Investment

Review outcomes

- No changes were made to the general investment assessment method. However, National Disability Insurance Scheme expenses will be removed from the measure of welfare investment need, as this spending has no associated capital expenditure.
- Changes to recurrent expense assessment methods will flow through to the investment assessment.
- The Commission considered but did not change the following.
  - To reduce volatility in the assessment, the Commission considered smoothing the period over which growth in user populations are calculated and freezing component shares of total asset values. These changes will not be made because the additional complexity of introducing population growth smoothing outweighed the likely benefits, and the freezing of component shares of asset values would potentially introduce bias.
  - Alternatives to the use of Rawlinsons construction cost indices were considered but the Commission decided that other measures are less comprehensive and not fit for purpose. Engaging private sector quantity surveyors is not considered practical. The Commission will continue to use Rawlinsons as an input to its measure of construction costs and will not introduce a discount. The appropriateness of Rawlinsons cost indices will continue to be monitored.
  - Recognising the higher costs associated with brownfield investments, the Commission considered introducing a new assessment to recognise these higher costs However, the Commission concluded that a separate brownfield assessment is unlikely to be material given the current level of these investments.

Introduction

1 On 6 July 2024, the Commission published the Draft Report for the 2025 Methodology Review.

2 The Draft Report included a detailed analysis and response to issues raised by states and territories (states) in their submissions on the Commission's consultation paper.

3 State submissions on the Draft Report can be viewed here.

4 This chapter includes:

- an overview of the issues considered throughout the review
- the Commission's response and decision on each issue
- GST impacts of method changes to other assessments that have had flow-on effects to investment.

5 A description of the assessment method, incorporating changes made in the 2025 Review, can be found in the investment chapter of the *Commission's Assessment Methodology*.

Issues considered

Population growth smoothing using a 3-year moving average

6 States have raised concerns in previous reviews that volatility in the investment assessment has been a significant contributor to volatility in GST distributions.

7 Annual changes in user populations are a major driver in the investment assessment. To reduce GST volatility associated with the investment assessment, the Commission proposed smoothing population growth by introducing a 3-year moving average for user populations.

State views

8 Some states supported the proposal, noting that investment decisions reflect long-term population growth, rather than annual changes in growth.

9 Some states did not support the proposal. They noted the potential for double-counting of the COVID-19 affected years and also that, outside of COVID-19 affected years, the volatility in population growth is not a substantive concern.

Commission response

10 Over time, both a smoothed and unsmoothed approach to population growth should give similar results. Smoothing would add complexity to the assessment method.

11 During the transition to a smoothed approach, population growth in some years would influence GST distribution more than growth in other years. This could distort the assessment. Phasing in smoothing would mitigate this but would add further complexity.

12 The Commission also found that even with smoothing user population growth, significant volatility in the assessment could still arise from large fluctuations in investment spending.

13 On balance, the Commission decided the additional complexity involved in smoothing population growth outweighed the benefits of reduced volatility.

Commission decision

14 The Commission will not smooth user population growth.

Freezing the component shares of the value of assets for the life of the 2025 Review

15 The Commission also proposed freezing the component shares of the value of total assets until the next review. This would be another way to alleviate assessment volatility stemming from asset revaluations, while also reducing the data provision burden on states.

State views

16 While some states supported the proposal, others said that any reduction in volatility would be minimal and that the burden of providing data was not significant. They also said that freezing this data would mean the assessment did not reflect changes in what states do.

Commission response

17 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 since the 2020 Review, while the share for rural roads has fallen. Analysis also showed that the volatility reduction would be marginal.

Commission decision

18 The Commission will retain the 2020 Review method and update component shares of total asset values annually.

Cost of construction

19 The Commission uses the Rawlinsons construction cost indices (the regional cost and the capital city indices) as a key input into several cost of construction measures used in the investment assessment.

20 In response to state concerns, the Commission proposed retaining the 2020 Review method while continuing to monitor the appropriateness of Rawlinsons cost indices.

State views

21 Some states raised concerns regarding the use of the Rawlinsons construction cost indices.

22 Victoria questioned the contemporaneity and policy neutrality of the Rawlinsons indices, suggesting the Commission explore the use of data from private quantity surveyors to provide a more accurate and contemporaneous picture of states' costs.

23 Queensland and Victoria raised particular concerns about the reliability of the Rawlinsons capital city index. Queensland argued that Rawlinsons underestimates construction costs in Queensland compared to other construction cost indices, noting the consistency between the other measures as evidence that Rawlinsons is an unreliable outlier. As a result, Queensland argued for a 50% discount to be applied to the Rawlinsons capital city index while supporting the Commission's proposal to monitor the appropriateness of Rawlinson's cost indices going forward. Victoria also identified alternative cost of construction indices, arguing that the variability between them raised sufficient doubts for a 12.5% discount be applied to the Rawlinsons capital city index.

24 Tasmania raised concerns that the blending of the Rawlinsons construction cost indices with the wage costs assessment potentially double-counted wage impacts as the Rawlinsons measures include wage costs.

Commission response

Contemporaneity

25 While the Commission agrees that Rawlinsons may not be as contemporaneous as directly engaging quantity surveyors, it 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. Analysis included in the Draft Report suggested that, while construction costs have increased nationally in recent years, the difference between states is marginal.

Policy neutrality

26 The Commission accepts that construction costs may be affected by state policies, for example, if a state has a very high level of investment projects driving up prices. Rawlinsons' estimates of inflation since 2020 show inflation being relatively consistent across all locations, therefore not indicating any substantial divergence in costs in different cities over time. This supports the assumption that there are no major individual state policy influences on construction cost differentials.

Alternatives

27 The Commission notes that Rawlinsons data are publicly available, widely used, and increase the transparency of the investment 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 not be practical, requiring the engagement of quantity surveyors in all states and developing a mechanism to ensure their estimates were comparable.

28 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.

29 The other commercially published construction cost indexes cited by Victoria and Queensland measure different things to Rawlinsons, from providing forecasts as opposed to estimates, and having different industrial scopes and levels of detail to Rawlinsons. No commercial provider publishes its methodology, making conclusions as to the most appropriate measure difficult. The Commission considers Rawlinsons to be the most comprehensive in terms of detailed construction inputs observed, and is a backward-looking measure of construction costs, thereby being consistent with the other data in the assessment, so remains the most appropriate measure for the Commission.

30 The Australian Bureau of Statistics Producer Price Indexes, also cited by Victoria and Queensland as showing divergent trends to Rawlinsons, are time series indexes and cannot be used as regional indexes as they are not benchmarked geographically at any point in time. Higher inflation over time, in a place, does not necessarily mean that costs are higher between the locations.

31 The Commission continues to regard Rawlinsons as fit for purpose and not warranting a discount.

Blending with wage costs

32 The Commission 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 decision

33 The Commission will continue to use Rawlinsons as an input to its measurement of construction costs and will not introduce a discount. It will continue to monitor the appropriateness of Rawlinsons cost indices.

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

Brownfield investment

34 In response to state comments, the Commission considered whether investment in brownfield developments increased the cost of constructing state assets, and should therefore be differentially assessed.

State views

35 Victoria asked the Commission to monitor the potential for assessing states' land purchase costs and brownfield investment needs and associated higher costs.

Commission response

36 In the 2020 Review, the Commission found that some investment, such as in schools, is more expensive to provide for growing populations in established urban areas – that is brownfield sites. However, available data did not support these additional costs as being material.

37 For the 2025 Review, 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 brownfield 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 brownfield area. This suggests that construction in brownfield areas is unlikely to be significantly larger than when the Commission found it to be immaterial in the 2020 Review.

Commission decision

38 The Commission will not introduce a brownfields assessment.

Impacts of changes to recurrent assessment methods

39 In each component of the investment assessment, the Commission assesses each state's share of need for capital. It generally measures these in a similar way to how it measures each state's share of the related recurrent expenses, although there can be differences between the recurrent and capital measure of need.

40 In response to state comments, and as a result of changes to expense assessments in the 2025 Review, the Commission reviewed the measures of state shares of need for capital. The measures that attracted particular attention included urban transport, health, and welfare.

Urban transport

41 The measure of need for urban transport investment is considered in the transport chapter of *Review Outcomes*.

Health

42 In the 2020 Review, the health measure of capital needs included all health components, in proportion to their share of recurrent expenses. The Commission

considers that states build infrastructure for mental health services, a new sub-component of the health assessment, and so proposed to include mental health needs in the calculation of health capital needs.

43 The Commission recognised there was an issue over the appropriateness of using the recurrent spending on COVID-19 as part of the proxy for health capital requirements.

Welfare

44 In the 2020 Review, the capital needs for welfare excluded spending on concessions. In the 2025 Review, the Commission considered that states do not provide infrastructure for the National Disability Insurance Scheme, and proposed that this component also be removed from the calculation of welfare capital needs, a change from the 2020 Review.

45 Homelessness services, a new component in the welfare assessment for the 2025 Review, 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 proposed that homeless services be included in the calculation of welfare capital needs in proportion to their share of recurrent spending.

State views

Urban transport

46 State views on urban transport investment are covered in the transport chapter of *Review Outcomes*.

Health

47 Victoria said that it was inappropriate to measure the effect of Victoria's declining COVID-19 payment in the health infrastructure assessment when the increase in the earlier years had not been included. It also said that the temporary nature of the response meant that it had not been as capital intensive as assumed by the Commission's assessment.

48 South Australia said that including a driver in recurrent assessments but not the corresponding investment assessment was inconsistent with the conceptual framework of the investment assessment.

49 The Northern Territory said method changes leading to 'step-changes' in investment assessment outcomes are to be expected during reviews, thereby questioning the conceptual case for not including this component.

Welfare

50 No state opposed the changes to the welfare assessment flowing into investment.

Commission response

Urban transport

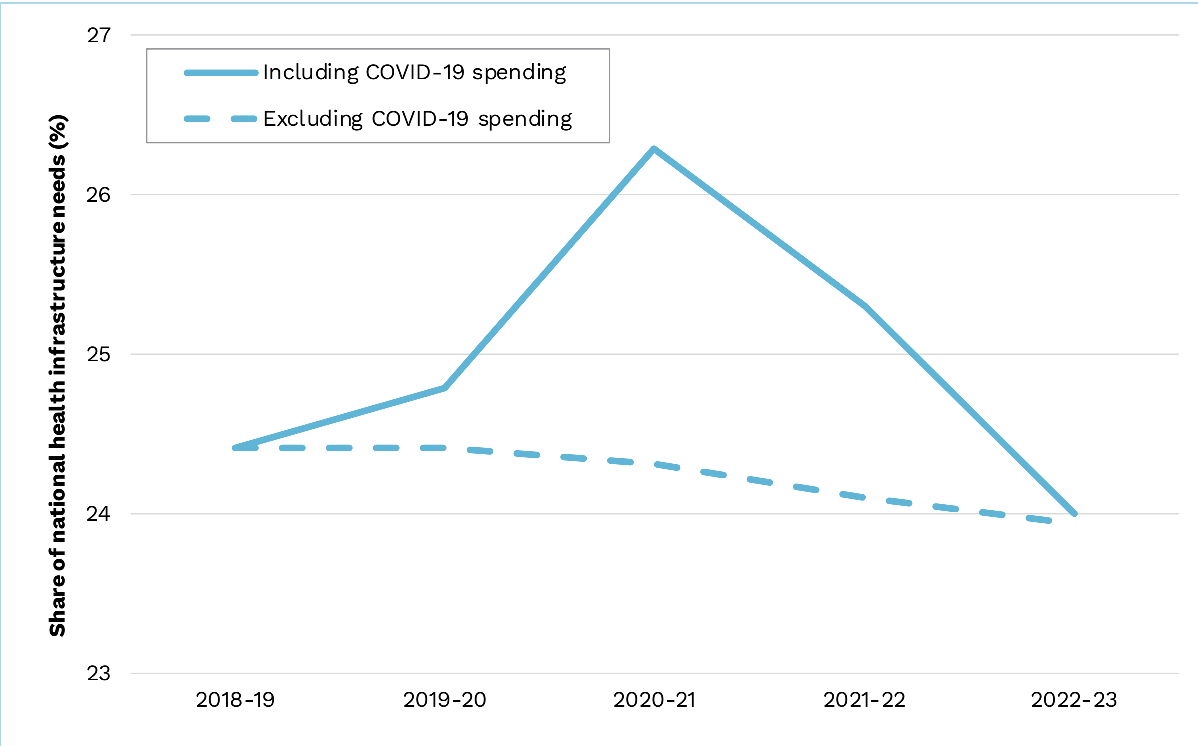
51 The Commission's consideration of state arguments is included in the transport chapter of *Review Outcomes*.

Health

52 The Commission agrees with Victoria that the COVID-19 related spending should not affect the assessment of health infrastructure.

53 The Commission's assessment method estimates that in 2018–19 Victoria required 24.4% of the national stock of health infrastructure, and by 2022–23 it required about 24% (Figure 1). In the intervening years, Victoria's share of assessed recurrent health spending had peaked at 26.3%, due to the effects of COVID-19. The Commission agrees that this does not reflect Victoria's changing capital needs because the state generally did not construct COVID-19 specific health infrastructure. Given that the COVID-19 related increases in recurrent spending were not used in the health infrastructure assessment in previous years, it would be inappropriate to include COVID-19 spending in the assessment of capital needs when this spending is decreasing. To do so would represent a significant asymmetry in the treatment of COVID-19 spending on health infrastructure.

Figure 1 Victoria's share of assessed health infrastructure



54 The investment category contains many instances where the driver of recurrent expenses differs from the corresponding driver of investment. This occurs when the driver of recurrent costs is not a relevant driver of its corresponding investment needs. This is the case for COVID-19 recurrent expenses.

55 Most COVID-19 related spending was not capital intensive because, states largely repurposed other infrastructure for COVID-19 related services. As such, the most appropriate indicator of health-related investment should exclude COVID-19 related spending, particularly in light of the short-term nature of a separate COVID-19 specific response.

56 The Commission agrees with the Northern Territory that method changes can result in a step change in investment assessments. Where the investment is ongoing, such a change is generally appropriate. However, given the short-term nature of COVID-19 specific spending, incorporating COVID-19 related spending in investment needs would not reflect relative state needs.

Commission decision

57 For the health component of investment, the Commission will include assessed mental health service use. It will not include COVID-19 related spending.

58 For the welfare component of investment, the Commission will include assessed homeless services expenses. It will remove the impact of National Disability Insurance Scheme expenses, which were previously included.

59 For the remaining investment components, including housing, the Commission will retain the approaches from the 2020 Review. Where changes have been made to methods, these flow through to the investment assessment.

GST impacts of method changes

60 There are no method changes to the investment assessment. However, changes to recurrent category methods flow through to investment. These are shown in Table 1.

Table 1 Impact on GST distribution of flow through to investment of recurrent method changes, 2024–25 to 2025–26

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total effect
	$m	$m	$m	$m	$m	$m	$m	$m	$m
Changes to urban transport assessment	5	-40	-193	198	57	26	-49	-3	285
Discounting of recurrent roads assessment	12	68	-21	-21	1	2	13	-53	95
Other changes to recurrent assessments	59	-40	-21	31	4	-19	-10	-4	94
Total	**76**	**-13**	**-235**	**208**	**61**	**9**	**-46**	**-60**	**354**
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Changes to urban transport assessment	1	-6	-34	65	30	44	-101	-11	10
Discounting of recurrent roads assessment	1	9	-4	-7	0	4	26	-206	3
Other changes to recurrent assessments	7	-6	-4	10	2	-34	-20	-14	3
Total	**9**	**-2**	**-41**	**68**	**32**	**15**	**-95**	**-232**	**13**

Note: Changes to the wage costs assessment are not included. They are shown in the wage costs chapter in *Review Outcomes*.

61 States that receive an increase in GST due to method changes to recurrent assessments generally receive an increase in GST due to the resultant changes in the associated investment. For example, the discounting of the roads assessment increased recurrent and investment needs in New South Wales, Victoria and the ACT, and reduced recurrent and investment needs in Queensland, Western Australia and the Northern Territory.

62 In some instances, the GST impacts of changes to investment needs and recurrent needs are not consistent. This is because the drivers of recurrent assessments relate to the relative level of need while the investment assessment also includes a driver reflecting the relative growth in this level of need. This is particularly the case in urban transport for Queensland and the ACT. For both states, method changes increase assessed GST needs in the recurrent assessment and reduce assessed needs in the investment assessment.

63 For Queensland, the flow through decrease can be explained primarily by the change in the method used to model passenger numbers. In the 2024 Update, passenger numbers were modelled using average passenger use in similar sized cities. In 2022–23, the population of Brisbane passed 2.5 million. This meant that passenger numbers for Brisbane were modelled based on the average passenger use across cities of more than 2.5 million (Sydney, Melbourne and Brisbane) in 2022–23. This was a large increase from previous years, where Brisbane's passenger numbers were modelled based on the average rate of passenger use in cities of 1 to 2.5 million people (Brisbane, Adelaide and Perth). The method for modelling passenger numbers in the 2025 Review no longer groups cities of similar size. Passenger numbers are modelled using individual city size. Changing to the 2025 Review method of modelling passenger numbers based on individual urban centre population size has moderated the growth in modelled passenger numbers for Brisbane compared to the growth used in the 2024 Update.

64 Moving to a population-weighted density measure based on a square kilometre grid from the 2020 Review method that used Statistical Area 1s (SA1), has reduced the rate at which Queensland and the ACT's population-weighted density grew over the assessment period. Urban SA1s are generally much smaller than a square kilometre, and SA1 based population weighted density is more sensitive to local individual developments. Canberra and Brisbane had greater population growth rates in very small SA1s than other cities. The change to a square kilometre-based measure has moderated this measure of growth, and in turn the ACT's investment needs.

65 Table 2 disaggregates the impact on the GST of method changes on the transport investment assessment. Each state's share of assessed transport needs drives the capital deepening driver. This is largely proportional to the method changes to the recurrent transport assessment, although there are some differences between the

recurrent and investment measures of need.[2] The change in share of transport needs reflects how each state's share of assessed transport needs changes over time. The states with the largest change in share of transport needs are Queensland and the ACT.

Table 2 Impact on GST distribution of method changes, urban transport investment, 2024–25 to 2025–26

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total effect
	$m	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
Change in share of transport need	123	131	-261	57	-5	2	-45	-2	313
Capital deepening	-116	-168	64	134	62	25	0	-1	285
Cost of construction	-2	-3	4	6	-1	0	-4	0	10
Total	**5**	**-40**	**-193**	**198**	**57**	**26**	**-49**	**-3**	**285**
	$pc	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**	**$pc**
Change in share of transport need	14	18	-46	19	-2	3	-93	-8	11
Capital deepening	-13	-23	11	44	33	42	0	-2	10
Cost of construction	0	0	1	2	-1	-1	-7	-1	0
Total	**1**	**-6**	**-34**	**65**	**30**	**44**	**-101**	**-11**	**10**

66 For more details of method changes to modelling passenger numbers and population-weighted density see the consultation paper on transport.

[2] The measure of investment need includes an urban population squared measure, and the blending proportion is 25%, rather than 35% used in the recurrent assessment.