



Treasury

NSW Treasury

**Submission to the Commonwealth
Grants Commission
2020 Methodology Review**

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Table of Contents

1. Executive summary	3
2. Revenue Assessments	10
Land taxes.....	10
Payroll tax	15
Stamp duties on conveyances.....	15
Gambling taxes	18
Motor taxes	21
Insurance taxes	22
Mining revenues	23
Other revenues.....	27
3. School education	28
4. Post-secondary education	33
5. Justice	35
6. Health	42
7. Welfare	56
8. Services to communities	64
9. Services to industry	69
10. Transport	72
11. Roads	83
12. Housing	91
13. Wages costs	95
14. Administrative scale.....	96
15. Physical and financial assets	100
16. Geography used by the Commission	102
17. Measuring Socio-Economic Disadvantage.....	104
18. Other expenses	111
19. Other disabilities	114
20. Draft 2020 Review Quality assurance strategic plan	117
21. Further information and contacts	118
Attachment A: NSW Treasury commissioned report from the ABS on an alternative measure of Socio-Economic Disadvantage	

1. Executive summary

Introduction

- 1.1. This first major submission from NSW Treasury to the 2020 Methodology Review (the 2020 Review) responds to the Commonwealth Grants Commission (the Commission) staff Draft Assessment Papers released on 20 April 2018.
- 1.2. New South Wales believes Australia's system of horizontal fiscal equalisation (HFE) penalises states and territories (states) that are fiscally responsible and pursue reform to drive increased productivity and economic growth. Australia's system is also one of the most complex systems of equalisation in the world. The issue of complexity is exacerbated by arrangements that are neither transparent or accountable.
- 1.3. These arguments are supported by the Productivity Commission's (PC) findings set out in its report *Horizontal Fiscal Equalisation* released on 5 July 2018 and its recommendation that a new equalisation benchmark be adopted – equalisation to the average state. The PC considered this benchmark as a 'reasonable' standard which strikes a better balance between economic efficiency and growth with fairness and equity.
- 1.4. New South Wales continues to support distribution of GST revenues between states, untied, in full and on an equal per capita (EPC) basis. An EPC distribution is consistent with the objective of HFE as GST revenues are transferred from fiscally stronger to weaker states. It is administratively simple, transparent and more predictable. It is more contemporaneous and stable over time. An EPC distribution has minimal data requirements and avoids potential inconsistency associated with the application of judgment and discounting.
- 1.5. Importantly, an EPC distribution of GST revenues between states is policy neutral and disincentives for economic reform are removed. Fairness is enhanced as it means those states that undertake challenging economic reform retain a greater share of these benefits.
- 1.6. The Commonwealth response to the PC report will significantly change the distribution of GST and result in fiscal uncertainty for states:
 - 'in-system' methodology changes will affect how the Commission assesses states' relative fiscal capacity through potentially multiple, interacting channels.
 - the proposal will shift the distribution of GST away from equalisation to the strongest state to equalisation to the stronger of New South Wales or Victoria. The future financial impact of this variable standard is unknown.
- 1.7. NSW Treasury, along with other states and the Commission, recognises that this 2020 Review will be impacted by any plan implemented by the

Commonwealth through revised Terms of Reference (ToR) issued to the Commission. Much is yet to be agreed between states and the Commonwealth regarding its HFE plan and, accordingly, the timing of such ToR being issued is highly uncertain.

- 1.8. The Commission should engage closely, and work constructively with states to consider how ‘in-system’ methodological changes decided by the Commonwealth are given effect by the Commission. Changes to the Commission’s assessment methodology have the potential to shift large amounts of GST revenues between states. Accordingly, this means accountability by the Commission to states must be recognised – GST revenues comprise a large share of state budgets.
- 1.9. The nature and extent of possible methodological changes remain unclear, but are likely to present granular questions across different revenue and expenditure assessments. The Commission will need to engage with the states to ensure that such changes are applied in a consistent way, are practicable, do not overly rely upon judgment and deliver simplification. States must have appropriate opportunity to carefully consider any proposed methodological change to help avoid the risk of unintended consequences.
- 1.10. NSW Treasury will continue to monitor, and keep under review any change to the Commission’s assessment methodology as the 2020 Review progresses. More generally, we reserve an ongoing right to make submissions on issues raised throughout the 2020 Review.
- 1.11. NSW Treasury requests that the Commission work flexibly with states regarding the timetable for the 2020 Review. States, along with the Commission, must have the opportunity to also consider the impact of any methodological changes and their potential interaction with submissions made in the course of the 2020 Review.

Key themes

- 1.12. This submission highlights some key themes relating to population density, terrain, congestion, cultural and linguistic diversity, household financial stress and counter-terrorism that disproportionately impact the demand for and cost of service delivery in New South Wales, as compared to other states. New South Wales, and Sydney in particular, is not unique in being impacted by these themes – Melbourne and other capital cities will face some of these same cost pressures as they grow. However, we consider that New South Wales has some unique challenges and a first mover cost disadvantage.
- 1.13. Sydney’s growing population is constrained by the Sydney Basin, a ring of national parks, Sydney Harbour and its catchments and hilly topography. These place limits on land available for settlement, drive ever increasing population density and property prices. Continued growth in both median property prices

and rentals costs at rates exceeding incomes sees Sydney experiencing the highest levels of housing and rental stress, and therefore higher levels of household financial stress, increasing demand for government services.

- 1.14. To this end, NSW Treasury has been working with the Australian Bureau of Statistics (ABS) to revise the Index of Relative Socio-Economic Disadvantage to more adequately capture the impact of financial stress on socio-economic disadvantage. We encourage the Commission to work closely with the ABS to adopt this updated Index as part of its assessments.
- 1.15. More affordable housing on the outer fringes of Sydney has attracted new residents, but economic opportunities remain concentrated in the historic centre of Sydney. This means there is a need to move a sizeable proportion of Sydney's population from west to east, and back again, each day with this causing congestion at unprecedented levels.
- 1.16. Population density, terrain and congestion together are key drivers of cost that affect the provision and ongoing maintenance of New South Wales roads and public transport task. Investment choices are constrained and increasingly more complex, highly technical and therefore costly engineering solutions are required to supply the road and transport networks required to provide an acceptable level of service. Intelligent transport management systems are needed to manage, maintain and keep safe a complex road and transport network. Network optimisation continues but system-wide, marginal costs are also rising dramatically, due to the growth in the size and complexity of the underlying transport task.
- 1.17. As Australia's largest, most densely populated city and economic centre, Sydney continues to draw in new people. Sydney has the largest intake of overseas migrants, resulting in a higher non-English speaking population than in most other cities. These migrants, especially non-economic migrants, are a higher cost customer group for services delivered by the NSW Government.
- 1.18. Sydney is a major Asia-Pacific financial hub. More than three-quarters of all foreign and domestic banks in Australia are headquartered in Sydney. Sydney is the base for the Reserve Bank of Australia, the Australian Stock Exchange and the Futures Exchange.
- 1.19. These same factors make Sydney a more attractive target for the threats of terrorism, cyber-crime and organised crime. Protecting against this presents a real, growing and unavoidable cost on our justice services (including policing) and road and transport systems so that the risk of harm to our community and public assets and infrastructure is reduced. In line with the changing patterns of crime – increasingly complex, and transnational – so too has the nature of the modern policing task changed in quite fundamental ways.

Conclusions on significant assessment proposals

1.20. Key recommendations within this submission include:

- The use of State Revenue Office (SRO) land value data over other alternatives. SRO provide the highest quality data source and it best reflects the way land tax is levied.
- The continuation of an EPC assessment for gambling revenues due to the significant difficulties in constructing a policy-neutral differential assessment using either an activity approach, an expense approach, or a broad indicator.
- Workers' compensation insurance and Compulsory Motor Vehicle (CTP) insurance being assessed on an EPC basis, due to the significant impact of state policies on the size of any the proposed revenue base associated with these insurances.
- Aggregation of the mining revenue assessment and the need to avoid any discounts associated with discretionary policy changes by a dominant state as this undercuts a fundamental tenet of HFE.
- Fire and Emergency Services Levies (FESLs), whether imposed on land, insurance, or motor vehicles, being treated as user charges and assessed on an EPC basis in line with their user charge characteristics.
- State expenditure under the schools education assessment should be assessed partly on an EPC basis as 25 per cent of expenditure is driven purely by population with the remaining 75 per cent linked to socio-demographic composition (SDC).
- The Commonwealth's Schooling Resource Standard (SRS) should continue to be used to assess need for Commonwealth funded government schools. Funding provided by the Commonwealth for government schools and its corresponding expenditure should be effectively excluded from the calculation of GST relativities – consistent with the 2015 Review Terms of Reference.
- The higher costs associated with students with a disability and culturally and linguistically diverse (CALD) students should be reflected in the schools education assessment consistent with the SRS. The Nationally Consistent Collection of Data (NCCD) on School Students with Disability is the best available and most complete dataset for determining a disability for students with a disability.
- The inclusion within the socio-demographic drivers for justice assessments of financial stress (as measured by housing stress) and the need to recognise community policing as a larger share of police activity.

- Moving the assessment of health expenditures to be more in line with the nationally agreed model for Commonwealth funding using National Weighted Activity Units (NWAUs).
- Combining expenses for non-admitted patients and community health services to better reflect how states provide health services to its citizens (that is, 'what states do').
- The need to fundamentally reassess the impact of non-state services on the level of state health services expenditures.
- The need to better reflect the impact of financial stress on the demand for family and child services through modified socio-economic status indicators and reassess the current assumed regional cost gradient to be consistent with actual service delivery costs in New South Wales.
- Reconsider the need to disaggregate community development spending into Indigenous and non-Indigenous components given the additional complexity that will arise.
- Apply a discount of at least 25 per cent to any disabilities assessed for regulation and other industry support services due to the reliance on a judgement-led, rather than a data-led approach, and the potential for state spending to be heavily policy driven.
- Transport assessment needs should take into account the impact on both transport demand and unit costs of population, population density, congestion and terrain.
- The need to better reflect what states do by adopting actual road length as the starting point for roads assessments and the additional costs associated with the extensive use of bridges and tunnels.
- The inclusion of housing stress, CALD, and refinements or discounting to the regional cost gradient in a revised assessment of housing costs.
- The need to test the plausibility of administrative scale cost estimates for individual expense categories.

A broader assessment approach

1.21. Given the myriad differences between jurisdictions, the pursuit to improve HFE will, over time, inevitably results in increasing levels of assessment complexity. In the past, the march towards precise equalisation has been constrained by two factors:

- The lack of robust data to support proposed differential assessments, and

- A conscious decision to impose a disability materiality threshold, recognising that precise equalisation is not possible and further complexity does not necessarily result in improved equalisation.
- 1.22. In the establishment of system of HFE in a greenfield environment, the potential to adopt a broad assessment approach may be possible as the counterfactual is unknown. However, given the position we find ourselves in after a period of extensive equalisation, any move to a broader assessment approach is unlikely to be a realistic option. Accordingly, the pursuit of other avenues to simplify the HFE process are likely to be more fruitful.

Assessment aggregation, simplification and materiality

- 1.23. HFE has been the subject of considerable criticism on the grounds that it is perceived to be overly complex and not understood by the vast majority of the population. Complexity, in itself, is not a problem if the system is perceived to work effectively. For example, few people have any knowledge of the complexities of manufacturing their mobile phone, but they accept that it works effectively.
- 1.24. HFE complexity becomes a problem when it is combined with significant dissatisfaction with its outcomes. In these circumstances, the inability to explain the details of the HFE assessments to non-experts becomes a touchstone for criticism, even where the HFE assessments are objectively rigorous and fair. This has been most recently demonstrated through the influential criticism of Western Australians.
- 1.25. In the current context, increasing the simplicity of HFE is likely to translate into broader understanding and therefore potentially greater public support for its outcomes.
- 1.26. In the past, simplicity has been equated with fewer assessment categories and a higher materiality threshold which eliminates disabilities which have a minor impact on the distribution of GST grants. Unfortunately, assessment aggregation has, in practice, tended to result in sub-assessments within a single combined category being undertaken.
- 1.27. We believe the main source of greater HFE simplicity in the future is likely to arise from increases to the materiality threshold. In practice, increases in the materiality threshold moves HFE in Australia more towards the broader assessment approach that operates in other countries. Doubling the current materiality threshold to \$60 per capita would be an appropriate step in this direction as part of the 2020 Review. This represents a relatively modest increase that balances simplification with a practical recognition of the fiscal circumstances of recipient states.
- 1.28. NSW Treasury expects that some states will argue that a higher materiality threshold undermines the extent to which HFE is achieved. We would caution

against accepting this view. In reality, the disabilities assessed by the Commission are likely to be only a biased subset of the full set of disabilities that exist. Given this, it is important that any assessed disabilities are material and unambiguously move HFE outcomes in the right direction.

- 1.29. NSW Treasury suggests that the Commission examine the materiality of the following areas in its pursuit of simplifying its assessments.
- Removal of the payroll tax and land tax threshold adjustments
 - Removal of the value distribution adjustments for land tax and transfer duty, and
 - Combining mining revenue assessments into one category.

Equalisation to a reasonable standard

1.30. The Productivity Commission discussed the issue of moving HFE to a reasonable standard and considered a range of options in its report to the Commonwealth Government. The conceptual basis behind equalisation to a reasonable standard is based on a number of premises:

- full equalisation may result in fiscal transfers that are unacceptably large to donor states
- the possible economic efficiency impacts of full equalisation, and
- the avoidance of over-equalisation, given the imprecision of the HFE process.

1.31. With the proposed movement of the equalisation standard to the stronger of NSW or Victoria, all states, other than Western Australia, will be equalised to something less than at present. The standard under this model will vary over the course of the economic cycle in Western Australia. Whether this variable standard can be considered 'reasonable' is a moot point, particularly at times when the fiscal circumstances of Western Australia are strong. Certainly, the variability of the proposed standard undermines its conceptual claim for being considered 'reasonable'.

1.32. From a NSW perspective, equalisation to a reasonable standard would entail topping up the fiscal capacities of states through the GST allowing them to provide services of a standard five per cent less than the national average with any residual GST distributed on an equal per capita basis.

2. Revenue Assessments

Land taxes

Revenue inclusions

Staff propose to recommend the Commission:

- include all land based taxes in the Land revenue category, except those taxes deemed to be user charges
 - treat planning and development levies and Victoria’s Growth areas infrastructure contribution as user charges
- include ACT replacement revenue in the category, provided the ACT can provide an estimate of the revenue
- include property based FESLs in the Land revenue category, insurance based FESLs in the Insurance tax category and motor vehicle based FESLs in the Motor taxes category.

2.1. NSW Treasury notes the staff recommendation to include all land based taxes in the Land revenue category, except those considered to be user charges. Consistent with this, we also note the intention to treat planning and development levies, Victoria’s Growth areas infrastructure contribution and New South Wales’ parking levies as user charges.

FESLs should be excluded from the land tax assessment as a user charge

- 2.2. The Staff Draft Assessment Paper proposes to include property-based FESLs in the Land revenue category and move it from an EPC assessment to a differential assessment based on land values.
- 2.3. NSW Treasury accepts that FESLs (whether imposed on land, insurance or motor vehicles) are taxes in a strict definitional sense, but we believe there are significant differences and characteristics that argue for their continued treatment as a user charge and for them to be assessed on an EPC basis.
- 2.4. Indeed, the Commission held the view that FESL revenues were user charges in the 2010 Review, excluding revenue from FESLs collected by insurance companies from its insurance tax assessment:

“because these levies are more in the nature of a user charge than a transactions tax.” [Ref: CGC 2010 Review, Volume 2, p 114].

2.5. FESLs have significant user charge characteristics:

- The FESL revenue target is set to explicitly recover the cost of the services provided, with any funds raised hypothecated to a specific service – fire and emergency services.
 - FESL taxes are the only taxes that are backsolved. This means the rate of tax is determined to achieve a pre-defined revenue target. For other taxes, it is the tax rate that is pre-determined by legislation and the state has little control over the actual revenue raised.
- FESLs include a significant fixed charge element in the structure of the levies. For example;
 - Victoria – Fixed levies of \$109 or \$221 depending on the classification of the property.
 - Queensland, Western Australia and South Australia – Significant fixed levies apply depending on the property's use and location.
 - New South Wales – While insurance premium mark ups as a result of the ESL range from 20-33 per cent, insurance premiums themselves have a significant fixed charge element which translates into the ESL having a fixed component.

2.6. If differential needs are assessed based on land values, the backsolved nature of FESL has several implications for the Commission's revenue assessments. Consider two states that are identical in all respects except State A has higher land values. In this circumstance, the following will occur.

- State A will be assessed to have a higher taxable capacity – but no capacity to raise the assessed level of revenues due to the FESL expenditure cap. Normally states have a policy choice whether to levy a tax rate at, below or above the national average.
- State B will be assessed to have above average taxing effort - but no capacity to reduce its measured revenue effort. Normally states have a policy choice to adjust their tax rates to achieve above, equal or below average revenue effort.

- 2.7. Key differences between FESL-type taxes and other taxes include:
- The tax base is used to distribute a fixed revenue burden across the community rather than determine the aggregate amount paid.
 - FESL revenues are unaffected by changes in economic activity during a financial year. Over time, FESL tax rates are mostly inversely proportional to changes in the revenue base:
 - Year to year changes in property values or insurance premiums that exceed the rate of growth in fire and emergency services expenditure simply lead to a reduction in the rate of tax.
 - Doubling of property values does not lead to an increase in the effective taxable capacity of the state. If the Commission uses property values to assess the taxable capacity of each state, they will be assuming the exact opposite of 'what states do'.
- 2.8. The Draft Assessment Paper refers to the experience in New South Wales where a proposed FESL property levy did not proceed as evidence that property and insurance based levies differ. While New South Wales did not proceed with its land value based FESL, NSW Treasury does not consider that this provides support for adopting a differential tax assessment.
- The property based FESL in New South Wales was not implemented because of a change in incidence of the tax which was perceived to be unacceptable. In our view, this undermines any argument that land values should be perceived as simply a measure of capacity to pay.
- 2.9. NSW Treasury therefore considers that revenue from FESL should be moved to the Other Revenues category and assessed by the Commission on an EPC basis as they constitute a user charge. This would ensure that revenues raised from FESL are treated in a manner that is consistent with the principle of HFE.

Assessing the tax base

Staff propose to recommend the Commission:

- continue to use land values as the basis of the Land revenue capacity measure.

2.10. Noted.

Staff propose to recommend the Commission:

- Assess the Land tax component using adjusted land values
- Adjust land values for
 - The scope of taxation, excluding land values relating to principal places of residence and land used for primary, general government and charitable purposes
 - State policies on aggregation, including the treatment of jointly owned land, if it can be done reliably
 - The progressivity of Land tax
- Not make a separate assessment of foreign owned surcharges, but allow the surcharge to affect the assessment through increased effective rates of tax.

2.11. NSW Treasury notes the intention of staff to recommend assessing the land tax component using adjusted land values; exclude land values relating to principal places of residence and land used for primary, general government and charitable purposes; and reflect state policies on aggregation, including the treatment of jointly owned land, if it can be done reliably, and the progressivity of land tax.

2.12. Commission staff also propose to recommend not undertaking a separate assessment of foreign owner surcharges, and for such revenues to affect the land revenue assessment through higher effective rates of tax. NSW Treasury supports this approach. A separate differential assessment of foreign owner surcharges (for both land tax and transfer duty) would present difficulties for the Commission to reliably measure the fiscal capacity of states:

- Firstly, the absence of a national registry or database on foreign land ownership or transfers presents difficulties in identifying the distribution of landholdings held by foreign property owners amongst states.
- Secondly, the revenue base for foreign owner surcharges is narrow, and the basis of imposing the tax differs considerably between states. This would make it difficult for the Commission to define what constitutes average policy to support a differential assessment. For example, a foreign person in New South Wales, for the purposes of a foreign owner surcharge, does not include temporary visa holders that are ordinarily resident in Australia. By contrast, a foreign person that is ordinarily resident in Australia still attracts foreign owner surcharges in both Victoria and Queensland.
- Thirdly, the potential elasticity effects that each state's tax rates have on their revenue base, and the revenue base of other states, means the Commission cannot measure each state's revenue base in a reliable, policy neutral manner.

Staff propose to recommend the Commission:

- assess other land based using land values for residential, commercial and industrial properties.

2.13. Noted.

Data to assess state revenue capacity

Staff propose to recommend the Commission:

- seek views from the Officer Working Party on which is the most appropriate source of land value data and what adjustments may be required to make States' measured tax bases comparable.

2.14. NSW Treasury notes that the Commission has been using SRO data since the 2010 review and prior to that Valuer-General (VG) data. The Commission has requested states views on the advantages and disadvantages of the three potential data sources – SRO, VG and ABS data.

2.15. Revenue New South Wales uses raw VG data as its primary input source and makes several adjustments before data is provided to the Commission. This data best reflects the way land tax is levied: inter alia, it excludes non-taxable principal place of residences and aggregates other land holdings.

2.16. ABS data is reliant on market value sale prices, not unimproved site values, which requires further estimation on relevant values for the improvements on the land. Further ABS data is:

- reliant on 100 per cent census participation and accurate identification of land assets owned
- does no valid principal place of residence identification
- cannot identify aggregation and joint ownership
- not available by value range, and
- would require further assumed approximations from other data sources including building completion rates, demolition rates etc.

2.17. VG data used in isolation is limited by the fact that it does not identify non-taxable from taxable residential land and aggregated land ownership.

Staff propose to recommend the Commission defer consideration of:

- As elasticity adjustment until it has considered the consultant's report on elasticities
- A discount until the assessment method is settled.

2.18. Noted.

Other issues

2.19. NSW Treasury requests that the Commission test the materiality of the current value ranges disability. This review provides an opportunity for the Commission to simplify the assessment with fewer value ranges.

Payroll tax

Staff propose to recommend the Commission:

- retain the 2015 Review payroll tax assessment.

2.20. Noted.

Stamp duties on conveyances

Revenue inclusions

Staff propose to recommend the Commission include in the category:

- revenue from duties on the transfer of real and non-real property, including foreign owner surcharges
- an amount equal to the concessional duty provided to first home owners.

2.21. NSW Treasury notes that revenues raised from non-real property transactions, foreign owner surcharges and revenue foregone from concessions to first home owners will be included within the stamp duty assessment.

2.22. However, we believe the current approach of not assessing differential needs for the provision of stamp duty concessions, within the housing assessment, results in an inconsistency within the Commission's methodology.

2.23. Consider, for example, a scenario involving two identical states (State A and State B) that impose the same progressive stamp duty rate scale and offer a full stamp duty exemption for first home buyers. Assume the only difference between the states is that first home owner transactions are more concentrated at low values in State A, while transactions in State B are at slightly higher values.

2.24. Under the Commission's methodology adopted at the 2015 Review, each state would be assessed as having the same capacity to raise stamp duty and the same (equal per capita) expenditure needs within the housing assessment. The budget impact of the policy to provide first home owner stamp duty concessions is greater in State B than State A as less actual revenue is raised. This additional cost is not currently offset by a higher GST share.

Drivers of revenue capacity

Staff propose to recommend the Commission:

- assess stamp duty on conveyances using the value of property transferred
- adjust the value of property transferred
 - to remove values relating to non-real property, corporate reconstructions and sales of major assets
 - for the wider scope of unit trusts and commercial real property in selected states
 - for the progressivity of transfer duty
- assess duty from transactions on non-real property, corporate reconstructions and sales of major state assets in the EPC component.

Property component

Non-real property

2.25. NSW Treasury notes the proposal to exclude non-real property transactions from SRO data and treat any revenue raised on an EPC basis. The majority of states have abolished this revenue source and the value of real property transactions is not a reasonable proxy for non-real property transactions.

Off-the-plan concessions

2.26. NSW Treasury notes the proposal to no longer make an adjustment to the revenue base of Victoria for its off-the-plan concession. Two adjustments are required to the Victorian data which, taken together, are significant and material to the stamp duty assessment. The first adjustment relates to the size of Victoria's tax base, while the second adjustment relates to where these transactions appear within the value range data provided to the Commission by the Victorian SRO.

2.27. We understand the data provided by the Victorian SRO classifies off-the-plan concession transactions to a value range which equates to the concession transaction value, rather than the pre-concession transaction value that applies in all other states. We consider this approach to be incorrect and has meant the size of the tax base and progressivity adjustment for Victoria has been understated since the 2010 Review.

Unit trusts

2.28. NSW Treasury notes the removal of transactions associated with the wider definition of unit trusts in some states.

Commercial transfer duty

2.29. NSW Treasury notes the recommendation to adjust the revenue base of the ACT and South Australia, to reflect the phasing out of commercial transfer duty in both those states.

2.30. However, we note that the 2015-16 Budget Papers indicate that non-residential transfer duty in South Australia was expected to represent around 17 per cent of revenue in 2018-19 once fully removed.¹ This would produce an increase in its revenue base of around 21 per cent, rather than only 12.7 per cent indicated by Staff Draft Assessment Paper CGC 2018-01-04-S.

EPC component

Corporate reconstructions and major asset sales

2.31. NSW Treasury notes the proposal to assess foregone stamp duty revenue from corporate reconstructions, and revenues from major asset sales, on an EPC basis.

Land rich and landholder transactions

2.32. NSW Treasury notes the intention to include land rich transactions by listed companies in the property revenue base.

2.33. There are significant variations in each state regarding the tests for a land rich landholder, threshold land values, landholder entities, land classification and acquisition thresholds and relevant rates. This means an EPC assessment may be warranted. An EPC approach would reduce the complexity required for the Commission to recognise the threshold policies of states.

Other issues

Staff propose to recommend the Commission defer consideration of:

- an elasticity adjustment until it has considered the consultant's report on elasticities.

2.34. Noted.

¹ The actual percentage reduction would be more than 17 per cent, as some revenue received in 2018-19 would relate to taxable transactions in 2017-18.

Gambling taxes

Staff propose to recommend the Commission:

- continue to investigate a disaggregated gambling assessment based on HILDA data
- continue to investigate an aggregated assessment based on broad measures of gambling capacity
- pending the outcome of these investigations, assess gambling taxes [equal per capita] EPC.

- 2.35. NSW Treasury notes that gambling taxes are currently assessed EPC and were last differentially assessed in the 2004 Review.
- 2.36. Gambling policies differ significantly between states. Gambling tax revenue strongly reflects each state's policy towards gambling.
- 2.37. NSW Treasury notes the Commission's comments at the 11 July 2018 Officer Working Party meeting that it had been unable to successfully construct a differential assessment using either an activity approach, an expense approach or a broad indicator.
- 2.38. NSW Treasury recommends the continuation of an EPC assessment.

Policy neutrality

- 2.39. Gambling taxes are heavily influenced by current state policy and longstanding historical factors. The variables which determine each state's gambling revenues are diverse and debatable making the identification of a robust, policy neutral revenue base problematic. The Commission found as such in the 2010 Review, stating:

"We consider differences in State policies on regulatory and related matters affect the interstate comparability of ABS estimates of gambling expenditure in each State and those effects cannot be reliably removed. Nor is it possible to construct policy neutral proxies by reference to the underlying factors that drive gambling expenditure." [R2010 p142]"

- 2.40. The clearest example of policy difference relates to the availability of poker machines, where numbers differ markedly across states with Western Australia restricting gaming machines to its casino. Policy differences can also impact gambling tax revenue through several other channels:
- Different forms of gambling, and even the same form of gambling in different venues, such as poker machines in clubs or hotels in New South Wales, can attract different tax rates, which may reflect harm minimisation initiatives.
 - Varying regimes for regulating gaming machines, such as restrictions on note acceptors, maximum bet limits, game speed and other similar machine characteristics, can impact gaming expenditure.
 - Policies in industries related to gambling, including jurisdictional support of the racing industries and investments in significant events, race fields, legislation and tax credits for industry support can all increase a jurisdiction's capacity to generate wagering activity.
 - The approach to venue licence approvals can impact gambling revenue, with land-based gaming continuing to be the largest source of government revenue from gambling.
- 2.41. Since the 2015 Review, there have been several major changes in the Australian gambling industry which have further widened policy differences amongst states:
- New South Wales has introduced a Restricted Gaming Facility licence for the second Sydney casino, which permits the licensee to operate a facility that does not include poker machines and is unavailable to the general public.
 - New South Wales has further restricted the capacity of betting service providers to advertise inducements, which is designed to remove the incentive for individuals to set up new betting accounts and therefore reducing betting frequency and intensity.
 - Most states have moved to tax net wagering revenue based on the point of consumption of the service.
 - Victoria has introduced a prohibition on the publication of static betting advertising in certain locations (e.g. proximity to schools, on or above public roads or public transport infrastructure).
 - Tasmania has temporarily suspended new applications to authorise possession of electronic gaming machines, pending the introduction of a community interest test for first time applicants, or applicants with a six-month break in possession.
- 2.42. Any revenue assessment using gambling expenditure will also be complicated by divergent growth across the different gambling types. Over the past five

years, sports betting expenditure has grown at a significantly greater rate than other forms of gambling while gaming machines and race betting expenditure has grown at a slower rate.

Socio-economic and behavioural factors

2.43. NSW Treasury notes several difficulties associated with using socio-economic and behavioural factors as a measure of state's fiscal capacity.

2.44. In the context of an aggregated gambling assessment, it is doubtful that a unique capacity driver can be identified that reflects gambling expenditure across the wide range of gambling services. The Commission has considered this point in the context of household income, stating in the 2015 Review:

“We found no link between household income and gambling activity. In the case of poker machines, there was some evidence that low income predicted higher levels of gambling, but the evidence was not sufficiently robust to use. Prevalence studies suggest some forms of gambling (for example, horse racing or casino gambling) may be associated with higher incomes but, again, the effect could not be quantified. In addition, any effect could potentially be offset by the influence of low income on poker machine gambling, if that could be proven.”

2.45. The HILDA survey looks at gambling activity and expenditure in a typical month, providing a socio-demographic profile of regular gamblers but not all gambling activity. The estimates therefore do not represent total gambling expenditure for the year, which would include amounts from high and low spend months, and expenditure on activities where participation was less than monthly.

2.46. The HILDA survey suggests that there is little evidence of substitution across the various forms of gambling. For example, horse racing gamblers are unlikely to be significant gamblers on lotteries. The lack of substitutability further complicates attempts to implement a differential gaming revenue assessment, whether on an aggregated or disaggregated basis.

2.47. National gambling expenditure indicates some common characteristics of regular gamblers such as participants being primarily; males, aged 30 to 64, no more than 10 years schooling, born in Australia, married/de facto, employed full-time and high income. However, across different gambling types, demographic drivers of expenditure vary widely. For instance;

- women are more likely to gamble on scratchies, lotteries and bingo
- mean expenditure on electronic gaming machines and sports betting is much higher for those living alone, and
- those aged under 30 spent more on sports betting than other age groups.

- 2.48. Casino revenue is also somewhat independent of demographic drivers as a significant portion of expenditure is sourced from overseas based gamblers, making residential demographics less relevant.

Motor taxes

Staff propose to recommend the Commission:

- retain the 2015 Review Motor taxes capacity measures
- present the assessment of stamp duty on motor vehicles transfers in the Motor taxes category.

Presentation of stamp duty on vehicle transfers

- 2.49. NSW Treasury notes the Commission's proposal to move the assessment of stamp duty on the transfer of motor vehicles to the Motor taxes category. This change would have no effect on GST distribution.

Updating the split of revenue between heavy and light vehicles

- 2.50. The Commission indicates that they are currently deriving the split between heavy and light vehicles from data provided in the 2009 Update. Updated data should be utilised for this split.

Progressive rates of vehicle transfer duty

- 2.51. NSW Treasury agrees with the Commission that any adjustment for progressive rates of tax would be complicated by the range of other criteria applied by states to determine the rate of transfer duty. This includes differences in rates ranging from New South Wales relatively basic rate structure to other states that take account of emissions i.e. engine capacity/fuel type used and/or vehicle classification.

Treatment of fire and emergency services levies (FESLs)

- 2.52. NSW Treasury notes that the revenue in this category includes fire and emergency services levies imposed on motor vehicles. These levies are more akin to a user charge and should be assessed EPC (see further discussion in our submission on land revenues). As such, this revenue should be excluded from the motor taxes revenue base.

Insurance taxes

Staff propose to recommend the Commission:

- retain the 2015 Review insurance tax assessment, but include workers' compensation duty in the category and assess it using the general insurance base.

Treatment of insurance based FESLs

2.53. As outlined in comments regarding land revenues, NSW Treasury believes that FESL revenues should be considered by the Commission as akin to a user charge and assessed on an EPC basis.

Workers' compensation insurance

- 2.54. NSW Treasury does not support the inclusion of workers' compensation duty in the insurance tax assessment
- 2.55. NSW Treasury notes significant differences in state policy regarding taxation of workers' compensation. Most states do not impose tax on workers' compensation policies, with reduced rates or exemptions in the remainder.
- 2.56. NSW Treasury also notes the level of premium in each state reflects government policy regarding both benefits and the institutional structure of the sector. Given this, revenue raised from taxes on workers' compensation premiums should be assessed on an EPC basis.

Compulsory Motor Vehicle (CTP) insurance

- 2.57. NSW Treasury does not support the inclusion of CTP premiums within the insurance tax base. As with workers' compensation, premium revenue reflects policy differences between states unrelated to underlying taxable capacity. In particular:
- Private or public-sector underwriting – a private sector underwritten scheme will include a profit margin within premiums.
 - Levels of coverage – schemes may be no-fault or fault based, where some schemes offer limited or no at-fault coverage and others provide a lifetime coverage for the same injured people.
 - Differences in the level of benefits:
 - For weekly benefits – some schemes may cap the level at different multiples of the relevant average weekly earnings (for the state), as well as capping at a percentage of prior earnings i.e. 75 per cent vs 85 per cent for weekly payments after six months on benefits, and
 - Payments for care – paid care only versus gratuitous care.

- Levels of accidents per capita – demography and road conditions vary between states, which affects the rate of accidents
- Differences in the propensity to claim – common law tends to drive legal provider involvement who are predominantly paid as a percentage of settlement size versus a defined benefit scheme, where payments are ongoing but based on prior earnings with no or little ongoing legal involvement.
- Differences in the quality of claims management – a monopoly publicly underwritten scheme may be less efficient than a competitive privately underwritten scheme.

2.58. Given this, differences in per capita premiums are not reflective of differences in taxable capacity. We therefore believe that CTP premiums should be excluded from the Commission’s assessed tax base with any revenues being assessed on an EPC basis.

Mining revenues

Staff propose to recommend the Commission:

- the Mining revenue category continue to comprise: state royalty revenue and grants in lieu of royalties.

2.59. NSW Treasury supports the mining revenue assessment continuing to comprise state royalty revenue and grants in lieu of royalties. Mining revenues contribute significantly to the fiscal capacity of states and should therefore remain differentially assessed.

Drivers of revenue capacity

Staff propose to recommend the Commission:

- use value of production as the capacity measure for mining revenue
- collect value of production data from States on a free on-board basis.

2.60. NSW Treasury notes the intention of the Commission’s staff to recommend continuing the use of value of production as the capacity measure for mining revenue, and to collect value of production data from states on a free on-board basis.

Assessment approach

Staff propose to recommend the Commission continue to:

- assess mining revenue capacity using a mineral by mineral approach.

2.61. NSW Treasury notes the proposal by Commission staff to continue the assessment of state mining revenue capacity by using a mineral by mineral approach. The Commission should consider an aggregate mining revenue assessment as a way to address concerns over policy neutrality (and drive simplicity) given the dominance displayed by some states in individual minerals.

Policy neutrality and discretionary changes to royalty rates

Staff propose to recommend that, if a dominant State makes a discretionary change to its royalty rates, the Commission:

- assess a portion of the revenue increase EPC
- use the formula (set out in Attachment A [of the Commission's draft assessment paper]) to calculate that proportion.

2.62. NSW Treasury notes that states have not been previously provided the opportunity to comment on the Commission's proposal. This proposal was not raised for state consultation in Draft Assessment Paper CGC 2017-02-S, and was presented to states, after the Commission had taken its position on the issue, in Commission position paper CGC 2017-21.

2.63. As the first opportunity to comment on the Commission's proposal, NSW Treasury strongly objects to the proposal and its implementation method. It is fundamentally inconsistent with the principle of HFE and is a blunt instrument to address policy neutrality concerns under the mining revenue assessment. Our concerns are both conceptual and practical in nature.

2.64. The proposal adds an additional layer of complexity to the mining assessment, is not transparent and adds instability to the determination of state's GST shares.

Conceptual considerations

2.65. HFE attempts to give each state the capacity to deliver the national average standard of services, if it imposes the national average tax rate, and operates at the national average level of technical efficiency. The proposal to discount additional (or foregone) mining revenues arising from a discretionary policy change would represent a fundamental departure from this principle and could be argued to apply more widely.

2.66. Put simply, the proposition that Western Australia should be treated differently because of an accident of history (where state borders have been drawn) should be rejected.

Policy neutrality and incentives

2.67. NSW Treasury understands the significant differences in state's fiscal capacities to raise mining revenues makes the pursuit of policy neutrality in this area a difficult and complex task for the Commission. However, it is important to recognise these very disparities make the observance of HFE of central importance to the mining assessment. In circumstances such as these, a trade off with any subsidiary principles of the Commission, such as policy neutrality, must necessarily be made to ensure that HFE is still achieved.

Practical considerations

2.68. In practical terms, an increase in mining royalties in year 'X' will not impact a state's GST entitlement until year 'X+2', and this impact is effectively phased in in equal increments over years 'X+2', 'X+3' and 'X+4', with the state ultimately retaining its population share of any additional revenue. Given this profile, the incentive for policy action is greatly diminished and is demonstrated by the action taken by Western Australia in 2012-13 with respect to iron ore royalties.

Implementation issues

2.69. The proposal put forward in Draft Assessment Paper CGC 2018-01/05S does not address the many practical implementation issues associated with this fundamental change. Further there is no justification for the considerable additional complexity it will add to the Commission's calculations at a time when greater simplification is needed. Some of these implementation questions are listed below:

- Will the proposal apply retrospectively, and what will be the effective date all policy changes will be measured against?
- Will the proposal apply symmetrically, where a royalty reduction will be compensated less through higher GST revenues than is currently the case, noting that this would result in a bias against royalty reductions during times of economic stress and introduce a systemic upward bias in royalty rates over time?
- What will be the definition of dominance of a state under the proposal, and how will the Commission explain publicly the different outcomes for two states on either side of the threshold?
- How will changes over time in the level of dominance of a state be handled, particularly should a state move in and out of a position of dominance over an assessment period?

Policy neutrality of state development policies

Staff propose to recommend the Commission not make adjustments for differences in State:

- development policies
- compliance efforts.

2.70. A robust, policy neutral assessment in both these areas is possible.

2.71. Interstate competition ensures that states make efforts to promote economic development. Further, states with significant mining royalties retain an incentive under the Commission's existing methodology to actively pursue compliance activity.

Policy neutrality and the uncertain distribution of state revenue bases

Staff propose to recommend the Commission:

- assess revenue from banned minerals equal per capita, from the commencement of the 2020 Review
- apply this treatment to coal seam gas and uranium royalties
- present the banned minerals assessment in the Mining revenue category.

2.72. NSW Treasury notes the proposed treatment of royalties from banned minerals on an EPC basis. We do not believe it is possible to successfully disentangle the numerous policy and data issues that impact this area. We also see difficulties in the Commission developing an appropriate measure of the underlying tax base that is reliable and reflects what states do.

Other issues considered

Staff propose to recommend the Commission defer consideration of:

- an elasticity adjustment until it has considered the consultant's report on elasticities
- a discount until the assessment method is settled.

2.73. NSW Treasury notes the Commission will reconsider the inclusion of an elasticity adjustment for mining revenues, following a report from its consultant on the issue of elasticity adjustments.

- 2.74. NSW Treasury notes that discounting of the mining revenue assessment will be considered at a later stage, once the methodology is closer to being settled. However, a discount on the mining revenue assessment is fundamentally inconsistent with HFE, and that the lack of complete policy neutrality in parts of the assessment may be an inevitable consequence of full and comprehensive equalisation.

Other revenues

Should gambling revenue be differentially assessed?

The Commission had no major issues with this assessment. The only possible change that staff are exploring for the 2020 Review is whether a differential assessment of gambling revenue can be made.

- 2.75. NSW Treasury has responded to the issue of the Commission's proposed investigation of a differential assessment for gambling through its response to staff discussion paper CGC 2018 01/07-S. NSW Treasury believes that gambling revenue should continue to be assessed EPC in Other Revenue. This submission also includes commentary on this matter.

Other issues

- 2.76. NSW Treasury notes that the Commission are proposing to continue the user charge treatments used in the 2015 Review. NSW Treasury has commented on respective user charge treatments in the relevant expense or revenue category.
- 2.77. FESLs are more akin to user charges and should be assessed EPC in this category, as outlined in our comments on land revenues.

3. School education

Assessment structure

- 3.1. The Commission's approach of differentially assessing all spending on government schools is not consistent with how states allocate resources. The New South Wales Department of Education (DoE) allocates:
- 75 per cent of the budget based on school enrolments, and
 - 25 per cent of the budget centrally.
- 3.2. In New South Wales 75 per cent of funding is allocated via the resource allocation model (RAM). This funding is needs-based, and is consistent with the Schooling Resource Standard (SRS). The RAM includes three components²:
- a base allocation for the core cost of educating each student and running a school, including staffing and operational components (such as per capita allocation, location and utilities);
 - additional equity loadings to support the needs of specific student cohorts (students with a disability (SWD), Indigenous students, disadvantaged students, and students requiring English language support), and
 - additional targeted funding for individual students (newly arrived students, refugee students, and students with moderate to high levels of adjustment for disability).
- 3.3. The remaining 25 per cent supports the general operation of government schools in New South Wales, including cleaning and maintenance, teacher learning support and upskilling of teachers. This funding is essential to the running of the school system. It is broad, not needs-based, and driven by enrolments.
- 3.4. On this basis, NSW Treasury s believes that 25 per cent of state expenditure on schools should be assessed based on total enrolments. Only 75 per cent of expenditure is driven by socio-demographic composition (SDC).

² Additional information on each component is available at: <https://education.nsw.gov.au/our-priorities/work-more-effectively/local-schools-local-decisions/resource-allocation-model>

Specification of the regression model

Staff propose to recommend the Commission:

- use an appropriate regression model reflecting state funding models once further developed following consultation between staff and the states.

- 3.5. NSW Treasury notes that the difference between enrolments and attendance is not factored into resource allocation decisions under the DoE's RAM. NSW Treasury will continue to monitor developments in this area closely, but we note that the results shown by the Commission of including a variable for 'enrolled but not attending' in the regression indicates that the current weighting on Indigeneity may be overstated.
- 3.6. NSW Treasury notes that the Index of Community Socio-Educational Advantage (ICSEA) is an education-specific measure of socio-economic status that may reduce the likelihood of double-counting between Indigeneity and remoteness – a significant concern with the current regression. New South Wales will comment further upon specification of the final regression.

Complementary data on Commonwealth funding allocation and user charges

Staff propose to recommend the Commission:

- net user charges off the state funded government school assessment
- model student cost weights with a regression that predicts state government recurrent funding.

User charges

- 3.7. Noted.

Commonwealth funded government schools

Staff propose to recommend the Commission:

- use the Commonwealth's SRS to assess need for Commonwealth funded government schools.

- 3.8. NSW Treasury supports this recommendation. The current assessment seeks to not unwind differences in Commonwealth funding proportions under the SRS.
- 3.9. Funding provided by the Commonwealth for government schools under the SRS is subject to a robust needs-based methodology. Interference with any component of this necessarily undermines the overall intent of such funding – including loadings for educational disadvantage.

Commonwealth funded non-government schools

Staff propose to recommend the Commission:

- assess Commonwealth funding to non-government schools in the same way as for other Commonwealth payments that do not affect state shares of GST revenue.

3.10. NSW Treasury supports this recommendation as it reduces the complexity of the assessment and improves consistency with other assessments.

Data source for student numbers

Staff propose to recommend the Commission:

- continue the 2015 Review practice of using ABS data using splits of geographic distribution based on ACARA data.

3.11. NSW Treasury supports this recommendation. The Commission should continue the same practice adopted in the 2015 Review of using ABS and ACARA data. Together, they provide the richest available datasets for this purpose.

Students with disabilities

Staff propose to recommend the Commission:

- not incorporate students with a disability into the Schools education assessment unless it is clear these data are comparable across states.

3.12. NSW Treasury does not support this recommendation. A disability for students with a disability (SWD) should be included within the regression underpinning the state funded component of the schools education assessment. NSW Treasury acknowledges that the PricewaterhouseCoopers review “2016 Nationally Consistent Collection of Data (NCCD) Continuous Quality Improvement Project” found that “the data is of sufficient quality to inform policy at the national level”. Data is suitable to be considered as one component among others when developing policy at the jurisdictional and sector level.

3.13. New South Wales was the first jurisdiction to have a RAM that is broadly consistent with the SRS. Other states have now followed. Consistent with the Commission’s policy to recognise average state policy and more broadly ‘what states do’, the Commission’s methodology should mirror the SRS and its loadings.

3.14. In line with the SRS, additional funding is provided to New South Wales government schools through:

- an equity loading (low level adjustment for disability) to support students in every regular New South Wales public school who have additional learning and support needs, and
 - additional targeted funding for individual students (those in need of a medium to high level of support).
- 3.15. In 2017, approximately \$1.2 billion (or around 10 per cent) of the New South Wales public school education budget was allocated towards supporting students whose learning is impacted by disability. The SWD loading represents a significant portion of this spend, making it one of the most significant loadings within the DoE's RAM.
- 3.16. The NCCD on School Students with Disability is the best available and most complete dataset.
- 3.17. The top three categories of disability that attract funding under the SWD loading in the SRS (calculated using the NCCD) best maps to the measure of SWD used by New South Wales. This cohort is most representative of the cost base.

English language proficiency

- 3.18. The DoE's RAM includes additional funding for students in need of English language support, consistent with the SRS.
- 3.19. As with SWD, the RAM includes:
- an equity loading for English language proficiency – English as an Additional Language or Dialect (EAL/D)
 - additional targeted funding refugee students who have been enrolled in an Australian school for less than three years, and
 - additional targeted funding for newly arrived students who speak a language other than English as their first language and require intensive English language tuition.
- 3.20. New South Wales direct expenditure on students in need of English language support was over \$160 million in 2017. The majority of funding was allocated to schools through the equity loading, with the remaining funding directed via specific programs and as targeted support for individual students.
- 3.21. All students in New South Wales are assessed on their English language proficiency upon entering the New South Wales government school system. Students identified as requiring support are assigned to one of four categories based on their level of proficiency.
- 3.22. To apply an assessment on a national basis, the Commission should use ACARA language background other than English data.

Policy effects on states' shares of government and non-government students

Staff propose to recommend the Commission:

- use the actual numbers of government and non-government students in each state.

3.23. NSW Treasury supports this approach. The alternative (a calculation of 'expected enrolments') does not accurately incorporate all factors driving the choice between government and non-government schools. In New South Wales, population density, a key driver of congestion, constrains access to school options and limits choice. Further, calculating expected enrolments is not consistent with 'what states do'. Resourcing decisions in New South Wales are based on actual enrolments.

Student transport

Staff propose to recommend the Commission:

- include transport of school children expenses with transport expenses and assess this using the same the disabilities as those for the urban transport assessment.

3.24. Noted.

4. Post-secondary education

Indigenous cost loading

Staff propose to recommend the Commission:

- retain the Indigenous cost loading but update the loading using State provided data reflecting current spending allocations.

4.1. Noted.

Remoteness cost loadings

Staff propose to recommend the Commission:

- adopt the new category specific regional cost loadings and use them in the assessment on an undiscounted basis.

4.2. The Commission should investigate whether the wide variations in the loadings for remote locations shown in Table 3 of the Draft Assessment Paper CGC 2018-01/11S are genuine as the variation between jurisdictions appears implausible and is not reflective of other factors such as Indigenous status.

Qualification level loading

Staff propose to recommend the Commission:

- investigate if a qualification level loading should be included in the assessment to recognise that different level courses attract different subsidies.

4.3. Noted.

Industry mix

Staff propose to recommend the Commission:

- not include a State course mix disability because States are unlikely to be able to provide the necessary cost data and there is potential for State subsidy policies to influence the course mix.

4.4. Supported.

Public RTO loading

Staff propose to recommend the Commission:

- not investigate a disability based on the sector of training providers because most States provide the same subsidy to all providers regardless of sector, and the mix of public and private providers is highly policy influenced.

4.5. Noted.

User charges

Staff propose to recommend the Commission:

- make a data adjustment to ensure only fee-for-service revenue is netted of expenses, if it is material.

4.6. Noted.

5. Justice

Police

Staff propose to recommend the Commission:

- further develop a model incorporating socio-demographic drivers of offences and geographic based model of cost per offence.

- 5.1. NSW Treasury notes the staff recommendation to further develop a model incorporating socio-demographic drivers of offending and geographical influences on cost. However, this approach does not adequately capture the factors that affect relative policing costs across jurisdictions. As the Commission's draft assessment paper suggests, the use of offender rates
- does not capture the impact of increasing complexity of crime on police resourcing, and
 - does not reflect the fact that the majority of policing effort – and therefore expenditure – is focused on preventing and disrupting crime.
- 5.2. New South Wales is disproportionately impacted by structural changes in policing practices, with Sydney status as Australia's only global city and largest financial hub making it a key target for complex crimes.

Offender rates do not reflect police resource allocation

- 5.3. Offender rates are a poor indicator of spending and resource allocation for policing. Modern policing practices overwhelmingly allocate resources to proactively disrupt and prevent, rather than respond to crime. In other words, spending more closely aligns with avoided rather than recorded crime. This model reflects an increasingly complex and costly mix of criminal activity (Figure 5.1 and Figure 5.2)³, socio-demographic shifts, and technological change and is consistent with trends towards Intelligence-led policing models as the basis for resource allocation.⁴
- 5.4. The challenge of responding to complex crime is more acute in New South Wales than other states. Sydney's status as Australia's most globalised city and largest financial hub makes it a target for complex criminal activity and exemplifies the ongoing challenges faced at Australia's borders from transnational organised crime and the movement of illicit goods, money and

³ See also Smith R. 2014. *Responding to organised crime through intervention in recruitment pathways*. Trends & issues in crime and criminal justice No. 473. Canberra: Australian Institute of Criminology. <https://aic.gov.au/publications/tandi/tandi473>

⁴ See <https://pdfs.semanticscholar.org/db84/a18d7770e86a575dca82d29533337327b43a.pdf>

people. Complexity is further increasing due to the impact of information technology on fraud in online banking, trade, superannuation and identity crime, along with online trading of illicit goods

Figure 5.1: New South Wales Crime rate per 100,000 people

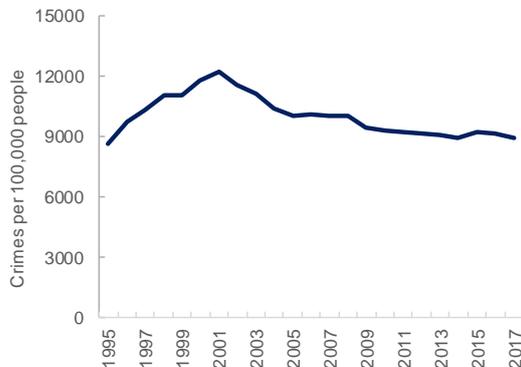
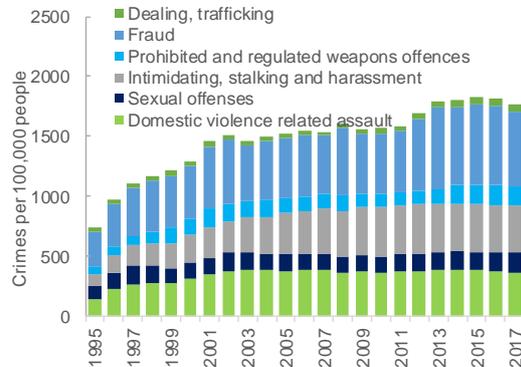


Figure 5.2: Rate of select complex crimes per 100,000 people in New South Wales



Source: New South Wales BOCSAR - Recorded Crime Statistics and ABS 3101.4

5.5. On various measures, New South Wales is most exposed to threats of terrorism, organised crime, and cyber-crime and must respond accordingly. New South Wales:

- is the first state that has needed to introduce legislation and allocate High-Risk Offenders resources for surveillance of fixated persons in order to prevent and disrupt terrorism;
- has significantly more Critical Infrastructure Sites that must be protected; and
- has far more Outlawed Motor Cycle Gangs and members than any other state in Australia, resulting in a higher-than-average threat of major drug, prostitution and gun crime.

5.6. There are material costs associated with providing the necessary infrastructure and intelligence across police, courts, corrections (and other lines of service delivery) which should be recognised by the Commission.

Socio-demographic influences on crime

5.7. As discussed throughout this submission, NSW Treasury believes that the Commission should adopt a measure of SES that adequately captures financial stress (as measured by housing stress), which disproportionately affects New South Wales. While the drivers of crime are multi-faceted, financial stress

has been shown to increase the incidence of certain types of complex and costly crimes – for example, domestic and family violence.⁵

- 5.8. The Commission should adopt a revised measure of SES which captures financial stress (see Chapter 18 for more details).

Community and specialised policing mix

- 5.9. The current approach of dividing police expenditure evenly into community and specialised policing no longer reflects the drivers of policing services or cost. In New South Wales, activity associated with an offence – i.e. where a person(s) enter the justice chain – only accounts for 6-10 per cent of policing effort. 90-94 per cent is associated with prevention, disruption and community engagement, with the aim of minimising costs on the individual and government service delivery (Figure 5.3). This approach also seeks to ensure the community has strong feelings of safety, which adds to the desirability of communities as places to live and locate businesses.

Figure 5.3: Allocation of policing effort in New South Wales



Source: New South Wales Police Force

- 5.10. Taking this into account, NSW Treasury recommends that the Commission consider a split between community and specialised police of around 80 and 20 per cent respectively.

⁵ A study by Don Weatherburn identified that the risk of actual or threatened violence for a woman at the lowest levels of financial and social stress was 4 per cent and rose to 36 per cent at the upper end of the financial and personal stress, the risk of actual or threatened violence rose to 36 per cent. The analysis controlled for other drivers of disadvantage such as being a sole parent, having drug and /or alcohol problems and the level of social support and autonomy. (Weatherburn, D., “Personal stress, financial stress and violence against women”, *Crime and Justice Bulletin*, No. 151, August 2011, p. 15.)

Courts

Staff propose to recommend the Commission:

- divide legal service expenses into those associated with criminal matters and all other legal services;
- assess criminal legal matters using use rates based upon State data on the Indigenous status, SES and age characteristics of criminal court defendants;
- not apply any cost weights to population groups.

5.11. The demographic factors considered in the Commission's courts assessment do not adequately capture the degree of complexity in criminal matters disproportionately appearing before New South Wales courts. The cost of remoteness is also overstated.

5.12. As discussed for the police assessment, New South Wales has higher than average prevalence of complex crime and federal matters, owing to factors separate to the SDC considered by the Commission, including Sydney's status as the main port of entry and economic centre of Australia, and a high rate of housing stress.

- New South Wales hears 81 per cent of matters related to terrorism, 69 per cent of matters related to the proceeds of crime, and 51 per cent of drug-related matters.⁶ Complex matters of this nature take significantly longer to finalise in the criminal court, requiring both greater court time and longer periods in remand for bail-denied individuals.⁷

5.13. The Commission currently adjusts for remoteness costs by applying the police cost gradient and discounting by 25 per cent. NSW Treasury believes that additional policing costs in remote areas is a weak indicator of court costs. Given this, any discount applied should be higher than 25 per cent as courts are far more centralised than police stations. Interactions with courts occur at centralised locations whereas police are often required to travel to the location of a crime or the complainant.

⁶ Sources: ABS 4515.0; Corrective Services New South Wales, and Bureau of Crime Statistics and Research.

⁷ For example, individuals being charged with terrorism offences are likely to spend around three years in remand (two times as long as state offenders) and require over 1,000 days for matters to be finalised (two times as long as state matters) in facilities with stringent security requirements.

Prisons

Staff propose to recommend the Commission:

- retain the 2015 Review method used to assess Prisons.

5.14. The Commission's assessment of prison expenditure could be improved by incorporating a cultural and linguistic diversity (CALD) disability, revising the cost loading for the Indigenous population and remoteness, and by considering the impact of terrorism and federal offenders on state prison expenditure.

Cultural and linguistic diversity

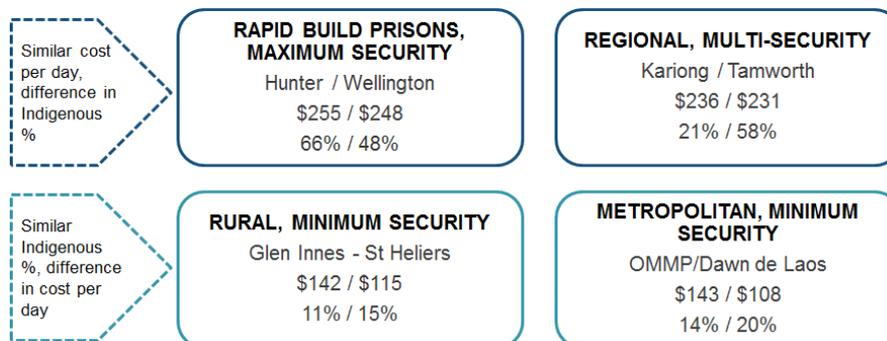
5.15. New South Wales higher than average CALD adds a layer of complexity and cost to the provision of corrective services. In particular:

- New South Wales has more than its population share of prisoners born overseas
- CALD communities may be more vulnerable to crime and more correlated with the incidence of certain types of crime, and
- costs associated with CALD defendants and inmates are higher due to additional resource requirements, including interpreters and translation services.

Indigeneity costs

5.16. The weighting on Indigeneity within the prisons assessment captures both use and cost of this demographic cohort. Indigeneity may be correlated with greater use of corrective services, but New South Wales data suggests that prisoner costs do not materially differ between Indigenous and non-Indigenous inmates (Figure 5.4). That is, costs are not impacted by the proportion of Indigenous inmates. This suggests that the current cost weight is overstated.

Figure 5.4: Indigenous and non-indigenous inmate costs in New South Wales

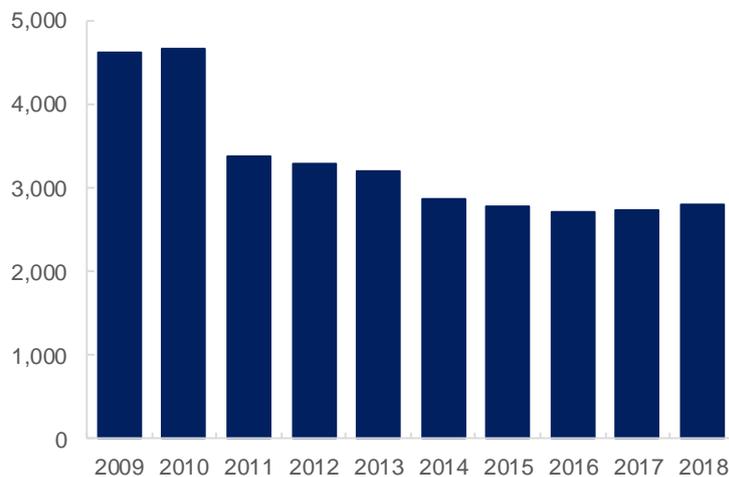


Source: New South Wales Department of Justice

Regional costs

- 5.17. The Commission currently adjusts for remoteness costs by applying the police cost gradient and discounting by 25 per cent. Additional policing costs in remote areas are a weak indicator of prison costs. Given this, any discount applied should be higher than 25 per cent as prisons are far more centralised than police stations and (like courts) interactions with a prison occur at a centralised location whereas police are often required to travel to the location of a crime or complainant.
- 5.18. The relative cost of providing prisons in regional and remote services has been reduced through adoption of audio-visual links (AVL). Around 70 per cent of New South Wales court appearances occur by AVL from prison reducing the need to for prisoner transport, avoiding an estimated \$60 million in costs over the five years to 2018, while at the same time improving safety and access to expert witness evidence.
- 5.19. The adoption of AVL has seen prisoner transport costs decline dramatically – falling from \$4,674 per prisoner in 2010 to \$2,793 per prisoner in 2018 (Figure 5.5). This is despite additional cost pressures due to greater demand for transportation because of a 37 per cent increase in the prison population since 2013. Holding all other things equal (that is, had the prison population remained stable) it is extremely likely prisoner transport costs would have continued to decline as adoption of AVL increased.

Figure 5.5: New South Wales prisoner transport costs per prisoner (\$)



Note: Excludes the cost of prisoner transport by police
Source: New South Wales Department of Justice

- 5.20. While AVL utilisation may vary between states, NSW Treasury considers that it is a reasonable standard for how states provide services in regional and remote areas and that the remoteness cost gradient should reflect this.

Terrorism and federal matters

- 5.21. The overwhelming majority of adult prisoners charged with terrorism-related offenses are in New South Wales custody. Security and longer sentences for these prisoners increase costs for New South Wales, which are largely a result of the Commonwealth *High Risk Terrorism Offender Scheme*. Currently, 61 per cent of current adult prisoners with a terrorism charge are in New South Wales custody. These inmates cost almost three times as much as an average adult inmate.
- 5.22. More broadly, New South Wales legal and economic institutions lead it to hold 60 per cent of federal prisoners and 65 per cent of federal parolees – well above its population share. Cost recovery is only limited to corrections for immigration detainees in corrections and legal aid (*Expensive Commonwealth Criminal Cases Fund*), meaning that the New South Wales Government must bear most of these costs for reasons beyond its control.

Other issues

Staff propose to recommend the Commission:

- apply the wage costs assessment in the Justice category
- retain the 2015 Review method for regional costs and service delivery scale
- assess the influence of the use of AFP officers by the ACT

- 5.23. Noted. NSW Treasury reiterates our related feedback on the regional cost scale in the courts and prisons assessment and more broadly in our response to the Draft Assessment Paper CGC 2018-01-23-S.

6. Health

Overview

- 6.1. Commission staff propose to enhance the health assessment methodology through the use of improved activity data and refined assumptions over the substitutability between private and public health services. Staff propose to continue separately assessing spending on care received in an admitted, non-admitted, emergency department and community health environment.
- 6.2. The structure of the health assessment must be re-examined. The current approach of assessing health spending based on the location of care is aligned with an outdated service delivery model that no longer reflects 'what states do'. Health services across the country are increasingly focused on care that is patient-centred and location neutral, in line with a national policy shift to prioritise interventions that keep people out of hospital.
- 6.3. The Commission can bridge the gap between the old and new service delivery model by assessing spending on non-admitted patient (NAP) and community health services together. This would achieve a better balance of simplicity, materiality and accuracy. We note :
 - 64 per cent of the New South Wales Health budget (in 2018-19) is activity based funding for health services. Under the national nomenclature, this incorporates non-admitted patient (NAP) care, which includes services previously referred to as community health services. As a result, community health is not meaningful within an ABF and patient-centred care environment.
 - demographic cost drivers can be assessed using robust and nationally consistent data, following significant improvements to NAP activity data held by the Independent Hospital Pricing Authority (IHPA). This would be a major methodological improvement from the current approach of using hospital separations and ED triage 4 and 5 activity.
- 6.4. We welcome the Commission's proposal for a more forensic consideration of the substitutability between public and private services (substitutability). NSW Treasury maintains the view that the existing substitutability assumptions, and by extension the non-state adjustments, are significantly overstated. This is most relevant for NAP and community health services.
- 6.5. Conceptually, state-based NAP services are a poor substitute for General Practice (GP). GPs focus on the individual, have universal coverage, and are backed by broad-based skills, whereas state-based community services provide specialist knowledge and interventions to populations with complex needs, poorer health outcomes and/or barriers to care. In many instances, GPs are complements rather than substitutes, and will recommend that patients attend a state-funded NAP clinic – that is, demand is induced rather than displaced.

- 6.6. This is supported empirically. New South Wales activity data suggests that greater availability and more intensive use of GPs does not reduce activity in NAP clinics. Even the most substitutable clinics that provide similar services to a community health clinic – *NAP 40 series clinics* – appear to have marginal substitutability.
- 6.7. NSW Treasury also suggests that the Commission re-estimate the level of substitutability for ED services after considering the temporal distribution of demand. This acknowledges that nearly half of ED visits (triage 4 and 5) occur after hours and on weekends, when there is little access to GPs.
- 6.8. NSW Treasury strongly supports retaining the direct approach to the health assessment as it reflects the principle of ‘what states do’ and can be practically implemented.

Assessment approach

Staff propose to recommend the Commission:

- consider retaining the direct approach to assess all components of health expenses in the 2020 Review rather than reverting to a subtraction approach because the direct approach utilises reliable data to directly assess State health spending and focuses on what States do while appropriately recognising the influence of the non-State sector
- not scale the outcomes of the direct assessment method based on a very broad interpretation of what constitutes State-like services.

- 6.9. NSW Treasury supports retaining the direct rather than the subtraction approach to the health assessment. NSW Treasury also supports the recommendation to not scale the outcomes of the direct assessment based on a broadened measure of non-state services.

Assessment structure

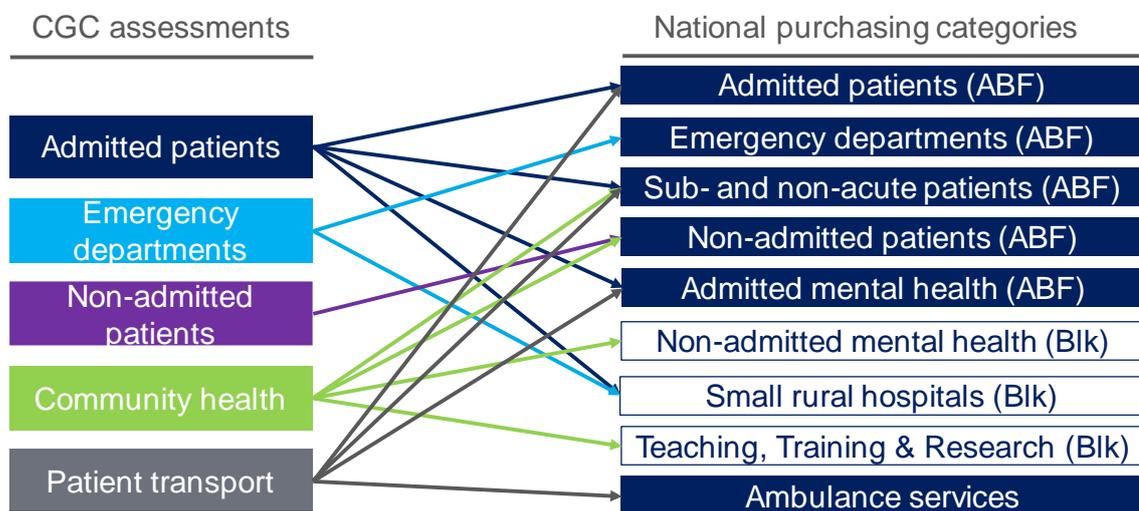
- 6.10. The Commission separately assesses health expenditure on admitted patients, NAP, ED and community health and other services. This disaggregation relies on the assumption that the drivers of demand and cost for each component are materially distinct and can be reliably measured.
- 6.11. While there are clear and obvious differences between admitted patient care, emergency care and NAP care, NSW Treasury disagrees that further disaggregation is appropriate. In particular:

- it does not align with ‘what states do’ in an ABF environment, where states purchase non-admitted care (including in community health and outpatient clinics) and services are increasingly location neutral.
- the Commission currently uses unsuitable demand data for its NAP (hospital separations) and community health assessment (ED triage 4 and 5 activity), whereas reliable activity data is now available for NAP services.
- Assumptions over substitutability for NAP and community health are too high and lack a clear evidence base (discussed further below).

6.12. NSW Ministry of Health purchases health services according to categories established under the national funding model. These categories provide a nationally consistent method of classification that is clinically meaningful, and distinguishes on the basis of costs. All jurisdictions report against these categories in order to receive Commonwealth funding. The majority of these services are subject to ABF, where New South Wales purchases National Weighted Activity Units (NWAUs) using the weights for Indigeneity, remoteness and other complexities established by IHPA.

6.13. In this environment, community health is not clearly defined as it focuses on location, rather than the treatment. Rather, the types of services traditionally delivered in a community health setting are funded under several different purchasing categories (Figure 6.1), key of which is NAP care.

Figure 6.1: Alignment of the Commission’s assessment categories with national purchasing categories



Source: NSW Ministry of Health

6.14. NAP care is classified according to the nature of services being provided, ranging from procedural (10 series), medical consultation services (20 series), diagnostic (30 series) and allied health and/or clinical nurse specialist

intervention services (40 series). The majority of spending (54 per cent in 2016-17) is on series 40 clinics.

- 6.15. Focusing on location rather than service classification means that the existing assessment structure adds greater complexity by relying on a fraught mapping process. A better balance of simplicity, materiality and accuracy can be found by:
- aggregating community health and NAP expenditure to better reflect how states provide and fund health services
 - using activity data on ED and NAP services to split non-admitted expenditure into ED and NAP, rather than the 50:50 split currently assumed
 - using NAP NWAUs for the SDC assessment rather than in-scope separations and ED-triage 4 and 5 activity
 - removing the remoteness disability for NAP expenditure, as this will be reflected in the NWAUs, which from 2018-19 include the Patient Residential Remoteness Area Adjustment and Patient Treatment Remoteness Area Adjustment, and
 - reassessing the level of substitutability between private and public services.

Socio-Demographic Composition

Measuring socioeconomic status

- 6.16. The Commission measures socioeconomic status (SES) of non-Indigenous people in different locations based on the ABS *Index of relative Socio-Economic Disadvantage* (IRSD). The IRSD includes a loading for the *% of occupied private dwellings paying rent less than \$215 per week (excluding \$0 per week)*
- 6.17. NSW Treasury believes that financial stress (as proxied by housing stress) drives demand for health, justice, welfare and housing services, not just the level of absolute housing expenditure.
- 6.18. New South Wales Treasury commissioned the ABS to re-estimate the IRSD with the addition of the variable: *% of occupied private dwellings paying 30% or more of income in housing costs*. This more closely reflects the conceptual link between SES and demand for health services. NSW Treasury recommends that the Commission adopt this alternative version of the IRSD when updating its SDC assessments.
- 6.19. Further discussion can be found in Chapter 18 of this submission.

Non-admitted patient services

Staff propose to recommend the Commission:

- continue to use IHPA's NWAU data for the SDC assessments of admitted and ED services because the data provide a reliable basis for measuring the material factors which influence State spending on these services
- use IHPA's NAP NWAU data for the SDC assessment of NAP expenses instead of admitted patient separations because the data should be sufficiently reliable by the 2020 Review and it will provide a better measure of the material factors which influence State spending on NAP services.

6.20. NSW Treasury notes the recommendation of Commission staff to continue using IHPA NWAU data for admitted patient and ED service.

6.21. NSW Treasury agrees that the Commission should use IHPA NWAU data for NAP services as it more accurately measures the material factors that influence state spending. However, NSW Treasury recommends that the Commission use the NAP NWAUs when assessing spending on NAP and community health services together.

Community health services

Staff propose to recommend the Commission:

- investigate whether sufficiently comparable and reliable administrative data on community health services are available from States to build a national SDC profile for community health services
- in the absence of suitable data, staff will consider whether ED triage category 4 and 5 remain the best proxy for measuring the SDC disability for community health services.

6.22. ED triage 4 and 5 activity is a poor proxy for the population characteristics of demand for community health services. The Commission's ongoing reliance on this activity data is not justified.

6.23. Community health services do not have a clinically meaningful definition within the national funding model and New South Wales's purchasing model. Therefore, spending on both NAP and community health services should be apportioned using NAP NWAUs.

6.24. Within NAP care, '40 series' clinics, which provide a range of Allied health and clinical nurse specialist interventions, most closely aligns to community health services.

6.25. Notwithstanding the above, New South Wales, in good faith, will continue to engage with the Commission to provide activity data that best aligns with the Commission's definition of community health services.

Remoteness and service delivery scale (SDS)

Staff propose to recommend the Commission:

- note the changes to IHPA's adjustments for 2018-19 NWAU data, which will affect the assessment for the first time in the 2020 Review
- ensure all hospital remoteness and SDS costs for small rural block funded hospitals are recognised in the SDC assessments for hospital services (admitted patients, ED and NAP)
- take steps to ensure that the proxy indicator used in the SDC assessment for community health adequately recognises remoteness and SDS costs
- re-test the materiality of splitting remote and very remote areas in the SDC assessments.

6.26. NSW Treasury notes these recommendations, and would add that:

- the Commission should remove the application of the remoteness cost gradient for the assessment of NAP expenditure given that it will be included in the NWAUs, and
- the use of NAP NWAUs to assess community health expenditure would ensure that remoteness costs would be appropriately recognised.

Substitutability

Admitted patient services

Staff propose to recommend the Commission:

- Continue to recognise the influence of the non-State sector on admitted patient expenses using a direct assessment approach
- confirm the level of substitutability and data used to calculate the non-State sector adjustment after staff analysis has been completed and States have been consulted.

6.27. NSW Treasury will support the Commission as required to assist in calculating this adjustment.

Emergency Department (ED) services

Staff propose to recommend the Commission:

- investigate if there are any new studies examining the relationship between GP and State provided ED services to support or otherwise indicate a different level of substitutability for ED services
- investigate to what extent private ED services are substitutable with State ED services.

- 6.28. NSW Treasury supports the concept of using GP bulk billed attendances as a non-state sector comparator for ED triage 4 and 5 services but believes the methodology can be refined by adjusting for the temporal distribution of service provision.
- 6.29. In New South Wales – a state with relatively high private service utilisation – around 48 per cent of ED visits (triage 4 and 5) occurred between 7pm and 7am and on weekends. The substitutability during these periods is likely to be close to zero, as patients rarely delay attendance when there is a perceived emergency. Confining demand to ‘in-hour’ attendance suggests that substitutability should be closer to around eight per cent rather than 15 per cent (see Table 6.1).

Table 6.1: Use of ED (triage 4 and 5) in New South Wales by time of day in 2016-17 and the impact of substitutability

	Presentations	Substitutability
Current approach		
All attendees	2,761,581	15%
Suggested approach		
Day Attendances	1,439,627	15%
Night (19:00-07:00) & Weekend Attendances	1,321,954	0%
All attendances	2,761,581	8% effective

Source: NSW Ministry of Health analysis

Non-admitted patient services

Staff propose to recommend the Commission:

- confirm the current level of substitutability for NAP using the same approach used in the 2015 Review
- investigate if service bundling or non-State allied health services have any implications for State provided NAP services.

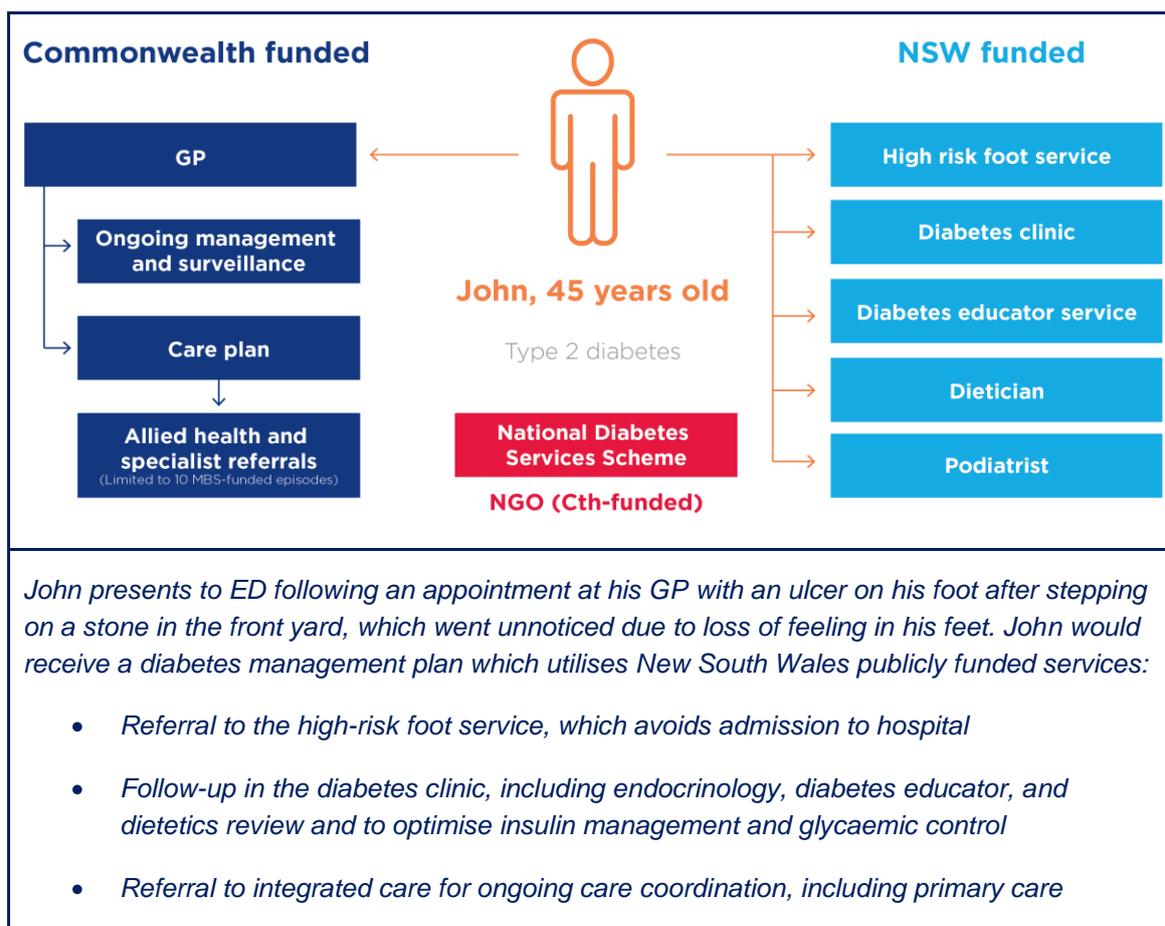
- 6.30. NSW Treasury strongly recommends that the Commission revise its assumption that 40 per cent of spending on NAP services is substitutable.

6.31. Although some services are available in both public and private settings (such as imaging and pathology) conceptually, NAP and GPs serve complementary, rather than substitutable roles in patient-centred care. Patients attend for different reasons and the services have different priorities, scope and coverage (Table 6.2). Greater access to GPs may well induce demand on state-funded clinics, as is demonstrated through the two case studies below (Figure 6.2 and Figure 6.3)

Table 6.2: High level features of GPs and NAP clinics

General practice	NAP clinics
<ul style="list-style-type: none"> • Priorities are determined at individual level • A long-term relationship with patient (93% of Australians always go to the same practice) • Universal coverage • Broad general knowledge for one-off or ongoing management of a range of health issues and conditions 	<ul style="list-style-type: none"> • Priorities are determined at population level • Specialist knowledge and interventions • Addresses access and equity • A time limited, goal-based relationship • Targeted to defined communities but with some universal coverage • Multidisciplinary team based

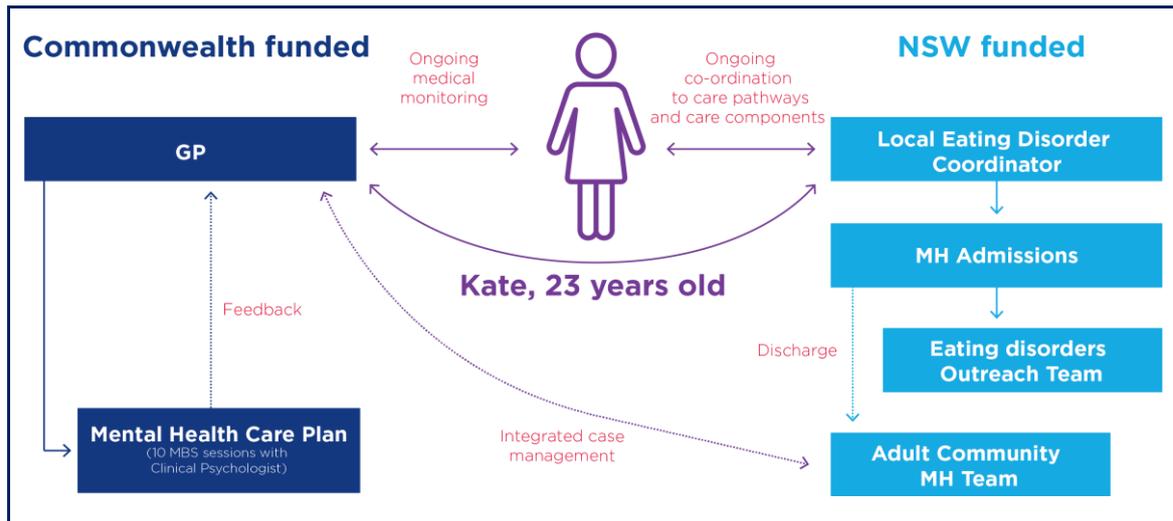
Figure 6.2: Case study of a patient presenting for diabetes management in a GP and NAP setting



- John is also registered with the National Diabetes Services Scheme - Largely delivered out of pharmacies that provides people with diabetes subsidised access to consumables – test strips etc.
- A 48-hour follow-up phone call would be received if John was admitted to hospital and identified as an Aboriginal person (in most LHDs).

Source: New South Wales Ministry of Health

Figure 6.3: Case study of a patient presenting with an eating disorder in a GP and NAP setting



Kate's body mass rapidly dropped following a change of eating habits that occurred after a disruptive life event.

Kate attended the family GP, who diagnosed anorexia nervosa and completed a Mental Health Care Plan (MHCP), which provided up to 10 sessions with a Clinical Psychologist, subsidised by the Commonwealth.

Kate attended six sessions with her Clinical Psychologist but was not gaining weight and her GP was concerned about her blood results. The GP called the Local Eating Disorder Coordinator for the district, and sought advice about management of Kate. The Local Coordinator sent the GP the New South Wales Guidelines for Medical Admission of Anorexia Nervosa, developed by the InsideOut Institute (formerly the Centre for Eating and Dieting Disorders) in partnership with New South Wales Health. Kate met the threshold for admission set out in the guidelines.

The Local Eating Disorder Coordinator assisted in arranging a local admission to hospital within the adult medical ward. Kate was offered multidisciplinary care including from medical, nursing and allied health (eg. dietician) specialists.

The hospital contacted the outreach team funded under the New South Wales Service Plan for People with Eating Disorders (New South Wales Service Plan). The outreach team, located within the Adult tertiary hub at Royal Prince Alfred Hospital provided outreach to the local team to support Kate's admission and to provide advice on refeeding rates, containment, family engagement and discharge planning.

The Local Eating Disorder Coordinator arranged for Kate to be transferred to the care of the Adult Community Mental Health Team upon discharge. Kate's case manager within the community team had been trained as part of the New South Wales Service Plan in Enhanced Cognitive Behaviour Therapy (CBT-E) for eating disorders. Kate's case manager was receiving ongoing supervision in CBT-E as part of the New South Wales Service Plan.

Kate's GP who continued to provide medical monitoring of Kate within the community was integrated by the case manager into the care team and was invited to dial-in to weekly case reviews.

The Local Eating Disorder Coordinator continues to provide coordination as needed, facilitating access to pathways and care components.

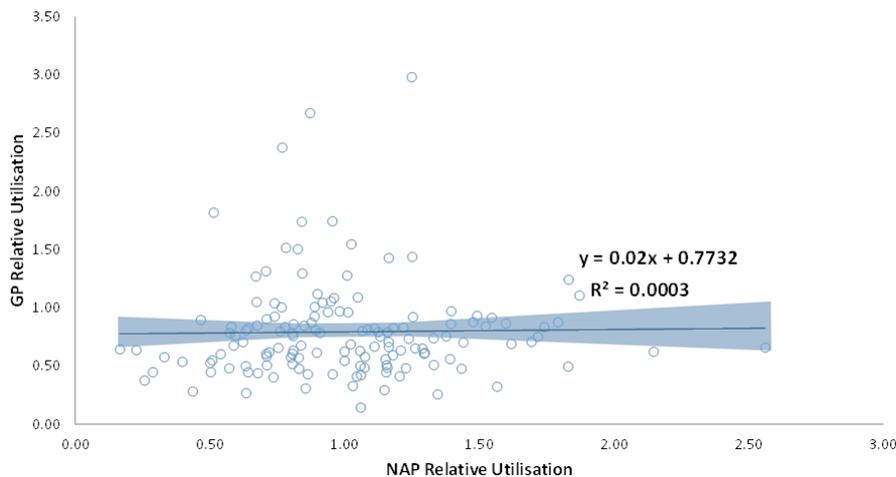
Kate is continuing to receive treatment in the community and is managing to maintain her tertiary studies as well as part-time employment. Although still underweight, her weight is more stable following integration of eating disorder services. Her mood is also improved with the wrap around community supports that she can access under the New South Wales Service Plan.

Source: NSW Ministry of Health

6.32. The Commission's assumption that 40 per cent of NAP services are substitutable suggests that there should be, all else equal, a negative relationship between the rate of use of NAP clinics and GPs. That is, if 40 per cent of visits are substitutable, then an area with increased availability and use of GPs should have a lower rate of demand for NAP clinics.

6.33. This proposition was tested in New South Wales SA3s (Figure 6.4). The analysis suggests that the utilisation of GPs has little explanatory power on the use of NAP clinics and that New South Wales residents attend both NAP clinics and GPs.

Figure 6.4: NAP clinic Utilisation (all clinics) vs GP Relative Utilisation



Note: When comparing visits to NAP clinics and visits to GPs, the R squared result is close to zero, showing no relationship between GP and NAP clinic visits.

Source: NSW Ministry of Health

6.34. Clearly, SES also impacts effective substitutability, as income limits private service usage in some areas. However, there is a very strong case for lowering the substitutability assumptions and that the Commission could make greater use of spatial demand data to inform its decision-making.

Community health services

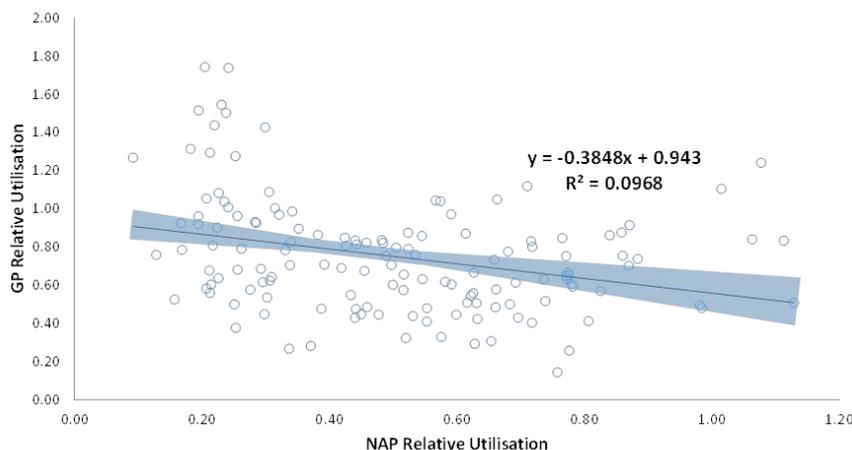
Staff propose to recommend the Commission:

- re-estimate the substitutability level for community health using a bottom-up approach which examines each major service area on a case by case basis
- investigate if bulk-billed GP benefits data, which is currently being used to estimate the availability of non-State community health services, is the best available indicator for this purpose.

6.35. NSW Treasury welcomes the recommendation to conduct a more detailed assessment of substitutability in community health services as we share the Commission’s concern on both the top-down nature of the existing approach and the lack of supporting data. NSW Treasury has a long-held concern that the Commission’s assumption (70 per cent) redistributes significant amounts of GST revenue with little clear empirical basis or alignment with the estimates supplied by jurisdictions (50-75 per cent), one of the Commission’s consultants (‘closer to 50 per cent’), or staff recommendations (60-75 per cent).

6.36. Comparing utilisation of series 40 NAP clinics (most closely aligned with ‘community health’) with GP utilisation demonstrates that even for these clinics, there is no correlation with GP visits (Figure 6.5).

Figure 6.5: NAP clinic Utilisation (40 series) vs GP Relative Utilisation



Note: When comparing visits to NAP 40 series clinics and visits to GPs, the R squared result is close to zero, showing no relationship between GP and NAP 40 series clinic visits.

Source: NSW Ministry of Health

6.37. The Commission should re-estimate the substitutability of NAP services as a whole in line with our recommendation to aggregate community health and NAP

expenditure. Doing this via a bottom-up approach appears to be a reasonable approach.

- 6.38. If the Commission continues to use bulk-billed GP visits as the non-state indicator for community health 40 series clinics, a lower level of substitutability should be adopted.

Cross-border service use

Staff propose to recommend the Commission:

- note that the current arrangements ensure that States are reimbursed for the cost of providing hospital services to residents of another State
- review the approach to the cross-border assessment for community and other health services as outlined in the Staff Draft Assessment Paper CGC 2018-01/25-S.

- 6.39. Noted.

Other considerations

Non-hospital patient transport

Staff propose to recommend the Commission:

- Retain the current method for assessing non-hospital patient transport expenses but collect new data to benchmark patient transport expenses and re-calculate the remote patient cost loading.

- 6.40. Noted.

Other health expenses

Staff propose to recommend the Commission:

- Consider whether expenses for pharmaceuticals, medical aids and appliances and health administration not elsewhere classified (n.e.c.) should be included in the community and other health component or admitted patients.

- 6.41. NSW Treasury supports the recommendation that medical aids and appliances and health administration n.e.c. should be included in the admitted category. Pharmaceuticals are included in all patient categories. If the Commission uses expense data from the Australian Institute of Health and Welfare (AIHW) rather than COFOG data, pharmaceuticals will be accurately integrated across all patient categories.

User charges

Staff propose to recommend the Commission:

- continue to offset all user charges against expenses to maintain simplicity and because:
 - fully compensable patients have no effect on State fiscal capacities and it is appropriate to remove these expenses from the assessment
 - only the residual cost of private patients in public hospitals affect State fiscal capacities and the NWAU data used in the SDC assessment recognises that private patients in public hospitals are less costly.

6.42. Noted.

Category structure

Staff propose to recommend the Commission:

- consider assessing all hospital services in a single component if IHPA's NWAU data for NAP services is considered sufficiently reliable by the time of the 2020 Review.

6.43. NSW Treasury supports methodological changes that simplify the health assessment and better align with 'what states do'. We acknowledge that a combined assessment of hospital services would achieve significant simplification and avoid the challenge of separating NAP and ED expenditure from state accounts, however, as noted above, this may deviate too far from a meaningful classification of services that reflects what states do and their different cost drivers.

6.44. Admitted patients, ED and NAP services are funded separately because they meaningfully differ in terms of service delivery, aggregate cost, and demand drivers. The Commission should assess expenditure on the same basis.

Cultural and linguistic diversity

Staff propose to recommend the Commission:

- not include a cost adjustment for culturally and linguistically diverse (CALD) patients because any additional costs for CALD patients compared with non-CALD patients appear to be small.

6.45. CALD patients require resources well above the average patient in the form of interpreter and cultural services and additional clinician time. This is particularly

the case for NAP rather than admitted patient care. Case studies undertaken for sexual assault cases in New South Wales demonstrates this:

- the average time spent on discharged cases was 1.4 times higher for CALD patients compared to non-CALD patients
- additional time was required for intake, medical/forensic examinations, court support, and victims of crime reports, and
- the average number of counselling sessions clients failed to attend due to those clients declining the service was also 1.75 times higher for CALD clients, potentially requiring additional resources to facilitate client access.

6.46. NSW Treasury acknowledges that there exists no nationally consistent method of identifying CALD patients and will continue to work with other cultural and linguistically diverse states (particularly Victoria) to progress this ahead of the 2020 methodology being implemented. NSW Treasury will keep the Commission informed of these developments.

7. Welfare

Family and child services

SDC assessment of family and child services

Staff propose to recommend the Commission:

- Retain the current assessment methodology for family and child services but stay in contact with the AIHW on developments concerning their unit record database, including whether data might become available for New South Wales and a possible CALD and/or disability measure.

- 7.1. NSW Treasury supports retaining the current assessment methodology for family and child services at a high level. However, the existing methodology would be greatly improved in the following ways:
- adopting a refined measure of socio-economic status,
 - incorporating New South Wales unit record data on substantiations,
 - reconsidering the estimate of the general cost gradient,
 - considering the impact of reporting inconsistencies in RoGS data, and
 - considering the extent to which policy changes in individual states can heavily impact use rates.
- 7.2. The adoption of a CALD related disability warrants close consideration. As shown below, available evidence points to the clear existing of a conceptual case in support of this.

Measure of socio-economic status

- 7.3. The need for child protection and out of home care (OOHC) is fundamentally interrelated with the prevalence of social factors linked to disadvantage, including socio-economic status, domestic violence, substance abuse, poverty and homelessness. Administrative data collected by FACS confirms that children from low-SES areas are more likely to be subject of a concern report and at risk of significant harm (ROSH) compared to children from high SES areas.⁸
- 7.4. Notwithstanding, the current SDC assessment does not adequately reflect the prevalence of risk factors that lead to family breakdown and child protection initiations, such as the effects of financial stress.

⁸ Analysis can be provided on a confidential basis, as needed to the Commission.

- 7.5. It is well established that financial stress is a driver of social problems, which ultimately places pressures on the welfare, health and criminal justice system.⁹ Relative levels of financial stress can be measured by the prevalence of housing stress, with the most widely accepted measure being where a household is forced to spend 30 per cent or more of income on housing costs.
- 7.6. NSW Treasury recommends that the Commission adopt a re-specified version of Non-Indigenous Socio-Economic Indexes for Area (NISEIFA) that considers the prevalence of housing stress in addition to the level of spending on housing (See Chapter 18).

New South Wales child protection unit record data

- 7.7. The Commission has used Australian Institution of Health and Welfare (AIHW) child protection unit record data on substantiations and OOHC numbers to estimate national average rates. Currently, New South Wales does not provide unit record level data to the AIHW.
- 7.8. NSW Treasury has analysed unit record level data for child protection substantiations and children in OOHC using the Commission’s current approach of apportioning expenditure. The outcome is markedly different compared to the national average use rates calculated by the Commission (Table 7.1).

Table 7.1: New South Wales SDC assessed expenses per child, family and child services, 2016/17

	SES	Remoteness	Indigenous	Non-Indigenous
Child protection expenses	Low SES	Non-remote	3,924	379
		Remote	4,541	2,592
	High SES	Non-remote	966	255
		Remote	641	93
Out-of-home care expenses	Low SES	Non-remote	11,524	731
		Remote	6,764	2,560
	High SES	Non-remote	3,557	560
		Remote	4,768	406

Source: New South Wales AIHW substantiation and OOHC unit-record level data and respective New South Wales populations.

- 7.9. The results show that the cost of providing child protection services to an Indigenous child living in a low-SES remote area is 1.75 times the cost of service to a non-Indigenous child in the same location.
- 7.10. The Commission calculation using 2013-14 data shows that the Indigenous child living in a low-SES remote area is 12 times more expensive to service relative to a non-Indigenous child in the same location. This suggests that the

⁹ For example: <https://www.tandfonline.com/doi/full/10.1080/02673037.2015.1070796>, https://www.ahuri.edu.au/_data/assets/pdf_file/0010/2215/AHURI_Final_Report_No192_Housing_affordability_housing_stress_and_household_wellbeing_in_Australia.pdf

Commission’s cost weighting applied to Indigenous children is overestimated. We acknowledge that the Commission calculation utilises historical data and results may differ when updated with newer use rates.

- 7.11. Furthermore, New South Wales results show that Indigenous children living in low-SES urban areas cost over ten times more to provide OOHC services than non-Indigenous children living in the same area. This is significantly higher than the Commission’s calculation which shows that the cost of providing OOHC care services for Indigenous children in the same area is six times more expensive relative to non-Indigenous children.
- 7.12. Given the size of its population, the use of New South Wales unit record level data will impact on the national use rates computed in the Commission’s welfare assessment.

Culturally and Linguistically Diversity

- 7.13. There is strong evidence to suggest that a cost adjustment should be considered for CALD influences. New South Wales welcomes the Commission’s recommendation that a CALD disability be pursued.
- 7.14. New South Wales has a disproportionate share of CALD persons relative to other states. Census data for 2016 show that New South Wales has a higher than average proportion of the population that speak a language other than English at home and/or who were born in a non-English speaking country. In New South Wales, 31 per cent of the population speaks a language other than English at home. This is higher than the national average of 27 per cent (see Table 7.2). Similarly, 28 per cent of the total New South Wales population was born in a non-English speaking country compared to a quarter of the national population (see Table 7.3).

Table 7.2: 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	31.5	32.1	18.8	21.8	24.8	11.7	42.0	27.3	27.3

Source: Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016 - Cultural Diversity, Table 12. Language Spoken at Home by State and Territory of Usual Residence, Count of persons - 2016(a).

Table 7.3: Proportion of persons born in a non-English speaking country (%)

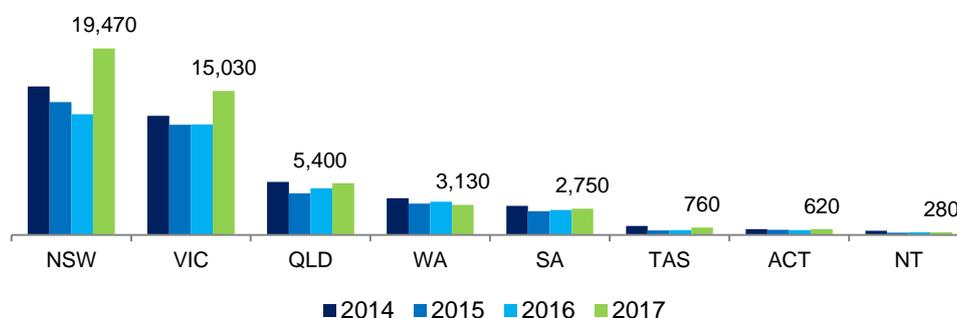
	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
% of persons born in a non-English speaking country ¹⁰	27.9	28.8	18.4	20.3	24.2	13.1	24.7	25.3	24.9

Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016 - Cultural Diversity, Table 12. Language Spoken at Home by State and Territory of Usual Residence, Count of persons - 2016(a).

¹⁰ A non-English speaking country including: Australia, New Zealand, United Kingdom, Ireland, South Africa, Canada, USA.

7.15. New South Wales also had the largest number of non-economic permanent migrants in 2017, with 54 per cent holding a ‘special eligibility and humanitarian visa’ (Figure 7.1).

Figure 7.1: Net non-economic permanent migration, 2014 to 2017



Source: ABS, Net overseas migration, Arrivals, departures and net, State/territory, Major groupings and visas - Financial years, 2004-05 onwards.

7.16. While CALD does not increase the likelihood of a child or family entering the child protection system, CALD families in the child protection system require significantly more support, and hence resources, relative to non-CALD families.

7.17. It is highly likely that the proportion of CALD children and families in the New South Wales child protection system is underestimated:

- Recording the CALD status of a child is not mandatory and is at the discretion of the caseworker. Caseworkers rely upon the reporter’s knowledge of the child’s language spoken at home.
- The CALD status of a child is not necessarily equivalent to the CALD status of its parents. The CALD status of parents is not recorded by the NSW Department of Family and Community Services (FACS).

7.18. FACS recognises that additional costs are involved in providing child and family services to CALD families. FACS’ child protection RAM includes a complexity loading for CALD families, accounting for the additional effort and services provided to CALD families relative to non-CALD families¹¹.

7.19. FACS employs multicultural caseworkers who establish rapport with CALD families receiving child protection services. CALD families are provided with additional services including cultural consultations, information sessions, language skills, and cultural case planning in order to maintain the connection to family and culture.

¹¹ CALD loading can be provided on a confidential basis if required by the Commission.

7.20. Further, FACS provides a specialist package to CALD children in OOHC managed by service providers in the non-government sector (NGOs). A one-off support payment of \$1,421¹² is provided per CALD child. This represents an additional two to three per cent of the total OOHC package cost, compared to non-CALD children in OOHC with the same needs.

7.21. The CALD support payment provides for the cost of hiring:

- cultural liaison officers for the development of cultural care plans, and
- manager support programs for oversight of the CALD program, attendance at workshops and delivering training programs.

7.22. The value of the package, constructed by FACS in partnership with Ernst and Young (E&Y), reflects the need to train and build career capability in this area.

Regional cost gradient

7.23. The Commission assesses regional costs using an extrapolation of the average regional cost loadings for Police and Education (the *general cost gradient*).

7.24. While a conceptual case exists in principle, the slope and shape of this gradient appears inconsistent with the costs incurred in providing child protection and OOHC in regional and remote locations in New South Wales.

7.25. FACS applies a location loading in its child protection RAM to provide for differences in resources required in regional and remote areas relative to metro areas. A 16 per cent loading is applied for children and young people reported at Risk of Significant Harm (ROSH) located in regional and remote areas. Community Service Centres (CSCs), which are located in town centres in regional and/or remote towns, and where child and family services are provided, are classified as regional or remote based on its respective Accessibility/Remoteness Index of Australia (ARIA) scores. The loading represents additional travel time required to and from the child or young person's home, as well as access to services.¹³

7.26. Further, eligible FACS staff employed in remote areas are provided with allowances on top of their base salaries. The allowances range between \$1,500 and \$3,700 per annum depending on their location and whether they have dependents¹⁴.

7.27. Taking these factors into account, we estimate that remote allowances represent an additional four percentage points, resulting in a loading of 1.20 for

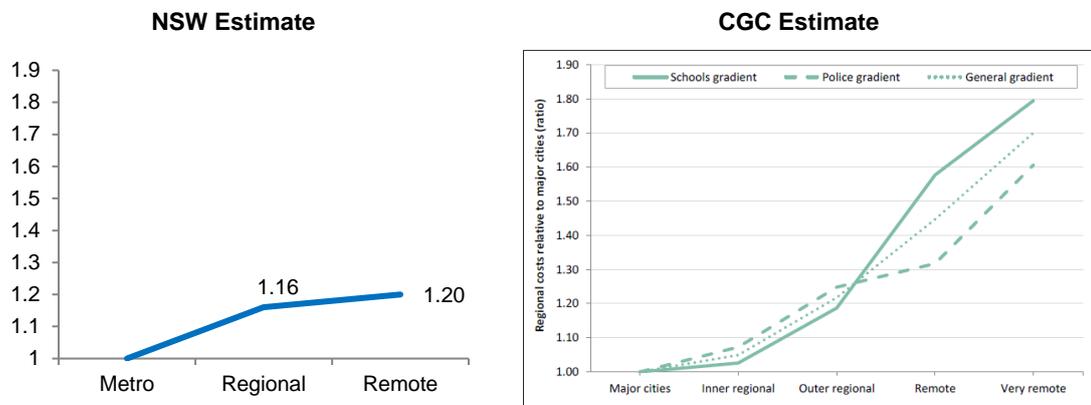
¹² Eligibility criteria for PSP service packages, <https://www.facs.nsw.gov.au/download?file=561014>

¹³ The loading is based on a time-and-motion study of FACS child protection caseworkers conducted by E&Y in 2011.

¹⁴ Crown Employees Conditions Award, Clause 39.

remote areas. This suggests that FACS' cost gradient (on the left of Figure 7.2) is significantly flatter than the cost gradient used by the Commission (on the right).

Figure 7.2: Estimated regional and remote cost loadings of child protection services



Source: NSW FACS data and CGC 2015 review

7.28. We acknowledge that the Commission is seeking to update its regional cost gradients with new spending data from the states. NSW Treasury considers that the steepness of the existing cost gradient is not an accurate reflection of the costs incurred in the provision of family and child services.

Inconsistent reporting practices across states

7.29. The Commission utilises unit level record data from AIHW to assess relevant expenditure (where currently New South Wales only provides aggregated data). All jurisdictions provide the data sets to AIHW and this same data is the basis for reporting by AIHW in its own publications and in the PC's Report on Government Services (RoGS).

7.30. While RoGS is a useful starting point for evaluating government services and performance, the PC acknowledges that many of the existing measures reported in RoGS are currently inappropriate for interjurisdictional comparison. Specifically, 11 out of 17 child protection indicators in the performance indicator framework are not comparable across jurisdictions or years.

7.31. Moreover, there are significant variations across jurisdictions in how service systems are organised, and services prioritised and delivered. Unless these differences are explicitly accounted for, it is not possible to make valid comparisons across jurisdictions. Data submission rates also affect the figures. This can result in a distortion of the representation of performance.

7.32. NSW Treasury understands the PC is working with all jurisdictions to improve data comprehensiveness and comparability across child protection by working towards developing uniform counting rules. However, this is a long process, with significant time required to achieve the final outcome of full comparability of data across states.

Policy influences on use rates

7.33. Child protection and OOHC reforms and practices, where effective, can have significant impacts on reported outcomes. For example, there was a 25 per cent reduction in new entries into OOHC in New South Wales in 2016-17 compared to 2015-16¹⁵ as a result of reform, with a particular focus on early intervention and changing the way frontline staff work with families. This suggests that policies impact child protection and OOHC data, and will vary by state depending on child protection practices adopted. This is an emerging development that the Commission will need to monitor as it will lead to significant changes in the data sets over time as it demonstrates that current use rates assessed by the Commission are policy-influenced.

Aged care

Staff propose to recommend the Commission:

- merge States' residual aged care expenses with other general welfare expenses and assess them using a general low SES measure.

7.34. Noted.

Disability

Staff propose to recommend the Commission:

- assess NDIS expenses actual per capita (APC) at full implementation in the 2020 Review, subject to decisions on this issue taken in the 2019 Update.

7.35. Noted.

Staff propose to recommend the Commission:

- re-allocate non NDIS expenses to the other general welfare component and assess them using the same measure of low SES as that used for other general welfare expenses after the full implementation of NDIS, subject to decisions on this issue taken in the 2019 Update.

7.36. Noted.

¹⁵ FACS administrative data.

Concessions

Staff propose to recommend the Commission:

- retain the current assessment methodology for concessions.

7.37. Noted.

Other general welfare

Staff propose to recommend the Commission:

- retain homelessness related expenses within the other general welfare component of the Welfare category
- if the ABS updates SEIFA, use it to measure needs for other general welfare expenses. If an updated SEIFA is not available for the 2020 Review, use the relative proportions of State populations in the bottom quintile of the 2016 Census individual income.

7.38. NSW Treasury supports this recommendation, noting that the causes of homelessness are fundamentally linked to demand for other welfare services.

7.39. NSW Treasury recommends that the Commission incorporate financial stress (proxied by housing stress) in the calculation of the SDC disability, consistent with the approach for family and child services.

Staff propose to recommend the Commission:

- assess revenues from user charges on an equal per capita (EPC) basis in the Other revenue category.

7.40. Noted.

8. Services to communities

Utilities subsidies

Assessment structure

Staff propose to recommend the Commission:

- split the utilities component into electricity subsidies and water subsidies, recognising that average subsidies for these services are likely to be different
- update the split between electricity and water subsidies annually using data already available from the States.

- 8.1. Should the Commission continue to assess needs for utilities subsidies, NSW Treasury supports the recommendation to split spending into water and electricity given the level, nature, and drivers of subsidies differ.

Electricity subsidies

Staff propose to recommend the Commission:

- determine at what point full cost recovery for electricity services is not feasible
- differentially assess electricity subsidies which are the result of unavoidably high costs recognising that subsidies vary by community size and remoteness area
- not differentially assess electricity subsidies when the decision to not fully cost recover is due to State policy choice.

- 8.2. NSW Treasury supports in principle the recommendation to determine the point of feasible cost recovery and differentially assess only operating subsidies provided to communities where cost recovery is not possible (based on remoteness, community size and fuel type).
- 8.3. Under its current methodology, the Commission differentially assesses 50 per cent of state operating subsidies on the basis that they are provided to small communities – deemed to be between 50 and 1000 people – in remote and very remote locations. As the Commission has previously noted, these subsidies would include part of the common subsidy, particularly when tariffs are set on a statewide basis or linked to those in metropolitan areas. This means continuing with the existing methodology risks overstating the impact of remoteness on state capacity to provide the average subsidy.

- 8.4. While NSW Treasury views operating subsidies as a policy choice, we support the conceptual case that the feasibility of cost recovery is affected by the isolation and size of communities, and the fuel source.
- 8.5. Inevitably, isolating the component of operating subsidies that are linked to these cost drivers requires an element of judgment. The approach of determining the point at which cost recovery is not feasible is no exception. However, NSW Treasury consider this to be an improvement over the current methodology of assuming all operating subsidies to small remote communities are driven by their remoteness and size. We believe that the proposed approach is a refinement that more closely aligns with the public good characteristics that the Commission is seeking to capture.
- 8.6. NSW Treasury notes:
- the definition of a small town as those with a population of 50-1000 people appears to be arbitrary and the Commission should test the sensitivity of the results to alternative assumptions.
 - electricity is provided in New South Wales within a fully contestable, deregulated retail market, in part reflecting our characteristics of being relatively urbanised and on-grid. Notwithstanding, the Commission estimates that some 6,000 people in New South Wales live in small, remote and very remote communities.¹⁶ These communities are still high cost but provide an example where operating subsidies are not always unavoidable for on-grid communities.
- 8.7. NSW Treasury supports the Commission's approach to continue assessing state-wide subsidies or those provided to metro areas EPC.

Water subsidies

Staff propose to recommend the Commission:

- determine at what point full cost recovery for water services is feasible
- not differentially assess water subsidies when the decision to not fully cost recover is due to State policy
- differentially assess water subsidies which are the result of unavoidably high costs.

- 8.8. NSW Treasury supports in principle these recommendation should the Commission continue to differentially assess the need for water subsidies.

¹⁶ As per the 2018 Update.

Community development and amenities

Indigenous community development

Staff propose to recommend the Commission:

- expand the scope of Indigenous community development expenses to include general revenue grants to local councils with a predominantly Indigenous population because the driver of these expenses is communities with a significant Indigenous population.
- collect data from the States for Indigenous community development expenses to evaluate the quality of GFS data and to decide the best approach for estimating annual component expenses
- assess Indigenous community development expenses in a separate component of the Services to communities category to improve transparency and simplify the assessment
- continue to use the Indigenous population living in these communities as the disability for the Indigenous community development, and applying wage costs and regional costs disabilities
- continue to define discrete Indigenous communities as SA1s with populations that are more than 50% Indigenous.

- 8.9. NSW Treasury notes the Commission's recommendations with regards to assessment of expenditure on Indigenous community development. Key concerns regarding the reliability of this assessment relate to the following:
- the reliability of Government Finance Statistics expenditure data due to both the high level of disaggregation and potential for double counting expenditure on other functions.
 - while the conceptual case highlights that some costs may increase with remoteness, the current data on schooling and policing expenditure underpinning the general cost gradient is dated. It has little clear link with community development expenses, which can occur centrally rather than the location that development occurs (for example, development and administration of planning and zoning laws).
- 8.10. On this basis, the Commission should apply at least a 25 per cent discount or reconsider its approach given the additional complexity resulting from disaggregating spending into Indigenous and non-Indigenous community development

Other community development and amenities

Staff propose to recommend the Commission:

- continue to assess community amenities expenses EPC
- assess other community development expenses EPC because these services apply to all communities including discrete Indigenous communities
- continue to apply wage costs and regional costs disabilities to other community development and community amenities expenses
- include other community development and amenities expenses in the Other expenses category because this is where most other State expenses which are assessed on the basis of population are classified.

8.11. Noted.

Environmental protection

Staff propose to recommend the Commission:

- continue to assess environmental protection expenses EPC because it is not practical to disaggregate expenses or possible to identify a single broad indicator for assessing spending on this function
- continue to apply a wage costs disability
- consider applying the regional costs disability to some or all environmental protection expenses, especially in light of changes to the scope of these expenses, which now include national parks and wildlife expenses
- include environmental protection expenses in the service expenses component of the Other expenses category because this is where most other State expenses which are assessed on the basis of population are classified.

8.12. Noted.

User charges

Staff propose to recommend the Commission:

- include all user charges for the activities covered by the existing Services to communities category in the Other revenue category and assess them on an EPC basis.

8.13. Noted.

Other disabilities

Staff propose to recommend the Commission:

- discontinue the regional cost weight and SDS factor for electricity subsidies, as the influence of remoteness and SDS will already be captured under the new assessment
- ensure that regional costs and SDS costs are captured in the water subsidies assessment
- retain the 2015 Review assessments of wage costs and regional costs for the remaining components, and consider applying a regional costs disability to environmental protection expenses.

8.14. Noted.

Other issues

Staff propose to recommend the Commission:

- not to assess the effect of the non-State sector on the level of electricity, water and wastewater subsidies.

8.15. Noted.

9. Services to industry

Business development expenses

Staff propose to recommend the Commission:

- continue to assess business development expenses EPC
- continue to apply the wage costs disability to State business development expenses
- continue to recognise that there are minimum fixed costs associated with the normal range of business development activities States perform.

9.1. Noted.

Regulation and other industry support services

Estimating business development and regulation expenses

Staff propose to recommend the Commission:

- use State data on business development expenses and GFS data to estimate business development and regulation expenses for agriculture and other industries
- continue to assess agriculture and other industries regulation separately because the way States regulate these sectors is different, but only if a separate agriculture assessment remains material
- send draft data requests for agriculture and other industries in May 2018
- send final data requests to the States in September 2018 to collect the final data for three financial years from 2015-16 to 2017-18
- retain the business development and regulation weights obtained from data for 2015-16 to 2017-18 for the period of the 2020 Review.

9.2. Noted.

Weighting the drivers of regulation expenses

Staff propose to recommend the Commission:

- continue to differentially assess industry regulation expenses because the size of the regulation task for industry is related to the size of the sector
- use information from State line agencies to inform the decision on the relevant drivers of State spending on industry regulation.

9.3. Commission staff propose to adopt a high-level approach to weight the drivers of regulation expense based on a questionnaire issued to states regarding relative importance. NSW Treasury is concerned that this methodology is heavily driven by the assumptions and judgment of both the Commission and the states. In particular, states could report in a way that achieves a favourable assessment and there is potential for states to misunderstand the nature of the task. Given the reliance on a judgment-led, rather than data-led approach, and the potential for state spending on regulatory activities to be heavily policy-driven, NSW Treasury believes that the Commission should discontinue this assessment. If needs continue to be assessed, a discount of at least 25 per cent should apply to any disabilities assessed for regulation and other industry support services.

Regression approach for identifying and weighting drivers

Staff propose to recommend the Commission:

- not use a regression approach to determine drivers and associated weights due to the nature of the available data and initial regression results lacking statistical significance.

9.4. Noted.

Planning and regulation for major infrastructure projects

Staff propose to recommend the Commission:

- continue to assess planning and regulation expenses for major infrastructure projects in the Services to industry category using State shares of private non-dwelling construction expenditure as the disability
- collect data from States to update the current spending estimate.

9.5. Noted.

Other R&D expenses

Staff propose to recommend the Commission:

- not remove R&D expenses identified in the new COFOG-A classification from the relevant functions on simplicity grounds, unless it is material.

9.6. Noted.

User charges

Staff propose to recommend the Commission:

- deduct all user charges from expenses because most relate to regulation activities and the same disabilities apply to expenses and revenue
- collect data on State agricultural levies to confirm they are not material.

9.7. Noted.

Administrative scale assessment

Staff propose to recommend the Commission:

- retain the administrative scale assessment for the category but re-estimate the costs using the approach outlined in Staff Draft Assessment Paper *CGC 2018-01/25-S, Administrative scale*.

9.8. NSW Treasury considers that the proposed bottom-up methodology for assessing administrative scale is flawed. Apart from the degree of judgment required by the Commission, the underlying data will be unduly policy influenced. Further discussion can be found in our response to *2018-01-24-S DAP - Administrative scale* and in Chapter 15 of this submission.

10. Transport

Overview

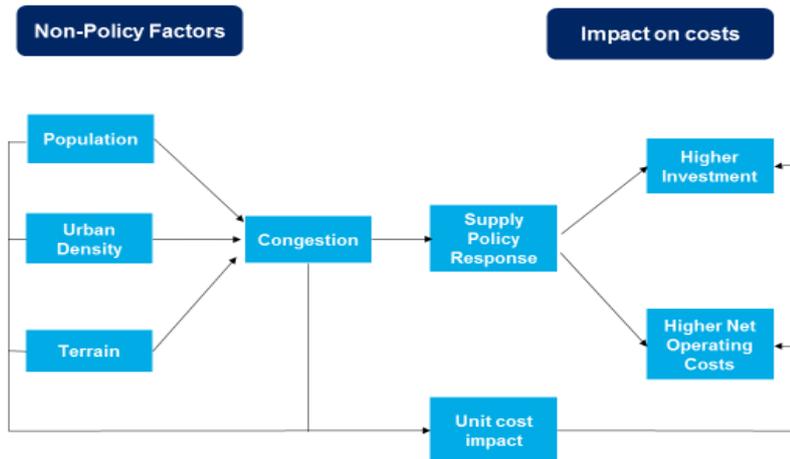
- 10.1. Governments have a long-established role in providing public transport. This role results from the capacity for public transport to generate positive externalities including avoided economic costs from congestion and pollution.
- 10.2. The positive externalities associated with an integrated public transport system means full cost recovery is not efficient or consistent with principles of affordability and accessibility. At a macro level, governments adopt multiple roles in the provision of public transport (including funding, regulating, coordinating, operating and contracting) to reduce the economic costs of congestion associated with large urban areas to an acceptable level, and to capture positive externalities on behalf of the community.
- 10.3. The current assessment of transport expenses grossly understates the relative needs of New South Wales in the provision of public transport compared with other states. While urban population is a key driver of the need to provide public transport, other non-policy factors play an important role and should be captured within any model used by the Commission to assess the relative fiscal needs of the states.
- 10.4. Academic literature¹⁷ indicates that the use of public transport in cities across the world is affected by numerous factors – some being intrinsic to a city, while others are a function of government policy. Disentangling the impact of these influences to determine the key non-policy factors driving the net cost of providing public transport in an Australian context will be a key task of the Commission.
- 10.5. In the Australian context, non-policy factors cause the intrinsic level of congestion, and therefore the need for public transport, to differ significantly between cities even where these cities have similar levels of population. Given this, a more robust model of underlying net transport expenditures which accounts for all significant non-policy factors, beyond urban population, is needed.

¹⁷ See Cihat Polat, 2012. The Demand Determinants for Urban Public Transport Services: A Review of the Literature. *Journal of Applied Sciences*, 12: 1211-1231
<https://scialert.net/fulltextmobile/?doi=jas.2012.1211.1231>

10.6. While many factors could be included within a public transport model developed by the Commission, we consider (as shown in Figure 10.1) the key non-policy factors driving interstate differences in the need for public transport to be:

- urban population
- urban population density and urban form, and
- urban terrain.

Figure 10.1: Conceptual Framework for Urban Public Transport



10.7. The Commission already recognises the impact of population. However, it is also very clear urban population density and terrain increase the intrinsic level of congestion within a city which results in the need for higher per capita levels of public transport provision to enable a city to function.

10.8. In addition to its impact on the need to provide public transport, higher population, urban population density and terrain impact per unit public transport operating and capital investment costs. In particular:

- high population densities require the provision of high cost urban rail services
- variable urban terrain increases train and bus operating costs, and
- high urban land values increase investment costs either through land acquisition costs and/or the need to construct expensive tunnels and bridges to manage the transport task.

Staff propose to recommend the Commission

- retain the current general approach to the assessment of recurrent and infrastructure urban transport expenditure because the conceptual case that city population is a major driver of net expenses and assets for public transport systems is strong and supported by data.

Staff propose to recommend the Commission

- provide the report on stage 2 of the consultancy to States for comments. After receiving those comments, staff will develop assessment proposals for net expenses and investment for the Commission.

Population density

- 10.9. The Commission currently links need for public transport with the population of an urban centre. While such a relationship exists other factors also play a significant role in determining the need for public transport.
- 10.10. As the population of an urban centre increases, land values increase in the central area resulting in an economic incentive to increase the intensity of land use. Given this, there is a strong correlation between the population of a city and its urban population density within its central core.
- 10.11. Academic literature¹⁸ and the Commission's own consultant demonstrates the link between population densities and the provision of public transport. Conceptually this relationship is not difficult to understand as higher population densities result in higher levels of congestion and therefore the need to provide public transport to mitigate this congestion.¹⁹
- 10.12. Sydney has the highest urban density amongst Australian capital cities. The growth in Sydney's population and constraints on land along the periphery of the city has ensured dwelling density has risen significantly. These geographic constraints distinguish Sydney from other capital cities.
- 10.13. Greater Sydney has a population of 5.1 million, of which almost 17 per cent live in a very dense, or extremely dense areas over 5,000 persons per km². Melbourne by comparison has only 8 percent of its population of 4.8 million living in areas with a similar density with Brisbane having only one per cent.
- 10.14. In addition, Greater Sydney has a more dispersed, dense population, with 48 km² exceeding 8,000 people per square kilometre and 126 km² between 5,000 and 8,000 people per square kilometre. Only 14km² of Melbourne has a population that exceeds 8,000 people per square kilometre and 51km² between 5,000 and 8,000 people per square kilometre²⁰.

¹⁸ See for example, Stephanie Souche, "Measuring the structural determinants of urban travel demand", *Transport Policy*, 17, 3 (2010) pp. 127-134 - <http://halshs.archives-ouvertes.fr/halshs00578019/fr/>

¹⁹ To illustrate this, consider two cities with equal populations with City B have an area half the size of City A and therefore double the population density – for a given transport task, City B will be more congested.

²⁰ 3218.0 - Regional Population Growth, Australia, 2016-17 – Population Grid

10.15. Nearly three quarters of a million people work in an arc that travels through eastern Sydney from Chatswood down through to Botany.²¹ Of these workers, almost 157,000 commute to the Sydney-Haymarket-The Rocks area (an SA2) in the CBD by train²². A net outflow of 200,000 people leave the Western Sydney region each day for work – this is forecast to grow to 340,000 by 2041²³. Current government policy is actively attempting to reduce the relative magnitude of these flows through adopting a three cities approach to planning in the Sydney basin.²⁴

10.16. The strong correlation between population density and the public transport share of travel is not only found in academic literature but is also demonstrated in the analysis by the Commission’s transport consultant²⁵ shown in Table 10.1. Sydney has the highest population densities and the highest rates of public transport use amongst Australia’s capital cities.

Table 10.1: Urban population density and public transport share

Capital cities (2011 SUA)	Population density in Urban Areas (pp/sqkm)	Public Transport Mode Share
Sydney	1,897	14%
Melbourne	1,439	11%
Brisbane	930	8%
Perth	1,058	8%
Adelaide	1,186	6%
Hobart	606	4%
Canberra	821	4%
Darwin	504	6%

Source: Jacobs Stage 1 Report

10.17. As of the 2016 census, greater Sydney’s work force stood at 2,209,296 persons with 524,487 relying on public transport to commute (i.e. approximately 23 per cent of the work force). In comparison only 16 per cent of Melbourne’s

²¹ ABS Census data (SA3 areas (POW): Botany, Marrickville-Sydenham-Petersham, Sydney Inner City, North Sydney-Mosman, Chatswood-Lane Cove)

²² ABS data <http://www.abs.gov.au/ausstats/abs%40.nsf/mediareleasesbyCatalogue/EC802A92025821DFCA2582950001F5DD?OpenDocument>

²³ Smart Cities Plan, Department of Infrastructure, Regional Development and Citis, 2016 https://cities.infrastructure.gov.au/htmlfile#_Ref08

²⁴ A Metropolis of Three Cities, <https://www.greater.sydney/three-cities>

²⁵ Jacobs - Modelling of urban transport recurrent and infrastructure expenditure requirements - Stage 1 Report to the Commonwealth Grants Commission (2017)

workforce relies on public transport to commute although it has comparable number of workers at 2,046,163 (see Table 10.2)²⁶

Table 10.2: Public transport demand and use by mode

Urban Centre	No of employed persons	Public transport trips	Use rates of public transport
Greater Sydney	2,209,296	524,487	23.74%
Greater Melbourne	2,046,163	337,646	16.50%
Greater Brisbane	1,037,901	127,709	12.30%
Greater Adelaide	560,316	52,140	9.31%
Greater Perth	850,158	87,852	10.33%
Greater Hobart	99,361	5,483	5.52%
Greater Darwin	72,120	7,328	10.16%
Australian Capital Territory	220,645	15,654	7.09%

Source: ABS 2016 Census

10.18. Public transport patronage is increasing. In 2016-17 Sydney's rail network managed 385 million trips – up 27 per cent from 2012, its bus network managed 315 million trips – up 44 per cent since 2012 and 10 million annual trips were taken on the light rail network – up 152 per cent from 2012.

10.19. NSW Treasury believes the Commission should assess both population and urban density in its model for determining underlying net transport expenses. The inclusion of population density is likely to see the explanatory power of the model increase significantly while at the same time population density will take on some of the explanatory power currently attributed, inaccurately, to population size.

10.20. Higher population and population densities increase infrastructure costs through higher land acquisition costs. These factors are important additional drivers alongside the impact of congestion on public transport operating costs (as outlined by Jacobs in their stage 1 report). Sydney's high land values means bridges or tunnels are often the only viable means of navigating a densely populated area. This results in unavoidably higher infrastructure costs.

Terrain

10.21. The terrain of the Sydney basin with its wide harbour and significant river system (Middle Harbour, Parramatta, Georges, Hawkesbury and Nepean rivers) impacts significantly on Sydney's transport task necessitating the provision of multiple bridges and tunnels.

²⁶ ABS Census of Population and Housing, 2016.

- 10.22. Despite the provision of this capital-intensive infrastructure, the terrain of Sydney also inevitably increases trip lengths and journey times and creates points of congestion within the transport network²⁷. These factors increase the need for both public transport and the provision of road space to reduce congestion to acceptable levels.
- 10.23. To measure this disability, the Commission should consider the impact of terrain barriers and its impact on travel distances as a measure of the intrinsic congestion impact of terrain. Alternatively, the Commission could use the number of road and rail bridge and tunnel lane kilometres which cross permanent waterways divided by the surface area of the urban centre. This variable could then be assessed to determine how this acts to increase the lane kilometres of the urban road network and act as an intrinsic measure of the impact of terrain on congestion.
- 10.24. In addition to the impact of its waterways, the positioning of Sydney within and along the Great Dividing Range creates significant changes in gradient and curvature across transport routes adding to wear and tear on public transport assets. For example, urban terrain features such as track slope and curvature impact rail operating costs. High road slope gradients and curvature increase wear and tear and reduce fuel efficiency resulting in higher operating expenses. As Daniels & Mulley note “topographically difficult terrain usually results in increased maintenance and operations costs” for rail.²⁸

Urban congestion

- 10.25. Sydney continues to experience greater levels of congestion than other major capital cities despite having higher levels of public transport use, due to its higher population density and the nature of its terrain (see Figure 10.2).
- 10.26. Changes in the relative levels of congestion over time in each city shown in Figure 10.2 are a function of a number of offsetting factors, including:
- the share of population growth allocated to expanding the perimeter of the city versus urban in fill, with the latter having a greater impact on congestion, and

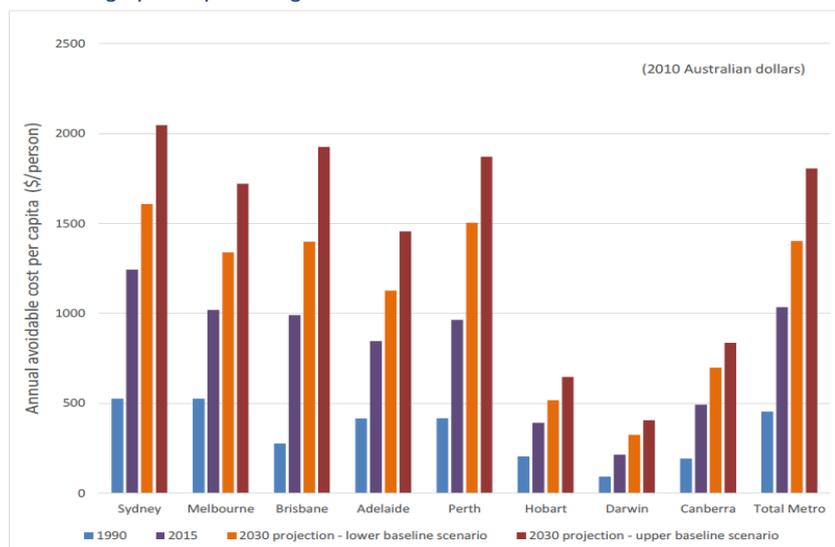
²⁷ To illustrate this, consider two identical cities. Now add a barrier dividing City B into 2 halves requiring the provision of bridges and tunnels. For a given transport task, City B will be more congested due to longer travel distances and the funnelling effect of the bridges and tunnels.

²⁸ Daniels, R & Mulley, C, Planning Public Transport Networks—The Neglected Influence of Topography, *Journal of Public Transportation*, Vol. 15, No. 4, 2012 (<https://scholarcommons.usf.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1079&context=jpt>)

- the level of infrastructure investment by jurisdictions to relieve congestion arising from population growth.

10.27. When comparing Sydney and Melbourne, the ease with which population growth can be accommodated in Melbourne through an increased surface area of the city distinguishes it from Sydney. This impacts on congestion levels and the need for public transport.

Figure 10.2: Average per capita congestion costs



Notes: Costs here refer to avoidable social costs, and are based on the deadweight losses associated with the relevant congestion levels. That is, these per capita social costs refer to the estimated annual costs of delay, trip variability, vehicle operating expenses and motor vehicle emissions—associated with traffic congestion above the economic optimum level for the relevant networks—divided by the resident population (for the years ending 30 June) for each capital city (ABS GCCSA geographies).

Source: BITRE report 074 - Traffic and congestion cost trends for Australian capital cities (p.30)

10.28. Traffic in Sydney is delayed from free flow 31 per cent of the time, compared to 23 per cent of the time in Melbourne. Sydney's road users need to budget 50 per cent additional travel time to arrive on time 90 per cent of the time in the afternoon/evening peak period²⁹.

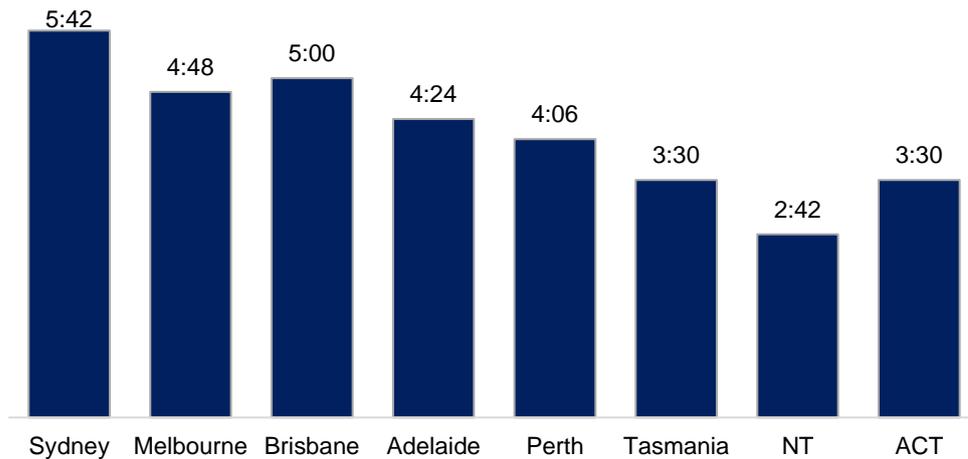
10.29. While ABS data shows that the average commute distance for Australian capital cities is broadly similar (Greater Sydney, 15.25km; Greater Melbourne, 15.39km; Greater Brisbane, 15.42km³⁰), commuters in Sydney spend significantly more time commuting than other capitals (Figure 10.3) – an average of 42 minutes more per week³¹.

²⁹ Austroads 'Congestion and Reliability Review' (2016) Travel Time Delay
<https://www.onlinepublications.austroads.com.au/items/AP-R534-16>

³⁰ ABS 2016 Census Data.

³¹ AMP.Natsem Income and Wealth Report - Race against time: How Australians spend their time (p.15)

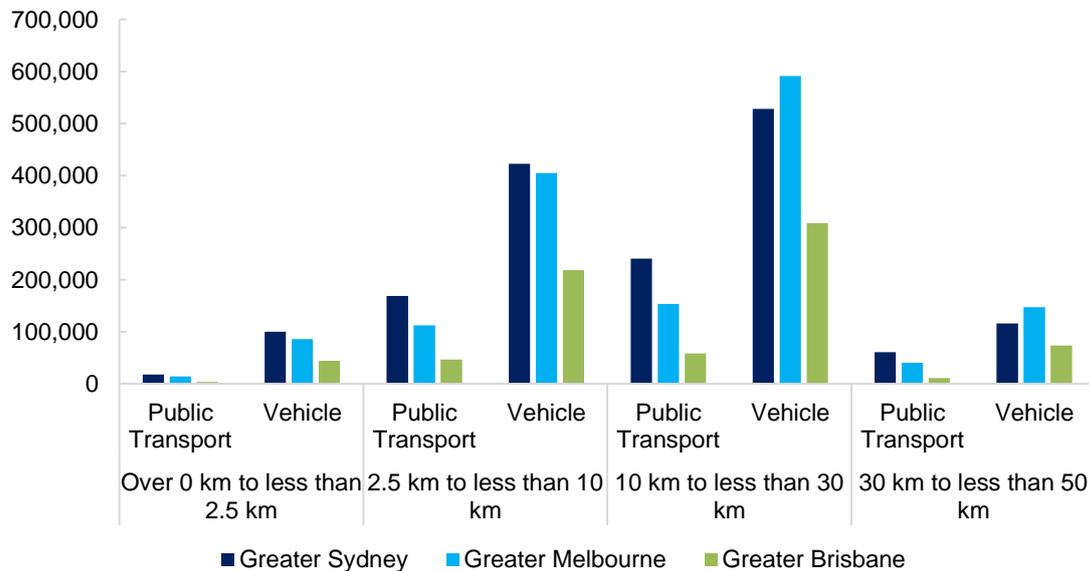
Figure 10.3: Commuting times (Average hours spent travelling to/from paid work per week), Australian capital cities



Source: Race against time: How Australians spend their time. Natsem, Issue 30 – November 2011.

10.30. The need to move Sydney’s dense, dispersed population across its congested urban terrain places a greater burden on its public transport system to perform this task. Figure 10.4 demonstrates that a larger number of people are being moved by public transport over larger distances in Sydney³². Conversely, more people can commute greater distances by car in Melbourne and Brisbane (62 per cent of people travelling to and from work in Melbourne and Brisbane travel more than 10km, in Sydney this is 57 per cent) due to lower levels of congestion.

Figure 10.4: Number of people by distance commuted by public transport and car



Source: ABS census data (2016)

³² ABS census data (2016).

- 10.31. Any measure of urban transport network congestion will be influenced by government policies over an extended period of time. In fact, the current investment decisions of the New South Wales Government can be seen as an attempt to manage congestion in the Sydney basin to an acceptable level. Given this, relative levels of congestion are not an appropriate public transport demand variable for any model assessing the fiscal needs of the state.
- 10.32. However, congestion will impact public transport costs. NSW Treasury has engaged an external transport consultant to examine how this factor could be measured across states and will present the findings to the Commission early in 2019.

Table 8: Cost of congestion

City	Congestion cost for rigid bus (\$/VKT)	Congestion cost for articulated bus (\$/VKT)
Sydney	\$0.30	\$0.45
Melbourne	\$0.23	\$0.34
Brisbane	\$0.21	\$0.32
Adelaide	\$0.21	\$0.32
Perth	\$0.22	\$0.34
Hobart	\$0.09	\$0.13
Canberra	\$0.10	\$0.15
Darwin	\$0.06	\$0.09

Source: Jacobs Stage 1 Report

- 10.33. High levels of urban congestion cause greater wear and tear on bus assets and reduce fuel efficiency due to repeated stopping and starting in traffic. Traffic congestion and peak spreading induce higher demand for additional bus services resulting in higher vehicle costs – purchase, registration, maintenance, storage and depreciation. Additional vehicles require additional personnel costs – recruitment, training, salaries and overtime.
- 10.34. As Jacobs note³³, the Australian Transport Assessment and Planning (ATAP) Guidelines contain a Bus Operating Cost Model, which considers bus operating cost as a function of travel speed, road surface roughness and vehicle weight (including weight of passengers). The reduced speeds associated with congestion increase bus operating costs.

³³ Jacobs Stage 1 report for the Commonwealth Grants Commission titled “Modelling of urban transport recurrent and infrastructure expenditure requirements” (2017), p.18.

The need for heavy rail

- 10.35. It has been suggested that the higher net cost associated with the public transport in Sydney results from a policy choice to operate an extensive rail network. This hypothesis is unsubstantiated. It ignores the practical realities of moving large numbers of people in a congested urban setting. It also implies the New South Wales Government would deliberately choose a significantly higher cost option for meeting public transport needs.
- 10.36. Heavy rail is the only viable mass transit option available to meet a significant proportion of Sydney public transport demand. Adding more bus services to a congested road network is not feasible. ABS Census data shows 157,000 commuters travel to the Sydney CBD by train. This is the equivalent of nearly 2,000 buses entering the Sydney CBD, which is clearly not a viable option.
- 10.37. There is a greater reliance on heavy rail in Sydney than other capital cities – of the 20 per cent of Sydney’s workforce which use public transport to commute, approximately 70 per cent rely on heavy rail³⁴. Although 72 per cent of Melbourne commuters rely on heavy rail – slightly higher than Sydney – a smaller portion of Melbourne workers use public transport to commute.
- 10.38. With increasing population densities along the rail corridor west of the Sydney CBD, the last five years seen unprecedented growth of over five per cent per annum in patronage on the Sydney rail network³⁵. This increased patronage has required increased frequency of services and kilometres travelled.
- 10.39. The impact of this increase in growth on Sydney Trains includes increased wear and tear on the network, reduced times for access to the network for maintenance, increased costs associated with more costly maintenance work at night and the requirement for new specialised equipment, a need for increased train crew and new fleet, and obsolescence of existing fleet.
- 10.40. The Sydney Trains network has experienced a 22 per cent increase in customer journeys and 18 per cent increase in costs since 2015: including a 10 per cent increase in costs in the last year (2017-18)³⁶. The additional services the network requires also necessitates an increase of 130 train crew.
- 10.41. The impact is also significant at stations. Large city stations have seen growth of over a million customer trips between 2015 and 2018, and stations in the west of Sydney doubling in size.

³⁴ Census of population and Housing, 2016, TableBuilder (157,000 people commute to the Sydney-Haymarket-The Rocks SA2 area).

³⁵ Source: Sydney Trains

³⁶ Sydney Trains data.

10.42. Demand for rail travel is forecast to more than double over the next 20 years³⁷. Greater Sydney can no longer provide for additional car transport as densification increases; future growth needs to be supported by public transport and active transport in established areas.

10.43. Given the need for heavy rail in some Australian cities this additional per unit cost should be recognised by the Commission.

Staff propose to recommend the Commission:

- retain the 2015 Review definition of urban areas: ABS UCLs contained within SUAs
- include all SUAs in the assessment of urban transport because most of them have public transport services.
- decide whether or not some satellite cities should be amalgamated with their principal city based on the results of the analysis using the two quantitative criteria proposed by the consultant.

10.44. Noted.

Staff propose to recommend the Commission:

- retain the 2015 Review assessment of non-urban transport services, which is based on State shares of population outside capital cities.

10.45. Noted.

³⁷ New South Wales State Infrastructure Strategy 2018,
http://www.infrastructure.nsw.gov.au/media/1138/sis_report_section80_print.pdf

11. Roads

Rural road length

Staff propose to recommend the Commission

- consider whether it should adopt a new approach to measuring State road length in a way that more closely reflects the actual length of roads that States manage and, if so, to:
 - use State actual road networks adjusted to ensure the inclusion of roads commonly classified as State roads and the exclusion of roads commonly classified as local roads to reflect average policy
 - as a fall-back, retain the mapping algorithm approach with changes to incorporate all connections between urban centres, connections to smaller population centres and connections to certain areas of significance
- provide a draft data request to States by early 2019 to see whether States can provide road length information based on the definitions and formats set out in the Austroads Standard.

11.1. NSW Treasury supports the view that the mapping algorithm developed for the 2010 review does not adequately reflect the rural road network required to be maintained by jurisdictions.

11.2. The Staff Assessment Paper notes an estimated rural road length of 25,685km for New South Wales. Table 11.1 below compares this with the actual carriageway kilometres and lane kilometres managed and funded by the New South Wales Government. The synthetic network is estimated to represent around 80 per cent of the rural road network funded by Roads and Maritime Services (RMS) in New South Wales.

Table 11.1: New South Wales rural road network

	Carriageway km	Lane km
<i>CGC Synthetic Road Network</i>	25,685.0	N/A
<i>CGC Actual Roads</i>	37,535.0	N/A
<i>Managed and Funded Roads (RMS)</i>		
New South Wales State Roads (rural)	11,468.1	24,250.7
National Land Transport Network (rural)	4,593.4	9,652.8
Unincorporated Regional Roads	506.1	1,012.2
Unincorporated Local Roads	2,371.8	4,725.5
Other funded roads*	12,227.0	24,454.1
Total funded New South Wales rural roads	31,166.5	64,095.3

Note: Full regional road network length is 19,408km - 10% is in urban areas and RMS covers approximately 70 per cent of the total cost of the remainder.

Source: NSW Roads and Maritime Services (RMS)

- 11.3. The gap between the synthetic road network and the actual road network for rural areas funded by states reflects several factors including:
- a historic pattern of settlement which may no longer match present day population centres
 - the need to link significant zones of economic activity with potentially low population densities both now and in the past, with urban centres and
 - the difficulty experienced by all jurisdictions in defunding existing roads which may now not meet some objective criteria for being a state road.
- 11.4. The ‘historical stickiness’ of state funded rural road networks – that is, the current road network reflects both current and historical factors – is more likely to be greater for older, intensive rural production areas of Australia. Such funding does not present a policy choice but represents ‘what states do’ in line with long-held expectations amongst rural communities that such road networks will continue to be publicly funded. Given the significance these issues, the Commission’s use of the actual rural road network maintained in each jurisdiction is likely to better reflect fiscal need compared with the current synthetic road network.
- 11.5. While we acknowledge the potential for grant design effects to occur through using the actual rural road network as the base for the Commission’s assessment, on balance, this is a lesser problem than ignoring the historical factors that determine the need to fund state rural roads.
- 11.6. NSW Treasury notes the suggestion to use the Austroads Data Standard of road classification for consistency of road length data across states. While a consistent approach to road length is welcomed, this standard may not provide a solution as the proposed definitions for road classification are open to interpretation. For example, the Austroads functional classification of rural roads

defines the route characteristics of 'Class 2' roads as roads whose main function is to form the principal avenue of communication for movements between 'a capital city and key towns'. However, what constitutes a 'key town' is open to interpretation. In addition, the data sets that would derive from this classification are still being constructed and are unlikely to be sufficiently advanced in time for this review.

- 11.7. NSW Treasury will work with the Commission to provide an alternative, independent measure of state road classification.
- 11.8. Finally, in assessing the cost of managing the sealed verses unsealed roads, the current methodology assumes the cost of maintaining a kilometre of unsealed road is half that of a sealed road. Based on experience in New South Wales, sealed roads are, on average, 7.5 times more expensive to maintain than unsealed roads. This suggests a factor around 0.13 is more appropriate.³⁸

Urban road length

Staff propose to recommend the Commission

- retain the definition of urban areas as UCLs of more than 40 000 people
- use State actual road networks adjusted, to the extent possible, to ensure the inclusion of roads commonly classified as State roads and the exclusion of roads commonly classified as local roads to reflect average policy
- as a fall-back, continue to use urban population as a proxy measure of urban road length needs.

- 11.9. NSW Treasury supports the staff proposal to use state actual road networks adjusted, to the extent possible, to ensure the inclusion of roads commonly classified as state roads and the exclusion of roads commonly classified as local roads to reflect average policy.
- 11.10. The assessed cost of maintaining the urban road network should also reflect differential costs arising from congestion in urban areas. Large city urbanisation, and the congestion associated with it, is a key cost driver of maintaining the road network.
- 11.11. Sydney has the highest per capita congestion costs and the largest population of any Australian capital city. This introduces a complex task associated with planning and coordinating real-time management of the transport network, including incident management and congestion mitigation. It also requires a

³⁸ Based on RMS estimates

greater investment in Intelligent Transport Systems to optimise the efficient use of road capacity.

- 11.12. Congestion drives investment decisions, increases the complexity of transport planning and coordination, and raises road maintenance costs – due to increased wear and tear, traffic volumes and the constraint heavy traffic volumes place on road access times.
- 11.13. Road capacity projects, and smaller lower cost pinch point and clearway projects, are necessary to make the network operate much more efficiently at lower cost, as well as drive network reliability. These projects often require higher operating costs.
- 11.14. The congested network leads to higher maintenance costs in densely populated urban areas. Transport NSW estimates the expected average maintenance costs over the next 10 years (excluding bridge maintenance costs) differ substantially between urban and rural roads. For example, the 10-year maintenance cost for Sydney roads is expected to be \$38,768 per lane km, the Hunter \$33,024, Southern New South Wales \$25,399 and Western New South Wales \$11,257 per lane km (Table 11.2).

Table 11.2: Road network maintenance costs

Region	Carriageway km \$	Lane km \$
Sydney	97,468	38,768
Hunter	68,745	33,024
Southern New South Wales	53,911	25,399
Northern New South Wales	51,714	24,891
South West New South Wales	31,383	15,639
Western New South Wales	22,870	11,257

Source: NSW RMS

- 11.15. These costs are driven by a number of factors in addition to traffic volume. For example:
- the limited time availability on the pavement between heavy traffic periods, resulting in low production rates
 - payment of overtime and penalty rates
 - provision of lighting, safety and other equipment
 - noise abatement costs (as any significant work must be performed at night), and
 - use of higher cost materials with quick setting properties due to the limited time availability on the pavement.

11.16. The following table (Table 11.3) compares road maintenance costs in Sydney and regional New South Wales.

Table 11.3: Comparison of road network maintenance costs in Sydney and regional New South Wales per square metre

Activity	Sydney Average \$	Regional Average \$	Difference	
			\$	%
Sprayed resealing	20.56	6.81	13.74	+202%
Pavement rehabilitation	131.89	108.46	23.43	+22%
Pavement patching	121.86	77.14	44.71	+58%
Asphalt resurfacing	83.96	49.57	34.39	+69%

Source: NSW RMS

Local road length

Staff propose to recommend the Commission

- ensure that the local roads component includes only expenses relating to maintenance of local roads in areas of States where there is no local government (unincorporated areas) or where there is insufficient population for the local government to support road maintenance
- update the estimates of local road length using actual road length in unincorporated areas and sparsely populated areas.

11.17. Noted.

Road use – traffic volume and heavy vehicle use

Staff propose to recommend the Commission

- retain the current methodology for calculating urban and rural traffic volume
- treat light commercial vehicles as passenger vehicles because they do not fit the definition of heavy vehicles
- combine rigid and other trucks, and buses into an 'other heavy vehicles' class
- not pursue the issue raised by the ACT.

11.18. Noted.

Bridges and tunnels

Staff propose to recommend the Commission

- agree to staff considering options for a bridge and tunnel factor based on State spatial data
- if no satisfactory options are found, reallocate bridge and tunnel expenses and investment to the relevant urban and rural road components and apply the disabilities for those components.

11.19. NSW Treasury supports the Commission considering options for assessing bridges and tunnels based on state spatial data.

11.20. NSW Treasury notes that bridge and tunnel infrastructure is significantly more expensive to build and maintain compared to an earthwork road formation. The current Commission methodology only assesses the costs of bridges on an equal per capita basis. The calculation of costs for bridges and tunnels in this manner does not recognise the extra cost of maintaining this infrastructure. For example, we estimate the average annual maintenance expenditure over the next 10 years for pavements and roadside assets is around \$43 per metre compared to \$838 per metre for bridges.

11.21. Bridges represent 1.4 per cent of the total road length (5,860 bridges of total length 284.3 km), equivalent to the cost of maintaining 5,540 kilometres of road earthwork formation.³⁹ It should be noted that New South Wales uses as a definition of 'bridge' a structure with greater than 6 metre total length. If the Commission considers using the Austroads definition of a bridge, and assumes the most common definition of a structure with a clear span of 1.8 metres, rather than the Roads and Maritime Service (RMS) definition of 6 metres, this would result in a significant increase in the number of bridge-sized structures in New South Wales.^{40 41}

11.22. The number and nature of bridges and tunnels in New South Wales is significant due to its topography, population dispersion, urban congestion and

³⁹ Bridges cost, on average, 19.5 times more than the same length of earthwork road formation including the road pavement and associated roadside assets (RMS data estimates).

⁴⁰ Austroads, AP-R252 – Guidelines for Bridge Management

⁴¹ In New South Wales, the minimum length of 6m (20ft) for bridges has been in use for many years to ensure that the bridge teams, with specialist bridge skills, are fully focused on managing bigger structures with higher risk profile. Smaller structures, with relatively lower risks, are managed separately under corridor assets by road teams.

historical development. This is especially true in Sydney with its urban terrain of waterways and inclines.

11.23. There are a substantial number of tunnels across greater Sydney and New South Wales – for both road and rail. As with bridges, these are more complex to build and maintain than straight roads.

11.24. RMS average expenditure on the maintenance and operation of tunnels, opening bridges and vehicular ferries is around \$30 million per year. As with bridges, RMS estimates the cost of maintenance and operation of tunnels per year is significantly more expensive than pavements and roadside assets, at approximately \$1,525 per metre.

Other services

Staff propose to recommend the Commission

- remove the other services component from the roads category and reallocate other services expenses to the other components of the Roads category on a proportional basis and apply to them the component disabilities.

11.25. Other roads services cover expenses on corporate services, enforcement of heavy regulatory costs, vehicle registration, driver licensing and loan servicing (NTC category G expenses). In the 2015 Review, other roads services were assessed on an EPC basis because a material assessment could not be identified.

11.26. NSW Treasury opposes the Commission proposal to allocate these costs to service delivery expenses. There is no linkage between corporate services, vehicle regulatory, vehicle registration and driver licensing costs and road length (the main disability for the category). Loan servicing expenses should be reallocated to financing costs.

National network roads

Staff propose to recommend the Commission

- defer a decision on the treatment of Commonwealth payments for investment on national network road and rail projects until State comments on the issue have been received and examined.

11.27. NSW Treasury supports examining the treatment of Commonwealth payments for investment on national network road and rail projects (the National Land Transport Network) to ensure they are treated appropriately. A key factor for the Commission will be whether Commonwealth funding of projects simply changes

the timing of state expenditure or leads to spending that would not otherwise occur.

11.28. NSW Treasury invests around 1.5 times more funding than compared to that provided by the Commonwealth to maintain roads within the National Land Transport Network. In 2017-28, New South Wales received Australian Government funding of \$105 million⁴², however the state invested of \$265 million into the network over the same period.

Other issues

Physical environment

Staff propose to recommend the Commission

- Not pursue the development of a physical environment assessment for road maintenance expenses.

11.29. Noted

Location factor

Staff propose to recommend the Commission

- continue to apply the wage costs factor to all components of the Roads category
- continue to apply the regional costs factor to the rural roads component.

11.30. Noted.

User charges

Staff propose to recommend the Commission

- continue to assess roads user charges on an EPC basis in the Other revenue category.

11.31. Noted.

⁴² RMS data estimates.

12. Housing

SDC assessment of housing

12.1. The Commission's SDC assessment of housing expenditure does not entirely capture the cost pressures incurred by the state. We recommend that the assessment can be improved by:

- inclusion of housing stress
- inclusion of CALD, and
- refinements or discounting to the regional cost gradient.

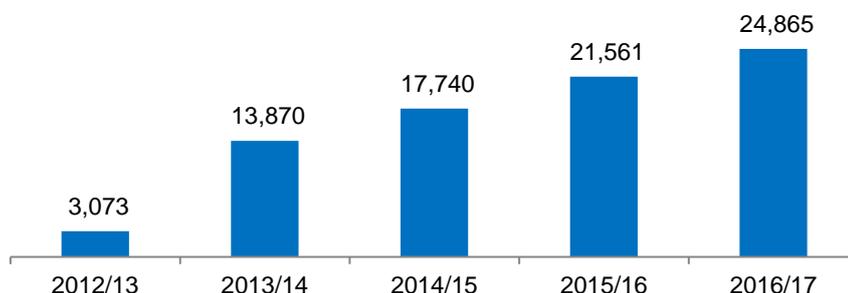
Housing stress

12.2. A lack of affordable housing and financial stress in New South Wales increases the demand for and costs of homelessness and social housing. Relative levels of financial stress can be measured by the prevalence of housing stress. The most widely accepted measure of housing stress is where a household is forced to spend 30 per cent or more of income on housing costs.

12.3. Where public housing or community housing is not available for a family requiring urgent assistance due to housing stress, other options are offered, such as private rental assistance (PRA). PRA products provide financial and non-financial support to clients to set up and maintain tenancies in the private rental market. FACS also provides temporary accommodation (TA) to families where safety is a primary concern.

12.4. There has been an increase in FACS expenditure on PRA, as well as TA, particularly in the last few years (Figure 12.1)⁴³. This is partially driven by an increase in households requiring housing assistance due to the rapid escalation of housing costs in New South Wales.

Figure 12.1: Number of households assisted with Temporary Accommodation during the year



Source: FACS Statistical Report 2016/17, Housing dashboard 3.

⁴³ Expenditure data can be provided on a confidential basis as required by the Commission.

Culturally and linguistically diversity

- 12.5. A material proportion of households in New South Wales public housing are born in a non-English speaking country⁴⁴. CALD households are more likely to require social housing assistance than non-CALD households⁴⁵.
- 12.6. FACS recognises the additional resources needed to service CALD clients in social housing by applying a complexity loading for CALD clients as part of its RAM. This is based on a time-and-motion study conducted by ARTD Consultants, on behalf of FACS, in 2017. We have estimated that the provision of tenancy management services costs five per cent more for a CALD household compared to a non-CALD household in public housing.
- 12.7. Specifically, CALD clients in social housing require assistance with communication (face-to-face meetings and written documents), as well as assistance in building knowledge of, and navigating through, the service system. In particular refugees may have experienced significant trauma and may require additional supports and/or a different approach to engage and interact effectively with services which increases the complexity of this task.
- 12.8. Given the prevalence of CALD clients in social housing and additional resources required, CALD should be considered as a disability.

Regional cost gradient

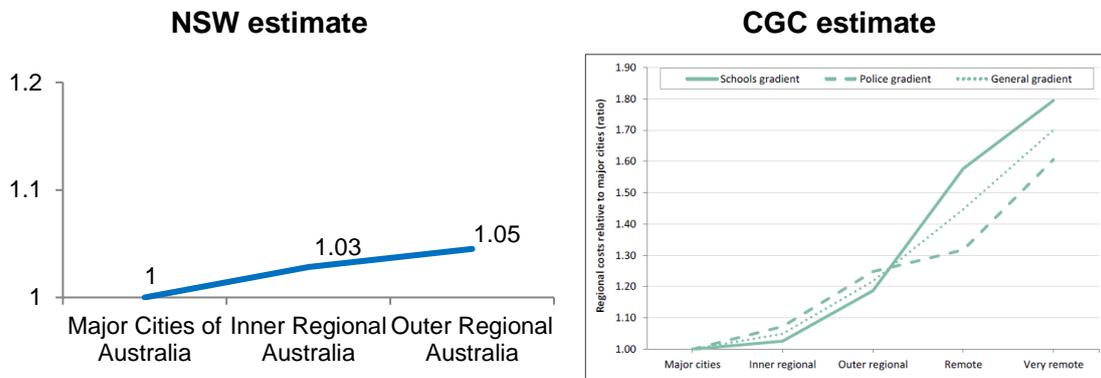
- 12.9. The Commission have assessed regional costs using an extrapolation of the average regional cost loadings for police and education. FACS applies a location loading in its housing RAM to provide for differences in resources required in providing tenancy management services in outer regional areas relative to major cities.
- 12.10. FACS adopted a first-principles approach to determine travel times for the location loading. FACS measured actual travel times from District Housing Offices (DHOs) to property location to derive weighted average travel time for each DHO.
- 12.11. Regional cost loadings have been estimated by comparing the base demand hours for providing tenancy management per household with the adjusted hours that takes into account actual travel time. This is computed for all DHOs located in major cities, inner regional and outer regional.
- 12.12. The slope of the cost gradient estimated by FACS (on the left of Figure 12.2) is significantly flatter than the cost gradient used by the Commission (on the right).

⁴⁴ Data can be provided on a confidential basis if required.

⁴⁵ Excludes households that do not have a CALD status recorded. Data can be provided on a confidential basis, as required by the Commission.

This is because the travel time between DHOs and public housing properties is not especially long. The estimated weighted average travel time between DHOs and public housing dwellings in major cities compared to outer regional differs by less than half an hour. Furthermore, the number of social housing dwellings in outer regional New South Wales is lower relative to urban areas.

Figure 12.2: Estimated regional and remote cost loadings of social housing services



Source: NSW FACS data and CGC 2015 review

Census and AIHW data

Staff propose to recommend the Commission:

- agree to develop an approach which scales the more detailed Census data to accord, to the extent possible and appropriate, with available Australian Institute of Housing and Welfare (AIHW) data for each State on households in State housing (public housing plus State Owned and Managed Indigenous Housing (SOMIH)) and community housing (mainstream community housing plus Indigenous Community Housing Organisation (ICHOs) dwellings).
- agree to staff undertaking further investigations into the possible scaling of Census rent data to accord with available AIHW data.

12.13. Noted.

Impact of the cost of land

States are welcome to develop a case for the assessment of the impact of land prices on the costs of providing housing services. Staff propose to recommend the Commission:

- not pursue a differential assessment of housing related land costs because recurrent expenses would not be affected by land prices and net investment in land is too small for an assessment to be material.

12.14. Noted

The impact of policies on affordable housing

Staff propose to recommend the Commission:

- not pursue a separate assessment of affordable housing because State expenses are likely to be small.

12.15. Noted.

The assessment for First Home Owner Grants and stamp duty concessions

Staff propose to recommend the Commission:

- retain the EPC assessment of first home owners grants (FHOGs) and stamp duty concessions expenses.

12.16. New South Wales has demonstrated, in the Revenue chapter of this submission, the current inconsistent treatment of FHOGs and stamp duty concessions which should be corrected as part of the 2020 Review.

13. Wages costs

Staff propose to recommend the Commission:

- retain its approach to estimating differences in wage costs using the 2016 Update econometric model, updated with new CoES data each year
- update the wage proportions of service delivery expenses based on GFS expense data in the review, but not update these proportions in subsequent updates.

13.1. Noted.

14. Administrative scale

- 14.1. NSW Treasury remains unconvinced that the current and proposed administrative scale assessment adequately captures costs states incur in delivering services which are independent of the size of the service population. While we recognise the efforts being made by the Commission to quantify administrative scale, we are concerned the inability to test the integrity of the current and proposed methodology undermines the credibility of an assessment that redistributes more than a billion dollars of GST between the states.
- 14.2. NSW Treasury notes that the administrative scale assessment was the subject of considerable work in the 1999 and 2004 Reviews aimed at providing estimates of the minimum level of administrative structure for each function. Despite the Commission considering these estimates to be robust, considerable judgement was used to develop the old estimates. These estimates are now over 14 years old.
- 14.3. The proposed methodology is flawed – apart from the degree of judgement required by the Commission, the underlying data is unduly policy influenced and informed by an assessment of ‘what states do’ over 14 years ago. The business of government has changed in fundamental ways – driven, in part by new technologies and business models. Given this, the Commission should discount the assessment to account for the considerable uncertainty associated with estimates produced by the methodology.

The conceptual case for administrative scale and its definition

Staff propose to recommend the Commission:

- retain the 2015 Review definition of administrative scale.

- 14.4. In our response to Commission 2017-06-S, NSW Treasury noted the difficulties faced by the Commission to develop a methodology that is a reliable indicator of additional per capita costs associated with administrative scale. Further the inability to test the integrity of the current and proposed methodology undermines the credibility of the assessment, and HFE more generally, given it results in a redistribution of over a billion dollars of GST.
- 14.5. The current administrative scale assessment is based on data from the 1999 and 2004 Reviews inflated by the ABS state and local government final consumption expenditure (SLGFCE) deflator. If these estimates were accurate at the time, it is likely they have become less accurate as technology and the scale of operations of states have changed over time. For example, the greater prevalence of outsourcing and the use of cloud based information and communications technology (ICT) would have reduced administrative scale costs.

- 14.6. If the estimate of administrative scale costs in the 2020 Review becomes 'intractable', as it did in the 2015 Review, the Commission should consider discounting its assessment due to the unreliability of the underlying data. As evidence of this, we strongly urge the Commission to consider the plausibility of its current administrative scale estimates.
- 14.7. Table 14.1 presents administrative scale allowances for individual expenditure categories as a share of total expenditure for Tasmania, the ACT and the Northern Territory. It is implausible for administrative scale in the services to industry category to represent 19 per cent of expenditure in Tasmania, 19.5 per cent in the ACT and 27.3 per cent in the Northern Territory. The implied administrative scale allowances in many other expenditure areas are equally implausible.

Table 14.1: Assessed Administrative Scale as a Proportion of Total Assessed Expenditure – 2016-17

	Tasmania %	ACT %	NT %
Schools education	1.5	2.2	2.2
Post-secondary education	8.4	10.4	13.6
Health	1.5	2.6	2.5
Welfare	2.0	3.9	2.6
Services to communities	2.7	3.3	0.9
Justice	6.1	9.4	4.2
Roads	3.7	7.1	3.0
Transport	4.1	1.8	9.0
Services to industry	19.0	19.5	27.3
Other expenses (excluding Housing)	14.9	15.6	23.7

Source: Staff discussion paper (CGC 2018-01/24-S), p. 10 and CGC 2018 Update, Supporting Documentation, the Assessed Budget, Summary Tables

Re-estimating the administrative scale costs

Staff propose to recommend the Commission:

- to the extent possible, re-estimate administrative scale expenses for each expenses category using the bottom-up and top-down approaches.

- 14.8. The bottom-up approach has not been applied successfully for almost 15 years.
- 14.9. Relying on the cost structures of the three small scale jurisdictions at a point in time introduces undue policy influence into the assessment. Conceptually administrative scale is meant to be a policy free cost that is independent of client population. The general approach for estimating administrative scale by necessity must reflect 'average policy' in the bottom-up stage of the methodology, but in the top-down limiting stage, relies on the Commission judgments of the circumstances in the three small states.

- 14.10. Hypothetically, if the three smallest states were all technically inefficient at this point in time, the methodology would be ineffective at limiting the administrative scale expenses. Introducing panel data for all states over an extended period of time would mitigate the problem but does not appear possible with the Commission's proposed methodology. As evidence of the need to look more broadly at the available data, we note that in 2005-06 New South Wales Treasury had only 226 employees (including both the insurance and procurement functions but excluding a revenue office) compared with the assumption shown on page 36 of Commission 2018-01/24-S for minimum structure of a comparable Treasury of 79 despite the larger scale of operations of New South Wales at that time.
- 14.11. NSW Treasury strongly disagrees with the Northern Territory's arguments around ICT. The trend at all levels of government has been to increase the number and volume of services provided through contractors and shared services (for example, GovConnect in New South Wales and Cenitex in Victoria provide shared IT services). This has been especially prevalent in ICT and is likely to increase as governments try to move more and more internal client interactions onto cloud based internet services. The main driver for this has been the significantly lower cost of providing services in this way.

Adjustments for the Northern Territory and the ACT

Staff propose to recommend the Commission:

- continue to adjust the ACT's scale expenses to reflect its minimal spending needs for Indigenous communities, non-urban transport, primary industries, and mining and mineral resources other than fuels
- decide whether to retain the adjustments for the Northern Territory based on State provided evidence about the existence of dual service delivery models.

- 14.12. NSW Treasury supported the proposal to adjust downwards the ACT's administrative scale expenses for activities not undertaken.
- 14.13. The Commission should make no adjustments to administrative scale for the Northern Territory. As service delivery has become more sophisticated, New South Wales departments have demonstrated to the Commission the adoption of culturally sensitive service delivery models to deal with different client groups. In some service areas such as health, education and welfare, this is driven by the needs of culturally and linguistically diverse (CALD) clients. In other areas such as justice, the needs of clients are driven by SES rather than CALD or Indigeneity. All jurisdictions would be applying similar service delivery models and experiencing similar administrative costs to do so without relying upon dual service delivery models.

Wage costs adjustment

Staff propose to recommend the Commission:

- re-estimate the proportion of administrative scale expenses to which the wage costs factor should apply through the collection of State data on the proportion of wage related expenses for head office functions and whole of State services such as Treasuries, for all the Commission's categories.

14.14. New South Wales supports this recommendation.

Indexing the administrative scale expenses

Staff propose to recommend the Commission:

- keep the administrative scale expenses up-to-date in updates following the 2020 Review by indexing them using the ABS State and local government final consumption expenditure deflator.

14.15. Noted.

Presentation

Before making a recommendation to the Commission:

- staff seek State views on whether administrative scale expenses should all be included in a component of the Other expenses category or separately identified in each expense category.

14.16. Administrative scale expenses should be split into each expense category. Together with the proposed split of physical and financial assets, this will logically group the different types of costs in each expense category together. It will also allow a more transparent comparison of the effect of disabilities on each type of cost.

15. Physical and financial assets

Functionalising the assessment

Staff propose to recommend the Commission:

- separately assess investment in all category and component service areas.

15.1. There is conceptual merit in separately assessing investment in all category and component service areas to increase transparency and allow category-specific demand factors to be applied. Considerable background calculations are currently required for this assessment. The Commission should balance this against materiality and the potential for additional complexity. On balance, further functionalisation of this assessment is supported to support greater scrutiny of a major area of GST redistribution.

Refining our assessment of infrastructure needs

Staff propose to recommend the Commission:

- remove three-year averaging of stock disabilities
- capture the change in circumstances through the use of category specific growth measures, where methods can be developed and reliable data are available. If no alternative measure is available, use total population growth as a proxy
 - where population growth is used, specify change in population levels, rather than births, deaths and net migration, as the measure of population growth
- where there are considered to be additional stock requirements not captured by the growth indicator, use the assessment year's stock disability for both opening and closing stocks.

15.2. The Commission should remove three-year averaging of stock disabilities. Like the move from 5- to 3-year averaging of relativities, this may result in a discontinuity which will advantage some states.

15.3. The Commission should use category specific growth measures and the assessment year stock disability for both opening and closing stocks.

Privately provided assets

- 15.4. There should be no adjustment for claimed differences in the ability to enter into private public partnerships. These arrangements are on a user pays basis with capital expenditure and the value of assets often being reflected within the state accounts. Consistent with other user charges, they should not be assessed.

Other issues considered

Staff propose to recommend the Commission:

- not consider differential assessment of investment in land for any category other than roads
- assess the suitability of recurrent disabilities in assessing capital stock needs when assessments are further progressed
- consider whether to assess depreciation expenses with net investment expenses in an assessment of gross investment
- continue to assess the impact of population dilution on net financial assets, remove the 12.5% discount and not recognise any other disabilities.

- 15.5. The inclusion of a disability for new versus old assets would be difficult and it is unclear whether additional costs associated with higher construction standards for new assets would not be more than offset by lower operating costs due to more efficient design. There are significant inefficiencies in the operation of older hospitals and prisons and new technology in the urban transport sector can result in significant cost savings.
- 15.6. The Commission should implement a differential assessment for higher urban land costs. We note that higher urban population densities add significantly to land acquisition costs and that this has, in part, been a driver for the expanded use of tunnelling in urban areas. As discussed in the transport and roads chapters, tunnelling carries significantly higher capital and recurrent costs.
- 15.7. While most road tunnels have been associated with privately public partnerships and, as argued above, should be assessed on a user pays basis, we believe the Commission should recognise the higher capital costs associated with tunnelling of publicly owned roads and rail lines in urban areas as part of its treatment of land costs.
- 15.8. The Commission should implement a gross assessment which combines both new infrastructure investment with the depreciation of the existing capital stock as a means of simplification.

16. Geography used by the Commission

Geography for the regional costs assessment

Staff propose to recommend the Commission:

- continue using ABS remoteness areas geography across all categories.

16.1. NSW Treasury supports using ABS remoteness areas geography across all categories.

What are the drivers of revenue capacity?

Staff propose to recommend the Commission:

- develop a regional costs assessment using data from schools, police, post secondary education and hospitals
- test whether there are significant differences in the cost gradients between these services and, if not, use a single measure for all categories.

16.2. NSW Treasury supports gathering more data to improve the regional costs assessment and would prefer a single measure, subject to the quality of the model. The existing dataset is too old to reflect recent changes to service delivery models and too narrow to be applied widely across expenditure assessments.

Extrapolation

Staff propose to recommend the Commission:

- send a data request to States for current data on State spending by region by service
- continue applying a regional cost disability to services where a conceptual case has been identified.

16.3. NSW Treasury accepts the conceptual case that operating costs generally increase with remoteness for most government services, however, the slope and shape of the gradient, and the strength of the broader conceptual case, varies significantly across these services. For example, in New South Wales there is limited difference in the cost of child protection services between an

outer regional and remote area, and even less for out of home care given that there is minimal staff travel required.⁴⁶

- 16.4. On this basis, while NSW Treasury supports the Commission seeking to expand the evidence base on state spending in regional areas, stronger consideration should be given to a discount where extrapolation is required and the conceptual case is relatively weak.

Other issues considered and settled

Staff propose to recommend the Commission:

- continue to use SEIFA and NISEIFA for the total and non-Indigenous population, respectively
- maintain 2015 methods for Service delivery scale
- maintain 2015 methods to measure Interstate non-wage costs.

- 16.5. NSW Treasury supports the use of SEIFA and NISEIFA for the total and non-Indigenous population, respectively. However, the Commission adopt a revised version of SEIFA and NISEIFA that accounts for housing stress, and not just the level of housing expenditure. See chapter 17.
- 16.6. NSW Treasury notes the Commission's recommendation to maintain 2015 methods for service delivery scale.
- 16.7. NSW Treasury does not support the method to measure Interstate non-wage costs. If there is no data to support the conceptual case then the disability should not be applied.

⁴⁶ See commentary within the Welfare chapter.

17. Measuring Socio-Economic Disadvantage

Financial Stress and SES Status

- 17.1. 'Socioeconomic status ... is a theoretical construct encompassing individual, household, and/or community access to resources ... [and] ... is commonly conceptualized as a combination of economic, social, and work status, measured by income or wealth, education, and occupation, respectively.'⁴⁷
- 17.2. The Commission recognises that a significant proportion of state government expenditure is directed at either offsetting socio-economic disadvantage (for example, housing and education) or dealing with the consequences of socio-economic disadvantage within the community (such as policing and child protection).
- 17.3. Quantifying the link between socio-economic disadvantage and government expenditure is highly fraught:
- socio-economic disadvantage can be measured in many ways with the outcomes under different measures varying for specific groups within the community.
 - the relationship between any chosen measure of socio-economic disadvantage and the need for government expenditure in a specific area is unlikely to be direct, or linearly-related to, any SES index.
- 17.4. The Commission measures socio-economic disadvantage based on an Index of Relative Socio-Economic Disadvantage (IRSD) within a suite of Socio-Economic Indexes for Areas (SEIFA) developed by the ABS⁴⁸. Like most measures of socio-economic status, the IRSD includes a number of indicators that reflect a household's likely access economic resources (eg income and employment status) and its inability to consume resources (eg housing rental paid and the level of car ownership). Where access to resources is low and the ability to consume resources is restricted, SES is considered to be low.
- 17.5. NSW Treasury is concerned that the current IRSD used by the Commission does not adequately capture the demands placed on government services associated with households in financial stress. Based on discussion with New South Wales agencies, financial stress is a significant factor driving service delivery demands – for example, household financial stress can be a driver of

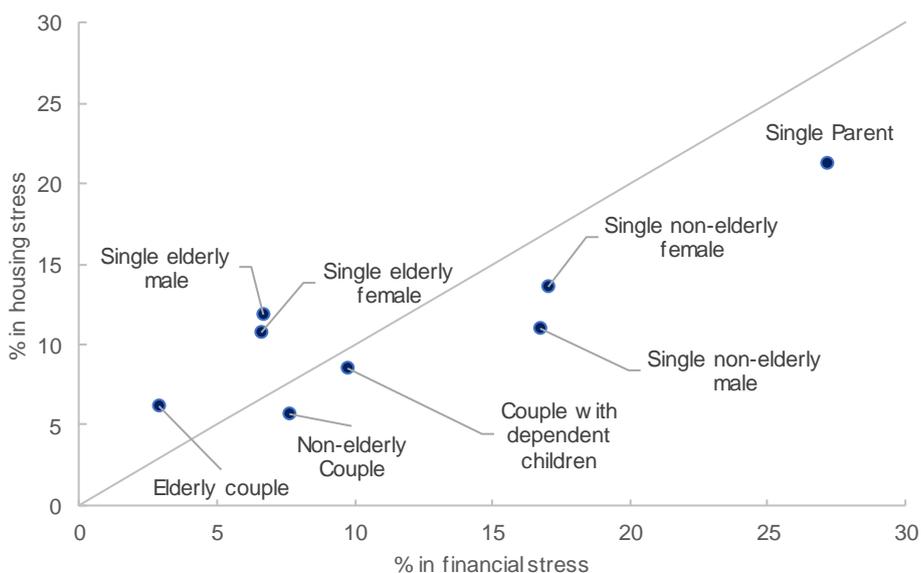
⁴⁷ Psaki SR, Seidman JC, Miller M, et al. Measuring socioeconomic status in multi-country studies: results from the eight-country MAL-ED study. *Population Health Metrics*. 2014;12:8. doi:10.1186/1478-7954-12-8.

⁴⁸ In some cases the Commission uses a non-indigenous version of IRSD (NISEIFA) developed by the ABS and a similar indigenous index developed by the Centre for Aboriginal Economic Policy Research.

domestic violence, the incidence of child protection, the demand for housing assistance as well as some forms of criminal activity.

- 17.6. The separate inclusion of financial stress as a disability within the Commission's assessments would be complex and would overlap with existing measures of socio-economic status. To overcome this problem, the Commission should modify its existing measure of socio-economic status developed by the ABS by the inclusion of a measure of financial stress.
- 17.7. While income data is collected as part of the Census, details of household expenditure, other than housing costs, is not available. Given this, the direct inclusion within the ISRD of a financial stress component is not possible. To overcome this problem, the ISRD should be modified by the inclusion of a variable which can act as a proxy for financial stress derived from the same Census data used to produce the ISRD.
- 17.8. Figure 17.1 provides evidence of a broad correlation between the levels of financial and housing stress from the HILDA Survey.

Figure 17.1: Financial v Housing Stress - % of Households



Source: The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1-16

- 17.9. ABS data indicate that housing stress⁴⁹ is higher in New South Wales than in any other state. Table 17.1 shows that 19.0 percentage of households in New South Wales experience housing stress compared with 16.5 percent in the rest of Australia. In addition, the same ABS survey shows that 50.8 percent of low

⁴⁹ Housing stress is generally considered to occur where a household is required to pay more than 30 per cent of income in housing costs.

income household in New South Wales are in housing stress compared with only 41.1 percent in the rest of Australia.

Table 17.1: Interstate comparison of Housing Stress (ABS)

	% of Household in Housing Stress	% of Low Income Rental Household in Housing Stress		
		Capital City	Rest of State	Total
New South Wales	19.0	53.3	45.2	50.8
Victoria	16.3	51.7	31.5	46.7
Queensland	17.4	33.6	37.9	36.6
Western Australia	17.7	43.0	23.0	39.4
South Australia	16.6	50.6	35.9	48.0
Tasmania	13.6	28.9	22.7	26.3
Australian Capital Territory	12.9	33.8	25.4	24.3
Northern Territory	15.5	26.5	-	33.8
Australia	17.3	47.1	38.2	44.2
Australia less New South Wales	16.5	NA	NA	41.1
Number of households	1,550,700	NA	NA	666,200

Source: ABS Catalogue 4130.0 (2015-16), Tables 13.5 and 22.1

17.10. Data from the Melbourne Institute also shows higher levels of housing stress in New South Wales. Table 17.2 shows that 13.0 per cent of households in Sydney were in housing stress in the period from 2013 to 2016 compared with only 9.7 per cent in Melbourne and 10.5 per cent in Brisbane.

Table 17.2: Interstate comparison of Housing Stress (HILDA Survey)

	Capital City	Other Urban	Non-Urban
New South Wales	13.0	8.7	NA
Victoria	9.7	8.7	NA
Queensland	10.5	11.3	NA
Western Australia	8.8	9.4	NA
South Australia	8.4	9.5	NA
Tasmania	9.5		NA
Australian Capital Territory and Northern Territory	6.6		NA
Australia	NA	NA	8.5

Source: Melbourne Institute, The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 16

17.11. Given the relationship between financial and housing stress shown in Figure 17.1, NSW Treasury requested the analytical unit within the ABS to test the importance of a housing stress variable within the IRSD. Not surprisingly, the

variable selected – households within the bottom four deciles paying more than 30 percent of their income in housing costs – was a more important indicator of socio-economic disadvantage than most of the existing variables used within the IRSD.

17.12. Table 17.3 shows the individual components and estimated weightings of the IRSD with and without the inclusion of the housing stress variable in the analysis. The ABS analysis shows that the selected housing stress variable was an important indicator within the IRSD and distinct from the existing housing variable.

Table 17.3: IRSD Weightings with and without Housing Stress

IRSD Variables	Existing IRSD Variable Loadings	Proposed IRSD Variable Loadings
% People with stated annual household equivalised income between \$1 and \$25,999	-0.91	-0.90
% Families with children under 15 years of age who live with jobless parents	-0.83	-0.83
% Occupied private dwellings with no internet connection	-0.79	-0.77
% People aged 15 years and over whose highest level of education is Year 11 or lower. Includes Certificate I and II	-0.77	-0.75
% People (in the labour force) unemployed	-0.75	-0.75
% Employed people classified as 'labourers'	-0.74	-0.73
% Occupied private dwellings paying rent less than \$215 per week (excluding \$0 per week)	-0.73	-0.72
% of low income dwellings with housing costs of more than 30% of income	NA	-0.69
% One parent families with dependent offspring only	-0.67	-0.69
% People aged under 70 who have a long-term health condition or disability and need assistance with core activities	-0.67	-0.66
% People aged 15 and over who are separated or divorced	-0.55	-0.56
% Employed people classified as Machinery Operators and Drivers	-0.54	-0.53
% Employed people classified as Low Skill Community and Personal Service Workers	-0.53	-0.54
% Occupied private dwellings with no cars	-0.49	-0.50
% Occupied private dwellings requiring one or more extra bedrooms (based on Canadian National Occupancy Standard)	-0.46	-0.47
% People aged 15 years and over who have no educational attainment	-0.43	-0.44
% People who do not speak English well	-0.30	-0.32

Source: ABS

17.13. Table 17.4 shows the impact on the number of persons living in low-SES households from the inclusion of the proposed housing stress variable. Overall the proposed IRSD, which includes a housing stress variable (as a proxy for

financial stress), results in an additional 86,610 persons across Australia being classified as low SES (decile 1-4) with 52.1 per cent of these persons being in New South Wales.

Table 17.4: Distribution by jurisdiction of low-SES persons

	Existing IRSD	Proposed IRSD	Change
New South Wales	3,027,394	3,072,494	45,100
Victoria	2,041,787	2,068,447	26,660
Queensland	1,946,467	1,977,889	31,422
Western Australia	785,423	792,855	7,432
South Australia	811,415	801,384	-10,031
Tasmania	292,577	281,533	-11,044
Australian Capital Territory	28,447	28,591	144
Northern Territory	85,746	82,673	-3,073
Australia	9,019,256	9,105,866	86,610

Source: NSW Treasury calculations based on ABS data

17.14. Besides impacting on the interstate distribution of low-SES persons, the introduction of financial stress into the SES calculation also has a significant intrastate impact relevant to the Commission's assessments. Table 17.5 shows that including financial stress within the SEIFA increases the number of persons in major cities classified as low-SES for New South Wales.

Table 17.5: Regional impact of financial stress in New South Wales

Australian Deciles	Major cities	Inner regional	Outer regional	Remote	Very remote	Total
1	52,997	-2,278	-11,002	-251	0	39,466
2	7,623	-2,101	-7,677	-2,331	0	-4,235
1-2	60,620	-4,379	-18,679	-2,080	0	35,231
3	-9,426	-10,116	9,290	508	-268	-10,012
4	21,121	3,973	-6,645	-351	-40	19,881
1-4	72,315	-10,522	-16,034	1,472	-308	45,100
5	-14,335	-2,248	-2,589	-1,802	-120	-21,094
6	-15,285	1,903	8,927	1,411	428	-2,616
7	-1,864	3,829	2,695	-957	-382	3,321
8	-24,684	939	2,848	1,075	382	-19,440
9	2,280	3,256	3,954	624	0	10,114
10	-18,517	2,796	176	0	0	-15,545

Source: NSW Treasury calculations based on ABS data

17.15. In view of the changes in distribution of low-SES persons outlined above, the Commission should include housing stress as a proxy for financial stress within its measures of socio-economic disadvantage.

Disaggregation of the IRSD

17.16. The Commission currently derives SES disabilities by grouping deciles into material groups – typically low, middle and high-SES. NSW Treasury has undertaken a dissection of this data which indicates significant differences in the interstate proportion of persons fitting within the lower deciles.

17.17. Table 17.6 and Table 17.7 presents existing ISRD data and the proposed modified IRSD taking account of financial stress. This data shows the higher proportion of very low-SES persons (deciles 1 and 2) are concentrated in New South Wales.

Table 17.6: Distribution by Jurisdiction of low SES Households excluding financial stress

	1-2 Deciles %	3-4 Deciles %	1-4 Deciles %
New South Wales	35.0	32.2	33.6
Victoria	22.0	23.3	22.6
Queensland	21.2	21.9	21.6
Western Australia	7.5	9.9	8.7
South Australia	9.2	8.8	9.0
Tasmania	3.8	2.8	3.2
Australian Capital Territory	0.1	0.5	0.3
Northern Territory	1.2	0.7	1.0
Australia	100.0	100.0	100.0

Source: NSW Treasury calculation based on ABS data

Table 17.7: Distribution by jurisdiction of low-SES households including financial stress

	1-2 Deciles %	3-4 Deciles %	1-4 Deciles %
New South Wales	35.3	32.2	33.7
Victoria	21.7	23.7	22.7
Queensland	21.6	21.8	21.7
Western Australia	7.4	10.0	8.7
South Australia	9.0	8.6	8.8
Tasmania	3.6	2.6	3.1
Australian Capital Territory	0.1	0.5	0.3
Northern Territory	1.2	0.6	0.9
Australia	100.0	100.0	100.0

Source: NSW Treasury calculation based on ABS data

17.18. Given the assumed correlation between socio-economic status and the need for government expenditure, we believe the Commission should consider further disaggregation of the low socio-economic category where this currently consists of an aggregation of deciles one to four combined.

17.19. Further information is contained in the attached report from the ABS (see Attachment A).

18. Other expenses

Natural disaster relief

Staff propose to recommend the Commission:

- continue to assess natural disaster relief expenses on an APC basis
- not make an assessment for natural disaster mitigation expenses, due to the difficulty in obtaining expense data and identifying a reliable driver
- continue to make adjustments to the adjusted budget to ensure:
 - natural disaster relief expenses under the NDRRA framework are only assessed once
 - net natural disaster relief expenses funded from local government revenue are not included in the assessment because they do not affect a State's fiscal capacity
 - Commonwealth NDRRA assistance payments through States to local government (for example, for roads) are not included in category expenses.

- 18.1. Given the difficulties in determining an underlying expense basis for natural disasters, continuation of the current APC basis is supported.
- 18.2. However, an EPC approach to spending on natural disaster relief mitigation presents real concerns regarding potential perverse incentive effects. While we recognise the potential for grant design impacts of an APC approach, we are also concerned that the Commission's current approach creates disincentives for states to spend on mitigation activities. On balance, we consider the inherent delays in equalisation process act sufficiently to mitigate grant design impacts if the assessment is discounted by 50 per cent.
- 18.3. Finally, we support the proposal to continue to make adjustments to ensure that natural disaster relief expenses under the NDRRA framework are only assessed once, remove local government natural disaster expenses funded from local government revenue and to remove Commonwealth NDRRA assistance payments through states to local government.

Capital grants to local government for community amenities

Staff propose to recommend the Commission:

- cease assessing the capital grants to local governments for community amenities component because the driver of this spending is unclear.

18.4. The underlying cost driver behind grants to local government for community amenities is unclear and its more likely to be related to state population over the medium term rather than population growth in any particular year. NSW Treasury support the proposal to assess these expenses on an EPC basis.

National parks and wildlife services

Staff propose to recommend the Commission:

- not assess national parks and wildlife services, due to uncertainties surrounding the policy influences and difficulty in obtaining reliable data to measure cost influences and expenses.

18.5. Supported.

Cross-border expenses

Staff propose to recommend the Commission:

- not assess a cross-border disability for library, sports grounds and other cultural and recreational services provided to New South Wales residents unless the ACT is able to provide current data to substantiate an assessment.

18.6. Supported.

Other issues including location

Staff propose to recommend the Commission:

- include most State expenses which are assessed EPC in this category
- continue to apply location disabilities to the same expenses as the 2015 Review.

18.7. Noted.

19. Other disabilities

Cross-Border

Staff propose to recommend the Commission:

- retain the 2015 Review approaches to cross-border disabilities for schools, post-secondary education, roads and hospitals.

19.1. Noted

Staff propose to recommend the Commission:

- retain a cross-border assessment for community health expenses
- collect updated evidence on cross-border use of ACT community health services by residents from New South Wales and use of New South Wales community health services by ACT residents.

19.2. Noted.

Staff propose to recommend the Commission:

- not apply a cross-border factor to residual State disability expenses, other general welfare expenses and recreation and culture expenses, unless the ACT provides evidence of significant cross-border use and that use leads to identifiable costs for the ACT.

19.3. NSW Treasury supports this recommendation.

Staff propose to recommend the Commission:

- consider whether a community health specific method could be assessed to measure a cross border factor or whether the general method, subject to a review of the proportion of the population from surrounding areas who are considered to use ACT services, should continue.

19.4. NSW Treasury supports the Commission reviewing the proportion of the population from surrounding areas who are considered to use ACT services.

National Capital

Staff propose to recommend the Commission:

- discontinue all the planning allowances unless the ACT can make a case for their continuation
- retain the police allowance and the 2015 Review method for calculating it and assess it as a separate factor in the Justice category.

- 19.5. NSW Treasury supports this recommendation.
- 19.6. As the Commission has noted, other states incur costs through having to interact with other levels of government, circumstances outside their control, or out of necessity. Further, all states must cope with planning and policy decisions made in the past that in hindsight have led to increased costs.
- 19.7. NSW Treasury recommends the Commission measure actual state road length (See discussion in chapter 11). This would address any ACT concerns in relation to its roads costs.

Native Title and Land Rights

Staff propose to recommend the Commission:

- continue to assess the native title component of the native title and land rights assessment on an APC basis, subject to State views on alternative assessments.

- 19.8. Further consideration of the ACT's suggestion of a differential assessment for native title expenses is merited.
- 19.9. Actual per capita cost assessments are appropriate where there are no policy differences between states, that is, any differences are entirely due to differences in state characteristics. But as the Commission has noted:

While general frameworks for the implementation of native title and land rights legislation are imposed by the Commonwealth, States have adapted them to fit their own circumstances.

- 19.10. Although states in general aim to develop cost-effective processes, there are examples of states choosing to litigate or legislate for policy reasons.⁵⁰

⁵⁰ For example, the Barnett Government's involvement in the native title claim for James Price Point

19.11. Conceptually a differential assessment with Indigenous population share as a supply driver, and the presence of valuable land with mineral reserves as a demand driver is sound. Data sources that could be econometrically tested include share of Indigenous population and the value of mineral production or reserves as explanatory variables for share of native title expenses. The Commission should have enough data to construct a panel data set to run a regression analysis with enough data points to be reliable.

19.12. Using a differential assessment based on panel data regression analysis would also relieve the Commission of the need to collect data annually.

Staff propose to recommend the Commission:

- decide on whether land rights expenses should be assessed for all States and, if so, how, after collecting State expenses on land rights.

19.13. Noted.

20. Draft 2020 Review Quality assurance strategic plan

20.1. Noted.

21. Further information and contacts

For further information or clarification on issues raised in this submission, please contact:

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Email: ffr@treasury.nsw.gov.au

NSW Treasury commissioned report from the ABS on an alternative measure of Socio-Economic Disadvantage