

Investment

Overview

- 1 On 12 October 2023, the Commission issued a [consultation paper](#) on the draft investment assessment. The Commission considered changes since the 2020 Review and their implications for the assessment method.
- 2 The Commission proposed to retain the 2020 Review assessment method with 2 changes designed to reduce volatility and ease state data compliance burdens.
- 3 A summary of state responses to each consultation question is included below, as well as the Commission's draft position and the draft 2025 Review assessment method.
- 4 State submissions can be viewed [here](#).

Consultation questions

Q1. Do states support smoothing user population growth to reduce volatility, with an associated reduction in contemporaneity?

Q2. If user population growth were to be smoothed, do states support a 3-year moving average of growth rates?

State views

- 5 New South Wales, Victoria, Queensland and Western Australia did not support the proposal, preferring the retention of the 2020 Review approach. New South Wales said that, outside of COVID-19 affected years, the volatility in population growth is not a substantive concern.
- 6 New South Wales, Queensland, and Western Australia valued contemporaneity over smoothness, noting the 3-year assessment period already reduces volatility.
- 7 Victoria was concerned that introducing a smoothing measure would necessitate double counting COVID-19 affected years.
- 8 Tasmania, South Australia, the ACT and the Northern Territory supported the proposal to smooth population growth, saying investment decisions reflect long-term population growth, not volatile annual growth.
- 9 Western Australia said that if smoothing is to be used, it should be over as short a period as possible.

Commission response

- 10 Over time, both a smoothed and unsmoothed approach should give similar results, albeit smoothing would add complexity to the current assessment method.
- 11 The Commission notes Victoria’s comments that moving to a smoothed approach would lead to some years’ population growth influencing GST distributions more than others (Table 1). This could distort the assessment, particularly where these years were COVID-19 affected. Phasing in the smoothed approach could mitigate this effect somewhat but this would add even more complexity.

Table 1 Contribution of data years to inquiries, introduction in 2025 Review

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	Total
	%	%	%	%	%	%	%	%	
2020 Review	33								
2021 Update	33	33							
2022 Update	33	33	33						100
2023 Update		33	33	33					100
2024 Update			33	33	33				100
2025 Review		11	22	33	22	11			100
2026 Inquiry			11	22	33	22	11		100
2027 Inquiry				11	22	33	22	11	100
2028 Inquiry					11	22	33	22	
2029 Inquiry						11	22	33	
2030 Inquiry							11	22	
2031 Inquiry								11	
Total contribution over time	100	111	133	133	122	100	100	100	

Source: Commission calculation.

- 12 The Commission also notes that, even with smoothing of user population growth, significant volatility in the assessment could still arise from fluctuations in relevant investment spending.
- 13 On balance, the Commission considers the additional complexity involved in implementing the smoothing approach outweighs the benefits of the change.

Commission draft position

- 14 The Commission proposes not to smooth user population growth.

Q3. Do states support freezing the component shares of the value of assets for the life of the 2025 Review?

State views

- 15 Western Australia, Tasmania and the Northern Territory supported the proposal to freeze component shares of assets for the 2025 Review.
- 16 New South Wales, Victoria and Queensland did not support the proposal. They argued that any reduction of volatility was likely to be minimal and the burden of providing the data is not significant.
- 17 South Australia did not explicitly agree or disagree with the proposal but indicated a preference for improving the current data sources to alleviate the volatility and asset revaluation issues.
- 18 The ACT wanted more analysis of the impacts on GST distribution to be made available before supporting or rejecting the proposal.

Commission response

- 19 The view in the investment consultation paper was that state revaluations of assets appeared to increase the volatility of the assessment without necessarily increasing its reliability. It was also considered to impose significant administrative burden on states. The proposed freezing method change was intended to reduce noise, volatility, complexity, and the state data burden, without a significant cost to the contemporaneity or accuracy of the assessment.
- 20 Freezing the component shares of asset stock would result in a loss of contemporaneity and responsiveness of the assessment to investment trends. It could potentially introduce bias into the assessment due to the implied assumption that asset stocks grow at the same rate among all components when in reality some grow much faster than others. Component shares for urban roads and urban transport have increased significantly, while the share for rural roads has fallen since the 2020 Review. The proposal, if implemented in the 2020 Review, would have resulted in the assessment not appropriately accounting for changes in what states do. The analysis also showed that the impacts on volatility reduction would be marginal, corroborating the views of New South Wales, Victoria and Queensland.
- 21 The Commission notes the advice from states that the data burden is not significant. After consulting with states and further analysing the potential impacts of the initial proposal, the Commission proposes not to freeze component shares, favouring the retention of the 2020 Review method.

Commission draft position

- 22 The Commission proposes to retain the 2020 Review method and not freeze component shares.

Other issues raised by states

Cost of construction

- 23 Victoria recommended the Commission evaluate the suitability of the Rawlinsons construction cost indices and consider replacing them or discounting their use. Victoria questioned the contemporaneity and policy neutrality of the Rawlinsons indices. Victoria suggested the Commission explore the use of data from private quantity surveyors that may provide a more accurate and contemporaneous picture of states' costs.
- 24 Tasmania noted that Rawlinsons already considers labour costs. It was concerned the use of Rawlinsons blended with the Commission's wage costs assessment double counts the impact of wages and argued for Rawlinsons to be used without the blending with wage costs.

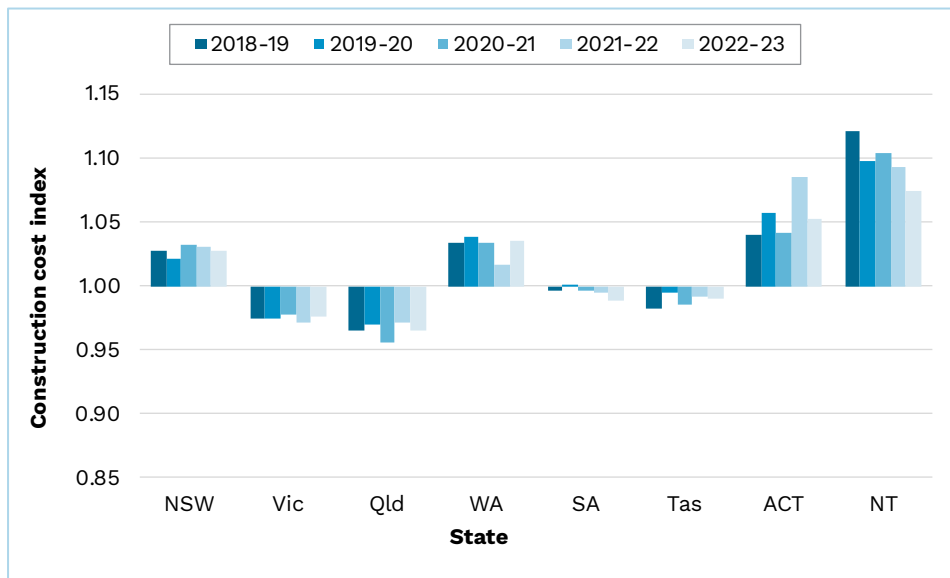
Commission response

- 25 In response to Victoria, the Commission notes that Rawlinsons data are publicly available, widely used, and increase the transparency of this assessment. The Commission is not aware of any superior practical alternative. Victoria's suggestion of engaging quantity surveyors to provide a more contemporaneous estimate of costs may provide a better estimate of such costs. However, to produce such estimates for all states would require engaging quantity surveyors in all states and developing a mechanism to ensure their estimates were comparable.
- 26 Rawlinsons is one of at least 3 regional construction cost guides in Australia. Alternatives include the Cordell Construction Cost Index and BMT's Construction Cost Calculator.¹ These guides do not appear to be as comprehensive as the Rawlinsons construction cost guide. The Commission is not aware of any source of nationally consistent data on construction costs that is likely to rival Rawlinsons for the Commission's purposes.
- 27 While Rawlinsons may not be as contemporaneous as directly engaging quantity surveyors, the Commission does not consider this to be a major concern. State departments building new projects require highly contemporaneous, or even forward-looking, data on prices. The Commission's requirements for contemporaneity are less stringent. The analysis below suggests that while construction costs have increased nationally in recent years, the difference between states is marginal.
- 28 The Commission accepts that construction costs may be affected by state policies, particularly if a state has a very high level of investment projects that drive up

¹ [Cordell Construction Cost Index \(CCCI\) | CoreLogic Australia; Construction Cost Calculator & App | BMT Tax Depreciation \(bmtqs.com.au\)](#)

prices. The Commonwealth has expressed concerns that large state infrastructure projects have been increasing inflationary pressure in recent years, prompting a review and reprioritisation of Commonwealth funding.² Rawlinsons estimates of construction costs have shown general rates of inflation since 2020 across all states (Figure 1). The inflation appears relatively consistent across all locations, therefore not indicating any substantial divergence in costs in different cities over time. This suggests that there are no major individual state policy influences on construction cost differentials or that Rawlinsons is not a contemporaneous and reliable source for relative construction costs.

Figure 1 Relative construction costs, 2018–19 to 2022–23



Source: Commission calculation.

29 The Commission has considered Tasmania’s argument that blending Rawlinsons with the wage costs assessment leads to double counting. All investment costs are subject to local labour costs. The Commission has 2 approaches to measuring this: using the Rawlinsons estimates and using the wage costs assessment. The Commission effectively applies Rawlinsons factors to half of assessed state investment and the wage costs factors to the remaining half of assessed state investment. This means that every dollar of state spending has an adjustment for local labour costs, without any dollar having both factors applied.

Commission draft position

30 The Commission proposes to retain the 2020 Review method while continuing to monitor the appropriateness of Rawlinsons cost indices.

² [Nation-building infrastructure for a better Australia | Ministers for the Department of Infrastructure](#)

Brownfields investment

- 31 Victoria asked the Commission to actively monitor the potential for assessing states' brownfields investment needs and associated higher costs.

Commission response

- 32 In the 2020 Review, the Commission used Victorian data and found that while some services, such as schools, are more expensive to provide for growing populations in established urban areas, other services can be supported by existing infrastructure. The additional cost of services such as schools was not material.
- 33 The Commission investigated whether the prevalence of brownfields investment has significantly increased since the 2020 Review. Schools are the major service that require construction in brownfields areas, as they are highly localised, so need is responsive to local population growth. Only 3 of the 74 new schools built or under construction in Victoria since 2020 are in a brownfields area.³ This suggests that construction in brownfields areas is unlikely to be significantly larger than when the Commission found it to be immaterial in the 2020 Review.

Commission draft position

- 34 The Commission proposes not to introduce a brownfields assessment.

Appropriate user populations

- 35 New South Wales raised concerns regarding the appropriateness of the user populations for the various investment components.

Urban transport

- 36 New South Wales, Queensland and South Australia considered that population squared should not be used as part of the proxy of user populations for urban transport.
- 37 New South Wales argued for the removal of the urban population squared blend, favouring the use of the regression only to assess the user population for investment in urban transport.
- 38 Queensland did not support the current approach for assessing investment in urban transport. Queensland argued that urban population be used as the user population for urban transport investment, replacing the blend of the recurrent expense regression and urban population squared. Queensland disagreed with the conceptual case of both the regression (as noted in the tranche 1 urban transport response) and urban population squared.

³ [New schools | schoolbuildings.vic.gov.au](https://www.schoolbuildings.vic.gov.au/new-schools)

- 39 South Australia also raised concerns about the use of blended population squared, arguing that its use should be reviewed.

Commission response

- 40 In the 2020 Review, for most components the Commission used state shares of recurrent spending as a measure of state shares of investment user populations. The Commission considers that for these components the recurrent spending approach remains appropriate. This section considers where measures of investment user populations differ from measures of recurrent spending.
- 41 The need for schools infrastructure differs slightly from recurrent schools needs. Infrastructure is driven by student numbers, with only First Nations students in schools with at least 25% First Nations students deemed to have higher capital requirements per student. The socio-educational profile of students that affects recurrent needs is not applied to capital needs. The Commission considers this approach remains appropriate.
- 42 The measure of need for road infrastructure is the same as for recurrent road spending, although the drivers are combined with capital specific weights. The Commission considers this approach remains appropriate.
- 43 The Commission has included new components in the health and welfare assessments, including mental health and homelessness respectively. In the 2020 Review, the health measure of capital needs included all health components, in proportion to their recurrent expenses. The Commission considers that states build infrastructure for mental health services, and so proposes to include mental health needs in the calculation of health capital needs. In the 2020 Review, the capital needs for welfare excluded the provision of concessions. In the 2025 Review, the Commission considers that states do not provide infrastructure for the National Disability Insurance Scheme, and that that component should also be excluded from the calculation of welfare capital needs. Homelessness services are more capital intensive than other welfare services, with soup kitchens and homeless shelters requiring capital. However, states contract non-government organisations to provide some homeless services, and in these cases do not build capital assets. On balance, the Commission considers that homeless services should be included in the calculation of welfare capital needs.
- 44 The measure of need for transport infrastructure in the 2020 Review differed from the recurrent driver of transport needs. States have made comments on issues associated with the measure of transport infrastructure needs and these are considered in the transport chapter.

Commission draft position

- 45 The Commission's proposed changes to the urban transport recurrent assessment will affect user populations for the urban transport component of the investment assessment. The Commission proposes that capital stock requirements in health

include mental health assessed expenses and in welfare capital needs to include homeless services expenses but exclude National Disability Insurance Scheme expenses. For the remaining investment components, the Commission proposes to retain the approaches from the 2020 Review.

Draft 2025 Review assessment method

46 Table 2 shows the proposed structure of the 2025 Review investment assessment.

Table 2 Proposed structure of the investment assessment

Component	Driver	Influence measured by driver	Change since 2020 Review?
All components	Population growth	Capital requirement for additional user population	No (a)
	Capital deepening	Capital improvement and replacement of depreciated assets for existing user population	No (a)
	Cost of construction	Recognises the cost of construction	No

(a) Some component user populations will change as a result of method changes to the recurrent expense category drivers.

Indicative distribution impacts

47 The impact on the GST distribution in 2024–25 from the proposed changes in the investment assessment is shown in Table 3. These changes comprise changes in recurrent category methods flowing through to investment and changes to measures of user populations.

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

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
U2024 using R2020 methods	176	-1,271	565	999	-532	-283	-118	464	2,204
U2024 using draft R2025 methods	105	-1,229	468	1,055	-502	-275	-96	474	2,101
Effect of draft method change	-72	42	-98	56	31	8	22	10	169
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
U2024 using R2020 methods	21	-181	101	338	-282	-487	-246	1,806	81
U2024 using draft R2025 methods	12	-175	83	357	-266	-473	-200	1,844	77
Effect of draft method change	-8	6	-17	19	16	14	47	38	6

Note: Based on no change to the wage costs assessment. The effect of these changes is shown in the wage costs chapter. The GST pool and population estimates are equivalent to those used in the 2024 Update.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.

Indicative GST impacts are provided for illustrative purposes only and should not be used to predict impacts on GST distribution for 2025–26.

48 The impacts on the GST distribution in 2024–25 from changes in other categories that affect the investment assessment are shown in Table 4. To estimate the full

impact of a change in a recurrent method, it is important to add the effect shown in the recurrent category chapter and the effect shown here.

Table 4 Indicative impact on GST distribution from proposed changes in recurrent expense categories that affect the investment assessment, 2024–25

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total Effect
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Investment in schools	4	10	-7	-2	1	1	1	-8	17
Investment in health	-76	-30	17	51	28	6	16	-11	117
Investment in housing	-27	-26	8	12	-7	0	-2	42	62
Investment in welfare	1	-10	5	1	0	0	-1	3	11
Investment in rural roads	56	100	-96	-43	-4	-2	12	-22	168
Investment in urban roads	-17	9	-24	12	15	4	-1	4	43
Investment in urban transport (a)	—	—	—	—	—	—	—	—	—
Investment in services to industry	-13	-10	0	26	-2	0	-1	1	26
Total	-72	42	-98	56	31	8	22	10	169
	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc	\$pc
Investment in schools	0	1	-1	-1	0	1	1	-29	1
Investment in health	-9	-4	3	17	15	10	32	-43	4
Investment in housing	-3	-4	2	4	-4	0	-4	164	2
Investment in welfare	0	-1	1	0	0	1	-2	13	0
Investment in rural roads	7	14	-17	-15	-2	-3	25	-87	6
Investment in urban roads	-2	1	-4	4	8	6	-3	17	2
Investment in urban transport (a)	—	—	—	—	—	—	—	—	—
Investment in services to industry	-1	-1	0	9	-1	0	-3	3	1
Total	-8	6	-17	19	16	14	47	38	6

(a) Indicative GST impacts of changes to urban transport investment will be detailed in the transport addendum.

Note: Numbers are calculated using the same GST pool and population as were used in the 2024 Update report.

The data included in the table have not been subject to full quality assurance processes and as such, should be treated as indicative only.