Geography

Overview

- 1 On 13 June 2023, the Commission issued a <u>consultation paper</u> on the use of geography in the Commission's various assessments. The Commission considered changes since the 2020 Review and their implications for the assessment method. The main issues are the calculation of regional cost and service delivery scale assessments using the Australian Bureau of Statistics (ABS) remoteness areas classifications.
- 2 The Commission proposed to retain the 2020 Review assessment approach.
- 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 <u>here</u>.

Consultation questions

Q1. Do states support continuing the current methodology for estimating regional costs and service delivery scale effects?

State views: general gradient

Where the general gradient is applied

- 5 New South Wales said that the nature of service delivery varies across sectors. It had concerns with extrapolating regional costs from one assessment to another. It accepted applying a general gradient when a specific measure could not be obtained.
- 6 New South Wales said service delivery scale costs do not apply to child welfare because services are typically delivered from centralised hubs rather than small outposts.
- 7 Victoria said the general cost gradient is no longer appropriate in its current form. It said that costs in regional areas may be higher on average, but that the impact will not be the same across all services.
- 8 Victoria said the general cost gradient should not be applied in areas where there is a lack of information, data or strongly established conceptual case for regional costs or service delivery scale. It said that supporting evidence is needed to justify applying the gradient.

- 9 Queensland said there is a conceptual case for regional costs in the urban transport assessment, using the general gradient.
- 10 Western Australia raised concerns that the general cost gradient currently underestimates the additional costs of delivering services in regional areas. It said that land area of national parks and reserves should be considered as the basis for applying regional costs in environmental protection.

Data used in the calculation of the general gradient

- 11 New South Wales said providing schooling in regional areas differs greatly in nature from providing other regional services. It said the provision of schools is much more decentralised than other services. For example, a very small community may have its own school but not have other state services delivered locally. New South Wales, therefore, argued that schools should be removed from the calculation of the general gradient as these data were overstating the actual average gradient for state services.
- 12 Queensland said many services are provided in a one-on-one framework, such as child protection. It said that these services would incur higher regional and service delivery scale costs than services that are provided more centrally such as hospitals. Queensland argued that the general gradient was therefore understating the actual average gradient for state services.
- 13 New South Wales and Western Australia criticised the general gradient for relying on only 2 assessments. They suggested including more regional cost gradients from other assessments to make the general gradient more robust.
- 14 Victoria pointed to digital service delivery options and asked the Commission to monitor developments in this area that could impact regional service delivery costs.
- 15 Western Australia suggested that Rawlinsons indices could be used to measure regional costs in some assessments. It highlighted that there are already nationally consistent data and said that using Rawlinsons indices would result in a more accurate cost gradient for the Commission's purposes. Western Australia asked the Commission if it had considered the application of Rawlinsons capital cost gradient in assessments that include construction or maintenance costs or in place of the general gradient.

Discounting the general gradient

- 16 New South Wales and Victoria advocated for further discounting of the general gradient if assessment-specific gradients are not implemented. New South Wales suggested further discounting of the general gradient could be applied broadly or to specific components.
- 17 Queensland and Western Australia advocated for less (or no) discounting of the gradient. Queensland said that if the discount is not removed for all components, it should be removed from the following components in particular:
 - Indigenous community development

- other community development and amenities
- social housing.
- 18 The Northern Territory said cost gradients should only be discounted if there is evidence to support doing so.

State views: Category-specific measures of regional costs and service delivery costs

- 19 New South Wales and Western Australia said the Commission should investigate developing more assessment-specific gradients. New South Wales said some assessments that currently rely on the general gradient, such as housing and welfare, could instead use a specific gradient.
- 20 Queensland said that service delivery scale costs should apply more broadly. It argued that, where a conceptual case for regional costs exists, the case also exists for service delivery scale.
- 21 South Australia noted that developing an alternative measurement of regional costs and service delivery scale would require time for the data to be collected and tested. Both Queensland and South Australia suggested that the Commission retain the 2020 Review approach and investigate more robust methods following the 2025 Review.

Commission response: general gradient

Where the general gradient is applied

- 22 The Commission agrees that if a reliable, component-specific measure of regional costs and service delivery scale can be calculated, it would provide the best estimate of remoteness cost impacts. Therefore, it is the Commission's preference to use component-specific measures of regional and service delivery scale costs where data allow. If a component-specific measure cannot be estimated, a category-specific measure using data from within the relevant category would be preferred to a general gradient.
- 23 In cases where a category-specific cost gradient cannot be estimated and there is a strong conceptual case that regional or service delivery scale costs are present, the general gradient should be applied.
- 24 The Commission proposes to continue applying service delivery scale to the child protection and family services component of welfare for the 2025 Review. This issue is discussed in more detail in the welfare chapter.
- 25 Queensland suggested regional costs should be considered in the urban transport assessment. The Commission considers that while there is a conceptual case that maintenance costs are higher for regional areas, there is also a conceptual case that higher congestion levels and the need for night maintenance in less remote areas leads to a higher cost of servicing. In addition, urban transport is only provided in

significant urban areas. It would be inaccurate to apply a cost gradient developed for all areas in a region just to the large towns in that region.

26 Western Australia's suggestions on environmental protection are addressed in the services to community chapter.

Data used in the calculation of the general gradient

- 27 The effect that remoteness has on the cost of service delivery varies considerably between services (Figure 1). Part of this variation reflects the extent to which the approach to service delivery is centralised or decentralised. Many health services are delivered in a relatively centralised way. For example, patients sometimes travel significant distances to a hospital. Schools are delivered in a much more decentralised manner, with very small communities often having their own primary school. Some other services, including welfare and industry regulation, can be delivered at a client's home or business. Given that some services to which the general gradient is applied are more decentralised than schools, the Commission considers it appropriate to continue to include the schools data in the calculation of the general gradient.
- 28 In response to comments by New South Wales and Western Australia, the Commission has considered what data should be included into the calculation of the general gradient. Currently, the general gradient uses government schools and admitted patients data but is applied to a wide range of services. The Commission recognises a gradient that incorporates a more diverse range of state services would be more representative of the state services where the general gradient is applied.
- 29 The Commission has identified additional data from the following assessment components that could be incorporated into the calculation of the general gradient:
 - health emergency departments
 - health non-admitted patients
 - services to communities water subsidies
 - services to communities electricity subsidies
 - justice prisons
 - justice criminal courts
 - post-secondary education
 - investment (Rawlinsons regional cost gradient).
- 30 The Commission considers there is a strong conceptual case for regional costs in a range of services. However, the conceptual case for service delivery scale is only strong for a subset of these services (see Table 2 at the end of the chapter). The Commission therefore requires a general gradient for regional costs, as well as a general gradient for combined regional and service delivery scale costs. The Commission proposes to include data in the respective gradients as outlined in Table 1 based on the data available in each component.

31 The Commission proposes these components be weighted in proportion to their share of total national spending of all relevant services. This would mean that the components used in the 2020 Review general gradient (the admitted patients and schools components), which attract greater total state spending, would still have the largest influence on the general gradient slope.

Table 1Components contributing to regional costs and service delivery scale
general gradients

Component	Contribution to regional costs gradient	Contribution to regional and service delivery scale costs gradient
Health - admitted patients	36.2%	49.0%
Health - emergency departments	3.8%	5.2%
Health - non-admitted patients	5.7%	7.7%
Services to communities - water subsidies (a)	0.5%	-
Services to communities - electricity subsidies (b)	1.4%	-
Justice - prisons	4.6%	6.2%
Justice - criminal courts	-	2.6%
Post-secondary education	4.4%	-
Schools – state funding of government schools	21.8%	29.5%
Investment (Rawlinsons) (c)	21.6%	-

Note: (a) Water subsidies does not have a relative cost that includes major cities. Therefore, it is only used to distinguish costs between inner regional, outer regional, remote and very remote locations.

(b) Electricity subsidies does not have a relative cost outside of remote and very remote areas. Therefore, it is only used to distinguish between remote and very remote locations.

(c) Rawlinsons gradient contains state-specific gradients. The regional costs assessment uses a national average difference in costs in comparable regions. Therefore, it is proposed to use the average gradient across all states. Source: Commission calculations.

32 The slope of the regional cost gradients of the services proposed for the general gradient calculations differ considerably (Figure 1 and Figure 2). The Commission proposes the general gradients be calculated as the weighted average of these gradients, with a 25% discount. This average is used to approximate the relative cost of service provision where no other data exist.

Figure 1 Regional costs gradients of service components used in the regional costs general gradient, 2022–23



Note: Water subsidies does not have a relative cost that includes major cities and therefore cannot be shown in this figure. These data show outer regional areas to be 117% more expensive than inner regional areas. These data also show remote and very remote areas to be 345% more expensive than inner regional areas.
 Electricity subsidies does not have a relative cost outside of remote and very remote areas and therefore cannot be shown in this figure. These data show very remote areas to be 203% more expensive than remote areas.

Source: Commission calculations.

Figure 2 Regional and service delivery scale costs gradients of service components used in the regional and service delivery scale costs general gradient, 2022–23



Source: Commission calculations.

33 Figure 3 outlines the difference between the proposed regional costs gradient and the current gradient. Figure 4 outlines the difference between the proposed regional and service delivery scale costs combined gradient and the current gradient.

Figure 3 Regional costs general gradients, 2022–23



Source: Commission calculations.



Figure 4 Regional and service delivery scale costs combined general gradients, 2022–23

Source: Commission calculations.

- 34 New South Wales provided evidence that the regional cost gradient for child protection in New South Wales is considerably lower than the national general gradient. It stated that the combined general gradient may be overstating costs in the child protection assessment. However, without comparable data for other states, the Commission cannot determine whether the general gradient misrepresents the remoteness costs faced by all states on average.
- 35 The Commission agrees with Victoria that service delivery options and models change over time in response to new technology and changes in service standards. This means that the gradient for regional costs and service delivery scale can change over time and should be regularly recalculated. The health and schools data that are used in the general gradient are updated annually. The other data proposed to be incorporated into the general gradient such as post-secondary education, courts and prisons data are updated 5-yearly or as part of each review. Where annual data are available, the Commission proposes to continue updating the general gradient annually.

Discounting the general gradient

36 Currently, the Commission applies a 25% discount to the general gradient and does not discount the more reliable gradients that are component or category-specific. The purpose of the discount to the general gradient is to reflect the uncertainty around the strength of the gradient when it is applied to areas where a gradient cannot be directly measured.

- 37 The Commission applies the general gradient to services where there is a strong conceptual case to do so. It recognises these services are delivered in unique ways and face their own specific regional costs, however, it is unable to determine a reliable basis for different levels of discount for different services.
- 38 The addition of emergency departments, non-admitted patients, water subsidies, electricity subsidies, prisons, criminal courts, post-secondary education and Rawlinsons data to the general gradient makes the gradient more representative of the range of state services. However, the Commission does not consider that the level of uncertainty associated with the application of the general gradient to components where data do not exist has changed. Therefore, the Commission proposes retaining the current 25% discount.

Commission response: Category-specific measure of regional costs and service delivery costs

- 39 There is a conceptual case for a regional costs adjustment where there is a higher cost in maintaining or supplying a service in more remote areas. There is a conceptual case for a service delivery scale costs adjustment if fewer people will be serviced per staff member in smaller centres. This can occur because:
 - the indivisibility of labour means a small user-population requires a high staff to client ratio, for example with schools and health services
 - there can be high travel times between visiting clients in sparsely populated areas, for example in child welfare.
- 40 Table 2 contains a summary of the assessments of regional costs and service delivery scale across all expense components.
- 41 The Commission investigated whether more service-specific measures of remoteness impacts can be obtained for each component for the 2025 Review. The Commission requested state data to underpin a component-specific regional costs gradient in social housing, but only 2 states were able to provide data on social housing costs by region. Using these data would not allow for a robust assessment of regional cost impacts across all states. Therefore, the Commission proposes to retain the general gradient in the housing assessment.
- 42 In the health assessment, data from the Independent Hospital and Aged Care Pricing Authority have matured.¹ As a result, since the 2020 Review a component-specific gradient has become possible for non-admitted patients. This component-specific measure became available through data developments applied in the 2022 Update. The capacity to calculate component-specific gradients for admitted patients, emergency departments and non-admitted patients has increased the robustness of the measures of remoteness costs within the health assessment.

¹ IHACPA Annual Report 2022–23

Commission draft position

- 43 The Commission proposes to continue its current approach to estimating regional costs and delivery scale effects. This includes:
 - using component-specific measures of remoteness costs and/or service delivery scale where the availability of reliable data makes that possible
 - using category-specific measures of remoteness and/or service delivery scale costs where component-specific measures are not possible
 - using a general gradient where a service-specific gradient would not be appropriate or cannot be measured, but there is a strong conceptual case for remoteness costs and/or service delivery scale.
- 44 The Commission proposes improving the representation of services included in the general gradient calculation (currently composed of schools and admitted patients data). The Commission proposes using a weighted average of schools, admitted patients, emergency departments, non-admitted patients, water subsidies, electricity subsidies, prisons, criminal courts, post-secondary education and Rawlinsons construction cost data to calculate the gradient.
- 45 The Commission proposes to continue implementing the 25% discount to the general gradient.
- 46 The Commission proposes to apply regional costs and service delivery scale to the same assessments as in the 2020 Review.

Q2. Can states identify any data to measure differences in non-wage costs between major cities?

State views

- 47 Victoria, Queensland, South Australia, Tasmania, the ACT and the Northern Territory said they were unaware of changes in the conceptual case or new data sources that would warrant or enable measurement of differences in non-wage costs between major cities. New South Wales and Victoria raised concerns with a judgement-based approach to this assessment.
- 48 Western Australia and the ACT said there was merit in including an isolation factor for major cities. They suggested, given the timeframe, the adjustment applied in the 2015 Review should be reintroduced.

Commission response

- 49 Many of the inputs used by states are available in major cities from national supply chains with nationally consistent pricing policies.
- 50 In the 2020 Review, the Commission found little evidence for a material difference in non-wage costs. Travel and accommodation for interstate meetings was the largest single driver of such potential costs. As technology continues to develop, and

business practices have evolved, in-person meetings have become less common, reducing the potential materiality of non-wage cost differences.

- 51 While the Commission acknowledges that Perth is more geographically isolated than other major cities, there is not consistent evidence that this materially increases its overall costs. For example, crowd-sourced data on fuel costs suggest that fuel costs in Perth are typically lower than in other capital cities.
- 52 Some costs in Canberra, particularly fuel, are higher than in other states. However, interstate meetings are likely to remain disproportionately hosted in Canberra, or in cities easily accessible from Canberra. Therefore, there is no consistent evidence that the ACT has higher costs than other major cities.
- 53 The Commission considers Hobart and Darwin to have higher costs than most other capital cities, but this is captured by them being treated as inner and outer regional cities, respectively.
- 54 The Commission has not identified evidence that non-wage costs differ between capital cities, other than because some capital cities are inner regional (Hobart) or outer regional (Darwin).

Commission draft position

55 The Commission proposes not to introduce an interstate non-wage cost assessment.

Other issues raised by states

Remoteness classification

Definitions of remoteness

- 56 Western Australia, Tasmania and the Northern Territory said the remoteness definitions as defined by the ABS do not accurately measure differences in service delivery costs.
- 57 Western Australia said that service costs will be higher in locations that are further away from a major city. It said it was inappropriate to average expenses across states by remoteness area unless the remoteness areas can be made more comparable. Western Australia said that the remoteness areas currently used cannot capture the extent of the cost differences.
- 58 Western Australia said the calculations underpinning the ABS' remoteness classifications were designed to strip out extreme cases of isolation through capping relative distances to service centres at 3 times the national average. Western Australia said that this limited the capacity to capture additional costs incurred in locations that are significantly isolated. It also said the Commission's needs are not met by the ABS' practice of measuring distance to the nearest service centre town of a given size, even if that service centre is in another state.

- 59 Western Australia raised concerns that under the current approach, towns with very different accessibility profiles can fall under the same remoteness classification.
- 60 Western Australia brought forward alternative approaches to using ABS remoteness areas to better capture the regional costs faced by states:
 - use continuous ARIA+² score
 - remove the truncated ARIA+ score
 - use measure of amenity (distance from a major road)
 - blend ARIA+ and distance from capital city.
- 61 Western Australia said if the suggestions it has put forward are not achievable, more options need to be explored so that remoteness costs can be accurately calculated.

Classification of Hobart

62 Tasmania raised concerns that Hobart's population may eventually cross a threshold of 250,000. While this would not significantly change the actual cost profile of services in Tasmania, it would significantly change the assessed cost profile. Western Australia said that, while the urban centre of Hobart (which is the geographical concept measured by the ABS) has a population of less than 200,000, the significant urban area has a population approaching 250,000, and so the cost profile is approaching that of a major city.

Road quality and seasonal challenges

63 While the distance of any point from the various population centres is measured as road distance, the Northern Territory was concerned that road quality and seasonal impassability meant not all road distances were equal. It said that poor quality roads and seasonal road closures mean the measured remoteness of many Northern Territory locations is dramatically underestimated. It suggested that accessibility and the condition of roads be considered when classifying remoteness areas.

Commission response

64 The Commission's preference is to use national standard approaches to data issues. For the Commission to generate its own version of remoteness rather than using the ABS' approach would require a very strong case that the Commission's needs differ from those of other statistical agencies. The Commission does not have any evidence for any particular, significant bias in the current approach that should be overcome.

² The Accessibility/Remoteness Index of Australia Plus (ARIA+) is an index of remoteness developed by the National Centre for the Social Applications of Geographic Information Systems (GISCA) at Adelaide University.

Definitions of remoteness

- 65 Remoteness categories aim to group areas with broadly comparable circumstances. The Commission recognises that not all towns within a remoteness category have identical characteristics. However, there are difficulties in defining which combinations of characteristics within a remoteness category make a town more expensive to service than another.
- 66 Western Australia raised concerns around the remoteness classifications of Karratha compared with Clermont in Queensland. Western Australia said Clermont, being only 300km from a centre of 120,000 people should be classified as less remote than Karratha which is 1,520km from such a centre. The Commission agrees that services that are only provided in larger town centres would be more easily accessible in Clermont than in Karratha. However, services that are available in smaller centres are more accessible in Karratha (population 22,000) than in Clermont, (population 3,000). Remoteness classifications need to reflect accessibility to both smaller and larger centres. There is a lack of evidence to say whether distance from a larger centre is significantly more important than distance to smaller centres when measuring regional costs.
- 67 Western Australia suggested removing the truncation of ARIA+ scores or using a continuous ARIA+ score to measure remoteness costs. The Commission, like the ABS, continues to consider that the current ARIA+ score reflects the effects of remoteness better than if distance limits were removed.
- 68 The Commission only has data on cost per user across each location of Australia for a small number of services, such as schools. The relationship between a continuous ARIA+ score and costs is unlikely to be linear. Developing a model such as the schools regression, which takes into account multiple drivers (including First Nations students, socio-educational disadvantage and school size) and adding a non-linear relationship with ARIA+ score, is unlikely to be reliable. Building similar models for other services with more limited data on service delivery by location costs would bring even more challenges.
- 69 Western Australia suggested blending the distance from a capital city with ARIA+ scores or accounting for the distance from a major road. Currently, the distance to a capital city contributes 20% to a remoteness classification. There is a lack of evidence to support the proposition that the distance from a capital city should contribute more to the geographical classification than it already does.
- 70 The proportion of people who do not live near a major road is small. Therefore, the Commission does not consider this disaggregation is helpful in distinguishing populations. It would also be difficult to identify the relevant populations. Much of the Commission's data are gathered at too high a level to allow for this disaggregation.

Classification of Hobart

71 Hobart, with a population of fewer than 200,000 people is unlikely to be reclassified as a major city in the 2026 Census of ABS geography classifications. While the region surrounding Hobart does currently contain a population approaching 250,000 people, Hobart does remain quantitatively different from major cities around Australia. It appears more appropriate to group Hobart with other cities of about its size, than to group it with cities much larger than it. The Commission, therefore, proposes to retain the standard ABS classification of remoteness.

Road quality and seasonal challenges

72 Much of monsoonal Northern Territory faces seasonally impassable roads. This is also a challenge faced in northern Western Australia and Queensland. Most of the areas that face this problem fall into the very remote geographical classification. Therefore, adjusting for seasonal impassability would not impact their classification (they would remain very remote). On this basis and noting the Commission's preference to use nationally consistent data classifications where it can, the Commission proposes to retain the current remoteness classifications.

Commission draft position

73 The Commission proposes to retain the ABS standard classification of remoteness.

Where people receive services

74 Victoria raised concerns that remoteness loadings are based on the remoteness of where people live rather than where services are delivered.

Commission response

- 75 Where people live is the measurable demographic attribute that differs between states. Where services are delivered is the attribute that drives the cost of delivering services. Therefore, remoteness gradients are calculated based on where a service is delivered and applied based on where people live.
- For example, in the admitted patients component of the health assessment, the Commission uses data which calculate the additional costs of remote hospitals. It then applies this additional cost to the extent to which residents of remote areas use remote hospitals. Similarly, in the justice assessment, prisoners held in remote prisons are around 45% more expensive to house than prisoners in non-remote prisons. However, only around 40% of prisoners who lived in remote areas prior to sentencing are sent to remote prisons. To account for both these factors, the Commission calculates that the average remote prisoner incurs an effective additional cost of 18% (0.45% x 0.40%). This approach means that even when data are collected according to place of service delivery, they are applied on place of residence.

Commission draft position

77 The Commission proposes to retain its current approach and measure the extent to which costs increase for people who live in different regions.

Potential misallocation of regional cost effects

- 78 Victoria raised concerns about double counting. It said there are many drivers including Indigenous status, remoteness and socio-economic status that are heavily influenced by geography. Victoria said compounding effects could occur if these drivers measure the same underlying cost or demand driver.
- 79 Victoria said it is important to identify the unique effect of each driver in isolation. While these issues are addressed appropriately in the health assessment, in areas with less comprehensive data, the Commission's estimation of different cost gradients from different sources can potentially lead to double counting. It raised specific concerns with housing and welfare.

Commission response

- 80 The Commission aims to measure the impact of each driver individually for each category. The Commission designs assessments in ways that take account of any potential double counting.
- 81 For example, the Commission includes the general regional cost and service delivery scale gradient in welfare. It adjusts the assessed number of clients in each remoteness region to avoid double counting other influences that are correlated with remoteness such as Indigenous status and socio-economic status.

Commission draft position

82 The Commission proposes to continue to take measures to avoid any double counting within assessments.

Draft 2025 Review assessment method

83 Table 2 shows the structure of the proposed use of geography in 2025 Review assessments.

Category	Component	Driver	Type of assessment	Change since 2020 Review?
Schools	State spending on government school	RC & SDS	# Component	No
	State spending on non- government schools	RC & SDS	Component	No
	Commonwealth funding of government schools	RC & SDS	Embedded in the Schooling Resources Standard	No

Table 2 Proposed structure of the geography assessment

Post-secondary education	Post-secondary education	RC	# Component	Included in general gradient		
Health	Admitted patients	RC & SDS	# Component	No		
	Emergency departments	RC & SDS	# Component	Included in general gradient		
	Non-admitted patients	RC & SDS	# Component	New measure introduced in U2022. Included in general gradient		
	Community and public health	RC & SDS	Category ^(a)	No		
	Non-hospital patient transport	—		No		
	COVID spending	—		New component		
Housing	Social housing expenses	RC	General gradient	No		
	Revenue	—		No		
	First home owner expenses	—		No		
Welfare	Child protection and family services	RC & SDS	General gradient	No		
	National Disability	—		No		
	Concessions	_		No		
	Homelessness services	RC	General gradient	New component		
	Other welfare including non-National Disability Insurance Scheme, aged care, and National Redress Scheme	RC	General gradient	No		
Services to communities	Water subsidies	RC	# Component	Included in general gradient		
	Electricity subsidies	RC	# Component	Included in general gradient		
	First Nations community development	RC	General gradient	No		
	Other community development and amenities	RC	General gradient	No		
	Environmental protection	RC	General gradient	No		
ustice	Police	RC & SDS	Component ^(b)	No		
	Criminal courts	RC & SDS	# Component	Included in general gradient		
	Other legal services	RC & SDS	Category ^(a)	No		
	Prisons	RC & SDS	# Component	Included in general gradient		
Roads	Rural roads	RC	Rawlinsons ^(c)	Rawlinsons applied instead of general gradient		
	Urban roads	_		No		
	Bridges and tunnels	RC	Rawlinsons ^(c)	Rawlinsons applied instead of general gradient		
Transport	Non-urban transport	RC	General gradient	No		
	Urban transport	_		No		
Services to	Agriculture regulation	RC	General gradient	No		
industry	Mining regulation	RC	General gradient	No		
	Other industries regulation	RC	General gradient	No		
	Business development	_		No		

	COVID-19 Business support	—		New component
Other expenses	Service expenses	RC	General gradient ^(d)	No
	Natural disaster relief	—		No
	Administrative scale	—		No
	Native Title and land rights	—		No
	National capital	_		No

Note: RC refers to regional costs, SDS refers to service delivery scale.

indicates that an assessment is used in the calculation of the general gradient.

(a) The cost gradient is extrapolated from other components within the same category.

(b) In the police component, regional costs and service delivery scale are measured together as a single cost gradient along with the differential use of police resources in different remoteness areas. Where assessed, differential use of services is considered separately from regional costs in all other categories.

(c) In the roads assessment, Rawlinsons applies to road length.

(d) In service expenses, the general gradient is applied to half the expenses in the component.

Indicative distribution impacts

- 84 The Commission proposes to make a number of assessment changes that include changes to geography variables. Some of these changes are specific to a category and therefore, the corresponding impact on the GST distribution is shown within that category in the relevant chapter.
- 85 Proposed changes to the elements that contribute to the general gradient calculation would change the distribution of GST across several categories. The impact of these proposed changes on the GST distribution in 2024–25 in isolation from any other proposed changes is shown in Table 3.
- 86 The comparable tables in expense categories include the impact of changing the general gradient as well as any other proposed changes within that category. Therefore, the impact captured in Table 3 will also be captured through the relevant expense category GST impacts.

	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Total Effect
	\$m								
U2024 using R2020 methods	-176	-136	49	98	14	13	-11	147	322
U2024 using draft R2025 methods	-187	-144	55	104	11	19	-14	153	343
Effect of draft method changes	-10	-8	6	6	-3	5	-3	7	24
	\$pc								
U2024 using R2020 methods	-21	-19	9	33	7	23	-23	571	12
U2024 using draft R2025 methods	-22	-20	10	35	6	32	-28	597	14
Effect of draft method changes	-1	-1	1	2	-2	9	-6	27	1

Table 3Indicative impact on GST distribution of proposed changes to the general
gradient (difference from an equal per capita distribution), 2024–25

Note: 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.

87 As a result of including additional components in the regional costs general gradient, the slope of the gradient has become steeper as shown in Figure 3. As a result of additional components included in the regional and service delivery scale costs combined general gradient, the slope of the gradient has become flatter as shown in Figure 4. Given the slope of one gradient has become steeper and the other, flatter, the net impact of the proposed changes, as captured in Table 3, include offsetting elements.