

2024 Update – NSW Response

New Issues Consultation

3 November 2023

Acknowledgement of Country

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

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

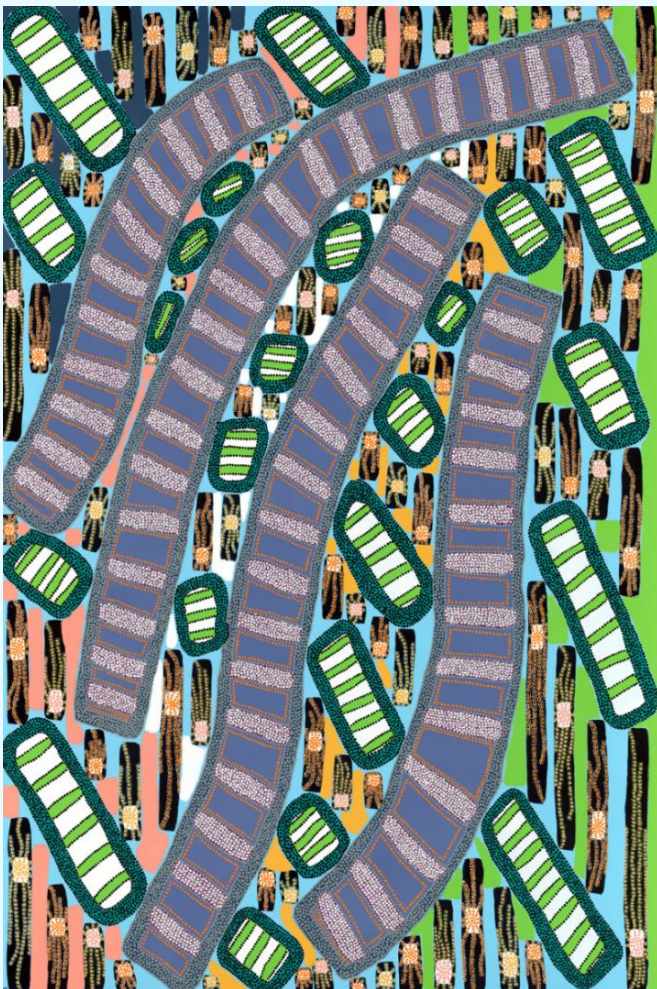
We celebrate the deep and enduring connection of Aboriginal and Torres Strait Islander peoples to Country and acknowledge their continuing custodianship of the land, seas and sky.

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

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

Artwork:

Regeneration by Josie Rose



Contents

1	2024 Update – New Issues Paper	4
1.1	Overview of new issues.....	4
1.2	Data issues for consideration.....	4
1.3	Other issues for consideration.....	9
1.4	NSW points for consideration.....	10

1 2024 Update – New Issues Paper

1.1 Overview of new issues

- The 2024 new issues paper includes data issues for consideration:
 - Retention of the Australian Bureau of Statistics (ABS) Estimated Resident Population (ERP) data with First Nations population estimates based on the 2016 Census.
 - Update of the transport assessment with ABS 2021 Census geographies and distance to work data, 2016 Census passenger numbers, and Geoscience Australia slope data.
 - Amendment of the payroll tax assessment by removing the Australian Defence Force (ADF) personnel and Australian embassy employees adjustment from Compensation of Employees data.
- The 2024 new issues paper includes other issues for consideration:
 - The suspension of the national capital assessment from the GST relativities calculation if the ACT's assessed GST needs for it are negative.
 - Separating nickel within the mining revenue assessment, as it has become material.
- The 2024 Update will also include updated ABS 2021 Census data for:
 - Commission estimates of Discrete First Nations Communities populations.
 - Remoteness area classifications.
 - Significant urban areas and urban centres using 2021 census geographies, and urban populations using the latest populations and boundaries.
 - Sub-state First Nations population estimates, and Commission updates for ABS First Nations population projections by state and age.
 - Updated socio-economic status measures including Indigenous Relative Socio-Economic Outcomes (IRSEO) / Non-Indigenous Socio-economic Index for Areas (NISEIFA) and Socio-economic Indexes for Areas (SEIFA).
- Due to improved data availability, the health assessment will be able to shift its non-state calculation data from SEIFA to IRSEO / NISEIFA from the 2024 Update onwards, which is in line with the use of IRSEO / NISEIFA for all other assessments.

1.2 Data issues for consideration

The Commission proposes:

- To apply 2016 Census-based use weights to 2016 Census-based population estimates for First Nations people in the 2024 Update justice assessment.
- This approach, of continuing to apply 2016 Census-based use weights to 2016 Census-based population estimates, is consistent with that taken by the Commission during the 2018 Update process. This approach is supported until more current data on the use rates of justice services for the 2021 Census population becomes available.

- This approach recognises that the substantial growth in population from non-demographic factors, including increased self-identification and improved Census coverage, limits the comparability of the 2021 Census First Nations population and 2016 population projections.

The Commission proposes:

- To update the characteristics of urban areas that are applied to the regression coefficients in the urban transport assessment using:
 - 2021 Census significant urban areas definitions to update urban area population and population weighted densities
 - 2021 Census distance to work data to update network complexity
 - Updated Geoscience Australia average slope data to update topography
 - 2016 Census passenger data to model passenger numbers.
- The material changes in population-weighted density (PWD) using 2021 Census significant urban area data raises concerns about the sensitivity of measured PWD to small changes in SA1 data. The changes in SA1-based PWD are likely to be disproportionate to changes in intrinsic public transport demand and adjusting the assessment to instead use SA2 data would be appropriate for the 2024 Update.
- NSW Treasury supports the use of 2021 Census distance to work data, updated Geoscience Australia average slope data, and 2016 Census passenger data to update the characteristics of urban areas as part of the urban transport assessment.

2021 Census urban area population and population weighted densities

- The use of updated significant urban areas definitions from the 2021 Census is supported. However, NSW Treasury recommends the Commission uses 2021 Census SA2 data to update the PWD of significant urban areas, rather than SA1 data.
- The Commission's urban transport model uses PWD to explain the level of intrinsic demand for public transport, with greater densities driving higher public transport demand. The current methodology measures PWD using SA1 boundaries.
- As illustrated in the new issues paper, the SA1 approach is sensitive to both changes in population within SA1 boundaries and changes to SA1 boundaries, with very large changes in PWD for some jurisdictions arising from changes to Census geographies. While additional SA1 boundaries reflects urban development, NSW Treasury believes the changes in SA1-based PWD are disproportionate to changes in intrinsic public transport demand.
- By its nature, disaggregation of any geographic area increases the potential estimates of PWD. Table 1-1 illustrates how PWD increases when disaggregating, so long as the population is not uniformly distributed with respect to area.

Table 1-1: Example of population-weighted density

Region	Land Area (km ²)	Population	
		Scenario 1	Scenario 2
Sub-Region A	10	100	200
Sub-Region B	10	100	160
Sub-Region C	10	100	30
Sub-Region D	10	100	10
Total for Region	40	400	400
Unweighted density:		10	10
Population-weighted density:		10	16.7

- Accurately measuring intrinsic public transport demand requires some level of geographic disaggregation. For example, in Table 1-1, Scenario 2 is likely to see higher demand for public transport than Scenario 1 due to congestion arising in sub-regions A and B. However, there are both theoretical limits and policy reasons which should determine the desirable level of geographic disaggregation. For example, asymptotic density is infinite in continuous space as individual parcel areas approach zero:

$$Density = \lim_{A \rightarrow 0} \frac{P}{A}$$

Where P is population and A is area.

- NSW Treasury believes the level of geography used in the PWD calculation should reflect the level at which people “experience” density.¹
- Urban transport congestion is a function of neighbourhood characteristics. The SA2 level of geography aligns more closely to the “neighbourhood” level and therefore represents the level on which urban transport decisions are made – both by the individual and by transport planners.
- Transport planning is not determined at an SA1 level – which, in major urban centres, can represent only a portion of a street block. High concentrations of population in such small areas need to be surrounded by other high concentrations of population for the provision of public transport infrastructure to be necessary.
- Based on our analysis, SA2 geography instead provides an acceptable level of sensitivity with respect to boundary changes along with reflecting the nature of public transport provision and planning. Table 1-2 provides estimates of the change in PWD for the 2021-22 population arising from changes between 2016 and 2021 geographic boundaries, with alternative levels of geography.
- The impact of changing the PWD calculation to an SA2 basis on total and per capita GST redistributions cannot be ascertained from the table below, which only shows the change in 2021-22 measured density from updating boundaries.

¹ Ottensmann, J.R., *The Use (and Misuse) of Population-Weighted Density*, 2021. Available at SSRN 3970248.

Table 1-2: Changes in 2021-22 capital city densities due to ABS revisions

	Syd	Mel	Bris	Per	Ade	Hob	Can	Dar	Ave
SA1 (people per km²)									
2016 Geography	6,393	4,209	2,999	2,566	2,507	1,911	3,006	2,564	3,269
2021 Geography	7,196	5,125	3,397	2,649	2,518	1,990	3,315	2,690	3,610
Change (%)	12.6	21.8	13.3	3.2	0.4	4.2	10.3	4.9	10.4
SA2 (people per km²)									
2016 Geography	3,567	2,667	1,926	1,779	1,835	1,227	1,894	1,657	2,069
2021 Geography	3,725	2,720	1,912	1,779	1,812	1,224	1,864	1,655	2,086
Change (%)	4.4	2.0	-0.7	0.0	-1.3	-0.2	-1.6	-0.1	0.8
SA3 (people per km²)									
2016 Geography	2,986	2,186	1,666	1,450	1,627	1,038	1,465	736	1,644
2021 Geography	2,969	2,115	1,650	1,445	1,601	1,040	1,391	728	1,617
Change (%)	-0.6	-3.2	-0.9	-0.4	-1.6	0.2	-5.0	-1.1	-1.6

Source: CGC calculation based on ABS Estimated Resident Population data, NSW Treasury calculations

- NSW Treasury considers that changing from the SA1 to the SA2 level of geography in the PWD calculation is a data change and within scope of adjusting for the 2024 Update.
- As per prior terms of reference, the Commission has scope to make adjustments during annual updates if data problems arise.
 - new, more reliable data that was not previously considered would be used in the first possible update, if method changes were not required.
 - if overcoming the data problems necessitated method changes, revised methods would be used in the first possible update, subject to consultation with states during that update.
- The source of SA1 and SA2 data is consistent, with new data available from the 2021 Census for both geographic levels. SA2 data is more reliable, by reducing the PWD calculation's sensitivity to geographic changes and better reflecting the actual level that urban transport decisions are made.
- Conceptual changes to the urban transport model itself are not proposed for the 2024 Update, solely a change in the geographic data input.
- It is not evident that the use of SA2 data has previously been considered for use in the PWD calculation, though it may be appropriate for the Commission to evaluate this.
- NSW Treasury has raised similar concerns as part of its Tranche 1 submission for the 2025 Review. If the Commission determines that a data adjustment is not appropriate for the 2024 Update, it will remain important to evaluate this issue as part of the 2025 Review.

2021 Census distance to work data

- As discussed by the Commission in its 2025 Review consultation paper, the instructions for the 2021 Census ensured that COVID-19 lockdowns did not significantly impact the distance to work dataset, with the complexity of existing networks largely unaffected.
- Given this, NSW Treasury supports the use of distance travelled to work data from the 2021 Census to update network complexity for the 2024 Update.

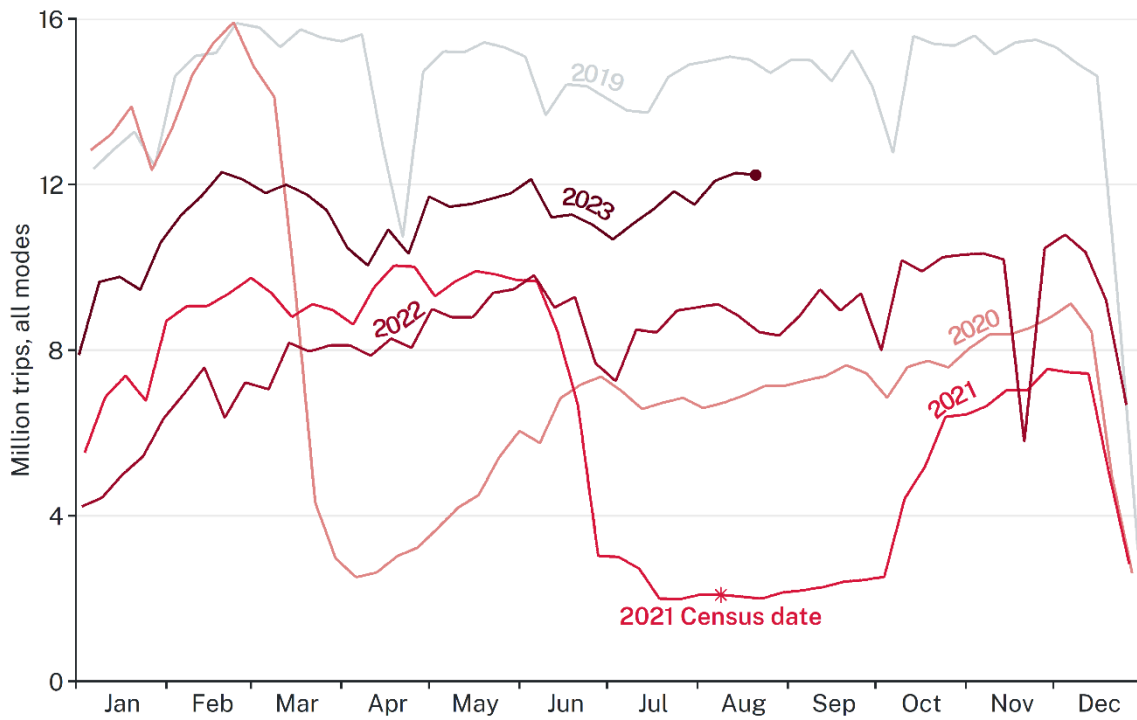
Geoscience Australia average slope data

- NSW Treasury supports using updated Geoscience Australia average slope data to reflect 2021 urban areas, noting that updated data are available for use in the 2024 Update.

2016 Census passenger data

- The 2021 Census was conducted on 10 August 2021 while a number of states were in a COVID-19 lockdown and social distancing was being actively encouraged. Both these factors resulted in public transport usage being far lower than normal and far lower than would be expected. In the case of New South Wales, public transport patronage was 86 per cent lower than at the same time in 2019 (Figure 1-1).
- The Commission provided strong evidence in its 2025 Review Transport consultation paper to show these factors were indeed reflected in the 2021 Census journey to work data.
- Therefore, NSW Treasury agrees the commuter mode data from the 2021 Census are not fit for purpose for measuring annual passenger numbers and that continued use of 2016 Census journey to work data is supported for the 2024 Update.

Figure 1-1: Weekly public transport trips, NSW



Source: Opal, TfNSW

The Commission proposes:

- To discontinue the separate adjustment to remove the remuneration of Australian Defence Force personnel and Australian embassy employees from its measure of the payroll tax base from the 2022-23 assessment year, as it is no longer necessary.
- NSW Treasury supports discontinuing the separate adjustment, noting that it is no longer necessary as the ABS data will now include the wages and salaries of ADF personnel and Australian embassy employees, allowing the ‘taxable proportion’ method to be applied.

1.3 Other issues for consideration

The Commission proposes:

- To suspend the national capital assessment from the calculation of GST relativities for the 2024 Update if the ACT's assessed needs for the national capital assessment are negative.
- While NSW Treasury recognises that the assessment is increasingly immaterial, we do not support the Commission's proposal to potentially suspend the assessment.
- The Commission identifies that the national capital assessment is designed to recognise only the additional costs incurred by the ACT. In effect this means that the ACT will only ever be treated as a GST-recipient or GST-neutral state for the purpose of this assessment. This is not appropriate and is inconsistent with the approach taken for any other state in any other assessment.
- The ACT is required to use the Australian Federal Police (AFP) for its policing services. From its use of the AFP, the ACT's average actual police salary is now lower than its assessed police salary. As the ACT has a lower expenditure need for police salaries than other states, the negative assessed need should continue to be reflected in the Justice assessment.
- More generally, the assessment should continue to ensure that expenditure needs are properly recognised, whether those needs be higher or lower than average.
- This assessment should be retained through the 2024 Update and any decision on a method change or a discontinuation of the assessment should be made as part of the 2025 Review.

The Commission proposes:

- To separately assess nickel royalties in the 2024 Update.
- The separate assessment of nickel in the mining assessment is supported, provided it does prove material.
- The Commission identified that if a separate assessment of another mineral became material, it would exercise its judgement on whether changing the mining assessment structure would improve equalisation.
- It is simpler to remove the Commission's judgement from this matter. If a separate assessment is material, the mining assessment structure should be changed accordingly, even if between Reviews.

The Commission proposes:

- To treat new Commonwealth payments as per the Commission's New Issues consultation paper.
- The Commission should split the Schools Upgrade Funding – Round 1 into 'impact' and 'no impact'. For New South Wales, this payment includes Commonwealth pass-through payments to non-government schools. As support for non-government schools is primarily a Commonwealth responsibility, this payment should be partially excluded.
- The proposed treatment of Commonwealth payments is otherwise supported.

1.4 NSW points for consideration

NSW Treasury proposes:

- That COVID-19 state impacts be assessed as actual per capita, including retrospectively.
- If the Commonwealth Treasurer's terms of reference for the 2024 Update allows for a method change, the Commission should revisit its preliminary view in the 2023 Update to undertake a change in method for COVID-19 impacts.
- For the Health assessment, this would include:
 - Treating Commonwealth payments under the National Partnership on COVID-19 Response as impact.
 - Assessing state spending associated with the national partnerships on an actual per capita basis.
- For the business support component of the Services to Industry assessment, this would include:
 - Treating Commonwealth payments under the national partnerships on COVID-19 business support as impact.
 - Assessing state expenses that meet the definition of *non-assessable non-exempt* using a driver of need based on the reduction of hours worked in each state.
 - Where data on state expenses that meet the definition of *non-assessable non-exempt* cannot be obtained, assess the state spending associated with the national partnerships on COVID-19 business support on an actual per capita basis.
- An alternative would be to remove both the expenditure and the revenue from the relevant assessments.

NSW Treasury proposes:

- That a data adjustment is required to reflect Newcastle passenger ferry services.
- There is a permanent passenger ferry service in Newcastle. Two vessels have connected Stockton to the Newcastle CBD via Queens Wharf since 1983, with services every 15-minutes during peak periods.²
- The urban transport model has historically assessed Newcastle as having no passenger services, which is incorrect. This data issue understates the assessed need for New South Wales and should be corrected in the 2024 Update.

² <https://newcastletransport.info/plan-your-trip/ferry-services/>

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