assessment.
- As part of the 2020 Review, it was demonstrated that CALD populations are not uniformly distributed across states, with New South Wales also having a disproportionate number of non-economic permanent migrants year-on-year. This remains the case, as demonstrated in Table 6-7, Figure 6-5 and Figure 6-6.

Table 6-7: Proportion of persons speaking a language other than English at home (%)

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
% of persons speaking language other than English at home	32.4	32.8	19.5	22.4	24.7	13.9	42.7	28.7	28.0

Source: Census of Population and Housing: Cultural diversity data summary, 2021, Table 5: Language used at home by State and Territory of usual residence, Count of persons



Figure 6-5: Non-economic migrants as a proportion of state populations, 2018-19 to 2022-23 (%)

Source: ABS, Overseas migrant arrivals and departures, by visa and citizenship groups, by state/territory - financial years, 2004-05 to 2022-23



Figure 6-6: Number of net permanent non-economic migrants by state, 2018-19 to 2022-23²⁷

Source: ABS, Overseas migrant arrivals and departures, by visa and citizenship groups, by state/territory - financial years, 2004-05 to 2022-23

- Additionally, the Commission accepted the conceptual case that CALD clients can be more costly to provide service for. This also remains the case.
- At the time, the Commission identified two outstanding issues precluding the use of a CALD driver: the absence of comprehensive and reliable cost data, and CALD use data. However, we believe that it is possible to derive a CALD cost ratio using available CALD service use data.
- In previous reviews the Commission has attempted to identify state expenditure on CALD specific programs, such as interpreter services. Programs of this nature are a significant driver of additional expenditure on CALD clients.
- The Commission has previously found these costs to be ultimately immaterial with respect to GST distribution. We contend, however, that materiality should be jointly assessed across all relevant categories, as per the Commission's stated intent, and that it could be found material with a broader assessment of CALD-related expenditures.
- We consider that there are material CALD costs associated with the additional staff time spent with CALD clients relative to non-CALD clients. Therefore, instead of only identifying specific services for CALD clients (e.g. interpreter services), it should be possible to derive a CALD cost weight from the difference in service time required between CALD and non-CALD clients.
- In the Welfare context, this cost weight could be applied to the annual expenditure on caseworker salaries in providing child protection and OOHC services.
- There are three key elements required to derive a CALD cost weight:
 - The proportion of clients from CALD backgrounds.
 - The percentage of extra time taken, on average, to deliver services to CALD clients.
 - The proportion of state welfare expenditure allocated to caseworker salaries and amount of time caseworkers spend directly dealing with clients.

²⁷ Non-economic migration, for consistency with the 2020 Review, has included all permanent visa migration with the exception of Skills visa entries. This is only a proxy for non-economic migration.

- In New South Wales, for example, the time for a caseworker to manage a CALD client in the child protection system has been found to be around 44 per cent higher than a non-CALD client. This could form the basis of a cost weight to be applied to CALD service users.
- This approach would likely understate the overall cost of providing services to CALD clients, since it does not include CALD specific services, such as interpreter services. For example, New South Wales provides additional payments to OOHC service providers where they are providing care for CALD children. The payment represents around an additional two to three per cent of the total OOHC package cost compared to non-CALD children with the same needs.
- While we do not consider this to be a fully developed calculation of CALD-driven expenditure, we contend that it offers the Commission the opportunity to test the materiality of assessing a CALD driver (at least for a single component).

6.5 Combined regional cost and SDS gradient

NSW Treasury proposes:

- That the Commission revisit the viability of a welfare-specific regional cost and SDS gradient in place of the existing general gradient.
- A more detailed discussion on the general regional gradient is outlined in the Geography chapter (Section 15). For the purposes of this chapter, we provide specific comment on the gradient's impact on the Welfare assessment.
- As part of the 2020 Review, New South Wales demonstrated that the general cost gradient overstates the remoteness cost slope for Welfare by comparison against actual data in New South Wales. This analysis is provided again in Figure 6-7, with a comparison against the current combined general regional gradient from the Commission's 2023 simulator.

Figure 6-7: Estimated regional and remote cost loadings of child protection services



Source: 2020 Review and 2023 Data Stimulator

Note: NSW gradient estimate relies on an internal document using data predating 2017-18. Its relevance for comparative analysis with CGC data (based on 2023 data stimulator which covers 2021-22 period for schools and general gradient, and 2017-18 for prisons and courts) is uncertain.

• More recent analysis in New South Wales has determined that cost loadings for remoteness are lower than originally analysed. This is because it has been found that regional and remote caseworker activities are no more time-consuming than in other areas. The analysis refutes the

notion of unproductive regional travel, which conceptually underpins the Commission's general cost gradient when applied to child protection. As such, we urge the Commission to calculate a Welfare-specific cost gradient or otherwise discount the current general cost gradient.

• Additionally, we consider that the introduction of a child protection and family services SDS adjustment was not appropriately evidenced in the 2010 Review. The Commission extrapolated from minimal evidence, primarily the provision of data from Queensland's Department of Communities.²⁸ The SDS adjustment should be removed unless it can be supported by more comprehensive data.

²⁸ We note that the Commission was not comfortable extrapolating from New South Wales remoteness data in the 2020 Review.

7 Roads

This category covers state and territory spending on the maintenance of roads, bridges and tunnels, and other related services.

Overview of category

- The Roads category separately assesses state expenses on rural roads, urban roads, and bridges and tunnels. Higher costs are attributed to:
 - longer road networks, as states with large numbers of dispersed localities need longer road networks, and hence need to spend more on maintenance and repairs than other states
 - greater traffic volumes, as states require greater spending on traffic control and safety measures (such as signage and traffic lights)
 - greater heavy vehicle use, which causes greater pavement wear and tear that increases maintenance to restore the pavement to acceptable service standards
 - longer bridge and tunnel lengths, as states with greater lengths need to spend more on maintenance and repairs than other states.
- The roads assessment also recognises the differences between states in wage costs, and, for bridges, tunnels and rural roads, the higher costs of providing services in more remote locations.
- State investment in roads infrastructure is assessed separately in the Investment category.

NSW Treasury position

- Population should continue to be used as a proxy for required urban road length.
- The assessed cost of maintaining the urban road network should reflect differential costs of road maintenance and operations in older, high mean slope, densely populated and congested urban areas. These costs are not captured by traffic volume and heavy vehicle use. For example, congestion requires New South Wales to carry out costly works at night to manage traffic disruption.
- The 2020 Review synthetic rural road network is a sufficiently contemporaneous measure of road length. However, it contains errors which bias the assessment in favour of states with remote mines and national parks. The network misrepresents average state policy and fails to capture practical road functions and the historical stickiness of state funded roads, which are reflected in the actual road network. A policy neutral measure of the actual network should be used, such as the forthcoming National Service Level Standards for Roads (NSLSR) dataset.
- Despite the discontinuation of the ABS Survey of Motor Vehicle Use (SMVU), the traffic volume data from the Bureau of Infrastructure and Transport Research Economics (BITRE) and the National Transport Commission (NTC) are expected to remain the most fit for purpose data sources for traffic volume.
- The Commission should evaluate the plausibility of the roads assessment in light of apparent biases in the actual and assessed expenditure of each state and whether it accords with state needs or changes in the standard of roads in each state. Annual rainfall and differences in soil types are obvious missing components of the current roads assessment.

7.1 Urban road length

The Commission asks:

- Do states support retaining the 2020 Review method of assessing urban road length, using population as the driver for large towns?
- NSW Treasury notes the evidence provided by the Commission supporting the use of population as the driver of urban road length. We agree there are significant data limitations when comparing state-type road lengths across urban areas, including differences in policies between states in the classification of roads and incomplete lane count data.
- Moreover, there may be geographical factors that influence road length. For example, Sydney and Hobart have the highest mean slope measurements among capital cities,²⁹ while both cities have lower road lengths per capita than other state capitals with similar population.³⁰ Elevation changes and road gradients are not accounted for in the surface length measurements provided in the National Roads dataset. Road gradients are also likely to increase the relative cost of road construction and maintenance.
- Given this, we support using population as the driver of urban road length, in lieu of reliable and policy-neutral alternatives.

7.2 Higher maintenance and operating costs in densely populated urban environments

NSW Treasury proposes:

- The roads assessment should recognise the higher unit cost of road maintenance and operations in older, high mean slope, densely populated and congested urban areas.
- The Commission currently assumes unit costs for road maintenance and operations are the same for all Urban Centres and Localities (UCLs) over a population threshold of 40,000 persons. NSW Treasury believes that urban road maintenance and operating costs are higher than in less densely populated urban areas.

Road Maintenance

• Congested urban environments impose unique challenges to operating and maintaining roads in Sydney. Constant daytime road congestion results in the need for road repairs and maintenance to be carried out late at night. Data from Transport for NSW has indicated that 100 per cent of pavement re-sheeting and rehabilitation in Sydney is carried out after hours with a 16 per cent cost premium compared with day shifts (Table 7-1). This compares with only 35 per cent after hours in the rest of NSW with a cost premium of 4.3 per cent.

 ²⁹ Geoscience Australia estimates by Significant Urban Area, as provided in the Transport assessment.
 ³⁰ Commonwealth Grants Commission, 2025 Methodology Review – Roads consultation paper, 2023, page 11.

Region	After hours maintenance work*	Cost premium	Total expenditure per linear lane km	Additional cost
Greater Sydney	100%	16.0%	\$683,000	\$94,000
Rest of NSW	35%	4.3%	\$605,792	\$24,805

Table 7-1: Cost premium for after-hours road maintenance

* Pavement re-sheeting and rehabilitation

• Slower traffic speeds and stop-start driving conditions in congested urban areas also impose additional stress on road pavement increasing the frequency of maintenance. In this regard we would note that average peak hour traffic speeds in Sydney are around 10 per cent slower than other capital cities.

'The presence of slow-moving loads and static loads can have negative effects on pavements, as they are primarily designed to withstand the impact of moving loads. Usually, when vehicles move at slower speeds or come to a complete stop, they exert a load on a specific area of the pavement for an extended duration, leading to increased damage. This effect can be observed in bus stops on hot mix asphalt (HMA) pavements where buses stop to load and unload passengers, and where vehicles stop and wait to cross an intersection.'³¹

- With the Sydney road network being older on average than other capital cities, lane widths are, by necessity, generally narrower. Consequently, greater pressure is placed on specific parts of the road pavement (termed channelisation) leading to increased maintenance costs compared with roads in new urban areas where traffic lanes are generally wider. Wider lanes spread the dynamic load of traffic more evenly across the pavement surface reducing maintenance costs.
- A further factor influencing maintenance cost in Sydney is its higher mean slope. Higher mean slope results in higher levels of acceleration and braking which increases pressure on the pavement surface. Higher mean slope also results in additional curvature of the road network which places greater horizontal pressures (termed shear force) on the pavement surface, thus increasing maintenance costs. A report by the Western Australian Road Research and Innovation Program (WARRIP) indicated that 'Cornering manoeuvres can typically increase the load on one side of an axle by 20% on individual wheels, resulting in a 100% increase in fatigue and 20% increase in rutting'.³²
- The constrained land environment in Sydney also results in the need for tunnelling and elevated roads rather than surface solutions to congestion. This is demonstrated by the fact that Sydney has 84 per cent of tunnel lane kilometres in urban areas (Table 7-2 and Figure 7-1). Maintenance costs associated with elevated roads and tunnels is significantly higher than the cost of maintaining surface roads, with the former more akin to the cost of maintaining a bridge.

	Syd	Mel	Bri	Per	Ade	Can	Hob	Dar	Total
Below ground (tunnels)									
km	635.8	17.9	87.8	7.7	4.5	1.1	1.3	0.0	756.1
%	84.1	2.4	11.6	1.0	0.6	0.1	0.2	0.0	100
Above gr	ound (bridge	s and elev	ated roads)					
km	347.2	193.5	122.8	39.9	43.7	33.6	13.3	0.0	793.9
%	43.7	24.4	15.5	5.0	5.5	4.2	1.7	0.0	100

Table 7-2: State-type roads lane kilometres by grade, capital cities

Note: Imputed number of lanes when actual count unavailable – 3 lanes each direction for motorways; 2 lanes each direction for all other roads.

Source: Geoscience Australia, NSW Treasury estimates

³¹ Pavement Management Services, *The Impact of Traffic & Vehicle Loads on Pavements*, https://www.pavement.com.au/news/the-impact-of-traffic-amp-vehicle-loads-on-pavementsnbsp

³² WARRIP report (2017) by ARRB. *Dynamic load effects of heavy vehicles on pavement performance – Stage 1,* Main Roads Western Australia



Figure 7-1A: State type roads by capital city

Source: Geoscience Australia, NSW Treasury

Figure 7-1B: State type roads by capital city



Source: Geoscience Australia, NSW Treasury

Road Operations

- In densely populated urban areas, the cost of operating the road network is higher. In particular:
 - Drainage infrastructure needs to be far more extensive and complex (capital costs)
 - Community expectations are generally higher, increasing consultation costs and expenditure to mitigate sensitive environmental issues such as noise abatement (recurrent and capital costs)
 - There is a need to minimise disruption to public transport services (recurrent)
 - There is additional time and cost to notify residents before roadworks commence (recurrent cost)

- There is a greater requirement for appropriate pedestrian facilities, including fences on medians, buttons on signals, greater sign height (capital costs).
- With an older road network in Sydney, a higher proportion of traffic managements must be undertaken through tidal flow lane arrangements on key roads. In addition, traffic lights are used, rather than more modern roundabout solutions available in new urban environments. Both these factors increase the day-to-day cost of operating the Sydney road network.
- Other costs arising in congested urban areas include the need for sophisticated traffic management systems and the provision of strategically placed breakdown response teams.

7.3 Rural road length

The Commission asks:

- Do states agree that the 2020 Review synthetic rural road network should not be updated?
- NSW Treasury acknowledges that developing a policy neutral measure of rural road length is challenging given varying state policies for the allocation of financial responsibility for roads between levels of government. Nevertheless, NSW Treasury is concerned with several aspects of the model developed by the Commission.
- Table 7-3 compares estimates of actual state road lane kilometres with the synthetic road network.³³ The data indicate that, on average, the synthetic road network is capturing roads that are normally the responsibility of local government.

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Estimated Actual								
72,613	43,356	65,918	36,584	24,097	7,764	1,320	32,802	284,454
Synthetic Roads								
77,402	41,142	82,582	55,336	31,819	8,865	366	29,505	327,017
Variance (%)								
6.6	-5.1	25.3	51.3	32.0	14.2	-72.3	-10.1	15.0

Table 7-3: Comparison of actual state rural road lane kilometres and the synthetic road network

Source: CGC

- Including roads within the synthetic road network that are normally the responsibility of local government will bias the Commission's calculations where the grossing up factor between average state policy and the synthetic road network differs between states. Factors which the Commission might consider as causing this grossing up could be:
 - $_{\odot}$ $\,$ Whether all connections between all UCLs should be classified as state roads.
 - Whether all roads to major mines, gas wells, ports and national parks should be classified as state roads. In this regard, we would note that the last 47 kilometres of the road to the mining town of Weipa in Queensland does not appear to be the responsibility of the Queensland Government, but forms part of the synthetic road network.

³³ Morris, K., Boisseau, M. and Harper, A., 2019, *Measuring the length of State-type roads*, Australasian Transport Research Forum 2019 Proceedings, <u>https://australasiantransportresearchforum.org.au/wp-content/uploads/2022/03/ATRF2019_resubmission_44.pdf</u>, accessed 1 March 2024.

- Whether basing the synthetic roads algorithm on the shortest route between two UCLs, rather than the quickest route, results in additional road length.
- Most drivers are likely to choose the fastest route rather than the shortest route between destinations, with the former more likely to be a state road due to higher average traffic speeds. Based on the map of the area surrounding Avoca in central Victoria provided in the Consultation Paper, adopting the fastest, rather than the shortest route, results in fewer road kilometres. In particular, the route between Avoca and Stawell proceeds through Navarre rather than Shays Flat, reducing total measured network kilometres.
- Given these concerns, and should the Commission wish to continue the use of the synthetic road network, it should be updated based on the fastest route rather than the shortest route between destinations.
- Moreover, roads to ports and mines should not be included as these access roads are funded by private entities. States typically fund roads in mining areas insofar as they serve a connection between communities, which is already captured elsewhere in the algorithm. NSW Treasury found no evidence of state funded roads to mines, instead finding examples of road upgrade and maintenance clauses in mining project development proposals.³⁴ State funding support for roads to mine gates and ports therefore reflects a policy choice.
- A large share of the roads to mines in the synthetic network are located in the Pilbara region of Western Australia, where some of the largest private railway networks in the world transport iron ore production to Port Hedland and Dampier and Port Lambert. The synthetic road network includes rail access roads which are private and restricted for use.³⁵ The 2020 Review considered a 50% discount to account for private contributions, but these road types should be excluded altogether due to the lack of evidence that this is what states do on average.
- We also note that roads to national parks are maintained at a significantly lower standard than main roads, and in many cases, are 4WD accessible only. These roads are not representative of the state road management task and should be excluded from assessed rural road length.
- NSW Treasury found several examples of routes in the synthetic road network that have been included in error, raising major concerns about the reliability of the synthetic network particularly regarding roads to mines and national parks. These errors account for around 5,000 lane kilometres and over 10 per cent of the synthetic roads to mines, ports and national parks combined (Table 7-4). This further supports exclusion of mines, ports and national parks from the algorithm, and highlights the advantages of using an actual road network measure that accounts for actual road usage, functions and/or standards.

Project%20Approval%20-%20PA%2010_0138%20consolidated.pdf, accessed 1 March 2024.

³⁴ NSW Department of Planning and Environment, *Maules Creek Coal Project Approval*, paragraph 61, <u>https://whitehavencoal.com.au/Documentations/Maules%20Creek%20Mine/Approvals/Authorisations%20und</u> <u>er%20the%20EP%20and%20A%20Act/MCC-</u>

³⁵ <u>https://www.australiasnorthwest.com/listing/rail-access-roads-pilbara/433/</u>, accessed 1 March 2024.

Table 7-4: Errors in 2020 Review synthetic rural road network

Road names	Length (km)	State	Feature	Description	Google maps link
Carnarvon-Mullewa Road, Beringarra-Byro Road, Beringarra-Mount Gould Road	435	WA	Mines	Erroneous connection to Fortnum Gold mine. Actual haulage likely travels 85km south via Ashburton Downs-Meekatharra Road, to meet up with other Gold mining freight routes.	<u>Hyperlink</u>
Parallel (No. 2) Road, Connie Sue Road	300	WA	Mines	Erroneous connection to Tropicana Gold mine. Actual haulage moves southwest via 220km access road to Pinjin and Kalgoorlie.	Hyperlink
Moujakine Road, Kellerberrin-Bencubbin Road, Beacon-Bencubbin Road, Burakin- Wialki Road, Mouroubra Road, Maranalgo Road	245	WA	Unknown	The route from Trayning to Paynes Find. NSW Treasury could not determine the feature type that has prompted this route's inclusion in the synthetic network.	<u>Hyperlink</u>
Urandangi North Road, Urandangi Carandotta Road, Donohue Highway, unknown roads	230	QLD	Unknown	Route is incomplete according to Google Maps and several adjustments were made to approximately replicate the synthetic route used. NSW Treasury could not determine the feature type that has prompted this route's inclusion in the synthetic network.	<u>Hyperlink</u>
Woolerbilla Road, Old Woolerbilla Road, Davirton Road, Link Road, Woolerina Road, Tate Road, Fernlee Road, Murra Murra Road, unknown roads	180	QLD	Unknown	Suboptimal route, including 4WD tracks. Several adjustments were made to approximately replicate the synthetic route used. NSW Treasury could not determine the feature type that has prompted this route's inclusion in the synthetic network.	<u>Hyperlink</u>
Withywine Noonbah Road, Longreach Tocal Road	155	QLD	National parks	Fastest connection to the main road network is 33km eastbound to the Thomson Development Road which also forms the fastest route to Longreach according to Google.	<u>Hyperlink</u>
Black Street, unknown roads	100	QLD	National parks	Likely an erroneous route to Munga-Thirri National Park. Actual entry to the national park and Simpson Desert is via Birdsville and is 4WD accessible only.	<u>Hyperlink</u>
Ranken Road, "Mittiebah", "Alexandria/Gallipoli", unknown roads	260	NT	National parks	Likely an erroneous route to Lawn Hill National Park, Queensland. Connection to Lawn Hill is already included in the synthetic network in Queensland.	<u>Hyperlink</u>
Kempe Road, Oodnadatta Track, Mount Dare Road	430	SA	National parks	Questionable route between Witjira National Park and Coober Pedy. Majority of the route is 4WD accessible only, and the park can be reached from Coober Pedy using 100km less road. Nevertheless, the nearest UCL is Finke, NT which is less than 100km in distance.	<u>Hyperlink</u>
Old Eyre Highway	100	SA	National parks	Erroneous route to Nullarbor National Park. The (new) Eyre Highway is sufficient to visit the national park, so including Old Eyre Highway is an error.	<u>Hyperlink</u>
Total carriageway	2,435				
Total lanes (carriageway x2)	4,870				

• NSW Treasury supports policy-neutral measures of the actual road network to assess rural road length. Firstly, highways and arterial roads as defined in Geoscience Australia's National Roads dataset are a reasonable benchmark for state-type rural roads. In other words, these are road types that are typically state-funded. Comparing the synthetic rural road network with these state-type roads, we find the synthetic road length underestimates the share of actual road length in New South Wales. This is because there is a large volume of rural highways and arterial roads that the synthetic network does not capture (Figure 7-2).



Figure 7-2: Map of Australian road network

Source: Geoscience Australia, CGC

- Secondly, OpenStreetMap is another viable alternative data source. It provides a policy-neutral classification of roads, according to use.³⁶ State-type rural roads in this instance would likely include motorways, trunk roads, primary roads, and secondary roads.
- Both alternative road datasets indicate that the synthetic network overstates rural state road length in Queensland (Figure 7-3). The Cape York Peninsula illustrates this overstatement where long stretches of unsealed local roads and access roads have been included in the synthetic network (Figure 7-4). This again highlights that roads to national parks are not representative of the state road maintenance task. Meanwhile, many of the communities in this area are serviced by privately funded cargo operators (Figure 7-5) and are therefore less reliant on road connections.

³⁶ Geofabrik GmbH, *OpenStreetMap Data in Layered GIS Format*, <u>http://download.geofabrik.de/osm-data-in-gis-formats-free.pdf</u>



Figure 7-3: Rural road length measures



Figure 7-4: State roads in Cape York Peninsula

Source: CGC, Department of Transport and Main Roads (Queensland)



Figure 7-5: Sea Swift operations in Northern Australia

Source: https://www.seaswift.com.au/

- Finally, the Commission's consultation paper on the roads assessment recognises the forthcoming NSLSR dataset and its nationally consistent categorisation of roads based on traffic volume and function. While the Commission notes its expected release in late 2024, we strongly encourage the Commission to monitor its release for potential inclusion in the 2025 Review and/or evaluate its use in the 2026 Update.
- Moreover, the Commission raises concerns that the initial iteration of the NSLSR data will not include information on the level of government ownership. However, we disagree that this would be a limitation to its use in the roads assessment as the ownership variable should be irrelevant in a policy-neutral measure. We further note that the level of government ownership or responsibility is an imperfect indicator of funding source. For example, New South Wales has an extensive Regional Roads network which falls under the responsibility of local government authorities but is primarily funded by the NSW government.

7.4 Measuring traffic volume

The Commission asks:

- 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?
- The full implications from the discontinuation of ABS Survey on Motor Vehicle Use (SMVU) are unclear. NSW Treasury expects standard errors of BITRE and NTC traffic volume data to increase. Nevertheless, we agree that traffic volume should continue to be assessed using data from BITRE and NTC as these remain the most fit for purpose data. We note that statistics would typically not be published if standard errors become too large and unreliable.
- According to the 2020 Review final report, the SMVU ensured that vehicle kilometres travelled (VKT) data reported by BITRE was reflective of actual travel in each state, rather than the travel of registered vehicles from each state. To avoid structural breaks in the data, NSW Treasury expects VKT data will continue to reflect the historical relationship between actual and registered volume, which is likely relatively stable. Therefore, in the absence of large structural

changes (e.g. divergences in vehicle registration pricing across states), BITRE's reported VKT data are expected to remain reliable for the foreseeable future.

NSW Treasury proposes:

- The Commission consider the intensity of road use, rather than simply road use, as a driver of road maintenance costs.
- The roads assessment applies disabilities to various sub-components of total road expenditure with each component having its own cost drivers. For example, cost drivers for routine maintenance are:
 - Road length 24 per cent
 - Traffic volume 38 per cent
 - Heavy vehicles use 38 per cent.
- Under the Commission's current approach, these disabilities are treated as independent cost drivers. However, the cost impact of traffic volume and heavy vehicle use which are measured as vehicle kilometres travelled and average gross mass-kilometres (AGM-km), respectively is partly a function of road length. NSW Treasury believes the current assessment fails to recognise this interrelationship and the distributional challenge of road asset management.
- As outlined in Section 7.1, road maintenance costs are not only a function of VKT on a road, but the intensity of travel on the pavement surface. For example, a single lane road with the same traffic volumes as a dual carriageway will suffer greater surface degradation and therefore incur higher maintenance costs. This is because the road surface has less time to recover after each deformation cause by traffic flows.³⁷
- Presently, the Commission assumes that two states with identical traffic volumes will incur the same costs arising from that traffic. We contend that, in fact, the costs incurred will depend in part on the length of each state's road network. This is separate to the existing road length cost driver, since in this case costs will be inversely related to road length.
- NSW Treasury believes the Commission should consider whether the traffic volume disability should be expressed as VKT per lane kilometre rather than simply VKT. Similarly, heavy vehicle use should be expressed as AGM-km per lane kilometre.

7.5 Reassessing the fundamentals of the roads assessment

NSW Treasury proposes:

- The Commission reassess its broad approach to the roads assessments to determine whether the approach results in plausible outcomes.
- The Commission has historically struggled to find an assessment methodology which adequately captures the underlying state needs for expenditure on roads. This is not surprising given the range of factors impacting the maintenance and construction cost of roads. States have previously argued inconclusively that, among other things, terrain (slope and elevation), climate (rainfall and temperature) and the nature of the sub-soil (sandy soil versus black soil versus clay soil) impact on construction and maintenance costs.

³⁷ Pavement Management Services, *The Impact of Traffic & Vehicle Loads on Pavements,* <u>https://www.pavement.com.au/news/the-impact-of-traffic-amp-vehicle-loads-on-pavementsnbsp</u>

• While the Commission has made significant progress in developing a policy neutral assessment, the current approach continues to represent 'rough justice'. NSW Treasury believes it is necessary to now reassess the plausibility of the current roads assessment. To do this, we have looked at the ratio of actual to assessed roads expenditure for the period of data consistent with the 2020 Review methodology. Table 7-5 shows that over a seven-year period some jurisdictions have spent considerably more or less than their assessed expenditure.

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	%	%	%	%	%	%	%	%	%
2015-16	121.6	117.3	76.6	100.0	52.1	66.2	53.9	98.3	100
2016-17	107.2	117.7	77.4	115.9	69.2	96.4	66.9	96.5	100
2017-18	110.0	124.5	74.6	117.8	40.0	88.9	103.5	111.9	100
2018-19	90.2	142.3	78.1	116.8	39.8	94.3	121.1	127.4	100
2019-20	99.7	153.2	75.0	97.1	32.5	93.5	149.0	73.8	100
2020-21	127.3	141.4	65.5	85.5	27.3	74.3	123.4	46.0	100
2021-22	144.3	79.2	83.2	113.9	32.6	61.6	187.7	66.7	100
Average	114.3	125.1	75.8	106.7	41.9	82.2	115.1	88.6	100

Table 7-5: Ratio of actual versus assessed roads expenditure

Note: Data for each year represents the latest available CGC estimate for that year.

- While the Commission process is agnostic as to state policy choices, it is also incumbent on the Commission to test whether, in practice, the differences between assessed and actual expenditure reflect reality or a problem with the assessment methodology.
- Data outlined in Table 7-5 indicate that either the standard of roads in some jurisdictions must be deteriorating rapidly compared with the national average (Queensland, South Australia, Tasmania and the Northern Territory) or there is a fundamental problem with the current assessment methodology. Two obvious omissions impacting on road maintenance and construction costs are rainfall and soil type, which we discuss later in this submission.
- We believe it is possible for the Commission to test our contention that the roads assessment methodology is flawed by collecting data from each jurisdiction on the average condition of its road surface. Trends in the average surface road condition could be used to benchmark the plausibility of the current roads assessment. NSW Treasury has been advised that such data exists within each jurisdiction.
- Table 7-6 presents time series data for the average surface condition of roads in New South Wales. The data shows that over the period from 2016 to 2021, the average surface condition of roads in New South Wales has remained relatively stable despite the state being assessed as spending more than required to deliver the average standard of state road services. Of course, spending more in New South Wales than the assessed need may simply mean that roads in other states are, on average, deteriorating. Alternatively, it could mean that the Commission assessment methodology understates assessed expenditure in New South Wales. Collecting data from each jurisdiction showing trends in pavement quality should reveal which of these scenarios has validity.

					, , ,	
	2016	2017	2018	2019	2020	2021
Greater Sydney	76.3	73.4	75.7	75.9	78.1	79.1
Rest of NSW	70.3	71.7	72.0	69.1	72.8	70.0
All NSW	71.2	71.9	72.5	70.0	73.5	71.1

Table 7-6: Pavement Health Index, % Good or Very good

Source: TfNSW

NSW Treasury proposes:

- The roads assessment should recognise additional costs associated with rainfall.
- The Commission has noted that a consultant for the 2015 Review was unable to develop a measure of needs that captures *all* the relevant physical environment impacting on the cost of road maintenance. Nevertheless, it is widely acknowledged that the *primary* physical environment factor impacting road maintenance costs is rainfall. Water ingress substantially weakens underlying support of the road pavement. In combination with traffic, this leads to deformation and failure, requiring maintenance and rehabilitation.
- Rainfall also influences rural road operating costs. In higher rainfall areas, the ongoing costs related to vegetation control are significantly higher. For safety reasons, it is essential to maintain landscaping around roadways to remove hazards and avoid collisions with animals.
- NSW Treasury combined the 2020 Review synthetic rural road network with 30-year average annual rainfall data from the Bureau of Meteorology (Figure 7-6). This enabled us to determine the proportion of each state's assessed rural road network that is subject to different levels of annual rainfall, thus indicating the relative risk of water-related road costs faced by each state.



Figure 7-6: 2020 Review synthetic road network and average rainfall



- As shown in Table 7-7, a large proportion of the synthetic network in Western Australia and South Australia sees relatively little (and in some cases almost zero) annual rainfall. These roads are also on relatively flat terrain. This relative dryness significantly reduces traffic induced deformation of the road surface and the need for regular maintenance, including vegetation control. Conversely, roads in New South Wales, Queensland and Tasmania are subject to much heavier rainfall on average. The useful life of roads in these wetter areas is expected to be much shorter as a result. We also note that some of the Queensland roads subject to the heaviest rainfall are unlikely to be state managed roads, as per our comments in section 7.3.
- NSW Treasury believes this data could be used as the basis for adjusting the assessment to account for rainfall. We acknowledge that including rainfall as a disability will not resolve all the problems of the roads assessment. However, we do expect that including a rainfall disability factor will move the roads assessment closer to reality and result in less 'rough justice'.

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Lane km									
Under 200ml	252	0	837	165	5,749	0	0	93	7,096
200-400ml	11,990	6,055	8,635	29,491	15,132	0	0	12,248	83,551
400-600ml	15,516	11,720	20,316	11,362	7,672	1,271	0	2,410	70,267
600-800ml	21,211	12,400	24,918	6,710	2,459	1,956	240	3,662	73,557
800-1,500ml	24,056	10,292	19,777	7,075	295	4,109	105	10,288	75,998
Over 1,500ml	2,749	119	7,566	0	0	1,336	0	613	12,383
Total	75,774	40,586	82,049	54,804	31,307	8,672	345	29,315	322,852
Share of total (%)									
Under 200ml	0.3	0.0	1.0	0.3	18.4	0.0	0.0	0.3	2.2
200-400ml	15.8	14.9	10.5	53.8	48.3	0.0	0.0	41.8	25.9
400-600ml	20.5	28.9	24.8	20.7	24.5	14.7	0.0	8.2	21.8
600-800ml	28.0	30.6	30.4	12.2	7.9	22.6	69.6	12.5	22.8
800-1,500ml	31.7	25.4	24.1	12.9	0.9	47.4	30.4	35.1	23.5
Over 1,500ml	3.6	0.3	9.2	0.0	0.0	15.4	0.0	2.1	3.8
Total	100	100	100	100	100	100	100	100	100

Table 7-7: 2020 Review synthetic rural road length by annual rainfall

Source: CGC, Bureau of Meteorology, NSW Treasury calculations

NSW Treasury proposes:

- The CGC should consider the impact of different soil types on road maintenance and construction costs.
- While a very difficult area of analysis, soil type affects road maintenance and construction costs. This is relevant, since the proportion of the synthetic road network built on different soil types varies between states.
- The Californian Bearing Ratio (CBR) is used to assess the strength of soil for road construction. A
 higher CBR value means the soil is stronger and can support heavier loads without deforming or
 failing. If the CBR is high, then less effort, material, or stabilising agents are needed to prepare
 the foundation of the road. Roads constructed on soil with a low CBR are more prone to damage
 from heavy traffic, changes in weather, and water infiltration.
- A range of CBR results are associated with four subgrade materials:
 - Clay (CBR < 3)
 - o Loam (CBR 3 7)
 - o Sand (CBR 7 15)
 - Rock (CBR > 15)
- As can be seen in Figure 7-7, New South Wales, Victoria and Queensland have a far higher concentration of clay and loam soils which are the weakest road construction base. This combined with higher rainfall in these states increase road maintenance and construction costs significantly.

Figure 7-7: Soil map of Australia³⁸



³⁸ Metternicht, G. and Goetting, J., 2007. Towards a standardised approach for the selection of colours in soil maps based on their textural composition and rock fragment abundance: an implementation within Macromedia FreeHand.

8 Services to industry

This category covers state spending on the regulation and development of businesses, industries, and other economic affairs.

Overview of category

- The services to industry assessment has four components:
 - agriculture, fisheries, and forestry (collectively referred to as agriculture) regulation including biosecurity, animal welfare, agriculture and veterinary chemicals, and water resource management
 - o mining regulation, including exploration, production, and rehabilitation
 - other industries regulation, including business registration, construction industry regulation, workplace health and safety, and industrial relations
 - business development, including investment and trade promotion, regional development programs, and support for small business.
- In assessing net state expenses on business regulation, the method recognises:
 - that the costs of regulating business activities are affected by industry size, currently measured by the value of production of the regulated industry, such that larger state industries have a greater cost of regulation
 - that states seek to recover the costs of regulating business activities from user charges and levies which are offset against expenses on business regulation
 - o the differences between states' public sector wage costs
 - o the additional cost of providing services in regional areas
- Other industries regulation is assessed 75 per cent industry size, measured by the value of production, and 25 per cent EPC, in recognition that some regulatory activities such as consumer protection service the entire population.
- Business development costs are assessed as EPC on the basis that states spend on business development primarily to facilitate economic activity and new employment opportunities for their populations.

NSW Treasury position

- NSW Treasury supports replacing total factor income with the volume measure to assess industry regulation spending need for all the regulation assessments, i.e. agriculture, mining and other industries.
- We support using an average base year index as it offers a more stable measure of production changes by mitigating short-term fluctuations.
- We also support reinstating the number of businesses as an important factor influencing the need for regulatory spending. Additionally, we propose updating assumptions underlying materiality weights using more recent data to better reflect the current economic landscape.
- New South Wales has suggested potential drivers of spending on net-zero transition, particularly relating to natural resources driving states' energy and economic markets. These markets should be considered a structural part of state economies, rather than being heavily driven by

individual state policy decisions. We seek greater clarity from the Commission on its preferred drivers for the assessment.

• We anticipate increased spending in net-zero transition which could be integrated into the business development assessment.

8.1 Chain volume measure of production

The Commission asks:

- Do states support replacing total factor income as a measure of industry size with the chain volume measure of industry value-add to assess the need for spending on industry regulation?
- NSW Treasury supports replacing total factor income with the chain volume measure to assess industry regulation spending need. We expect that this would produce a more reliable and less price sensitive measure of the regulatory task.
- The chain volume measure of industry value-add can provide more accurate representation of an industry's economic contribution by accounting for changes in both price and volume. This approach considers inflation and deflation effects, resulting in a more precise assessment.
- As industries transform, the contribution of different sectors to overall economic output can change. The chain volume measure captures these shifts in economic structure.
- Although the impact of price fluctuation is less pronounced for other industries, NSW Treasury supports changing total factor income to chain volume measure for all the regulation assessments agriculture, mining and other industries.
- The ABS also recommends the chain volume measure as an indicator of production as it provides a more accurate and reliable representation of production level changes, which is important in assessing state spending requirements.
 - Firstly, the chain volume measure accounts for changes in the mix of commodities produced over time. It is crucial to adjust for commodity composition changes to better reflect shifts in an economy's structure and specialisation.
 - Secondly, the chain volume measure accounts for changes in relative prices. In an economy, the prices of goods and services can fluctuate, and these fluctuations may not always reflect changes in the actual quantity or volume of production. By adjusting for these price changes, a chain volume measure provides a more accurate reflection of real changes in production levels.
 - Thirdly, a chain volume measure is particularly valuable for assessing production in regulated industries where prices and quantities can be influenced by government policies or regulations.
- In contrast, the value of output is heavily influenced by market prices, which may be subject to significant volatility. This can distort the perception of industry size, specifically for agriculture, if price fluctuations are unrelated to changes in production capacity. Also, changes in production value may be influenced by inflation, making it difficult to differentiate between real growth in the industry and the impact of rising prices.
- The volume (or quantity) measure, therefore, serves as a superior indicator of industry size and complexity when compared to value. Consequently, a volume measure stands as a more accurate proxy for the Commission's assessment objectives.
- This position also aligns with using the number of businesses as an indicator of the size of the regulatory task.

The Commission asks:

- Do states support the development of an average or representative base year to index changes in the chain volume of production?
- NSW Treasury supports an average as it smooths out short-term fluctuations and reduces the impact of short-term volatility and anomalies in the data, providing a more stable measure of production changes. It also considers changes in economic conditions over a period, providing a more comprehensive view of trends and changes in production.
- An average base year, assuming over a short period of time (e.g. 3 years), is also less likely to be skewed by extreme values in a single year.

8.2 Number of businesses as a driver

The Commission asks:

- Do states support the reintroduction of the number of businesses as a driver of need for regulatory spending if it is material?
- NSW Treasury supports the conceptual case for including a business count disability alongside sector size when assessing regulatory spending. We firmly believe that the value of output should not be the exclusive determinant of the size of the regulatory task, especially for agriculture and mining, but also for other industries.
- The number of businesses significantly influences the size, complexity, and cost of the regulatory task. This can be illustrated by simple example: regulating 100 firms, each with a turnover of \$1 million, typically incurs substantially higher costs than overseeing a single business with a \$100 million turnover.
- Incorporating the business count, even if its influence is not necessarily material in a given year, contributes to achieving more accurate and stable economic measurement. Maintaining conceptual soundness, data stability, and minimising potential distortions in data ensures an accurate assessment of spending needs.
- As part of the 2020 Review, the Commission removed the number of businesses as a factor influencing business regulation costs, citing its failure to meet materiality thresholds. These changes increased the volatility of the assessment and reduced its usefulness in determining states' required spending on regulation.
- NSW Treasury suggests the Commission revisit its materiality testing, utilising more recent data. Additionally, the Commission should revisit its assumption around the relative importance of industry size and business count as determinants of required regulatory effort. Previously the Commission used the following weightings:

Table 8-1 Assumed contribution of business count and industry size to size of regulatory task

	Business Count	Industry Size		
Agriculture	50%	50%		
Mining	33%	67%		
Other industries	Business count not used			

• Notwithstanding the above, we consider that there may merit in including a business count driver regardless of materiality. We suspect that its materiality may be understated due to the correlation between business count and industry size, but including business count should help remedy volatility issues with the current assessment.

8.3 Net-zero transition

The Commission asks:

- Will states be able to identify spending on the net-zero transition and provide it to the Commission to develop an assessment?
- New South Wales has the capability to identify most direct spending related to the net-zero transition and can provide this information to the Commission for the purpose of investigating the development of an assessment. However, there are other expenditures that are more difficult to allocate, including both support activities (i.e. overheads) and projects with multiple objectives beyond just the net-zero transition.
- For example, transport and land management projects may have net-zero related objectives such as emissions reduction, but these projects will also have other objectives that are not for the purpose of the net-zero transition. Appropriately allocating expenditure from such projects for the purpose of net-zero objectives would be difficult.
- New South Wales has established mechanisms and reporting requirements to track and report expenditure associated with initiatives aimed at achieving net-zero emissions or addressing climate change. For instance, the new *Climate Change (Net Zero Futures) Act 2023* has legislated targets that would enable the identification of net-zero transition spending for relevant projects.
- We note that there are not currently any COFOG codes that specifically relate to investment in the net-zero transition. Relevant subcategories can include Fuel and Energy (A-043), Mining, Manufacturing and Construction (A-044), Environmental Protection Pollution Abatement (A-053), though this is not comprehensive given the complex interrelationships for net-zero spending.
- Separately, we have some concerns about the current ability to readily distinguish between netzero expenditure for business development, and all other net-zero expenses. Assessing net-zero expenditure as a component within the business development assessment risks overlooking transition expenditures that are not related to business development.
- Given this, NSW Treasury requests the Commission provide more detail on the specific data requirements it would be seeking to develop an assessment, so we can provide more targeted responses on the potential assessment. This will enable us to fully respond on the data collection and reporting practices required for a new assessment.

The Commission asks:

- Can states identify and provide data on potential drivers of state spending on the net-zero transition?
- We consider that there is a complicated mix of structural factors and individual state policy choices that may make it difficult for the Commission to derive policy neutral drivers for this assessment. An appropriate assessment will likely not be possible without accounting for the impact of individual state policy choices on the net-zero transition.

- Emissions reduction is average state policy and all states have committed to transitioning to netzero emissions by 2050. State positions are heavily influenced by external factors including international agreements and national policies. It is apparent, though, that transition costs are materially influenced by individual state policy decisions.
- Put simply, the expenditure required to transition to net-zero is primarily a function of the size of the transition task and the cost of abating emissions within each state. The overall size of a state's transition task is somewhat determined by structural factors, including the main source of its energy and its industrial structure and composition. Accordingly, we consider that the historic presence of high-emitting industries within states is a key driver of transition extent, cost, and timing.
- States are historically likely to rely on their natural resources in supplying domestic energy needs and boosting their economic growth by providing interstate and international exports. A state's volume of, and reliance on, high-emitting resources, such as brown and black coal, will increase the extent of the net-zero transition required.
- Additionally, the emission intensity of a state's existing industrial structure will affect its transition task. High-emission sectors include energy, heavy industrial processes, waste, agriculture, and land use and forestry. There are varying levels of emitting intensity within each of these industries. Many of these industries were fully established decades before the need to implement net-zero policies was widely understood.
- This does not necessarily mean that it is the state's responsibility to bear all the costs of this transition, as some emitting-industries would likely be expected to contribute for their role in emission-producing activities. The Commission would have to consider the extent that a state is responsible for net-zero transition activities, compared to the business sector, as well as the extent to which it is average state policy to financially support their business sectors to reduce emissions.
- However, even if historic structural factors drive transition costs, it is difficult to isolate these factors from state policy. While the national average trend has been to reduce emissions over the period from 1990 to 2019, this has not been the case for all states. Differences in the extent of transition to date represent clear policy decisions made by the states, rather than an underlying structural driver of need. It should not be the case that states that have commenced their transitions should be punished for having fewer emissions to reduce going forward.
- An alternative approach could be for the Commission to evaluate the relative cost of available carbon abatement options for individual states. There may be important differences in states' ability to restructure their economies quickly and less expensively, take advantage of abatement opportunities, or downsize certain industries or activities.
- The opportunity presented by new abatement technologies, for example electric vehicles, may contribute more or less to successful transition for some states relative to others. To the extent that this reflects differences in underlying, policy-neutral structural factors for each state, such differences could form the basis of the Commission's assessment.
- Overall, there is some scope to consider net-zero cost drivers related to the presence of emissions-intensive industries for both domestic emissions production and wider exports, as well as the availability of more or cheaper abatement options.
- However, given the influence of individual state policy choices, this will likely be a more complex assessment to implement. It may be most appropriate for the Commission to retain the existing equal per capita approach for the 2025 Review and assess a comprehensive approach to implementation as part of the 2030 Review.
- We expand on these points in the sections that follow.

8.3.1 Policy frameworks for climate change and emissions reduction

• The support for necessary policy adjustments for climate change can be seen at an international level from the early 1990s, recognising the need for the reduction of emissions from greenhouse

gases³⁹. With the United Nations Framework Convention on Climate Change in 1992, followed by the Kyoto Protocol (1997) and the Paris Agreement (2015), it is evident that emissions reductions have been understood as necessary since this time.

- 2030 reduction targets and a net-zero position by 2050 are relatively consistent policy both internationally and nationally. The Paris Agreement has a 45 per cent reduction target from 2005 levels by 2030. The Commonwealth Government has a 43 per cent target, which has been legislated through the Climate Change Act 2022.
- New South Wales has legislated a 50 per cent reduction target by 2030 and aligns with the netzero by 2050 target as part of the Climate Change (Net Zero Future) Act 2023.
- While there are differences in degree, Queensland (30 per cent), South Australia (50 per cent), Victoria (45-50 per cent), and the ACT (65-75 per cent of 1990 levels) have set targets for reductions by 2030, as well as committed to net-zero by 2050. We note Queensland is seeking to introduce legislation for a 75 per cent target by 2035.
- Western Australia and the Northern Territory have not set clear 2030 targets, though have committed to the 2050 net-zero target. Tasmania achieved net-zero in 2015.
- It is evident that it is average state policy to transition to net-zero. Most states have been responding to historic frameworks and known impacts of climate change since the early 1990s.

8.3.2 Domestic emissions

• Historically, a state's energy use mix has closely aligned to the availability of specific natural resources. States with better historic access to coal, gas and renewables have developed their energy mix on this basis. This can be seen in Figure 8-1.



Figure 8-1: Australian energy mix by state, 2008-09 and 2021-22

Note: ACT data is factored in NSW total.

Totals do not precisely add up to 100% due to statistical discrepancies. These discrepancies encompass unclassifiable fuels and are, in part, a result of rounding of totals.

Source: Department of Climate Change, Energy, the Environment and Water (2023), Australian Energy Statistics, Table C.

• As per Figure 8-1, it is evident that states still tend to use their natural resources to provide for key energy needs. New South Wales, Queensland and Victoria all have large coal endowments (black or brown), and even though the proportion has reduced, coal still makes up a high proportion of these states' energy production compared to all other states.

³⁹ It is noted that there are earlier agreements related to emissions, including the Montreal Protocol (1987).
- In contrast, Western Australia and the Northern Territory have higher natural gas availability, and subsequently rely on it more as an energy source. Tasmania, as the only state to have transitioned to net-zero, has by far the highest proportion of renewables in its energy mix.
- There may be a more significant transition required for states reliant on coal rather than natural gas. In some instances, natural gas is proposed as a complementary energy source in a net-zero transition, while coal is widely considered to not be part of a net-zero future, as there is significantly higher carbon dioxide produced per unit of coal-based energy compared to other sources.
- Given the emissions related to coal usage, those states reliant on coal-related activities for both energy and economy may need to undertake a transition earlier than other states or may otherwise have a larger transition task. As shown in Figure 8-1, there has been a clear shift away from coal as an energy source for all states. Obviously, this has been a greater burden for those states that were / are more reliant on coal to begin with.



Figure 8-2: Industry contribution to total emissions (1990)

Source: Department of Climate Change, Energy, the Environment and Water, National Greenhouse Accounts 2019, 2019.



Figure 8-3: Industry contribution to total state emissions (2019)

Source: Department of Climate Change, Energy, the Environment and Water, National Greenhouse Accounts 2019, 2019.

- State emissions are not solely driven by energy. Figure 8-2 and Figure 8-3 consider the shift in emissions mix across states from 1990 to 2019. Tasmania has been removed as it has negative total emissions for 2019 and has achieved net-zero. As demonstrated, there are relatively similar trends in emissions splits across states. While the extent differs between states, energy emissions have increased proportionally for every state between 1990 and 2019 while land-use and forestry emissions have decreased for every state.
- Where we consider that individual state policy influences begin to factor in is with the actual changes in overall emissions for states over the same time period. While the trends in splits are broadly in the same direction, trends in total domestic emissions are not similar. This is most apparent for Western Australia and the Northern Territory. Total emissions are shown in Table 8-2.

State	1990 total net emissions (2) kt C02-e	2019 total net emissions (2) kt C02-e	Change in total net emissions	Per cent of 2019 national emissions
NSW	181,074	136,579	-44,495	25.8%
VIC	112,769	91,329	-21,440	17.3%
QLD	185,752	164,538	-21,214	31.1%
WA	77,831	91,852	14,020	17.4%
SA	37,453	23,919	-13,534	4.5%
TAS	19,636	-1,683	-21,318	-0.3%
NT	13,500	20,647	7,147	3.9%
ACT	1,192	1,279	87	0.2%
National	629,208	528,459	-100,749	100.0%

Table 8-2: Charts on state total net emissions production (1990 vs 2019)

Source: Department of Climate Change, Energy, the Environment and Water, National Greenhouse Accounts 2019, 2019.

- Though we consider it reasonable that historic natural resource availability could be a driver of necessary expenditure on the net-zero transition, the Commission would need to identify a point in time when a state should have become aware of climate impacts but chose to undertake emissions-increasing policies. Such policies after this point would reduce the case for underlying structural factors, as these policies would result in known higher costs to transition to net-zero.
- Increases in emissions for Western Australia and the Northern Territory were occurring as the impacts of climate change were increasingly widely understood. This is demonstrated by the UN Convention in 1992 and the following Kyoto Protocol in 1997, noting Australia's ratification of the Protocol was not completed until 2008. While these states may have made decisions in the interest of economic growth, these clearly represent individual policy decisions.
- The Commission has a difficult task to identify what proportion of a state's future cost of transitioning to net-zero is driven by underlying structural economic or environmental factors and what proportion is driven by state policy that diverged from the national average.
- We do not think it would be appropriate for the Commission to make this assessment on the basis of current energy and emission mixes, as this would fail to account for most states already reducing emissions from 1990 levels. This would effectively reward states for not reducing emissions in alignment with state average policy over the past three decades.

8.3.3 Exports of key emitting resources

- As previously identified, while natural gas can be considered by some policy makers as a complement to net-zero, coal is rarely considered to have a significant role in the transition and is commonly viewed as an emitting resource to be replaced in the future. We contend that this will drive greater expenditure for certain states, as commodity exports will not be impacted equally and consistently by the net-zero transition.
- The net-zero transition requires that state economies adapt to account for other countries undertaking their own net-zero transitions. The transition cannot solely be viewed through the lens of each individual state achieving net-zero domestically. States that export emissions-

intense commodities will face economic challenges as international buyers transition to other commodities or sources.

- Emissions released by other countries from Australian international exports are not incorporated in each state's individual net-zero targets. The major importers of Australian coal, Japan (2050), China (2060), and India (2070), have all set net-zero targets. While this represents a longer-term transition for two major importers, the transition will eventually reduce state exports of key commodities. This will not impact all states equally.
- As evidenced in Australia, coal has been reduced in all state energy mixes in favour of other energy sources (oil, gas, renewables). The shift in coal imports in major importing markets for Australian states will also be important to consider in terms of state drivers on the net-zero transition. States with more exposed industries, such as coal, will be required to expend more in the transition than states with less exposed industries, such as gas.



Figure 8-4: Major coal importers by energy mix, 1990 and 2019

Source: Energy Institute - Statistical Review of World Energy (2023) - with major processing by Our World in Data

- Per Figure 8-4, no consistent trend has emerged among the major importers of Australian coal over the past three decades. While China has reduced its use of coal as a proportion of its total energy needs, its economic and population growth has continued to result in high absolute usage of coal. India's coal usage has remained relatively stable over the same time period. However, both these states are generally considered to be newly industrialised states. Industrialisation has historically involved intense use of fossil fuels. We can expect this intensity to fall over time.
- By comparison, Japan is a developed market. Its coal usage has increased to substitute for oil as an energy source. However, Japan has made commitments at the recent COP28 summit to cease new construction of unabated coal power plants, which would be expected to eventually impact on its coal imports.
- Given these inconsistent trends, a comparison against other major world economies is also considered here. Figure 8-5 analyses the same energy mix for the United States, the United Kingdom, and Germany. In combination with China, India and Japan, these represent the world's six largest economies.



Figure 8-5: Other major national economies energy use by fuel type

Source: Energy Institute - Statistical Review of World Energy (2023) – with major processing by Our World in Data

- For these countries, there is a clearer alignment with the trend in Australia. Chiefly, there is a common decrease in coal's share of the energy mix, typically replaced by an increase in gas and renewables.
- While the major importing markets of coal are not yet demonstrating a consistent reduction in coal usage, we contend that this will almost certainly be the case in the net-zero transition over the next 25-45 years as each state works towards its net-zero target.
- As demonstrated, this decrease in coal usage is likely to be replaced with uptake of gas and renewables. This will actively drive up costs for coal-focused states in achieving the net-zero transition, while alternatively improving revenues for states that have a greater concentration of energy sources that are more likely to remain during the transition.
- Though these revenue impacts will be captured under existing assessment methods, the coalproducing states will be required to invest significantly more in business development and support to enable businesses in emissions-intensive industries to transition.
- Additionally, while this export analysis has been focused on fuel resources, the Commission will need to consider other export commodities and goods markets. If state economies are structured around specific exports which are likely to see reduced global demand as a consequence of the net-zero transition, then those states will have higher transition costs. The Commission should consider sectors including iron and steel, aluminium smelting, cement, and chemicals.

8.3.4 Emissions reduction and abatement

- An alternative approach for the Commission would be to consider the cost of abatement for states in delivering the net-zero transition. While states do not have an equal starting position in the net-zero transition, states also do not necessarily have access to equal emission abatement opportunities.
- All methods for emissions reduction are not created equal. States can make significant progress from straightforward and relatively inexpensive policy options, such as take-up of electric vehicles or industrial heat pumps. In contrast, it will be materially more expensive to replace coal plants with gas or renewable energy sources.

- In terms of marginal costs, states that have not significantly begun the net-zero transition should still have access to easier and cheaper opportunities for abatement, unlike states partially through the net-zero transition. These delayed states may also benefit from increasingly accessible carbon capture or other emissions-reducing technologies, which are likely to become both cheaper and more effective over time.
- However, this approach also runs into the difficulty of determining what the average cost of a state's net-zero transition is in response to underlying structural factors, rather than individual state policy choice. This difficulty in disaggregating policy influences from structural factors remains a consistent theme in implementing a new net-zero assessment.

8.4 Future spending on net-zero

The Commission asks:

- 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?
- New South Wales anticipates an increased spending on diverse net-zero transition programs and supports a distinct assessment if practical and material. While the expenditure increase may prove material, a separate assessment is still heavily dependent on the determination of appropriate drivers.
- The NSW Climate Change Fund is a significant contributor to increased spend, as it is forecast to spend more than \$2.5 billion over ten years, with identifiable expenses managed according to legislation (Energy and Utilities Administration Act 1987). However, quantifying expenditure outside the NSW Climate Change Fund poses challenges.
- The escalating demands posed by climate change, coupled with newly legislated emissions reduction targets and adaptation objectives under the *Climate Change (Net Zero Futures) Act 2023* in NSW, suggest an anticipated overall increase in expenditure.
- Additional expenditure is highly likely due to the transition from easier to harder to abate sectors (e.g., iron and steel, chemicals, cement, and heavy transport). While some programs are addressing these sectors, such activities are expected to be part of a multi-decade transition. Also, the escalation of climate impacts, resulting from past and forecasted near-term emissions, will likely necessitate increased efforts over time.
- Net-zero expenditures, particularly under the NSW government's tiered targets to net-zero in 2050, are anticipated across various sectors. This can include support for renewable energy targets, electric vehicle adoption, energy efficiency programs, clean technology investment, carbon offset initiatives, climate resilience, and other policy and regulatory frameworks. Importantly, these expenditures are not all necessarily tied to business development spend.

8.5 COVID business support costs

- That the Commission assesses COVID-19 business support costs on an APC basis.
- NSW Treasury advocates assessing COVID-19 costs on an actual per capita (APC) basis, in line with the treatment of natural disaster relief expenditures. We have provided comments on the proposed APC treatment of COVID-19 health expenditures as part of our Tranche 1 submission to the Review.

- Between 2020 and 2022, New South Wales incurred significant expenditure for business support in response to COVID-19. However, despite state COVID-19 spending requirements not being equal across states, the business development assessment continued to use an EPC approach (with a wages adjustment) in redistributing GST. This undermined the achievement of fiscal equalisation by unfairly disadvantaging states more heavily impacted by the pandemic.
- The Commission has previously identified in its 2023 Update New Issues consultation paper that state responses to the pandemic were largely driven by circumstance, rather than policy choice. While the Commission acknowledged the methodological issue, the lack of flexibility available to the Commission to change methods between reviews entrenched the unfair distribution.
- The Commission estimated this would have had a \$398 million worsening for NSW against APC for 2023-24 alone, with Victoria and the ACT also worse off.
- This material redistribution, along with the need for a renewed commitment to equalisation, is the basis for NSW Treasury continuing to advocate for an APC treatment of COVID-19 costs.
- An APC approach would reflect that assessed state expenditure is based on underlying need, where spend is due to non-policy influences and cost drivers are not possible to apply. Put simply, an APC assessment assumes that what states needed to spend in responding to the pandemic is equal to the actual expenditure of the state.
- While applying an APC approach from 2025-26 onward addresses part of COVID-19's fiscal impact on New South Wales, Victoria and the ACT, a retrospective adjustment is also necessary to correct the treatment of COVID-19 in annual updates from 2022 to 2024.
- We consider that this approach should be extended to any future pandemic events where state expenditures do not align with the cost drivers defined by the Commission's existing assessment methods.

9 Natural disaster relief

This category covers net expenses that fall within scope of the Disaster Recovery Funding Arrangements between the Commonwealth and states.

Overview of category

- Under the Disaster Recovery Funding Arrangements (DRFA), states can be reimbursed by the Commonwealth for expenses incurred in response to an eligible disaster.
- Eligible disasters include bushfires, earthquakes, floods, storms, cyclones, storm surges, landslides, tsunamis, meteorite strikes, tornadoes, and some terrorist attacks.
- The assessment includes:
 - o Immediate reconstruction of public assets to their pre-disaster function.
 - Emergency financial and non-financial assistance to individuals including food, clothing, temporary accommodation, and counselling.
 - Financial support to businesses and organisations.
 - o Longer term community recovery activities.
 - State funding of expenses for which local governments are also responsible, which is also covered by the DRFA.
- The assessment excludes:
 - Events such as pandemics, droughts, oil or chemical spills, etc.
 - Some terrorist attacks that are not eligible disasters under the DRFA.
 - Natural disaster mitigation, covered under the services to communities assessment.
 - Any other expenses on natural disaster relief by a state not recognised under the DRFA framework, which are covered by other assessments.
- The Commission's approach is that states should receive GST revenue equivalent to the actual amount they spend on natural disaster relief, net of Commonwealth reimbursements and insurance payments. This actual per capita approach can be appropriate when state spending is not influenced by state specific policy decisions and is policy neutral. Effectively, the costs of responding to natural disasters are shared between states.
- A subset of the assessment considers net payments made by States to local governments for costs incurred in natural disasters, which is considered a state-type service. State policies vary, so these local government contributions are assessed using average contribution rates.

NSW Treasury position

- NSW Treasury supports the retention of the natural disaster relief assessment in its current form, including maintaining an APC assessment of expenditure.
- NSW Treasury has provided comments on natural disaster mitigation expenditure as part of its 13 October 2023 Tranche 1 submission, specifically relating to the Services to Communities assessment. Elements of that submission should be considered in conjunction with this response.

9.1 Continuation of the existing method

The Commission asks:

- Do states support the continuation of the natural disaster relief assessment in its current form?
- NSW Treasury supports the continuation of the natural disaster relief assessment in its current form, including the retention of the APC treatment for most expenditure and the average local government contribution approach for that component.
- NSW Treasury has responded on natural disaster mitigation expenditure as part of the Tranche 1 submission for the Services to Communities assessment.
- However, if the Commission determined a separate natural disaster mitigation assessment was achievable and material, we suggest it would be appropriate to consider natural disasters as part of a single assessment with multiple components, rather than split between Natural Disaster Relief and Services to Communities.
- This is not suggesting a change in the method for either the natural disaster relief assessment or a hypothetical natural disaster mitigation assessment.
- As raised in the 2020 Review, the Commission should ensure that its assessment methodology does not disincentivise state expenditure on natural disaster mitigation. Continued investigation of the potential for a differential assessment on disaster mitigation expenditure is warranted as part of the 2025 Review.

9.2 Pandemic-related expenditure

- That pandemic expenditures incurred by states be treated as actual per capita, in line with natural disaster relief, rather than assessed based on existing (and unrelated) methodologies.
- We contend that the experiences of the COVID-19 pandemic, particularly relating to the pandemic's impact on GST redistribution, evidenced that the Commission's methodology is not well placed to respond to unavoidable expenditures in a pandemic. This is considered in detail in our Tranche 1 submission to the 2025 Review.
- The methodology from the 2020 Review continues to incorrectly and unfairly redistribute COVID-19 health expenditure based on unrelated socio-demographic drivers. While this will not permanently impact the assessment, with COVID-19 expenditure eventually dropping out of the assessed years, it materially reduced the GST revenue that New South Wales and Victoria should have received. This has resulted in an unfair windfall gain to other states.
- This GST impact exacerbated the direct fiscal cost of COVID-19 to NSW, which otherwise would have received increased GST distributions of approximately \$2.1 billion over the three years from 2023-24 to 2025-26.⁴⁰ Such an outcome would have aligned with the core intent of horizontal fiscal equalisation (HFE).
- Accordingly, expenditure in response to a global pandemic and in line with nationally agreed guidelines should be treated as actual per capita in future assessments. This would be in line

⁴⁰ Assuming COVID costs would have otherwise been treated on an APC basis.

with the treatment of natural disaster relief expenditure, with natural disasters representing a comparable event to a pandemic for governments.

- An actual per capita assessment is used where any differences in the per capita cost of providing a service in this case health and business support services related to COVID-19 are due to non-policy influences and where disability factors do not apply. It is used where states are assessed as spending based on underlying need.
- This approach should be generalised to any future pandemic event where state expenditure is not aligned to the cost drivers articulated by the Commission's existing assessment method.
- Additionally, to the extent that COVID-19 related expenditure remains in the data years for assessment years from 2025-26 and beyond, the Commission should assess these expenses actual per capita.

10 Other expenses

This category covers state expenses not covered in the other specific expense assessments.

Overview of category

- Expenses in this assessment include:
 - civil protection services (mountain rescue, beach surveillance and lifesaving, evacuation of flooded areas, maintenance of state emergency services and their operations - except those expenses that are included in the natural disaster relief category)
 - o administration and operation of fire prevention and firefighting services
 - o control of domestic animals and livestock
 - o services related to recreation, culture and religious activities
 - services related to communications, such as the production and dissemination of information and statistics on communication services; grants, loans or subsidies to support the construction, operation, maintenance or upgrading of communication systems
 - o administration, operation, or support of executive and legislative bodies.
- Major agencies in metropolitan areas predominantly handle legislative, general administrative, and some cultural, recreational, and communication services. Cultural, recreational, and public safety services are often provided through state funding.
- The current assessment method:
 - evaluates other expenses on an EPC basis with the state population serving as the primary determinant for service usage for certain components
 - incorporates variations in wage and regional costs for certain components with an adjustment applied to 64 per cent of total other expenses in 2021-22.

NSW Treasury position

• NSW Treasury agrees with the expenses classified to the other expense category and that the current assessment approach remains broadly reasonable.

10.1 Continuation of the existing method

The Commission asks:

- Do states agree with the expenses classified to the other expenses category and that other expenses should be assessed equal per capita?
- NSW Treasury agrees with the expenses classified to the other expenses category as the assessment captures expenses not part of other specific expense assessments.

- We agree conceptually that the components of other expenses (related to general public services, culture, recreation, communication, and civil protection services) are generally proportionate to state population, with unit costs remaining broadly similar across states. These should continue to be assessed on EPC basis.
- We also consider it appropriate for the Commission to continue with some wage and regional cost adjustments in addition to the EPC assessment as variations in regional costs and wage disparities impact state spending needs.
- We note that we have separately identified issues with the existing general regional cost gradient, which impacted 64 per cent of this assessment for 2021-22. This has been discussed in more detail in Section 15 of our submission.

11 Investment

This category covers state and territory gross investment, including investment in new assets and investment that replaces existing, depreciated assets.

Overview of category

- The Commission assesses state investment as the amount each state would invest to finish the year with the average per capita stock of new and replacement infrastructure, taking account of the growth in its user populations and relative cost levels.
- The main driver of the assessment is growth in the populations who use services. States whose user populations are growing require more investment. The relative costs of infrastructure and the average increase in infrastructure per capita also drive the assessment.
- Investment for every expense category is assessed separately based on relevant user populations and costs. Investment in land and other non-produced assets is assessed on an equal per capita basis and does not affect the GST distribution.
- The category includes all capital investment by the general government sector as well as by housing and public transport public non-financial corporations.

NSW Treasury position

- NSW Treasury does not support smoothing user population growth to reduce volatility or freezing the component shares of the value of assets for the life of the 2025 Review.
- We propose a simpler approach to assessing investment needs which results in identical outcomes to the current Commission approach.
- The Commission must carefully consider whether the disabilities impacting recurrent expenses fully, or even partially, translate into the need for a higher volume of capital assets.

11.1 Smoothing population growth

The Commission asks:

- Do states support smoothing user population growth to reduce volatility, with an associated reduction in contemporaneity?
- If user population growth were to be smoothed, do states support a 3-year moving average of growth rates?
- NSW Treasury does not support smoothing user population growth. The loss of contemporaneity, increased complexity, and the introduction of an inconsistency between the investment assessment and other assessment categories outweigh any benefits of a reduction in the volatility of GST distributions. The calculation of relativities uses a 3-year moving average of data, so year-to-year volatility of GST disbursements resulting from changes in user population growth is already limited.
- Currently, the fiscal circumstances of a jurisdiction in Year T are reflected in GST distributions in Years T+2, T+3 and T+4. Given this, a jurisdiction is fully compensated for its investment needs

4 years after the time the need arises. Under the Commission's proposal, the 3-year moving average approach would be replaced by a 5-year weighted moving average with a jurisdiction being fully compensated 6 years after the time the investment need first arises. While we agree that investment decisions are sometimes made with a longer time horizon, delaying financial compensation is likely to impede, rather than enhance, government decision-making with respect to changes in investment needs.

• We note that consideration of smoothing the impact of population changes on investment needs has arisen due to extraordinary population movements associated with the COVID-19 pandemic, which are unlikely to be repeated in the foreseeable future. Moreover, we consider the volatility arising from changes in user populations to be at an acceptable level. Volatility is not significantly more pronounced for the investment assessment than it is for other assessments. We compared this volatility to the assessments for land tax and stamp duty which, when *combined,⁴¹ result in a similar level of volatility in the distribution of GST (Table 11-1).

	Investment	Land Tax & Stamp Duty
Document	\$ per capita	\$ per capita
2020 Review	20.3	33.0
2021 Update	32.3	32.3
2022 Update	52.4	13.1
2023 Update	67.5	82.4

Table 11-1: Mean absolute change in needs from previous review or update*

*Average change in GST redistribution resulting from changes in investment needs at each document year.

Source: CGC, NSW Treasury calculation

- Furthermore, the nature of the volatility is different to that in other assessments. Take, for example, the volatility experienced in assessed wages, in response to which the Commission has proposed changes to the wage costs assessment. The changes in this case which NSW Treasury partially supported in its Tranche 1 submission were mainly prompted by sampling error and other modelling practicalities which led to volatile estimates of state wage pressures that are inconsistent with the conventional understanding of wage dynamics. In the case of user population growth, the volatility is proportional to actual changes in state needs and therefore does not require additional smoothing.
- Currently the Commission's process results in a series of discontinuities around the time of each Review. For example, the financial year 2016-17 was assessed twice under the 2015 Review Methodology and once under the 2020 Review Methodology. These discontinuities are shown in Table 11-2.

⁴¹ Given both assessments are driven by land values, we consider it reasonable to combine them.

	Number of tim	es Review Method	ology Applied
Data Year	2015	2020	2025
2013-14	3		
2014-15	3		
2015-16	3		
2016-17	2	1	
2017-18	1	2	
2018-19		3	
2019-20		3	
2020-21		3	
2021-22		2	1
2022-23		1	2
2023-24			3
2024-25			3
2025-26			3

Table 11-2: Application of review methodology to individual data years

• Under the Commission's proposal to use a 3-year moving average of population growth, the data years impacted by these discontinuities will increase. NSW Treasury believes such an outcome would increase pressure for backcasting⁴² to be applied to data from earlier years creating a further difference between the investment assessment and other Commission assessments.

11.2 Freezing the value of asset stock

The Commission asks:

- Do states support freezing the component shares of the value of assets for the life of the 2025 Review?
- Under the Commission's proposal, assets shares for each investment category for 2023-24 would be frozen for the period of application of the 2025 Review methodology. Assuming five-yearly reviews continue, assets shares for 2028-29 would be locked as part of the 2030 Review and remain unchanged until 2033-34.
- NSW Treasury simulated such an approach and found that it introduced systematic unrecovered biases where different assets classes grew at different rates and that these biases were magnified where user population grew at different rates in different states. On this basis, NSW Treasury does not support the proposed change in methodology to freeze asset shares for the life of a review.
- Furthermore, after investigating the data burden associated with annual requests, we found this not to be significant. We are also concerned that undertaking data collection every five years is likely to see unintended significant methodological changes occurring which are likely to diminish the quality of the data provided by the jurisdictions.

⁴² Backcasting refers to the Commission applying new methods established through a review to previous years' data to determine method-neutral changes in states' assessed needs.

11.3 A simpler approach to the assessment

NSW Treasury proposes:

- A simpler approach to assessing investment needs which results in identical outcomes to the current Commission approach
- As outlined in the Commission's consultation paper, the 'investment assessment provides each state the capacity to:
 - invest in additional physical assets to provide the state's new user population (added through the year) with the same per user stock the existing user population had at the start of the year, at the national average capital intensity; and
 - invest in physical assets to ensure the user population receives the increase in assets brought about by the replacement of depreciated assets and the national increase in capital intensity during the year.'
- Under the Commission's methodology, the opening stock of assets is calculated as the closing stock of assets less gross investment.
- NSW Treasury has developed a simplified methodology for assessing investment needs which results in identical outcomes to the current methodology. This methodology does not rely on deriving an opening asset balance and simply uses assets values in the previous year. This model has been shared with the Commission and can be provided to other jurisdictions on request.

11.4 Appropriate user population for each assessment

The Commission seeks advice on:

- The appropriate user population for each assessment category
- In an ideal world, the cost of providing capital assets to support service delivery would be a function of assessed service demand multiplied by the assessed unit cost of meeting that service demand. For example in the case of school education, each state's need to provide school education assets could be expressed as follows:

The total value of assets deployed nationally to deliver education in government schools per student

multiplied by

Any policy neutral factors which increase the per student volume of assets required in a specific jurisdiction (eg: Disabled students may require smaller class sizes)

multiplied by

Any policy neutral factors that increase the relative unit capital cost of providing school education assets (eg: The unit cost of land may be higher in large cities)

multiplied by

The number of government school students within a jurisdiction

- The Commission's methodology departs from this ideal in a number of ways:
 - The allocation of assets between expenditure categories is imperfect. For example, New South Wales allocates 0.7 per cent of state assets to the Justice category while other states allocate an average of 4.2 per cent of state assets. Such a difference appears implausible.
 - A specific user population cannot always be accurately identified. For example, population adjusted for income, socio-economic composition and Indigenous status fails to capture the impact on social housing demand arising from differing housing costs in each jurisdiction.
 - Other policy neutral service demand factors are measured via various proxies and the linkage to high infrastructure needs is unclear. For example, the Indigenous status of a school student may increase the volume of teaching resources required but have little impact on infrastructure needs.
 - The assessment ignores any impact from the geospatial distribution or concentration of services users on the volume of assets required in a jurisdiction. For example, if a state's population is increasingly concentrated as residents move to a central area, the existing assets in the source areas become underutilised. States need to deliver new assets in the destination area to address increased demand, despite intra-state migration having no effect on aggregate assets per capita.
 - Policy neutral unit costs of delivering infrastructure are imperfectly proxied by the Rawlinson Index and the wage cost assessment.
- In reviewing investment needs for each individual expenditure category, we urge the Commission to carefully consider whether the disabilities impacting recurrent expenses fully, or even partially, translate into the need for a higher volume of capital assets.

11.5 Urban transport component user population

- Removal of the blended approach between urban centre characteristics model and population-squared.
- As discussed in NSW Treasury's main submission to Tranche 1 and supplementary submission on Transport, the urban centre characteristics model is robust, policy neutral and supported by state provided data. To reduce complexity and support HFE, we propose removal of the blended approach, in favour of the urban centre characteristics model.

12 Net borrowing

This category redistributes GST to reflect differences in the rate of population growth and its impact on the capacity for states to borrow to fund any shortfall between expenditures and revenues.

Overview of category

- Net borrowing reflects the extent to which total outlays on service delivery and investment in infrastructure by states differs from their total revenue from all sources including the GST.
- This assessment provides each State with the capacity to borrow and finish a year with the average level of per capita net financial worth, assuming it began the year with the average value at that time. Interstate differences in population growth rates are the only driver of differences in net borrowing recognised in this assessment.

NSW Treasury position

- NSW Treasury supports the current assessment approach to assessing net borrowings.
- We do not support smoothing population growth consistent with our views expressed in Section 11 Investment.

12.1 Conceptual basis of the net borrowings assessment

The Commission asks:

- Do states agree that the conceptual basis for the net borrowing assessment remains unchanged?
- New South Wales supports the current assessment approach. However, we are concerned with the very significant differences between the closing net financial worth each year and the derived opening balance for the following year, and how this may impact on the assessed needs of each state.

Table 12-1: Comparison of closing and derived opening net financial worth - \$ billion

	30 June	1 July	Difference
2018	-95.1	-134.0	-38.9
2019	-155.4	-169.8	-14.3
2020	-225.8	-171.3	54.5
2021	-228.6	-269.1	-40.5

- From an analysis of the data used by the Commission, a large component of the variation shown in Table 12-1 arises from revaluation of defined benefit superannuation liabilities due to changes in interest rates.
- It is unclear to us what impact this has on the assessment. Given the significance of the differences, we seek clarification from the Commission on this aspect of its assessment.

12.2 Population growth smoothing

The Commission asks:

- 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?
- As outlined in Section 11, NSW Treasury does not see any need to smooth the assessment of investment needs as this category appears to be no more volatile than others, using the example of a combined land tax and stamp duty assessment. Furthermore, smoothing would introduce unnecessary complexity to the Commission's assessments and reduce the contemporaneity of GST distributions.

13 Administrative scale

This category relates to the minimal administrative expenses required for a state to undertake each of its functions.

Overview of category

- Administrative scale recognises that there is a minimum level of expenditure required to deliver government services. This relates to fixed costs that must be incurred before any service can be provided.
- The types of costs considered are broadly corporate in nature or otherwise have no relationship to the scale of service delivery. State expenses incurred in responding to the Commission's five-yearly reviews are an example of administrative scale expenses as they are broadly equal across states regardless of state size.
- Since administrative scale expenses are theoretically the same across states in absolute terms, they vary significantly in per capita terms. This drives the redistributive effect of the administrative scale assessment.

NSW Treasury position

- NSW Treasury agrees that there is some conceptual merit in recognising administrative scale expenses. It is entirely unreasonable, however, to recognise minimum scale costs but ignore the unavoidable costs of complexity and congestion that arise in states with larger populations. Recent academic work suggests that these costs of complexity and congestion are substantial for larger states.
- Additionally, the Commission's assessment overstates administrative scale expenses by adopting too low a ratio of staffing costs to other operating costs, and by assuming a more complex administrative structure than would actually be required to deliver minimum services.

13.1 Continuation of the existing method

The Commission asks:

- Do states support the continuation of the administrative scale expense assessment in its current form?
- The administrative scale assessment should be ceased or substantially re-evaluated in recognition of its unfair asymmetrical treatment of smaller versus larger states. It is unreasonable for the Commission to be satisfied of a conceptual argument for minimum scale costs but not be conceptually satisfied that there are unavoidable costs associated with government complexity and larger state populations.
- If the assessment is maintained, its impact should be reduced through changes to the method or otherwise discounted to address concerns that the current method materially overstates differences in per capita fiscal capacity arising from differences in population size.

13.2 The conceptual case for administrative scale

- It is conceptually reasonable that governments face some fixed costs that are unrelated to either population size or service delivery scale. These costs represent the minimum expenditure required to undertake the functions of government. These can include:
 - Expenditure on whole-of-state or non-service functions, like supporting parliamentary or Cabinet processes.
 - Establishment of baseline corporate functions, including human resources and finance.
 - Category-specific service enablers, like school or health policy functions.
- However, the prevalence and extent of these expenses cannot be readily identified or reliably calculated. References to existing machinery-of-government design and organisation provides little insight into the structure or organisation of government that would be adopted in the case of minimum service delivery.
- It is the growth in the scale of service delivery which gives rise to the breadth and complexity of government structure. It is only as scale of service delivery increases that the proliferation of departments and department-specific corporate functions becomes feasible, and eventually, unavoidable. In the absence of large-scale service delivery, states would consolidate and centralise fixed corporate costs (for example, they would not have separate payroll staff for different functions if they had only a very small number of staff across those different functions).
- In a hypothetical world where only the minimum functions of government are provided, the scope for consolidation of supporting services would be massively increased. Fewer agencies would be required and duplication of corporate services between those agencies would be eliminated. Individual departments would reorganise to operate efficiently.
- When considering costs unrelated to service delivery, it is unclear why any one functional area of government should have significantly more or less minimum fixed costs than any other area, at least for agencies primarily involved in service delivery (e.g. Justice, Health and Education departments).
- Moreover, as the scale of service delivery, complexity also increases. Larger states must manage this complexity. Consequently, relative to smaller states, larger states often have:
 - o more departments and other agencies or statutory bodies
 - o more complicated organisational structures with more functional areas
 - an increased number of more senior bureaucrats to manage the more complex structures
 - higher costs to manage internal communications.
- In New South Wales, for example, agencies divide responsibility for service delivery and administration between multiple geographic regions to appropriately manage scale and complexity. Clearly the need for this geographic division is diminished or non-existent in smaller and less populous states.
- This reality was acknowledged by the Commission in the previous review, but not addressed. The Commission stated⁴³:
 - *'…the number of functional areas in a head office tends to increase with the State's population size.'*

⁴³ Staff Research Paper CGC 2017-06-S

- 'Larger States tend to have higher classifications for similar positions. For example, New South Wales and Victoria's organisational structures show their staff tend to be a level higher in seniority than the smaller States for similar positions.'
- Presently, the Commission's treatment of scale is unfairly asymmetric. Smaller states are compensated for administrative scale disabilities, but larger states are not compensated for their need to manage increased complexity.
- Recently published research adds weight and urgency to this point. Chan and Petchey (2024)⁴⁴ find that state and local general government expenditure in Australia is subject to "super congestion" where congestion refers to the erosion of per capita service accessibility and benefit as populations increase. Governments must spend to mitigate the impact of congestion. That is, per capita general government expenditure increases as population increases. The authors cannot distinguish between congestion and cost (returns to scale) effects. But such a distinction is unnecessary for the Commission's purposes.
- The paper proposes plausible state congestion disabilities. For example, they estimate that to provide a given service benefit to its citizens, New South Wales needs to spend 15.9 per cent more than the all-state average per person to mitigate the effects of congestion because of its relative population size. This is a substantial cost disability. In absolute terms, New South Wales is estimated to spend around \$950 per person or nearly \$8 billion per year to mitigate congestion.⁴⁵ All other states also have significant congestion costs, though not to the extent of New South Wales. Estimated congestion costs in March 2023 under the Chan and Petchey methodology are shown in the following table.

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	All States
\$mill	7,920	6,036	4,478	1,893	1,049	218	165	39	21,825
\$ Per Capita	950	885	820	658	567	380	353	155	819
Disability	1.16	1.08	1.00	0.80	0.69	0.46	0.43	0.19	1.00

Table 13-1: Estimated congestion costs – March 2023

- We do not propose implementing such state specific disabilities without further research, though we contend that it is sufficiently material for the Commission to investigate as a matter of priority for the 2025 Review. However, it is clear that larger states face significant costs related to congestion and complexity of service delivery. With the exception of the Transport assessment, these costs are nowhere recognised by the Commission.⁴⁶
- Given the prevalence of these costs, it is untenable for the administrative scale assessment to be continued in its current form. It cannot be the case that smaller states are compensated for lower per capita fixed costs but larger states are not compensated for higher per capita variable costs.
- Based on the work of Chan and Petchey, we have constructed relative per capita state spending needs for mitigating congestion. A comparison of the current allowances for administrative scale (fixed costs) and congestion driven variable costs per capita is shown in the following table.

⁴⁴ Chan, F. and Petchey, J. The Cost of Congestion for State and Local General Government Services in Australia, *The Australian Economic Review*, 2024

⁴⁵ The methodology calculates costs for the combined state and local general government sector. However, given administrative arrangements, most congestion costs would be borne by the state sector.

⁴⁶ Indeed, states are instead punished for having less dispersed populations.

Table 13-2: Comparison of relative administrative scale and congestion needs - \$ per capita

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	All States
Administrative Scale [#]	-71	-61	-47	21	89	531	740	1,457	0
Congestion mitigation*	130	66	1	-162	-253	-440	-467	-664	0

Data for 2021-22

* Data for March 2023

• In our view, the potential materiality of congestion costs demonstrated by Chan and Petchey warrants the complete re-evaluation of the administrative scale assessment. Failing that, the impact of the assessment should be significantly reduced through either changes to the method or the application of a high discount.

13.3 Calculation of administrative scale

- If the assessment is continued, then we would bring the following to the Commission's attention.
- The Commission calculates minimum administrative scale by designing a hypothetical departmental structure for each assessment category and assigning some number of staff to the various functional areas of that hypothetical structure. The Commission calculates a corresponding employee related expenditure figure and then grosses this figure up using a constant 60:40 labour cost to other operating cost ratio.
- This approach overstates minimum scale expenses by ignoring that without service delivery, the clear majority of costs would be labour related. Minimum scale functions essentially comprise two components: state-wide policy functions and supporting corporate services. In both cases, related expenditure would be overwhelmingly labour based.
- It is extensive service delivery that gives rise to other operating costs. Service delivery drives expenditure on building, stock and road maintenance, purchases of low-value plant and equipment, consumption of utilities, travel, insurance and other major contributors to state operating costs.

Some agencies have limited or no service delivery functions. These agencies are responsible for state-wide policy functions – one of the components of minimum scale noted above. For these agencies, other operating costs relate only to those costs incurred to support staff in undertaking their functions. Table 13-3 lists select such agencies and the proportion of their expenditure which relates to labour costs (total expenditure is adjusted to exclude grants payments, interest, and depreciation expenses⁴⁷). Consultancy and contracting expenses are taken to be labour expenses, as these are generally substitutes.

⁴⁷ Since the investment assessment already provides for states to maintain the same level of state assets per capita, depreciation expenses should not be considered as part of the administrative scale assessment.

Agencies \$'000	Employee costs	Total expenses	Adjusted expenses ⁴⁸	Proportion adjusted expenses
Premier's Department	203,364.5	381,151.9	294,106.3	69.1%
The Legislature	148,964.4	226,492.6	198,250.6	75.1%
Office of the Independent Review Officer	12,948.6	86,093.0	16,782.0	77.2%
Crown Solicitor's Office	60,493.7	77,453.6	73,696.6	82.1%
Audit Office of New South Wales	61,922.7	71,823.6	68,873.6	89.9%
Ombudsman's Office	32,893.9	42,590.4	39,073.4	84.2%
Public Service Commission	23,518.8	41,215.7	40,347.7	58.3%
Independent Pricing and Regulatory Tribunal	29,945.6	37,868.9	37,395.9	80.1%
State Records Authority NSW	22,774.1	31,646.1	27,648.1	82.4%
Law Enforcement Conduct Commission	19,209.3	24,923.7	21,753.7	88.3%
Health Care Complaints Commission	18,995.5	23,879.5	23,500.5	80.8%
Parliamentary Counsel's Office	9,148.7	11,447.0	10,827.0	84.5%
Information and Privacy Commission	6,177.1	7,397.3	7,331.6	84.3%
Judicial Commission of New South Wales	5,259.8	7,330.3	7,059.3	74.5%
Arithmetic average				79.3%

Table 13-3: Non-service delivery agencies, 2022-23

• By comparison, Table 13-4 lists the same for agencies more clearly engaged in extensive service delivery. On average, labour costs make up a lower proportion of total expenditure for these agencies, as other operating costs grow (notwithstanding some functions such as teaching and policing which are labour intensive). The variance in proportion of labour costs is also larger.

⁴⁸ Adjusted expenses is total expenses less depreciation, interest and grants payments.

Table 13-4: Service delivery	agencies, 2022-2349
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Agencies \$'000	Employee costs	Total expenses	Adjusted expenses	Proportion adjusted expenses
Ministry of Health	18,253,480.7	29,991,756.7	26,771,393.7	68.2%
Department of Education	13,087,781.1	21,986,854.3	16,012,030.3	81.7%
Transport for NSW	2,095,942.5	19,807,625.4	8,842,752.6	23.7%
Department of Communities and Justice	3,384,705.7	12,062,580.2	4,862,022.7	69.6%
NSW Police Force	4,336,491.4	5,128,654.8	4,750,322.6	91.3%
Department of Planning and Environment	1,389,703.0	4,382,922.5	2,424,008.8	57.3%
Department of Customer Service	947,791.7	2,718,736.6	1,542,884.4	61.4%
TAFE Commission	1,440,436.3	2,003,312.0	1,793,070.0	80.3%
Department of Enterprise, Investment and Trade	159,208.6	986,402.5	313,371.0	50.8%
Fire and Rescue NSW	746,906.8	970,273.7	904,171.7	82.6%
NSW Rural Fire Service	161,918.5	635,377.3	369,759.5	43.8%
NSW State Emergency Service	54,379.1	195,065.1	153,298.1	35.5%
Arithmetic average				62.2%

- It is clear from these non-service delivery / state-wide policy agencies that labour costs should represent at least 75 per cent of administrative scale expenses. The current assumption of 60 per cent overstates minimum required other operating costs and is clearly influenced by operating costs related to service delivery.
- Additionally, the Commission's approach fails to take any account of shared services. Increasingly, governments centralise corporate functions to generate efficiencies. The Commission's approach assumes all separate departments require separate corporate functions. This is not the case for most governments in reality and would almost certainly not be the case if states were operating at a theoretical minimum administrative scale.
- The Commission should either explicitly structure its hypothetical departments to reflect the availability of shared services between departments or otherwise generally discount the number of assessed staff. In either case, the number of staff required for administrative scale related to corporate functions should be reduced.
- NSW Treasury also considers that the Commission likely overstates costs by using Commonwealth public sector wages to determine total staffing costs. While Commonwealth total remuneration for staff may be comparable to some states, it is likely significantly more than remuneration in the smaller states. Since the conceptual case for the administrative scale assessment is to compensate smaller states for unavoidable higher per capita minimum scale expenses, the salary costs those states actually face is highly relevant.

⁴⁹ NSW Police Force employee costs includes significant workers' compensation expenditure

14 National capital

This category covers ACT spending on unavoidable extra costs because of Canberra's status as the national capital or because of legacies inherited from the Commonwealth at self-government.

Overview of category

- National capital allowances recognise the unavoidable extra costs incurred by the ACT, because of Canberra's status as the national capital or because of legacies inherited from the Commonwealth at self-government that continue to affect its costs of service delivery.
- Costs above the unavoidable costs faced by the ACT are more properly a matter for the respective ACT and Commonwealth governments, rather than a matter for HFE.
- The assessment includes two types of national capital allowance, planning and police, which are assessed as part of the other expenses and justice categories, respectively.
- Planning allowances recognise the higher costs to the ACT in relation to planning and development activities due to the operation of the National Capital Plan (NCP) and the costs associated with maintaining the leasehold system.
- Police allowances recognise that the ACT has no legal alternative but to use the Australian Federal Police (AFP) as the provider of its policing services and it has no control over the salaries paid to AFP employees.

NSW Treasury position

• NSW Treasury supports discontinuing the national capital assessment. This is based on the negative assessed expenses related to the ACT's police allowance, which in turn results in negative assessed GST needs, which makes the national capital assessment immaterial.

14.1 Discontinuing the national capital assessment

The Commission asks:

- Do states support discontinuing the national capital assessment if the assessment is immaterial?
- NSW Treasury agrees that the national capital assessment should be discontinued if immaterial. We raised concerns in our submission to the Commission's 2024 Update New Issues paper about making such a decision between reviews. We do, however, consider it is practical and appropriate to discontinue the assessment given its expected immateriality.
- To align with the 2020 Review method, the 2024 Update New Issues paper proposed that the ACT's assessed national capital needs could be set to zero for the 2024 Update if they are negative. This adjustment would imply that the Commission assesses the ACT to have no unavoidable additional costs associated with Canberra's status as the national capital.
- The negative national capital assessment results from the police allowance; specifically, lower wages paid to the AFP in the ACT compared to wage cost estimates. This assessment

contradicts the 2020 Review method, which aims to recognise only additional costs incurred by the ACT.

- In addition to the police allowance, the planning allowance remains below the materiality threshold. These factors strongly support the argument to discontinue conducting a separate assessment for the national capital costs incurred by the ACT.
- We retain some concerns about the nature of the assessment, which treats the ACT as only being a GST-recipient or GST-neutral state with respect to its unique policing and planning arrangement. This is not consistent with the methodology for any other state in any other assessment.

15 Geography

This category impacts several areas of state spending as per capita expenditure on services varies for people in different regions. Differences in socio-demographic composition and service delivery costs contribute to varying service use levels and costs.

Overview of category

- Per capita expenditure varies geographically based on regional differences in sociodemographics and service delivery costs, including higher labour expenses in remote areas.
- This assessment uses ABS remoteness categories to measure:
 - regional costs, capturing higher costs of delivering comparable services due to remoteness;
 - service delivery scale (SDS), which captures the additional cost per person of delivering services in small, isolated centres compared with larger urban areas due to fixed costs.
- Where possible, the Commission measures the regional and SDS costs specific to each assessment category and makes category-specific adjustments to reflect those costs.
- In categories where regional costs or service delivery scale effects are acknowledged but cannot be directly quantified, a general gradient is estimated based on the average of the cost gradients for the admitted patients component of the Health assessment and the government schools component of the Schools assessment. This can be the average of either the regional cost effects or the combined regional cost and SDS effects. A 25 per cent discount is applied.

NSW Treasury position

- NSW Treasury retains concerns about the current method of estimating regional costs regarding the reliability and appropriateness of the general regional cost gradient. Where possible, specific regional cost gradients should be developed for individual expenditure assessments.
- Otherwise, or in the absence of sufficient data to establish a specific cost gradient, the general regional cost gradient calculation could be recalculated with more appropriate proxies, or a more significant discount should be applied for assessments where it is evidently inaccurate.
- NSW Treasury supports retaining the current method of estimating SDS, excepting points raised in our first submission and summarised in this chapter regarding costs in the Justice assessment. We also have concerns about the SDS adjustment in the Welfare assessment.

15.1 Regional costs and service delivery scale

The Commission asks:

- Do states support continuing the current methodology for estimating regional costs and service delivery scale effects?
- NSW Treasury is concerned that the current use of the general regional cost gradient across a multitude of assessments is materially overstating the influence of regional factors. We do not, therefore, support the current methodology for estimating regional costs.
- We have reservations about extrapolating regional costs from one service to another. The nature of service delivery varies significantly, making it unreasonable to assume that increasing remoteness affects different services equally. We also consider that some assessments, such as Housing and Welfare, could have a specific gradient implemented, and it would therefore be inappropriate to continue using the general gradient in its current form.
- Otherwise, we suggest a larger discount be applied when extrapolation is required in the absence of reliable data. This could be implemented for specific assessments where the general gradient has been evidenced as inaccurate, or more broadly for all assessments to which the gradient is applied.
- NSW Treasury supports retaining the current SDS methodology with updated data, excepting comments on costs in the Justice assessment. We do have concerns with the use of SDS in the child protection and family services component of the Welfare assessment. These comments are also raised in the Welfare chapter.

- The Commission introduce additional assessment-specific regional cost gradients in place of the existing general regional cost gradient.
- While we conceptually agree that increasing remoteness will tend to increase per capita costs, and that a general regional cost gradient is appropriate to use in assessments where other options are not available, the Commission should actively work to develop assessment-specific regional gradients. We believe this is crucial for accurate assessments and should ideally be based on comprehensive state data.⁵⁰
- The Commission was generally supportive of this position in the 2020 Review for the Housing and Welfare assessments and considered that New South Wales had demonstrated the general regional gradient was not representative for the Housing assessment. Unfortunately, in the absence of comprehensive data from other states, the Commission was unable to develop a housing-specific gradient.
- If comprehensive state data is deemed unavailable, the existing discount should be increased to account for the overstated steepness of the general regional cost gradient for social housing.
- The current general regional cost gradient is based on a combination of the schools (government schools) and health (admitted patients) regional cost gradients from the 2020 Review. In that review, the Commission considered that as school and hospital services are delivered in very different ways and have very different regional cost gradients, a simple average represents an appropriate estimate for the general regional cost gradient, with a 25 per cent discount.

⁵⁰ See commentary within the Housing chapter.

- We do not consider this to be sufficient rationale for the use of the current general regional cost • gradient. There is no clear evidence that a simple average of the two cost gradients is a fair representation of regional costs for any other expenditure assessment. Indeed, as noted above, it has been demonstrated that this approach overstates regional housing and welfare costs.
- The Commission's method assumes that schools and admitted patients represent the cost • extremes of regional service delivery. We consider that school services are delivered in a very different way to all other regional services, not just admitted patient services. As a result, the general cost gradient is overstated.
- The nature of providing regional schooling is not similar to other regional services provided by state governments. For many services, residents in small towns access services via a single, regional centre outside of the town. For some services, such as welfare, providers undertake outreach from this central location, but most recurrent activities would be provided in the centralised location.
- In contrast, many schools are located in small townships and have a much greater level of accessibility to more remote areas than other government services. This accessibility will clearly drive regional school costs beyond other services. When considering the differences between providing school services and all other regional services, it is not evident that schools should contribute 50 per cent of the general regional cost gradient.
- These same concerns extend to SDS. We do not think it is evident that the combined schools and • admitted patient ratios are representative of other service costs, specifically child protection and family services costs.
- Nonetheless, the Commission applies its general gradient to multiple other expenditure • assessments, including social housing, services to communities (except water and electricity subsidies), rural roads, non-urban transport, services to industry, and other expenses. The child protection and family services component in the Welfare assessment also has an SDS adjustment included. The general cost and SDS-adjusted cost gradients are shown in the figures below (Figure 15-1 and Figure 15-2).



Figure 15-1: Regional cost gradients, 2021-22

Figure 15-2: Combined SDS and regional costs gradients, 2021-22



We are concerned that there is insufficient evidence for the Commission's current application of • either the general regional cost gradient or the combined cost-SDS gradient, even with a 25 per cent discount. In Figure 15-3 we plot the general combined gradient against regional gradients used in other assessments. The general gradient does not appear to resemble costs faced across other assessments.

Source: CGC 2023 data stimulator

Figure 15-3: Combined gradient with welfare, prisons and courts, 2017-18



Note: NSW gradient estimate relies on an internal document using data predating 2017-18. Its relevance for comparative analysis with CGC data (for 2017-18) is uncertain.

• The Commission should reassess the merit of its current approach. As much as possible, assessment specific regional cost gradients should be developed. Failing that, the discount applied to the current general gradient should be increased. This is of particular urgency for the Housing and Welfare assessments.

- Adjusting the general regional cost gradient (or combined regional cost-SDS gradient) to include the use of other assessment specific gradients.
- Assessment specific gradients will not always be possible. In that case, the general cost gradient should be updated. The Commission should incorporate data from all other regional cost gradients considered sufficient for use in specific assessments (e.g. prisons, courts).
- We suggest that there are three options available for the Commission to correct for the issues we have identified:
 - 1. Calculate a new simple average for the general gradient by including additional assessment-specific regional cost gradients (e.g. prisons, courts, police for combined regional cost-SDS gradient).
 - 2. Remove the schools component from the general gradient, and either leave the gradient as admitted patients only or add other specific regional cost gradients to calculate a new simple average.
 - 3. Apply a higher discount to reflect that the current general gradient may be materially higher than cost gradients for other expenditure assessments.
 - This would only apply if specific expenditure assessment gradients are not adopted.
 - It may be the case that the Commission may want to apply assessmentspecific discounts instead (i.e. maintain 25 per cent for services to industry, other expenses, and increase to 37.5-50 per cent for housing and welfare).

15.2 Non-wage costs in major cities

The Commission asks:

- Can states identify any data to measure differences in non-wage costs between major cities?
- We consider that reverting to the 2015 Review assessment would not be appropriate without significantly better evidence to avoid overreliance on judgement. The Commission previously identified that the adjustment to be made was hindered by a lack of data, and the difficulty of determining the magnitude, and in some instances, the direction of the adjustment required. These are significant issues to be overcome before considering reintroducing this adjustment.
- While the Commission has previously focused this question on the effects of isolated major cities, NSW Treasury proposes that there are other major city effects that the Commission does not appropriately account for in its methodology. Most significantly, we believe that there is a need to recognise the costs associated with major city effects in a combined assessment of disability within the Justice assessment.⁵¹
- As identified in our Tranche 1 submission, we do not consider that the 2020 Review Justice model appropriately captures justice expenses linked to densely populated and highly globalised cities. The model should be extended to encompass factors such as the threat of terrorism, complex crimes (organised crime, cybercrime, financial crime), and culturally and linguistically diverse prisoners.
- Although these factors were individually considered immaterial in the 2020 Review, their combined impact under major city effects could be material. We consider that the high population density and global status of some large cities is an important driver in increasing justice expenditure.
- Alternatively, assessing centralised police function use rates by remoteness level could result in a greater allocation of central costs related to complex crimes to metropolitan areas. Additionally, a significant rise in reported cybercrime, especially fraud incidents, has put pressure on state police forces, particularly in areas with large organisations' head offices.

15.3 Regional costs in the Justice assessment

- The Commission revisit its method for apportioning centrally provided policing costs to districts, to avoid overstating regional costs in the Justice category.
- For the 2020 Review, New South Wales provided police expenditure data disaggregated into police districts. We also provided expenditure data for central police functions which support all residents equally, but which are primarily undertaken in Sydney. Examples include forensics services or police corporate services.
- The Commission apportioned these central costs to police districts in direct proportion to each district's share of non-central (direct) costs. This erroneously magnifies the impact of regional costs. By way of example, the Commission's method would assume that NSW police corporate functions undertaken in Sydney on behalf of citizens in the Far West of NSW are more costly than those same functions undertaken on behalf of citizens in metropolitan Sydney. But the cost of undertaking those functions is identical.

⁵¹ See commentary within the Justice chapter.

- This misattribution is a consequence of applying higher per capita costs fixed costs in regional areas, arising from the presence of discrete police stations in smaller population centres, as well as higher per capita regional variable costs (e.g. material or travel costs) to costs which exhibit no regional variation (because they are fully incurred in metropolitan areas).
- Since central function costs can make up anywhere from 40 to 60 per cent of total police expenditure, the current approach materially overstates regional costs.
- At a minimum, the Commission's approach should be adjusted to apportion central costs to districts on a per capita basis. Even this would overstate regional costs since a significant proportion of central costs relate to services disproportionately relevant for metropolitan areas. Metropolitan residents and police districts by extension are likely to have higher use rates of certain central services than remote residents. For example, investigation and specialist squads are more readily available to assist metropolitan detectives, and counter-terrorism spending is primarily aimed at preventing attacks on urban areas due to the higher risk.⁵²
- Given the likely data limitations and difficulty estimating average usage rates across remoteness areas in Australia, a discount to the regional cost gradient may be the most viable option to account for higher non-remote usage of central police services per person.⁵³
- These issues are discussed in Section 6.4 of our Justice chapter in the Tranche 1 submission.

- The Commission replace the remoteness dummy variable with a major cities dummy variable in the regional prison costs regression.
- We contend that the SDS adjustment for prisons in the regional prison costs regression needs to be replaced with a metropolitan prison cost variable. Primarily, this stems from the lack of evidence that remoteness drives more expensive costs in relation to small prisons.
- The Commission's current approach overestimates the influence of remoteness in the prevalence of small prisons. Apart from the analysis that small, remote prisons are not necessarily representative of average state policy, there is insufficient evidence that reliably links small prisons costs to remote locations.
- Instead, NSW Treasury identifies that per prisoner operating costs may be higher in metropolitan facilities, rather than remote facilities. This indicates that remoteness impacts may be even further overstated than expected. This issue is discussed in more detail in Section 6.5 of our Justice chapter in the Tranche 1 submission.

⁵² <u>Current National Terrorism Threat Level (nationalsecurity.gov.au)</u>

⁵³ See commentary within the Justice chapter.

16 Additional mining submission (coal)

Overview of supplementary issue

- As part of its 2024 Update Supplementary New Issue paper, the Commission considered the case for separating the current mining assessment coal component into metallurgical and non-metallurgical coal components, provided it was found to be material to do so.
- The Commission ultimately decided against changing its approach to assessing coal revenues, since such a change would have represented a methodological change and would have been inconsistent with its terms of reference for the annual update.
- NSW Treasury believes that the case for change remains and should be considered through the 2025 Review. The review process is less limited in scope than the annual update process.
- Provided the Commission continues to take a mineral-by-mineral approach, NSW Treasury proposes it separately assess metallurgical and non-metallurgical coal. A separate assessment will better reflect state fiscal capacities. Our submission to the Commission's 2024 Update New Issues (Supplement) paper is reproduced below, with additional content. In this way, our submission may be formally considered as part of the 2025 Review.

16.1 The conceptual case for separately assessing coal

NSW Treasury proposes:

• That, if a mineral-by-mineral approach is retained, the Commission separately assess metallurgical coal royalties as part of the Mining category, if it is material to do so.

16.1.1 Mineral-by-mineral versus aggregate mineral approach

- The Commission currently assesses states' capacities to generate mining revenue on a mineralby-mineral approach, where it is material. This is on the basis that some minerals are more highly valued than others or are more easily mined and states can therefore impose higher royalty rates on those minerals. The Commission argues that under an aggregated approach, applying an average royalty rate would not reflect the true revenue raising capacity of various states depending on the nature of their mineral endowments.
- For some minerals, a separate assessment has an immaterial effect on the distribution of GST. These minerals are jointly assessed under the 'other minerals' component. As part of its annual update process, the Commission reviews the materiality of each mineral. The Commission intends to begin separately assessing nickel revenue in its 2024 Update.
- Generally, NSW Treasury acknowledges that fiscal equalisation is plausibly improved through a mineral-by-mineral approach. Nonetheless, we have suggested an aggregated approach should be adopted as part of the 2025 Review. We believe aggregation is the simplest and most effective way to balance fiscal equalisation with policy neutrality concerns in the mining assessment.
- The Commission has grappled with the challenge of policy neutrality in the mining assessment for a number of years. In our view, *any* adjustment to the mining assessment which seeks to improve policy neutrality will unavoidably worsen equalisation. The Commission must find a way to satisfactorily balance this trade-off.
- It could be that the current method is, in the Commission's view, the best available option. NSW Treasury's position is that aggregation of minerals is the preferred option.

• If, however, the mineral-by-mineral approach is retained, the rationale for such an approach should be consistently followed and applied for all minerals. To that end, subject to the mineral-by-mineral approach being retained, NSW Treasury supports separately assessing metallurgical and non-metallurgical coal. A separate assessment will better capture relative state fiscal capacities since different types of coal have significantly different values and their distribution varies across states.

16.1.2 Metallurgical versus thermal coal

- Coal is categorised as either brown or black coal, with black coal further divided between subbituminous, bituminous and anthracite grades. Different grades of coal have different characteristics and different uses.
- Higher grade coal (some bituminous and anthracite) can be used to produce coke, which is a critical input into the steel smelting process. This coal is therefore known as metallurgical or coking coal.
- Non-metallurgical coal is typically used for electricity generation (thermal coal) or in other industrial processes. Non-metallurgical coal broadly comprises brown, sub-bituminous and some bituminous graded coal.
- Differences in the quality and use of the various types of coal are well known and reflected in industry analysis and market activity. Every aspect of the coal market is segmented by type, such that metallurgical and non-metallurgical coal are effectively treated as separate commodities. Importantly, markets for buying and selling coal reflect these distinctions.
- Such industry / market segmentation is thoroughly standard and reflected in, for example:
 - o Geoscience Australia's Identified Mineral Resources report⁵⁴
 - The Commonwealth Department of Industry, Science and Resources' *Resources and energy quarterly*⁵⁵ report
 - State government data releases, including the Queensland *Coal industry review* statistical tables⁵⁶
 - State budget papers, per the excerpt from the 2023-24 Queensland Budget papers⁵⁷ referenced in Figure 16-4. Queensland's budget papers consistently reference metallurgical (coking) and thermal coal as separate categories of coal.
 - Private market monitoring and reporting, including:
 - Coal Services NSW's NSW coal industry statistics report⁵⁸
 - McCloskey by OPIS financial market reporting⁵⁹
 - Academic writing, including from the Reserve Bank of Australia⁶⁰
- Other minerals in the mining category can also characterised by different qualities and various potential end uses. However, no comparable standard market segmentation exists for other minerals as exists for coal. Prices for different grades are not generally quoted on financial markets, nor are analyses of demonstrated economic resources presented separately.

⁵⁴ <u>https://www.ga.gov.au/scientific-topics/minerals/mineral-resources-and-advice/aimr</u>

⁵⁵ <u>https://www.industry.gov.au/publications/resources-and-energy-quarterly</u>

⁵⁶ <u>https://www.data.qld.gov.au/dataset/coal-industry-review-statistical-tables</u>

⁵⁷ Queensland Budget Paper No. 2, *Budget Strategy and Outlook*, pg 101.

⁵⁸ <u>https://www.coalservices.com.au/statistics/</u>

⁵⁹ <u>https://www.opisnet.com/commodities/coal-metals-mining/</u>

⁶⁰ https://www.rba.gov.au/publications/bulletin/2019/sep/the-changing-global-market-for-australian-coal.html

- Thinking of coal types separately makes it clear that there are differences in both the price and geographical distribution of metallurgical and non-metallurgical coal that result in differential state revenue generating capacities.
- Metallurgical coal is of a higher grade than other coal and as such it has historically sold at a premium to thermal coal. Figure 16-1 below charts the price of high-quality metallurgical coal, other metallurgical coal, and thermal coal between 2000 and 2023.
- Apart from a small blip in 2022, high quality metallurgical coal prices have been significantly above thermal coal prices, with an average premium of 87 per cent over the full time period. Of the 94 quarters between March 2000 and June 2023, average export prices for high quality metallurgical coal were more than double those for thermal coal in 36 quarters (or 38.3 per cent of the time).



Figure 16-1: Historical coal prices, A\$/t

• The simple reality is that market participants recognise important differences in the quality of different types of coal and pay market prices that reflect those differences. Even in the hypothetical (though unrealistic) case that the different types of coal were not actually put to different uses, it would still be the case that higher quality coal is both readily identifiable and more valuable and would trade at a premium.

16.1.3 Comparing state coal industries

- States which produce metallurgical coal have a fiscal advantage over states which produce nonmetallurgical thermal or brown coal, since these states can generate higher royalties from the same quantity of production.
- Queensland and New South Wales are the dominant producers of coal in Australia. However, there are important differences in the composition of the two states' coal industries that give Queensland a relative fiscal advantage.
- In New South Wales, approximately 88 per cent of total coal produced is thermal coal, and only 12 per cent is metallurgical coal. NSW Treasury estimates that thermal coal has been responsible for 85 per cent of the state's coal royalties from 2019-20 to 2022-23.
- Coal royalties in New South Wales are levied as a flat percentage rate. The royalty split can therefore be closely approximated by applying the ratio of average metallurgical and thermal free-on-board prices and the proportion of total production quantity that is metallurgical coal to the value of total coal production. Table 16-1 provides a breakdown of relevant coal statistics in New South Wales.

		2019-20	2020-21	2021-22	2022-23
Total production	tonnes	197,848,595	185,926,106	184,043,897	170,186,009
- Metallurgical	tonnes	23,521,034	21,597,039	21,949,405	20,150,708
- Thermal	tonnes	174,327,561	164,329,067	162,094,492	150,035,301
Total production	%	100	100	100	100
- Metallurgical	%	12	12	12	12
- Thermal	%	88	88	88	88
Total royalties	\$	1,524,417,818	1,221,161,600	3,555,980,253	4,767,310,306
- Metallurgical	\$	289,157,502	195,922,748	587,816,905	542,405,074
- Thermal	\$	1,235,260,317	1,025,238,851	2,968,163,348	4,224,310,306
Total royalties	%	100	100	100	100
- Metallurgical	%	19	16	17	11
- Thermal	%	81	84	83	89

Table 16-1: New South Wales coal industry statistics

Source: Coal Services NSW, NSW Treasury calculation

- As can be seen, the New South Wales coal industry is dominated by thermal coal. As a result, the majority of royalty revenue is also derived from thermal coal, with metallurgical coal royalties making up a relatively small fraction of total royalties.
- This contrasts with Queensland. According to its Coal Industry Review Statistical Tables⁶¹, metallurgical coal made up an average of 63.9 per cent of net coal mining output (in tonnes) in the seven years from 2016-17 to 2022-23. This was primarily hard-coking coal. The detailed breakdown is provided in

Table 16-2.

• These figures are based on tonnes of output. Since metallurgical coal is more valuable, its proportion of Queensland's total value of coal production would be significantly higher. It should also be noted that these figures are lower than what is reported in Queensland's budget papers.

⁶¹ Available at <u>https://data.qld.gov.au/dataset/coal-industry-review-statistical-tables</u>

Year	Metallurgical - coking	Metallurgical - PCI	Thermal	Total	Proportion metallurgical
2022-23	107,599,944	31,987,865	83,811,551	223,399,360	62.5%
2021-22	120,133,811	15,803,346	82,453,895	218,391,052	62.2%
2020-21	148,347,260	-	72,523,925	220,871,185	67.2%
2019-20	152,835,776	-	86,940,027	239,775,803	63.7%
2018-19	155,889,460	-	93,289,986	249,179,446	62.6%
2017-18	159,882,534	-	89,326,345	249,208,879	64.2%
2016-17	154,565,608	-	82,771,155	237,336,763	65.1%
				Average	63.9%



Source: Qld coal industry review statistical tables

• Statistics on the value of coal production by type of coal broadly accord with what we know about the geographical distribution of coal in Australia. Figure 16-2 shows that Queensland has both more and higher quality coal deposits relative to other states, with all of its known coal reserves being higher quality black coal. New South Wales also has large deposits, with a mix of high quality black and lower quality brown coal. Victoria, by comparison, has predominantly lower quality brown coal which cannot be used for metallurgical purposes.

Figure 16-2: Recoverable demonstrated coal resources across Australia



16.1.4 Differences in fiscal capacity

• The differences in price and geographical distribution of the two broad types of coal create disparities in the revenue generating capacities of the two major coal producing states. These differences in fiscal advantage have been magnified in recent years (and will continue in future years) due to unprecedented coal prices and increases in royalty rates in Queensland. The NSW Government has also announced its intention to increase coal royalty rates.

- The basis for a separate assessment of different minerals in the mining category is that states can levy different royalty rates for different minerals. It is clear that the price disparity between metallurgical and thermal coal as well as the established differences between them recognised by the market enables different royalty rates to be applied.
- In Queensland:
 - a. royalties are assessed based on coal sales over a three-month period.
 - b. the same royalty rates technically apply to thermal and coking coal, no discounts apply to the type of mining operation.
 - c. the same royalty rates and assessment rules apply to coal sold domestically or exported. $^{\rm 62}$
 - d. however, royalty rates are determined separately for (1) each mining operation and for (2) coal sold domestically and for export. This process ensures that differences in the price of coal sold domestically and sold overseas are reflected into different effective royalty rates.
- Notwithstanding that the same royalty rates apply to both metallurgical and thermal coal, we contend that there are important differences in practice that result in effectively different rates.
- In its 2022-23 Budget, Queensland introduced new tiers to its existing royalty rate regime. In Queensland, the royalty rate for coal is based on the average price per tonne of coal sold, disposed of or used. Queensland first introduced a tiered coal royalty rate structure in 2008 with a two-tier structure, and in October 2012 expanded to a three-tier structure. In July 2022, Queensland introduced three new tiers to create a six-tier structure.
- Since 2012, the highest marginal royalty rate applicable has been a rate of 15 per cent, payable on the part of the average price per tonne which exceeds \$150. Three additional marginal tiers have now been introduced:
 - 20 per cent on the part of the average price per tonne that is more than \$175 but not more than \$225
 - 30 per cent on the part of the average price per tonne that is more than \$225 but not more than \$300
 - 40 per cent on the part of the average price per tonne that is more than \$300
- Queensland's current royalty rate structure is shown below.

	price per tonne, A\$	marginal rate
	up to \$100	7%
Existing tiers	\$100-150	12.5%
	\$150-175	15%
New tiers	\$175-225	20%
introduced	\$225-300	30%
1 July 2022	above \$300	40%

Table 16-3: Queensland's tiered royalty structure

• This new structure was originally estimated in the 2022-23 Budget to generate approximately \$1.2 billion in additional revenue over four years to 2025-26. Subsequently, this figure was revised substantially upwards in the 2023-24 Budget and 2023-24 Budget Update, with the measure generating billions of dollars in additional revenue.

⁶² Queensland has similar provisions to NSW to deduct freight and insurance costs from c.i.f. rates

- This additional revenue is largely driven by metallurgical coal. The Budget papers note that, over the ten years prior to the new tiers being introduced, average hard coking coal prices have been higher than the \$175 per tonne lower threshold approximately half the time, while average thermal coal prices have only exceeded the lower threshold around 2.5 per cent of the time.
- Figure 16-3 is taken from the Queensland Treasury public facing website⁶³. It charts average metallurgical and thermal coal prices per tonne, showing periods where the new royalty rates would have applied historically had they been in place. As can be seen, the tiered rates apply almost exclusively to metallurgical coal⁶⁴. As such, the additional revenue generated is driven almost entirely by metallurgical coal and is therefore not comparably available to other coal producing states. There is a de facto difference in effective royalty rates between the two types of coal.



Figure 16-3: QLD Treasury coal price royalty thresholds

- In fact, even the previous upper marginal rate of 15 per cent over \$150 per tonne applies, in the main, to metallurgical coal only.
- This contrasts with New South Wales, where royalty rates are applied based on the method of extraction (open cut and underground mines attract different rates). There is no distinction between metallurgical and thermal coal. Given differences in average extraction methods between the two types of coal, there may be a minor distinction in practice, as is the case in Queensland. Regardless, since New South Wales produces significantly less metallurgical coal, it does not have a comparable fiscal advantage to Queensland.
- Queensland's relative fiscal advantage was acknowledged in its own 2023-24 Budget papers. In noting developments in its royalty revenue forecasts, the papers state (emphasis added):

⁶³ <u>https://www.treasury.qld.gov.au/programs-and-policies/coal-royalties/</u>

⁶⁴ The chart does not show a period in 2022 where thermal coal prices exceeded the lower threshold.

Figure 16-4: Excerpt from Queensland 2023-24 Budget

A large proportion of Queensland's royalties comes from coal mining and **the majority of this revenue is attributable to the hard-coking coal**¹ (HCC) used in global steel production.

The lower level of royalties collected from thermal coal mining compared to HCC reflects the smaller volume of thermal coal mined in Queensland, the generally lower values per tonne of thermal coal and the tiered coal royalty rate system, where lower value coal is subject to a lower average royalty rate. In 2022, HCC, in volume terms, represented around 52 per cent of coal exported from Queensland, with semi-soft/PCI 21 per cent and thermal coal 27 per cent.

Coal royalties are expected to total \$15.296 billion in 2022-23, more than double that in 2021-22 and around 9 times the coal royalties raised in 2020-21.

- Such disparities in revenue capacity are taken into consideration where they exist for other minerals through the Commission's use of a mineral-by-mineral approach. Separately assessing coal by type would be entirely consistent with the rationale for a mineral-by-mineral approach. Maintaining a combined assessment of coal is not justified.
- NSW Treasury considers it likely that the materiality of a separate assessment may vary over time, depending on trends in coal markets. As Figure 16-1 demonstrates, the relative prices of metallurgical and thermal coal can vary significantly.
- This is no way undermines the validity and appropriateness of a separate assessment in times when it is material. The Commission can and should continue to monitor the materiality of a separate assessment, as it does for all other minerals.
- Taking all the above into account, NSW Treasury contends that fiscal equalisation will be meaningfully improved by separately assessing metallurgical and non-metallurgical coal, subject to ongoing materiality testing.

16.2 Data to support an assessment

- NSW Treasury acknowledges that we do not currently collect data on royalties generated by coal type. However, we can readily adjust our data to approximate the split of royalties between metallurgical and coking coal. We believe this estimation will be robust and reliable. Adjustments of this nature are common across revenue categories.
- We have access to the actual quantity of coal produced, split between metallurgical and thermal coal. Using this and the average annual prices of thermal and metallurgical coal, we have been able to derive a disaggregation of the value of coal produced and, subsequently, our royalty revenue. The process taken was as follows:
 - Multiply the actual quantities of metallurgical and thermal coal by their average annual prices.⁶⁵
 - To the extent that the sum of these products does not align to the actual total value of total production for the year, the separate production values are rescaled accordingly.

⁶⁵ Ideally, a weighted average price would be used. This would account for when coal is sold and would obviate the need to rescale the resulting values of production to align to the total value of production.

- The derived values of production are used to determine the proportions of total value attributable to metallurgical and thermal coal.
- These proportions are then applied to the total royalty revenue to derive the split of revenue attributable to metallurgical and thermal coal.
- This approach is mathematically equivalent to weighting the quantity of metallurgical coal by its price premium relative to thermal coal and then apportioning the actual value of total coal produced (and royalty revenue generated) to metallurgical and thermal coal using the weighted quantities. This produces the same result, but more closely resembles the approach taken by the Commission in other assessments.
- Since NSW applies the same royalty rate to both thermal and metallurgical coal, we believe the process identified above is reasonable. We also believe the same calculation can be readily made for other states. This enables the Commission to undertake a reliable, reproducible assessment which states can easily review for assurance.
- For Queensland, there is a clear difference in effective royalty rates between metallurgical and thermal coal. So additional steps will need to be taken to apportion total royalty revenue between the two types of coal. Since royalties are paid by individual mining operations, data should be available to support such an apportionment.
- Going forward, NSW Treasury can investigate the feasibility of obtaining more directly relevant data to underpin the proposed assessment. The Commission can separately investigate whether more complete data is available elsewhere, specifically from market monitoring service providers (e.g. Coal Services NSW, McCloskey). There may be a cost to access any available data.
- An alternative to collecting value of production and revenue data by type of coal may be to collect the data in average price ranges or bands, analogous to the approach taken in the land tax and stamp duty assessments. Assessing coal by price band would capture the effectively different royalty rates paid by metallurgical and thermal coal producers, since higher price bands will be disproportionately made up of metallurgical coal producers.
- Data may be more readily available in this form, given that this information would be required to be provided as part of royalty payment schemes. Additionally, the assessment may be more practical to implement.

